

## H. Wilderness Review Texas Mid-coast NWR Complex

### H.1. Introduction

Wilderness Reviews (Reviews) are a required element of CCPs, and each refuge must follow the Review process outlined in 602 FW 1-3 and 610 FW 1-4. The process includes interagency and tribal coordination, public involvement, and NEPA compliance (610 FW 4.4 A). The purpose of the Review is to identify lands and waters that merit inclusion in the National Wilderness Preservation System (NWPS) and recommend suitable lands for Congressional designation (610 FW 4.4 A).

There are three phases to the Review process: (1) inventory; (2) study; and (3) recommendation. During the inventory phase, we identify lands and waters that meet the minimum criteria for wilderness designation (610 FW 4.4 B). Lands and waters that meet the minimum criteria for designation are called Wilderness Study Areas (WSAs). In the study phase, we assess a range of management alternatives to determine if a WSA is suitable for wilderness designation and corresponding management or if management under an alternate set of goals and objectives is more appropriate (610 FW 4.12 A). The findings of the study phase determine whether we will recommend a WSA for designation in the Final CCP. If we determine that the Complex contains lands and/or waters that are suitable for wilderness designation, we report the recommendation from the Director through the Secretary and the President to Congress in a subsequent Wilderness Study Report (610 FW 4.4). The following team performed the Wilderness Review for the Complex.

**Table H-1. Wilderness Review Team**

| Team Member      | Title/Affiliation                  | Email                    |
|------------------|------------------------------------|--------------------------|
| Jennifer Sanchez | Complex Manager                    | Jennifer_sanchez@fws.gov |
| Shane Kasson     | Refuge Manager                     | Shane_kasson@fws.gov     |
| Cody Dingee      | Refuge Manager                     | James_dingee@fws.gov     |
| Joseph Lujan     | Biologist/Natural Resource Planner | Joseph_lujan@fws.gov     |

### H.2. Wilderness Inventory

Section 2 (c) of the Wilderness Act of 1964 states that wilderness is an area that is “untrammeled by man, where man himself is a visitor who does not remain.” The Act identifies the minimum criteria that an area must meet to be eligible for wilderness. Service policy states that we use the Act’s minimum criteria to identify potential wilderness areas. These criteria include size, apparent naturalness, and outstanding opportunities for solitude or primitive recreation. Supplemental values are evaluated and documented but are not required for a WSA. The Complex Wilderness Review Team (team) met on January 12, 2011 to perform the inventory phase of the review.

### Identification of Lands that Meet the Size Criteria

First, the team reviewed each refuge for any lands that meet the size criteria outlined by 610 FW 4.8 and described below:

- An area with more than 5,000 contiguous acres. State and private lands are not included in making this acreage determination.
- A roadless island of any size. A roadless island is defined as an area surrounded by permanent waters or that is markedly distinguished from the surrounding lands by topographical or ecological features (610 FW 1.5 Z).
- An area of less than 5,000 contiguous acres that is of sufficient size as to make practicable its preservation and use in an unimpaired condition, and of a size suitable for wilderness management.
- An area of less than 5,000 contiguous Federal acres that is contiguous with a designated wilderness, recommended wilderness, or area under wilderness review by another Federal agency that manages wilderness, such as the Forest Service, National Park Service, or Bureau of Land Management.

Lands that meet any of these four size criteria are identified as inventory units during the review process. Brazoria NWR contains four and San Bernard NWR contains three inventory units that meet the criteria listed above. These areas are identified in the following map (Figure H-1), and unit is evaluated for wilderness criteria in Table H-2. On Brazoria NWR, these were large areas (>5,000 acres) with minimal roads and are minimally managed. On San Bernard NWR, four bottomland areas that are either near the 5,000 acres or considered to be intact old-growth forest with significant acreage (>1,000) were proposed for evaluation. Two marsh units similar to the criteria for selecting areas on Brazoria NWR were also selected on San Bernard NWR for consideration. Big Boggy NWR was not selected for further evaluation because the total acreage is less than 5,000 acres and this further gets reduced as we remove managed areas, conservation easement areas and buffer areas with regular disturbance. The area for consideration becomes quite small and does not provide an area suitable for wilderness management.

### Evaluation of the Naturalness Criteria

Section 2 (c) of the Wilderness Act defines wilderness as an area that "...generally appears to have been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable." In addition to the size criteria, Service policy states that an inventory unit must meet the naturalness criteria to qualify as a WSA. Although the area must appear natural to the average visitor, policy does not require that the land is in a pristine historic state (610 FW 4.9 A).

During the inventory phase, the team evaluated each inventory unit for the naturalness criteria. The following things were taken into consideration when determining naturalness: roads, navigable waters, the GIWW, oil and gas developments, aggressive fire program, and the fact that the area is within one of the most industrialized areas of the Nation. Findings for each inventory unit are noted in Table H-2.

### Evaluation of Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation

In addition to meeting the size and naturalness criteria, an inventory unit must provide outstanding opportunities for solitude or primitive recreation to qualify as a WSA. The Wilderness Act does not define what was intended by solitude or a primitive and unconfined type of recreation. The Service, however, defines solitude as “a state of mind, a mental freedom that emerges from settings where visitors experience nature essentially free of the reminds of society, its inventions, and conventions; privacy and isolation are important components, but solitude is enhanced by the absence of distractions, such as large groups, mechanization, unnatural noise and light, unnecessary managerial presence (such as signs), and other modern artifacts (610 FW 1.5 AA).” The Service defines primitive and unconfined recreation as “activities that provide dispersed, undeveloped recreation and do not generally require permanent facilities (610 FW 1.5 R).” According to 610 FW 4.10, an area does not need to have outstanding opportunities for both solitude and primitive recreation nor does the area need to have outstanding opportunities on every acre.

During the inventory process, the team found that none of the units within the Complex qualified for opportunities for solitude or primitive and unconfined recreation. The results of the inventory are also displayed in Table H-2.

### Supplemental Values

Although the presence of supplemental values is not required for an inventory unit to qualify as a WSA, 610 FW 4.11 recommends that the team document their presence if they exist. Supplemental values may include any ecological, geological, or other features of scientific, educational, scenic, or historic value. Since there were not any inventory units that met the “has an outstanding opportunity for solitude or primitive and unconfined recreation” criteria, supplemental values within each inventory unit were not documented.

## **H.3. Wilderness Inventory Summary**

After completing the inventory phase of the Wilderness Review, the team did not find any lands that meet the minimum criteria for a Wilderness Study Area. Therefore, the team does not recommend that the Wilderness Study portion of the Review be performed. This concludes the Wilderness Review process at this time. The process will be replicated in accordance with policy at the time of the next CCP revision.

Table H-2. Minimum Criteria Inventory

| Inventory Unit                               |               | Minimum Criteria for Wilderness  |   |   |   |  |
|--|---------------|--|---|---|---|--|
| Name   | Size          | (1) has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition or is a roadless island; | (2) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; | (3) has outstanding opportunities for solitude or primitive and unconfined recreation;  | (4) contains ecological, geological, or other features of scientific, educational, scenic, or historical value; | Parcel qualifies as a Wilderness Study Area (Meets criteria 1, 2, and 3) |
| Brazoria Wharton/Shrimp Farm/Chocolate Bayou | 12,000 acres. | Yes. It is greater than 5,000 acres.   | Yes.  | No. Primarily marsh habitat bounded by state waters on the north and east. Although remote, impact from motorboats on these adjacent waters would preclude its sense of solitude. | N/A   | No.  |

|                                       |                            |                                      |   |     |     |     |
|---------------------------------------|----------------------------|--------------------------------------|---|-----|-----|-----|
| Brazoria Slope Bowl                   | Approximately 5,000 acres. | Yes. It is greater than 5,000 acres. | No. Oil and gas development has lead to facilities and created subsidence. This will require significant restoration over the next several years.                                 | N/A | N/A | No. |
| Brazoria Alligator Marsh/Middle Bayou | 7,200 acres.               | Yes. It is greater than 5,000 acres. | No. Previous oil and gas activities may have created subsidence and abandoned roads impact water movement. The area requires repetitive treatment of invasive species.            | N/A | N/A | No. |
| Brazoria Austin/Walker                | 10,000 acres               | Yes. It is greater than 5,000 acres. | No. Although parts (2,000 plus acres) are natural. These parts are fragmented by man-made ditches, levees and roads. The area requires repetitive treatments of invasive species. | N/A | N/A | No  |

**Appendix H: Wilderness Review**

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|---|---|--|--|---|-----|-----|
| San Bernard Cow Trap Marsh/Cedar Lakes            | 9,500 acres   | Yes. It is greater than 5,000 acres.   | Yes. Unbroken saline marsh includes saline lakes and appears natural except for the GIWW.  | No. Navigable waters are nearby and within the unit including the GIWW.   | N/A | No  |
| San Bernard Smith Marsh/Cedar Lake Creek          | 6,200 acres   | Yes. It is greater than 5,000 acres.   | Yes. Unbroken saline marsh includes saline lakes and appears natural.  | No. Navigable waters are nearby and within the unit including the GIWW, which would preclude a sense of solitude.   | N/A | No  |
| San Bernard Austin's Woods Unit:<br>Big Pond Unit | Unit is composed of three contiguous parcels, which total nearly 5,000 acres. | No. Contiguous acres are less than 5,000 acres. However the unit has unique habitat characteristics which is worthy for consideration. | Yes. The Big Pond Unit tracts of forested habitat are part of the largest remaining forested area within the Columbia Bottomlands. | No. The unit is traversed by six primary pipeline corridors that are maintained as open per Texas Railroad Commission requirements. Pipelines are continuous conduits of invasive species invasion, requiring repetitive control. | N/A | No. |

|   |  |   |   |   |            |            |
|---|--|---|---|---|------------|------------|
| <p>San Bernard Austin’s Woods Unit: Dance Bayou Unit</p>    | <p>Two tracts totaling 1,300 contiguous acres.</p>   | <p>No. Contiguous acres are less than 5,000 acres, however the unique bottomland habitat characteristics’ are worthy for consideration.</p> | <p>Yes. This unit is recognized for its old growth bottomland forest and utilized extensively for research.</p> | <p>No. The unit is traversed by five primary pipeline corridors that are maintained as open per Texas Railroad Commission Requirements. Pipelines are continuous conduits of invasive species invasion, requiring repetitive control.</p> | <p>N/A</p> | <p>No.</p> |
| <p>San Bernard Austin’s Woods Unit: Linville Bayou Unit</p> | <p>Three contiguous tracts totaling 1,700 acres.</p> | <p>No. Contiguous acres are less than 5,000 acres, however the unique mature bottomland forest habitat is worthy for consideration.</p>     | <p>Yes. The unit has a high percentage of quality unbroken mature bottomland forest.</p>                        | <p>No. Although Linville Bayou Unit requires minimal invasive species treatments, with a heavy occurrence of Chinese tallow around the boundary, regular treatments to ensure encroachment does not occur.</p>                            | <p>N/A</p> | <p>No.</p> |

**Appendix H: Wilderness Review**

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| <p>San Bernard Austin's Woods Unit: Eagle Nest Lake.</p> | <p>One tract totaling 4,500 acres.</p> | <p>No. Contiguous acres are less than 5,000 acres, however the unique wetland habitat is worthy for consideration</p> | <p>Yes. The Eagle Nest Unit includes a 2,000-acre lake/emergent marsh that is unusual and unique in this area.</p> | <p>No. The unit is traversed by two pipeline corridors and two County roads and includes more than 1,000 acres of prairie and forest that require restoration including invasive species treatments. Restoration and treatment will need to be reoccurring.</p> | <p>N/A</p> | <p>No.</p> |
|--|--|---|--|---|------------|------------|

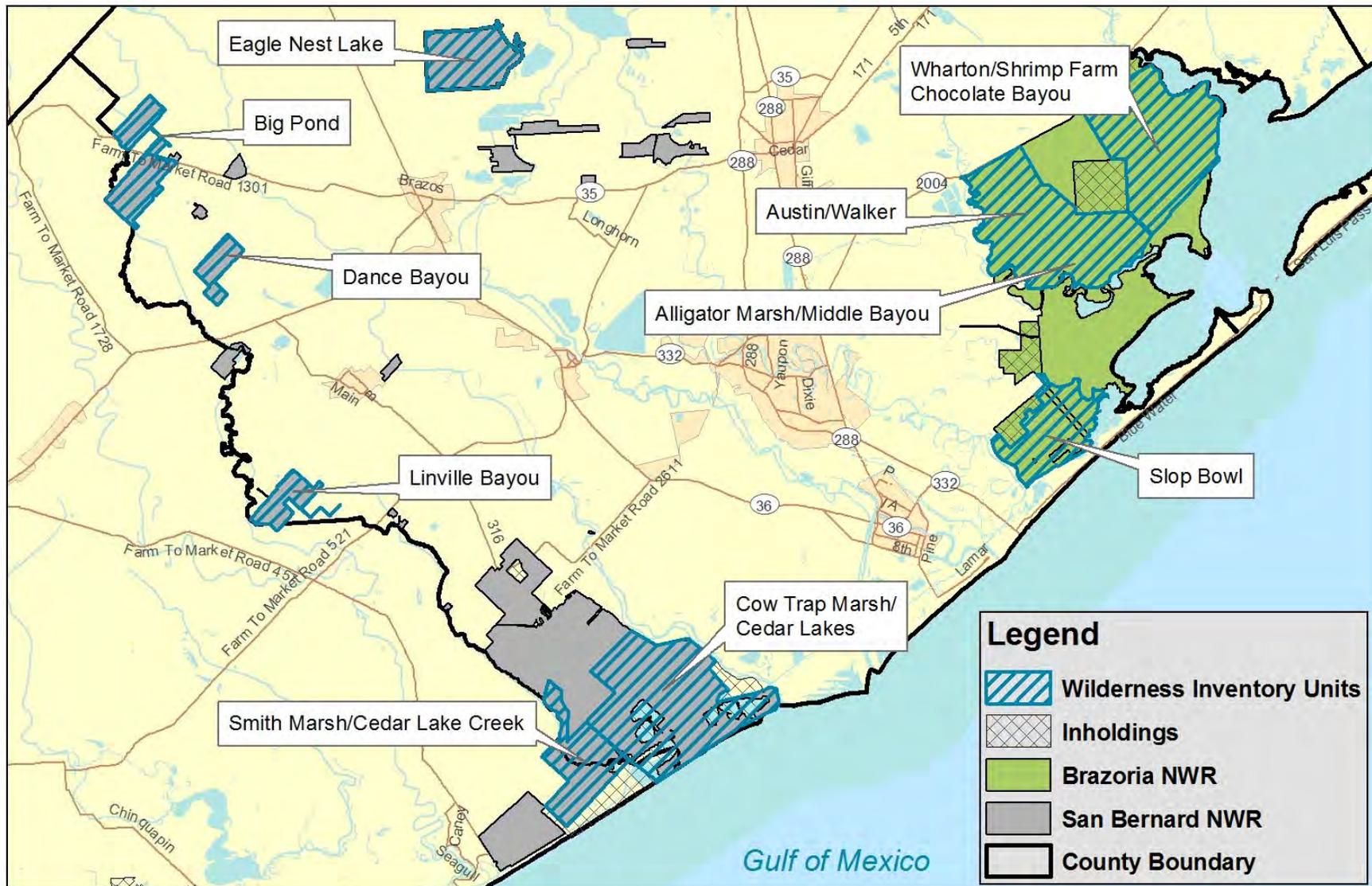


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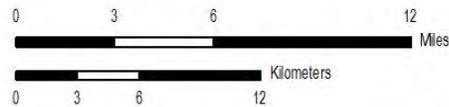
### Texas Mid-coast National Wildlife Refuge Complex

Brazoria, Fort Bend, Matagorda and Wharton Counties

Map H-1. Wilderness Inventory Units



PRODUCED IN THE DIVISION OF REFUGE PLANNING  
 ALBUQUERQUE, NEW MEXICO  
 LAND STATUS CURRENT TO: 5/31/09  
 MAP DATE: June 2012  
 BASEMAP: N/A  
 MERIDIAN: N/A  
 FILE: TMC\_wilderness\_units\_6\_4\_2012sk



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