

Memorandum for CRS Activity 422.c

Prepared: 11/6/2023

Prepared for: City of Gretna

This memorandum is intended to support the case for the City of Gretna to receive points under CRS activity 422.c Natural Functions of Open Space (NFOS). Gretna City Park is an open space within the regulatory floodplain (see Figure 1) that the city protects to maintain its natural functions including stormwater storage and wildlife and plant habitat (NFOS 1). The Gretna City Park Redevelopment project completed in 2023 restored and enhanced these natural functions. The project is identified in the Jefferson Parish Multijurisdictional Hazard Mitigation Plan and reduces flood risk to a significant number of repetitive and severe repetitive loss properties in the immediate vicinity (NFOS 2).¹

Gretna City Park's major natural assets are its native plants, preserved woodlands, and large, interconnected ponds. These make up habitat for native species, including fish, mammals, local birds, and migratory birds. There are two ponds and a connected lagoon. The historic flow path of Bayou Convent runs through the park (also shown in Figure 1). This historic stream was covered over in other parts of this watershed. The North Pond and South Pond coincide with the historic alignment of Bayou Convent, preserving the habitat it provides and its conveyance and storage of flood flows. The Gretna City Park project included the creation of the lagoon connected to South Pond which expanded fish and wetland bird habitat and increased the total water storage capacity of the system by approximately 20-acre feet (see Figure 2). A major component of the project was the creation of a sunken meadow and a bog garden which mimics the ecological and floodplain function of the area's historic swamp. The Gretna City Park project also included installation of permeable parking areas, bioswales, removal of invasive plant species, and establishment of native plant species. Habitat areas and corresponding flora created or restored can be found in Figures 3 and 4. A representative, though not an exhaustive, list of flora and fauna found in Gretna City Park, designated by the Louisiana Department of Wildlife and Fisheries as vulnerable (state designation of S3 or higher), include:

- Roseate Spoonbill (see Figure 5);
- Bald Eagle; and the,
- Alligator Snapping Turtle (NFOS 3).²

In summary, the ponds, riparian areas, and meadows of Gretna City Park provide habitat for numerous flora and fauna, including for established vulnerable species, while supporting a critical flood risk reduction function.

Gretna City Park also carries a zoning designation of Recreational and Open Space (R/OS zoning district) which limits allowable uses to those that support the park's recreational functions and those are only permitted through a conditional use permit process (NFOS 4).³ The district's stated purpose is "intended to retain public and private recreational lands and open spaces for open space, recreational and related uses".⁴

¹ [HM Plan 2020 FINAL 060320 w C-SAP.pdf \(azureedge.net\)](#)

² LDWF Species of Greatest Conservation Need -

https://www.wlf.louisiana.gov/assets/Conservation/Protecting_Wildlife_Diversity/Files/rare_animals_tracking_list_2022.pdf

³ Gretna Zoning Map - [Zoning-with-MN-Overlay-rev-12-01-2022.pdf \(gretnala.com\)](#)

⁴ See Division 6 – Recreation/Open Space District in the Unified Development Code - [Gretna-UDC-8-10-22-v2.pdf \(gretnala.com\)](#)

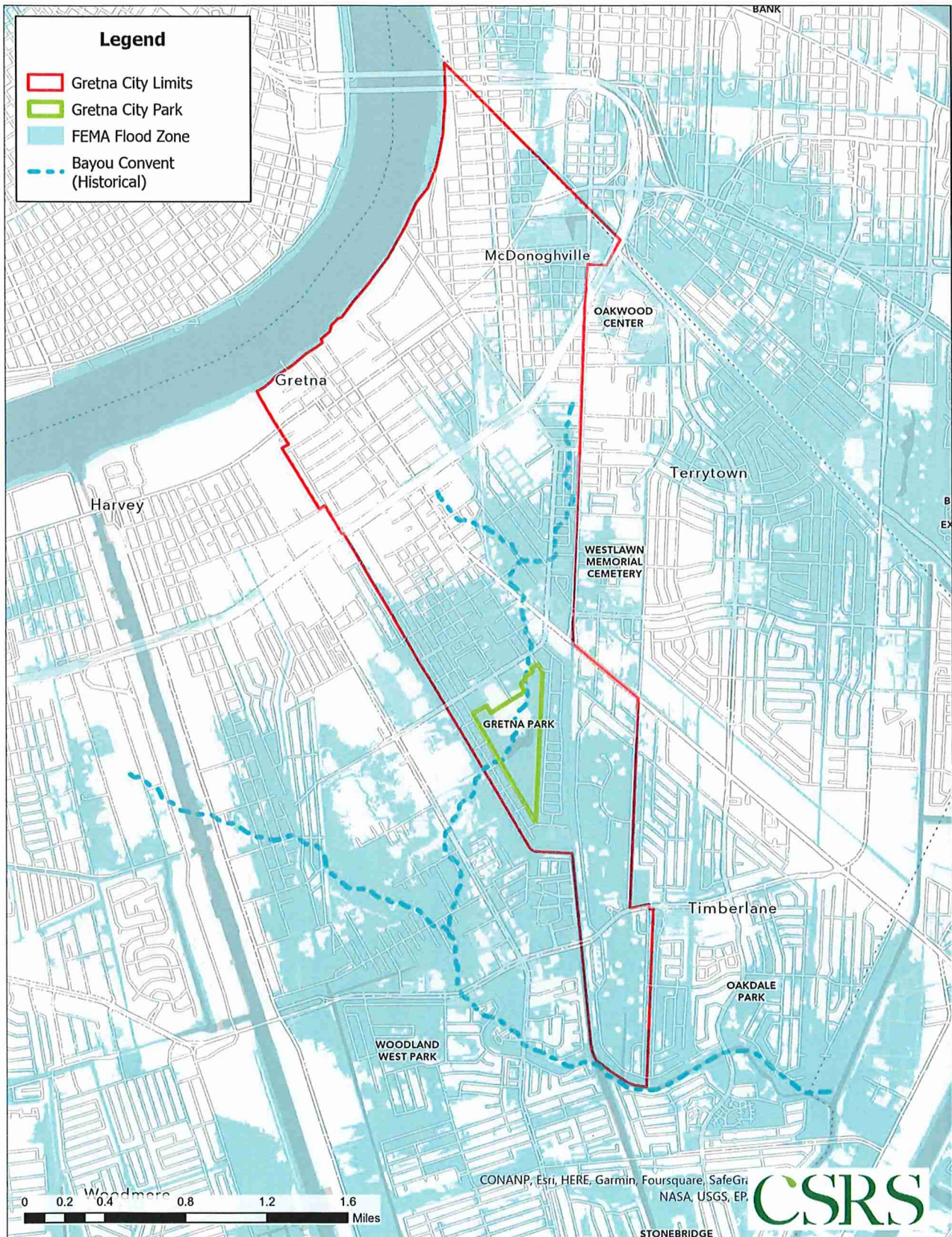


Figure 1: Gretna City Park Floodplain Map



Figure 2: Gretna City Park Overview, Image Credit: Waggonner & Ball



Figure 3: Plant Habitats Site Plan and Transect, Image Credit: Carbo Landscape Architecture

| UPLAND MEADOW | OPEN LAWN | PRESERVED WOODLANDS | TRANSITION MEADOW | WET MEADOW | AQUATICS | |
|---|---|---|--|---|---|--|
| Gulf States Little Bluestem <i>Schizachyrium scoparium</i> (Gulf States) | Bermuda Grass <i>Cynodon dactylon</i> | Drummond Red Maple <i>Acer rubrum var. Drummondii</i> Sweet Bay Magnolia <i>Magnolia Virginiana</i> Water Tupelo <i>Nyssa Sylvatica</i> Native Oaks <i>Quercus species</i> Bald Cypress <i>Taxodium distichum</i> | Plateau Agalinis <i>Agalinis edwardsiana</i> Broomsedge bluestem <i>Andropogon virginicus</i> Showy milkweed <i>Asclepias speciosa</i> Butterfly weed <i>Asclepias tuberosa</i> Winecup <i>Callithea involucrata</i> American Basketflower <i>Centauria americana</i> Lanceleaf coreopsis <i>Coreopsis lanceolata</i> Plains Coreopsis <i>Coreopsis linctorial</i> White Prairie clover <i>Dalea candida var. candida</i> Purple Prairie Clover <i>Dalea purpurea var. purpurea</i> Purple coneflower <i>Echinacea purpurea</i> Cutleaf Daisy <i>Erigeron phillyria</i> Sand Lovegrass <i>Eragrostis trichodes</i> Indian Blanket <i>Gaillardia pulchella</i> Swamp Sunflower <i>Helianthus angustifolius</i> Standing Cypress <i>Ipomopsis rubra</i> Marsh Elder <i>Iva annua</i> Gayfeather <i>Liatris spicata</i> Gulf Coast Muhly | <i>Muhlenbergia capillaris</i> Lemon Mint <i>Mentha citrifolia</i> Pink evening Primrose <i>Oenothera lacinata</i> Switchgrass <i>Panicum virgatum</i> Prairie Coneflower <i>Ratibida columnifera</i> Black-eyed Susan <i>Rudbeckia hirta</i> Bush Sunflower <i>Simsia calva</i> Scarlet sage <i>Salvia coccinea</i> Mealy Blue Sage <i>Salvia farinacea</i> Indiangrass <i>Sorghastrum nutans</i> Tall dropseed <i>Sporobolus cryptanthus</i> Greenthread <i>Thelyperma trifolium</i> | Bushy Bluestem <i>Andropogon glomeratus</i> Purple Bluestem <i>Andropogon glomeratus var. glaucopsis</i> Greenwhite Sedge <i>Carex abrotanensis</i> Virginia Wildrye <i>Elymus virginicus</i> Rattlesnake Master <i>Eryngium yuccifolium</i> Shortbeard Plumegrass <i>Friarthus corymbosus</i> Narrowleaf Sunflower <i>Helianthus angustifolius</i> Crimsoneyed Rosemallow <i>Hibiscus moscheutos</i> Rayless Sunflower <i>Helianthus radula</i> Purple Sneezeweed <i>Helianthus flexuosus</i> Soft Rush <i>Juncus effusus</i> Path Rush <i>Juncus tenuis</i> Narrowleaf Primrose Willow <i>Ludwigia linearis</i> Redtop Switchgrass <i>Panicum rigidulum</i> Beaked Switchgrass <i>Panicum anceps</i> Virginia Meadowbeauty <i>Rhexia virginica</i> Globe Beaksedge <i>Rhynchospora globularis</i> Woolgrass <i>Scirpus cyperinus</i> | Lizard's Tail <i>Saururus cernuus</i> Pickereelweed <i>Pontederia cordata</i> Arrowhead <i>Sagittaria latifolia</i> Soft Rush <i>Juncus effusus</i> |

PLANT HABITATS
SPECIES SELECTION

Figure 4: Plant Habitats Species Selection, Image Credit: Carbo Landscape Architecture



Figure 5: A small flock of Roseate Spoonbill (*Platalea ajaja*) sitting on a fallen branch at Gretna City Park