NATURE RESERVES TABLE OF CONTENTS

BURBANK NATURE RESERVE	
COHN NATURE RESERVE	
JACOB KORNMEYER NATURE RESERVE	
JONES CREEK NATURE RESERVE	
KINCHLOE LLOYD BAKER NATURE RESERVE	The state of the state of the
QUARTERHORSE NATURE RESERVE	
SOUTH HARRELL'S FERRY NATURE RESERVE	
TRISTIAN NATURE RESERVE	
WRAY NATURE RESERVE	
	it it is a

BREC NATURE RESERVES

INTRODUCTION

Nature Reserves are tracts of land set aside as protected natural habitat to preserve their biodiversity, geomorphic features, and the ecosystem services they provide. Ecosystem services include but are not limited to stormwater retention. carbon sequestration, pollution removal, and minimizing the urban heat island effect. Nature Reserves are undeveloped parks closed to the public for recreational purposes. Access to these parks is limited to scientific research and management activities as these habitats can provide opportunities to answer important scientific questions and should still be managed for healthy ecosystems and high biodiversity.

Nature Reserves typically have high quality natural communities as recognized by the Louisiana Natural Heritage Program, although some contain successional areas that are recovering from previous disturbance. Many are also part of larger forested tracts, thus providing valuable wildlife corridors. Others are isolated patches of natural area surrounded by development and provide valuable ecosystem benefits to the surrounding area. Nature Reserves do not have amenities such as parking lots, restrooms, hiking trails, etc., and access to them is limited. The size varies with Burbank Nature Reserve being the largest at 58.18 acres in size followed by Wray Nature Reserve and Jacob Kornmeyer Nature Reserve at 47.38 acres and 40.00 acres, respectively. Tristian Nature Reserve and Jones Creek Nature Reserve are the smallest Nature Reserves at 10.00 acres and 11.69 acres in size, respectively. In total BREC has 266.66 acres of land in 9 Nature Reserves that in the BREC park System.

The focus over the last 10 years has been to identify and label these areas for their protection which includes surveys and site visits to study local biodiversity. Staff has been systematically going through each location to assess habitat quality, recreational potential and ecosystem services extent filling out Ecological and Natural Capital Rubrics to quantify this data. A biodiversity Assessment report is then drafted which provides a written record for the park of the known history and synopsis of ecological findings. These reports then serve as a baseline for future study and to identify sensitive habitat zones which may require increased protection and staff attention. To date, BREC staff have completed eight (8) Biodiversity Assessment Reports and there are four (4) reports planned to be completed in 2023 to ensure all Nature Reserves have one.

BURBANK NATURE RESERVE

Burbank Nature Reserve is the largest Nature Reserve in the BREC park system at 58.18 acres in size and is located between Burbank Drive and Innovation Park Drive in an area that is quickly being developed on the south side of the parish.

This reserve is an isolated patch of natural area and is largely composed of forested wetlands, thus playing an important role in stormwater retention amongst other important ecosystem services. Evidence of an increase in flooding in this park became apparent after 2015 which limited access and management activities.

BREC staff typically worked with LSU's Coastal Roots program to have local students plant native trees to improve habitat quality. However, this became increasingly difficult as flooding increased and access for students became limited. Around that time is when BREC stopped mowing walking lanes at this property which also proved difficult with wet conditions. Although public access was not historically encouraged due to lack of amenities parking, at this time it was decided that public access would not be pursued in the future. Burbank Nature Reserve is slotted to be surveyed and receive a Biodiversity Assessment Report in 2023.

The Park is currently being used by LSU researchers in a large scale - long term study examining how anthropogenic impacts change patterns in biodiversity across taxa. This research is comparing natural areas in urban settings, like Burbank Nature Reserve, to natural areas in rural settings, like Frenchtown Conservation Area. This study began in 2021 and is set to end in 2026. An LSU study tracking barred owl movement in urban areas recently finished in 2021.

PROJECT DATE

- 2015: Coastal Roots Plantings
- 2021-2016: Ongoing LSU Research
- 2023: Biodiversity Assessment Report



BREC PLANNING & ENGINEERING IYP2 PORTFOLIO

COHN NATURE RESERVE

Cohn Nature Reserve is 15.59 acres of land located in north Baton Rouge along Foster Road just south of the Cohn Arboretum. It was donated for the purpose of conservation in which access and development of the site are restricted only to research purposes for the protection of the environment.

The Nature Reserve is composed of undeveloped forested land that borders White Bayou, a tributary to the Comite River. With habitat fragmentation occurring rapidly in this area, this large, forested tract along with Blackwater Conservation Area, Comite Conservation Area, and T.D. Bickham, Jr. Park provides valuable habitat for wildlife and important ecosystem services to the surrounding community.

In 2016, staff surveyed the site with the LDWF state herpetologist in order to assess for herpetofauna. This site is thought to include salamander breeding pools and requires further study to determine species and sensitivity. Cohn Nature Reserve is slotted to be surveyed and receive a Biodiversity Assessment Report in 2023.

- 2016: LDWF Herpetology Survey
- 2023: Biodiversity Assessment Report





JACOB KORNMEYER NATURE RESERVE

Jacob Kornmeyer Nature Reserve is the third largest Nature Reserve in the BREC park System at 40.00 acres in size and is located in Central, LA near Hooper Road between Sullivan Road and Greenwell Springs Road. This Nature Reserve is undeveloped and composed of Spruce Pine Hardwood Flatwood and Small Stream Forest, two rare and imperiled natural communities. A small stream does bisect the property and was likely a remnant of Beaver Creek before drainage was altered in the area. This Nature Reserve does not have a formal access point or parking area and access is very limited as it requires crossing private property. A formal Biodiversity Assessment was conducted in June 2022 where all flora and fauna were documented along with other notable features.

Overall, this Nature Reserve is in good condition and contains the previously mentioned natural communities along with other notable features including wetlands, several large trees, and overlooks of the waterway. Like Cohn Nature Reserve, Jacob Kornmeyer Nature Reserve is part of a larger forested tract which includes other BREC parks including Railey Roshto Park and Kinchloe Lloyd Baker Nature Reserve. The rare and imperiled habitats within this Reserve have been designated as Sensitive Habitat Zones and will be monitored long-term for potential impacts.



- 2022: Biodiversity Assessment Report
- 2022: Sensitive Habitat Zones Established





JONES CREEK NATURE RESERVE

Jones Creek Nature Reserve is 11.69 acres and is located in South Baton Rouge on Old Hammond Highway near Boulevard De Province. This Nature Reserve is composed of Bottomland Hardwood Forest that borders Jones Creek and bisects Lively Bayou, two large waterways in the area. No amenities are present besides a short gravel driveway at the parks gated entrance. Historically, a parking area was present, but it was removed in 2013 and is now overgrown with successional species. Jones Creek, which borders the western portion of the Nature Reserve, likely acts as a valuable corridor for wildlife, as it extends southeast before connecting to the Amite River.

Although development is present along Jones Creek, it is bordered by a narrow stretch of forest. This Park was surveyed and received a Biodiversity Assessment in March 2021 during which all flora and fauna were documented along with other notable features. Overall, this Nature Reserve is in good condition and likely provides valuable habitat for wildlife and ecosystem services to the surrounding area. In the Baton Rouge Bicycle and Pedestrian Master Plan a greenway trail is proposed in this area and the park could hold the trail if needed. Future planning would be required to decide if the park should include the trail and ultimately be transitioned to a conservation area as a result.



PROJECT DATE

• 2021: Biodiversity Assessment Report



KINCHLOE LLOYD BAKER NATURE RESERVE

Kinchloe Lloyd Baker Nature Reserve is 32.60 acres and is located in Central, LA on the west side of Greenwell Springs Road approximately halfway between Magnolia Bridge Road and Hooper Road. No parking is available although a grassy drive is present that leads to a small clearing that contains a memorial to Kinchloe Lloyd Baker.

Kinchloe Lloyd Baker Nature Reserve is part of a larger forested tract that also includes Railey Roshto Park and Jacob Kornmeyer Nature Reserve. For this reason, Kinchloe Lloyd Baker Nature Reserve likely provides valuable habitat for wildlife and ecosystem services to the surrounding area. Basic surveys have been conducted at this park and due to evidence of hunting, no hunting signage was placed at property boundaries.

This Park is slotted to receive additional surveys and a Biodiversity Assessment Report in 2023.

- 2015: Site Survey
- 2015: No Hunting Signs Placed Along Park Boundary
- 2023: Biodiversity Assessment Report





QUARTERHORSE NATURE RESERVE

Quarterhorse Nature Reserve is 21.4 acres and is located in Zachary, LA just west of Highway 19. It is undeveloped and is composed of Forested Wetlands and Mixed Evergreen/Deciduous Forest. No parking is available although the property can be accessed along Quarterhorse Dr. This Park was surveyed and received a Biodiversity Assessment Report in January 2021 during which all flora and fauna were documented along with other notable features.

Overall, Quarterhorse Drive Nature Reserve is in good condition although invasive species were present and there were signs of disturbance suggesting it may be in a successional stage of restoration. This Nature Reserve is also part of a larger forested tract including White Bayou, a tributary to the Comite River. For this reason, Quarterhorse Nature Reserve likely acts as a valuable corridor for wildlife and provides valuable ecosystem services to the surrounding area. This Park has potential for use as a research site for restoration and invasive species management techniques moving forward.

PROJECT DATE

• 2021: Biodiversity Assessment Report





SOUTH HARRELL'S FERRY NATURE RESERVE

South Harrell's Ferry Road Nature Reserve is 29.29 acres and is located in South Baton Rouge at the intersection of South Harrell's Ferry Road and Jones Creek Road. It is undeveloped and composed of Small Stream Forest along Knox Branch, a tributary to Jones Creek. South Harrell's Ferry Nature Reserve has no amenities or public parking with limited access. Small Stream Forest is considered rare in the state (S3) and there are few occurrences in the BREC park system, especially when considering the size and condition of the habitat present. The property also contains wetlands, an array of floral and faunal diversity including several large canopy trees over 40 inches in diameter, and several noteworthy overlooks of Knox Branch. Due to its connectivity to other green spaces in the surrounding area, along with its location in relation to surrounding development, this Nature Reserve is likely a valuable habitat regarding wildlife corridors and ecosystem services.

This Nature Reserve did receive a Biodiversity Assessment in October 2021. Overall South Harrell's Ferry Nature Reserve is in good condition, although some areas contained an abundance of invasive species, most notably Chinese Privet. Additionally feral hogs were observed on this property and in the future, potential management of these populations may occur in partnership with LDWF.

- 2021: Biodiversity Assessment Report
- 2021: Sensitive Habitat Zones Established





TRISTIAN NATURE RESERVE

Tristian Nature Reserve is 32.6 acres and is located in Baker, LA at the end of Tristian Avenue. This Nature Reserve does have a sign, one picnic table, and a small grassy open area at the entrance. Although Tristian Nature Reserve previously contained some amenities including a playground that was removed in 2011, it is currently undeveloped.

The forested area can best be described as Bottomland Hardwood Forest and contains some moderately large magnolia, beech, and oak trees. Tristian Nature Reserve also borders White Bayou, a tributary to the Comite River, and is part of a larger forested area.

NRM staff conducted a Biodiversity Assessment at the Nature Reserve in 2023.

PROJECT DATE

• 2023: Biodiversity Assessment Report









Wray Nature Reserve is the second largest Nature Reserve in the BREC park System at 47.38 acres in size and is located near Joor Road at the end of Ridgewood Drive in North Baton Rouge. No parking is available although a small easement is present where a car can park. A BREC sign is also present although it is currently overgrown and hidden from view. This Nature Reserve borders two waterways, Hurricane Creek to the South and Roberts Canal to the North and is adjacent to the Sunny Brook subdivision.

The Nature Reserve contains at least three natural Hardwood Flatwood, communities. Mixed Hardwood Loblolly Forest, and Deciduous Forest. This Park received a Biodiversity Assessment in July 2022 during which all flora and fauna were documented along with other notable features. Overall Wray Nature Reserve is in good condition and contains valuable habitat for wildlife and notable features including access to the confluence of Hurricane Creek and Roberts Canal, wetlands, and several large trees. Due to the fact that the donors of Wray requested that it provide public access and that after assessing the property staff believe it would be a good site for a hiking trail, Wray Nature Reserve will be transitioned to a Conservation Area in 2023 and establish a hiking trail. This will require adding the necessary amenities such as parking and signage.



- 2022: Biodiversity Assessment Report
- 2022: Decision Making Framework Completed to Transition Park
- 2023: Transition to Conservation Area



