

### **TABLE OF CONTENTS**

- Project Motivation
- Introduction to the Study Area
  - History
- Fieldwork and Findings
  - Sites Visited and River Connectivity (Lateral, Longitudinal, and Vertical)
- Proposed Interventions
- Further Work Needed
- References and Citations



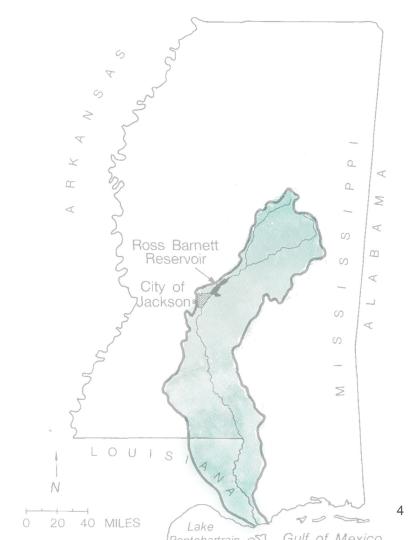
#### STUDY AREA

The Pearl River Basin

- 7,800 square mile drainage area
- 490 miles in length
- Headwaters begin in Neshoba County
- Discharges to the Mississippi Sound in the Gulf of Mexico
- At LeFleur's Bluff State Park near Jackson (below Ross Barnett Reservoir):
  - 3150 square mile drainage area
  - Discharge: 44,800 cfs (2-year flood), 80,600 cfs (5-year flood)
  - o Cross section: 211' wide, 6.7' deep

Source: USGS Streamstats

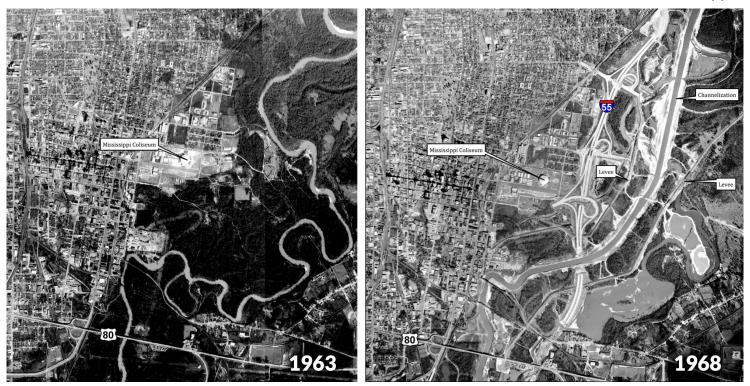
History of flooding, levees





# **HISTORY**

Pearl River, Jackson, Mississippi





Pearl River Accessibility

Lateral

Longitudinal

**Vertical** 



Ross Barnett Reservoir







LeFleur's Bluff State Park







Town Creek at Farish Road







#### HISTORY OF TOWN CREEK

Town Creek river runs across northwest Jackson

If we could boat down the creek we would pass several key attractions in Jackson:

The Jackson Zoo after passing the zoo you will whine downtown and flow under the Jacksons downtown area.

The next stop Mississippi Museum of Art.

There are several key points that make the Town Creek:

The Pearl River attributes to the Town Creek starting on the South end of Jackson Runs on the backside of Ferris St ending just northwest Jackson.

### **PROPOSED INTERVENTIONS**

Town Creek at Farish Road

- Creek restoration, removal of invasives, replacements with native plants and trees, signage
- Public access along the creek, docks and platforms to see the river



Hiking and biking trail along the South Platte River in Denver, Colorado



Example of urban stream restoration at Marsh Creek in Oakley, California, by Restoration Design Group



#### PROPOSED INTERVENTIONS

Town Creek at Farish Road

- Regional Collaboration Key Partnerships
  - Mississippi Department of Fish and Wildlife
  - City of Jackson
  - Mississippi Rural Water Association
- Funding and Maintenance
  - City of Jackson; Mayor of Jackson to obtain grants for streetscape and cleanups, improvements, and help address access issues
  - Department of Public Works
  - Funding, Streetscape, and Waterway
    Improvements: State and Federal Agencies
  - In the future, local groups, community organizations, volunteers







#### THE FARISH STREET

#### Influence



- Surrounding town creek, THE FARISH STREET
- Known as the "Black Mecca" of Mississippi
- Born from reconstruction, built from descendants of slaves
- Current Efforts
- Becoming black entertainment business district in Jackson
- Many failed attempts of revitalization



- District makes up 125 acres of residences & diverse businesses
- 100 million project during Black History
  Month "Farish project, making a comeback for Farish street"
- Trying and failing to revive a "dying street"

#### THE FARISH STREET

Influence



- More than 51M to be spent
- 22M federal grants, city infrastructure, state bonds, and developer investment
- 28M tax credits developer equity towards historic restoration and economic development projects
- Can be assumed this is similar to the ways funding can be issued

#### <u>Partnerships</u>

- Revitalize Mississippi = non-profit, addressing health, safety and societal issues of urban neglect
- Community Foundation= Revitalize
   Jackson Fund (fundraising efforts and
   project plans, for abandoned &
   trash-filled properties

#### PRECEDENT - MUSEUM TRAIL

Jackson, MS

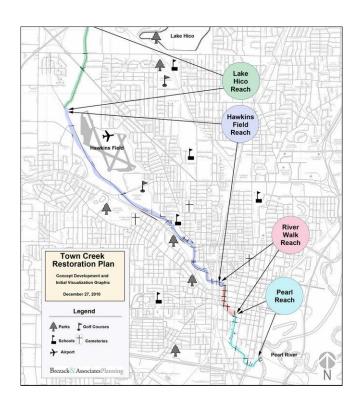
- Current Implementation
- 2.5 Mile Multi-use trail connecting to city (museums, parks, and communities)-- downtown Jackson to Lakeland Drive
- From Farmers Market to Mississippi Agriculture
  Museum
- Access to 3 parks, 6 museums
- Phase 2 to begin
- As of January 2021, official ribbon-cutting ceremony for the Museum Trail despite a lot of challenges like funding, water and sewer line construction, city leadership, and frequent revisions





Infrastructure improvements include: cobblestone streets & sidewalks, updated lighting, water, and sewer lines

#### RECOMMENDED FUTURE WORK



- Explore connections to existing trail systems
- Explore opportunities for ecological restoration and flexible connectivity to the river for Rankin, Hinds, and Madison counties at the Ross Barnett Reservoir Spillway Road
- Gather census data to investigate equity issues in access to the river and recreational opportunities
- Explore water quality issues associated with water treatment plants downstream of Barnett Reservoir

#### REFERENCES AND CITATIONS

- 1. Piatt, Rutherford H. (1982). "The Jackson Flood of 1979 A Public Policy Disaster". Journal of the American Planning Association, 48:2, 219-231, DOI: 10.1080/01944368208976542
- 2. Shadie, Charles E., Lopez-Llompart, Pilar, Samet, Melissa, Stroke, Todd, Kondolf, Mathias G., Serra-Llobet, Anna (2018). "Managing Floods in Large River Basins in the USA: The Mississippi River". Managing Flood Risk, https://doi.org/10.1007/978-3-319-71673-2\_2