2017 Annual Conference

SC Association for Hazard Mitigation

The Columbia Canal Project…Regulatory Challenges

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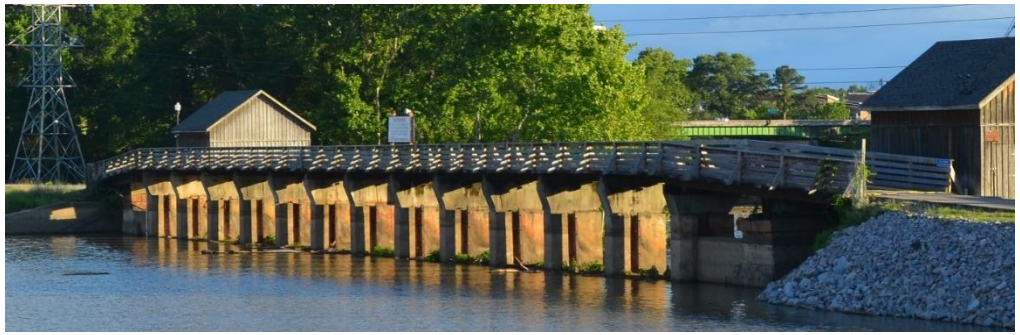


The Columbia Canal System

Regulatory Influence & Requirements

VS.

FEMA

FERC

How Important is the Columbia Canal?

Who depends on City of Columbia for safe and reliable drinking water?

- 141,000 Customer Accounts serving 400,000 Customers
- Water Supply for 5 Major Hospitals
  - Palmetto Health Richland
  - Palmetto Health Baptist
  - Providence Health
  - Dorn VA Medical Center
  - Moncrief Army Hospital
- Fort Jackson (Army's largest Initial Training site)
  - Trains 61,000 soldiers annually)
  - 7000 Active Duty military and Civilian employees
  - 12,000 Military Family members supported
- McEntire Joint National Guard Base

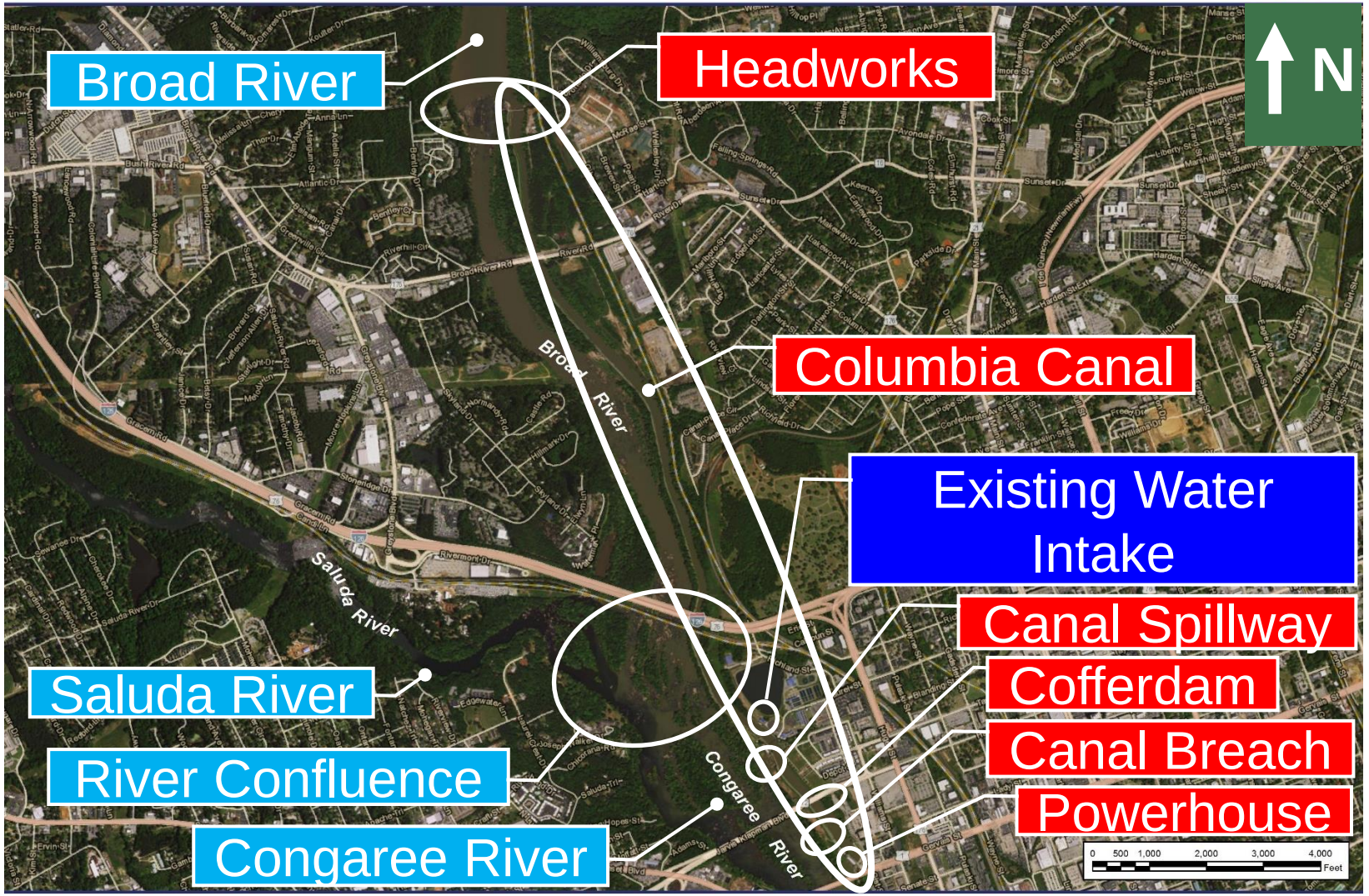
How Important is the Columbia Canal?

- State Capital and many State Agencies including
  - Department of Corrections and 3 Correctional Institutions
- City of Columbia & Richland County Offices and Facilities including
  - 16 Police Stations
  - 15 Fire Stations
- 6 Universities and Colleges
  - USC Main Campus (30,000 Students)
  - Columbia International University
  - Benedict College
  - Allen University
  - Midlands Technical College
  - South University

Project Goals

- Maintain water supply
- Repair the dike
- Reduce risk to the City
- Maintain multiple options for riverfront development
- Expedite project delivery
- Leverage financial participation

PROJECT LOCATION



FLOOD DAMAGE ASSESSMENT

Emergency Flood-Damage Response / Repair

FLOOD DAMAGE ASSESSMENT

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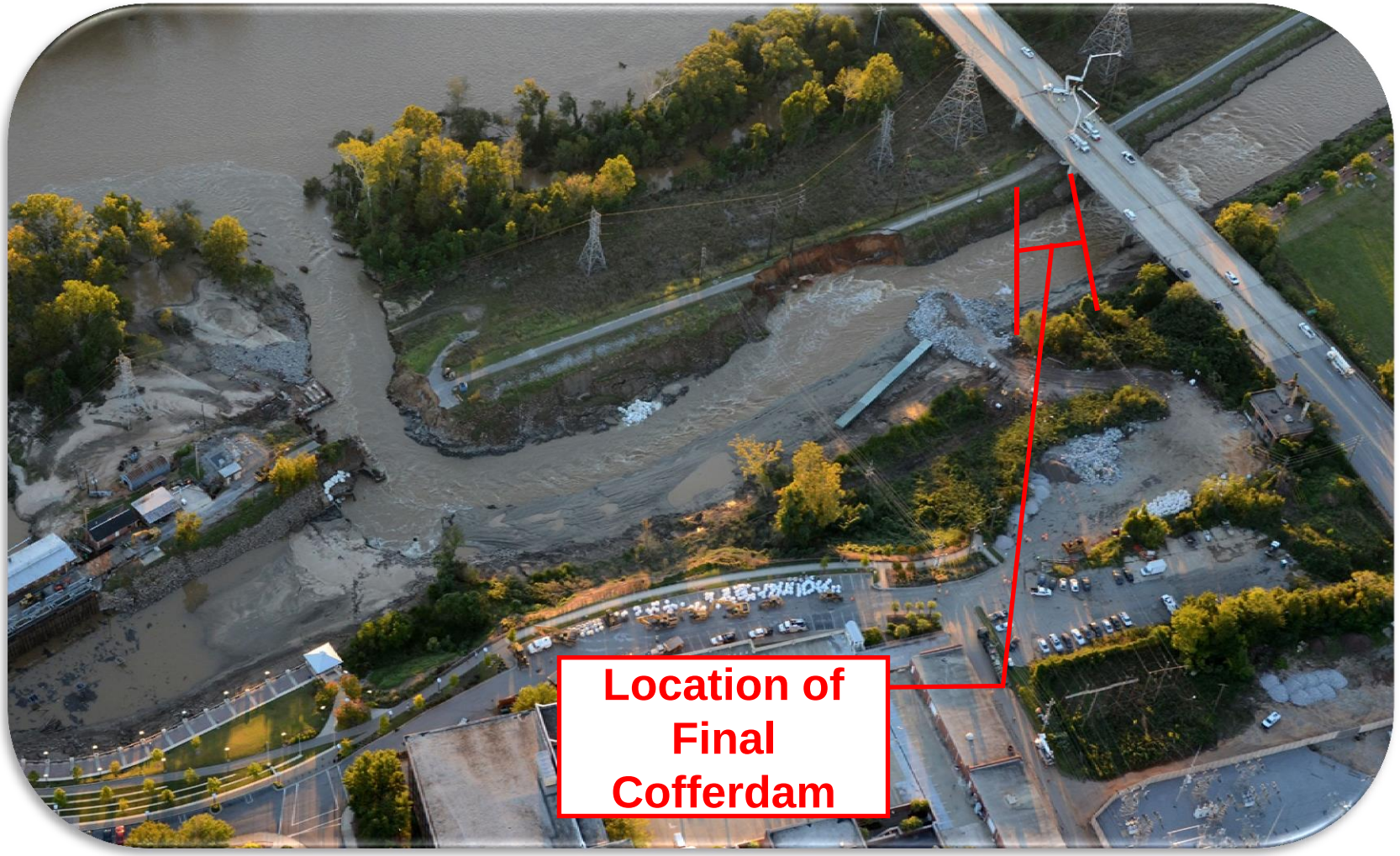
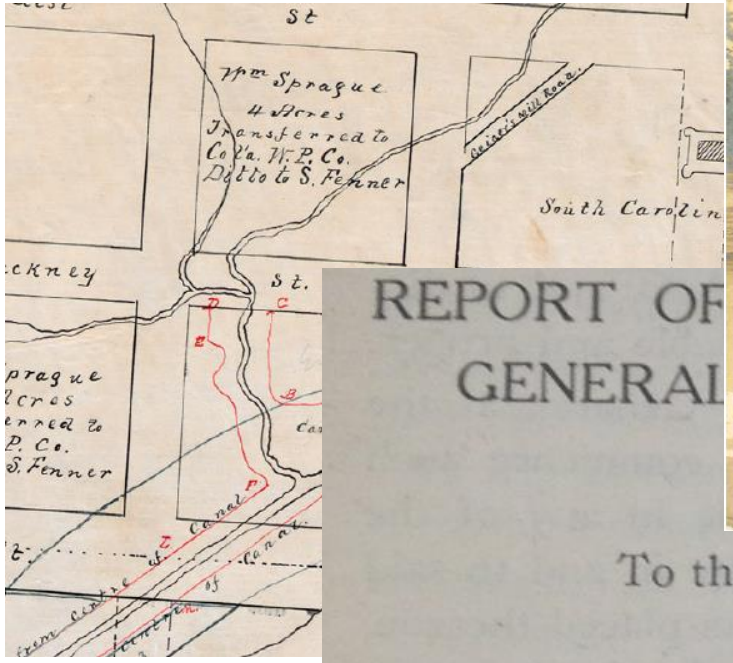
Emergency Flood-Damage Response / Repair



FLOOD DAMAGE ASSESSMENT

Data Acquisition

- Desktop Study



REPORT OF
GENERAL

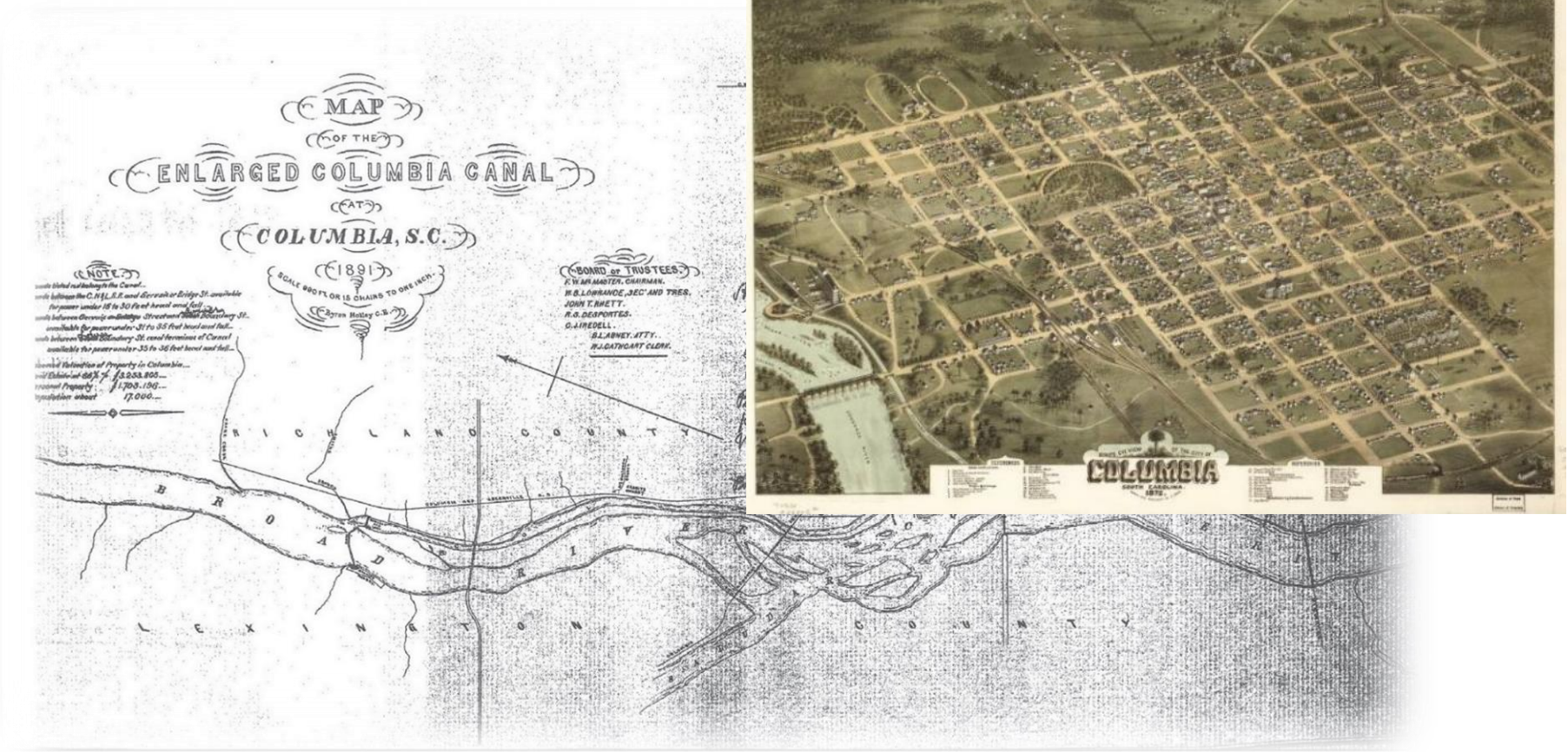
To the General Assembly of South Carolina.

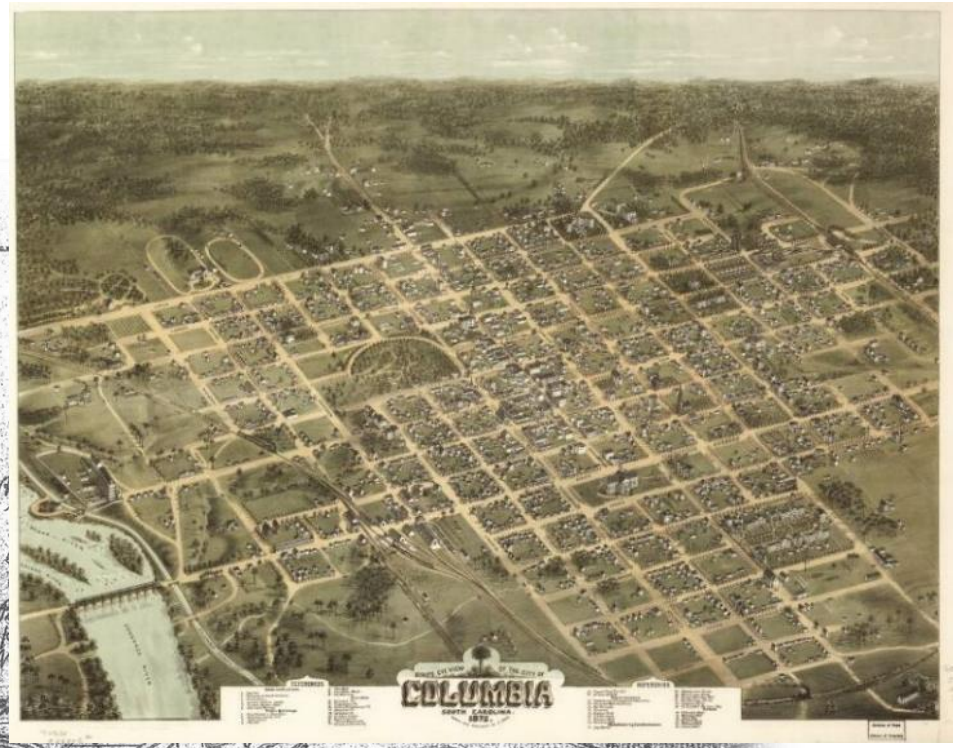
Columbia, S. C., January 8, 1918.

To the Honorable the General Assembly of South Carolina:

SITE CONSTRAINTS

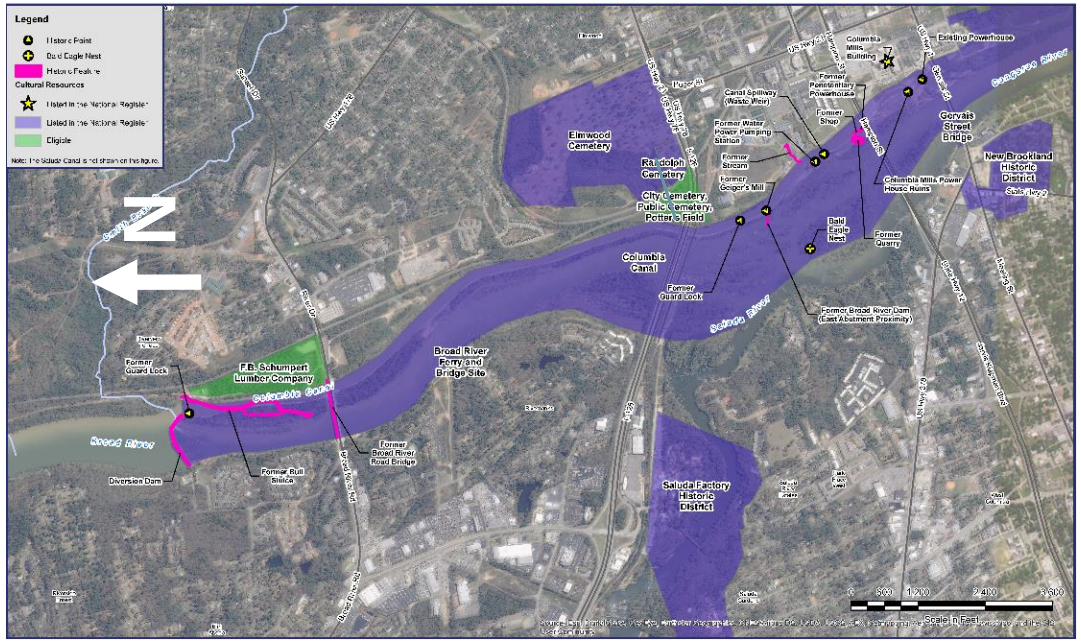
Cultural / Historic Resources





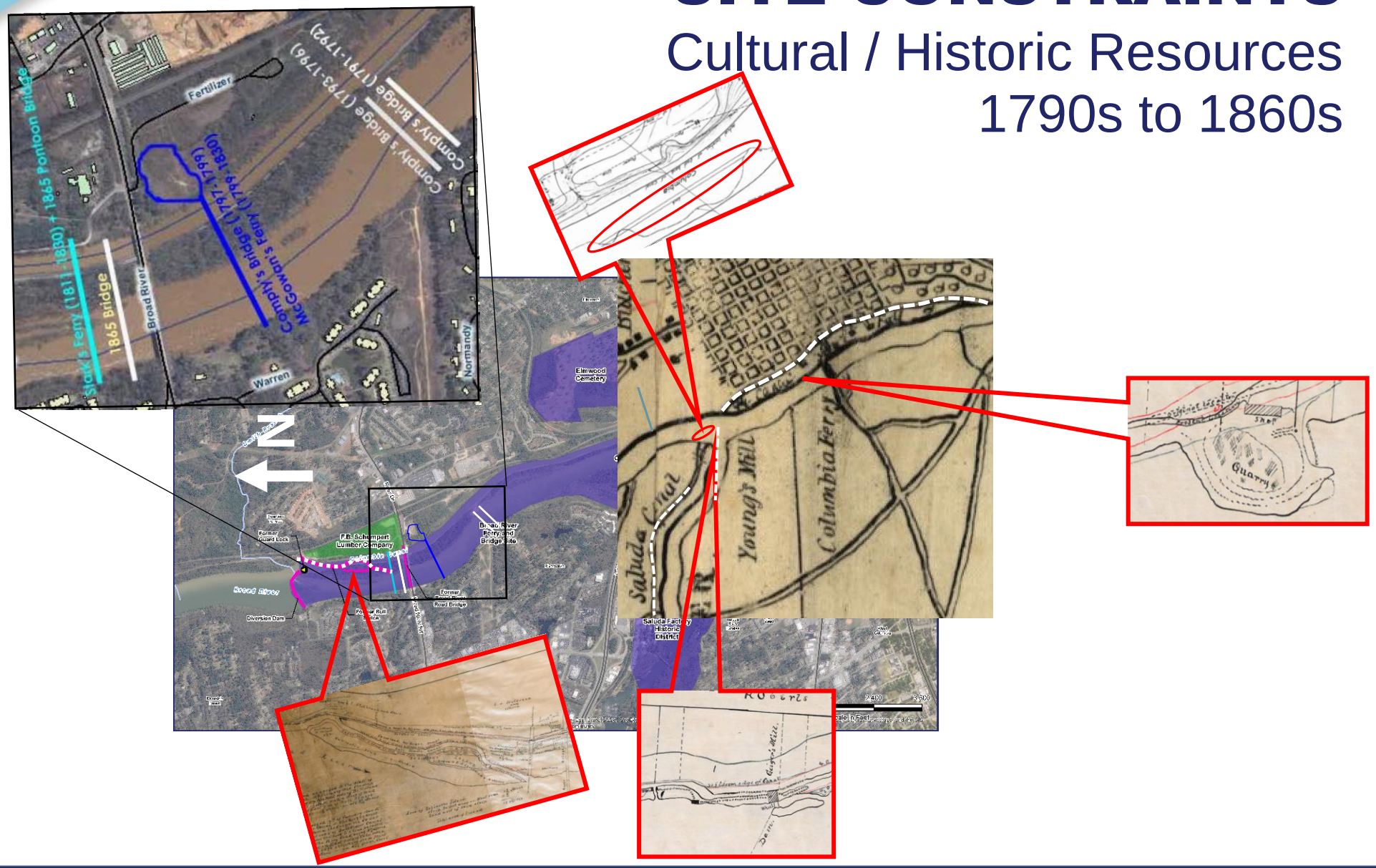
SITE CONSTRAINTS

Cultural / Historic Resources



SITE CONSTRAINTS

Cultural / Historic Resources
1790s to 1860s



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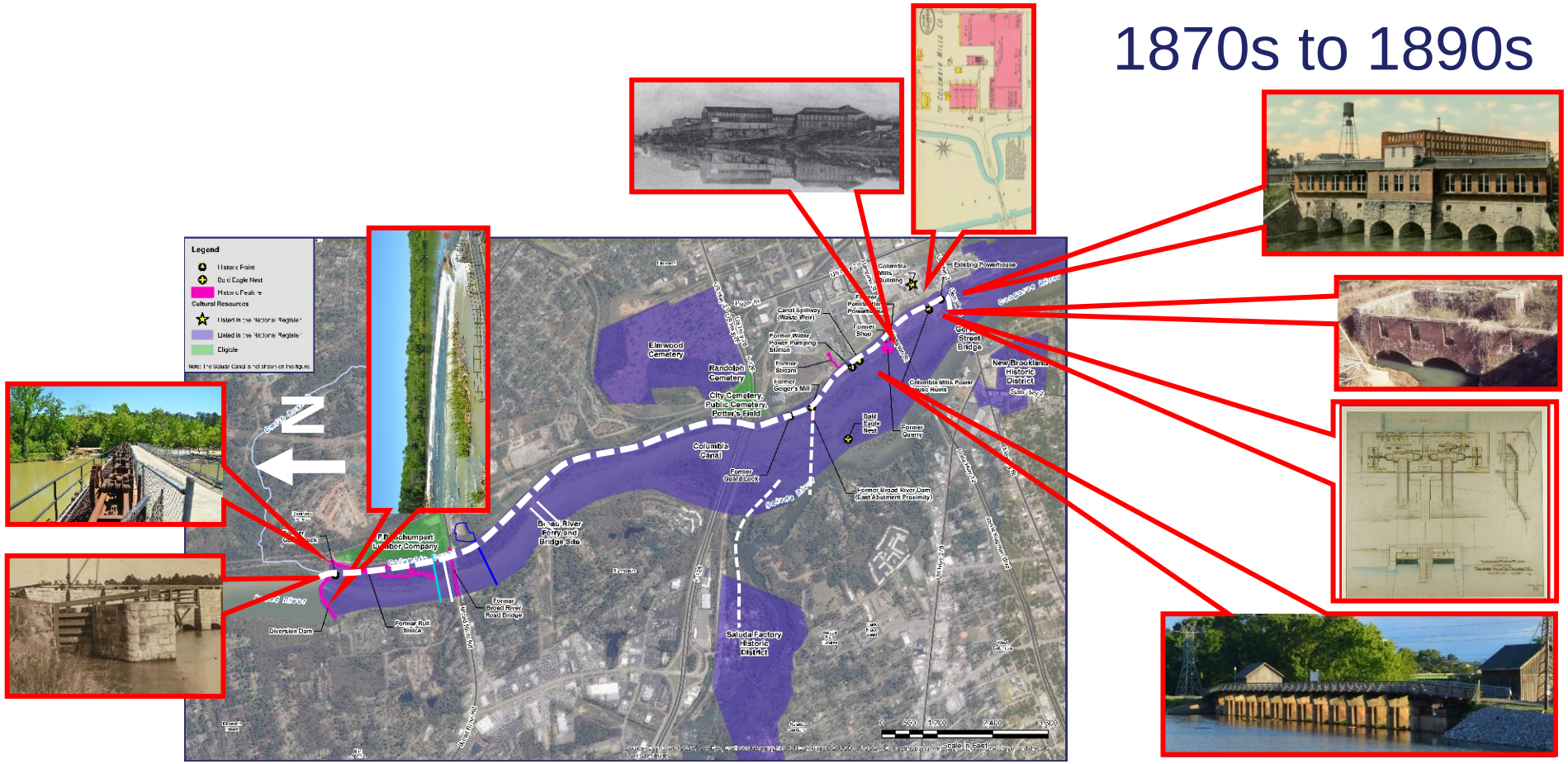
SITE CONSTRAINTS

Cultural / Historic Resources
1870s to 1890s



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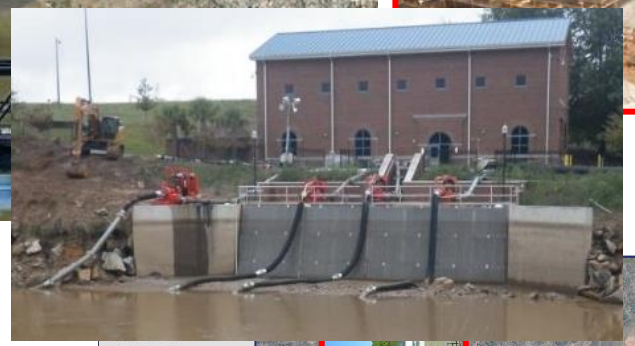
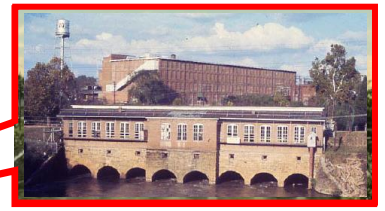
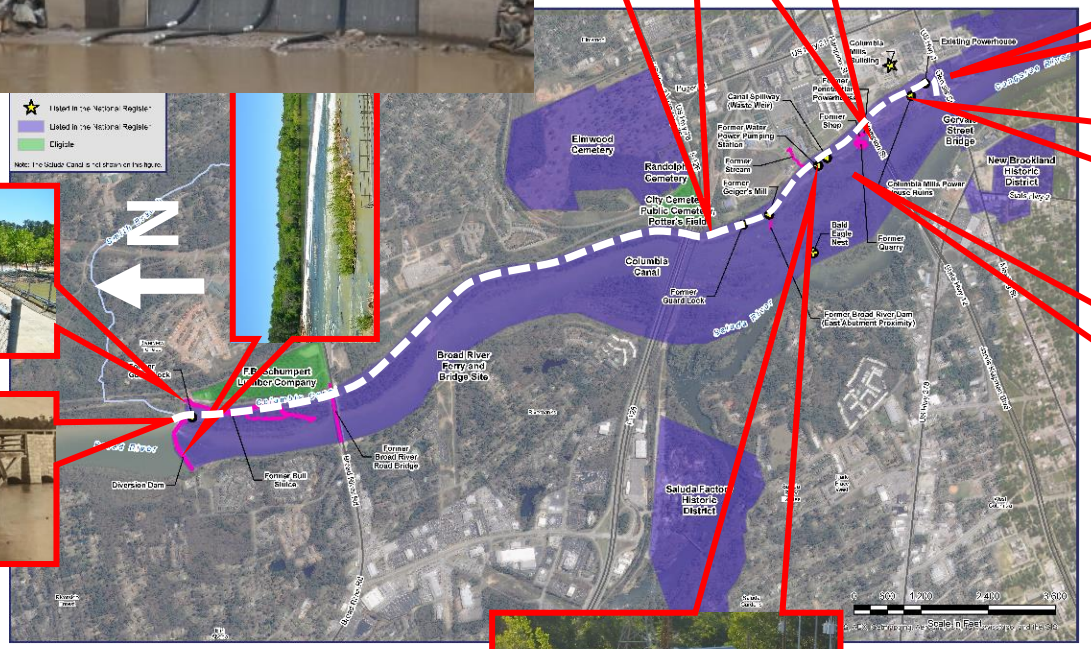
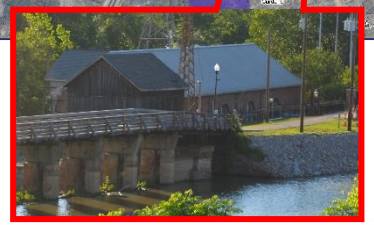
ITE CONSTRAINTS

ultural / Historic Resources
1900s to Present









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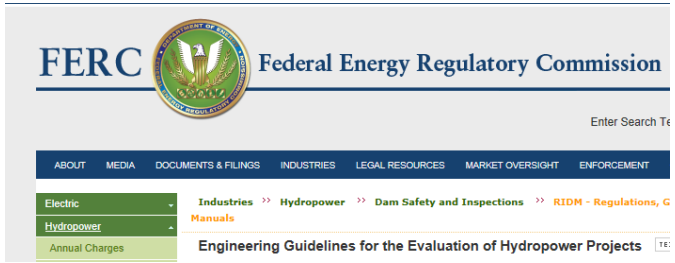
SITE CONSTRAINTS

Environmental Resources

Site Constraints

Cultural & Environmental Resource Preservation

Regulatory/Stakeholder Requirements


FERC Federal Energy Regulatory Commission

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Annual Charges

Industries ›› Hydropower ›› Dam Safety and Inspections ›› RIDM - Regulations, G
Manuals

Engineering Guidelines for the Evaluation of Hydropower Projects

LockhartPower

March 24, 2016

P-1895, NATDAM Nos. SC01064

Mr. Wayne B. King, P.E.
Regional Engineer
Federal Energy Regulatory Commission
wood Parkway, Suite 950
orgia 30096

ing:

losed is the revision to the December, 2015 update of Lockhart Power Company's
Action Plan for the Columbia Hydroelectric Project number 1895-SC to address
mments in a letter dated January 27, 2016.

refully review the updated EAP as the content has changed. Please replace pages in
f the EAP with the enclosed complete re-print.

se sign, date, and return the ACKNOWLEDGEMENT SHEET to me as soon as

The receipt acknowledgement sheets from the other plan holders are included in
pe.

Sincerely,

Lockhart Power Company

Lynn M. Mitchell
Generation Manager

Federal Energy Regulatory Commission
Division of Dam Safety and Inspections
May 2005

Preparations for Handling Emergencies and Potential Emergencies at Projects

Federal Energy Regulatory Commission
Division of Dam Safety and Inspections
DRAFT

RECOVERY PLAN FORMAT

ELECTRONIC CODE OF FEDERAL REGULATIONS

Electronic Code of Federal Regulations
e-CFR
TM

View past updates to the e-CFR.
Click here to learn more.

e-CFR data is current as of December 28, 2016

Title 18 → Chapter I → Subchapter A

TITLE 18—Conservation of Power and Water Resources

CHAPTER I—FEDERAL ENERGY REGULATORY COMMISSION, I
ENERGY

Technical Manual fo
Dam Owners

Impacts of Plants on Earthen Dams

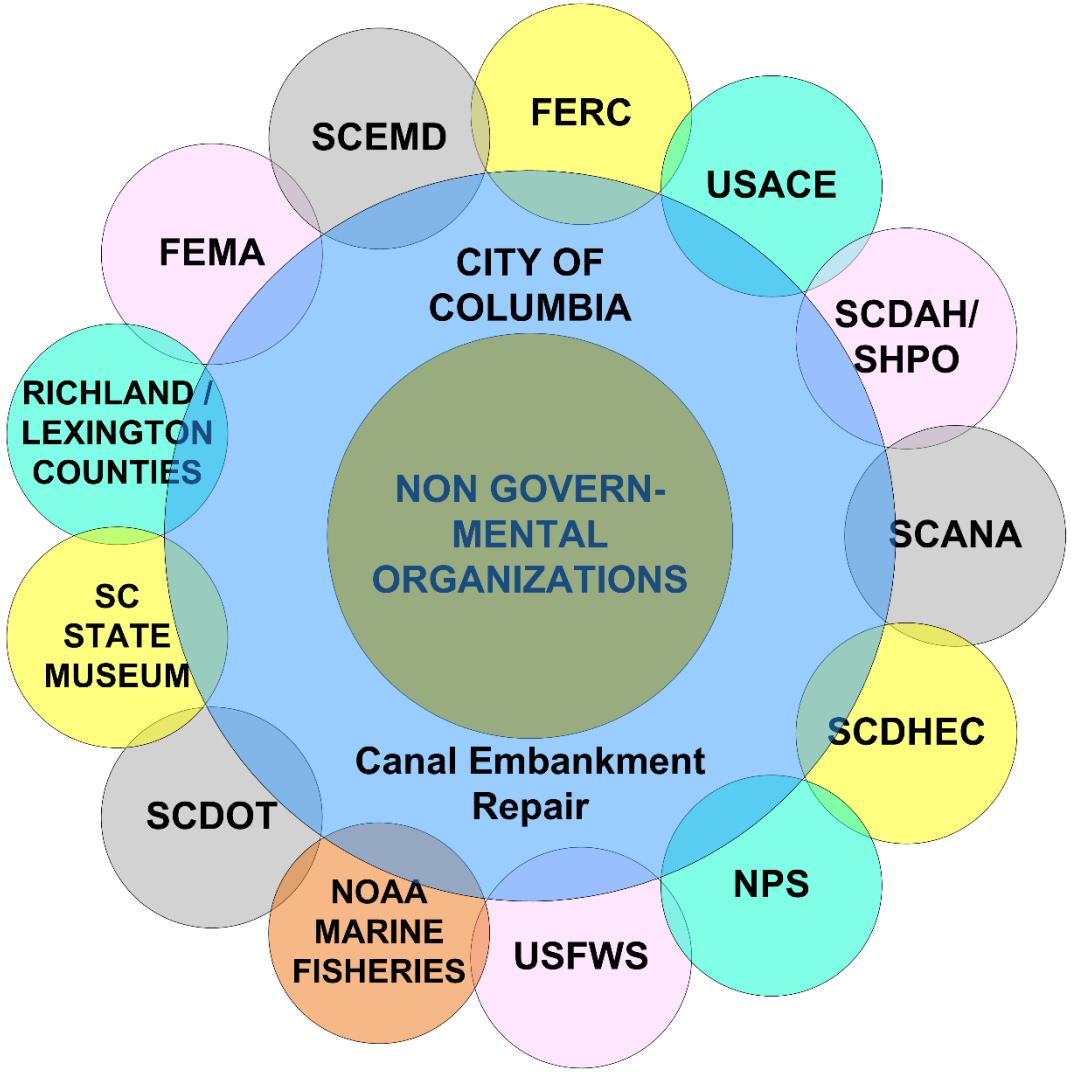
FEMA 534 / September 2005

ETL 1110-2-583
30 April 2014

US Army Corps
of Engineers®
ENGINEERING AND DESIGN

GUIDELINES FOR LANDSCAPE PLANTING AND VEGETATION MANAGEMENT AT LEVEES, FLOODWALLS, EMBANKMENT DAMS, AND APPURTENANT STRUCTURES

PATH MOVING FORWARD



Thank you.

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