Figure E2-25. Proposed Canton Club Levee (orange line)

Principal features of the work include mobilizing and demobilizing equipment, clearing and grubbing, removing and stockpiling any existing crushed stone surface, semi compacted levee embankment, traverses, adding new crushed stone surfacing, mowing, turfing, erosion control matting, preventing storm water pollution, and providing environmental protection.

If additional borrow is necessary, the borrow areas would be acquired by the NFI and furnished by the Government to the contractor (government furnished borrow). Some small areas could be more appropriate for the construction of a short floodwall, typically an I or T wall, could be more appropriate for some small areas due to space constraints, though further analysis would be required. Constructing a less designed berm could be more appropriate where smaller loadings would occur.

Construction of the project will require relocations and/or improvements to various public and private utilities and infrastructure, avoidance and minimization features required under the ESA, and the creation of new habitat mitigation areas to offset losses within the project's construction footprint areas.

Items not included within Alternative CTO

Given the magnitude of the Pearl River Basin, Mississippi flood risk, water supply and water quality concerns, it has become apparent that a systematic approach involving multiple projects from several different programs and under several different authorities will be required to effectively deal with a problem of such large proportions. Below is a listing of items that could be considered for separate efforts that were considered beyond the scope of the existing study.

Storage in Tributaries

Future projects could consider additional storage in tributary, either by upstream detention, or by side channel storage. These options could have limited benefit due to the downstream channel constraints, which are already restricting flow and lack of available land for side channel storage, as the tributaries are urban drainages. It may also afford recreational access to the waterway.

Storage in Pearl River Channel

Future projects could consider additional storage by upstream detention. This option was previously considered and known as “Lake Shoccoe” but removed due to a lack of public support. Comments at the public meetings supporting this plan suggest reincluding this as an option. Thes options could have some limits due to the downstream channel constraints, which are already restricting flow, but a reasonable reduction of damages could be realized. The Ross Barnett Reservoir Lower Dam, also known as the “Low head dam” is upstream of the Ross Barnett Reservoir and is in disrepair. This structure primarily supports recreation. This structure or a nearby site could be modified to add storage, while preserving the recreational aspects of the existing structure. Further this would limit mitigation damages, as this would replace rather than add an additional structure to the waterway. It may also afford additional recreational access to the waterway.

A sensitivity analysis shows that reducing the flows from the Ross Barnett Reservoir by 20 percent, would reduce damages to the project, similarly but a little less effectively than that of alternative C.

Water Supply- Programmatic Agreement

The EPA and USACE are currently working with the city of Jackson to address local water and wastewater infrastructure under existing federal authorities. This work addresses the immediate and to some extent long standing problems with aging local environmental infrastructure. The J.H. Fewell Water Treatment Plant is 90 years old and remains in service, and under court order is being upgraded. The Ross Barnett Reservoir and Pearl River surface water are the two primary sources of drinking water for the surrounding communities. Flood control projects in the area must directly account for substantive work occurring and ensure alignment with such infrastructure modernization work.

Additional Future Projects could consider potential water supply options:

- No action. Water supply is currently adequately supplied but concerns for future water supply needs would not be supplied.
- Water Supply Conveyance to a site selected by local utilities/municipalities via a pipeline from existing J.H. Fewell weir, with improvements to or replacement of