The following presentation is based on input from staff of various Louisiana state and federal resource agencies, but does not reflect the official position of any of the agencies involved.

Louisiana Coastal Protection and Restoration

Preliminary

Resource Agency

Environmental Alternatives

Agreed upon principles

- No levee construction w/o concomitant habitat restoration commensurate with the scale of levee const
- Restoration measures designed to maximize the dual purpose (hurricane prot./env. ben)
- Proposed features to be reviewed and modified as info becomes available on effectiveness

- Fully evaluate non-structural alternatives
- Hurricane protection should not come at the expense of the coastal environment
- Involve the public
- Plan for effects of features on hydrology

Avoid and Minimize Impacts

- Use existing levee alignments
- New alignments on the upland side of the upland/wetland interface *
- Avoid enclosing wetlands
- Minimize (and undo) the disruption of natural hydrology

- Unavoidable impacts to wetlands should be offset by compensatory mitigation measures
- Mitigation should be in-kind, same basin
- No mitigation credit for benefits to enclosed wetlands

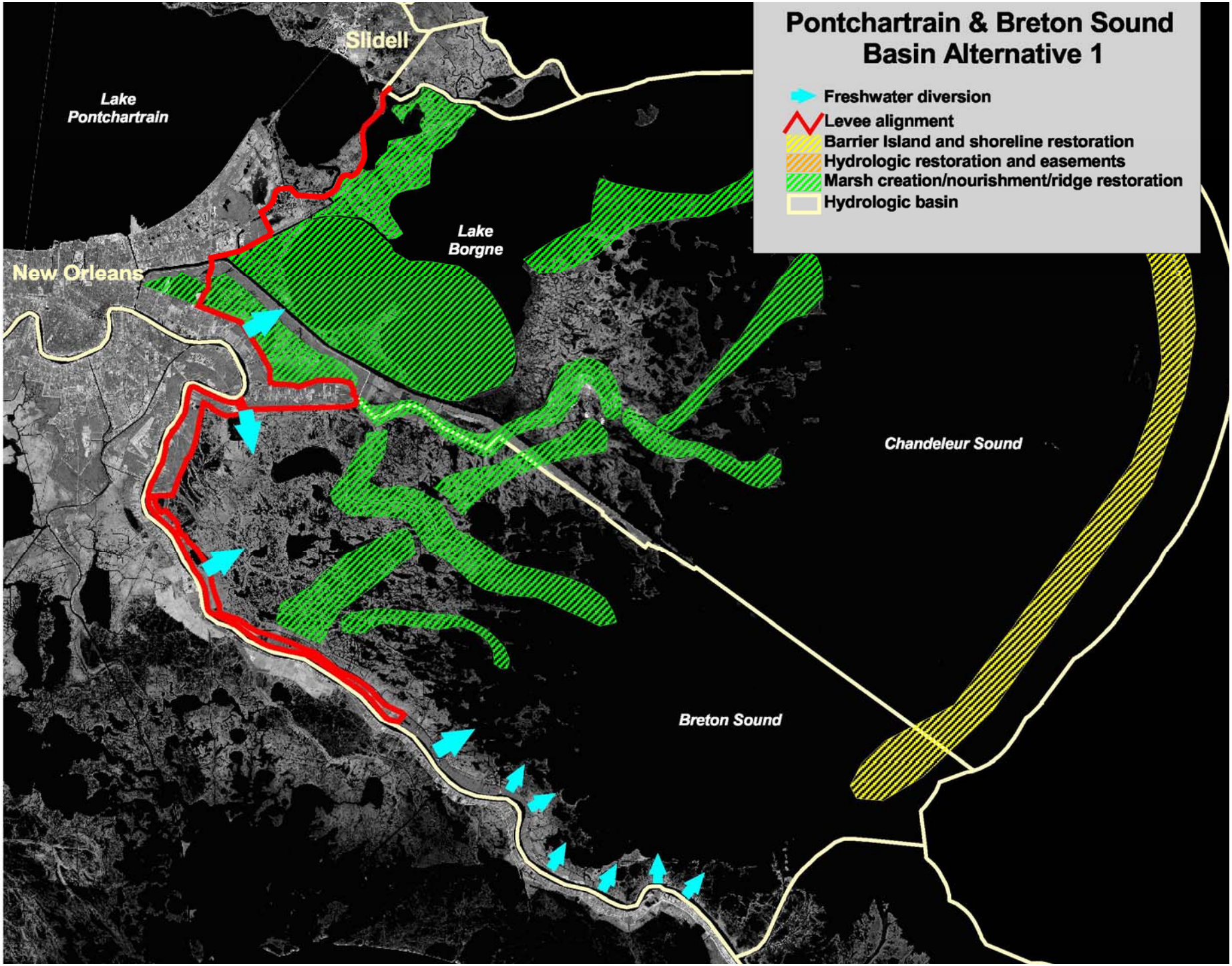
- Anticipate and accommodate river reintroduction projects
- Use Miss. and Atchafalaya Rivers for restoration and storm protection

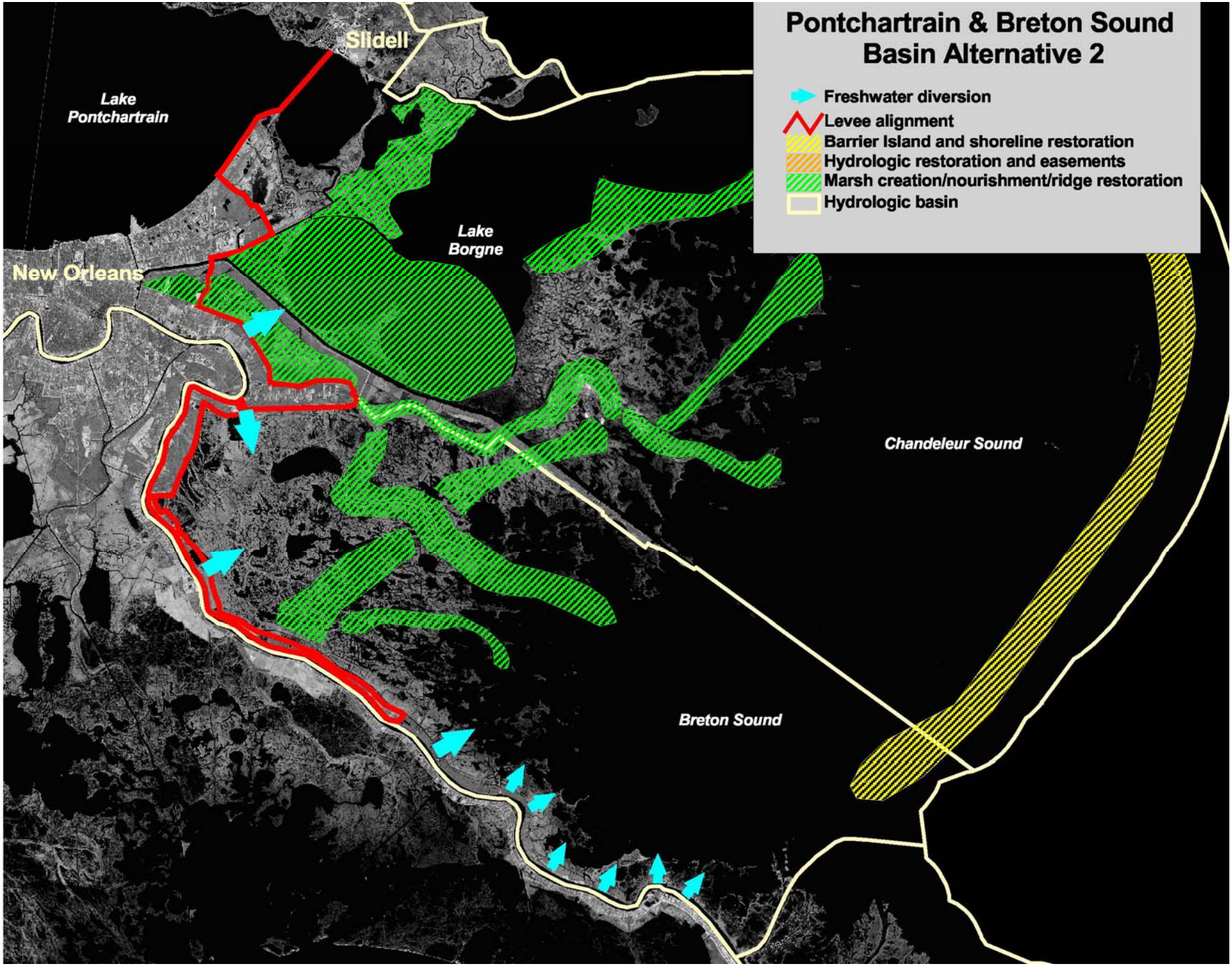
Restoration Strategy

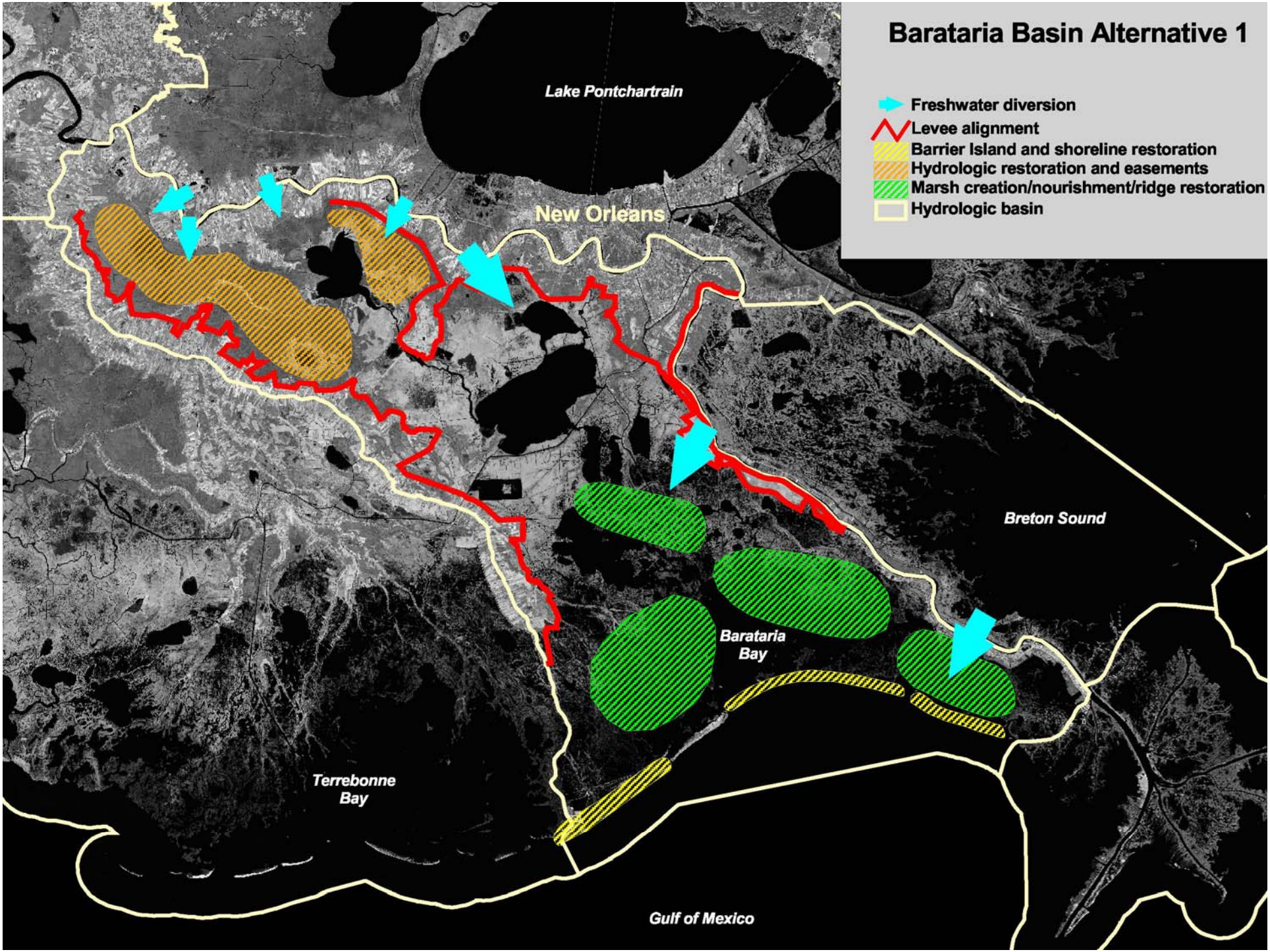
- Large scale creation of wetland and ridge barriers for storm surge protection, and maintain with diversions

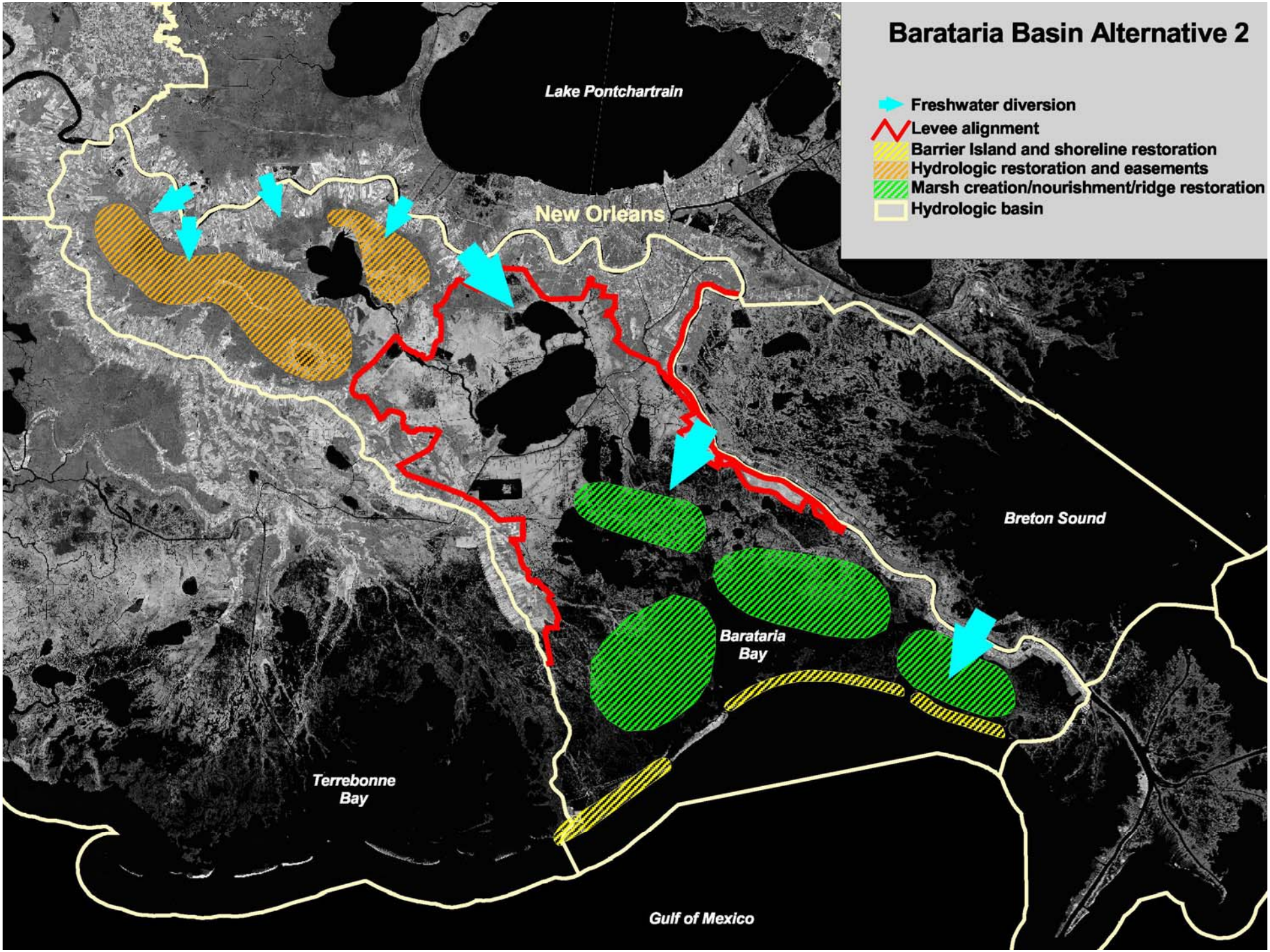
Programmatic Sediment Sources

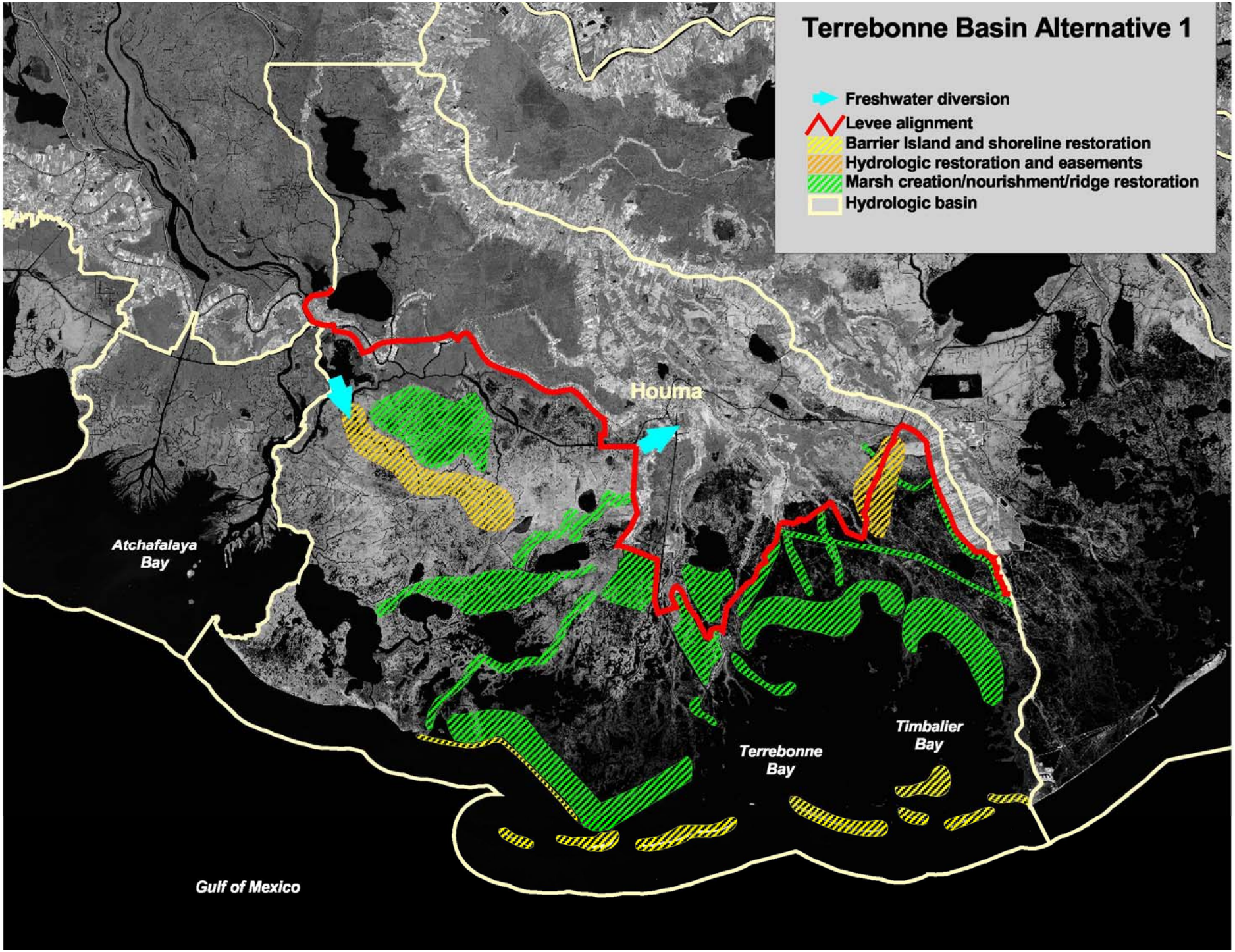
- Massive amounts needed
- Use external sources
- Avoid historical piecemeal approach, which results in adjacent borrow in wetlands
- Large-scale, such as offshore deposits, 2 rivers
- Pipeline delivery
- Economy of scale

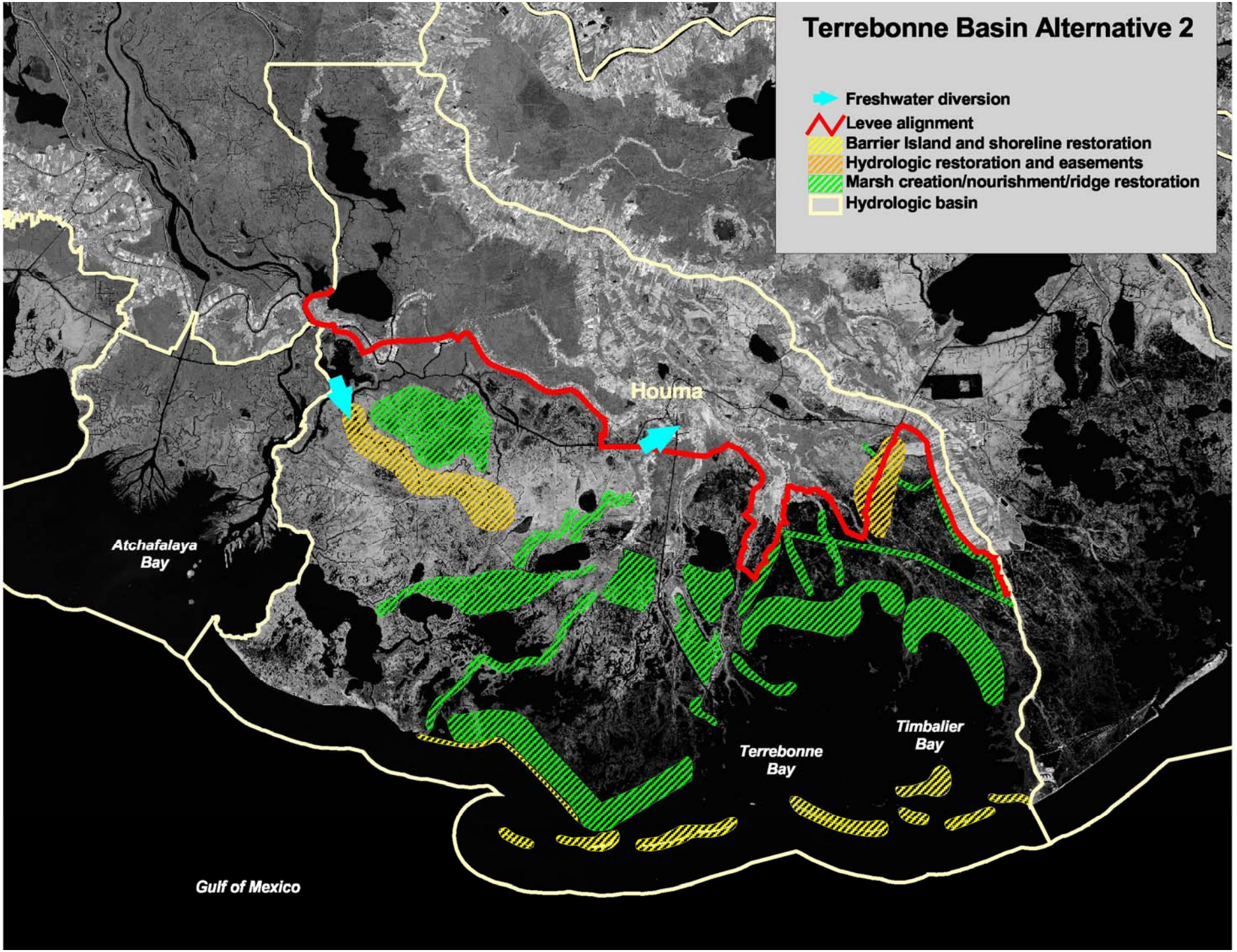

Pontchartrain & Breton Sound
Basin Alternative 1
Freshwater diversion
Levee alignment
Barrier Island and shoreline restoration
Hydrologic restoration and easements
Marsh creation/nourishment/ridge restoration
Hydrologic basin
Slidell
Lake
Pontchartrain
Lake
Borgne
New Orleans
Chandeleur Sound
Breton Sound

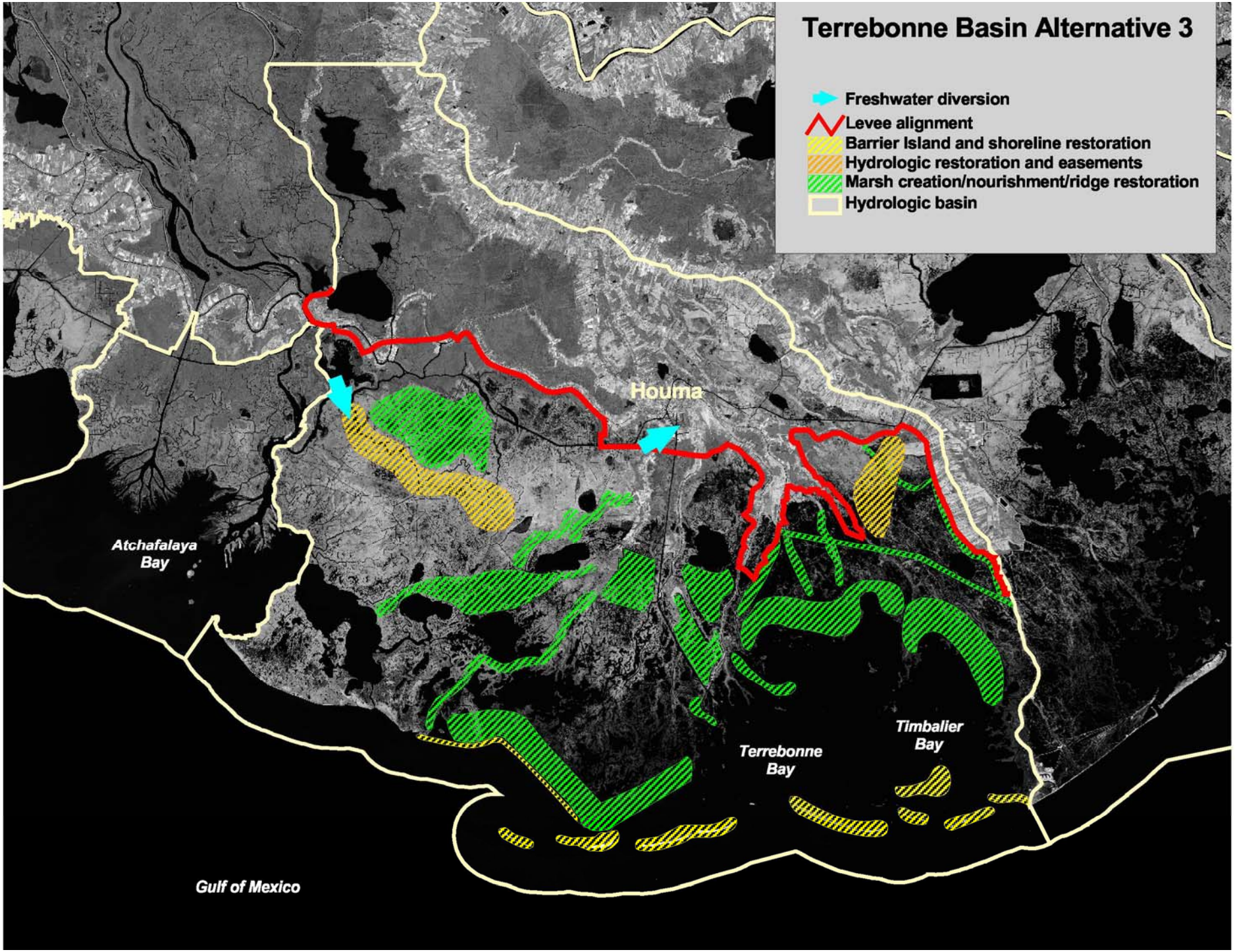

Pontchartrain & Breton Sound
Basin Alternative 2
Freshwater diversion
Levee alignment
Barrier Island and shoreline restoration
Hydrologic restoration and easements
Marsh creation/nourishment/ridge restoration
Hydrologic basin
Slidell
Lake
Pontchartrain
Lake
Borgne
New Orleans
Chandeleur Sound
Breton Sound

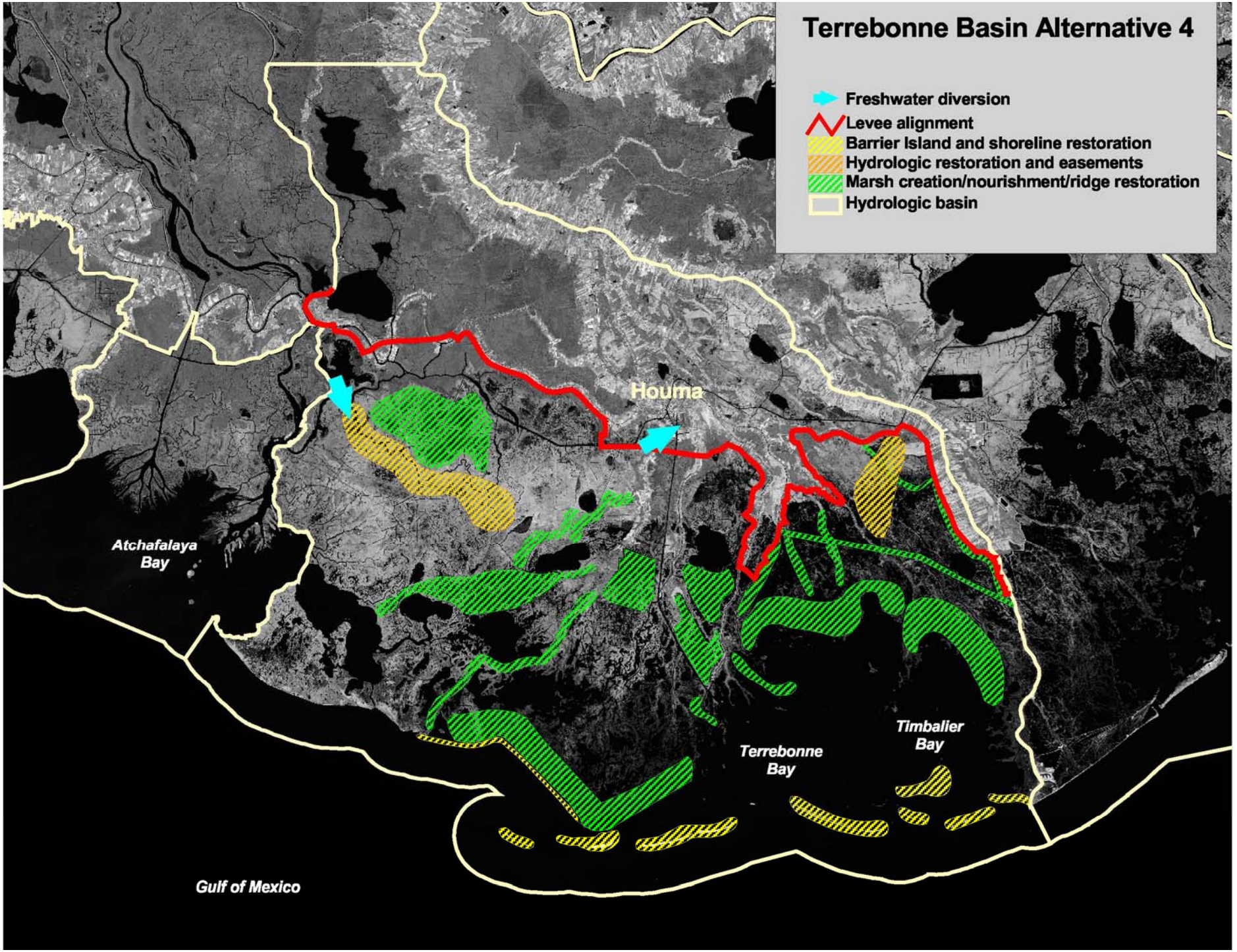

Barataria Basin Alternative 1
Freshwater diversion
Levee alignment
Barrier Island and shoreline restoration
Hydrologic restoration and easements
Marsh creation/nourishment/ridge restoration
Hydrologic basin
Lake Pontchartrain
New Orleans
Breton Sound
Barataria Bay
Terrebonne Bay
Gulf of Mexico

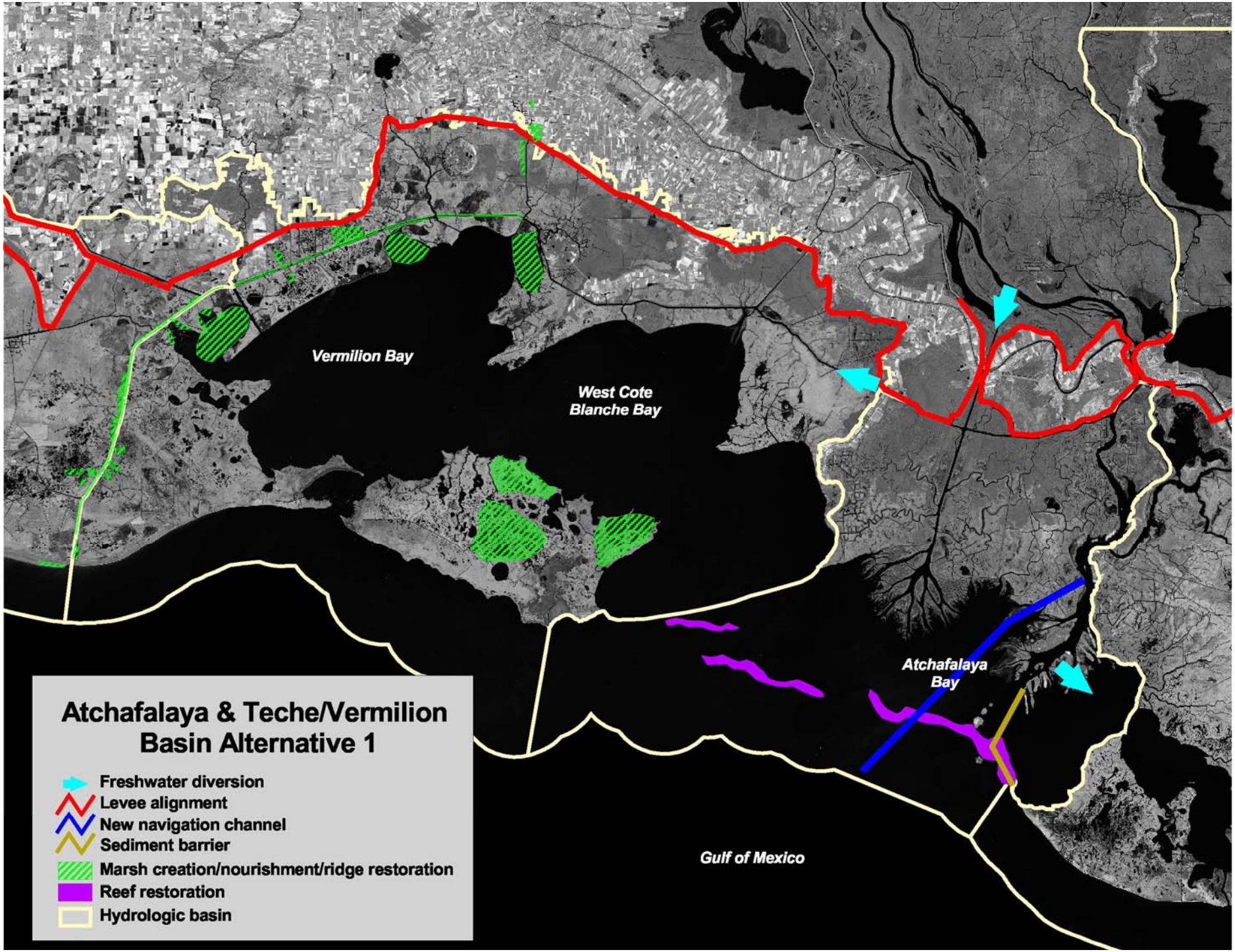

Barataria Basin Alternative 2
Freshwater diversion
Levee alignment
Barrier Island and shoreline restoration
Hydrologic restoration and easements
Marsh creation/nourishment/ridge restoration
Hydrologic basin
Lake Pontchartrain
New Orleans
Breton Sound
Barataria Bay
Terrebonne Bay
Gulf of Mexico

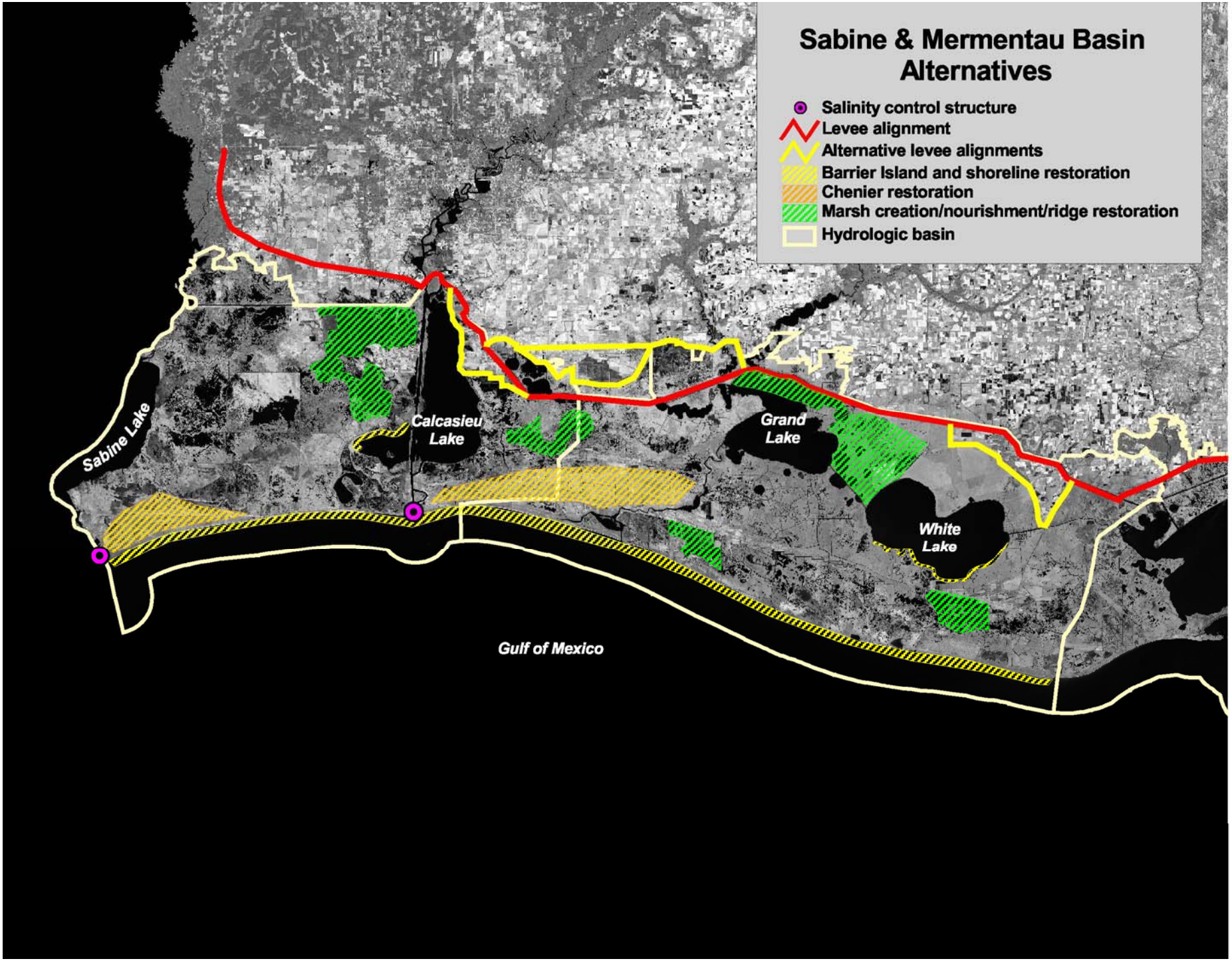

Terrebonne Basin Alternative 1
Freshwater diversion
Levee alignment
Barrier Island and shoreline restoration
Hydrologic restoration and easements
Marsh creation/nourishment/ridge restoration
Hydrologic basin
Houma
Atchafalaya Bay
Terrebonne Bay
Timbalier Bay
Gulf of Mexico


Terrebonne Basin Alternative 2
Freshwater diversion
Levee alignment
Barrier Island and shoreline restoration
Hydrologic restoration and easements
Marsh creation/nourishment/ridge restoration
Hydrologic basin
Houma
Atchafalaya Bay
Terrebonne Bay
Timbalier Bay
Gulf of Mexico


Terrebonne Basin Alternative 3
Freshwater diversion
Levee alignment
Barrier Island and shoreline restoration
Hydrologic restoration and easements
Marsh creation/nourishment/ridge restoration
Hydrologic basin
Houma
Atchafalaya Bay
Terrebonne Bay
Timbalier Bay
Gulf of Mexico


Terrebonne Basin Alternative 4
Freshwater diversion
Levee alignment
Barrier Island and shoreline restoration
Hydrologic restoration and easements
Marsh creation/nourishment/ridge restoration
Hydrologic basin
Houma
Atchafalaya Bay
Terrebonne Bay
Timbalier Bay
Gulf of Mexico


Vermilion Bay
West Cote
Blanche Bay
Atchafalaya
Bay
Gulf of Mexico
Atchafalaya & Teche/Vermilion
Basin Alternative 1
Freshwater diversion
Levee alignment
New navigation channel
Sediment barrier
Marsh creation/nourishment/ridge restoration
Reef restoration
Hydrologic basin


Sabine & Mermentau Basin Alternatives
Salinity control structure
Levee alignment
Alternative levee alignments
Barrier Island and shoreline restoration
Chenier restoration
Marsh creation/nourishment/ridge restoration
Hydrologic basin
Sabine Lake
Calcasieu Lake
Grand Lake
White Lake
Gulf of Mexico