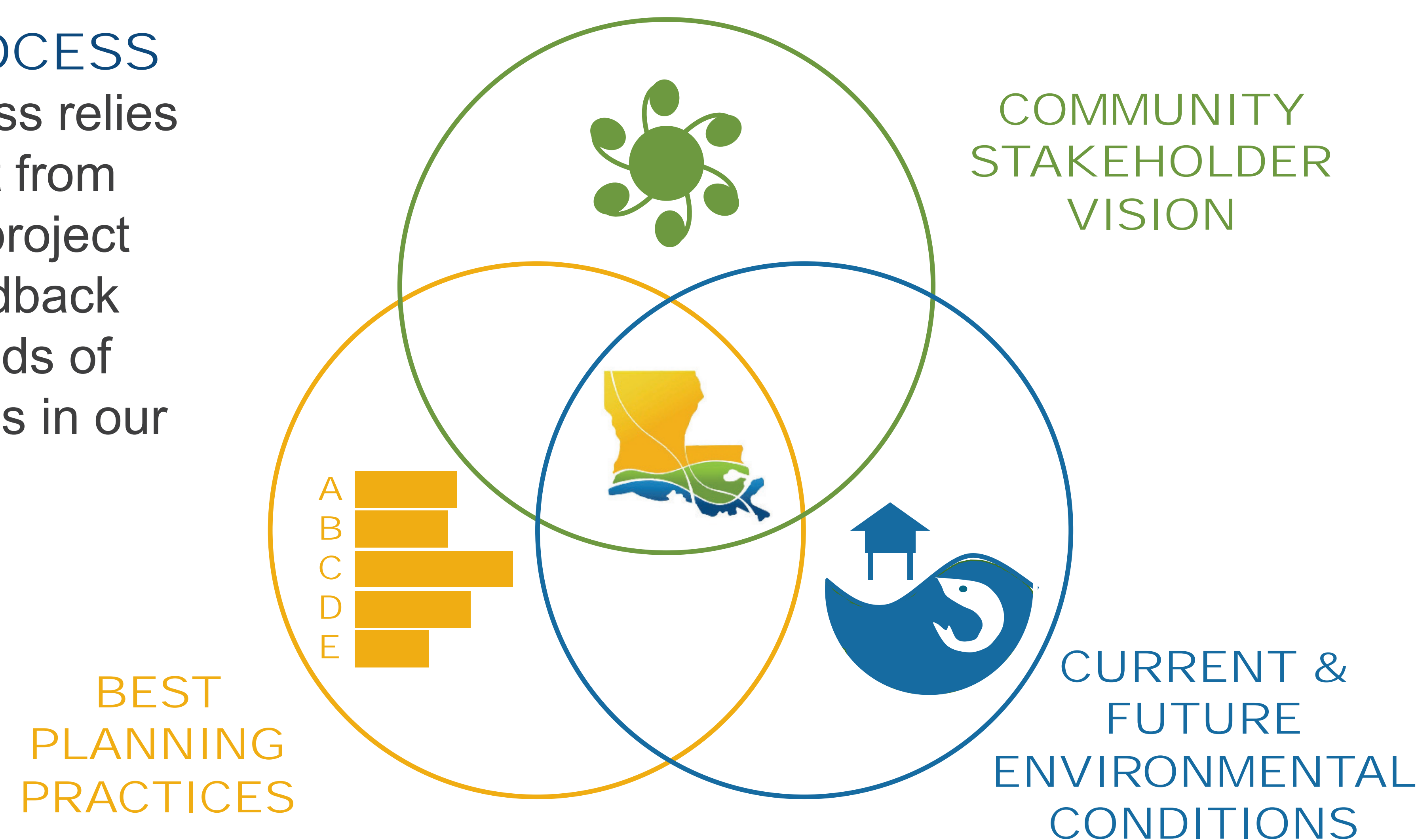


LA SAFE OVERVIEW

LA SAFE developed an inclusive way to plan for land change and the impacts to our communities from increasing flood risk. Our process integrates planning expertise, the best available science, and community input to envision how southeast Louisiana can grow over the next 50 years. When the plan is complete, LA SAFE will implement demonstration projects and programs across the coast to illustrate adaptation strategies that increase Louisiana's resilience.

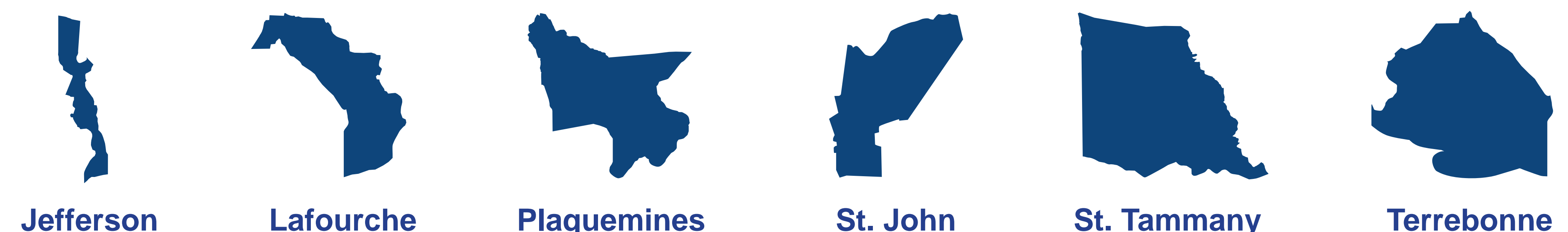
CO-DESIGN PROCESS

Our planning process relies on community input from start to finish. The project team created a feedback loop through 5 rounds of community meetings in our 6 target parishes.



HOLISTIC APPROACH

LA SAFE understands that flood risks and environmental challenges lead to changes throughout a community, including residents moving, cultural and economic change, increased social vulnerability, and new educational needs. To address this holistically, the project team collected data and perspectives to develop adaptation strategies that provide multiple benefits across community life. The strategies include a range of solutions outside of CPRA's structural protection and restoration focus.



CONNECTING LOCAL TO REGIONAL

By the end of the LA SAFE process, 6 parishes will have a plan that includes programs, policies and projects that will support southeast Louisiana communities over the next 50 years.

So far, more than 1,500 residents participated in the process. They shared their concerns related to stormwater, transportation, and development policy across the coast. Some of these concerns are local, while others require solutions at the regional or state level. Through this process, community members informed local, regional and state policy solutions.



LA SAFE ENGAGEMENT PROCESS



ROUND 1 MEETINGS

March & April 2017

LA SAFE brought the best science and risk modeling to the table. Residents brought their experience, goals and vision.

Meeting 1 focused on understanding changes taking place in each community, and setting goals for the future. After reviewing data, residents discussed the changes they have seen in their lifetimes, what they think is most important to protect, and their hopes for the future of their parish. The opportunities identified by the residents are the foundation for the LA SAFE strategies.



ROUND 2 MEETINGS

May & June 2017

We held 21 meetings in 19 locations across the coast. Residents recommended short-term, medium-term and long-term strategies.

The second round of LA SAFE meetings focused on conversations in smaller communities. Residents discussed adaptation strategies over the next 10, 25 and 50 years. In this series of community meetings, residents pinpointed challenges, proposed solutions, and collectively described a future across different types of environments and different levels of risk.



ROUND 3 MEETINGS

July & August 2017

Residents evaluated a vision, responded to polling questions and prioritized strategies.

At the third round of meetings, the project team presented an overall vision for each parish. Residents evaluated the vision and answered a series of questions, and provided feedback on individual projects, programs, and policies that could potentially support the vision.



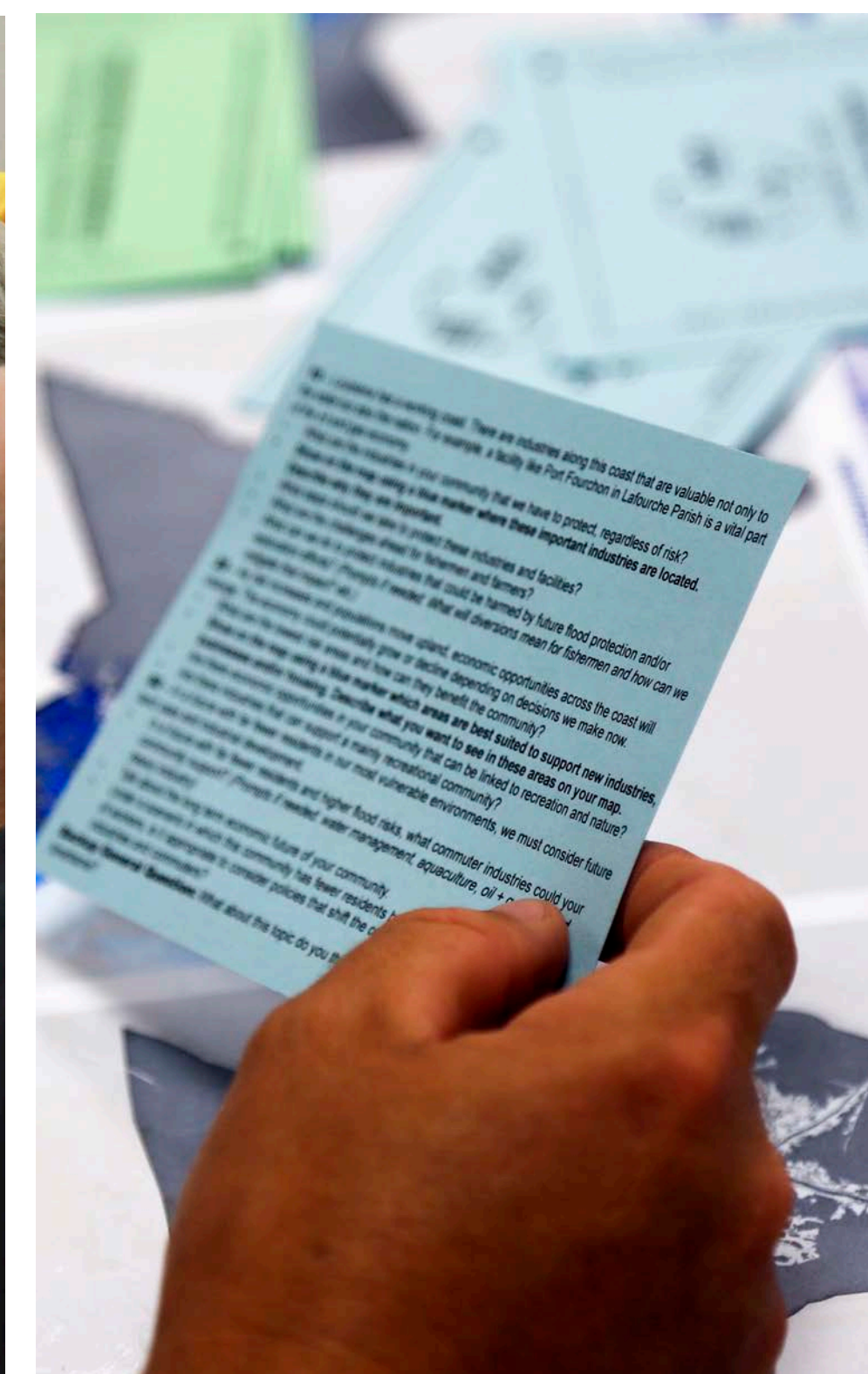
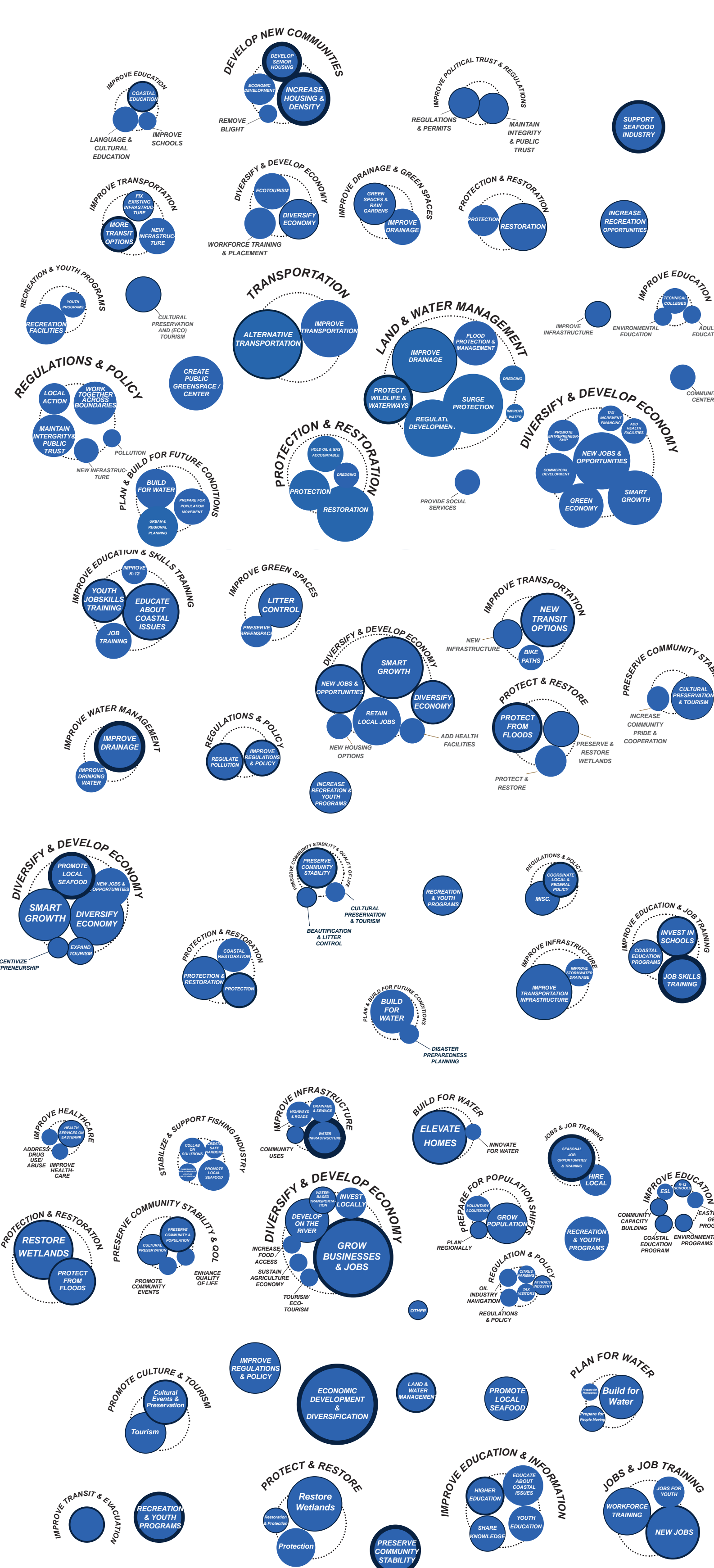
ROUND 4 MEETINGS

October 2017

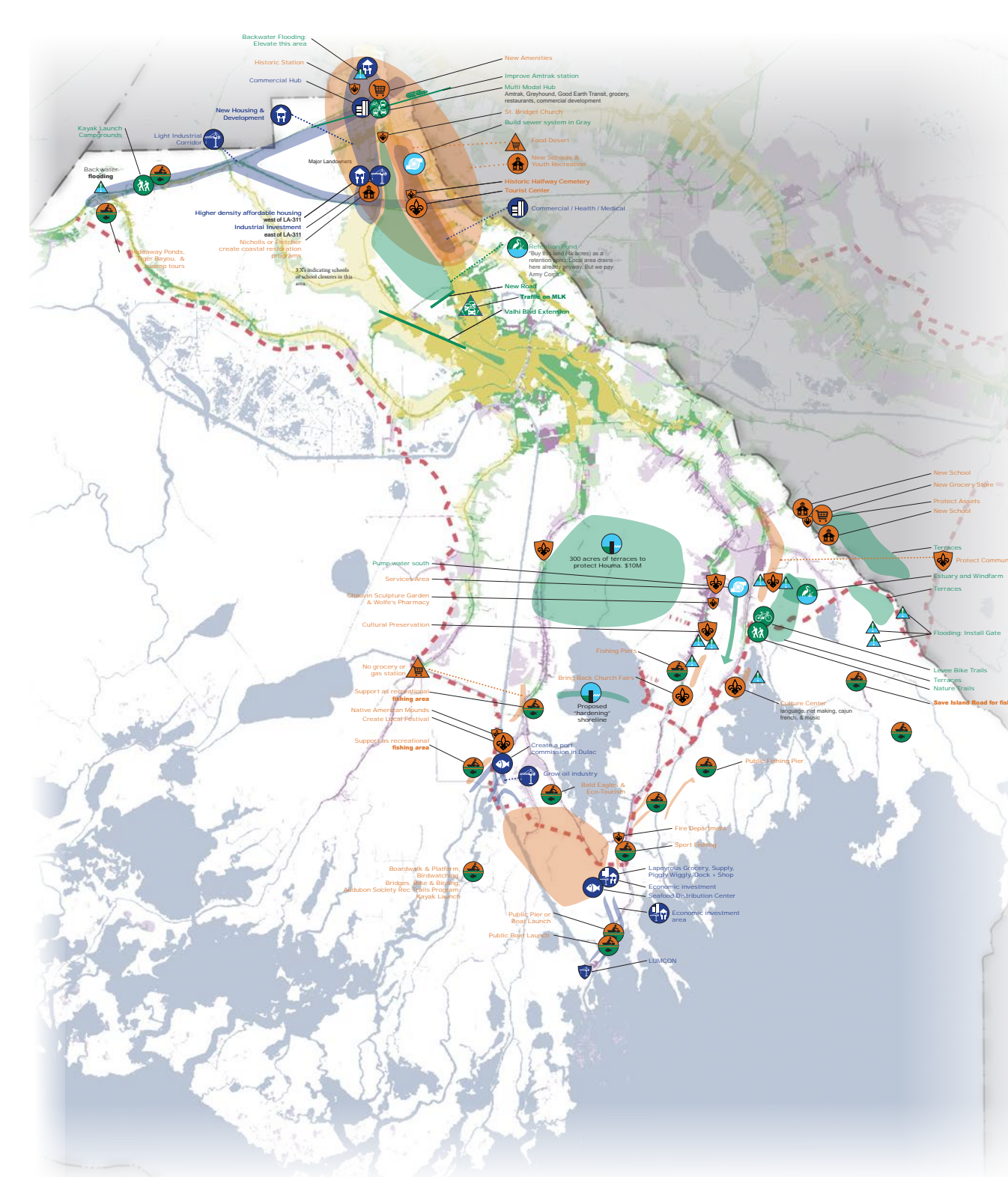
Residents checked in on the progress at open houses. Stakeholders provided implementation insight and guidance.

In the fourth round, the LA SAFE team held several stakeholder meetings and community open houses in each parish. At the open houses, LA SAFE shared updates and progress on plan and project development, and discussed the ideas with residents one-on-one. At the stakeholder meetings, leaders and potential partners advised on how the projects could align with existing efforts.

OPPORTUNITIES RESIDENTS IDENTIFIED

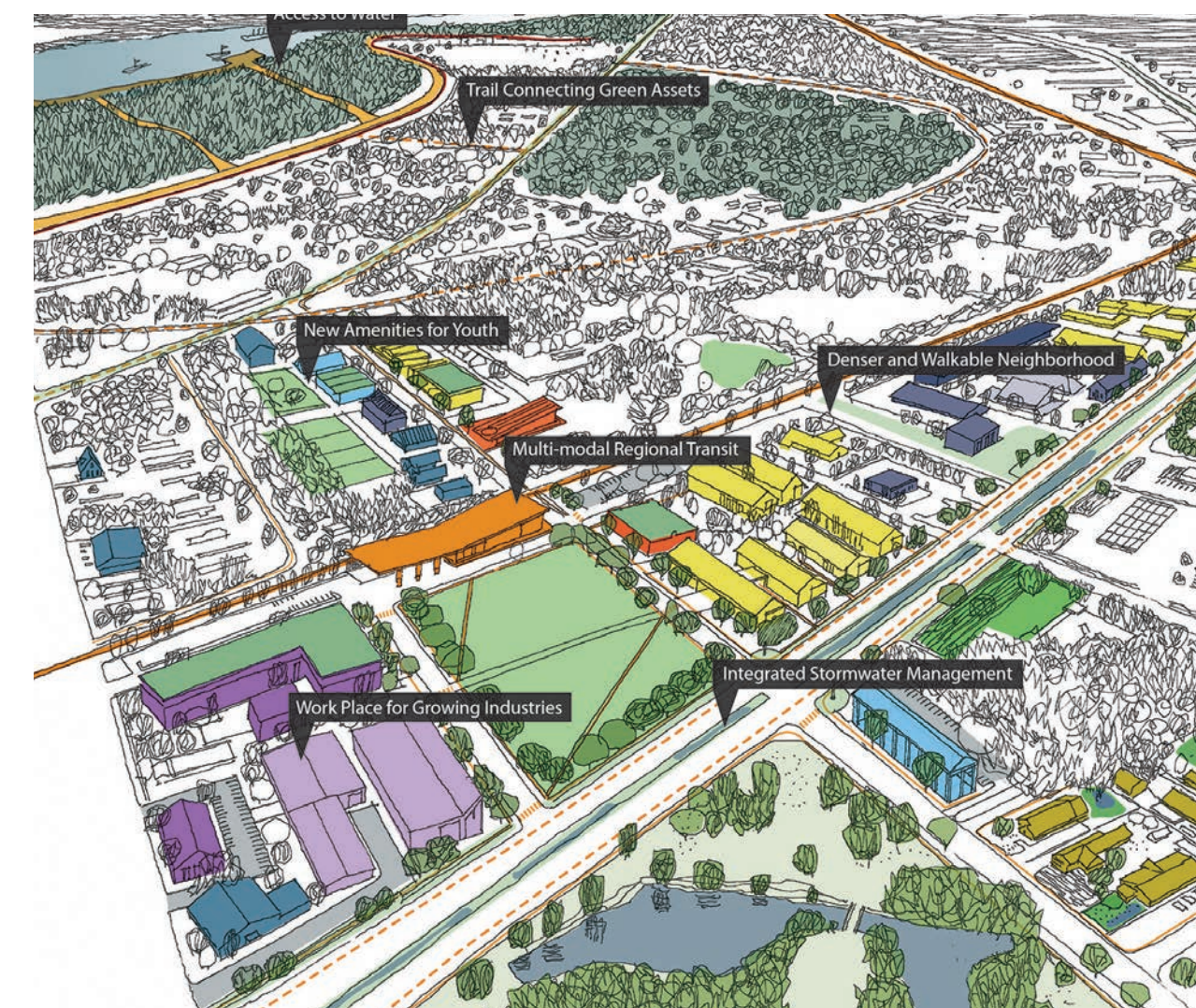


EXAMPLE ROUND 2 RESULT MAP

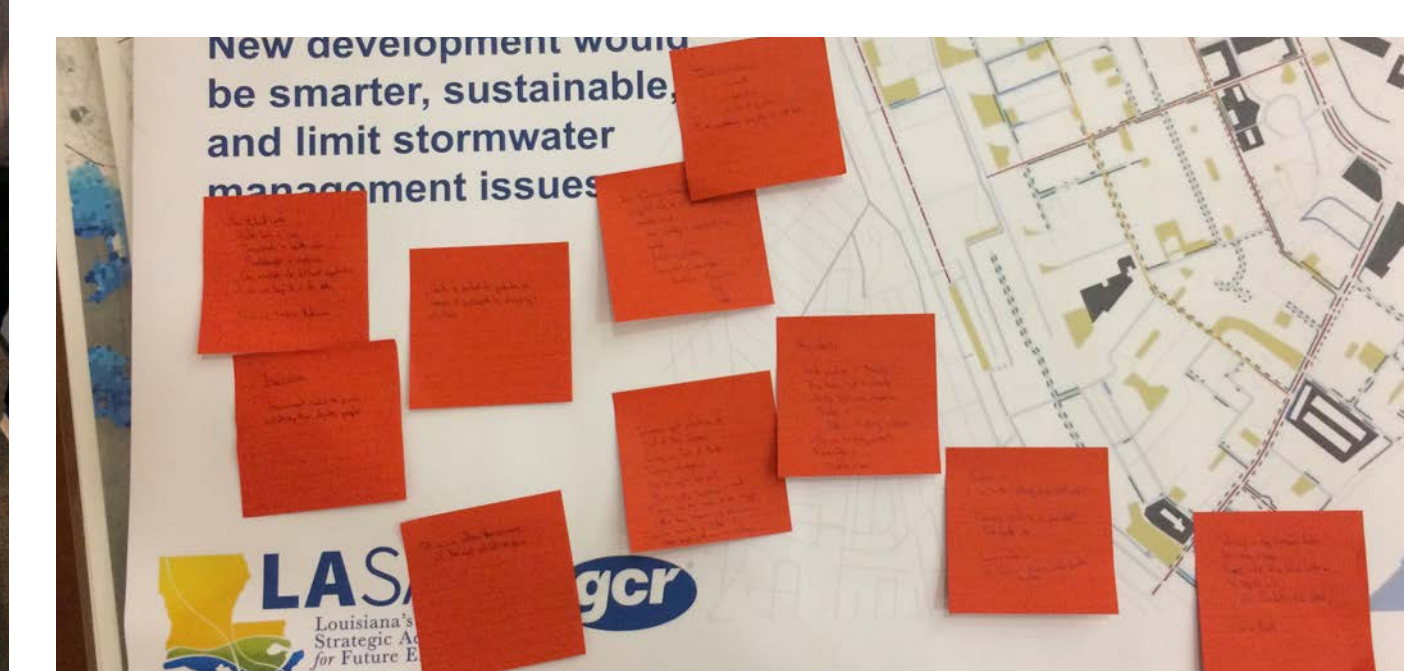
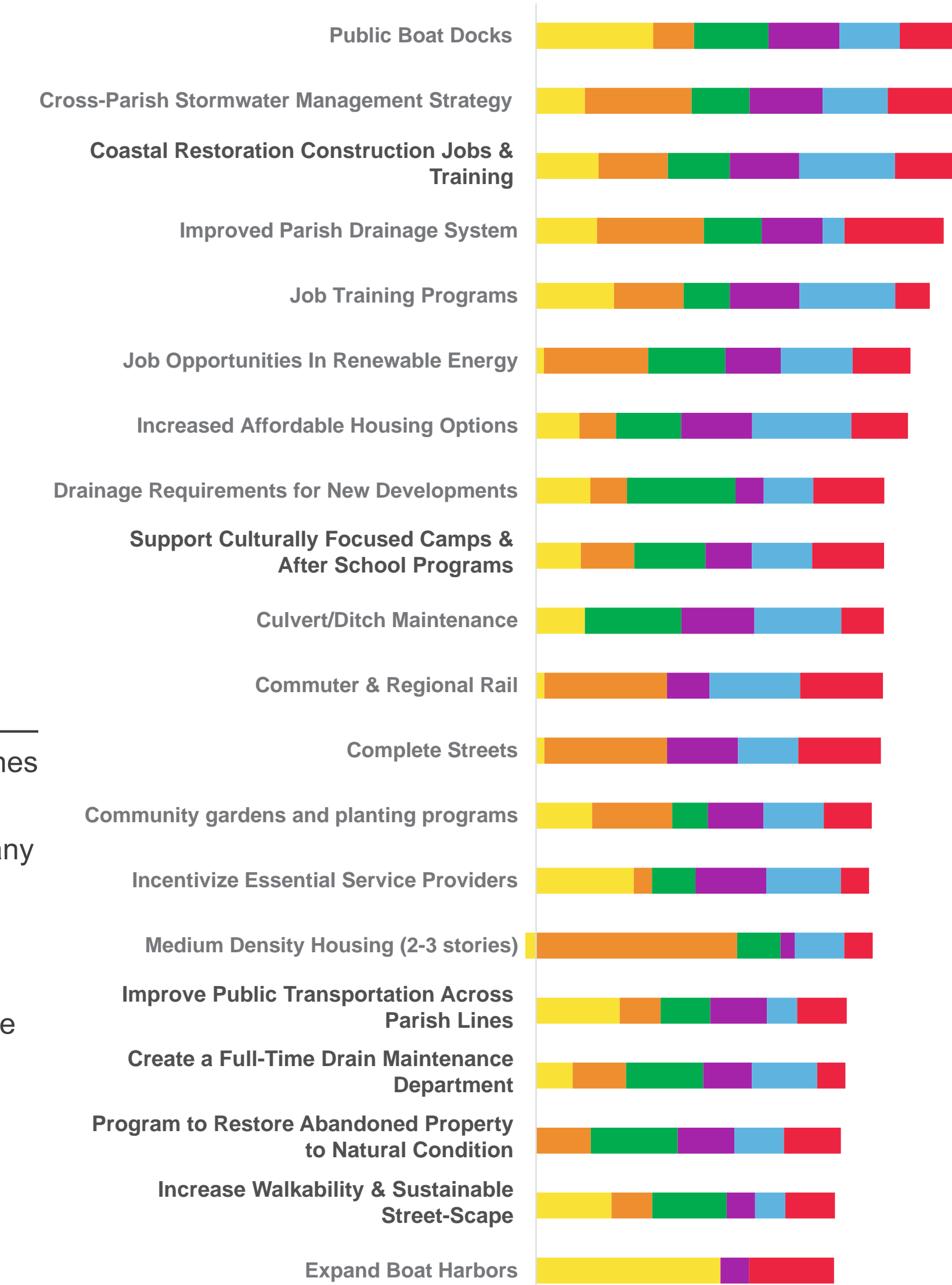


WHAT WE HEARD AT MEETING 2 TERREBONNE PARISH Discussion Summaries

- GIBSON/GRAY/SCHRIEVER**
 - Create a plan that allows more compact neighborhoods
 - Create affordable housing
 - Create water retention areas and rain gardens
 - Provide multi-modal public transportation (trains, buses, bicycles, and walking)
 - Develop **economic diversification**
 - Educate youth about coastal issues
 - Improve existing pumps
 - Clean existing drains, ditches, and culverts
 - Preserve critical assets
- MONTGUT/POINTE AUX CHENES**
 - Subsidize **flood insurance** costs
 - Assist in elevating homes
 - Clean existing drains, ditches, and culverts
 - Assist in elevating homes
 - Add public boat launches and piers
 - Support and encourage ecotourism
 - Preserve culture and traditions
 - Preserve critical assets
- COCODRIE/CHAUVIN/DULAC**
 - Add public boat launches and piers
 - Preserve, grow, and revive the ecotourism economy
 - Promote multi-modal public transportation
 - Subsidize home **flood** and wind insurance costs
 - Improve existing pumps
 - Support **local fishermen** and seafood industry
 - Clean existing drains, ditches, and culverts
 - Preserve culture and traditions
 - Allow **floating homes** and stores



MOST POPULAR IDEAS ACROSS THE COAST



PROPOSAL POLLING & SELECTION

The six pilot proposals around the room are based on the community input the project team heard this year, and align with future environmental conditions. Tonight, the project team asks you which of the six you most prefer.

Tonight's results will be announced at 7:30pm. The final plan, including proposal selection, will be released in the first quarter of 2018!

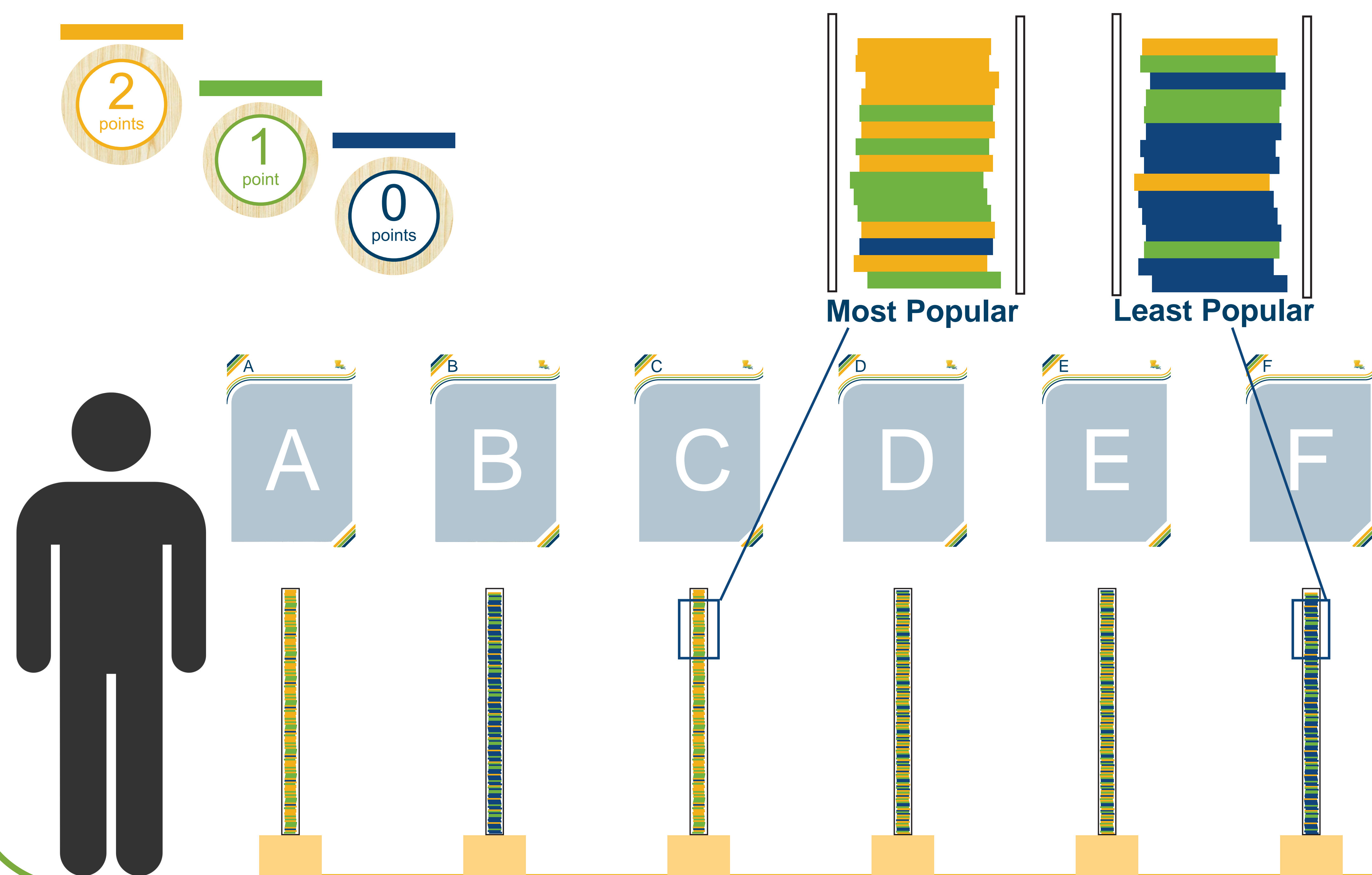
TONIGHT'S PREFERENCE POLLING

Boards with the six pilot proposals are around the room. Visit each of them, ask questions, and give your feedback on comment cards. Once you evaluate each of the proposals, please visit the polling station.

You have **two gold**, **two green**, and **two blue** tokens.

Drop one token in each tube at the polling station based on your level of preference.

- **Gold Token = 2 points.** These are for your two favorite proposals.
- **Green Token = 1 point.** These are for your third and fourth favorite proposals.
- **Blue Token = 0 points.** These are for your least favorite proposals.



WHY YOUR PREFERENCE MATTERS

The final pilot proposal will be chosen based on six criteria:

1. Public Preference

A proposal earns points based on public polling at current parish-wide meetings. The most popular proposals will receive the most points, and the least popular proposals will receive the fewest points.

2. Leverage Funds

A proposal earns points if it can identify other funding sources in addition to current funds. If \$1 is provided by other sources for every \$3 from LA SAFE, projects begin to earn points. Projects that are funded mostly (>50%) by other sources get the maximum points for this criteria.

Cash or other in kind contributions, such as land donations, are acceptable leverage. Volunteers or other “sweat equity” contributions are not considered leverage.

3. LMI Benefit

A proposal earns points if 50% or more of the proposal benefits a low-to-moderate-income (LMI) population. Points will be awarded on an all-or-nothing basis.

4. Public Benefit (Quantitative)

A proposal earns points if the benefit to the public can be measured. For example, the number of units created or rehabilitated in a housing proposal, or the number of jobs created in an economic development proposal. The scoring committee determines the measurable benefits of each proposal.

5. Public Benefit (Qualitative)

A proposal earns points if it addresses future flood risk and environmental conditions in a unique way and/or improves quality of life for residents. For example, this may include a proposal's value as an example project, or its ability to be easily replicated in other places. The scoring committee will determine the qualitative benefits of each proposal.

6. CRS Score

A proposal will earn points if the activity falls under the Community Rating System (CRS). Points will be awarded on an all-or-nothing basis. The Community Rating System (CRS) is a program that provides flood insurance discounts to communities that carry out certain floodplain management activities.

RECOMMENDED POLICIES



STORMWATER MANAGEMENT

Institutionalize considerations of future flood risk in daily operations and programs within state agencies.

- Create a State Office of Resilience to move away from the responsive nature of current mitigation planning and move away from paradigms specific and reactive to individual disaster events.
- Require state agencies to assess current and future flood risks to their physical assets based on the 50-year projections in the Coastal Master Plan. Agencies will publish risk reduction plans for existing and planned assets based on this assessment.
- Require state agencies to assess current and planned programs and projects to ensure consistency with the Coastal Master Plan, and develop strategies mitigate current and future flood risk on their operations.

Align public funding and project prioritization to promote green infrastructure and stormwater management.

- Empower regional planning associations to develop watershed-based stormwater policies across jurisdictional lines, and allow for the formation of stormwater utilities that can create fee-based services to help pay for flood risk reduction projects.
- Require all publicly-funded capital projects in the state to capture and store at least 1.25" of rainfall in the first hour of a rain event, and allow local governments to mandate higher stormwater retention requirements for publicly-funded projects.
- Develop safety guidelines for greywater use in toilets and for irrigation, and encourage the use of captured stormwater for these purposes.
- Design new and retrofitted recreation areas with ample drainage and water storage space, and use those recreation areas as a secondary tier of defense against neighborhood flooding.

Incentivize the incorporation of stormwater management features and green infrastructure in private developments.

- Incentivize investment in stormwater management best practices on private property through grant and low-interest loan programs, tax rebates, and stormwater fees.
- Provide outreach, education, and technical assistance to the public, planners, contractors, and local governments on best management practices for stormwater and green infrastructure.
- Create a public online portal that maps existing stormwater management and green infrastructure assets and provides the current status of local stormwater management assets.



HOUSING & DEVELOPMENT

Encourage elevation of homes based on current and future flood risk.

- Implement and enforce a requirement that all new developments or substantial rehabilitations of existing properties be built 2' above base flood elevation.
- Develop equitable financial incentives to assist with home elevations and ensure elevation support is accessible to all residents.
- Combine wind fortification and weatherization programs with home elevations to account for multiple risk factors.

Plan future development based on risk typologies, with residential growth in low risk areas.

- Develop zoning ordinances that incentivize high density, mixed use development in low risk areas.
- Prohibit new, permanent residential development in high risk areas outside proposed structural protections.
- Develop a buy-out program for full time residents in high-risk areas outside structural protection. This program must provide an adequate amount of money to buy a home of similar size and in good condition in a low-risk area.
- Create a phased reduction or elimination of the homestead exemption for homes in high risk areas outside structural protections.
- Require bonding of new commercial developments to ensure demolition at the end of their useful life, or upon long-term vacancy.

Identify ways to lower insurance rates.

- Require participation in FEMA's Community Rating System (CRS) for communities in the flood plain. To help communities comply with this requirement, provide local capacity building and technical assistance, prioritize funding for local mitigation and projects that improve a community's CRS rating, and provide education and outreach on the potential economic benefits of higher CRS ratings for home and business owners.
- Conduct a feasibility analysis for Louisiana to leave the NFIP and develop its own flood insurance program that requires mandatory insurance for homeowners throughout the state, creating a separate risk pool.



TRANSPORTATION

Promote well-connected multi-modal transportation options within parishes and across the region to better connect communities to emerging and growing sectors, industries and job opportunities.

- Require the use of base flood elevation and CPRA 50-year flood risk projections in the planning and design of future transportation routes, and when prioritizing retrofits and upgrades to existing routes to ensure long term viability.
- Require that DOTD model the impacts of new transportation projects on hydrological processes and mitigate flood risk in the surrounding areas.
- Improve connectivity between parks, complete streets, public transit, water transportation and greenways to create ease of access for pedestrians and bicyclists.
- Index the state fuel tax to the consumer price index to prevent future loss of purchasing power to help pay for the backlog of maintenance, particularly on key evacuation routes, and expand funding options for multimodal transportation.
- Allocate state transportation funding categorically rather than by project to provide the state more flexibility to be strategic in delivering projects, particularly in regards to multimodal transit projects.
- Prioritize transportation projects that promote multi-modal transportation, access to public and commercial facilities, and environmental and economic benefits.
- Update Louisiana's Complete Streets Policy to include consideration of facilities for stormwater capture and retention and incorporate these features into key transportation route planning.
- Review DOTD compliance with the recommendations of the Complete Streets Working Group final report, and take action to implement any recommendations that DOTD has not yet adopted.

Protect and elevate key supply chain and evacuation routes.

- Utilize the CPRA Master Plan's 50-year projections to identify key transportation and evacuation routes vulnerable to current or future flooding and prioritize their retrofit in the State Transportation Plan.
- Incorporate existing transportation assets such as parish ferries into evacuation plans, and train captains as first responders in case of emergencies.



EDUCATION, ECONOMY, & JOBS

Increase coastal education for students.

- Develop a coastal curriculum for K-12 students about Louisiana's coastal landscapes, including the ecology, culture, history, and economy of Louisiana's coast.
- Work with non-profit and philanthropic partners to expand weekend or summer camp opportunities for coastal education and combined culture and history camps, particularly among low and middle income students.

Expand skills training in coastal careers.

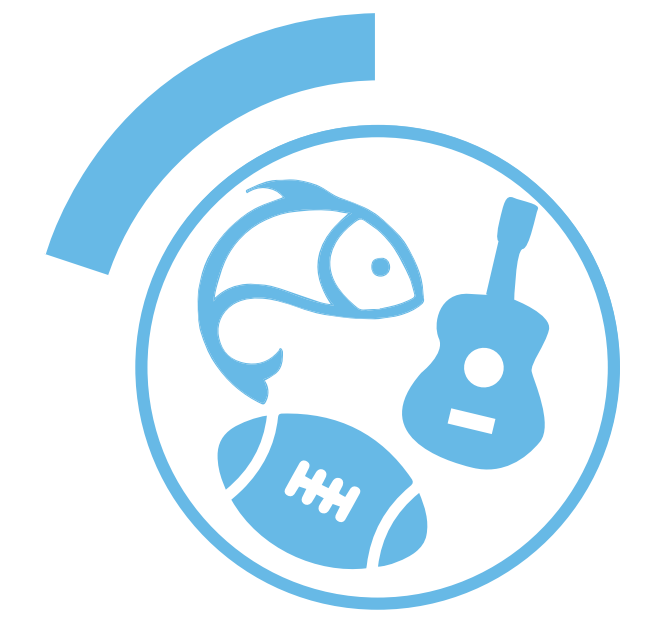
- Develop a coastal specialization certification pathway open to students seeking either Jumpstart or TOPS diplomas.
- Enhance coordination between k-12 education, community colleges, 4-year universities, and industry to ensure students are receiving the training that meets the needs of local employers.
- Support an eventual transition to an apprenticeship-based model for training new employees in coastal careers.
- Use a combination of regulations, financial incentives, technical assistance, outreach and education to build Louisiana's expertise in coastal and stormwater management.
- Offer retraining programs in coastal careers.

Grow and diversify the economy.

- Market and promote Louisiana expertise in the fields of coastal restoration, adaptation and water management.
- Incentivize the renewable energy and energy efficiency economy through the continuation or expansion of tax rebates, access to low-interest capital, outreach and education.

Support Louisiana Seafood and Fishermen.

- Understand how changing environmental conditions and proposed coastal restoration projects will affect Louisiana fisheries and work with affected fisheries to provide alternative opportunities or support.
- Assist the fishing industry with technical assistance and flexible loan programs that help improve product quality, reputation and distribution to local markets.
- Promote Louisiana's seafood industry with targeted advertising campaigns and events.
- Provide research and technical assistance for adopting sustainable fisheries and aquaculture practices in Louisiana.



CULTURE & RECREATION

Increase access to nature for recreational use.

- Promote areas outside structural protection systems as a sportsman's paradise, including tax incentives for recreational businesses operating in these areas.
- Create a division of ecotourism within the Louisiana Office of Tourism to help grow and promote ecotourism opportunities within the state.
- Partner with non-profits or philanthropic organizations to expand access to outdoor recreational opportunities for Louisiana youth.
- Use municipal ordinances and incentives to encourage new developments to create access to green spaces and natural areas.
- Provide technical assistance and loans to help commercial fishermen diversify their businesses during the commercial off-season.

Preserve and support Louisiana culture and historical sites.

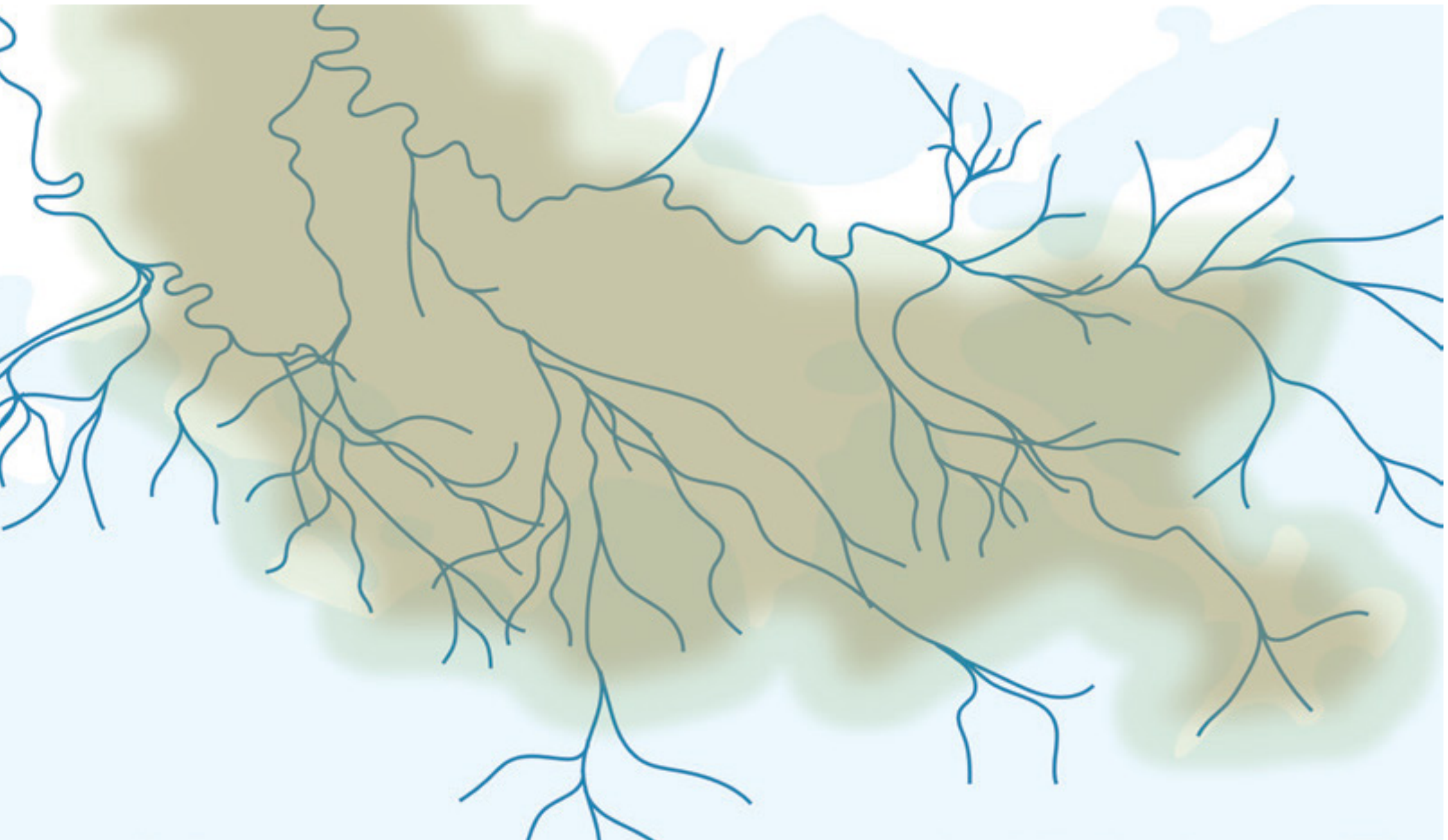
- Utilize apps, augmented reality and other new technologies to help visitors discover Louisiana's culture and history.
- Develop a "stay-cation" marketing campaign aimed at Louisiana residents to promote local tourism.
- Expand the state's Percent for Art program to include all capital expenditures from public funds, and allow the program to fund cultural assets such as space for music, festivals, or traditional cooking, in addition to visual arts.
- Co-locate cultural events and programs near existing transportation corridors and community centers to make them more accessible to a wider range of people.
- Create a division within the State Historic Preservation Office dedicated to preserving and transferring the cultures and practices of migrating communities, and documenting and honoring culturally and historically important locations in areas subject to high flood risk.

DELTA HISTORY

During the centuries preceding the federal levee system and pumping technologies of the early 1920s, Louisiana’s landscape continuously changed. The Mississippi river, always seeking the shortest path to the Gulf, jumped courses often and spread through countless distributaries. With every course change, old land was lost and new land formed. The river flooded often, blanketing the delta with layers of silt hauled from as far as the northern plains of Montana and the northeastern hillsides of Pennsylvania. During these periodic river floods, the heaviest sediment settled on the banks, while thinner, lighter silt floated further away into back swamps. Over time, this land formation process created the characteristic profile of the Mississippi River Delta, with relatively stable soils on high ground adjacent to natural waterways, and silty, highly organic soils on lower ground sloping away from natural levees.

The levee system protects residents from regular flooding but also prevents the river from depositing fresh sediment in Louisiana’s wetlands. CPRA projects Louisiana could lose 2,250 square miles over the next 50 years if no additional action is taken.

Historic Mississippi River Delta



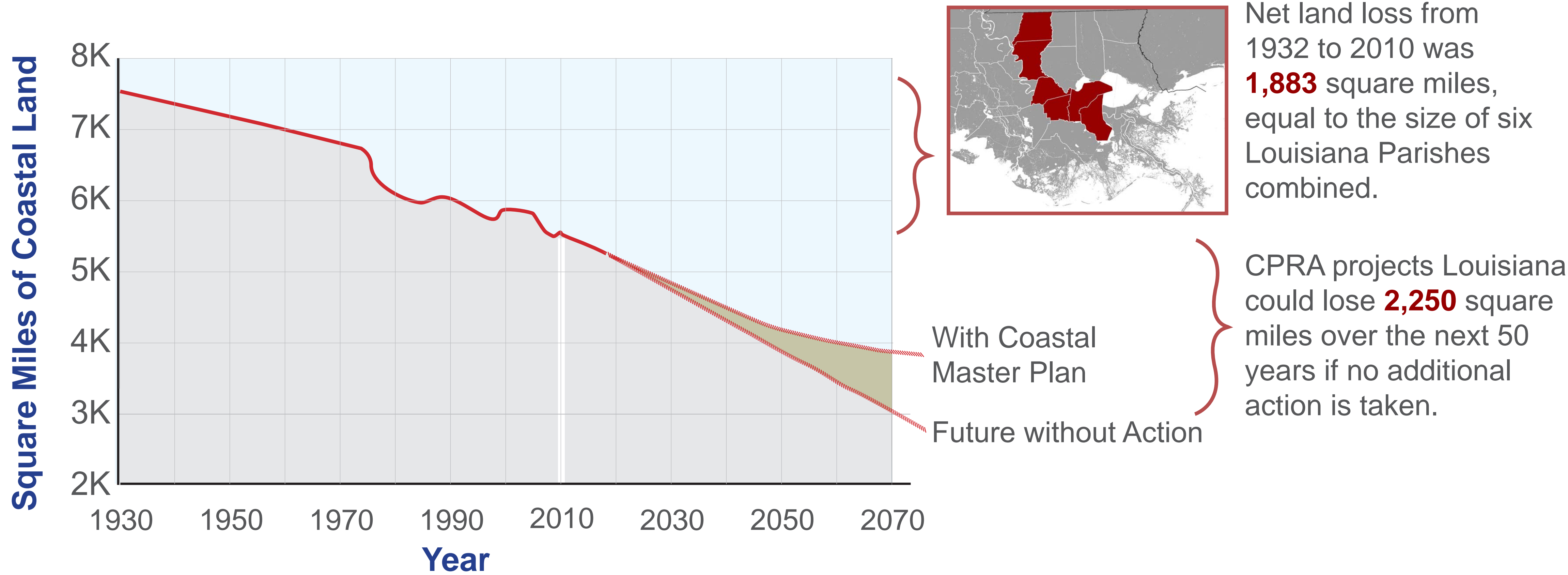
Prior to the levee system the Mississippi River built land through many distributaries. During yearly floods much of the landscape was covered in fresh water and new sediment.

Present Mississippi River Delta

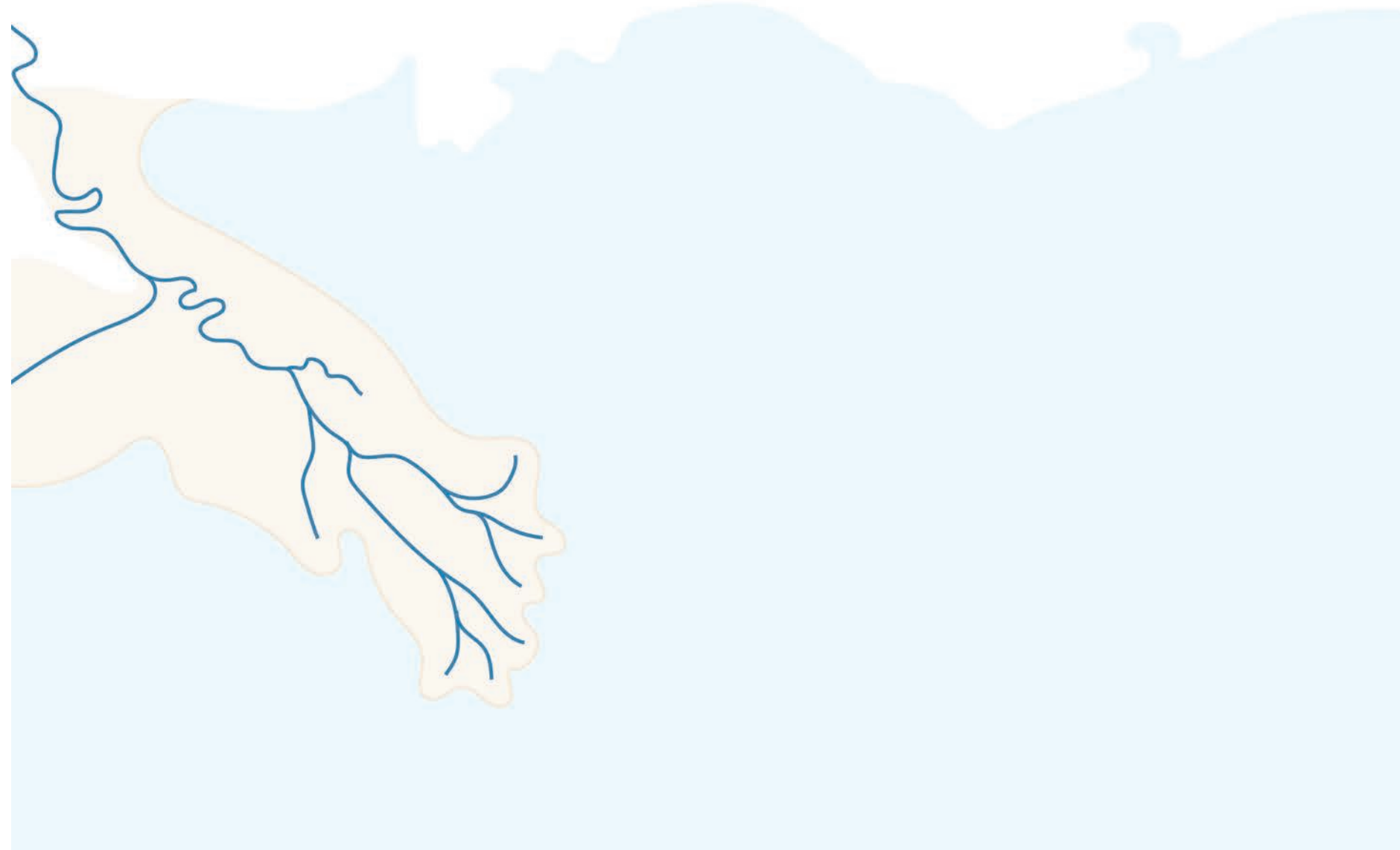


Following the Flood Control Act of 1928, the Mississippi River was limited to its present-day course, essentially cutting off its many distributaries from depositing sediment. This change doesn’t allow the waterways to build land as they once did, and contributes to land loss.

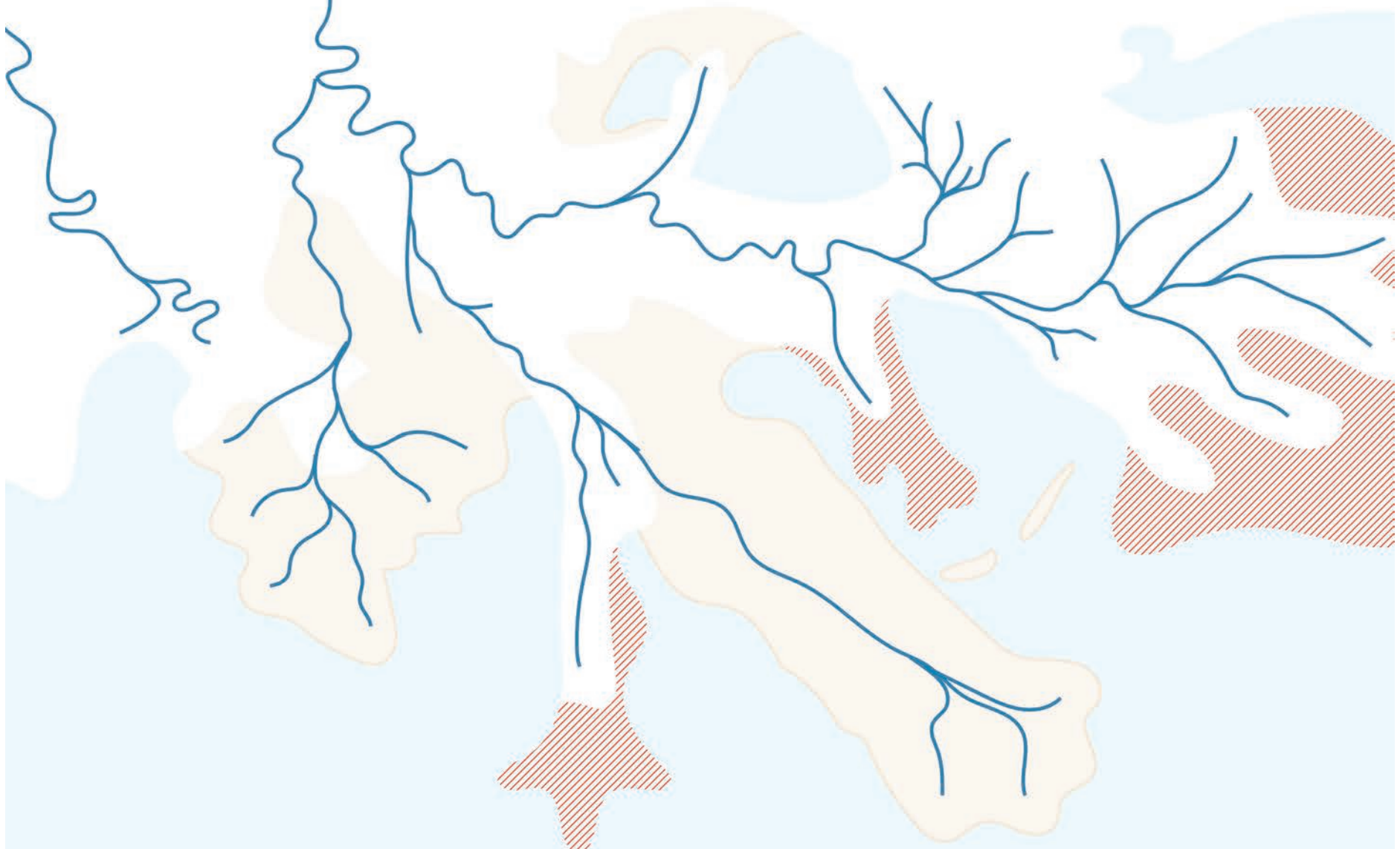
Source: Adapted from Jacob Rosenweig, Tulane University



Sources: USGS, Land Area Change in Coastal Louisiana (1932 to 2010); 2017 Coastal Master Plan (2017-2067), page 97 and ES-7

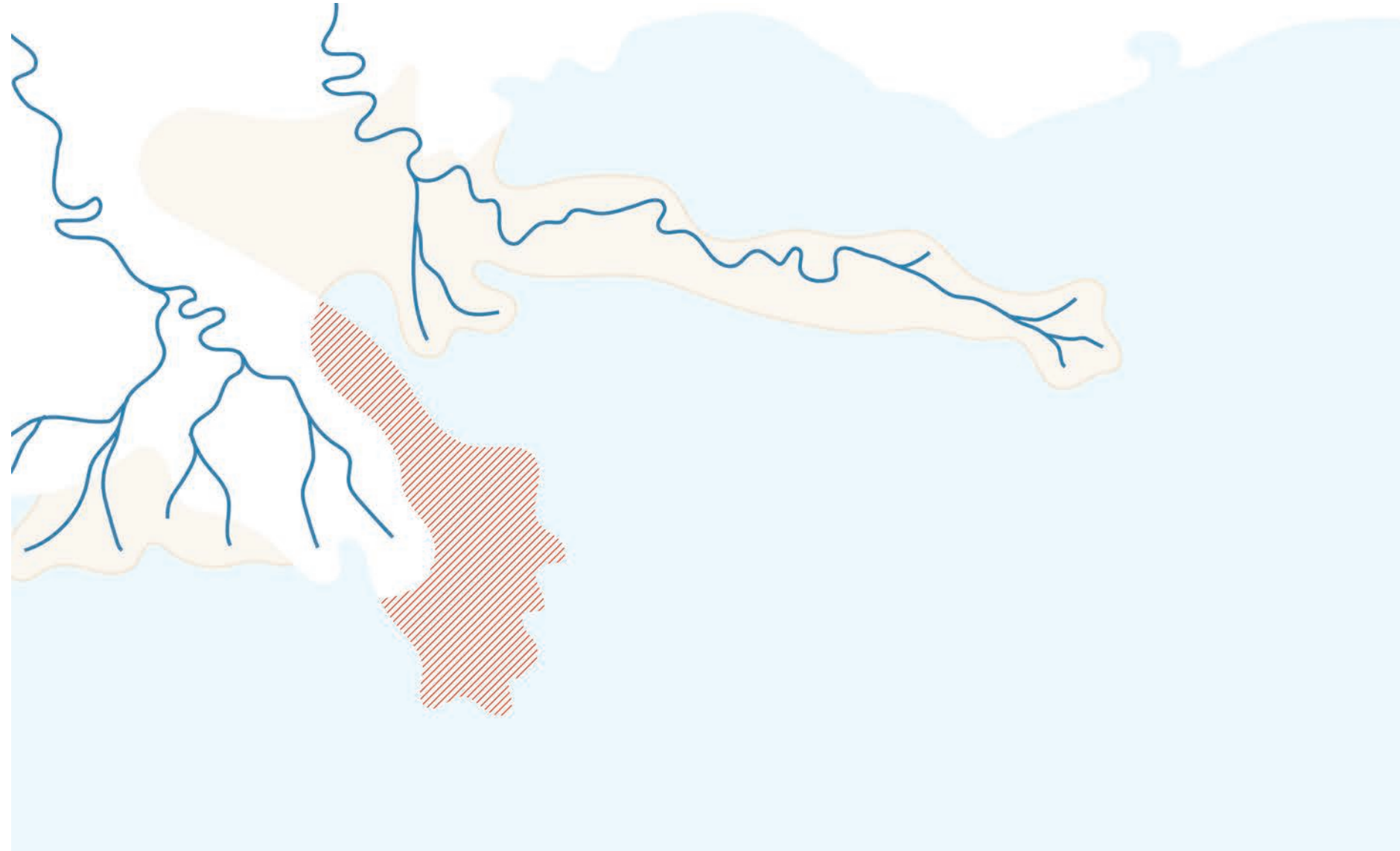


5,500 years ago



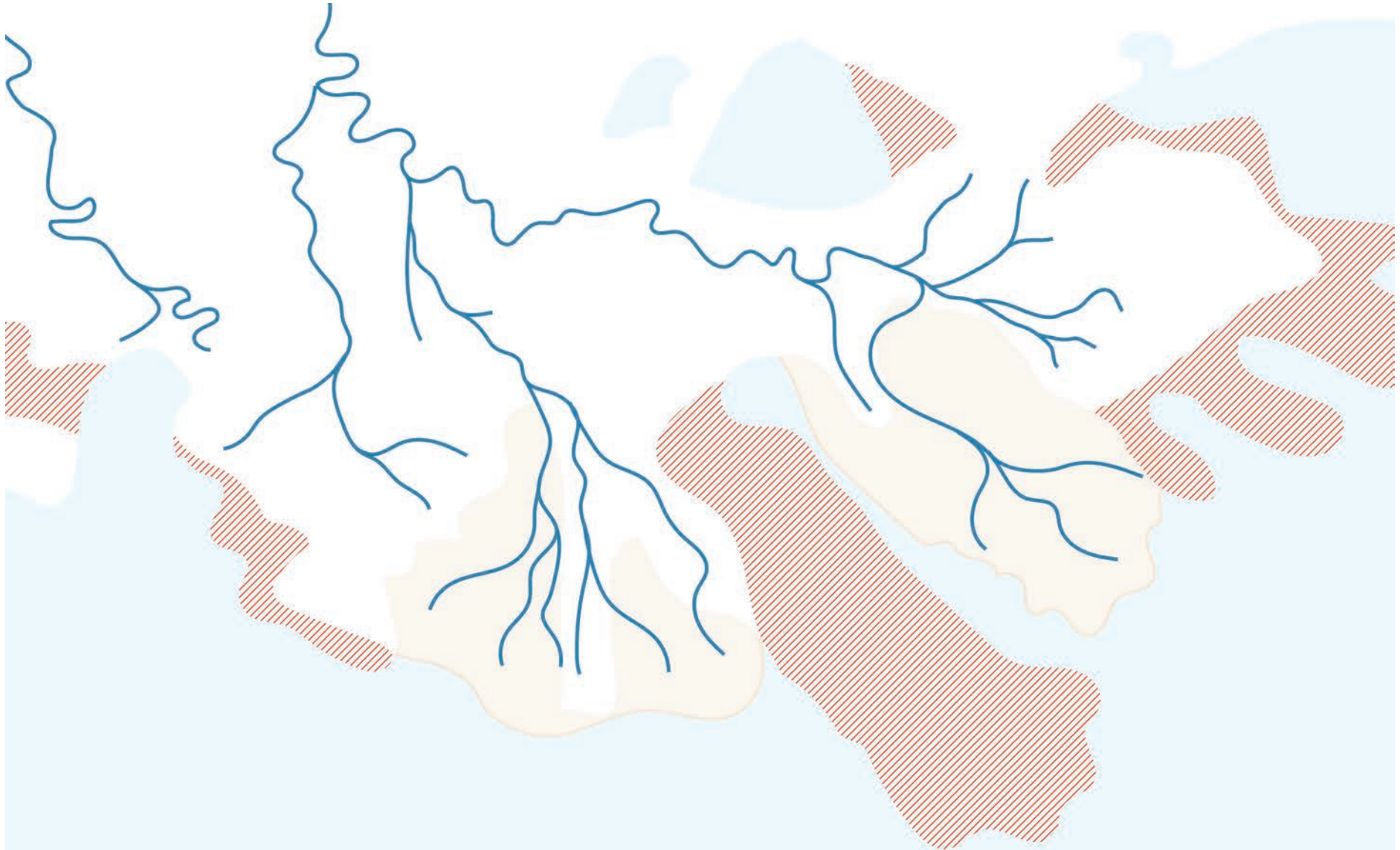
1,500 years ago

Land built: 3670 sq mi
Land Lost: 2350 sq mi
Net: +1,320 sq mi



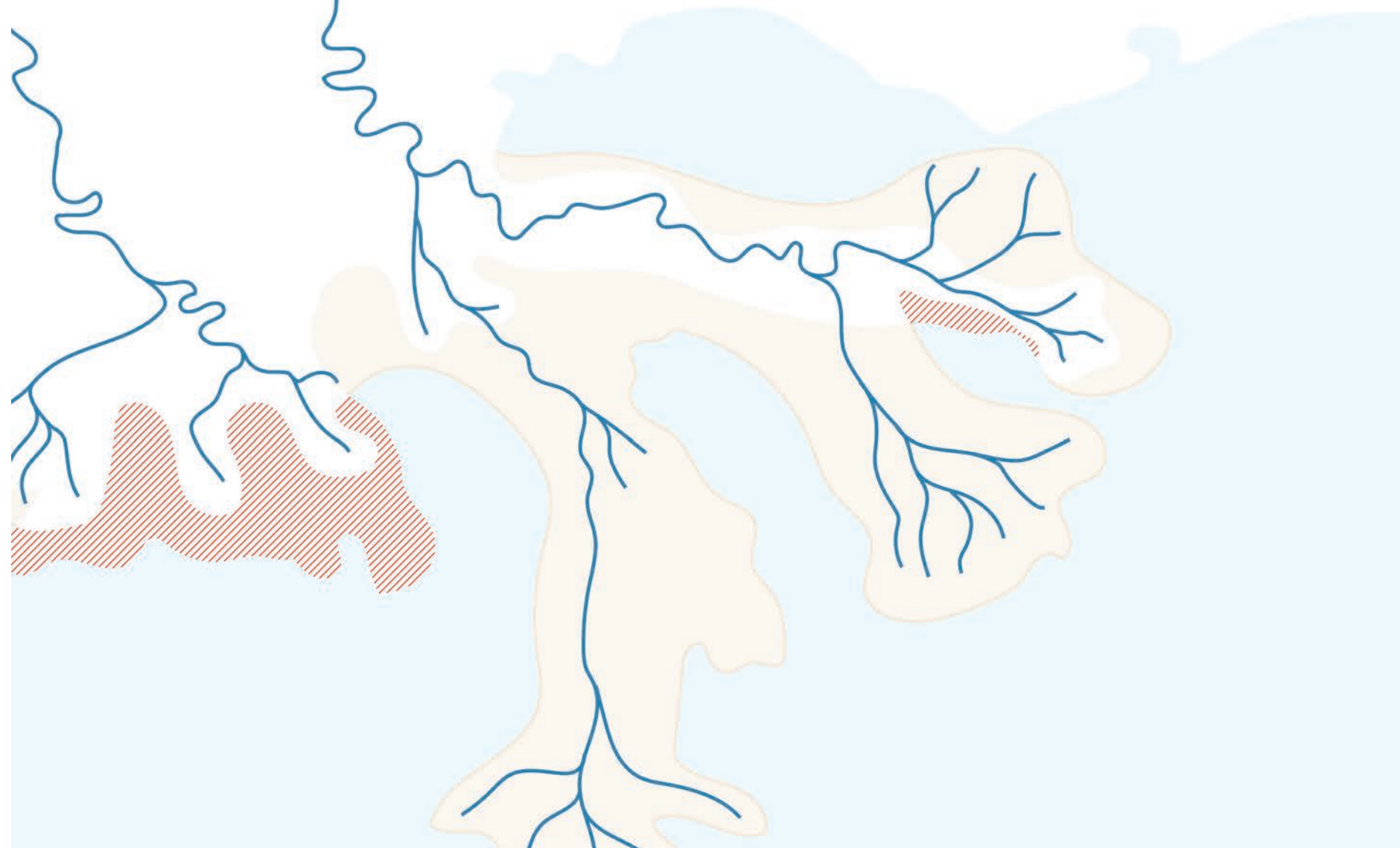
4,500 years ago

Land built: 2085 sq mi
Land Lost: 890 sq mi
Net: + 1,195 sq mi



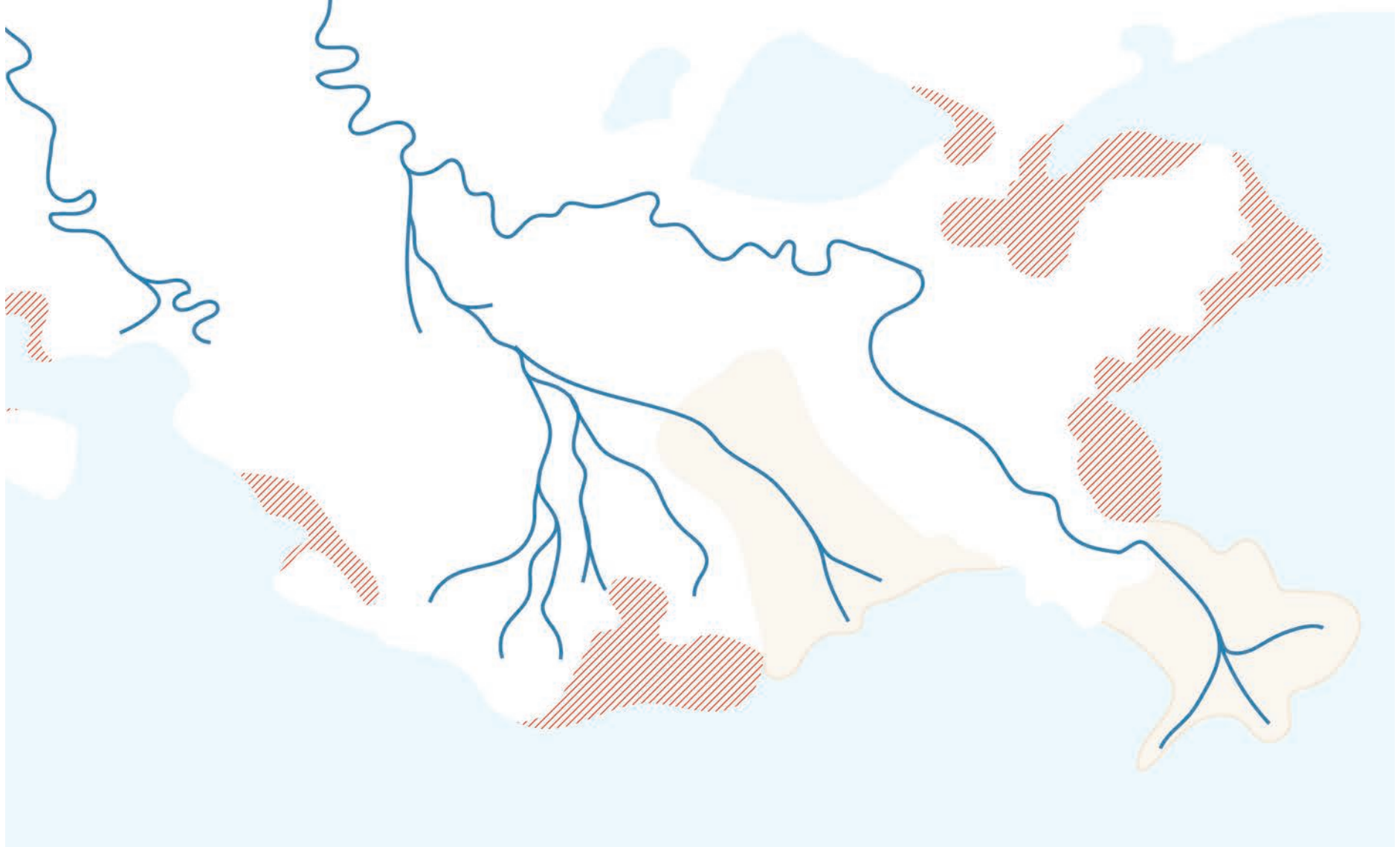
500 years ago

Land built: +2080 sq mi
Land Lost: -2500 sq mi
Net: - 420 sq mi



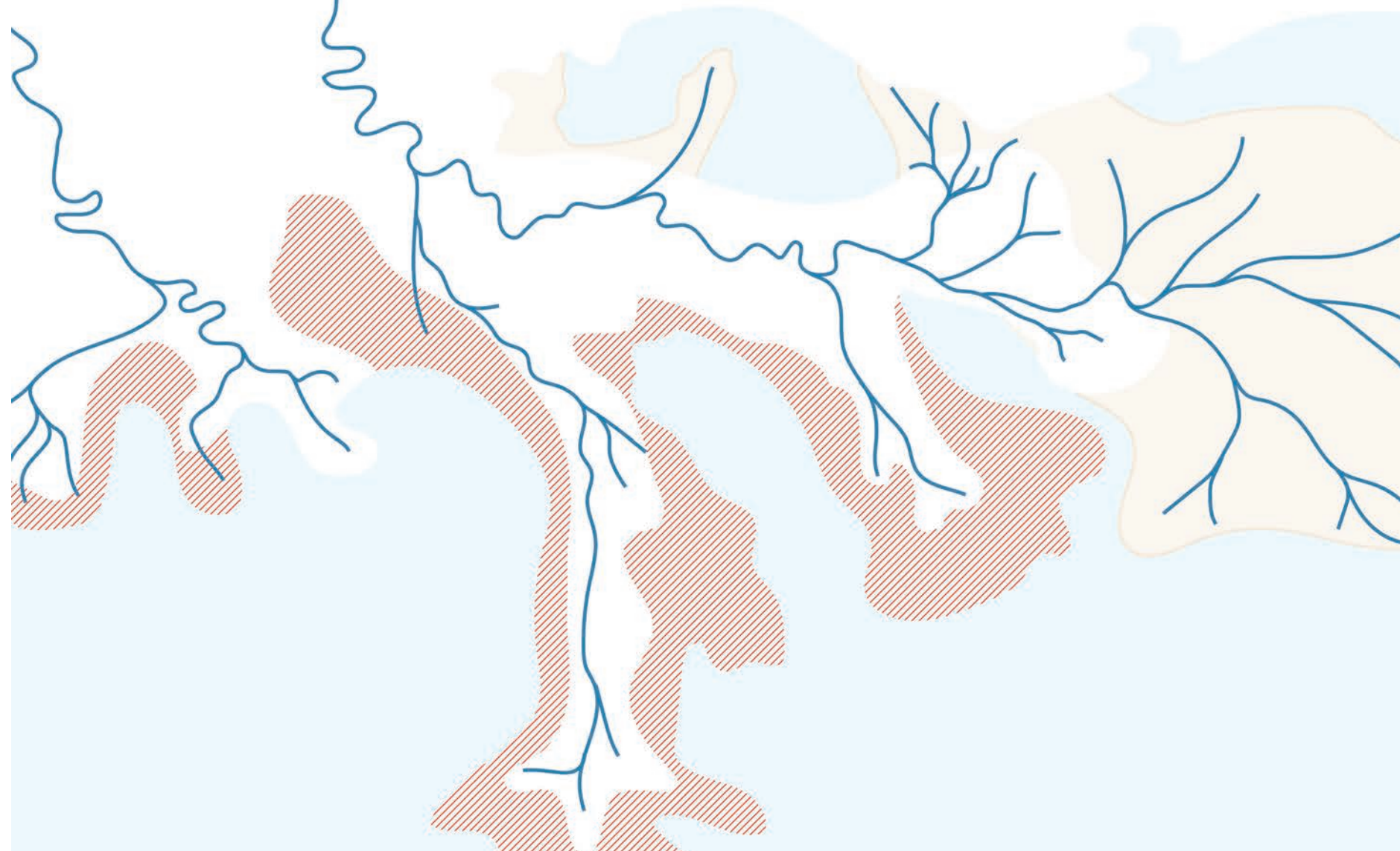
3,500 years ago

Land built: 4325 sq mi
Land Lost: 890 sq mi
Net: + 3,435 sq mi



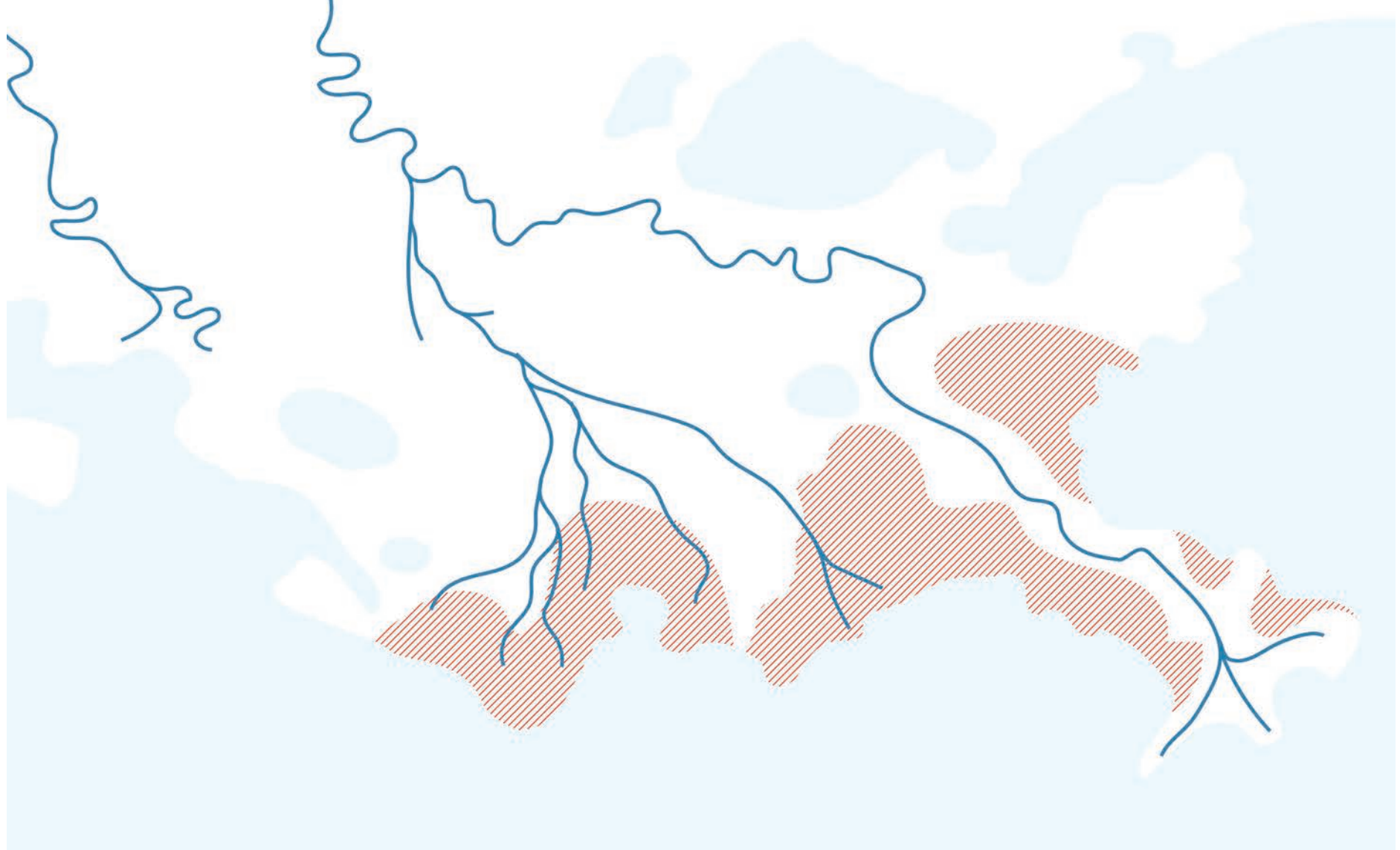
82 years ago

Land built: +1350 sq mi
Land Lost: -1080 sq mi
Net: - 270 sq mi



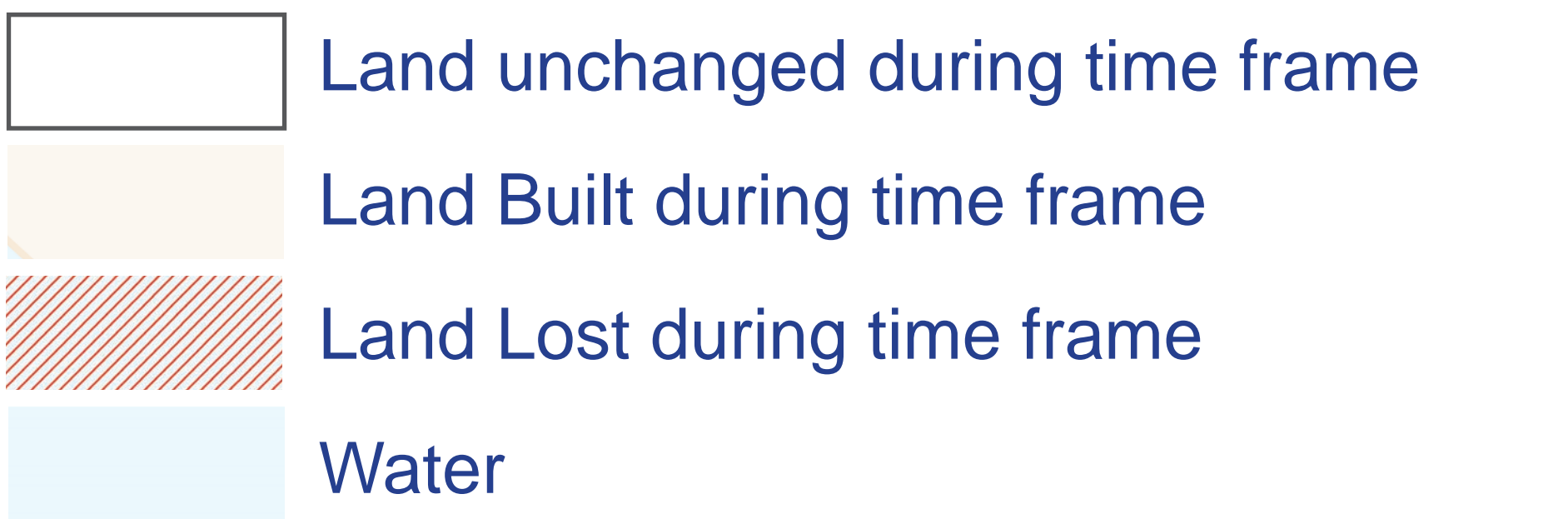
2,500 years ago

Land built: 3320 sq mi
Land Lost: 2390 sq mi
Net: + 930 sq mi



Today

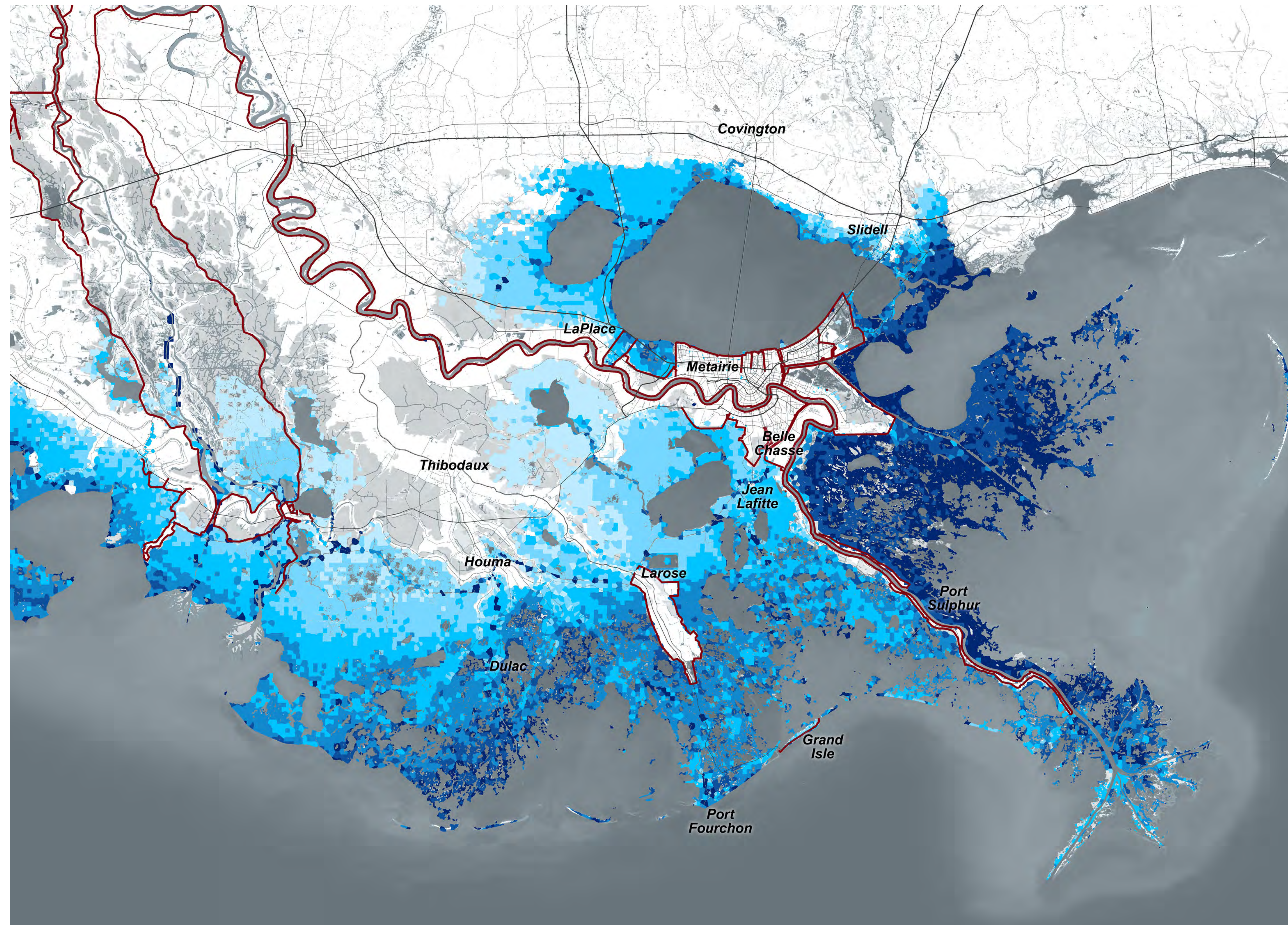
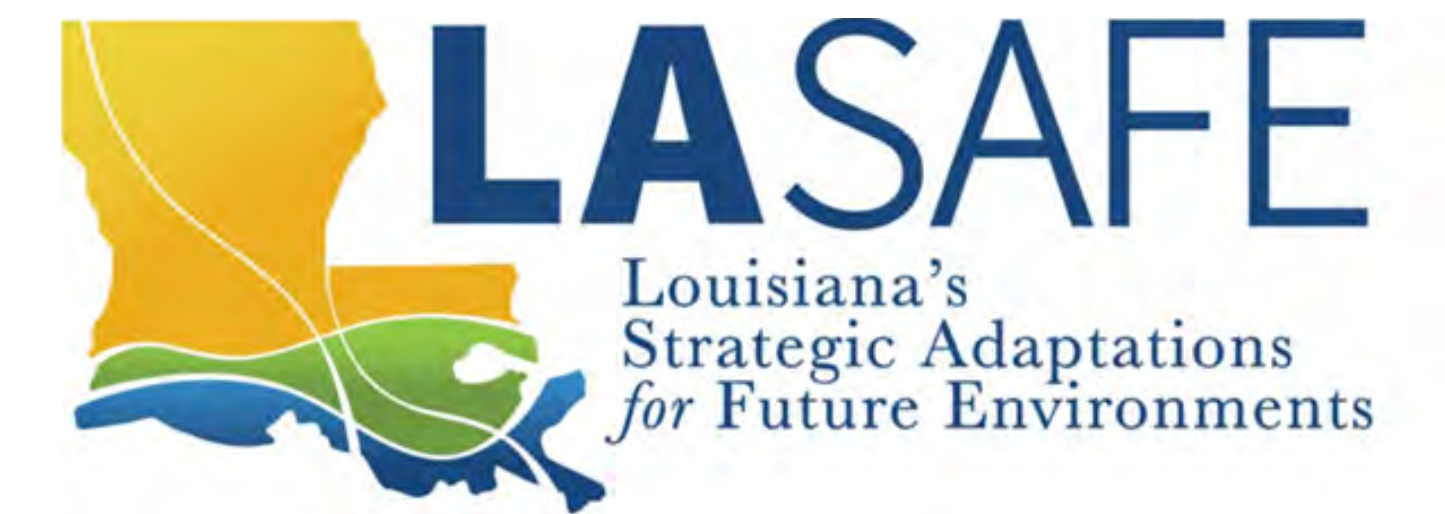
Land built: 96 sq mi
Land Lost: 1979 sq mi
Net: - 1,883 sq mi



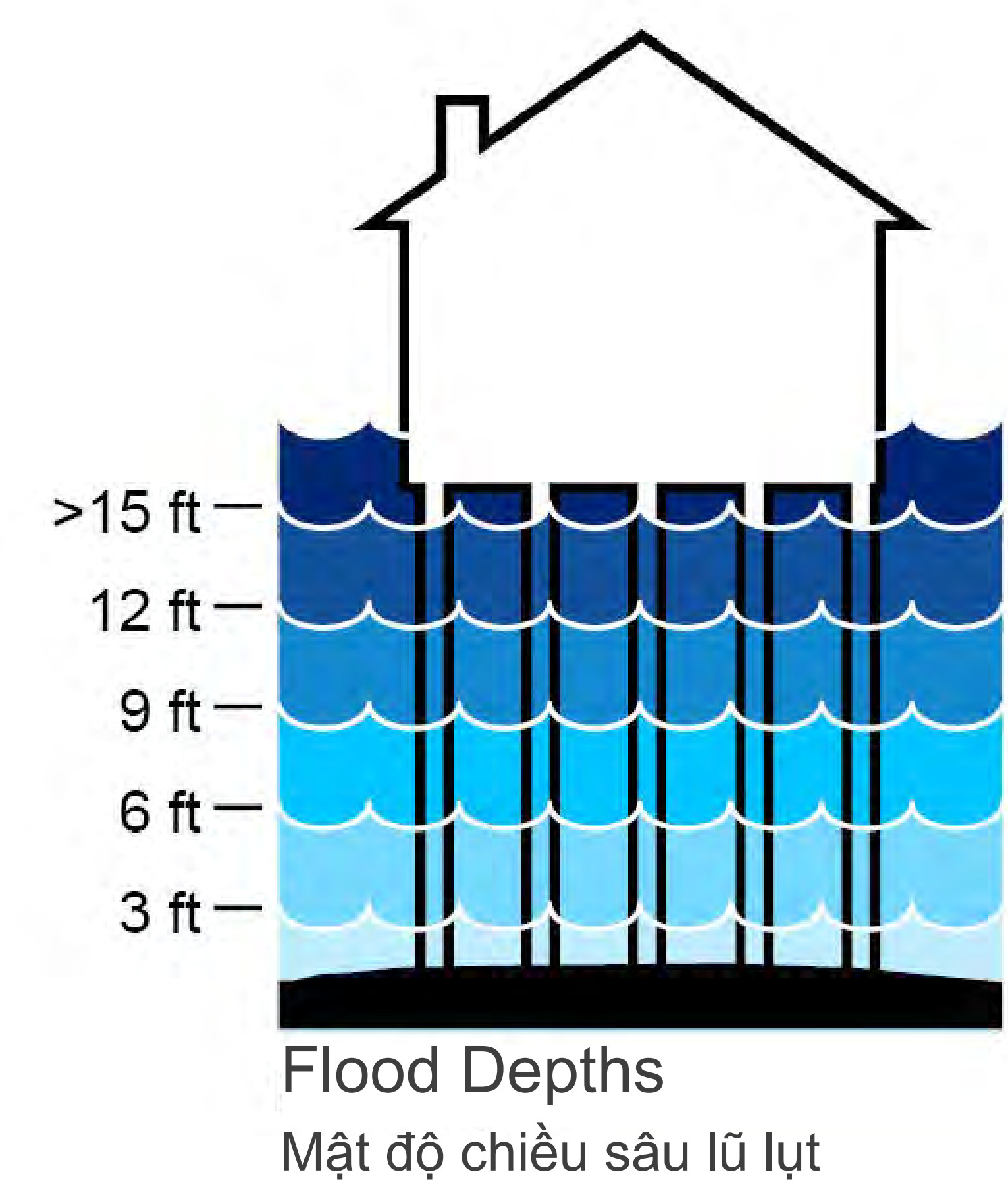
Source of 5,500 - 82 years ago: Historic data based on Frazier (1967), The Delta Cycle and Land Change Area in Louisiana Coastal Plain, 2014; adapted from Changing Course, Baird Team graphic. Source of 82 - 2010: USGS, Land Area Change in Coastal Louisiana (1932 to 2010)

FLOOD RISK: 2017

Nguy Cơ Lũ Lụt



- Water
Nước
- Wetlands
Đất Bùn Lầy
- Parish Boundaries
Ranh Giới Của Giáo Xứ
- Navigation Waterways
Điều Hướng Đường Nước Chảy
- Levees
Bờ Đê

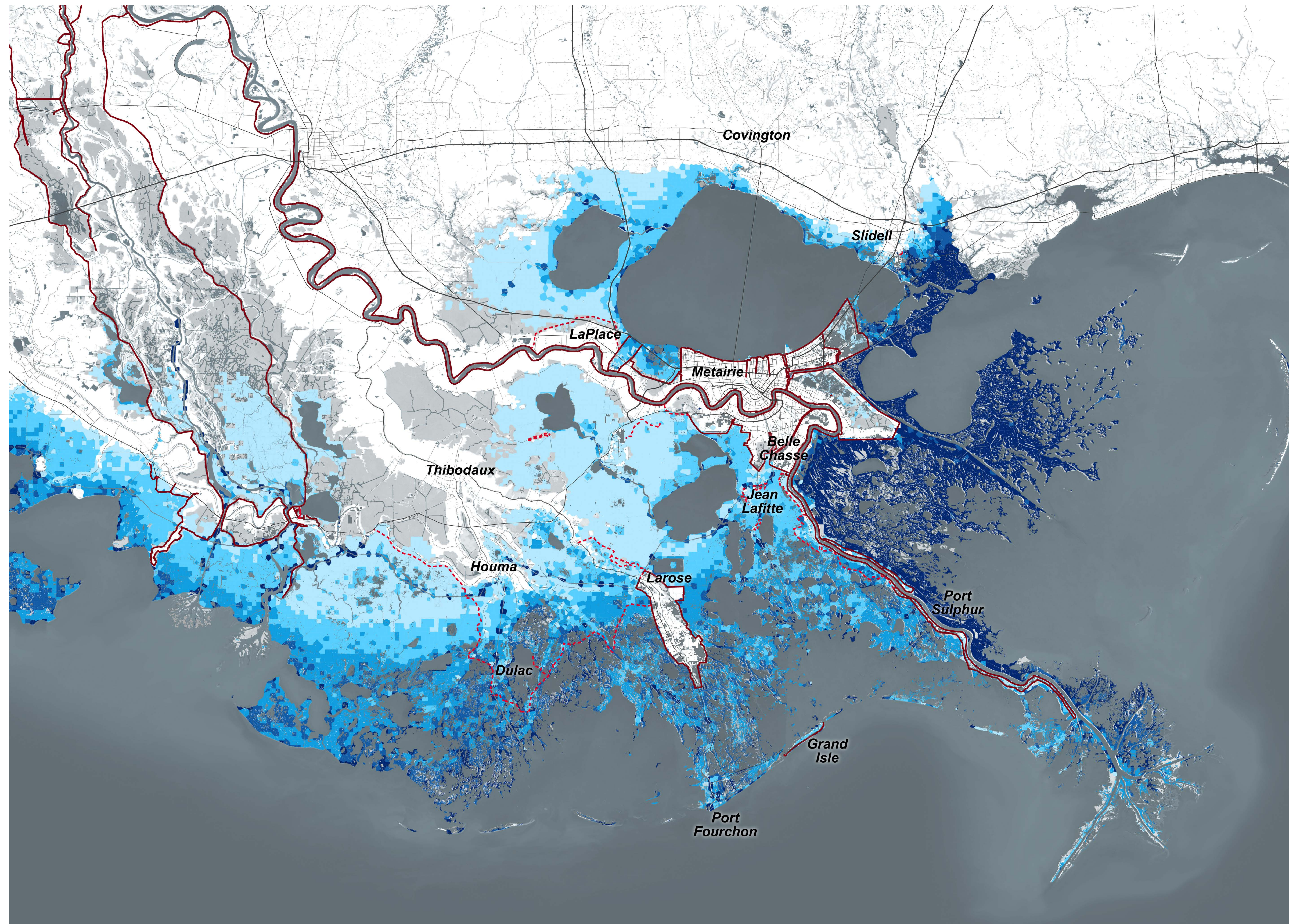
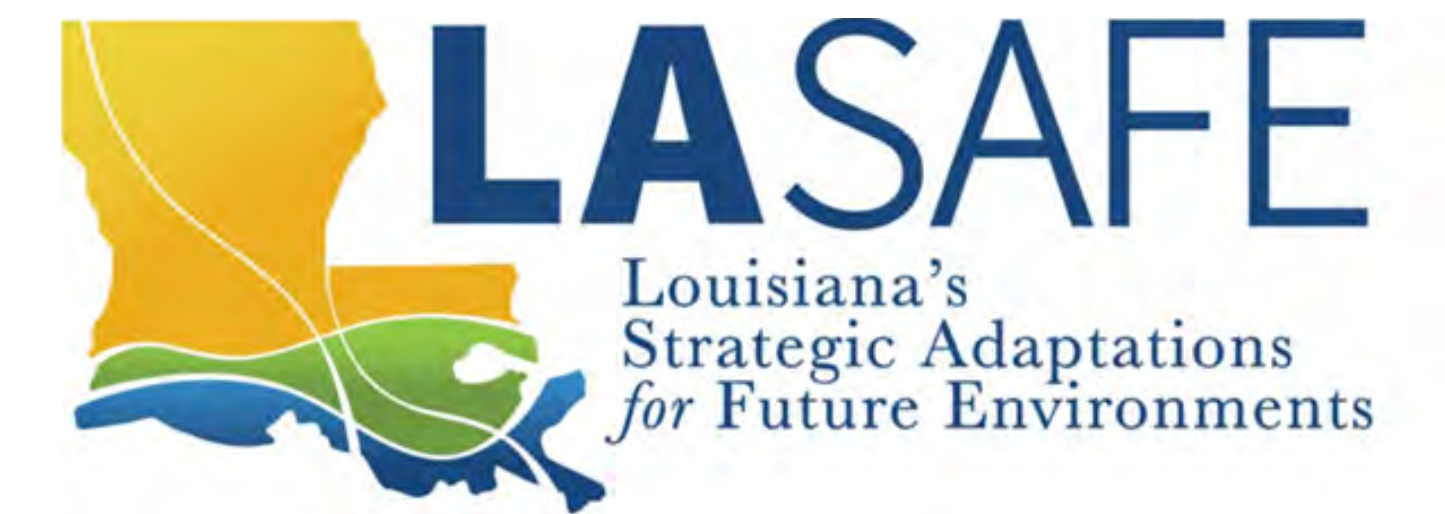


This map shows the CPRA Medium Scenario with full implementation of the 2017 Coastal Master Plan. This data were provided by CPRA and were originally produced to inform the development of the 2017 Coastal Master Plan.

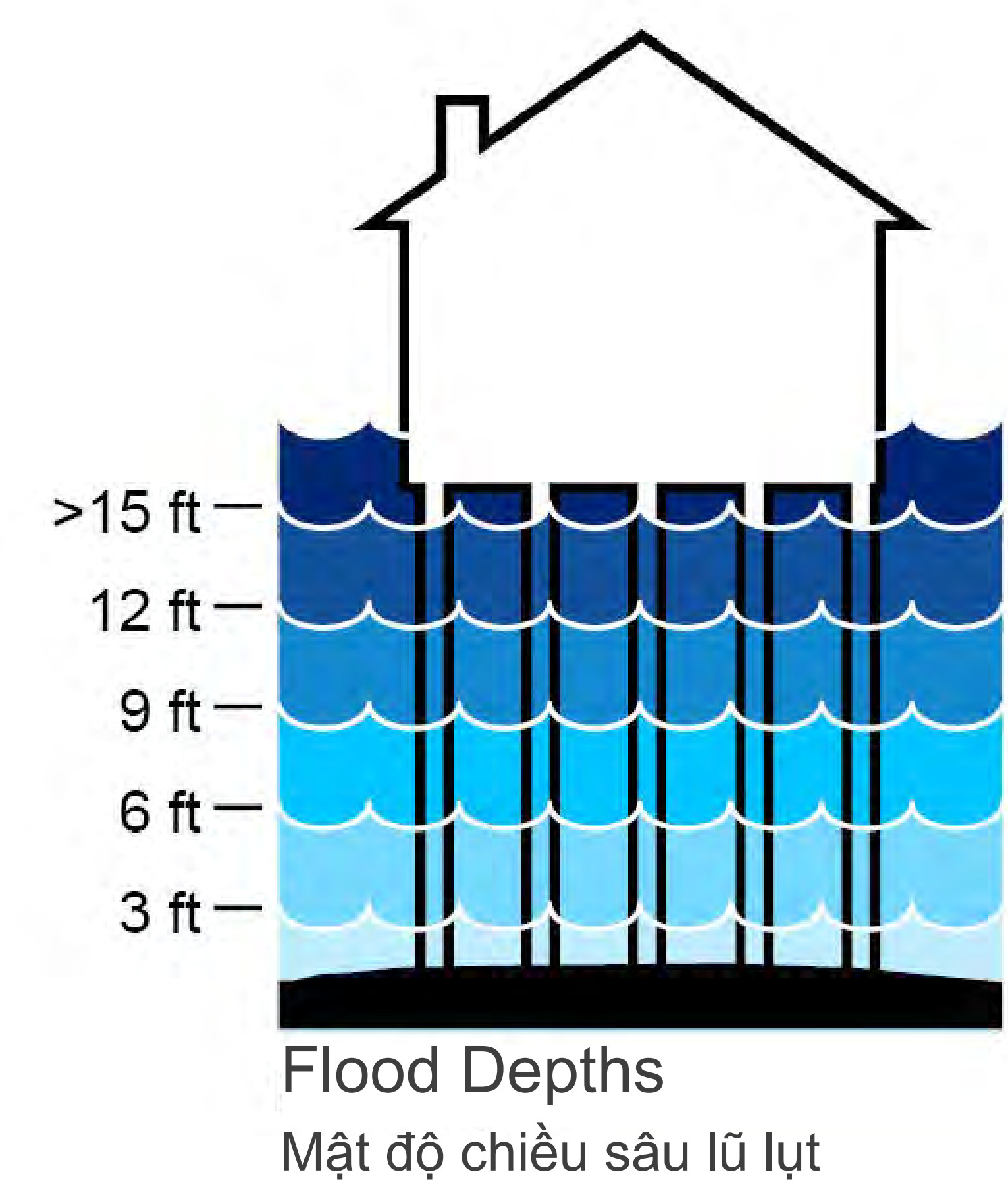
Bản đồ này cho thấy kịch bản trung bình của CPRA với việc thực hiện đầy đủ của kế hoạch năm 2017 Coastal Master Plan. Dữ liệu này do CPRA cung cấp và sản xuất để thông báo cho sự phát triển của năm 2017 Coastal Master Plan.

FLOOD RISK & LAND LOSS: 2027

Nguy Cơ Lũ Lụt & Mất Đất



- Water
Nước
- Wetlands
Đất Bùn Lầy
- Parish Boundaries
Ranh Giới Của Giáo Xứ
- Navigation Waterways
Điều Hướng Đường Nước Chảy
- Levees
Bờ Đê

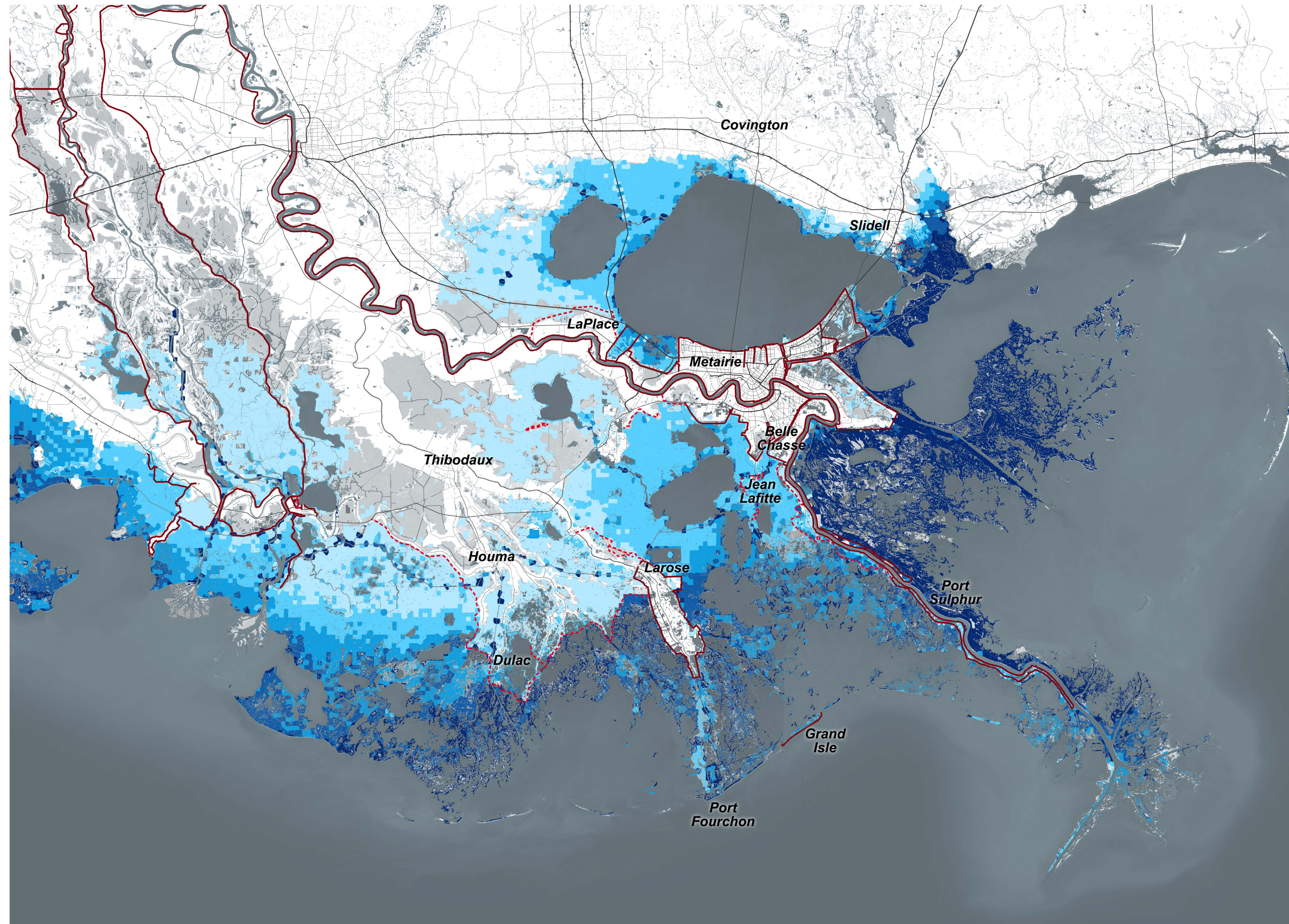
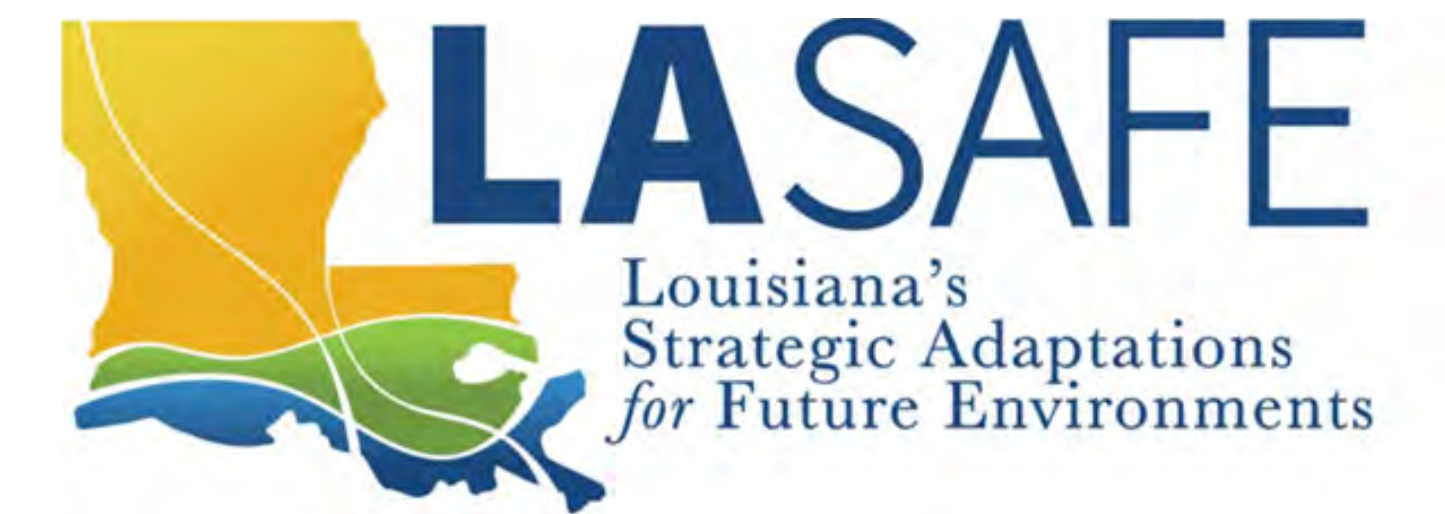


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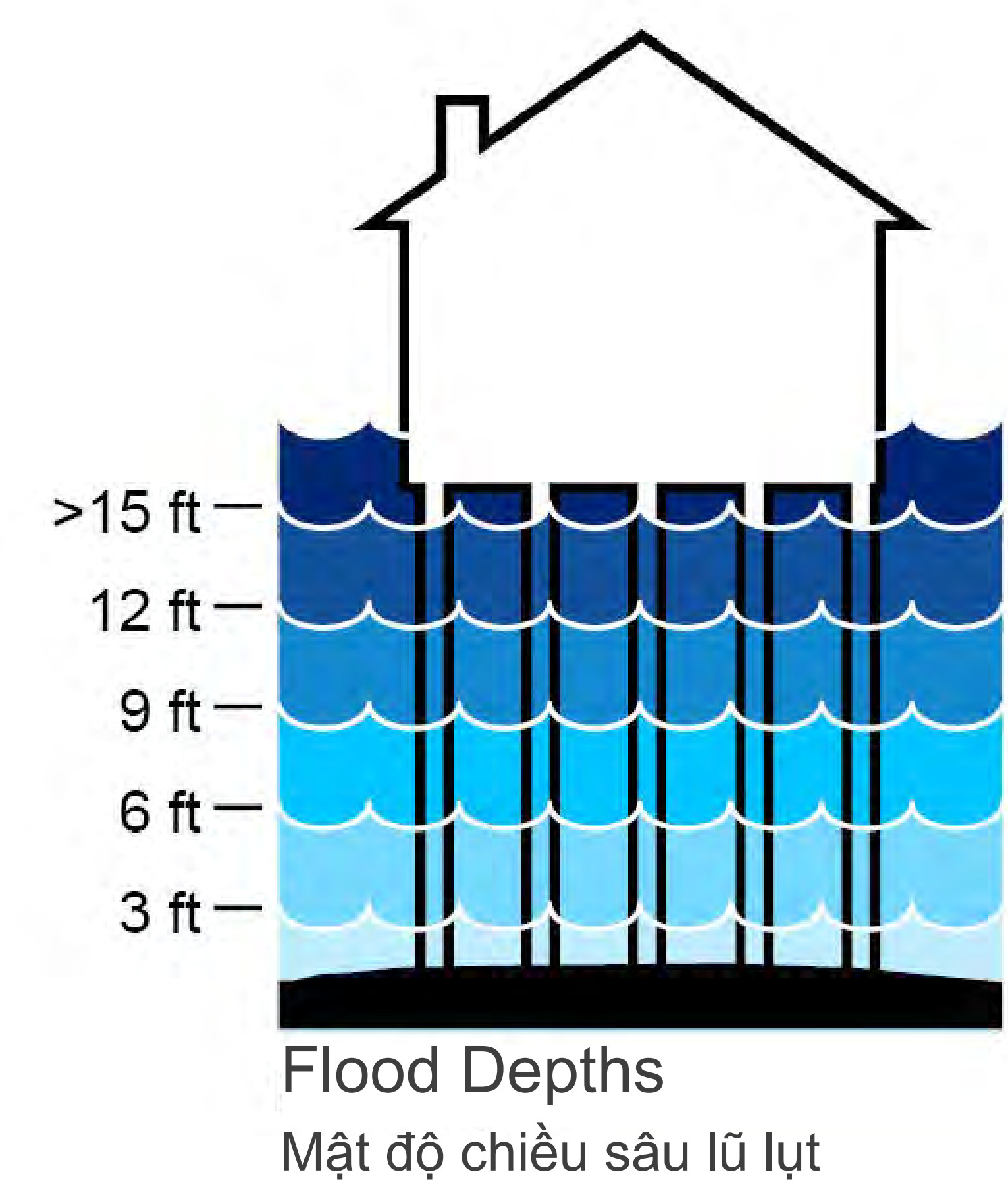
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FLOOD RISK & LAND LOSS: 2042

Nguy Cơ Lũ Lụt & Mất Đất



- Water
Nước
- Wetlands
Đất Bùn Lầy
- Parish Boundaries
Ranh Giới Của Giáo Xứ
- Navigation Waterways
Điều Hướng Đường Nước Chảy
- Levees
Bờ Đê

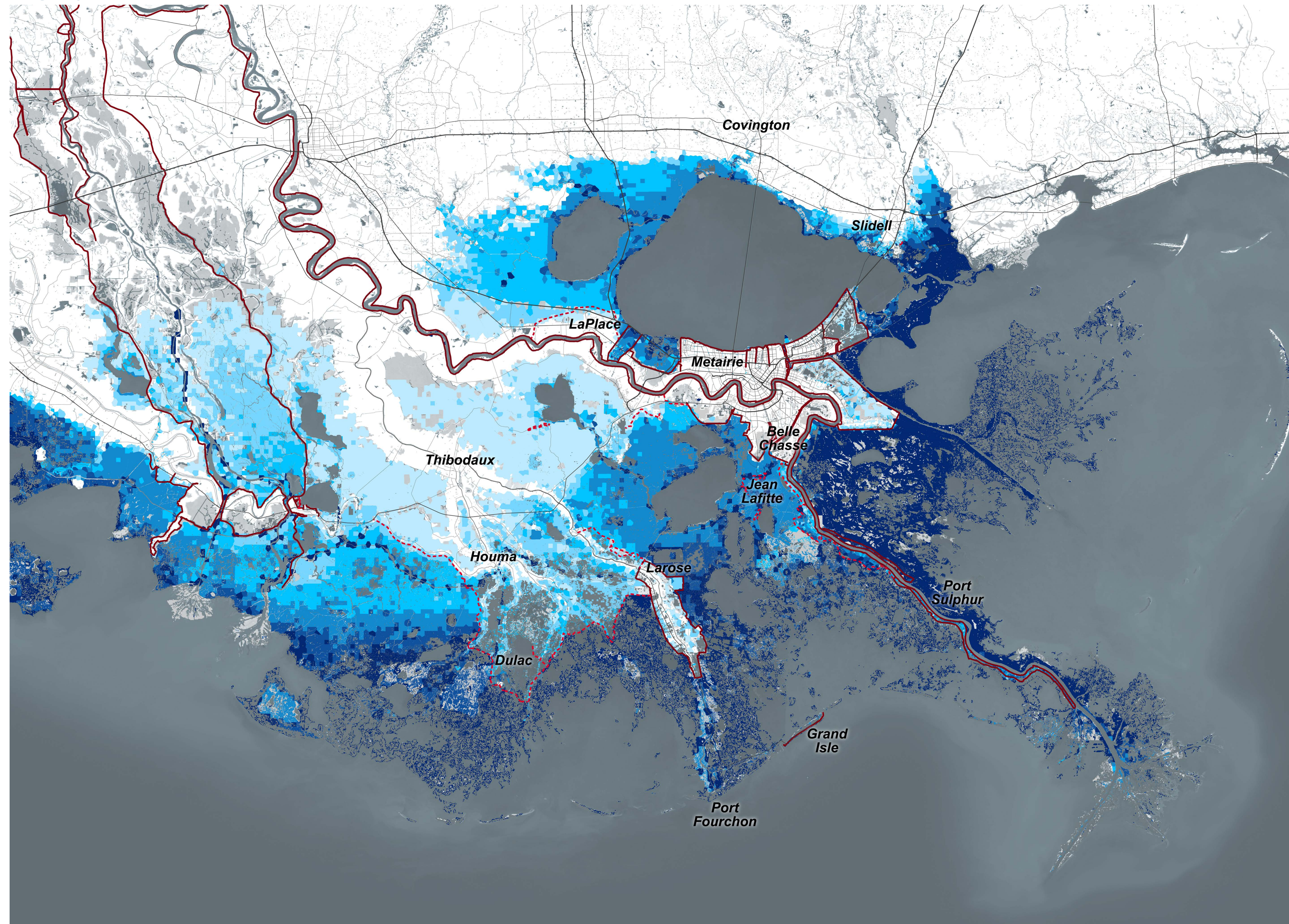
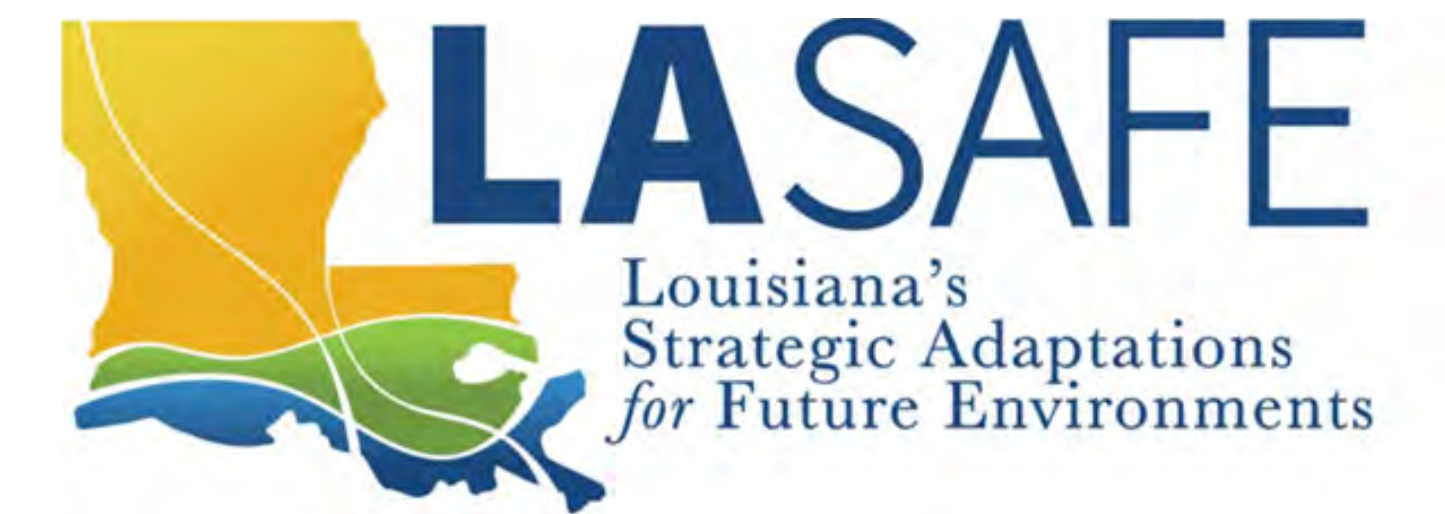


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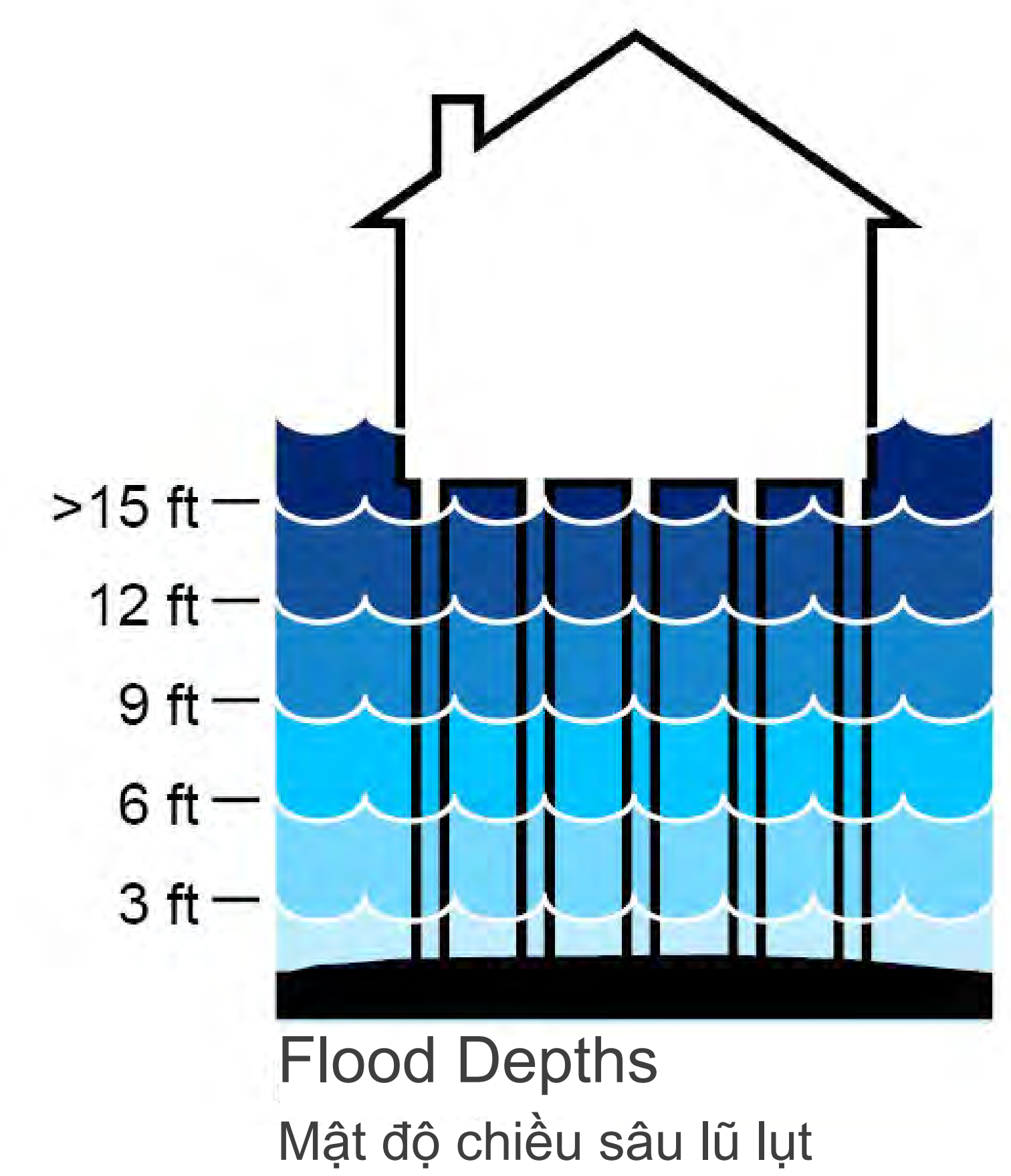
Bản đồ này cho thấy kịch bản trung bình của CPRA với việc thực hiện đầy đủ của kế hoạch năm 2017 Coastal Master Plan. Dữ liệu này do CPRA cung cấp và sản xuất để thông báo cho sự phát triển của năm 2017 Coastal Master Plan.

FLOOD RISK & LAND LOSS: 2067

Nguy Cơ Lũ Lụt & Mất Đất



- Water
Nước
- Wetlands
Đất Bùn Lầy
- Parish Boundaries
Ranh Giới Của Giáo Xứ
- Navigation Waterways
Điều Hướng Đường Nước Chảy
- Levees
Bờ Đê



This map shows the CPRA Medium Scenario with full implementation of the 2017 Coastal Master Plan. This data were provided by CPRA and were originally produced to inform the development of the 2017 Coastal Master Plan.

Bản đồ này cho thấy kịch bản trung bình của CPRA với việc thực hiện đầy đủ của kế hoạch năm 2017 Coastal Master Plan. Dữ liệu này do CPRA cung cấp và sản xuất để thông báo cho sự phát triển của năm 2017 Coastal Master Plan.

POPULATION MOVEMENT: 2000-2010

Di Chuyển Của Dân Số

