

AMITE RIVER BASIN DRAINAGE & WATER CONSERVATION DISTRICT 2025 MASTER PLAN EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

As directed by Louisiana Revised Statutes 38:3306, the Amite River Basin Drainage and Water Conservation District (ARBC), 2025 Master Plan presents a watershedwide strategy for comprehensive drainage, flood risk reduction, and water resource management across portions of the seven parishes: Ascension, East Baton Rouge, East Feliciana, Iberville, Livingston, St. Helena, and St. James. ARBC covers more than 1,700 square miles and is home to more than 700,000 people. The Master Plan aligns with the Louisiana 2023 Coastal Master Plan approach by enabling basin-scale planning that leverages predictive modeling from the Louisiana Watershed Initiative (LWI) and others to ensure that recommended projects and other actions emerge from robust, data-driven analyses. Stakeholder engagement has further shaped the Master Plan's emphasis on both near-term and long-term infrastructure projects and forward-looking policy reforms.

The Master Plan is a comprehensive, regional plan to lay out the road map towards efficiently managing the entire watershed as a single system, to reduce flood risk, improve resilience and protect the natural resources within the basin.

This represents the first time all seven parishes have been directly represented by the Board of Commissioners through their presidents or designees, supplemented by at-large appointees, coming together with shared goals.

This regional approach ensures that any projects or programs developed within the basin will have no adverse impacts on surrounding land and residents.

Currently, an average of \$210 million in direct economics losses from floods is estimated to be experienced annually within the Amite River Basin, which is predicted to rise to a staggering \$550 million annually by 2050 when factoring anticipated geographic changes, climatological changes, and inflation.

The Master Plan charts a path toward towards reducing these losses to create a safer and more sustainable future for the basin by integrating two major projects currently under construction including the Laurel Ridge Levee Extension and Comite River Diversion Canal, and thirteen additional physical projects to systematically reduce the magnitude and frequency of floods, preserve natural resources, and increase resiliency. Collectively, these projects are anticipated to reduce direct flood losses by over 50% annually when fully implemented. These projects include detention and retention of stormwater runoff in the upper Amite River Basin, restoration of degraded sections of the Upper Amite River, major pumping stations, levees, and the restoration and maintenance of existing flood control projects. Twenty-six key actions including supportive policy recommendations complement these physical projects to further the mission of and advance the goals of the ARBC.

A 52% REDUCTION IN **DIRECT FLOOD LOSSES** CAN BE REALIZED BY **IMPLEMENTATION OF THE MASTER PLAN PROJECTS**

VALUES





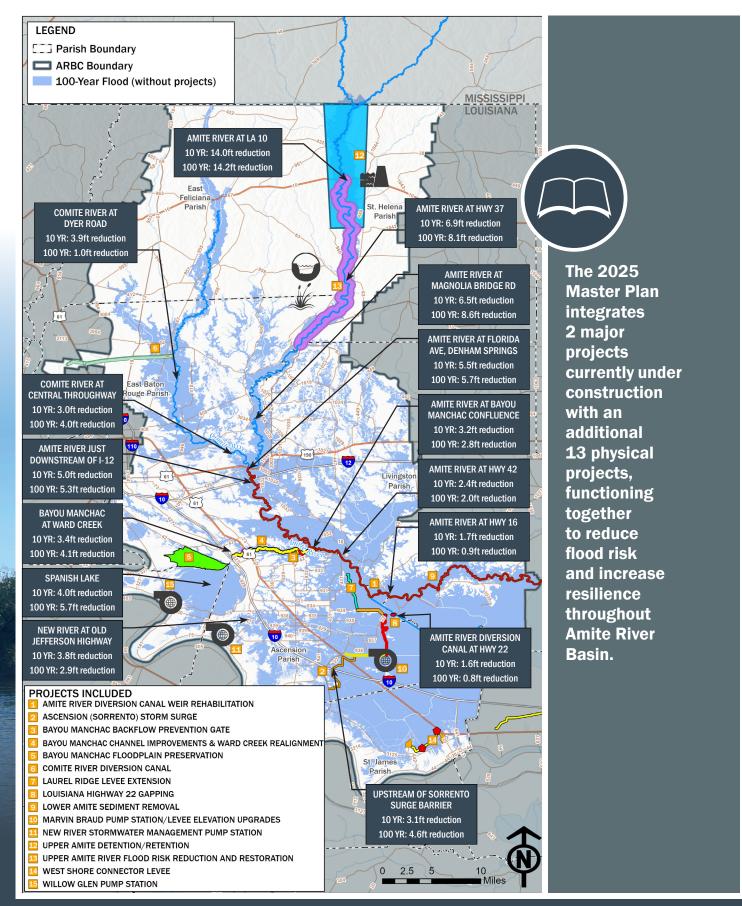


IMPROVE



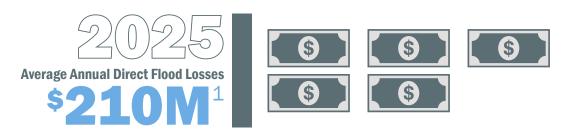
PROTECT NATURAL RESOURCES

Flood Elevation Reductions Associated with the ARBC 2025 Master Plan Project Implementation

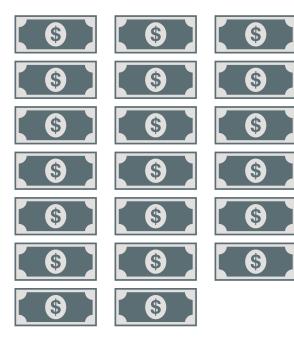


IMPLEMENTING THE PLAN

FLOOD RISK REDUCTION PROJECTS









Average Annual Direct Flood Losses WITH IMPLEMENTATION OF THE MASTER PLAN





1. Based on 2025-dollar values utilizing the LWI HEC-HMS, HEC-RAS and HEC-FIA models for baseline conditions

2. Based on 2050-dollar values utilizing the LWI HEC-HMS. HEC-RAS and HEC-FIA models modified by ARBC to reflect 2050 no-action conditions, factoring sea level rise, urbanization, and rainfall projections (as documented in Section 3.1) while adjusting for an average 3% annual inflation rate projected between 2025 and 2050 (Source: https://www.officialdata.org/us/inflation/)

3. Based on 2050-dollar values utilizing the LWI HEC-HMS. HEC-RAS and HEC-FIA models modified by ARBC to reflect 2050 conditions with implementation of the Master Plan projects.

SCHEDULE

In accordance with the requirements of HB 686 of the 2022 regular legislative session, as promulgated by Act 490, this initial 2025 Master Plan was submitted to the Senate and House Committees on Transportation, Highways and Public Works. Act 490 requirements stipulated that the ARBC shall review, revise, and amend this plan every six years thereafter.

Additionally, the board is required to develop annual plans for watershed management which lay out the critical actions for the coming year. Each annual plan shall include, at minimum, a three-year projection of funding for projects and programs, including funding sources.

To ensure that the 2031 Master Plan update is effective and fully engages stakeholders, a three year update period is planned which continuously engages stakeholders and uses the best available science and engineering.

| MAY 2025 | 2025 Master Plan Submitted to Senate and House Committees on Transportation, Highways and Public Works | |
|---------------|--|--|
| APRIL 2027 | Secure Dedicated Funding for 2031 Master Plan Update | |
| APRIL 2028 | 2031 Master Plan Update Planning Establish Master Plan committee and facilitate planning workshop Review of 2025 Master Plan and annual plans including best practices, stakeholders, partners, and lessons learned Review metrics used to evaluate projects in 2025 Master Plan and revise, as necessary, ensuring consensus among the members of the committee and board Determination of general consultant qualification requirements and procurement strategy and form selection committee | |
| JULY 2028 | Procure Contractor for Master Plan Update Issue qualifications-based Request for Qualifications (RFQ) for professional services Evaluation of proposals by selection committee and ranking of consultant responses for contractor negotiations Development of detailed scope of work, schedule, and fee for Master Plan update services. Award of consultant contract by October 1, 2028 | |
| OCT 2028 | Kickoff Master Plan Update Process Master Plan update kickoff with consultant and Master Plan committee Initial stakeholder engagement meetings to gather input by end of November 2028 Agency coordination, data gap analysis and data collection Existing conditions evaluation including predictive modeling updates, existing projects and program assessment Identification of mitigation needs and concept projects Project Workshop #1 by end of March 2029 Review of existing conditions and concept projects (new and existing) Selection of projects to move forward to evaluation | Science based evaluation of projects by end of September 2029 Project Workshop #2 by end of October 2029 Review of project results Selection of projects for final inclusion in Master Plan recommendations Draft Master Plan presented to board by June 2030 Draft Master Plan preview stakeholder engagement meetings to gather comments by October 2030 Final Master Plan presented to Board by February 2031 |
| APRIL 2031 | 2031 Master Plan Update Delivery to Senate and House Committees on Transportation, Highways and Public Works Updated Master Plan Submitted to Senate and House Committees on Transportation, Highways and Public Works Final stakeholder engagement meetings to present final plan | |

COMPREHENSIVE EVALUATION

Through a comprehensive evaluation of the existing flood risk, community needs, and available partnerships, this Master Plan identifies solutions and best practices to ultimately increase the resiliency of ARBC communities. Implementation of the 13 physical projects and 26 actions will:

Improve the accuracy of FEMA flood maps

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The rising cost of flood insurance within the Amite River Basin is a serious financial burden for its residents. Through this Master Plan, ARBC has determined that the average age of the underlying FEMA hydrologic and hydraulic predictive models used to define the Special Flood Hazard Area (SFHA) on the FEMA Flood Insurance Rate Maps (FIRMs) is over 33 years old. Additionally, many of these models were developed using outdated, low resolution topographic data and traditional 1D modeling techniques which are not well suited to many of the most populated areas of the basin.

ARBC is committed to working with DOTD, FEMA and local communities as an advocate for its residents to ensure FEMA Flood Insurance Studies (FISs) and FIRMs are updated to leverage to the fullest extents the efforts of LWI, ARBC and their partners, with the goal of providing relief to over 30,000 structures within the basin currently within the FEMA SFHA and depicting a more accurate representation of flood risk with the potential to cumulatively save these **impacted residents over \$25M dollars every year on flood insurance premiums.**

Encourage participation and support ARBC communities in the CRS program

ARBC communities participating in FEMA's Community Rating System (CRS) are estimated to save their residents nearly \$11M annually in flood insurance costs. While thirteen ARBC communities currently do not participate in CRS, there is significant opportunities for communities to achieve flood insurance rate reduction for their residents, or for communities that do already participate to increase their current insurance rate reduction. ARBC has strategically aligned the Master Plan and its deliverables with CRS activity requirements to lessen the burden to ARBC communities when maintaining and improving their CRS rating. This includes making products from the Master Plan available to communities to leverage when managing floodplains including future conditions floodplain delineations, datasets to support flood forecasting and datasets to support the development of flood response plans that can all support the award of critical CRS activity points.

Encourage ARBC communities to adopt more consistent ordinances and codes

Local ordinance and code requirements for ARBC communities vary considerably providing varying levels of flood risk resiliency for communities within the ABRC geographic boundary. Recommendations of this Master Plan seek to encourage greater consistency and higher standards in order to reduce flood risk, protect public health and safety, and ensure the long-term viability of the region's natural and built environments. ARBC's recommendations to communities include higher standards related to floodplain preservation, development, building and infrastructure, and drainage and erosion control with the goal of increasing basin-wide long term community resiliency. ARBC is a resource for communities as they look to update their ordinances and adopt higher standards.

Implement programs that reduce flood risk

Beyond just physical projects to reduce flood risk, communities can implement other programs including elevation, relocation and voluntary acquisition projects to mitigate risks to structures and assets. Implementing these programs can be cost effective measures in reducing flood risk, and this Master Plan can be used by communities to streamline identification of structures that would achieve the greatest flood risk reduction benefits by participating in these voluntary programs, as well as be a resource for communities to develop a funding roadmap for implementation.

Implement robust operation and maintenance programs

The Master Plan identifies the need for periodic maintenance of waterways and infrastructure and makes recommendations pertaining to the need for updated operations and maintenance manuals and periodic maintenance. ARBC is committed to exploring funding opportunities and partnerships to continue to support the preservation of the ecological health and functionality of the watershed while ensuring reliable flood protection for surrounding communities.

Facilitate capacity building for the local community of practice and public

The Master Plan identified the need to expand the community of practice in floodplain management, and strengthen the skills, abilities, and resources that local communities, agencies, and all stakeholders within the ARBC need to implement this Master Plan. ARBC is committed to working with other agencies including LWI to facilitate capacity building to achieve the common goal of mitigating flood risk, increasing resilience and preserving the natural resources of the Amite River Basin. This may include:

- · Hands on floodplain management training for local officials
- · Advance technical training for local engineers and geospatial professionals on the use of predictive models
- Promotion of flood safety awareness and preparedness

Provide tools and datasets to support emergency prepardness and response

Through the efforts LWI and other partners who have supported development of this Master Plan, advanced technical data is now available to support emergency preparedness and response. This Master Plan provides several proposed applications of the technical data to provide the ARBC communities with tools and data to rapidly perform informed emergency planning and response to improve public safety and resilience including:

- Advance flood risk information including depth, velocity and associated danger to support emergency planning
- Advanced datasets to support simplified real time flood forecasting
- Outlining the long-term plan for real time flood forecasting and warnings

Funding

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ARBC will seek to maximize funding opportunities to implement the Master Plan projects both as a project sponsor and as an advocate for ARBC communities implementing projects aligning with the goals of this Master Plan. This will include maximizing both state and federal grant opportunities to ensure the benefits of the Master Plan are realized.

Reduce flood risk through physical projects

As flood events become more frequent and extreme, combined with increased population growth and development, it is critical that communities work together to implement physical flood risk reduction projects both on a large scale, basin-wide approach, as well as smaller localized drainage improvements. This Master Plan identifies the critical sequencing considerations that communities should consider as physical flood risk reduction projects are implemented. ARBC is committed to facilitating coordination for both these long term and near term project implementations and assisting project partners acquire funding for implementation.

CONCLUSION

Under the auspices of the ARBC, our member parishes – Ascension, East Baton Rouge, East Feliciana, Iberville, Livingston, St. Helena and St. James – cooperate like never before. Together, we are acting in concert with a sense of urgency never before seen. And as of this writing, the Commission and Parishes are underway to design and construct several transformative projects in the Basin to reduce flood risk and increase flood protection.

The 2025 ARBC Master Plan charts a path toward a safer and more sustainable future for the seven-parish Amite River Basin. It integrates thirteen board-supported projects to systematically reduce flood depths, cut annualized flood losses by over 50%, and strengthen critical water supply through transformational detention and retention in the upper Amite River basin. Supportive policies and 26 key actions complement these engineering solutions. By aligning near-term milestones with long-range planning, the Master Plan adheres to the "no-adverse-impact" ethos, ensuring that each project meets basin-wide goals without shifting burdens from one locale to another.

At the core of this Plan lies an adaptive approach: annual progress reports and six-year major revisions will ensure that updated scientific insights, technological developments, and community needs continuously inform the region's flood mitigation trajectory. By uniting structural improvements, nature-based solutions, and robust governance, the Master Plan will provide the mechanism for reducing flood insurance costs, preserving valuable natural resources, and securing a dependable water supply for future generations. In doing so, the ARBC and its partners advance a shared vision of resilience that respects local distinctions while benefiting the broader watershed—and offers a lasting commitment to the safety, prosperity, and natural heritage of the Amite River Basin.

