



# Louisiana Department of Education Coastal Flood Risk and Resilience

Presented by the Coastal Protection and Restoration Authority and  
Louisiana State University Economics & Policy Research Group

## Coastal Flood Risk in Louisiana

Every day, the lives and livelihoods of our residents are affected by the challenge of wetland loss along Louisiana’s Gulf Coast. **Whether you live along the coast or inland, the impacts of land loss and coastal storm surge-based flood risk ripple across our state.** While the cost of hurricane impacts may total in the billions of dollars, the effects are also uniquely personal. A family may be forced to leave a community they have called home for generations after their house is damaged by a storm; a local business may have trouble affording flood insurance; or a school may lose students as a community is displaced.

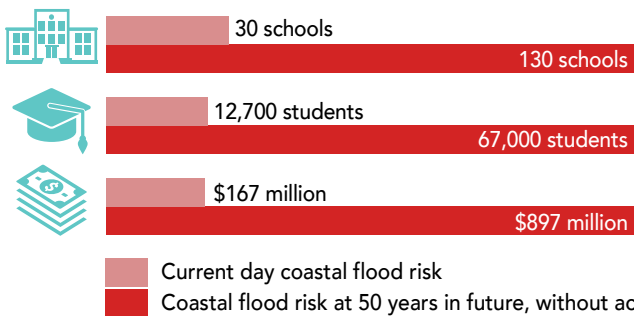
## Coastal Flood Risk to Schools

### Current Day Risk

PreK-12 public schools face increasing risk from coastal storm surge-based flooding over the next 50 years. Under **current day** conditions, a 1% annual chance flood event would impact **4% (or 30) of public schools in coastal Louisiana**. This includes impacts to approximately 12,700 students and would amount to \$167 million in damage to educational facilities.

### Future Risk Without Action

However, impacts from the same 1% annual chance flood event occurring **50 years in the future without additional protection or restoration actions** could have significantly more severe impacts on Louisiana public schools. **In fact, 4-6 times more public schools would face impacts from such a flood event in comparison to today.** Under future conditions, without the implementation of master plan projects, flooding could impact approximately 17-21% of public schools in coastal Louisiana. This translates into approximately 130-160 schools, 67,000-88,800 students impacted, and a cost of \$897 million-\$1.2 billion in damage.



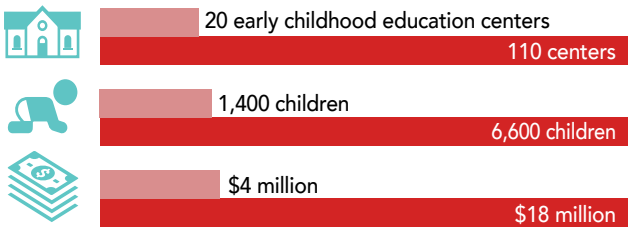
## Coastal Flood Risk to Early Childhood Education Centers

### Current Day Risk

In addition to impacts on schools, future coastal flood risk could also have significant impacts on the availability of early childhood education centers in coastal Louisiana. For instance, at **current day**, a 1% annual chance flood event would impact approximately **3% (or 20) centers in coastal Louisiana** and approximately 1,400 children, and result in damage of approximately \$4 million.

### Future Risk Without Action

However, this same flood event occurring **50 years in the future**, without the implementation of the master plan, could affect **4-7 times more early childhood education centers in comparison to today.** This means that **12-18% of the centers in coastal Louisiana** may be impacted (110-160 centers and 6,600-9,600 children) resulting in \$18-\$27 million in damage.

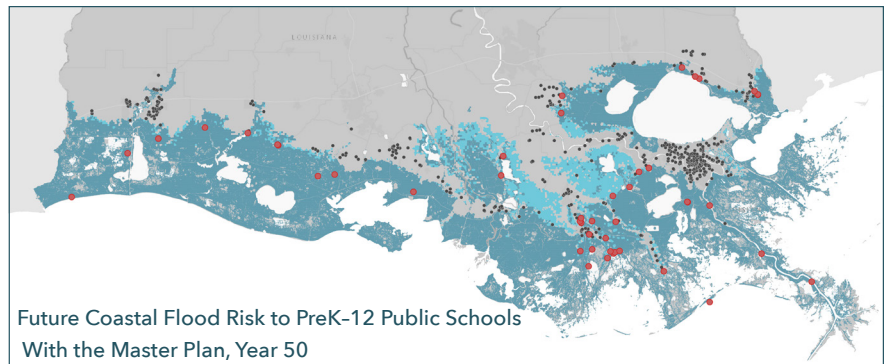
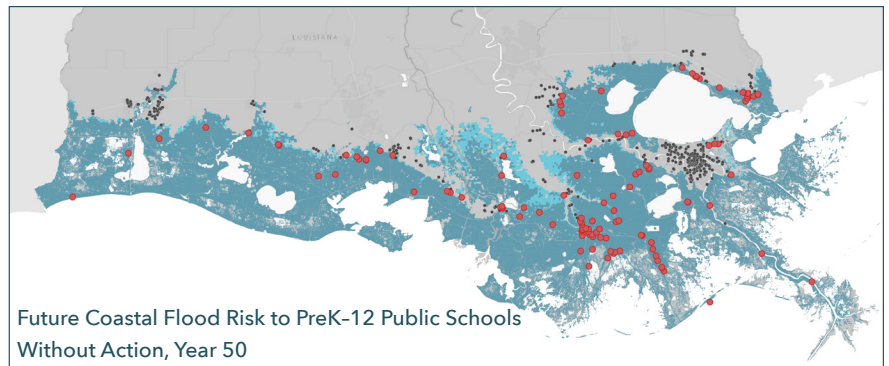
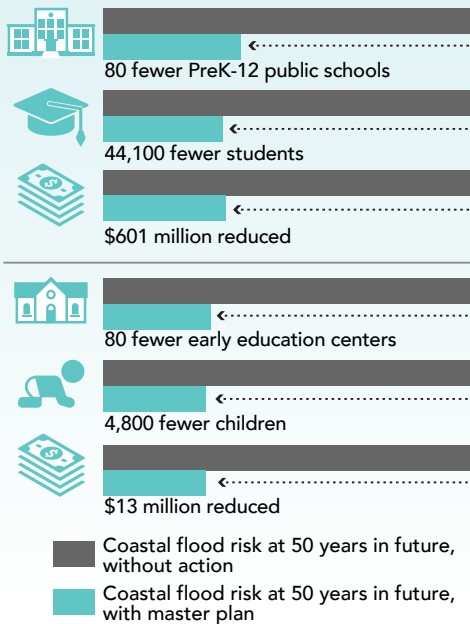


We encourage all educators and school system employees to learn more about Louisiana’s changing coastal landscape and the potential impacts faced by PreK-12 public schools, early childhood education centers, and the children supported by these facilities. The Coastal Protection and Restoration Authority (CPRA) through the 2017 Coastal Master Plan is working to create safer communities and a more sustainable landscape. Together, we can plan for a more resilient education system.

Learn more about how we can work to reduce the impacts of coastal flooding on schools and early childhood education centers.

## How Do We Look Toward the Future?

With the 2017 Coastal Master Plan, we can significantly reduce these risks. For instance, we can achieve a **43-62% reduction in the number of PreK-12 public schools at risk of flooding with the master plan, in comparison to a future without the plan.** This translates into 70-80 fewer schools and 43,200-44,100 fewer students impacted, along with approximately \$601-609 million in damage reduced. Similarly, we can achieve a 55-71% reduction in early childhood education centers at risk of coastal flooding with the master plan in place.

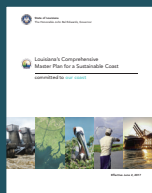


- 1 - 2 feet of coastal flooding
- 2+ feet of coastal flooding
- Schools at risk of coastal flooding
- Schools at higher risk of coastal flooding

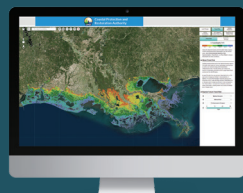
Louisiana's educational system, including PreK-12 public schools and early childhood education centers, faces increasing impacts from coastal flood risk. The impacts of flooded school facilities and interrupted schooldays can have detrimental effects on children, families, and communities.

**The State of Louisiana is working to create a bright and resilient future, and the 2017 Coastal Master Plan recommends a diversity of projects to build land and reduce coastal flood risk to achieve that future.** Yet, it will take an unprecedented effort by government, the private sector, and coastal communities to improve the sustainability of our coast. We are proactively preparing for a bright future in an ever-changing landscape.

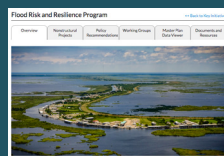
## Louisiana's Coastal Master Plan



2017 Coastal Master Plan  
<http://coastal.la.gov/our-plan/2017-coastal-master-plan>



Master Plan Data Viewer  
<http://cims.coastal.louisiana.gov/masterplan>



Flood Risk and Resilience Program  
<http://coastal.la.gov/our-plan/2017-coastal-master-plan/flood-risk-and-resilience-program>

## Story Map

Louisiana's Working Coast  
<https://arcg.is/9fjen>



**LSU**  
 E. J. Ourso College of Business  
 Economics & Policy Research Group

**DEPARTMENT of EDUCATION**  
 Louisiana Believes