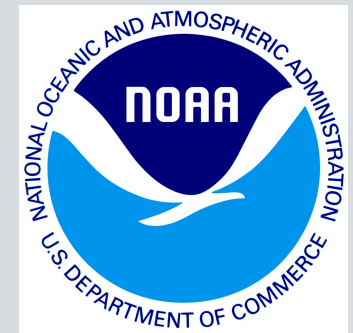


The Impacts of Seasonal Flooding on the Mississippi Delta and Future Adaptation Management Planning



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Outline

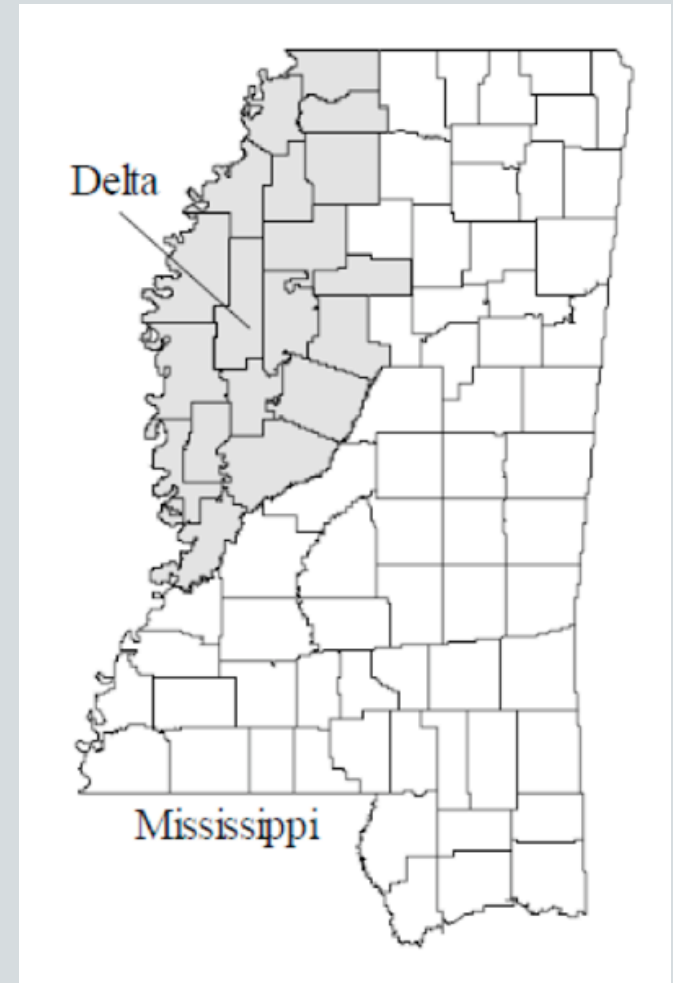


- Objectives
- Background
- Key Questions
 - How is flooding affecting the Delta?
 - Why does it flood?
 - What is being done?
 - What other adaptation measures could help?
- Conclusions
- Acknowledgements
- References

Objectives



- To better understand the weather and climate in the Mississippi Delta and its impacts on flooding
- To give insights on adaptation measures for future flooding



Background



- Flood history
- Flood season



My Grandfather: Roosevelt Parker



- Lived in Greenville, MS since early 1960s
- Home built on a floodplain



2011



“I could sit on my porch and catch fish.”

Impacts to the Delta



- Residents
- Economics
 - Casinos



Impacts to the Delta



Why does it flood so much?



- Snow melt
- Tropical systems
- Heavy rainfall
- Runoff

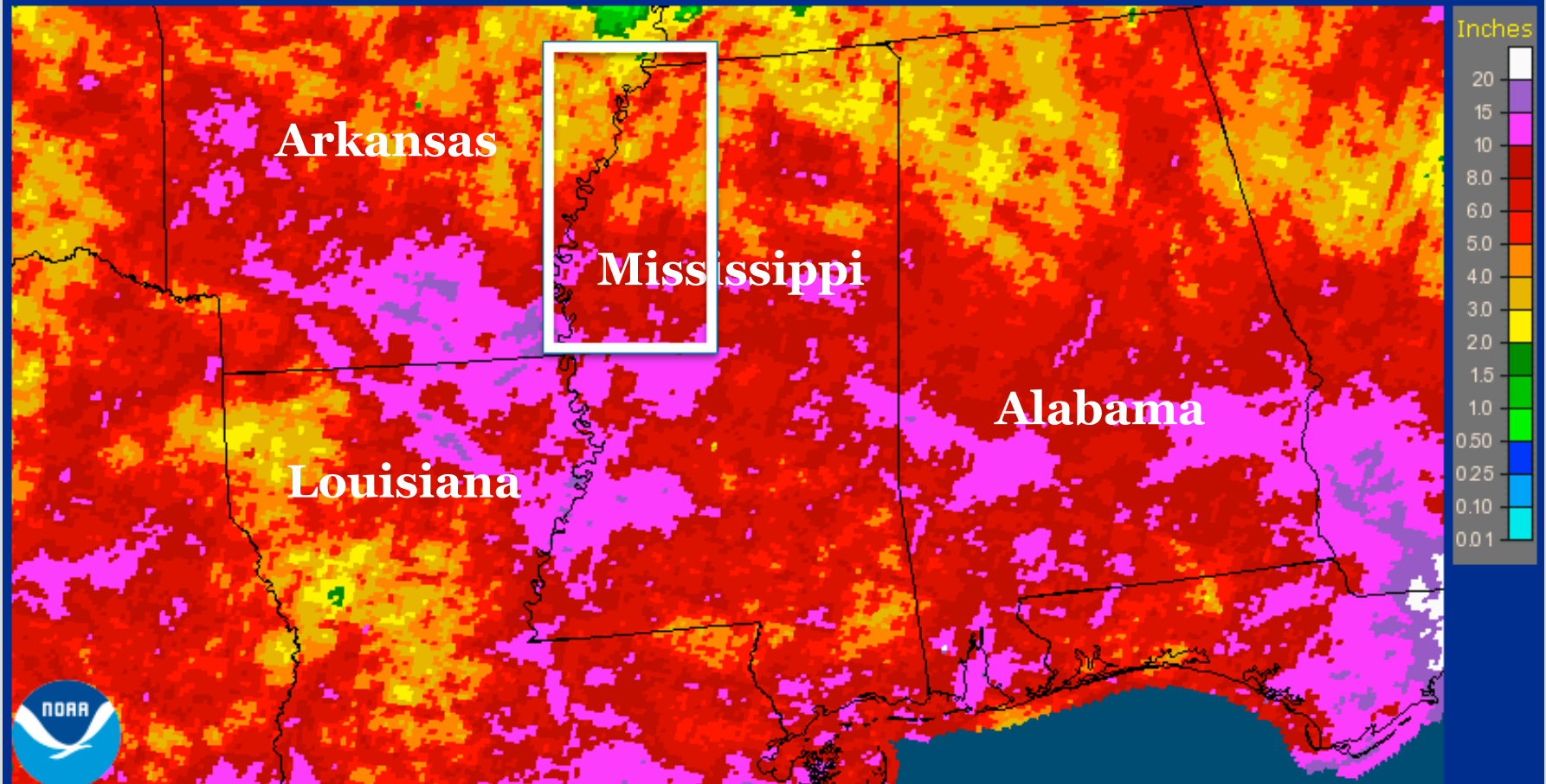


2008's Hurricane Gustav Photo Courtesy NASA Earth Observatory.

Why does it flood so much?



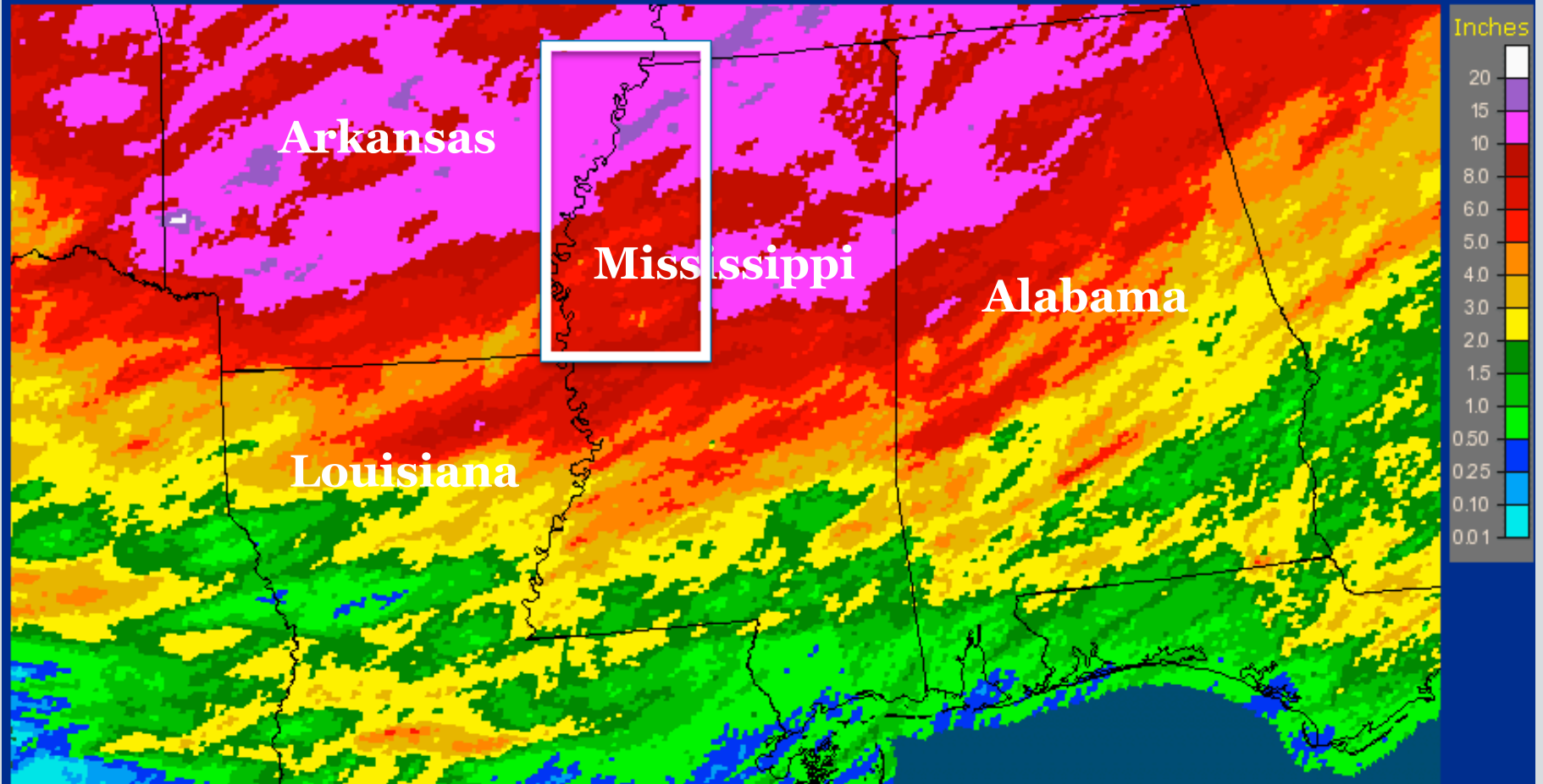
Mississippi: August, 2008 Monthly Observed Precipitation
Valid at 9/1/2008 1200 UTC - Created 6/18/14 7:53 UTC



Why does it flood so much?



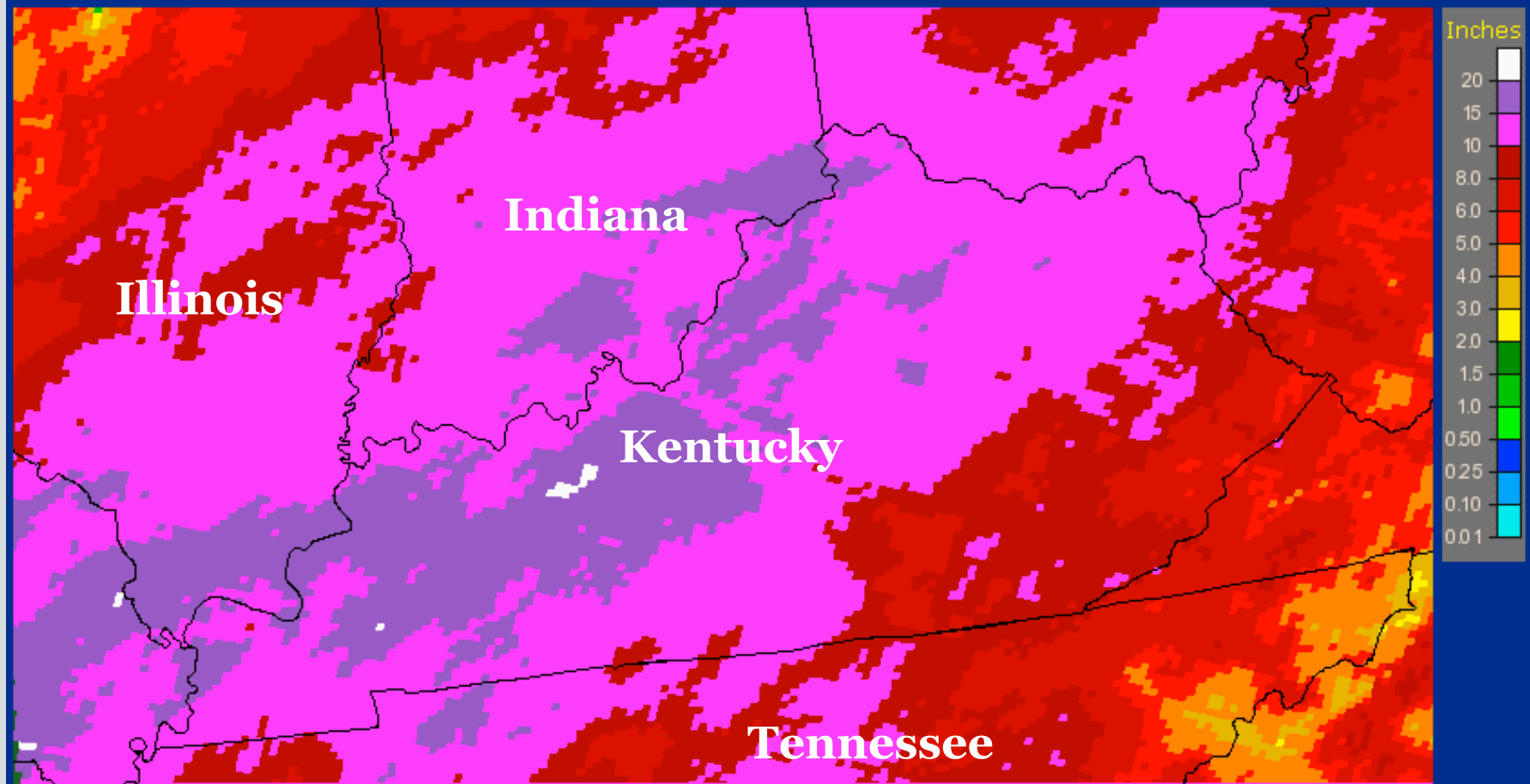
Mississippi: April, 2011 Monthly Observed Precipitation
Valid at 5/1/2011 1200 UTC - Created 10/14/12 21:33 UTC



Why does it flood so much?



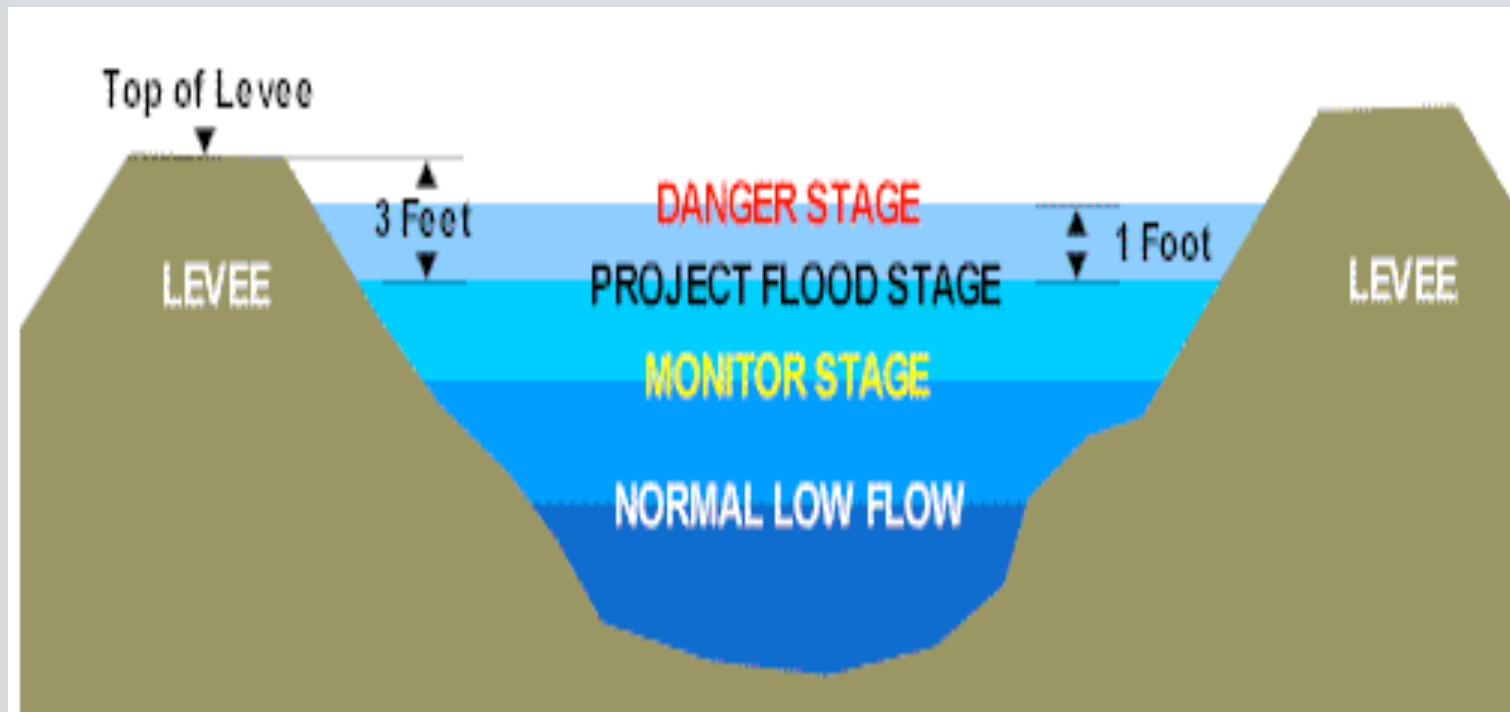
Kentucky: April, 2011 Monthly Observed Precipitation
Valid at 5/1/2011 1200 UTC - Created 10/14/12 21:33 UTC



What is being done?



- Levees
- Flood reservoirs



What other adaptation measures could help?



- Building standards
- Zoning
- Flood plain conservation
- Culverts



Conclusion



- Key Points
 - Upstream rainfall
 - Funding
 - Adaptation Measures
- Next Steps



Special Thanks



- NOAA
- EPP
- Nancy Beller-Simms
- Frank Niepold
- Amrith Sagar
- CPO Staff
- Latham Stack
- Margaret Walls
- Marty Pope
- United States Army Corps of Engineers

