

REPORTING PERIOD START	26-Sep-21
REPORTING PERIOD END	25-Dec-21
WATERSHED REGION	7
NATIONAL OBJECTIVE	N/A – Planning Activities
ELIGIBLE ACTIVITY	Planning: HCDA Sec. 105(a)(12)
EXPENDITURE/COMPLETION STATUS	227,692.57

RCBG PROGRAM QUARTERLY REPORT

REPORTING CONTACT INFORMATION	
CONTACT PERSON NAME	Rachelle Sanderson
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WATERSHED COORDINATION METRICS	
HOURS OF WORK PERFORMED (by Watershed Coordinator)	243.25
NUMBER OF MEETINGS FACILITATED	(1) October 19 RSC meeting (2) November 16 RSC meeting
ATTENDANCE PER MEETING	(1) October 19 RSC meeting, 74 registered participants (2) November 16 RSC meeting, 54 registered participants
DIVERSITY OF DISCIPLINES/INTERESTS REPRESENTED AT MEETINGS	RSC members, CRPC staff, Parish staff and elected officials, NGO staff, concerned citizens, home builders associations, OCD consultants, municipal staff and elected officials, universities, EPA, and state employees, FEMA
DESCRIPTION OF OTHER COORDINATION ACTIVITIES UNDERTAKEN	See attached narrative document

REGIONAL CAPACITY ANALYSIS AND REGULATORY REVIEW METRICS	
DESCRIPTION OF DELIVERABLES COMPLETED BY LSU OR WITH INPUT BY LSU	In progress. LSU continues to do work on (1) plan evaluation networks (2) evaluation of subdivision codes (3) assist with the build out of a governance structure and (4) work to ensure consistency and leveraging of other deliverables. See the attached narrative for more information.

2021 PUBLIC OUTREACH METRICS (Q1 & Q2) * please note that this only reflects meetings with regards to the Region 7 Provisional Governance Recommendation	
NUMBER OF COMMUNITY EVENTS/STAKEHOLDER MEETINGS (TOTAL)	0 - Region 7 Governance Recommendation was adopted in Q2
NUMBER OF MEETINGS WITH LOCAL OR REGIONAL OR REGIONAL PUBLIC OFFICIALS	0 - Region 7 Governance Recommendation was adopted in Q2
NUMBER OF MEETINGS WITH TRIBAL OFFICIALS	0 - there are no federally recognized tribes in Region 7 and based on the information that we have found, there are no state recognized tribes with offices or districts represented in Region 7 (if this is incorrect, we would love build a relationship with Indigenous nations in the region)
TYPES OF SPECIAL INTEREST STAKEHOLDER GROUPS ENGAGED	0 - Region 7 Governance Recommendation was adopted in Q2
NUMBER OF COMMENTS RECEIVED	0 - Region 7 Governance Recommendation was adopted in Q2

CRS PARTICIPATION METRICS	
CRS SCORES AND/OR NUMBER OF PARTICIPATING COMMUNITIES (one input per year)	See Q3 2021 report

NARRATIVE	
Please describe additional capacity-building activities conducted during the quarter. See attached narrative document	



LOUISIANA
WATERSHED
INITIATIVE



REGION 7

2021 QUARTER 4 (10/1/2021- 12/31/2021) REPORT NARRATIVE

Rachelle Sanderson
Regional Watershed Coordinator (Region 7)
Capital Region Planning Commission



WHAT PROGRESS HAS YOUR ORGANIZATION ACHIEVED IN MEETING THE GOALS AND OBJECTIVES LAID OUT IN THE PROPOSAL?

Please note that due to COVID-19, all meetings listed below were hosted virtually on Zoom.

Regional Steering Committee

OCTOBER 19, 2021 REGIONAL STEERING COMMITTEE (RSC) MEETING

This meeting focused on updates from the Model Use, Storage, and Maintenance team, an informational presentation from Dr. Barry Keim on climate changes in Louisiana, and discussion on draft membership structures.

NOVEMBER 16, 2021 RSC MEETING

This meeting focused on the review and adoption of a proposed membership structure.

Capacity Building

Capacity building for this quarter focused on building relationships across the region and identifying shared challenges and opportunities. This was done by completing, or beginning, the following activities:

CONTINUED WATERSHED COORDINATOR COMMUNITY CALLS

Similar to previous report Watershed Coordinator Community calls continue as intentional space for Watershed Coordinators to find consistency and alignment in activities and to share existing knowledge around existing challenges and opportunities. Since the establishment of these discussions, watershed coordinators have found strategic paths forward and alignment around the work through various efforts related to the long-term governance structures and regional project selection across the state. Since the last report, the Watershed Coordinators in Regions 5 and 8 have been leading efforts on developing a shared Google folder for the watershed coordinators, a list of potential funding resources and more.

ONE-TO-ONE CALLS WITH STRATEGIC STAKEHOLDERS

Similar to previous reports, discussions with strategic stakeholders who are a part of existing organizations, and governments, that are critical to ensuring the success of work within Region 7 are ongoing. These conversations encourage participation in Region 7 meetings, and in some cases, plant the seeds for longer-term asks for partnerships and strategic collaboration where gaps exist in knowledge, skillsets, and resources with the existing RSC membership and implementation team.

Regional Governance Recommendation

Discussions on regional governance have been limited to membership structure. On November 16, 2021, the RSC voted to adopt a membership structure to propose to OCD. Documentation of the vote and the recommendation can be found in this document along with the meeting minutes following this narrative report. Following this recommendation, the RSC will be waiting further instruction from OCD and the Watershed Council.



Leveraging Funds and Activities & Funding Opportunities

The Louisiana Watershed Initiative approach “requires unprecedented coordination and cooperation across all facets and functions of government agencies as we work together to mitigate future flood risk.” It is for this reason that we are also focused on leveraging existing activities, coordinating, and collaborating where there is strategic alignment. Below are activities that Region 7 is leveraging for the purpose of mutually advancing activities between LWI and our partners. **It is important to note that various teams that have been brought together in supporting Region 7 have been successful in securing 2 out of 3 funding opportunities, bringing together over 75 individuals across 50 institutions, and leveraging over \$1M through capacity building efforts and research grants. The third funding opportunity has not been announced yet.**

PARTNERSHIP WITH GEORGETOWN CLIMATE CENTER (\$100,000)

Status: Work is underway. Throughout this quarter the planning team prepared for several visioning exercises, conducted interviews with stakeholders, conducted research, and drafted an outline for the strategy.

- **Funds leveraged:** \$100,000 through a grant to GCC from the Doris Duke Foundation
- **Duration:** January 2021 – April 2022
- **Activity:** Development of a hybrid strategy and visioning tool that explores the intersection of affordable housing and flood risk by considering (1) rural housing (2) urban housing and (3) nature-based solutions. This work is being done with a planning work group that is outlined in the 2021 quarter 1 report.

PARTNERSHIP WITH ENVIRONMENTAL PROTECTION AGENCY OFFICE OF RESEARCH AND DEVELOPMENT (\$50,000)

Status: Work is underway. Local partners have been identified and preliminary structured decision making meetings are set to take place in the first quarter of 2022.

- **Funds leveraged:** \$50,000, please note that this is an approximation and that this value may change as a clearer scope of work is determined
- **Duration:** Spring 2021 – Mid-2022
- **Activity:** Please note that the full scope is to be determined and that the following reflects initial brainstorm discussions. EPA in partnership with CRPC’s Region 7 LWI program will develop a resilience roadmap to operationalize tools and resources focused on goals identified in the [Region 7 Guiding Principles Framework](#)

PARTNERSHIP WITH NEW ENGLAND, MARYLAND, AND SYRACUSE ENVIRONMENTAL FINANCE CENTERS (\$50,000)

Status: Work is underway. The first workshop took place in November and the team is working to identify partners to work with on a one-to-one basis.

- **Funds leveraged:** \$50,000, please note that this is an approximation and that this value may change as a clearer scope of work is determined
- **Duration:** Spring 2021 – Mid-2022



- **Activity:** The identified Environmental Finance Centers will work with CRPC's Region 7 LWI program efforts to develop a training conference for the region that focuses on delivering mission-critical information and an opportunity to practice the practical application of what is learned through collaborative cross-jurisdictional exercises between Region 7 partners.

LINCOLN INSTITUTE CASE STUDY AWARD (\$2,000)

Status: Awarded June 29, 2021, work is underway. The case study team has been awaiting next steps from the organizers. It is anticipated that the case study will be available by mid-2022.

- **Funds awarded:** \$2,000
- **Duration:** Spring 2021 – Mid-2022
- **Activity:** A team of individuals from LSU, NYU, and Capital Region Planning Commission will be putting together a case study titled, *Can Meandering Paths Connect a Fragmented Planning System? Developing a regional governance structure to enable watershed planning in Southeast, Louisiana, inquiry study*. This case study will focus on the development of the Region 7 governance structure and the challenge and opportunities discovered within that process.

NOAA RESTORE SCIENCE PROGRAM FUNDING OPPORTUNITY: PLANNING FOR ACTIONABLE SCIENCE

Status: Awarded. The project team has been developing a literature review, conducting interviews with stakeholders, and designing upcoming workshops for 2022.

- **Funds awarded:** \$115,172 to Capital Region Planning Commission
- **Duration:** September 1, 2021 – August 31, 2022
- **Activity:** To develop a cost-benefit framework for watershed management that will inform and reduce uncertainties during project selection of the Louisiana Watershed Initiative. The project team includes: Capital Region Planning Commission (Lead), LSU, LSU Agricultural Center, Pontchartrain Conservancy, Louisiana's Office of Community Development and, Department of Environmental Quality. More information can be found here: <https://restoreactscienceprogram.noaa.gov/funding/2-3-million-for-planning-actionable-science>

RESTORE CENTER OF EXCELLENCE

Status: Awarded. The project team has been developing an understanding of data sources and initial objectives to achieve project goals.

- **Funds awarded:** \$426,543 to The Data Center
- **Duration:** September 2021 – September 2023
- **Activity:** This research funded through the RESTORE Center of Excellence will: (1) develop new modeling strategies and micro-level data sources for exploring coastal population change. A major contribution of the project is to address issues of measurement at an appropriate temporal and geographic scale to understanding individual- and community-level responses to coastal hazards. (2) Measure the empirical effects of flood events on altering the baseline pattern of population and economic shifts in coastal Louisiana. (3) Build bridges between the Coastal Master Plan and other regional planning efforts that are anchored in empirical



analysis and projection uncertainty. The project team includes: The Data Center of Southeast Louisiana (Lead), LSU, and Capital Region Planning Commission.

GULF RESEARCH PROGRAM BRIDGING KNOWLEDGE TO ACTION(\$300,000)

Status: Full proposal submitted, pending feedback in early 2022.

The project team submitted a full proposal in late August for this funding opportunity titled, Linking Coastal-Watershed Resilience to Urban Reinvestment: Build Baton Rouge and Louisiana Watershed Initiative Region 7. This team includes LSU Department of Environmental Sciences, LSU Center for River Studies, Build BR, Capital Region Planning Commission, and Georgetown Climate Center. Text from LOI that was submitted can be found below...

Approach

The LWI, launched by executive order after the 2016 floods, seeks to apply a holistic watershed strategy for flood mitigation across the state. Watersheds are unique common pool resources (Kerr, 2007) and their management intersects with property rights and land development in urban areas. The idea of common pool resource management has long been part of environmental policy literature (Ostrom, 1990 & 2012, Douthat, 2008), and also has inspired consideration of the city as “an urban commons” or Co-City (Ione and Foster, 2016). In a watershed-urban commons perspective, mapping exercises can guide conversations about reevaluating land development needs. We propose to use existing data, and highfidelity hydraulic & hydrological modeling to create parcel level maps that classify flood protection value, and urban revitalization value. Parcel classification will be conducted across rural to urban gradients within focal watersheds, including the EBR Land Banks. This approach will demonstrate strategies for optimizing growth as a function of locational efficiency and accessibility, while minimizing growth in hazardous areas or areas with high flood protection value. We will also compile legal, planning, and policy tools aimed at addressing inland flooding, population transitions, green infrastructure, and urban revitalization, to inform actionable management alternatives.

Focal Program

We will focus on EBRP’s Land Bank, a program to acquire vacant/abandoned/deteriorated (VAD) properties and return them to use in alignment with community needs. The land bank is administered by Build Baton Rouge with whom we will partner.. The mapping of accessibility, green infrastructure potential, and hazards for all parcels in the LWI Region 7 watersheds, will provide information to plan for revitalization and storm management purposes, and for decisions about where to invest scarce public resources. Changes to flood insurance rates will likely occur in 2021 making this more pressing (CRSb, 2021).

INSTITUTE FOR SUSTAINABLE COMMUNITIES (ISC) & KRESGE FOUNDATION REGIONAL COLLABORATION FOR EQUITABLE CLIMATE SOLUTIONS (RCECS) PILOT COHORT

Status: Workshops completed, awaiting next steps for the second phase

As stated in the previous report, Region 7 was invited to participate in and create a team of 4-6 individuals for the RCECS pilot cohort. Recent updates from ISC have let the team know that the name of this effort is changing and that there will be additional resources to support these efforts in 2022.



PARTICIPATION IN COMMITTEES/TASK FORCE

- APA Water and Planning Network Steering Committee
- Climate Initiatives Task Force
- Georgetown Climate Center and LCG's Regional Climate Collaboratives Forum
- Network of Networks
- The Water Collaborative
- Association of Climate Change Officers Planning Council

Elevating Work to National/International Platforms

ABSTRACTS SUBMITTED

- **Status: Pending.** Gulf of Mexico Conference. Incorporating co-benefits and costs to coastal hazard mitigation decision-making.

PRESENTATIONS GIVEN

- **NOAA RESTORE Science Program Review Panel**
- **Association of Climate Change Officers Summit equity in the field facilitated discussion**
- **American Water Resources Association Fall Conference**

ADDITIONAL OPPORTUNITIES PURSUED

- **None this quarter**

LSU Deliverables

CRPC has been coordinating with the LSU consultant team on a weekly basis to focus on the following items:

NETWORK ANALYSIS AND PLAN EVALUATION (NAPE)

This work has focused on the development of a final report for the following items:

- Planning strategies for coding and evaluation
- Finalized evaluation protocol and coding structure
- Network section is pending
- Preliminary evaluation work on reviewing parish Goals and Objectives based on the Plan Evaluation Protocol
- During this month we also inventoried the Gravity Drainage Districts in LWI
 - Drafting of final documentation and reports. Identifying how to communicate what plans say about policies and projects that adhere to LWI policies and eligible procedures
- Orientation for new student to support work



SUBDIVISION CODE EVALUATION

This work has focused on the development of a final report for the following items:

- Finalization of schema for evaluation
- Further review of codes to double check interpretations, etc.

It is anticipated that the final reports will be completed by late winter 2022.

COLLABORATION AND WORK ON CAPACITY BUILDING AND KNOWLEDGE CREATION

This work has focused on the following items:

- Collaboration for the Lincoln Institute Case Study Award
- Collaboration with partners on the NOAA RESTORE Science Program grant
- Collaboration through GCC Planning Work Group
- Collaboration with Georgetown, CRPC, and NYU on Journal of American Planning Association paper
- Collaboration with partners on RESTORE Center of Excellence grant

CONSISTENCY AND LEVERAGING DELIVERABLES OF OCD'S CONSULTANTS

Additionally, LSU and CRPC have been in conversations with OCD, and their consultants, to ensure that work is not being duplicated. During these conversations, it was made clear that some deliverables will need to be altered to leverage the work of other contractors. Several conversations have been dedicated to this.

WHAT CHALLENGES OR OBSTACLES HAVE BEEN FACED IN MEETING THESE GOALS AND OBJECTIVES?

COVID-19

The introduction of the Omicron variant has created significant impacts in communities. In good timing, this surge became present during the late holiday season when many individuals already had planned time off. Louisiana, and the world, continue to grapple with planning around what have become expected surges and additional variants of COVID19. We will continue to follow CDC and state-level guidance.

HAVE THE GOALS AND OBJECTIVES CHANGED? HOW?

The goals and objectives have not changed.

REGION 7

OCTOBER 19 REGIONAL STEERING COMMITTEE MEETING

Accompanying slides and a recording of this meeting can be found online at <https://crpcla.org/previous-events-archive>. Please note that any time that you see “RSC” in this document, it stands for Regional Steering Committee. Anytime that you see “LWI” in this document, it stands for Louisiana Watershed Initiative.

INTRODUCTIONS AND MEETING LOGISTICS

THANK YOU

Shared agreements

1. Be brief and meaningful when voicing your opinion.
2. Seek common ground and understanding (not problems and conflict).
3. Consider what serves the benefit of the entire region.
4. When presenting a challenge, offer a solution.

Idea Marina

- We will be adding the concept of an “idea marina” in our discussions. This means when a discussion comes up that is not related to the goals of the meeting, we’ll put it in the idea marina to revisit at a later date.

PAST MEETINGS RECAP, REMINDERS, AND UPDATES

THANK YOU AND ICEBREAKER

Thank you for being with us today.

Icebreaker: How is everyone post-Ida?

UPDATES

- Georgetown Climate Center Resilient Affordable Housing
 - Visioning sessions taking place in November
- Environmental Finance Centers
 - Workshop taking place in Mid-November
- EPA Resilience Roadmap
 - First advisory group meeting
- Lindsey Lamana successfully defended her thesis on network and plan analysis
- Reminder: Working with Nature Training Series first session on Oct. 20th



- <https://watershed.la.gov/nature-based-solutions>

UPDATES

RSC Members

- None

A QUICK RECAP

2020-2021

- August-October – Vision, values, and goals; Root causes of flooding, opportunities to address challenges
- November-December – What kind of work the region would like to do, Governance models, initial feedback for recommendation
- January-March – Adopt provisional governance recommendation; Discuss Round 1 Regional projects; Discuss potential funding resources
- April-June – Vote on Round 1 regional project selection process; Discuss and adopt governance recommendations
- July-August – Adopt recommendations for Round 1 regional project; Discuss draft membership ideas

REMINDER

- LWI Mission: Reduce flood risk, improve floodplain management throughout the state and maximize the natural and beneficial functions of floodplains
- Region 7 Vision: Region 7 envisions a future with less flood risk, healthier natural environments, and resilience practices that are responsive to the needs of our communities and to our evolving environment

HURRICANES, STORM SURGES, HEAVY RAINFALL, AND FREEZES IN A CHANGING CLIMATE – DR. BARRY KEIM (LSU)

2021 ATLANTIC HURRICANE SEASON OVERVIEW

- 15-21 Named storms
- 7-10 Hurricanes
- 3-5 Major hurricanes
- Louisiana is the only coastal state to drop in population since 2000 due to devastating storms

SURGEDAT: STORM SURGE DATABASE

- LSU + University of Oklahoma developed SURGEDAT, the world's most comprehensive storm surge Database. This clearinghouse can search storms or locations and retrieve surge values back to 1880.



Q&A

- John Clark: Not only increased rainfall, but the inverse – are you seeing areas in LA with less rainfall? For example, NE Louisiana?
 - Barry Keim – Over the last 100 years, there has been an increase in rainfall across Louisiana. We have had a lot of wet years combined with really dry years - it has kind of been all over the place. I don't think there's any discernable trend we can extract. We have experienced extreme years going both ways.
- Jonathan Leo – The 2016 torrential rains had such magnitude in damages that the 2018 Executive Order was required. Is there a difference between non-hurricane events rain fall events and hurricane events that warrant this kind of approach?
 - Barry Keim – We get more catastrophic rains from fronts because we get so many in the area. If they stall, it can give immense amounts of rain. The 2016 was a tropical wave, precursor to hurricane, humidity was very high, and rained extremely hard over us.

MODEL USE, STORAGE, AND MAINTENANCE PLAN (MUSM)

Presented by Dr. Emad Habib & Dr. Ehab Meselhe

OBJECTIVES OF LWI MODELS

- Flood mitigation feasibility studies
- No adverse impact assessments
- Consequence and risk assessment
- Management of future developments and community growth
- Support evaluation of proposed projects, watershed management strategies and policy development
- For the future...
 - Inform assessment of habitat suitability and impacts on water quality
 - Inform assessment of ecological consequences (e.g., index of hydrologic alteration (IHAs))
 - Support development and update of FEMA flood insurance rate maps
 - Support future development of flood forecasting warning systems

REGIONAL & LOCAL MODEL USAGE

Multijurisdictional scale supports:

- Larger, regional-scale project evaluation
 - River diversions
 - Levee systems
 - Hundreds of acres of detention ponds
 - Interstate/state highway crossings over major rivers
 - Large-scale developments along major river floodplains
- Local-scale projects, but with possible regional impacts (e.g. downstream)



- Mid-size detention ponds, Channel widening, clearing and snagging, Roadway (culverts) conveyance improvement, local bridge improvements/replacement

MODEL LIFECYCLE STAGE

- Starts with development (blue)
- Once models are built, then can be used for project evaluation (grey)
- Composition of MUSM plan (green)

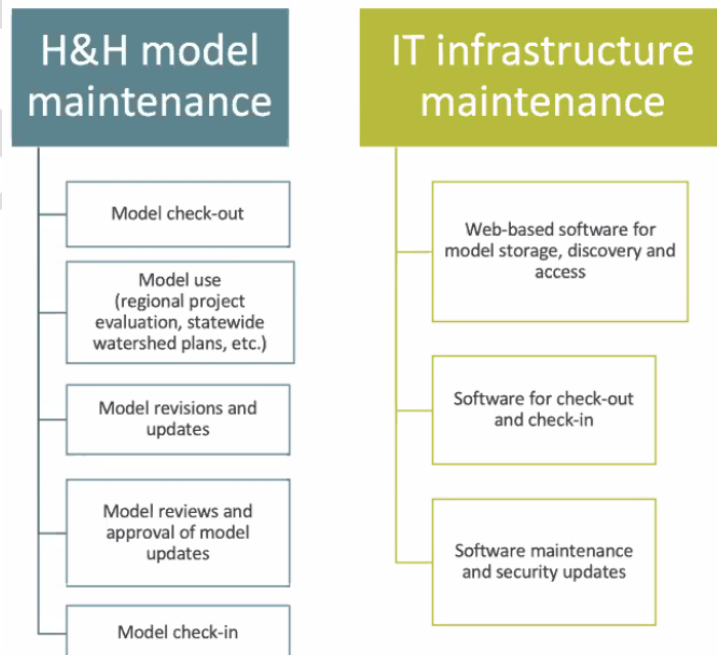
Model Lifecycle Stage
Acquisition of raw geospatial and time series data
Data preparation/processing into formats that models can directly import/use
Model setup
Model calibration and validation
Model scenario development & Project evaluations
Model execution
Visualization of results
Model discovery (i.e., browsing and searching)
Model download/check-out
Model modification
Model upload/check-in
Review and approval of model modifications
Notification of proposed/approved model updates

MUSM PLAN

Two Main Components

1. Where H&H model maintenance is implemented
2. Where IT infrastructure is deployed and managed

Both components can be implanted at regional, statewide, or central level or in a blended regional-central approach.





POSSIBLE MUSM APPROACHES

Responsibilities under each approach

MUSM APPROACH	PARTY RESPONSIBLE FOR			WHO CAN ACCESS
	MAINTENANCE OF H&H LWI MODELS	MAINTENANCE OF IT INFRASTRUCTURE	STATEWIDE CONSISTENCY	
CENTRAL APPROACH	Central entity	Central entity	Statewide Standards Advisory Committee Federal & State Advisory Board	All LWI-affiliated entities (<i>federal, state, regional, local and private firms</i>)
BLENDED APPROACH	Regional coalitions	Central entity		
REGIONAL APPROACH	Regional coalitions	Regional coalitions		
FEDERATED APPROACH	Central entity <i>(Regional coalitions responsible for non-LWI models)</i>	Central entity		

- Regardless of which approach, all stakeholders will have access.
- All the regions must follow consistent systems and have statewide standards
- Central entity: Advantages – Has cost savings
- Regional approach: Advantages – Local and regional participants are intimately familiar with local hydraulics and hydrology; have expertise and knowledge of the challenges in their area
- Blended: Advantage – Best of both worlds; IT can be done centrally but H&H can be done regionally
- Federated approach – central entity oversees LWI modeling being developed now, regions will be responsible for non-LWI models

RESOURCE REQUIREMENT & COST ANALYSIS

1. Costs for development of Prototype & Reference Model Management System
2. Costs of deployment, operation, and maintenance of MUSM system

Deployment, Operation and Maintenance of MUSM System

- 2 staffing options:
 - Members of LWI regional coalitions or state agencies
 - Consultants hired by regional/central agencies

LWI MODEL MANAGEMENT SYSTEM FUNCTION	O&M RESOURCES NEEDED
Model use	H&H modelers
Model storage and cloud infrastructure operations	IT personnel
Model upgrades and maintenance	H&H modelers Software maintenance consultants IT personnel



Estimated number of H&H modelers for Region 7

Table 26. Derivation of estimated number of H&H modelers needed per LWI governance region and statewide

Governance Region	Number of HUC8 models	Average HUC8 area in LA (km2)	Total HUC8 area (km2)	Avg. % impervious	Number of H&H modelers (FTE)
1	10	1,580	15,801	1.89	3
2	5	2,007	10,035	0.82	2
3	8	2,421	19,372	1.08	3
4	8	2,261	18,087	1.47	3
5	5	5,281	26,405	1.68	3
6	3	5,715	17,145	2.00	3
7	8	1,724	13,792	2.63	3
8	1	8,962	8,962	2.33	1
Regional Total	48	n/a	129,600	n/a	21
Regional Average	6	3,744	16,200	1.74	2.625
Central H&H program					18

Yearly Costs if done by regional coalition/state agency staff (except software maintenance done by consultants)

Table 29. LWI MUSM system estimated yearly operations and maintenance resource requirements if resources provided by regional coalition/state agency staff (except for software maintenance, which is assumed to be provided by consultants). Note: first year resources are estimated to be slightly higher for IT personnel due to effort needed for initial deployment.

Program Element	Central Approach (C) (Central IT & central H&H)	Blended Approach (B2) (Central IT & regional H&H)	Regional Approach (R) (Regional IT & regional H&H)	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8
H&H Modelers	\$2,340,000	\$2,730,000	\$2,730,000	\$390,000	\$260,000	\$390,000	\$390,000	\$390,000	\$390,000	\$390,000	\$130,000
IT Personnel	\$208,000	\$208,000	\$416,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000
Cloud Storage	\$96,610	\$96,610	\$97,435	\$11,881	\$7,568	\$14,552	\$13,591	\$19,814	\$12,887	\$10,378	\$6,765
Cloud Compute & Networking	\$2,444	\$2,444	\$7,016	\$877	\$877	\$877	\$877	\$877	\$877	\$877	\$877
Software Maintenance (year 2 & on)	\$176,800	\$176,800	\$176,800	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total subsequent year costs	\$2,823,854	\$3,213,854	\$3,427,251	\$454,758	\$320,445	\$457,429	\$456,468	\$462,691	\$455,764	\$453,255	\$189,642



CAPACITY BUILDING NEEDS

Primary Components

- Hardware: In-house and cloud-based computing infrastructure
- Technical personnel: IT, GIS and H&H support
- Training/education:
 - H&H use and applications
 - Effective stormwater management techniques
 - Interaction with and upkeep of MUSM system

Q&A

- Dietmar Rietschier: DOTD is doing the modeling for Region 7, we have 8 consultants doing the models. Are we contacting DOTD and their modelers/contractors where they are on the modelling? There is going to be a transition – between completion, administration, and testing. Is DOTD involved in the dialogue? We have modeling efforts currently, at subregional level for some improvements in some areas in Region 7. Are we coordinating with the other modeling interests to allow for easy transition from modeling and the management of modeling?
 - Emad Habib: Yes, DOTD is aware and participated in reviewing and revising. They have consultants not just for Region 7. We send reports to consultants for comments and input. The process of public comment period is included also for input. Transition between model development and model use – the transition concept is important and that is where capacity building comes into play. There can be training happening between model development and use phase, making sure local and regional users can use this model. If you think there is modeling occurring in your area, the program encourages you to talk with the consultants.
 - Sarah McEwen: There will be 2 pagers made to outline the modeling parameters for each region once work plans are finalized and hopefully resolve concerns.
- Ruth Phillips: Do all the regions vote on this? Or will this be decided by OCD or the responsible agency for employing the H&H modelers?
 - Emad Habib: From my understanding, the public comment period is supposed to be where we get feedback, compile them and LWI will make some recommendations on the final plan as far as which approach to take.
 - Nicolette Jones: Correct, we use public comment to inform this plan. Once researchers have reviewed and incorporated comments, we expect them to come up with a recommended approach based off comments. Could be multifaceted depending on differences among the regions. Then we will go into user-group phase – trying to implement and test the approach. Process will be supported by the state with capacity building.
 - Emad Habib: Developing the system will be made in the prototype phase, informed heavily by the users, and refining based on user needs.
- John Clark: Regarding the MUSM and the LaDOTD modeling within Region 7 for the Amite River Basin, is there cross-pollination between the different modeling efforts/groups, or rather each are individual efforts, thus duplication?



- Emad Habib: We encourage conversation between regions to avoid duplication efforts
- Patrick Forbes: The modeling performed in the regions will not overlap with the MUSM work except to the extent the modelers represent the vast modelers on the state, so we expect them to comment on the MUSM plan. I don't see overlap in efforts, maybe interests. Everyone, including modelers should be including on the models.
- Emad Habib: The MUSM will house the models
- Rebecca Bond: My concern is that I haven't heard back from consultants except one. Worried about budgets and schedules for the projects regarding modeling. We should be involved in that process
 - Conversations will be held with Lakesha Hart (OCD) to discuss further internally to address issues and backgrounds

DRAFT MEMBERSHIP STRUCTURES

LEGISLATIVE UPDATE

Patrick Forbes

- Timeline
 - Patrick Forbes: We are moving based on those recommendations towards drafting legislation for next year's legislative session. At this point, we are writing those up, we're going to put them into some form and then ultimately they take on a life of their own and the legislature makes the decision about what that's going to look like. Obviously that's time for you guys to weigh in with your legislators as to what you think that should look like but your voice is already being heard through the recommendations you've made. Rachelle told me y'all are in the process of refining those recommendations in terms of membership, things like that. I guess in my mind, considering in the next month or so, we will be developing draft legislative language and starting to socialize that with legislators, etc.... it may not be that valuable since nobody knows what the legislation will ultimately dictate that these organizations look like. I'm not recommending that you do one thing or the other really, just want to make sure that nobody feels like their work is being wasted. There's a lot of work for us all to do, including at the regional level in terms of thinking through what do we think legislation should look like for development codes. We already received the regional governance recommendations, and we are working on what state governance may look like based on input from the regions. Rachelle just asked me to make sure that everybody was aware of where we were at the state level and how that might impact the work that you're doing right now. I think that I have covered that. So, the session starts in March; we usually try to have legislation drafted and having people start to look at it by the end of the year. So that's sort of the timing. If y'all did want to continue with recommendations, if you wanted that to inform what we're drafting that would have to happen pretty quickly I would say. Otherwise, it might be something that it is information that you provide to your legislators about your preferences.



QUESTIONS & COMMENTS

- Dietmar Rietschier: Do I understand correctly when you say that you want to move forward with a recommendation, or not recommendation, with the Region 7 Steering Committee? We have been discussing this for almost a year but I want to remind everybody governance structure was not brought our attention, or my attention until maybe a month or month and half ago when I first saw it. That created some discussion among our members that they don't necessarily agree with that structure. So the way that I understand it, Pat is that we are going to move along with the non-approved recommendation by the steering committee and then you are telling us that if we want to change it we need to go to the legislators when the time comes. Am I interpreting this correctly?
 - Patrick Forbes: No. I don't think any of that sounds much like what I said. What we have are 8 different regional recommendations that we have to try to aggregate into a single legislative draft that will then go to the legislature. If your region isn't happy with recommendation that you put forward, and you wanted to change it, all I'm suggesting is that if you want us to consider a different recommendation as we're aggregating all of these recommendations into draft legislation that that would need to happen pretty quickly.
- Rebecca Bond: If changes need to be submitted, do you have a schedule for that? As you aggregate these recommendations for a state level governance package, will you check in with us and get our approval before you send it out?
 - Patrick Forbes: No. I doubt this would be a part of the process. We may try to get it out there for you to see what we got so you can understand what we are recommending so you can talk to your legislators if you like it or not.
 - Rebecca Bond: Is governance and decision making different as far as authority? (ex. Land use, ability to apply for funding) The package you will propose, will that inhibit or prohibit decision making ability of leadership of a city or municipality to make decisions
 - Nicolette Jones: In a meeting last fall, the governance recommendation outlines what Region 7 proposed for their work of their coalition. It does not include taking any authority of local governments. It does not remove any local authorities. There will be authorities granted to the region that the regions may or may not use. There is not any take from local authorities for management. We are talking about governance, us making decisions together across political boundaries.
 - Rebecca Bond: My concern is I am interested in additional authorities granted and seems like an exorbitant amount of time to implement flood management procedures. Adding additional layers of bureaucracy can makes things take longer. We need to enhance and improve our processes.
 - Nicolette Jones: Your concerns have been echoed by members of the steering committee. That is a shared concern
 - Patrick Forbes: Our role is to aggregate recommendations to look as a whole representative
- Dietmar Rietschier: My concern is the latest addition – the structure – voting and nonvoting committee. The nonvoting committee being elected officials.
 - Patrick Forbes: I am not recommending you do one thing over another. It doesn't make sense for you to define voting and nonvoting committees when we don't know the decisions of the legislature for the authorities.



- Rachele Sanderson: The membership structure was never going to be a recommendation to the state as part of the legislative packet. It was just a conversation to guide a pathway if legislation passes, what might we as a region want this to look like? Anything proposed from August 26 meeting was not included in the packet submitted to legislature.
- Ross Liner: I think the goal of this is to reduce the timeline as well as improve the quality at the same time, not elongate the process.
- Patrick Forbes: To respond to the comment about wasted time, the time spent was not a waste, legislation may ask for opinions or leave it open and leave the decision up to you to make. The objective is ensuring the decision making around watershed involves all people in the watershed since we share that risk.
- Ruth Phillips: The governance structure, this has nothing to do with anything with voting members. It is up to us to review the other regions recommendations also to see what we like and don't like.
 - Patrick Forbes: We don't have a definitive date to set when the draft will be produced
- John Clark: Let's get on the same page as we move forward to the legislature about our membership structure. We may not be voting today, but we are going to draft language to send to legislature that includes our voting and membership structure. It's like the decision is being proposed without us being on the same page.
 - Dietmar Rietschier: I second John, we have plenty of time to have another meeting to resolve this critical discussion. Let's correct it then send it.
 - Bridget Bailey: In response to John's comment – we are not drafting something; OCD is drafting the packet to provide to legislature.
 - Patrick Forbes: We have everything that we need from your region to develop draft language relative to regional governance then legislation will take over because we received the recommendation. If you develop other details or alternate thoughts, you can speak to your legislators about that.
 - John Clark: Does the draft include membership structure? And is it what the transition team provided?
 - Patrick Forbes: No, it does not.
 - John Clark: Is what you have what the transition team provided?
 - Patrick Forbes: No
 - Rachele Sanderson: The transition team was made to think forward if legislation passes. If it does, we began the discussion with this group of what that could look like. It was not meant to be a recommendation to go to legislation.

PUBLIC COMMENT + REQUEST FOR FEEDBACK

Request for feedback on our board: https://jamboard.google.com/d/1im-gdQukjM1u3XR2m7Yj_mpDzL1wTPZjMYeYrdULuAY/edit?usp=sharing.

PUBLIC COMMENT

No public comments.



MEETING CLOSEOUT

- Upcoming meetings: November 16, 2021 from 1:00-3:30pm
- Reminder – Ethics Certification
- Action Items

ADOPTION OF AUGUST 26 MEETING MINUTES

Ross Liner called for motion.
Ruth Phillips motioned.
Earl Matherne seconded.
No objections, motion passed.

MOTION TO ADJOURN

Ross Liner called for motion.
Bridget Bailey motioned.
Ruth Phillips seconded.
No objections, motion passed.

RESOURCES SHARED DURING THE MEETING

The Model Use Storage and Maintenance Plan can be viewed here:

https://watershed.la.gov/assets/docs/LWI_ModelUseStorageAndMaintenancePlan-2021-08-16-DRAFT.pdf

Regional Governance Recommendation:

<https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/60e5a72d672e6b27d83df902/1625663277811/Region+7+Governance+Recommendation+06292021.pdf>

MUSM Public comment

<https://www.watershed.la.gov/public-comment/musm>

MEETING CHAT

00:31:30Earl Matherne: Earl Matherne, St. Charles Parish
00:31:45Nicolette Jones: Nicolette Jones, OCD
00:31:47Rene Pastorek: Rene Pastorek, St. John Parish
00:31:49John Clark: John Clark, Iberville Parish
00:31:51Rachelle Trahan:Rachelle Trahan, CRPC
00:31:53Mohamed ElSaadani: Mohamed ElSaadani, ULL
00:31:55Kelin Hu: Kelin Hu, Tulane University
00:31:56Patrick Forbes: Pat Forbes, OCD



- 00:31:56Ruth Phillips: Ruth Phillips, Ascension Parish
- 00:31:56Chris Shalohm: Christopher Shalohm, CRPC
- 00:31:57Tara Lambeth: Tara Lambeth, St. John Parish
- 00:31:58Kay LeSage: Kay LeSage, OCD
- 00:31:58Gary Mego: Gary Mego, West Feliciana Parish
- 00:32:00Ryan Larousse: Ryan Larousse, St. James Parish
- 00:32:01Devin Foil: Devin Foil, HNTB
- 00:32:02Lakesha Hart: Lakesha Hart, OCD
- 00:32:10Kim Mosby: Kim Mosby, K&G Solutions, LLC
- 00:32:10Alex Sumrall: Alex Sumrall, Washington Parish
- 00:32:16Tori Nguyen: Victoria "Tori" Nguyen LSU + CRPC
- 00:32:19Jonathan Leo: Jonathan Leo, East Baton Rouge, volunteer environmental, land use, and non-profit governance lawyer
- 00:32:20Bridget Bailey: Bridget Bailey, Tangipahoa Parish Gov't
- 00:33:07Ryan Donadieu: Ryan Donadieu, St. James
- 00:33:35Ronny Carter: Hello ... Ronny Carter LPBF
- 00:33:39Jerome Fournier: Jerome Fournier, Ascension Parish
- 00:34:19Bob Jacobsen: Bob Jacobsen PE here
- 00:38:08Paul Arrigo: Paul Arrigo Visit Baton Rouge
- 00:38:36Erin Schilling: Erin Schilling, Dana Brown & Associates
- 00:54:15Nicolette Jones: link to EO: <https://gov.louisiana.gov/assets/ExecutiveOrders/JBE--18-16-Watershed-Council.pdf>
- 01:08:13Seneca Toussant: Seneca Toussant, La Terre Engineering
- 01:25:00Ruth Phillips: Will this Presentation be available on the website for future use?
- 01:25:26Rachelle "ray-chel" Sanderson (she/her): Absolutely! We'll post it online and will also send out after the meeting.
- 01:32:15Nicolette Jones: If Dr. Keim could share the published works on hourly rainfall intensity, would be great
- 01:35:34Ehab Meselhe: Copies of the publications would be greatly appreciated.
- 01:37:54Rachelle "ray-chel" Sanderson (she/her): Last question y'all and then we'll move onto our colleagues presenting the MUSM plan.
- 01:45:16Rachelle "ray-chel" Sanderson (she/her): The Model Use Storage and Maintenance Plan can be viewed here: https://watershed.la.gov/assets/docs/LWI_ModelUseStorageAndMaintenancePlan-2021-08-16-DRAFT.pdf
- 01:55:45Rachelle "ray-chel" Sanderson (she/her): As a reminder, our recommendation with regards to modeling can be found in the Regional Governance Recommendation on page 3 under data and modeling: <https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/60e5a72d672e6b27d83df902/1625663277811/Region+7+Governance+Recommendation+06292021.pdf>
- 02:06:25Rachelle "ray-chel" Sanderson (she/her): Data and Modeling - from Region 7's Governance Recommendation:
- Repository of technical data and information, including H&H models at the State level that is informed by, and made accessible to, the region.
 - o Examples may include: State-wide data portal website.



- Technical assistance for interpretation and utilization of information and data

- o Examples may include: Support for interpretation and use of H&H model information and other data; Translation of models into action for projects, policy, and programs; Provide information and have a technical expert run models and provide outputs; Partnership opportunities for a regional gauge network.

02:12:26Rachelle "ray-chel" Sanderson (she/her): We should have time for up to two more questions and then we'll move to our next agenda item.

02:13:28Ruth Phillips: Do all the regions vote on this? or will this be decided by OCD or the responsible agency for employing the H&H modelers?

02:14:37Rebecca Bond: How does one provide feedback to the LWI consultants when we have not heard from the re: the projects we have told you we have underway that are being modeled currently?

02:16:23John Clark: Regarding the MUSM and the LDOTD modeling within Region 7 for the Amite River Basin, is there cross-pollination between the different modeling efforts/groups, or rather each are individual efforts, thus duplication?

02:16:31Rebecca Bond: Is "public comment" intended for governmental entities working on mitigation projects or the actual public?

02:19:40Lakesha Hart: Rebecca, public comment is intended for all potential end users of the models, data from the models or any other stakeholders that would like to review and provide feedback. Please see the link to provide comment and feel free to share: <https://www.watershed.la.gov/public-comment/musm>

02:20:30Nicolette Jones: @Rebecca we need comments from stakeholders, that would include local governmental agencies

02:20:38Rebecca Bond: Again, this was skipped - How does one provide feedback to the LWI consultants when we have not heard from the re: the projects we have told you we have underway that are being modeled currently?

02:22:29Lakesha Hart: Rebecca. Please feel free to reach out to me to discuss lakesha.hart@la.gov

02:23:07Rebecca Bond: And we have budget and schedules associated w/those projects which could be impacted by this which is why I am asking about our lack of involvement as local entities

02:24:22Rebecca Bond: My number is 225-364-6041

02:26:17Lakesha Hart: Thank you Rebecca. I will give you a call today.

02:30:02Rachelle "ray-chel" Sanderson (she/her): This is the recommendation Pat is referring to:

<https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/60e5a72d672e6b27d83df902/1625663277811/Region+7+Governance+Recommendation+06292021.pdf>

02:30:08Rachelle "ray-chel" Sanderson (she/her): Which was adopted in July 2021

02:30:47Rachelle "ray-chel" Sanderson (she/her): This does not include the membership structures that were proposed by the transition team as a point of discussion on August 26

02:37:11John Clark: If there are different models within the same watershed area for the same purpose, which one wins as far as which one should the local decision makers use...LWI, LDOTD, FEMA?

02:40:11John Clark: Since today's meeting agenda includes "Draft membership structures, where we are at and next steps", why are we spending all this time talking about governance structure and not membership structure?

02:41:13jenna linn: Then what was the point of spending time on that?



02:41:31Rachelle "ray-chel" Sanderson (she/her):

<https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/60e5a72d672e6b27d83df902/1625663277811/Region+7+Governance+Recommendation+06292021.pdf>

02:43:12Karen Zito: appreciate those comments and clarification Rachelle!

02:44:20John Clark: Agenda 2:45 - 3:15 p.m ...Draft membership structures... Why are not discussing this?

02:45:32Rebecca Bond: I have to drop off of this call - I am late to another meeting.

02:45:50Rachelle "ray-chel" Sanderson (she/her): Thanks for your time and comments today, Rebecca!

02:46:11Rachelle "ray-chel" Sanderson (she/her): John, we're getting there

02:48:51Jonathan Leo: Pat: Is it accurate to say that the draft legislative package you'll be developing will provide an overarching structure for governance of Regional LWI organizations that will provide both limits and spaces within which each Region can define its own priorities?

02:51:01Patrick Forbes: We still have to boil down all the recommendations into a single document, but I think that is a pretty fair description.

02:54:05Rachelle "ray-chel" Sanderson (she/her): This is the recommendation Pat is referring to:

<https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/60e5a72d672e6b27d83df902/1625663277811/Region+7+Governance+Recommendation+06292021.pdf>. This was adopted in July 2021. This does not include the membership structures that were proposed by the transition team as a point of discussion on August 26

02:55:54Nicolette Jones: All of the recommendations that were sent from the regions are also posted on the LWI website here: https://watershed.la.gov/assets/docs/LWI_RCBG_FinalRecommendations.pdf

02:58:31Rachelle "ray-chel" Sanderson (she/her):

https://jamboard.google.com/d/1V1pywqqmQN7m2CXR7vDTqofKBt2o_qVA56evURc61k/edit?usp=s
haring

02:59:33Rachelle "ray-chel" Sanderson (she/her): rsanderson@crpcla.org

LWI Region 7 RSC Meeting

OCTOBER 19, 2021

RACHELLE SANDERSON, KIM MAROUSEK, JAMIE SETZE,
RACHELLE TRAHAN, CRPC
PAT FORBES, NICOLETTE JONES, OCD
VICTORIA NGUYEN, LSU/CRPC
DR. BARRY KEIM, LSU
DR. EHAB MESELHE, TULANE
DR. EMAD HABIB, ULL
CLYDE VERDIN, SPEARS



LOUISIANA
WATERSHED
INITIATIVE

working together for sustainability and resilience



AGENDA

1. Introductions and meeting logistics
2. Past meetings recap, reminders, updates
3. Dr. Barry Keim
4. Model Use Storage and Maintenance Plan
5. Draft membership structures, where we are at and next steps
6. Public comment
7. Closeout





1. Introductions and meeting logistics



Regional Steering Committee Meetings

- Will adhere to Louisiana Open Meetings requirements:
- Observable to the public
- Provide opportunity for public comments
- Opportunity to increase public's trust and awareness of the work of the RSC
- Importance of transparency and decision-tracking
- 24-hour advance notice of the meeting
- Allow for recording of the meeting by the audience
- Record minutes of the proceedings for public record



Roll Call and Notes

Roll Call: Please let us know if you are an alternate member

This is a public meeting:

- The meeting is being recorded and will be posted for public viewing
 - All comments made in the “chat pod” are written public comments
 - Comments from the steering committee can be made throughout the presentations
 - There is a specific time for public comments at the end of the meeting
-
- ❖ Please use your video camera during the meeting if possible
 - ❖ If anyone is having technical difficulties, please place a message in the chat pod

Shared agreements

These are “ways of engagement” for how we will be interacting with one another. If these agreements are not being followed, we will revisit them. We will aspire to:

1. **Be brief and meaningful when voicing your opinion**
2. **Seek common ground and understanding (not problems and conflict)**
3. **Consider what serves the benefit of the entire region**
4. **When presenting a challenge, offer a solution**



Idea Marina

This means when a discussion comes up that is not related to the goals of the meeting, we'll put it in the idea marina to revisit at a later date.



Introductions



NAME	AFFILIATION
Ruth Phillips and/or Ron Savoy	Ascension Parish
Tom Stephens and/or Fred Raiford	East Baton Rouge Parish
James Stewart and/or Joni Stone	East Feliciana
John Clark	Iberville Parish
Steve Kistler and/or Mark Harrell	Livingston Parish
Earl Matherne and/or Stephanie Bruning	St. Charles Parish
Major Coleman and/or Jeremy Williams	St. Helena Parish
Ryan Donadieu and/or Ryan Larousse	St. James Parish
Tara Lambeth and/or Rene Pastorek	St. John the Baptist Parish
Ross Liner and/or Jay Watson	St. Tammany Parish
Bridget Bailey and/or Melissa Cowart	Tangipahoa Parish
Bobbi Jo Breland and/or Alex Sumrall	Washington Parish
Gary Mego and/or Emily Cobb	West Feliciana Parish
Dietmar Rietschier and/or Larry Bankston	Amite River Basin Commission
Karen Zito and/or Diane Baum	Home Builders Association of Greater Baton Rouge
Ronny Carter and/or Kim Coates	Pontchartrain Conservancy and Tangipahoa Parish Council
Ivy Mathieu	St. John Coastal Advisory Committee, LA Recycling Coalition, Keep St. John Beautiful, etc.



Thank you & a quick icebreaker

- Thank you for being with us today
- How is everyone doing post-Ida?





2. Past meetings recap, reminders, updates



Updates

Capacity building

- **Georgetown Climate Center Resilient Affordable Housing**
 - Visioning sessions taking place in November
- **Environmental Finance Centers**
 - Workshop taking place in mid-November
- **EPA Resilience Roadmap**
 - First advisory group meeting
- **Lindsey Lamana successfully defended her thesis on network and plan analysis!**
- **Reminder: Working With Nature Training Series first session on Oct. 20**
 - <https://watershed.la.gov/nature-based-solutions>



Updates

Open call for updates

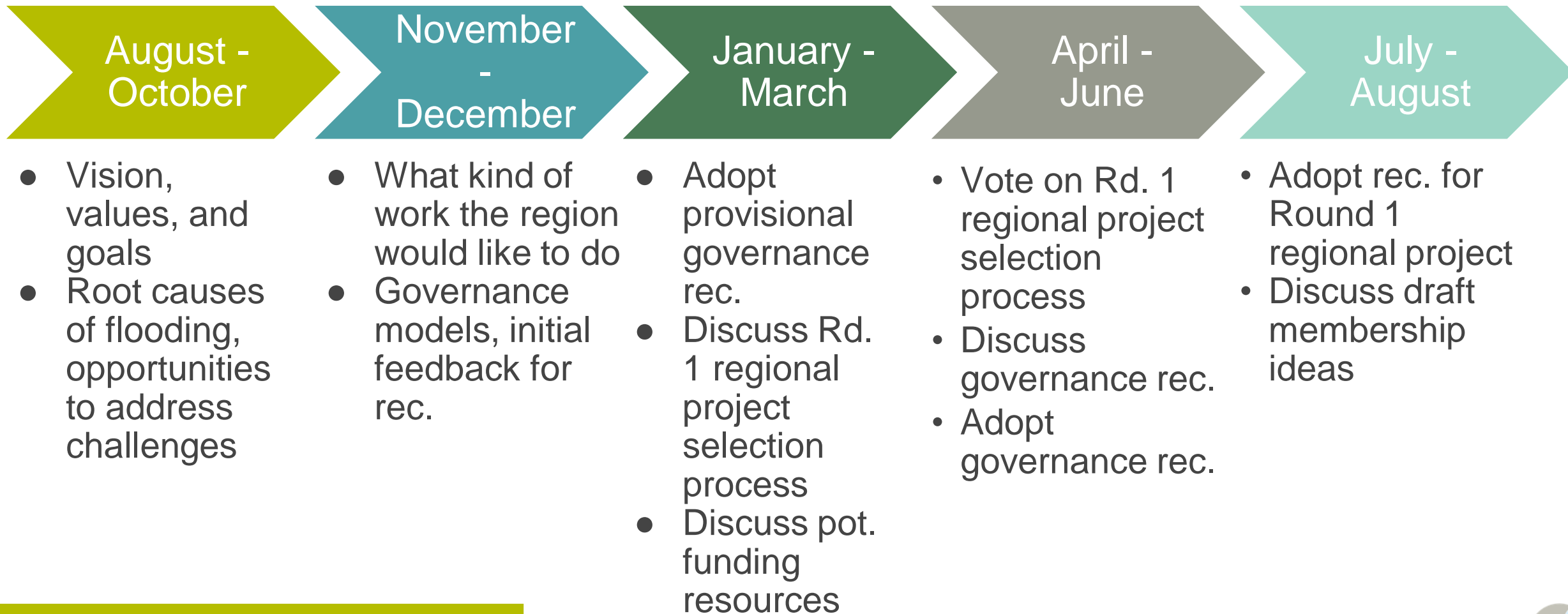
- **RSC members, let us know if you have updates**

- **Other folks on the call, please put updates you'd like to share in the chat pod**
 - **EBR is conducting public meetings related to the Stormwater Master Plan - do by watershed. This Thursday evening is on Ward Creek. You can see past ones or one next ones are by going to the website <https://stormwater.brla.gov/>**



A quick recap...

2020 - 2021



Reminder...

Mission & vision

LWI Mission:

- Reduce flood risk, improve floodplain management throughout the state and maximize the natural and beneficial functions of floodplains

Region 7 Vision:

- Region 7 envisions a future with less flood risk, healthier natural environments, and resilience practices that are responsive to the needs of our communities and to our evolving environment.



Gov. EO # JBE 2018-16, Goals

SECTION 3: The goals of this Council include, but are not limited to, the following:

- A. Promoting a unified effort, built on a solid foundation of scientific and engineering principles, to address flooding issues across the state.
- B. Identifying and working with or seeking input from additional local, state and federal agencies and other stakeholders including, but not limited to, The Water Institute of the Gulf (TWIG) and other not-for-profit research institutions, the Louisiana State University Center for River Studies (LSU CRS) and other university research institutions, the Department of Environmental Quality (DEQ) and other state agencies, the United States Geological Survey (USGS) and other federal agencies, drainage or levee boards and other local districts, and private sector experts to develop, implement, and evaluate the necessary components of a Louisiana Watershed-based Floodplain Management Program.
- C. Expanding, developing and using in-state skill, knowledge, technology and talent to develop and implement the program, promoting Louisiana resources through collaboration, communication, and cooperation among governmental, non-governmental, for-profit, non-profit and university entities.
- D. Increasing state and local resilience to flooding by working to improve response to flooding and reduce the instances, damages, and amount of time needed to recover from flooding.
- E. Creating a path for the state and its various jurisdictions and political subdivisions to coordinate at a statewide and watershed level to maximize flood risk reduction in coordination with the natural and beneficial functions of the watershed and its floodplains, and to consistently manage floodplains using contextually appropriate best practices.
- F. Working within the interdependencies of our communities, infrastructure, political jurisdictions and natural environment to increase Louisiana's resilience and its ability to adapt and thrive.
- G. Promoting actions, including legislative, administrative, and regulatory, where appropriate, to enhance watershed and floodplain management in Louisiana.
- H. Identifying, prioritizing, acquiring and establishing funding mechanisms to enhance the Louisiana Watershed-based Floodplain Management Program.
- I. Facilitating watershed-based floodplain management by working to create watershed-bounded entities across the state.
- J. Developing an approach to watershed-based floodplain management that is recognized as a model for others nationally and internationally.





3. Dr. Barry Keim



Hurricanes, Storm Surge, Heavy Rainfall, and Freezes in a Changing Climate



Barry D. Keim

Southern Climate Impacts Planning Program

Louisiana State Climatologist

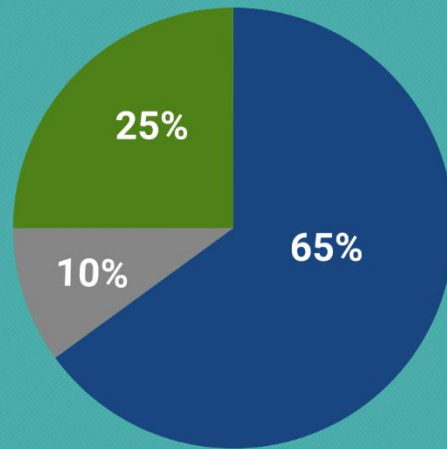
Louisiana State University





2021 Atlantic Hurricane Season Outlook

AUGUST 4 UPDATE



■ Above-normal ■ Near-normal ■ Below-normal season

Season probability

Named storms

15-21

Hurricanes

7-10

Major hurricanes

3-5

NOAA

Be prepared: Visit hurricanes.gov and follow @NWS and @NHC_Atlantic on Twitter.

August 4, 2021

2021 – 20 named storms (TS Claudette, MH Ida, TS Nicholas)

In 2020, 30 named storms, 14 hurricanes, 7 major hurricanes

Most Named Storms in Season – beats 28 in 2005

Most storms in Sep – 10, breaking record of 8 in 2002, 2007, and 2010

11 US Landfalls breaks record of 9 from 1916

4 Landfalls in Louisiana, ties State record from 2002

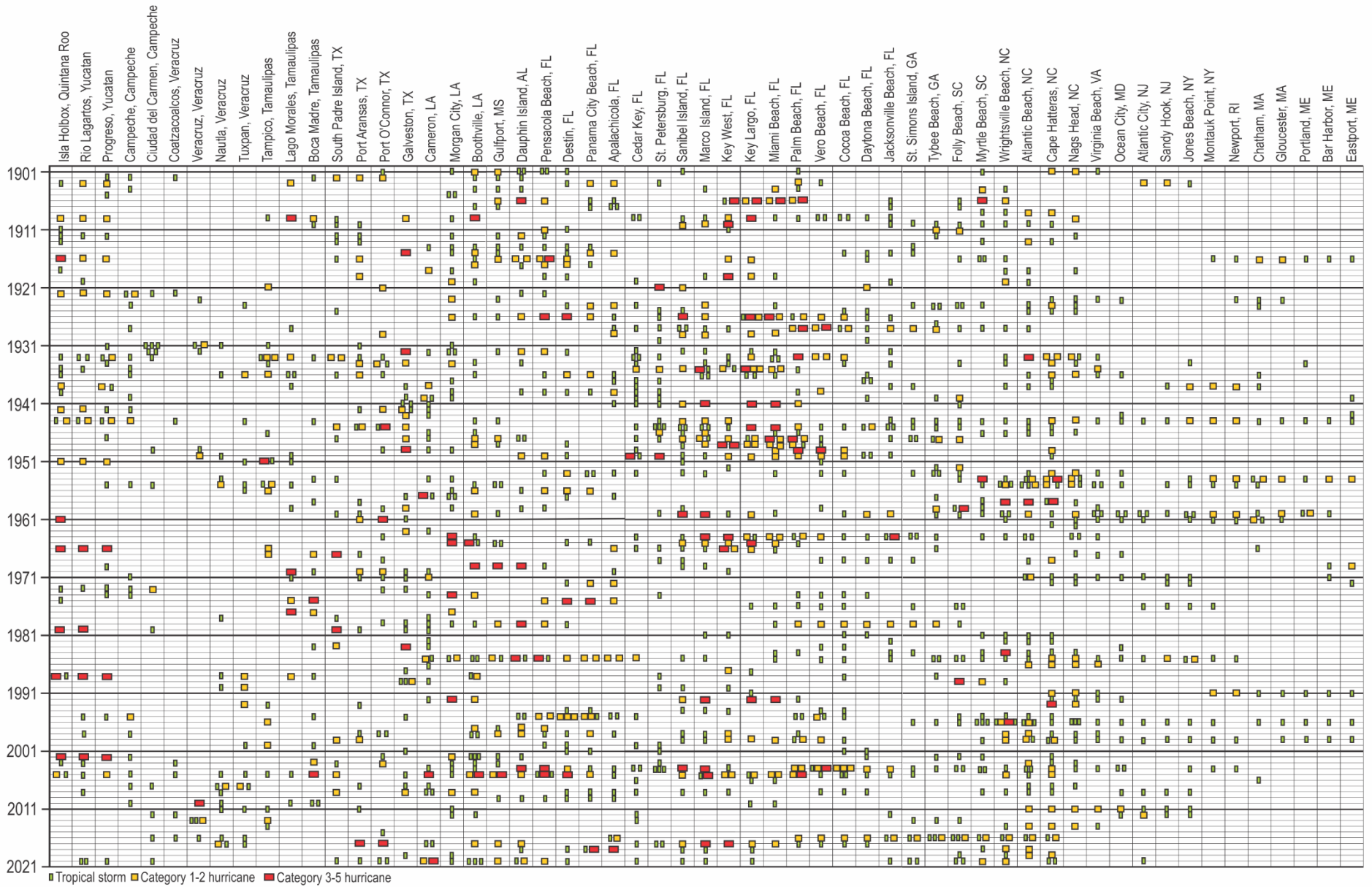
27 of the 30 storms had the earliest formation date for that letter of the alphabet

3 storms formed in 6 hours on Sep 18, and we had 5 at once on Sep 14

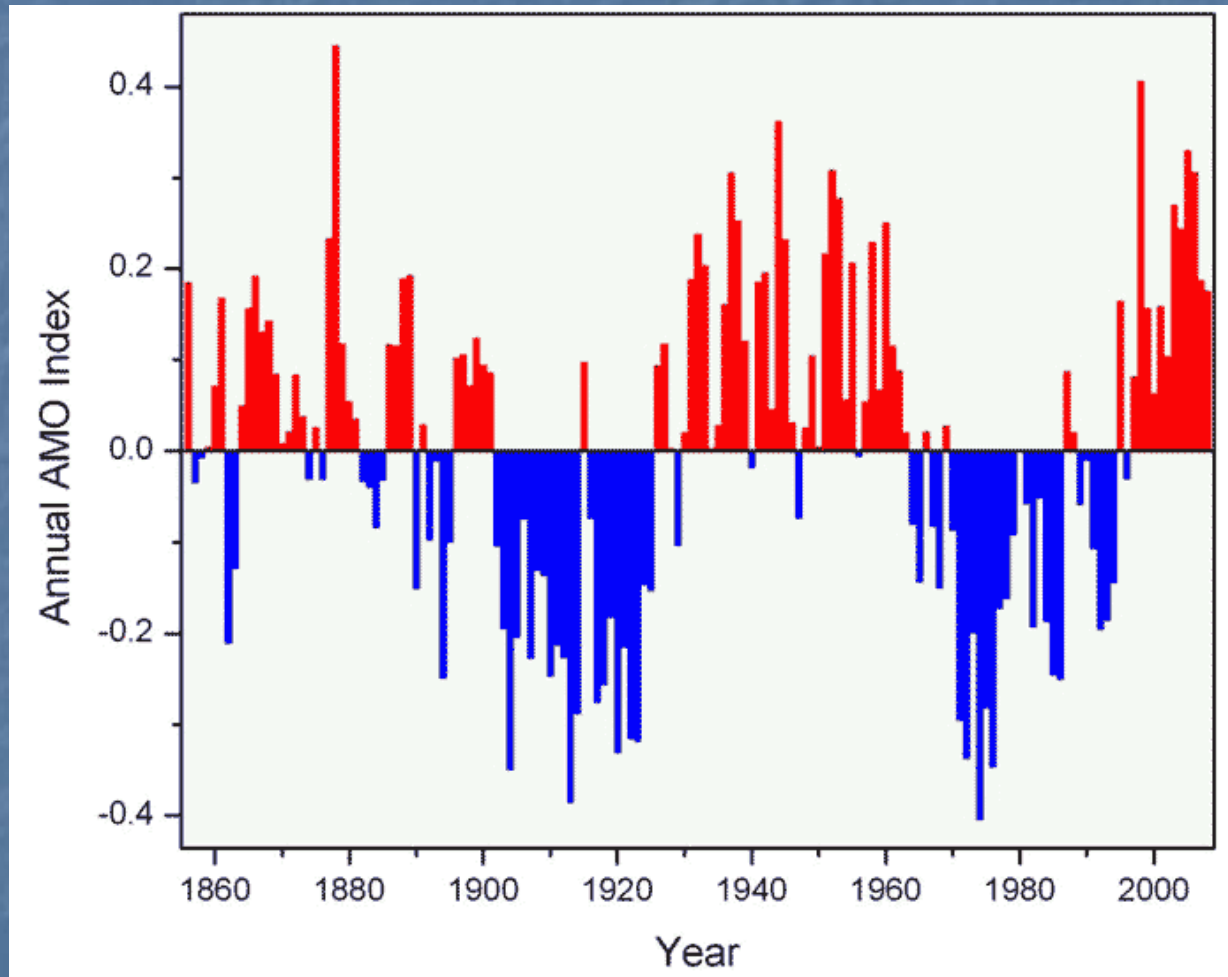
Population of U.S. coastal Counties/Parishes Gulf of Mexico in 1900, 1950, 2000, and 2019.

State	No. of Counties	1900	1950	2000	2019
Florida	23	175,000	841,000	4,916,000	6,715,890
Alabama	2	76,000	272,000	540,000	636,444
Mississippi	3	50,000	127,000	364,000	399,329
Louisiana	11	474,000	930,000	1,611,000	1,551,317
Texas	14	178,000	1581,000	5,006,000	6,711,202
Total	53	953,000	3,751,000	12,437,000	16,014,182

Time-Space Continuum of Hurricanes in U.S and Mexico

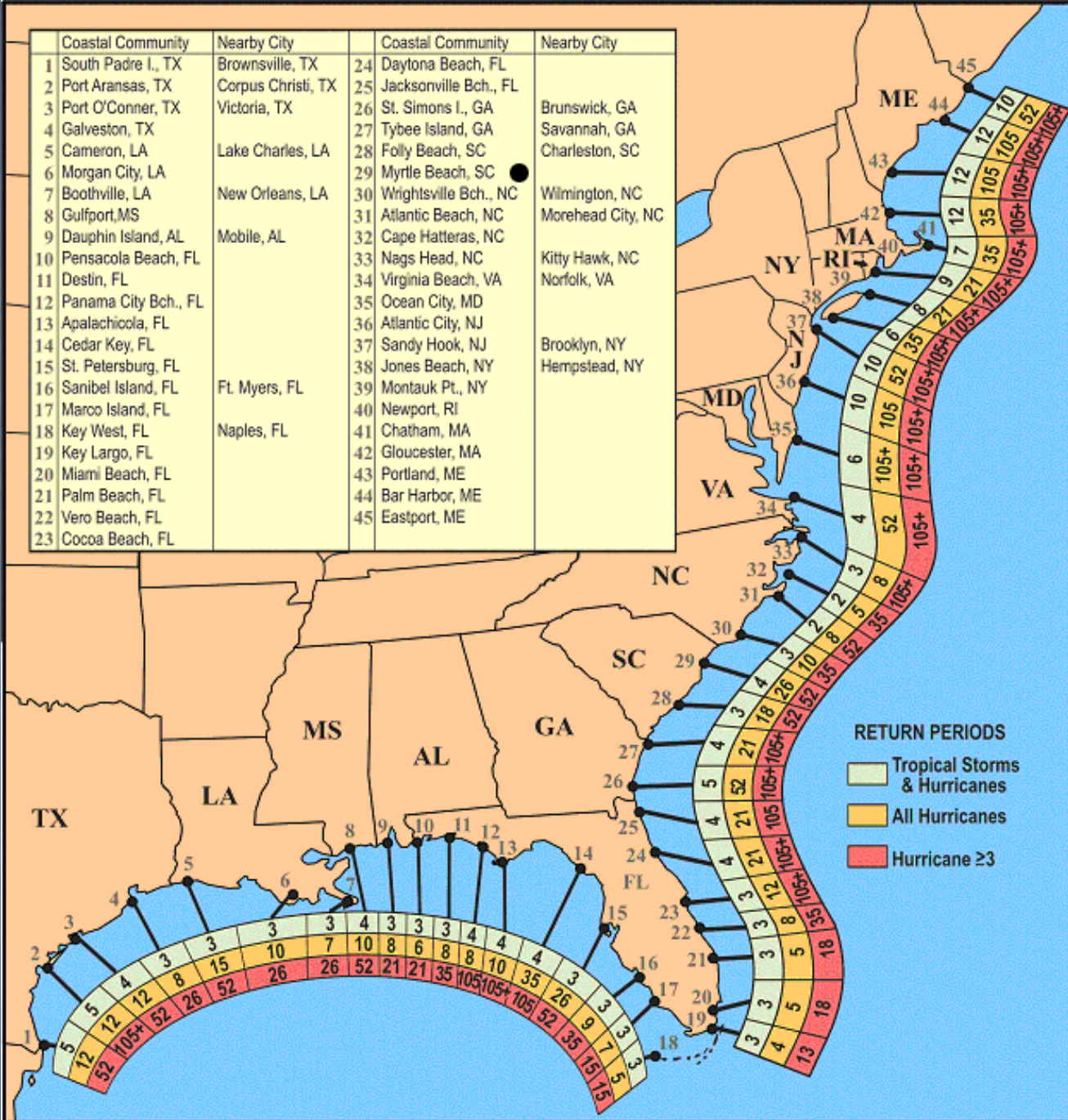


What's driving the increased storm counts?



Atlantic Multidecadal Oscillation Index

Coastal Community	Nearby City	Coastal Community	Nearby City
1 South Padre I., TX	Brownsville, TX	24 Daytona Beach, FL	
2 Port Aransas, TX	Corpus Christi, TX	25 Jacksonville Bch., FL	
3 Port O'Conner, TX	Victoria, TX	26 St. Simons I., GA	Brunswick, GA
4 Galveston, TX		27 Tybee Island, GA	Savannah, GA
5 Cameron, LA	Lake Charles, LA	28 Folly Beach, SC	Charleston, SC
6 Morgan City, LA		29 Myrtle Beach, SC	
7 Boothville, LA	New Orleans, LA	30 Wrightsville Bch., NC	Wilmington, NC
8 Gulfport, MS		31 Atlantic Beach, NC	Morehead City, NC
9 Dauphin Island, AL	Mobile, AL	32 Cape Hatteras, NC	
10 Pensacola Beach, FL		33 Nags Head, NC	
11 Destin, FL		34 Virginia Beach, VA	Kitty Hawk, NC
12 Panama City Bch., FL		35 Ocean City, MD	Norfolk, VA
13 Apalachicola, FL		36 Atlantic City, NJ	
14 Cedar Key, FL		37 Sandy Hook, NJ	Brooklyn, NY
15 St. Petersburg, FL		38 Jones Beach, NY	Hempstead, NY
16 Sanibel Island, FL	Ft. Myers, FL	39 Montauk Pt., NY	
17 Marco Island, FL		40 Newport, RI	
18 Key West, FL	Naples, FL	41 Chatham, MA	
19 Key Largo, FL		42 Gloucester, MA	
20 Miami Beach, FL		43 Portland, ME	
21 Palm Beach, FL		44 Bar Harbor, ME	
22 Vero Beach, FL		45 Eastport, ME	
23 Cocoa Beach, FL			



RETURN PERIODS

- Tropical Storms & Hurricanes
- All Hurricanes
- Hurricane ≥3



Galveston 1900

Hurricane Ike 2008



SURGEDAT

World's Most Comprehensive Storm Surge Database

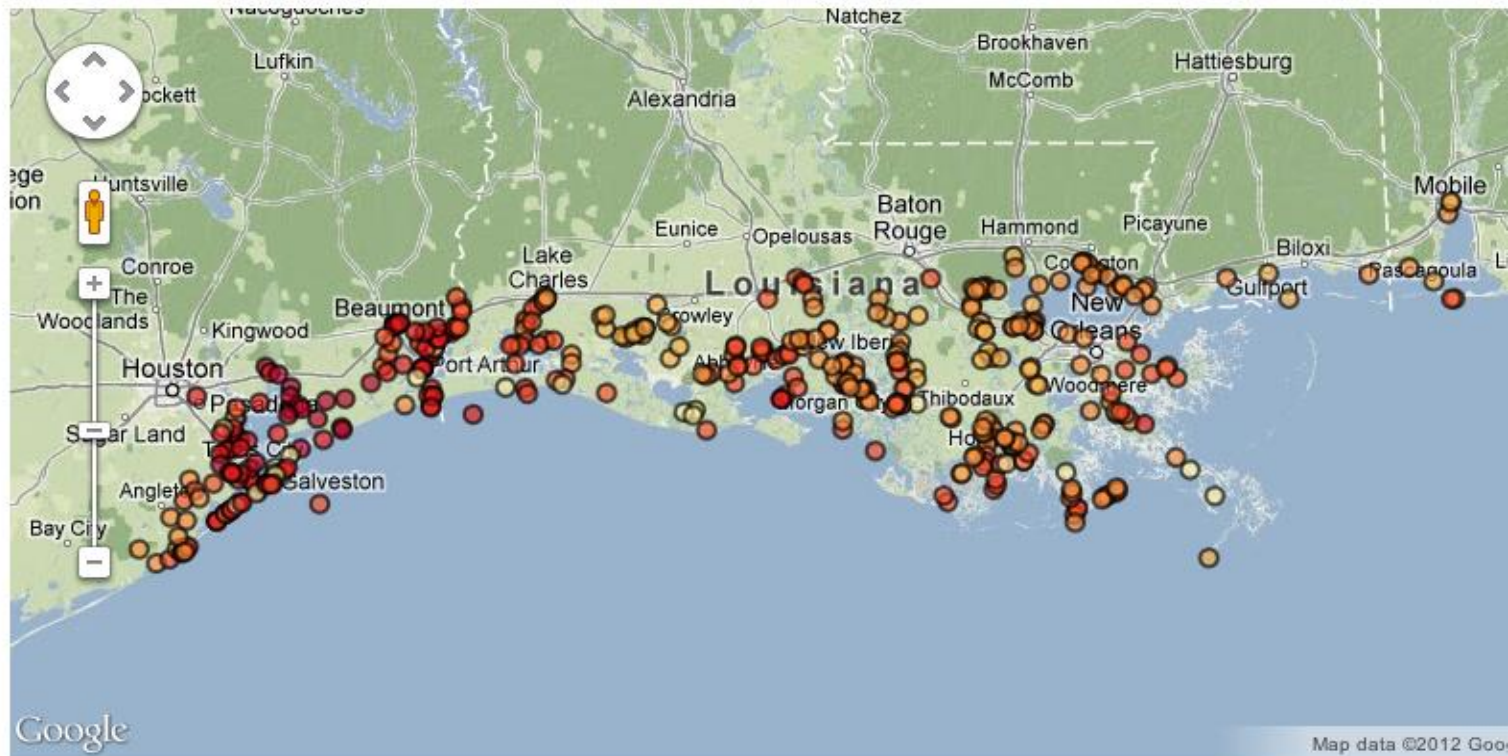


Search By Storm Name & Year

Ike

2008

Search By Location



<< first < prev 1 2 3 4 5 6 7 8 9 10 next > last >>

Storm Name	Year	Storm Tide(ft)	Storm Tide(m)	Surge(ft)	Surge(m)	Location	Basin	State
Ike	2008	6.6	2.01168				U.S. Gulf Coast	TX
Ike	2008	6.9	2.10312				U.S. Gulf Coast	TX
Ike	2008	8.8	2.68224				U.S. Gulf Coast	TX
Ike	2008	5.1	1.55448				U.S. Gulf Coast	TX
Ike	2008	5.3	1.61544				U.S. Gulf Coast	TX
Ike	2008	5.5	1.6764				U.S. Gulf Coast	TX
Ike	2008	7.2	2.19456				U.S. Gulf Coast	TX
Ike	2008	6.6	2.01168				U.S. Gulf Coast	TX
Ike	2008	7.3	2.22504				U.S. Gulf Coast	TX
Ike	2008	7.7	2.34696				U.S. Gulf Coast	TX

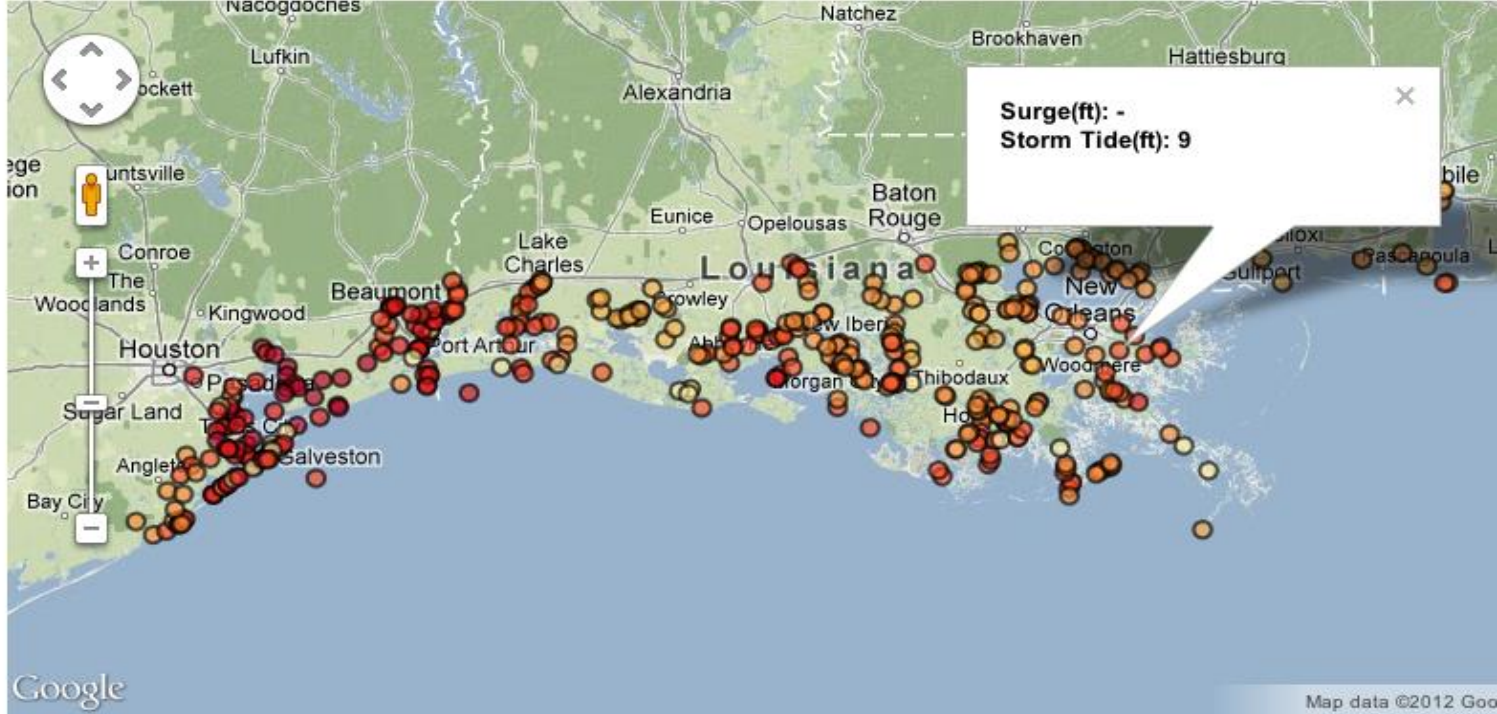
<< first < prev 1 2 3 4 5 6 7 8 9 10 next > last >>

Search By Storm Name & Year

Ike

2008

Search By Location



<< first < prev 1 2 3 4 5 6 7 8 9 10 next > last >>

Storm Name	Year	Storm Tide(ft)	Storm Tide(m)	Surge(ft)	Surge(m)	Location	Basin	State
Ike	2008	6.6	2.01168				U.S. Gulf Coast	TX
Ike	2008	6.9	2.10312				U.S. Gulf Coast	TX
Ike	2008	8.8	2.68224				U.S. Gulf Coast	TX
Ike	2008	5.1	1.55448				U.S. Gulf Coast	TX
Ike	2008	5.3	1.61544				U.S. Gulf Coast	TX
Ike	2008	5.5	1.6764				U.S. Gulf Coast	TX
Ike	2008	7.2	2.19456				U.S. Gulf Coast	TX
Ike	2008	6.6	2.01168				U.S. Gulf Coast	TX
Ike	2008	7.3	2.22504				U.S. Gulf Coast	TX
Ike	2008	7.7	2.34696				U.S. Gulf Coast	TX

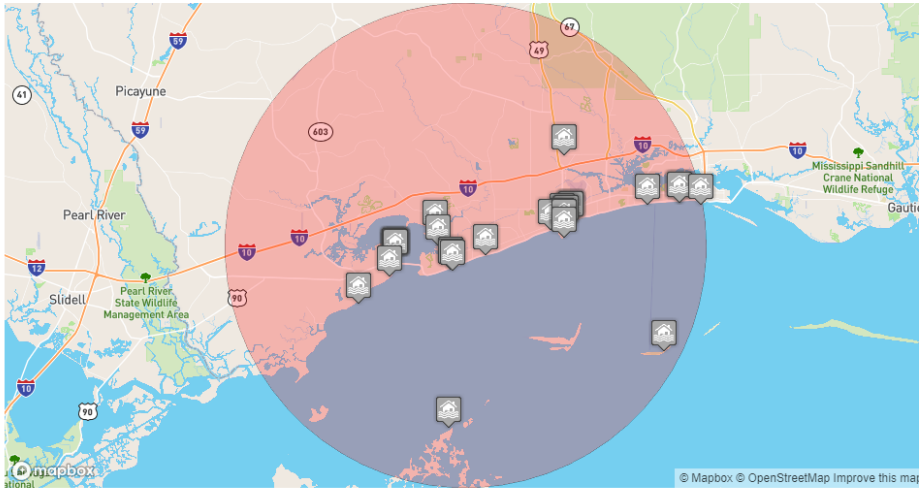
<< first < prev 1 2 3 4 5 6 7 8 9 10 next > last >>

Search By Storm

Search by Location

20 Miles

Draw Buffer Zone



CSV Excel PDF Print Show 10 entries

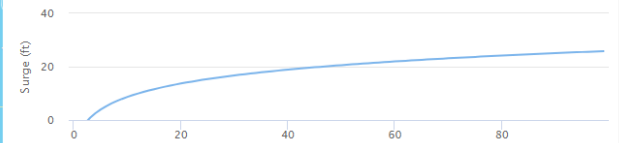
Search:

Name	Year	Lat	Long	Storm Tide (ft)	Storm Tide (m)	Surge (ft)	Surge (m)	Datum	Location	Basin	State
Andrew	1992	30.3053	-89.3333	4.5	NaN	NaN	NaN	Bay St. Louis	U.S. Gulf Coast	MS	2
Bertha	2002	30.325	-89.325	4.12	NaN	2.12	NaN	Waveland	U.S. Gulf Coast	MS	3
Beryl	1988	30.3703	-89.0811	NaN	NaN	4.7	NaN	Gulfport	U.S. Gulf Coast	MS	3
Betsy	1965	30.3674	-89.0928	10.7	3.26	NaN	NaN	Gulfport	U.S. Gulf Coast	MS	4
Bill	2003	30.325	-89.325	NaN	NaN	4.99	NaN	Waveland	U.S. Gulf Coast	MS	3
Bob	1979	30.3703	-89.0811	6.3	NaN	NaN	NaN	Gulfport	U.S. Gulf Coast	MS	3

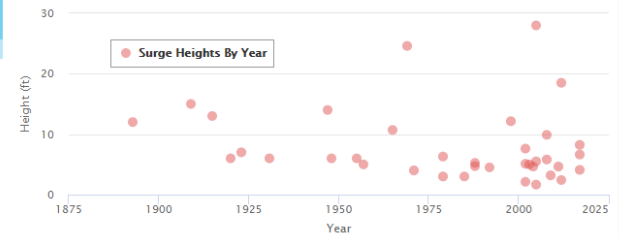
Return Periods



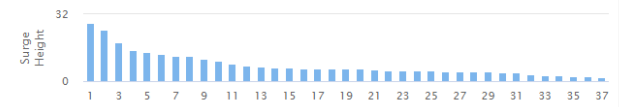
Return Periods Predictor



Storm Surge Heights By Year



Ranking of Storm Surge Heights



Top Ten Highest Surges Measured in the Gulf of Mexico

Rank	Name	Year	Location	State	Surge
1	Katrina	2005	Pass Christian	MS	28
2	Camille	1969	Pass Christian	MS	24.6
3	Carla	1961	Port Lavaca	TX	22
4	Laura	2020	Rutherford Beach	LA	20.9
5	Michael	2018	Mexico Beach	FL	19
6	Eloise	1975	Dune Allen Beach	FL	18.2
7	Labor Day	1935	Lower Matecumbe	FL	18
8	Beulah	1967	South Padre Is	TX	18
9	Rita	2005	Cameron Parish	LA	17.8
10	Ike	2008	Chambers County	TX	17.5

Louisiana's Top 20 Surge Levels 1880-2012

Rank	Storm	Year	Surge (ft)	Storm Tide (ft)	Location
1	Katrina	2005	18.7		SE St. Bernard Parish - Near Alluvial City
2	Rita	2005		17.8	Cameron Parish
3	New Orleans	1915		17	Southeast LA
4	Unnamed	1893		16	Cheniere Caminada
5	Camille	1969	16		Venice
6	Betsy	1965		15.7	Bohemia- East Landside
7	Grand Isle	1909		15	Seabreeze, Lafourche Parish
8	Isaac	2012		14.41	Outside levee -Pointe a la Hache Boat Harbor
9	Unnamed	1947		14	Chandeleur Light
10	Audrey	1957		13.9	Oak Grove Ridge
11	Flossy	1956		13	Ostrica Lock
12	Unnamed	1926		12.5	Terrebonne Par. Coast behind Isle Derniere
13	Gustav	2008	12.5		NE Bay Gardene
14	Ernesto	1957	12.4		Cameron
15	Lili	2002		12.3	Crewboat Channel near Calumet
16	Unnamed	1886		12	Cameron Parish
17	Ike	2008		11.7	Cameron Parish
18	Carmen	1974		11.64	Cocodrie
19	Galveston	1915		10.9	Cameron Parish
20	Andrew	1992		10.17	Bay Couteau, Terrebonne Parish

Global Peak Surge Dataset: <http://surge.srcc.lsu.edu>

Surge Map

About SURGEDAT

Blog



Top 12 Storm Surges in the Bay of Bengal

Rank	Surge	Year	Location
1	44.9	1876	Bangladesh
2	39.4	1737	India
3	39.4	1864	India
4	31.5	1966	Bangladesh
5	29.9	1960	Bangladesh
6	29.9	1963	Bangladesh
7	29.9	1970	Bangladesh
8	29.9	1999	India
9	28.9	1961	Bangladesh
10	28.9	1961	Bangladesh
11	28.9	1967	Bangladesh
12	26.9	1991	Bangladesh

Capital Weather Gang

Hurricane Laura produced a 17-foot surge, Weather Service finds, validating its dire predictions

The observed surge ranks among the 10 highest on record along the Gulf Coast



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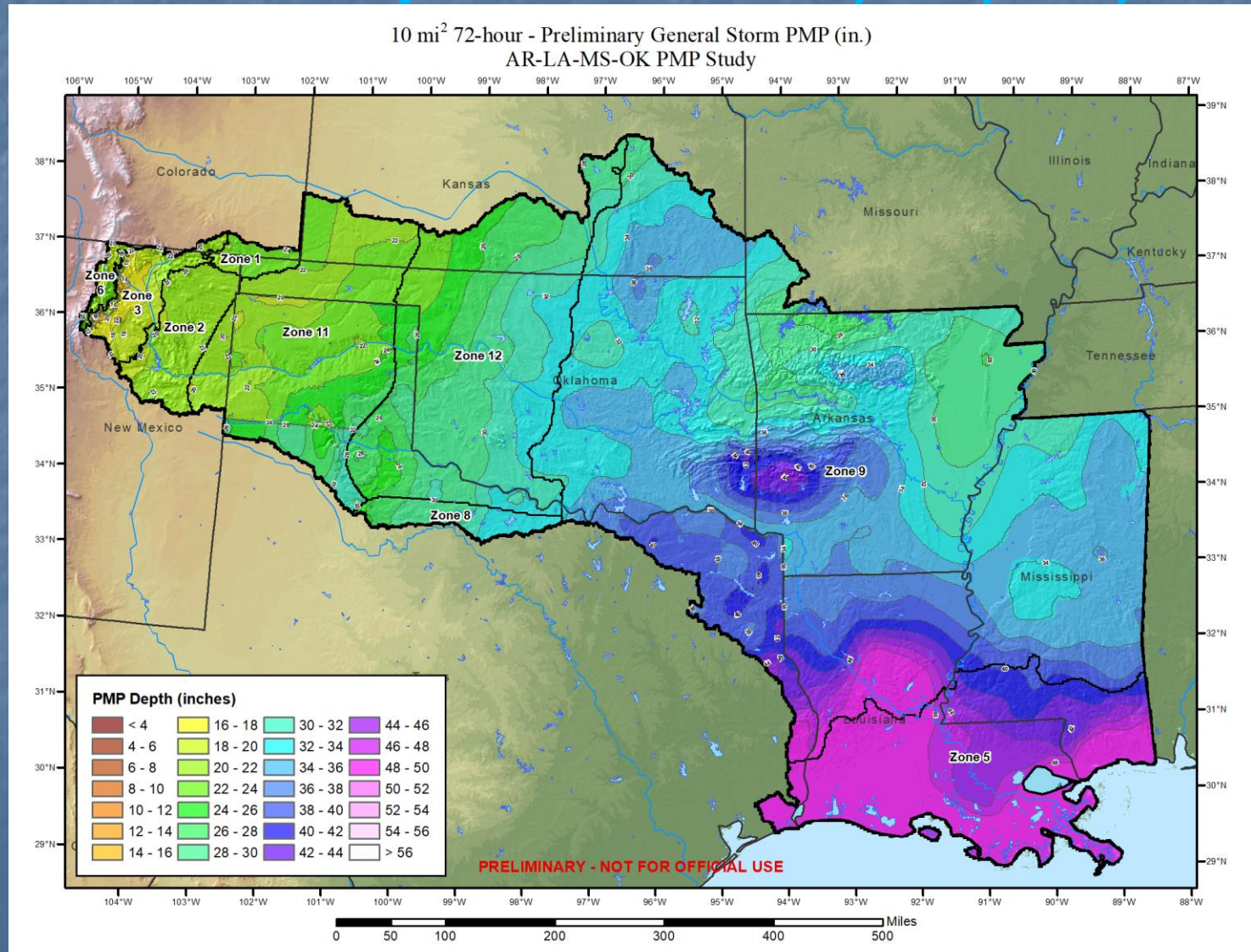




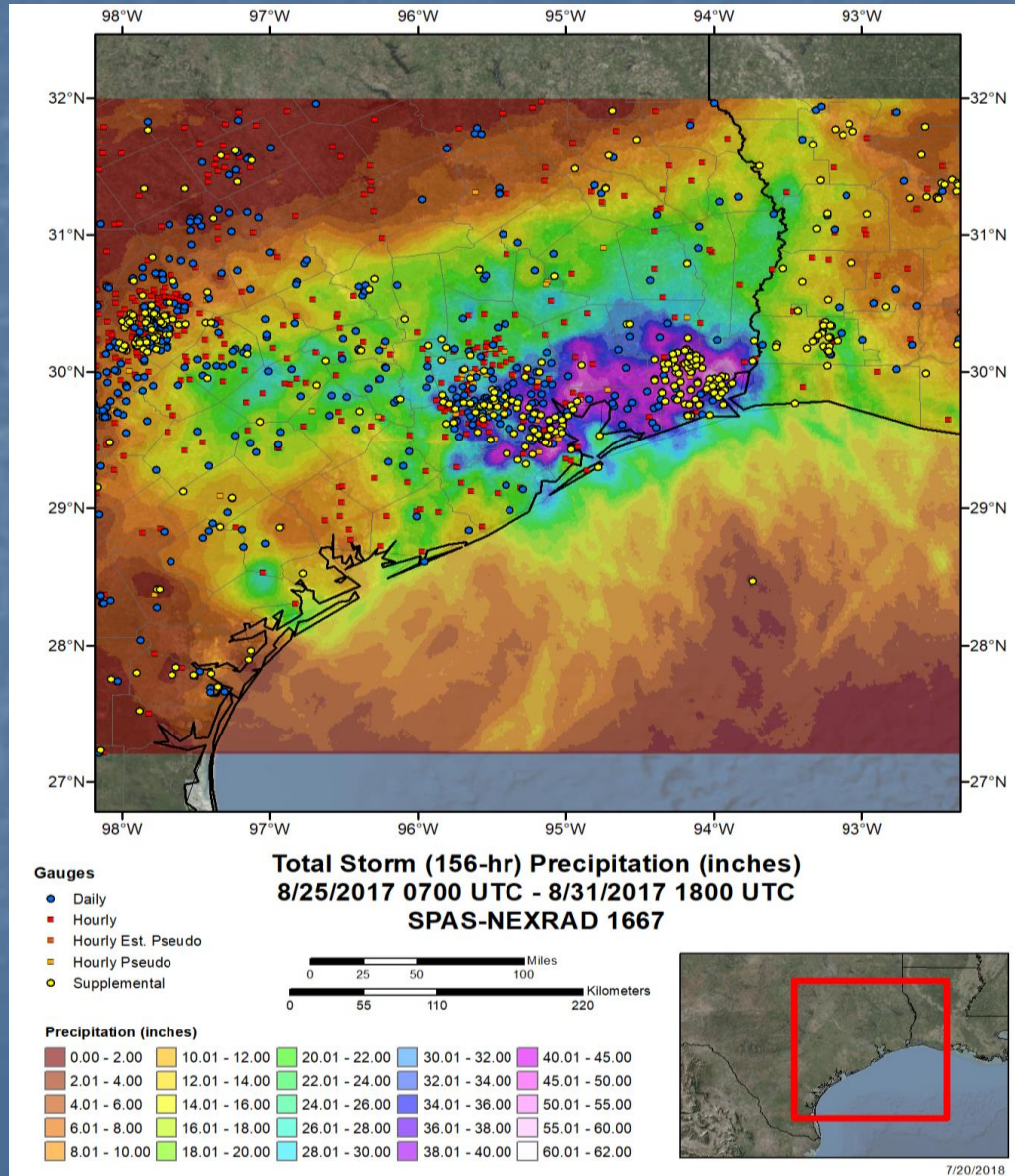




Probable Maximum Precipitation – AWA Dam Safety Offices in OK, AR, MS, LA



AWA SPAS Total Hurricane Harvey



SPAS Depth-Area-Duration Table

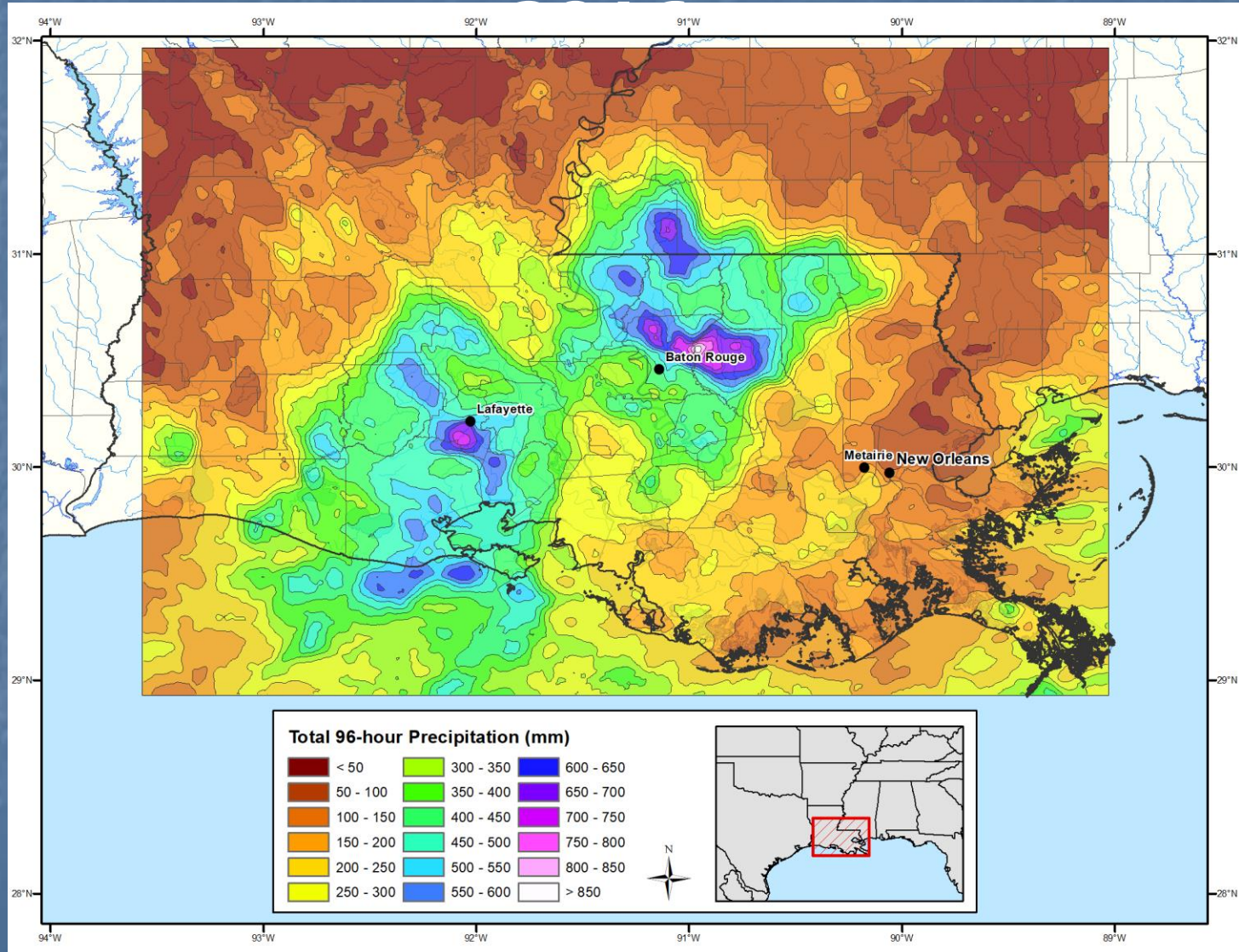
Hurricane Harvey

Storm 1667 - August 25 (0700 UTC) - August 31 (1800 UTC), 2017

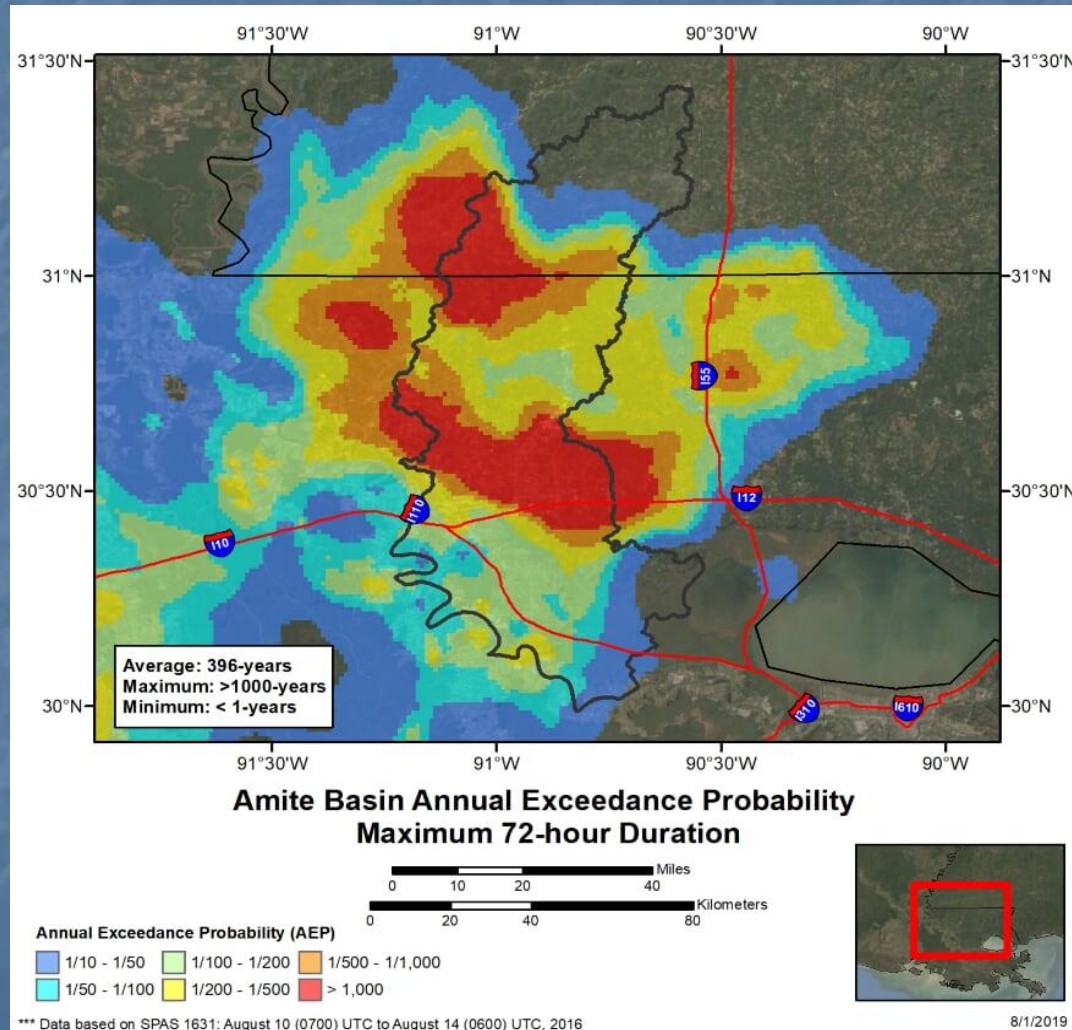
MAXIMUM AVERAGE DEPTH OF PRECIPITATION (INCHES)

Area (mi ²)	Duration (hours)														
	1	2	3	4	5	6	12	18	24	36	48	72	96	120	Total
0.4	5.80	11.47	14.56	17.08	18.76	19.93	23.92	28.16	34.52	37.39	40.95	51.84	58.62	60.25	61.11
1	5.64	11.18	14.38	16.94	18.63	19.76	23.67	27.88	34.19	37.04	40.61	51.48	58.23	59.78	60.62
10	5.40	10.04	13.25	16.48	18.28	18.98	22.68	26.86	32.72	35.34	39.07	49.43	55.91	57.53	58.36
25	5.07	9.37	12.68	15.99	18.03	18.85	22.11	26.19	31.60	34.18	37.64	47.20	53.09	55.15	56.06
50	4.90	8.84	12.27	15.46	17.68	18.47	21.37	25.35	30.62	33.17	36.49	45.49	51.16	53.37	54.31
100	4.65	8.25	11.71	14.64	17.01	17.79	20.29	24.09	28.98	31.40	35.93	43.68	49.29	51.66	52.67
150	4.45	7.92	11.20	13.98	16.34	17.13	19.64	23.56	27.45	29.59	35.19	42.85	48.01	50.68	51.73
200	4.28	7.67	10.77	13.46	15.73	16.58	19.12	23.06	26.81	28.97	34.57	42.27	47.04	49.83	51.01
300	4.03	7.24	10.09	12.64	14.74	15.67	18.35	22.22	25.81	28.13	33.54	41.28	45.90	48.66	49.86
400	3.81	6.95	9.54	11.94	13.99	14.91	17.71	21.52	24.98	27.55	32.75	40.47	45.10	47.75	49.06
500	3.63	6.61	9.08	11.39	13.27	14.22	17.14	20.88	24.18	27.07	32.15	39.80	44.50	47.01	48.34
1000	2.96	5.40	7.36	9.23	10.76	11.88	15.42	18.81	21.34	25.41	30.24	37.57	42.27	44.73	46.03
2000	2.30	4.00	5.87	7.24	8.55	9.57	13.40	16.53	18.70	23.35	27.98	34.95	39.66	42.23	43.44
3500	1.84	3.25	4.73	5.87	6.89	7.81	11.57	14.43	16.90	21.31	25.92	32.49	37.11	39.84	40.82
5000	1.57	2.82	4.03	5.06	5.98	6.82	10.33	13.10	15.65	19.87	24.52	30.54	35.04	37.73	38.71
7500	1.30	2.33	3.34	4.22	5.02	5.76	9.10	11.62	14.17	18.23	22.77	28.04	32.38	35.09	35.94
10000	1.14	2.04	2.92	3.71	4.43	5.08	8.23	10.59	13.06	17.01	21.37	26.28	30.36	32.83	33.77
15000	0.88	1.67	2.39	3.10	3.73	4.26	7.04	9.18	11.45	15.26	19.19	23.53	27.29	29.79	30.56
20000	0.73	1.37	1.99	2.59	3.15	3.63	6.13	8.16	10.29	13.90	17.59	21.62	25.09	27.36	28.23
35000	0.51	0.93	1.37	1.80	2.21	2.56	4.57	6.21	7.76	10.76	13.74	17.48	20.44	22.59	23.54
50000	0.39	0.70	1.03	1.37	1.68	1.96	3.52	4.94	6.28	8.93	11.31	14.62	17.14	19.33	20.46
75000	0.26	0.52	0.74	1.02	1.28	1.45	2.65	3.65	4.60	6.68	8.58	11.65	13.75	15.53	16.60
100000	0.20	0.40	0.59	0.81	0.99	1.17	2.17	2.95	3.70	5.36	6.85	9.34	11.03	12.43	13.44
120162	0.17	0.34	0.51	0.67	0.83	0.99	1.86	2.56	3.19	4.64	5.94	8.08	9.56	10.77	11.65

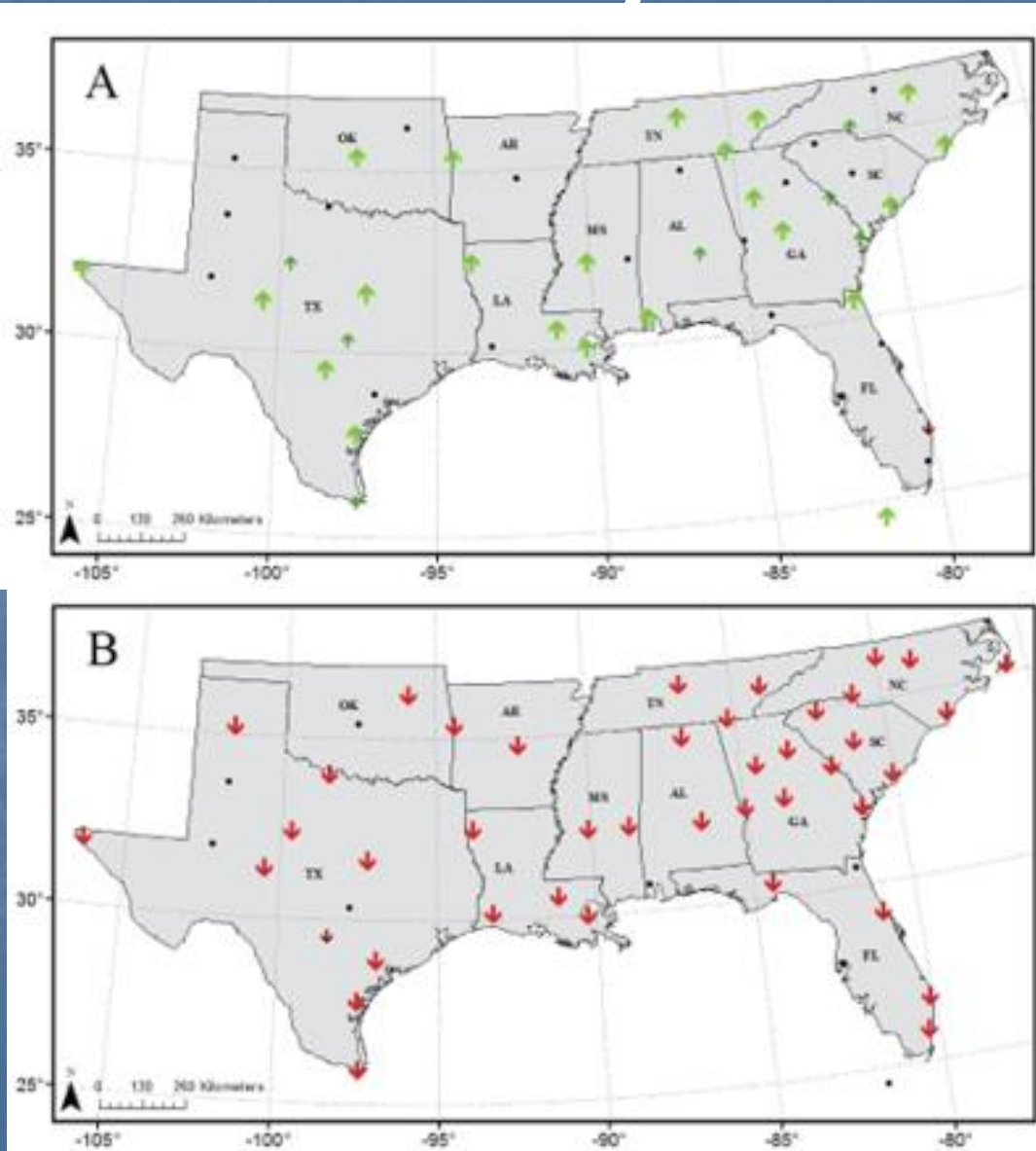
Total Storm Rainfall – August 10-14,



Return Period of Rain from August 2016

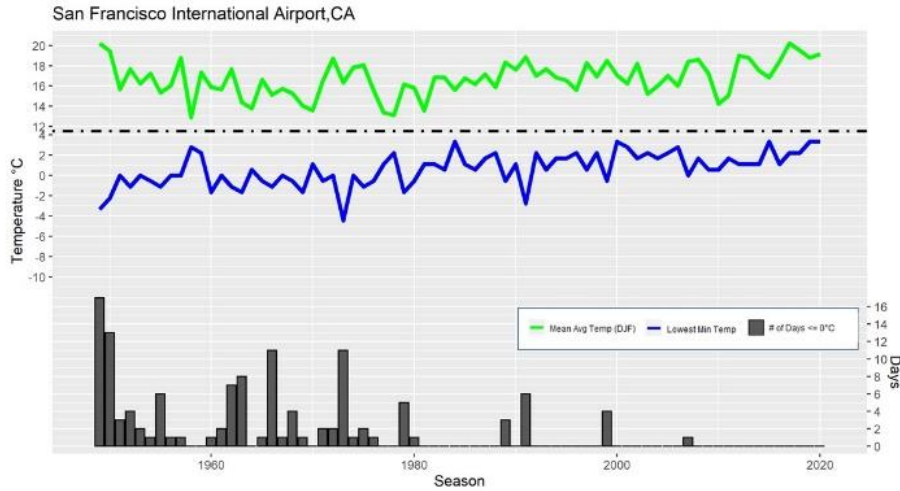


Hourly Rainfall Intensity and Storm Duration

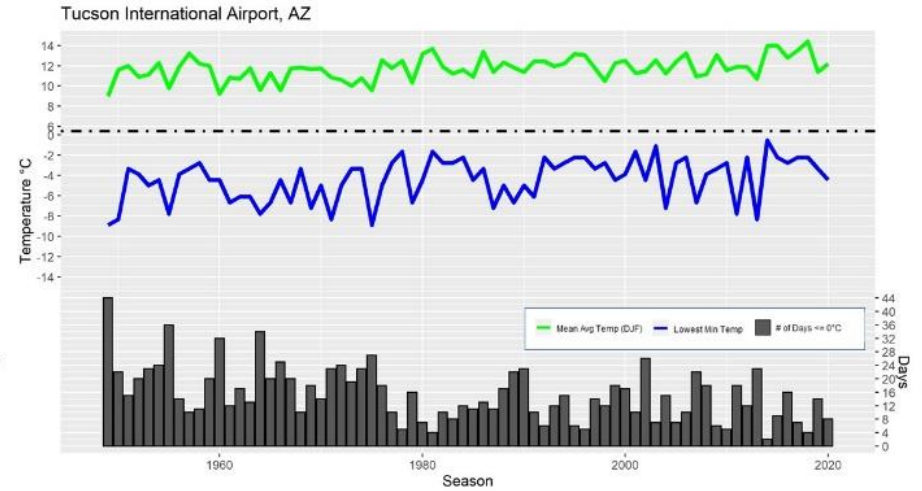


Tropicalization of the Temperate Zone in the U.S.

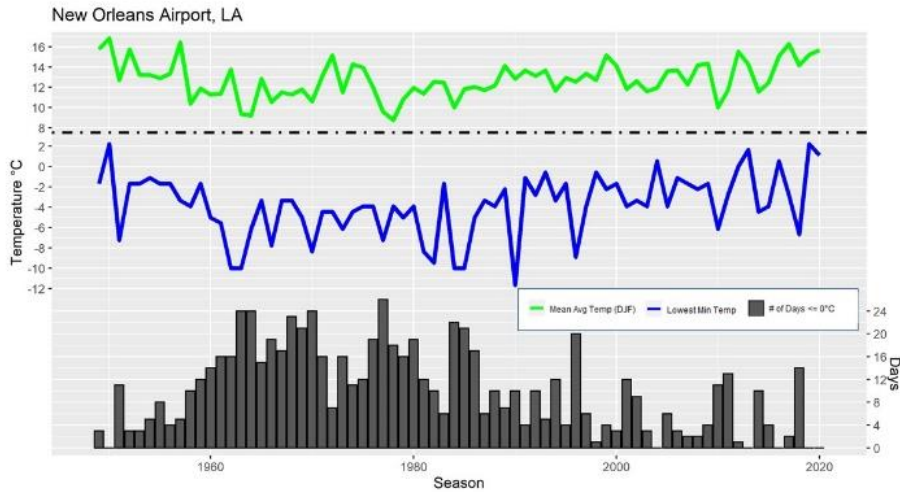
a



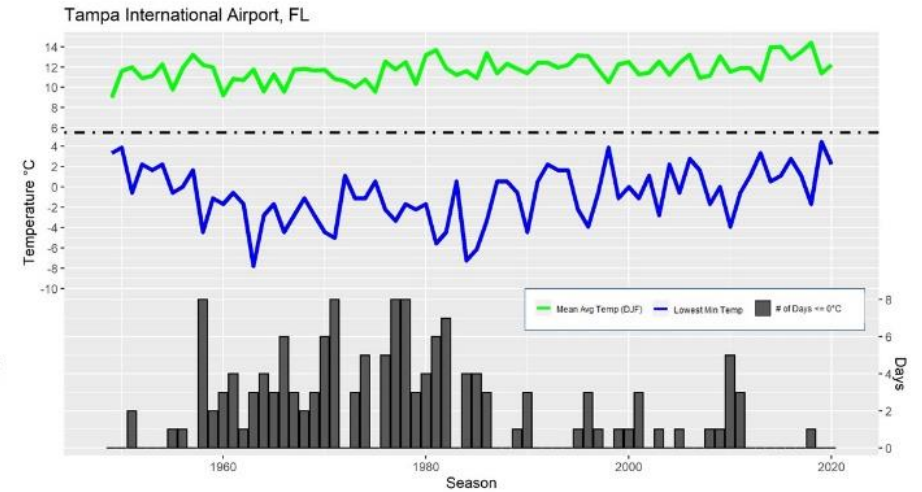
b



c



d



Sunset at Cameron, LA





4. Model Use Storage and Maintenance



Reminder...

Region 7 Governance Recommendation

What we recommended (screenshot below)...

Data and Modeling

- Repository of technical data and information, including H&H models at the State level that is informed by, and made accessible to, the region.
 - Examples **may** include: State-wide data portal website.
- Technical assistance for interpretation and utilization of information and data
 - Examples **may** include: Support for interpretation and use of H&H model information and other data; Translation of models into action for projects, policy, and programs; Provide information and have a technical expert run models and provide outputs; Partnership opportunities for a regional gauge network.





Model Use, Storage and Maintenance Plan Meeting with Region 7

Oct. 19 , 2021

Emad Habib & Ehab Meselhe
(on behalf of MUSM
Research Team)

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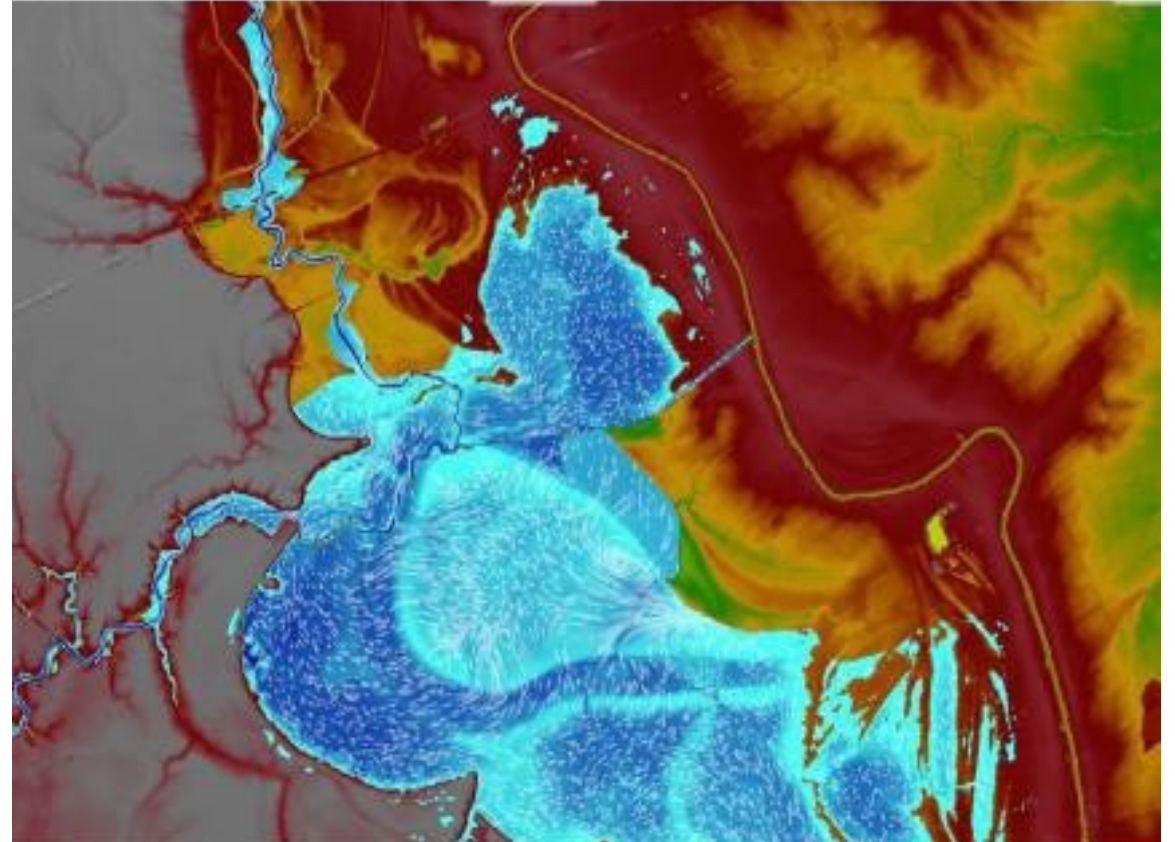
working together for sustainability and resilience

Modeling program

GOALS

- **Build:** Collect accurate, timely and consistent data to develop high-quality hydrologic and hydraulic models statewide to support evaluation of flood mitigation plans, policies and projects
- **Sustain:** Ensure program outcomes and tools continue to support flood risk reduction efforts throughout the state long after the CDBG-MIT funds are expended

For additional information, visit watershed.la.gov.



H&H models use software to simulate rainfall runoff processes and predict the rise of water levels and flooding.



Primary Objectives of LWI Models

- Flood mitigation feasibility studies
- No adverse impact assessments
- Consequence and risk assessment
- Management of future developments and community growth
- Support evaluation of proposed projects, watershed management strategies and policy development



RED RIVER, GRAND ECURE



Added-Value Objectives (future)

- Inform assessment of habitat suitability and impacts on water quality
- Inform assessment of ecological consequences (e.g., index of hydrologic alteration (IHAs))
- Support development and update of FEMA flood insurance rate maps
- Support future development of flood forecasting warning systems

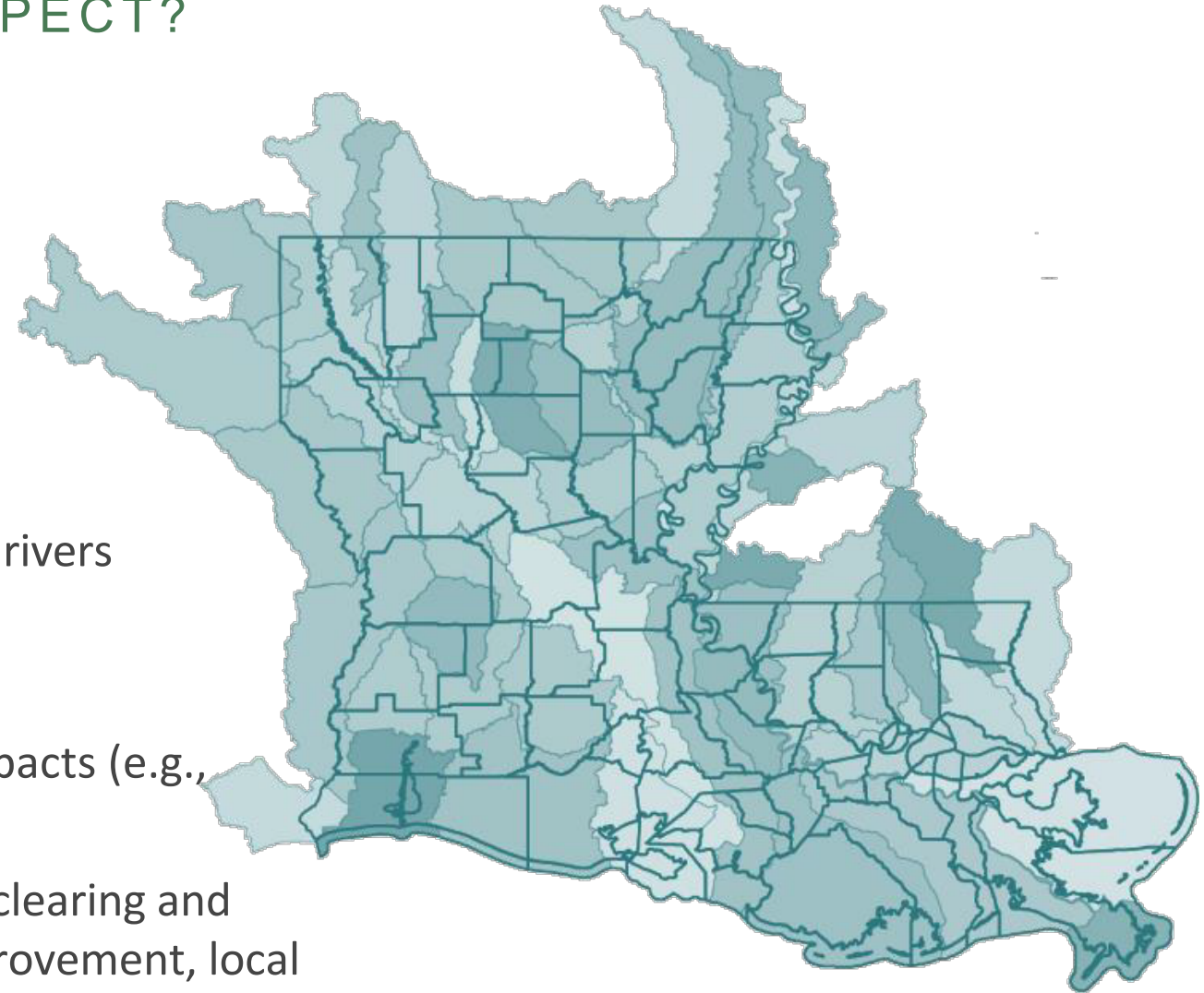


Regional & Local model usage

WHAT SHOULD STAKEHOLDERS EXPECT?

A consistent regional model approach with a multijurisdictional scale supports:

- Larger, regional-scale project evaluation
 - River diversions
 - Levee systems
 - Hundreds of acres of detention ponds
 - Interstate/state highway crossings over major rivers
 - Large-scale developments along major river floodplains
- Local-scale projects, but with possible regional impacts (e.g., downstream):
 - Mid-size detention ponds, Channel widening, clearing and snagging, Roadway (culverts) conveyance improvement, local bridge improvements/replacement



HUC8 WATERSHEDS



Model Lifecycle Stage

Model Lifecycle Stage

Acquisition of raw geospatial and time series data

Data preparation/processing into formats that models can directly import/use

Model setup

Model calibration and validation

Model scenario development & Project evaluations

Model execution

Visualization of results

Model discovery (i.e., browsing and searching)

Model download/check-out

Model modification

Model upload/check-in

Review and approval of model modifications

Notification of proposed/approved model updates

MUSM



Examples from other states

- San Antonio: <https://d2mr.sara-tx.org/map>
- Harris County: <https://www.hcfcd.org/Resources/Interactive-Mapping-Tools/Model-and-Map-Management-M3-System>



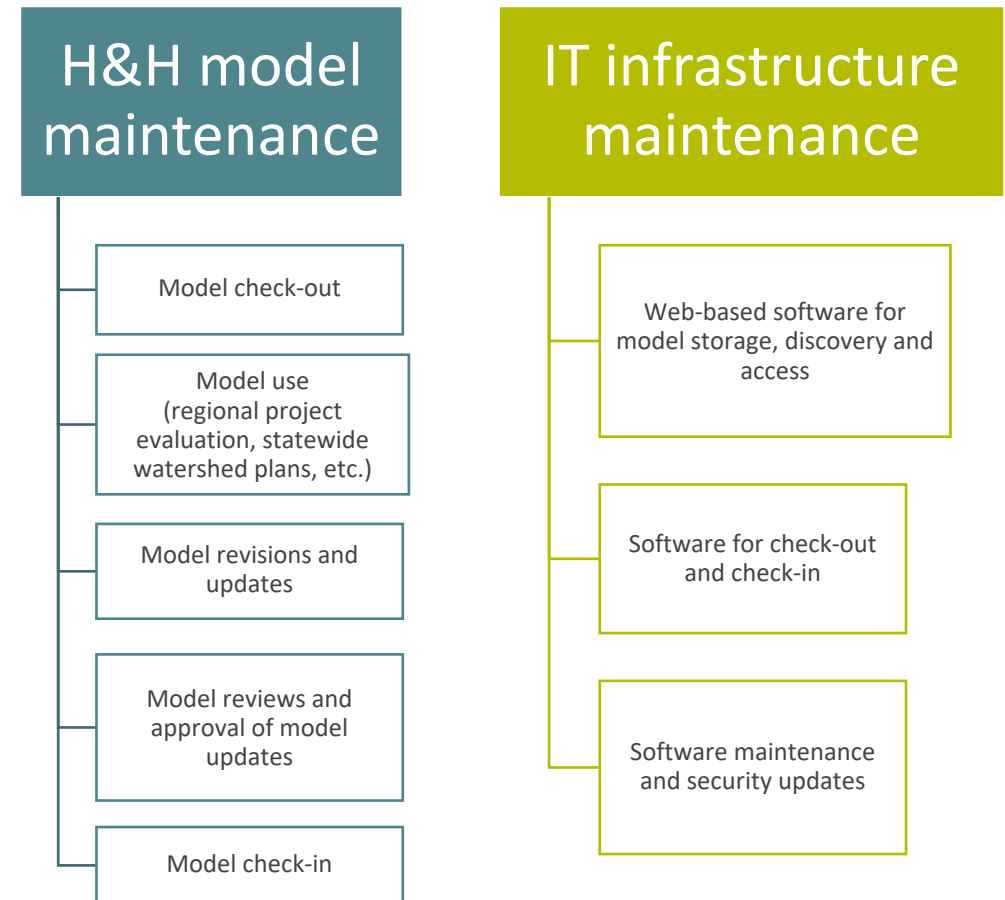
Model Use, Storage and Maintenance Plan

TWO MAIN COMPONENTS

System design approaches consist of two primary dimensions:

1. Where H&H model maintenance is implemented
2. Where IT infrastructure is deployed and managed

Both components can be implemented at the regional, statewide or central level or in a blended regional-central approach.



Possible MUSM approaches

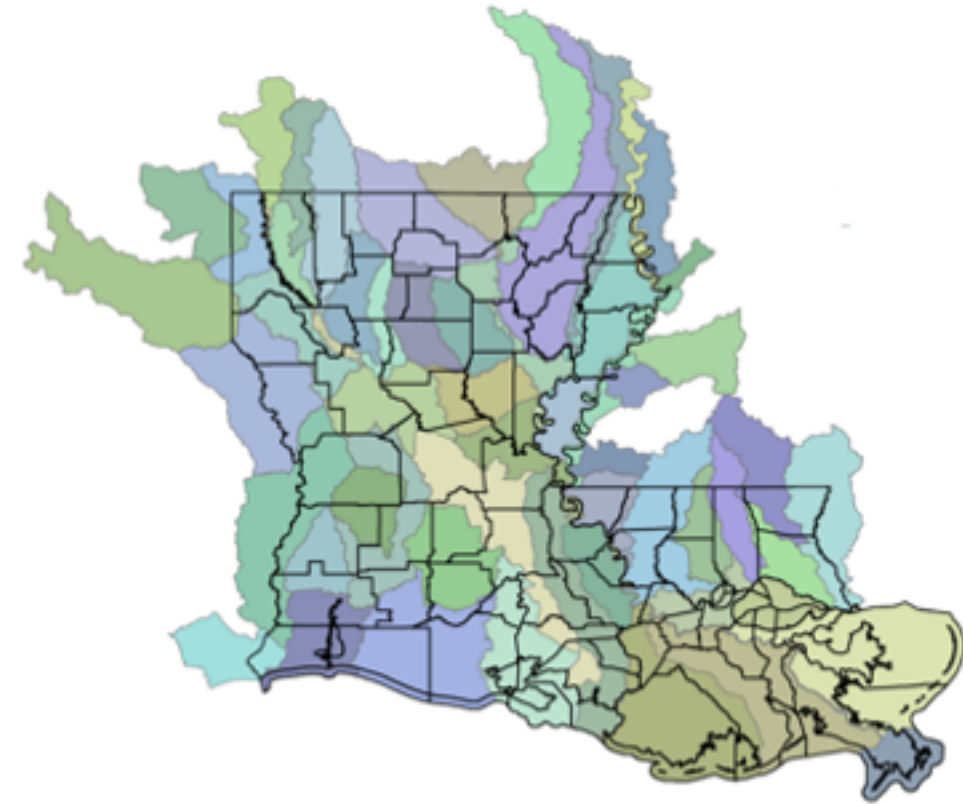
RESPONSIBILITIES UNDER EACH APPROACH

MUSM APPROACH	PARTY RESPONSIBLE FOR			WHO CAN ACCESS
	MAINTENANCE OF H&H LWI MODELS	MAINTENANCE OF IT INFRASTRUCTURE	STATEWIDE CONSISTENCY	
CENTRAL APPROACH	Central entity	Central entity	Statewide Standards Advisory Committee Federal & State Advisory Board	All LWI-affiliated entities (<i>federal, state, regional, local and private firms</i>)
BLENDED APPROACH	Regional coalitions	Central entity		
REGIONAL APPROACH	Regional coalitions	Regional coalitions		
FEDERATED APPROACH	Central entity <i>(Regional coalitions responsible for non-LWI models)</i>	Central entity		



Resource requirement and cost analysis

- Costs for development of Prototype & Reference Model Management System
- Costs of deployment, operation and maintenance of MUSM system



Resource requirement and cost analysis

DEPLOYMENT, OPERATION AND MAINTENANCE OF MUSM SYSTEM

Two staffing options:

- Members of LWI regional coalitions or state agencies
- Consultants hired by regional or central agencies

LWI MODEL MANAGEMENT SYSTEM FUNCTION	O&M RESOURCES NEEDED
Model use	H&H modelers
Model storage and cloud infrastructure operations	IT personnel
Model upgrades and maintenance	H&H modelers Software maintenance consultants IT personnel



Estimated number of H&H modelers per region

Table 26. Derivation of estimated number of H&H modelers needed per LWI governance region and statewide

Governance Region	Number of HUC8 models	Average HUC8 area in LA (km ²)	Total HUC8 area (km ²)	Avg. % impervious	Number of H&H modelers (FTE)
1	10	1,580	15,801	1.89	3
2	5	2,007	10,035	0.82	2
3	8	2,421	19,372	1.08	3
4	8	2,261	18,087	1.47	3
5	5	5,281	26,405	1.68	3
6	3	5,715	17,145	2.00	3
7	8	1,724	13,792	2.63	3
8	1	8,962	8,962	2.33	1
Regional Total	48	n/a	129,600	n/a	21
Regional Average	6	3,744	16,200	1.74	2.625
Central H&H program					18



LWI MUSM system estimated yearly costs if resources provided by regional coalition/state agency staff (except for software maintenance, which is assumed to be provided by consultants).

Table 29. LWI MUSM system estimated yearly operations and maintenance resource requirements if resources provided by regional coalition/state agency staff (except for software maintenance, which is assumed to be provided by consultants). Note: first year resources are estimated to be slightly higher for IT personnel due to effort needed for initial deployment.

Program Element	Central Approach (C) <small>(Central IT & central H&H)</small>	Blended Approach (B2) <small>(Central IT & regional H&H)</small>	Regional Approach (R) <small>(Regional IT & regional H&H)</small>	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8
H&H Modelers	\$2,340,000	\$2,730,000	\$2,730,000	\$390,000	\$260,000	\$390,000	\$390,000	\$390,000	\$390,000	\$390,000	\$130,000
IT Personnel	\$208,000	\$208,000	\$416,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000
Cloud Storage	\$96,610	\$96,610	\$97,435	\$11,881	\$7,568	\$14,552	\$13,591	\$19,814	\$12,887	\$10,378	\$6,765
Cloud Compute & Networking	\$2,444	\$2,444	\$7,016	\$877	\$877	\$877	\$877	\$877	\$877	\$877	\$877
Software Maintenance (year 2 & on)	\$176,800	\$176,800	\$176,800	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total subsequent year costs	\$2,823,854	\$3,213,854	\$3,427,251	\$454,758	\$320,445	\$457,429	\$456,468	\$462,691	\$455,764	\$453,255	\$189,642



LWI MUSM system estimated yearly costs if resources provided by regional coalition/state agency staff (except for software maintenance, which is assumed to be provided by consultants).

Table 30. LWI MUSM system estimated yearly operations and maintenance resource requirements if resources provided by consultants to regional coalition/state agencies. Note: first year resources are estimated to be slightly higher for IT personnel due to effort needed for initial deployment.

Program Element	Central Approach (C) <small>(Central IT & central H&H)</small>	Blended Approach (B2) <small>(Central IT & regional H&H)</small>	Regional Approach (R) <small>(Regional IT & regional H&H)</small>	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8
H&H Modelers	\$5,185,440	\$6,049,680	\$6,049,680	\$864,240	\$576,160	\$864,240	\$864,240	\$864,240	\$864,240	\$864,240	\$288,080
IT Personnel	\$416,000	\$416,000	\$832,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000
Cloud Storage	\$96,610	\$96,610	\$97,435	\$11,881	\$7,568	\$14,552	\$13,591	\$19,814	\$12,887	\$10,378	\$6,765
Cloud Compute & Networking	\$2,444	\$2,444	\$7,016	\$877	\$877	\$877	\$877	\$877	\$877	\$877	\$877
Software Maintenance (year 2 & on)	\$176,800	\$176,800	\$176,800	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total subsequent year costs	\$5,877,294	\$6,741,534	\$7,162,931	\$980,998	\$688,605	\$983,669	\$982,708	\$988,931	\$982,004	\$979,495	\$399,722

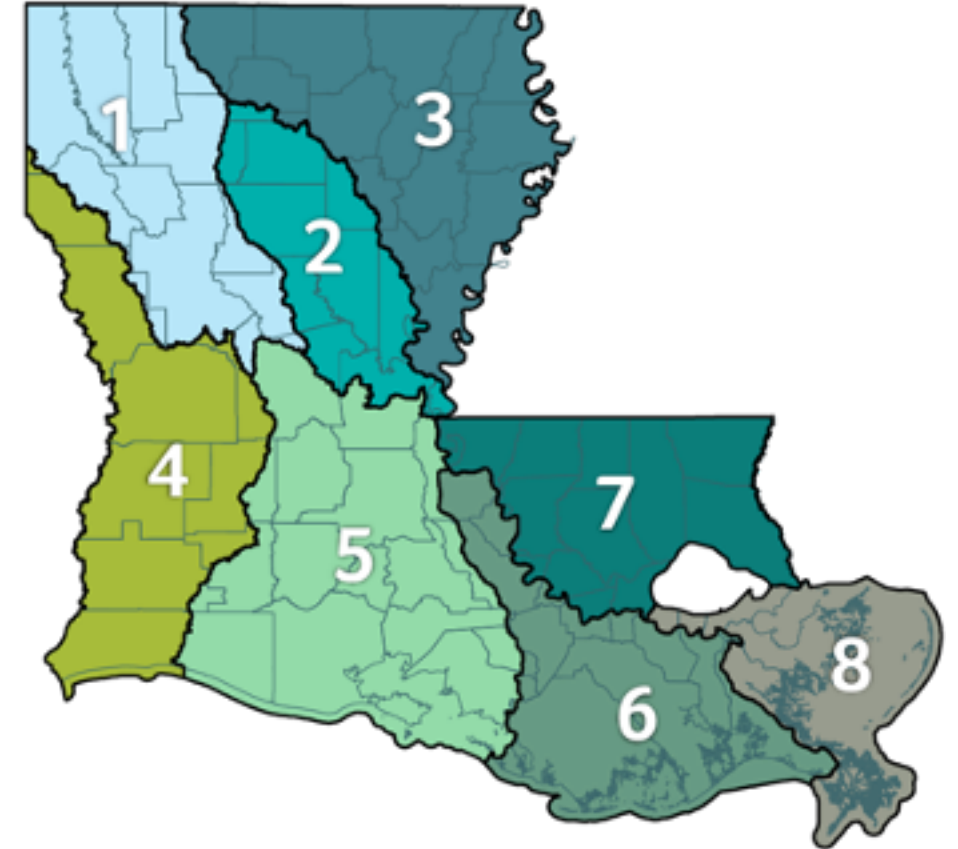


Capacity building needs

Capacity building is critical to establishing an effective and sustainable MUSM system.

Primary components:

- Hardware: In-house and cloud-based computing infrastructure
- Technical personnel: IT, GIS and H&H support
- Training/education:
 - H&H use and applications
 - Effective stormwater management techniques
 - Interaction with and upkeep of MUSM system



f @LAWATERSHEDINITIATIVE

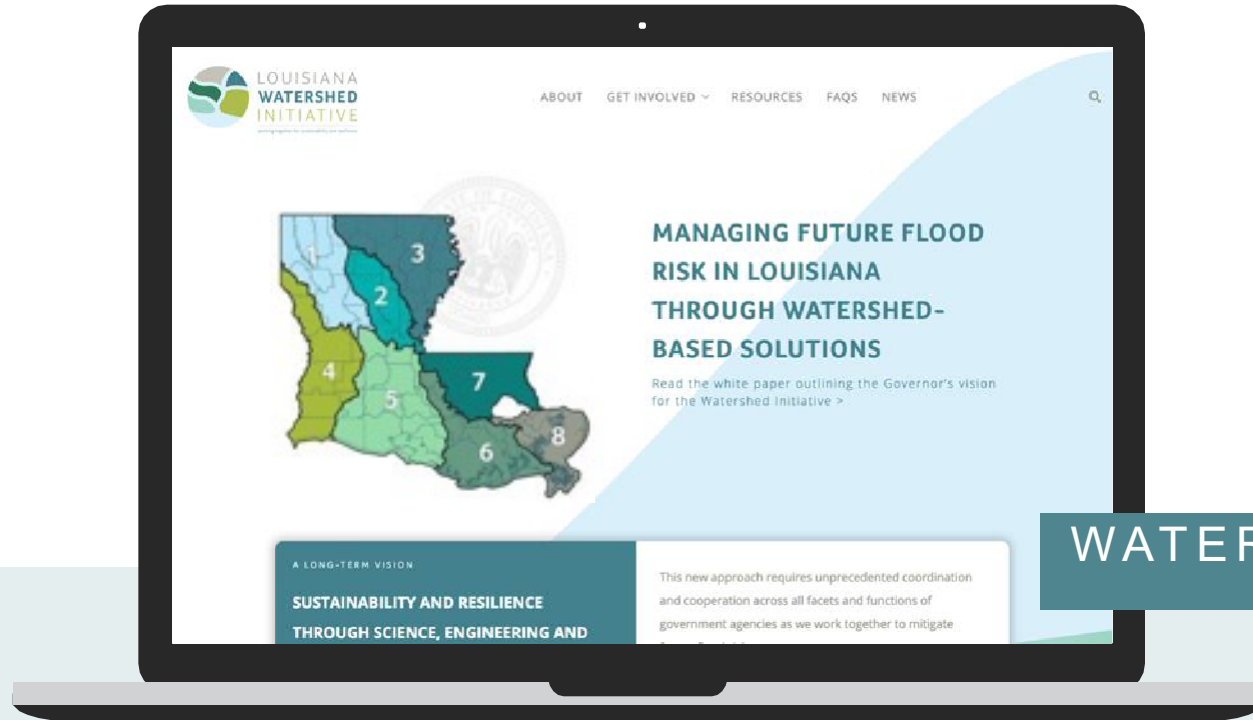
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i @LAWATERSHED

in LOUISIANA WATERSHED INITIATIVE

✉ WATERSHED@LA.GOV

THANK YOU



WATERSHED.LA.GOV



5. Draft membership structures, where we are at and next steps



Update

OCD

- Legislative update, Pat Forbes
- Timeline



Recent discussions

What we heard on August 26, questions for the Transition Team

Feedback	Questions
Parish-majority voting supported by some non-Parish voting roles	What gaps do we have? How might we fill them?
Less than 20 members	How would you recommend that we balance this while also considering occupational and demographic diversity? Are there ways you have seen this achieved in the past that you consider to be successful?
Support provided for technical decisions	What are the data-driven decisions where this is needed? What is the limit of expertise within institutions?
Parishes want to be involved in all decisions	What explicitly based on the examples that have been provided? Are there others? What is the degree to which this group wants to (1) inform programmatic activities (2) vote on programmatic activities (3) design programs (4) other items?
Consistency	What assets, beyond financial, do y'all need access to? In what ways do you need access?





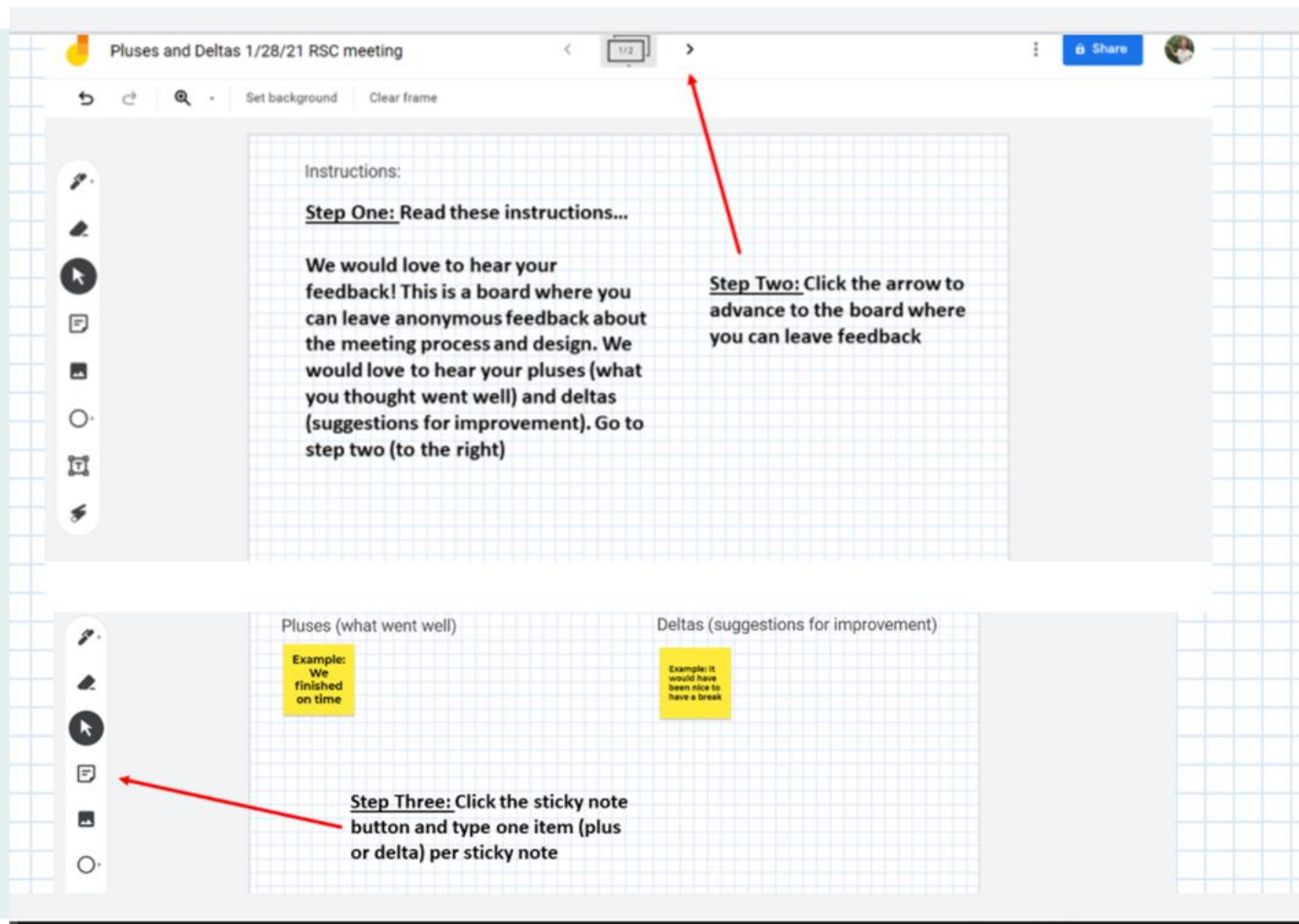
6. Public comment



Feedback from previous meeting

Feedback from last meeting's pluses and deltas board.

None



The screenshot shows a Miro board titled "Pluses and Deltas 1/28/21 RSC meeting". The board is divided into three sections. The top section, titled "Instructions:", contains the following text: "Step One: Read these instructions... We would love to hear your feedback! This is a board where you can leave anonymous feedback about the meeting process and design. We would love to hear your pluses (what you thought went well) and deltas (suggestions for improvement). Go to step two (to the right)". A red arrow points to a right-pointing arrow icon in the top navigation bar. The middle section is titled "Pluses (what went well)" and "Deltas (suggestions for improvement)". It contains two yellow sticky notes: "Example: We finished on time" under Pluses and "Example: It would have been nice to have a break" under Deltas. A red arrow points to the sticky note icon in the left-hand toolbar. The bottom section contains the text: "Step Three: Click the sticky note button and type one item (plus or delta) per sticky note".

Public Comment + Request for feedback

If members of the RSC or public would like to make a comment, please do so by unmuting your microphone or by use of the chat pod at this time.
Thank you.

Request for feedback... provide us with some “pluses” and “deltas” in the chat pod or on [our board](#).

- Pluses are what you liked about today
- Deltas are things you’d like to offer to help us improve



6. Closeout



Closeout

- Adoption of August 26 meeting minutes
- **Reminder - ethics certifications**
- Upcoming meetings:
 - November 16, 1 to 3:30pm
- Action items
- Visit CRPC's website at <https://crpcla.org/> for more information on Region 7
- Visit the LWI website at <https://watershed.la.gov/> for more information on LWI



Contact information

Rachelle Sanderson, Region 7 Watershed Coordinator
Rsanderson@crpcla.org

Kim Marousek, AICP, Director of Planning
Kmarousek@crpcla.org



Local Governments Working Together Since 1967

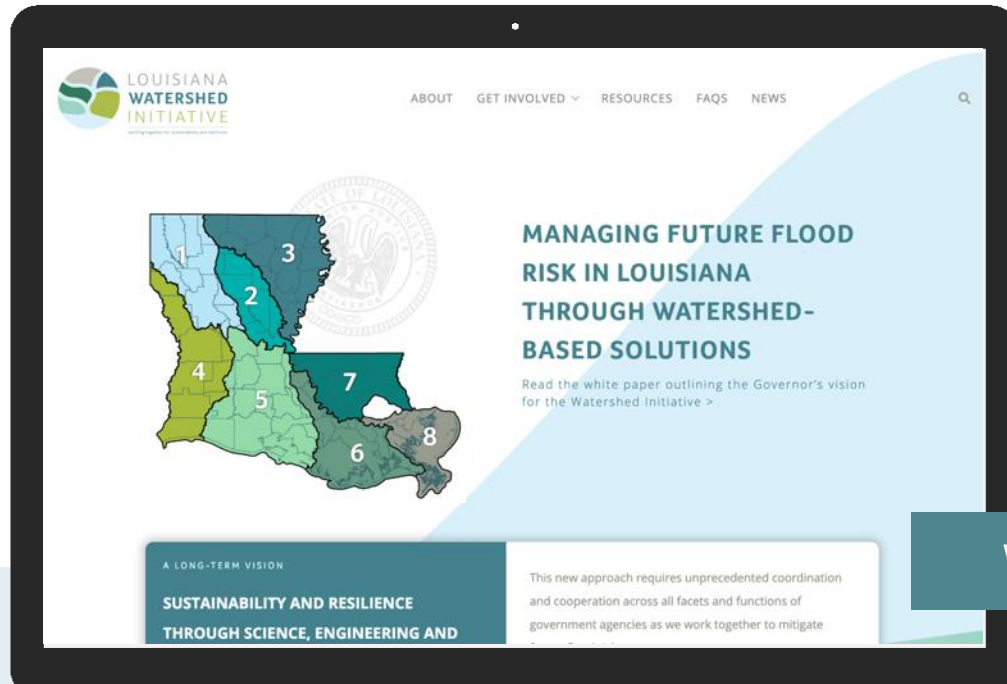


 @LAWATERSHEDINITIATIVE

 @LAWATERSHED

 WATERSHED@LA.GOV

THANK YOU



WATERSHED.LA.GOV

Idea Marina



April 22 meeting: Define Coastal areas by various factors (Deitmar question)

May 25: roadshow and program build out



REGION 7

NOVEMBER 16 REGIONAL STEERING COMMITTEE MEETING

Accompanying slides and a recording of this meeting can be found online at <https://crpcla.org/previous-events-archive>. Please note that any time that you see “RSC” in this document, it stands for Regional Steering Committee. Anytime that you see “LWI” in this document, it stands for Louisiana Watershed Initiative.

INTRODUCTIONS AND MEETING LOGISTICS

THANK YOU

Shared agreements

1. Be brief and meaningful when voicing your opinion.
2. Seek common ground and understanding (not problems and conflict).
3. Consider what serves the benefit of the entire region.
4. When presenting a challenge, offer a solution.

Idea Marina

- We will be adding the concept of an “idea marina” in our discussions. This means when a discussion comes up that is not related to the goals of the meeting, we’ll put it in the idea marina to revisit at a later date.

PAST MEETINGS RECAP, REMINDERS, AND UPDATES

THANK YOU AND ICEBREAKER

Thank you for being with us today.

Icebreaker: What dish are you most looking forward to during next week’s celebrations?

UPDATES

- Georgetown Climate Center Resilient Affordable Housing
 - Visioning sessions are complete
- Environmental Finance Centers
 - Workshop taking place now
- EPA Resilience Roadmap
 - Scheduling second advisory group meeting



UPDATES

RSC Members

- None

A QUICK RECAP

2020-2021

- August-October – Vision, values, and goals; Root causes of flooding, opportunities to address challenges
- November-December – What kind of work the region would like to do, Governance models, initial feedback for recommendation
- January-March – Adopt provisional governance recommendation; Discuss Round 1 Regional projects; Discuss potential funding resources
- April-June – Vote on Round 1 regional project selection process; Discuss and adopt governance recommendations
- July-October – Adopt recommendations for Round 1 regional project; Discuss draft membership ideas, Discuss model use, storage, and maintenance

REMINDER

- LWI Mission: Reduce flood risk, improve floodplain management throughout the state and maximize the natural and beneficial functions of floodplains
- Region 7 Vision: Region 7 envisions a future with less flood risk, healthier natural environments, and resilience practices that are responsive to the needs of our communities and to our evolving environment

MEMBERSHIP STRUCTURE DISCUSSION

REMINDERS

- Oct. 19 RSC Meeting Recap: Pat Forbes (OCD) stated they do not need anything else from the regions for the purpose of developing legislation.

Q&A

Comments are not verbatim.

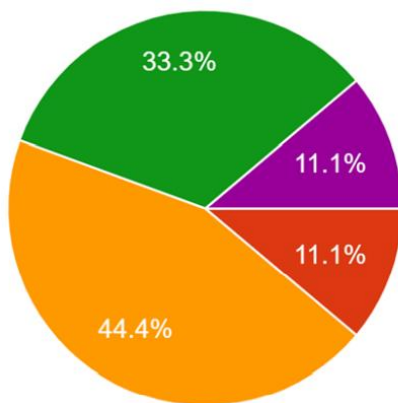
- Ruth Phillips: Will we see the governance structure version before it is submitted?
 - Lakesha Hart: The formal version of the compilation of all governance structures is available on the LWI website is the version that is sent. The one approved on June 29 is the final version has been submitted. The result of the legislative package will be what has been already submitted and approved as it relates to the governance recommendation
- Ross Liner: Did any other region not submit their governance recommendations?
 - Lakesha Hart: Every region submitted



- Dietmar Rietscher: Are the other governance structures from other regions similar to ours? Is there a document with the differences of the governance recommendations?
 - Nicolette Jones: There is a 2-pager made that broadly shows the framework organizations. It is also under the LWI website. Broadly, everyone proposed something that was a little bit different. They wanted a mix of public representation and community members. Each recommendation from the regions are published under the LWI website.

SURVEY RESULTS

- How do you think the Region 7 RSC should continue with regards to discussions about draft membership structure? (9 responses)



- I'm not sure
- Continue the discussion on membership structures during the November meeting to make a recommendation to OCD A...
- Wait until legislation is drafted to continue membership structure discus...
- Wait until the 2022 legislative session is over to continue membership structure...
- The Region 7 RSC should not continue discussions about draft membership st...

MEMBERSHIP STRUCTURE PROPOSITION

Membership structure proposed by Steve Kistler

- Voting body: 15 total
 - One member from each Parish + 1 from ARBC + 1 from the Pontchartrain Levee District
- Non-voting Body: 11 total
 - One from each of the following 7 categories +4 who have drainage related expertise or technical background
 - Resiliency, Community Representative, Economic Development, Environmental Conservation, Environmental Justice, Planning, and Water Sector Seat
- Selection Committee for non-voting body = 3 from voting body and 2 from non-voting body chosen by their respective bodies.
- The initial non-voting body would be selected by 3 voting body members, 1 representative from CRPC, and 1 representative from OCD.

Q&A

Comments are not verbatim.

- Ross Liner: When does the legislation session start?
 - Nicolette Jones: Unsure, but it may be the 2nd week of March until June



- Fred Raiford: It is difficult to support structures that do not allow parish representatives to participate as a voting body because we need to be involved in that voting process to get what is best for our community. I support Steve's proposed structure.
- Earl Matherne: Our administration reached out to our legislatures. We will support this and moving forward with it now, understanding that some revisions may be required later. We would like it to be revised from this strong standpoint. We want our opinion known from the beginning.
- Bridget Bailey: I have reviewed the suggestion and recommendations. The other agency representatives, we have more than one drainage district and levee board which are not represented at all. My concern is those are not mentioned or recommended in the current structure and there are only 2 recommended when there are other. I don't believe we are ready to vote at this time.
- Dietmar Rietscher: I don't know a reason why cannot vote. Is it because something is not done correctly? We should move on with a positive attitude, put something on the table so legislators have something to bite into. We have several small drainage districts too. I think that it's a better alternative than not doing anything.
- Steve Kistler: You must look at the drainage districts, when you have 13 parishes and different entities belonging to different parishes, it is up to the parish representative to have conversations with the public and entities contained within. If we started including all entities within the parishes, it would get unwieldy. It is the responsibility of the parish representative.
- Bridget Bailey: Only 1 levee district was included in the proposed structure leaving other levee districts out. It appears you are choosing. Instead of the 15 voting members, maybe you should have one of those voting memberships represent a drainage district among any of the parishes and the other be one of the levee districts or basin foundation. We are excluding instead of giving opportunities for voting membership.
- Ross Liner: I share those thoughts with Bridget. Ponchartrain Levee District is skewed towards the left side and that raises concern. Why those two (ARBC and Pontchartrain Levee District)?
- Ruth Phillips: I propose an amended version where the membership structure just includes parish representatives. Additional voting members can be added later if needed.
- Jenna (with Larry Bankston's office): We represent ARBC. We would disagree with ARBC not being included because they are unique and the governing body for drainage in multiple parishes. Excluding them in which they have the authority in which they have exceptional experience isn't right.
- Bridget Bailey: We aren't voting for one, just suggesting one for an alternative.
- Ross Liner: There isn't any legislation for us vote on how we govern ourselves, we are letting legislators know what we are thinking about through this vote. It is not binding because there is no legislation for us to actually do it.
- Steve Kistler: This isn't binding.
- Ross Liner: Ruth, is your intent on the motion to send official correspondence from Region 7 that expresses the makeup of the voting body to be considered as legislation is created and adopted.
- Ruth Phillips: I agree this vote isn't binding.

VOTE TO AMEND MEMBERSHIP STRUCTURE RECOMMENDATION

Motion to amend recommendation brought forward to change proposed recommendation to be 13 voting members (one member per parish).

Ross Liner calls for motion.



Ruth Phillips motioned.

Tom Stephens seconded.

RESULTS: Motion passed.

- Yay - 11
- Nay - 2
- Abstain - 2
- Absent – 2

AFFILIATION	VOTE	AFFILIATION	VOTE
Ascension Parish	Yay	St. Tammany Parish	Yay
East Baton Rouge Parish	Yay	Tangipahoa Parish	Yay
East Feliciana Parish	Absent	Washington Parish	Yay
Iberville Parish	Yay	West Feliciana Parish	Yay
Livingston Parish	Yay	Amite River Basin Commission	Nay
St. Charles Parish	Yay	Regional rep. – Home Builders Association of Greater Baton Rouge	Abstain
St. Helena Parish	Absent	Regional rep. – Pontchartrain Conservancy or Tangipahoa Parish Council	Yay
St. James Parish	Yay	Regional rep. – St. John Coastal Advisory Committee, LA Recycling Coalition, Keep St. John Beautiful etc.	Nay
St. John the Baptist Parish	Abstain		

Public Comment:

Comments are not verbatim.

- Honora Buras: I am confused on the structure. I am curious what the voting will be voting on? I thought this was a planning body not necessarily projects. I am concerned with voting by political individuals subject to their political terms of office that may and do change, and there is no regional continuity. The politics in Ascension Parish around drainage lack the elected officials taking into account the wishes of their constituents and that is my concern.

VOTE TO RECOMMEND THE AMENDED MEMBERSHIP STRUCTURE

The region will recommend the amended membership structure proposed by Steve Kistler during today’s meeting.

Ross Liner calls for motion.

Earl Matherne motioned.

Fred Raiford seconded.

RESULTS: Motion passed.

- Yay - 11
- Nay - 2
- Abstain - 1
- Absent - 3

AFFILIATION	VOTE	AFFILIATION	VOTE
Ascension Parish	Yay	St. Tammany Parish	Yay
East Baton Rouge Parish	Yay	Tangipahoa Parish	Yay



East Feliciana Parish	Absent	Washington Parish	Yay
Iberville Parish	Yay	West Feliciana Parish	Yay
Livingston Parish	Yay	Amite River Basin Commission	Nay
St. Charles Parish	Yay	Regional rep. – Home Builders Association of Greater Baton Rouge	Absent
St. Helena Parish	Absent	Regional rep. – Pontchartrain Conservancy or Tangipahoa Parish Council	Yay
St. James Parish	Yay	Regional rep. – St. John Coastal Advisory Committee, LA Recycling Coalition, Keep St. John Beautiful etc.	Nay
St. John the Baptist Parish	Abstain		

RSC Member Comments:

Comments are not verbatim.

- Ivy Matthieu: What stops collaboration across parish lines right now? I am sure the Amite has projects that impacts other parishes but what is stopping us from collaborating across lines and sharing with the region to do tabletop exercise? My concerns are continuing the same powerful people at the table and wanting different results if we are going to do the same behavior. That is one part of my fear, so I just wanted to throw that out as a challenge to the group.

REGION 7 MODELING UPDATE

Presented by Sam Crampton (Dewberry) – scrampton@dewberry.com

LWI WATERSHED REGION 7 MODELING CONTRACT

Current Scope of Work Timeline

- July 2021 Data Gap Analysis
- Spring 2022 Topographic and Bathymetric Survey, Hydrometeorology and Hydrography Data
- Winter 2022 Hydrologic and Hydraulic Model Development
- Fall 2022 Meteorological Forcing
- Coastal and Flood Transition Zone Approach
- Spring 2021 Report and Quick Guide, Data Management Plan

Communication Strategy

- Will provide updates through RSC meetings, newsletters, emails, and parish level meeting

Amite Watershed Updates

- Utilizing and refining existing models
- Making Amite model consistent with LWI efforts

Current Watershed Contract Status

Under Contract & Active	Schedule
Bayou Sara-Thompson	July 2021-March 2023
Lake Maurepas	July 2021-March 2023



Liberty Bayou Tchefuncte	July 2021-March 2023
Amite Updates	September 2021-May 2023

Progress

- Stream Naming convention
 - All 7 consultants statewide provided updated recommendations for stream naming within HMS and RAS models using a system based off the GNIS system rather than a 16-digit alphanumeric code. LWI management are reviewing the recommendation
 - If local communities have local names that differ from GNIS names and would prefer these to be used, please share this information.
 - View your stream names in the National Map Viewer: [The National Map - Advanced Viewer](#)
- Ascension Survey
 - F&T survey effort is about 70% complete. Coordinating with HNTB to ensure no duplications in efforts are made
- Hydrometeorology
 - Evaluation of the spatial and temporal rainfall data associated with the calibration/validation storms
 - Compare radar derived rainfall data versus observed rainfall to determine if bias corrections needs to be applied
 - Compare rainfall runoff vs observed discharges at gages to ensure radar estimated rainfall is reasonably accurate
- Quality Control at Key Milestones
 - Ensuring quality through continuous individual self-checking, task manager check-ins, internal detailed quality checks, independent technical reviews by FTN Associates, and LWI TDQ reviews by WEST, Taylor (Coastal), and the Professors

Future HUC Schedule

- Expected Notice to Proceed January/February 2022
 - Tickfaw
 - Tangipahoa
 - Lower Pearl
 - Bogue Chitto
- Once NTP is received, assume 20 month schedule
- LiDAR and other factors influencing task order issuance
- Milestones and workflow will be similar to current watersheds

Q&A

Comments are not verbatim.

- Dietmar Rietscher: Are you aware of the extensive work with USGS, DOTD, of the 2016 flood event? We have done quite some work, our objective is to make a dynamic map showing the flooding inundation in the Amite Basin. We have information you can use.
 - Sam Crampton: Yes. We have the information consolidated and we performed highly detailed reviews and high water marks. I don't believe we have the final version of your inundation map but you can share.



- Honora Buras: Will the model include the West shore Lake Pontchartrain levee and associated drainage structures as well as any other new structural features that are expected to be build in the near future?
 - Sam Crampton: The model will represent what is on the ground now or when the survey was taken. We will take into account of future development which can be modified and added on the models easily.
- John Clarke: How far do you think you will get into Bayou Manchac Watershed? There is a floodgate present in the Bluff Swamp, Frog Bayou and Alligator Bayou.
 - Sam Crampton: We do have the gates included so that future modelers can open and close the gate as they please.

PUBLIC COMMENT + REQUEST FOR FEEDBACK

Request for feedback on our board: https://jamboard.google.com/d/1im-gdQukjM1u3XR2m7Yj_mpDzL1wTPZjMYeYrdULuAY/edit?usp=sharing.

PUBLIC COMMENT

No public comments.

MEETING CLOSEOUT

- Upcoming meetings: November 16, 2021 from 1:00-3:30pm
- Reminder – Ethics Certification

ADOPTION OF OCTOBER 19 MEETING MINUTES

Ross Liner called for motion.
Ruth Phillips motioned.
Fred Raiford seconded.
No objections, motion passed.

MOTION TO ADJOURN

Ross Liner called for motion.
Earl Matherne motioned.
Bridget Bailey seconded.
No objections, motion passed.

RESOURCES SHARED DURING THE MEETING

Region 7 Governance Recommendation



<https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/60e4945385962770fdf5a400/1625592916251/Region+7+Provisional+Governance+Recommendation+Adopted+06292021.pdf>

Final Recommendations

https://watershed.la.gov/assets/docs/LWI_RCBG_FinalRecommendations.pdf

Toward a Regional Watershed Management: Regional Steering Committee Recommendations

https://watershed.la.gov/assets/docs/LWI_ToolkitResources_RegionalRecommendations_8-5-21.pdf

MEETING CHAT

00:31:50Ruth Phillips: Ruth Phillips, Chief of Staff Ascension Parish
00:32:05Laci Melancon: Laci Melancon, Coastal Technical Assistance Center
00:32:24John Clark: John Clark, Iberville Parish
00:32:35Tara Lambeth: Tara Lambeth, St. John Parish
00:32:40Ryan Larousse: Ryan Larousse, St. James Parish
00:32:53Honora Buras: Honora Buras - Ascension citizen (retired from CPRA)
00:32:54Earl Matherne: Earl Matherne, St. Charles Parish
00:33:00Nicolette Jones: Nicolette Jones, OCD
00:33:37Lakesha Hart: Lakesha Hart, OCD
00:33:39Ivy Mathieu: Ivy Mathieu, St. John Parish
00:33:56Karen Zito: Karen Zito - Home Builders Association of Greater Baton Rouge
00:34:56kim marousek: Kim Marousek, CRPC
00:35:02Chris Shalohm: Chris Shalohm, CRPC
00:35:18Stephen Amato: Stephen Amato, Evans-Graves
00:35:30Tom Stephens: Tom Stephens East Baton Rouge Parish
00:41:51Tara Lambeth: Apple pie :)
00:42:01Rachelle "Ray-chel" Sanderson (she/her): Love apple pie!
00:42:02Chris Shalohm: sandwich
00:42:05Honora Buras: turkey
00:42:10Lakesha Hart: gumbo!
00:42:15Earl Matherne: Cornbread dressing
00:42:28Bobbi Jo Breland: Duck dressing
00:54:31Nicolette Jones: https://watershed.la.gov/assets/docs/LWI_RCBG_FinalRecommendations.pdf
00:54:43Rachelle "Ray-chel" Sanderson (she/her): Thanks, Nicolette!
00:58:26Rachelle "Ray-chel" Sanderson (she/her): Region 7's recommendation that is in the link that Nicolette provided can be viewed here:
<https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/60e4945385962770fdf5a400/1625592916251/Region+7+Provisional+Governance+Recommendation+Adopted+06292021.pdf>
00:58:48Nicolette Jones:
https://watershed.la.gov/assets/docs/LWI_ToolkitResources_RegionalRecommendations_8-5-21.pdf
01:12:00Karen Zito: What was the survey for then?
01:35:50John Clark: John Clark, YAY



01:46:27Ruth Phillips: Will this presentation be available after the meeting? I did not see it included in the agenda packet

01:48:24Rachelle "Ray-chel" Sanderson (she/her): Yes it will be. We'll send it out with all of the meeting materials post-meeting

01:54:59Honora Buras: Will the model include the West Shore Lake Pontchartrain levee and associated drainage structures as well as any other new structural features that are expected to be built in the near future?

02:01:11Honora Buras: The 2018 Lidar will be woefully out of date in respect to all the infill from new development,

DRAFT



REGION 7 REGIONAL STEERING COMMITTEE

RECOMMENDATION FOR MEMBERSHIP STRUCTURE

Motion that passed: The region will recommend the amended membership structure proposed.

Name	Representing	Vote
Ruth Phillips and/or Ron Savoy	Ascension Parish	Yay
Tom Stephens and/or Fred Raiford	East Baton Rouge Parish	Yay
James Stewart and/or Joni Stone	East Feliciana	Absent
John Clark	Iberville Parish	Yay
Steve Kistler and/or Mark Harrell	Livingston Parish	Yay
Earl Matherne and/or Stephanie Bruning	St. Charles Parish	Yay
Major Coleman and/or Jeremy Williams	St. Helena Parish	Absent
Ryan Donadieu and/or Ryan Larousse	St. James Parish	Yay
Tara Lambeth and/or Rene Pastorek	St. John the Baptist Parish	Abstain
Ross Liner and/or Jay Watson	St. Tammany Parish	Yay
Bridget Bailey and/or Melissa Cowart	Tangipahoa Parish	Yay
Bobbi Jo Breland and/or Alex Sumrall	Washington Parish	Yay
Gary Mego and/or Emily Cobb	West Feliciana Parish	Yay
Dietmar Rietschier and/or Larry Bankston	Amite River Basin Commission	Nay



Karen Zito and/or Diane Baum	Home Builders Association of Greater Baton Rouge	Absent
Ronny Carter and/or Kim Coates	Pontchartrain Conservancy and Tangipahoa Parish Council	Yay
Ivy Mathieu	St. John Coastal Advisory Committee, LA Recycling Coalition, Keep St. John Beautiful, etc.	Nay

Ruth Phillips made the motion and Fred Raiford seconded a motion to recommend the following membership structure for Region 7 of the Louisiana Watershed Initiative:

Proposed recommendation:

Voting Body – one member from each Parish (13 total)

Non-voting Body – one from each of the following 7 categories plus 4 who have drainage related expertise or technical background = 11

- Resiliency
- Community Representative
- Economic Development
- Environmental Conservation
- Environmental Justice
- Planning
- Water Sector

Selection Committee for non-voting body = 3 from voting body and 2 from non-voting body chosen by their respective bodies.

The initial non-voting body would be selected by 3 voting body members and 1 rep. from CRPC and 1 rep. from OCD.

Please note that this reflects an approved amendment to the original recommendation that can be viewed [here](#).

This vote took place during the November 16, 2021 Regional Steering Committee meeting. All meeting materials, including a recording of the discussion, related to this meeting can be found online [here](#).



LWI Region 7 RSC Meeting

NOVEMBER 16, 2021

RACHELLE SANDERSON, KIM MAROUSEK, RACHELLE TRAHAN,
CRPC

NICOLETTE JONES, LAKESHA HART, OCD

VICTORIA NGUYEN, LSU/CRPC

JERRI DANIELS AND SAM CRAMPTON, DEWBERRY

CLYDE VERDIN, SPEARS



LOUISIANA
WATERSHED
INITIATIVE

working together for sustainability and resilience



AGENDA

1. Introductions and meeting logistics
2. Past meetings recap, reminders, updates
3. Membership structure discussion
4. Public comment prior to vote on membership structure and vote
5. Region 7 modeling update
6. Public comment
7. Closeout





1. Introductions and meeting logistics



Regional Steering Committee Meetings

- Will adhere to Louisiana Open Meetings requirements:
- Observable to the public
- Provide opportunity for public comments
- Opportunity to increase public's trust and awareness of the work of the RSC
- Importance of transparency and decision-tracking
- 24-hour advance notice of the meeting
- Allow for recording of the meeting by the audience
- Record minutes of the proceedings for public record



Roll Call and Notes

Roll Call: Please let us know if you are an alternate member

This is a public meeting:

- The meeting is being recorded and will be posted for public viewing
 - All comments made in the “chat pod” are written public comments
 - Comments from the steering committee can be made throughout the presentations
 - There is a specific time for public comments at the end of the meeting
-
- ❖ Please use your video camera during the meeting if possible
 - ❖ If anyone is having technical difficulties, please place a message in the chat pod



Shared agreements

These are “ways of engagement” for how we will be interacting with one another. If these agreements are not being followed, we will revisit them. We will aspire to:

1. **Be brief and meaningful when voicing your opinion**
2. **Seek common ground and understanding (not problems and conflict)**
3. **Consider what serves the benefit of the entire region**
4. **When presenting a challenge, offer a solution**



Idea Marina

This means when a discussion comes up that is not related to the goals of the meeting, we'll put it in the idea marina to revisit at a later date.



Introductions



NAME	AFFILIATION
Ruth Phillips and/or Ron Savoy	Ascension Parish
Tom Stephens and/or Fred Raiford	East Baton Rouge Parish
James Stewart and/or Joni Stone	East Feliciana
John Clark	Iberville Parish
Steve Kistler and/or Mark Harrell	Livingston Parish
Earl Matherne and/or Stephanie Bruning	St. Charles Parish
Major Coleman and/or Jeremy Williams	St. Helena Parish
Ryan Donadieu and/or Ryan Larousse	St. James Parish
Tara Lambeth and/or Rene Pastorek	St. John the Baptist Parish
Ross Liner and/or Jay Watson	St. Tammany Parish
Bridget Bailey and/or Melissa Cowart	Tangipahoa Parish
Bobbi Jo Breland and/or Alex Sumrall	Washington Parish
Gary Mego and/or Emily Cobb	West Feliciana Parish
Dietmar Rietschier and/or Larry Bankston	Amite River Basin Commission
Karen Zito and/or Diane Baum	Home Builders Association of Greater Baton Rouge
Ronny Carter and/or Kim Coates	Pontchartrain Conservancy and Tangipahoa Parish Council
Ivy Mathieu	St. John Coastal Advisory Committee, LA Recycling Coalition, Keep St. John Beautiful, etc.



Thank you & a quick icebreaker

- Thank you for being with us today
- What dish are you most looking forward to during next week's celebrations?





2. Past meetings recap, reminders, updates



Updates

Capacity building

- **Georgetown Climate Center Resilient Affordable Housing**
 - Visioning sessions are complete
- **Environmental Finance Centers**
 - Workshop is taking place tomorrow
- **EPA Resilience Roadmap**
 - Scheduling second advisory group meeting



Updates

Open call for updates

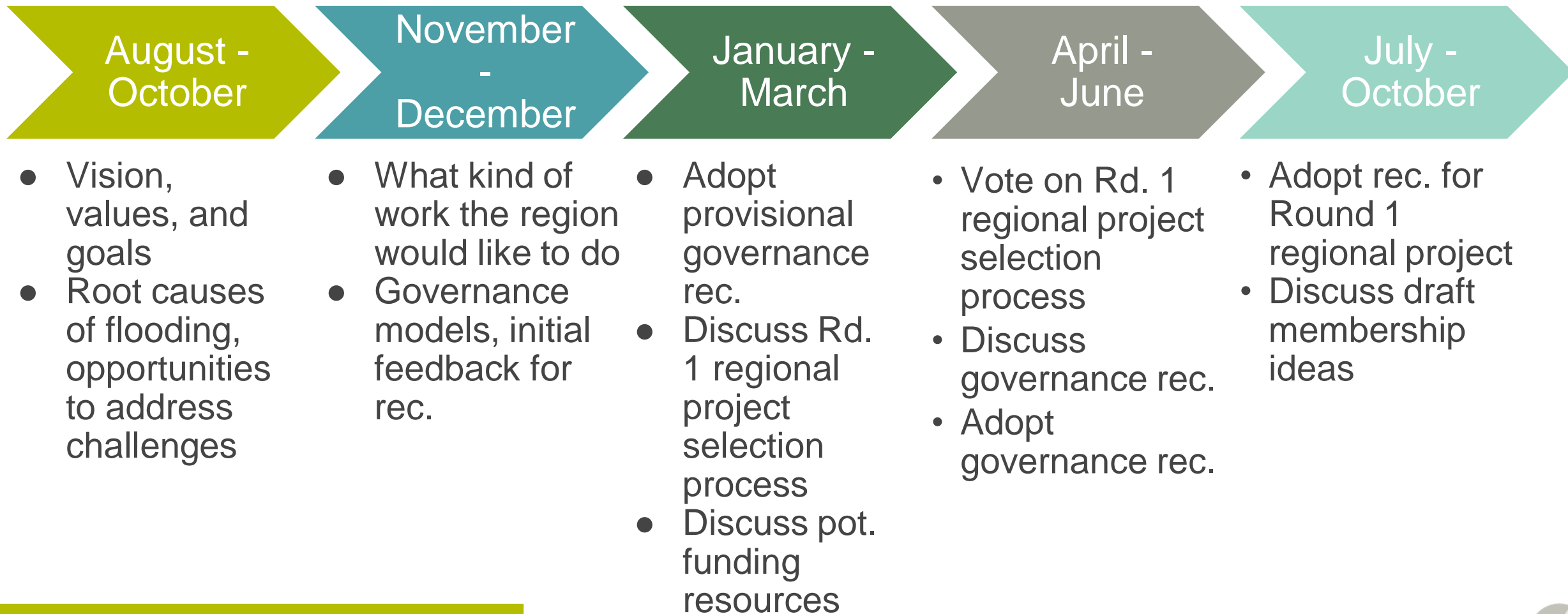
- **RSC members, let us know if you have updates**

- **Other folks on the call, please put updates you'd like to share in the chat pod**



A quick recap...

2020 - 2021



Reminder...

Mission & vision

LWI Mission:

- Reduce flood risk, improve floodplain management throughout the state and maximize the natural and beneficial functions of floodplains

Region 7 Vision:

- Region 7 envisions a future with less flood risk, healthier natural environments, and resilience practices that are responsive to the needs of our communities and to our evolving environment.



Gov. EO # JBE 2018-16, Goals

SECTION 3: The goals of this Council include, but are not limited to, the following:

- A. Promoting a unified effort, built on a solid foundation of scientific and engineering principles, to address flooding issues across the state.
- B. Identifying and working with or seeking input from additional local, state and federal agencies and other stakeholders including, but not limited to, The Water Institute of the Gulf (TWIG) and other not-for-profit research institutions, the Louisiana State University Center for River Studies (LSU CRS) and other university research institutions, the Department of Environmental Quality (DEQ) and other state agencies, the United States Geological Survey (USGS) and other federal agencies, drainage or levee boards and other local districts, and private sector experts to develop, implement, and evaluate the necessary components of a Louisiana Watershed-based Floodplain Management Program.
- C. Expanding, developing and using in-state skill, knowledge, technology and talent to develop and implement the program, promoting Louisiana resources through collaboration, communication, and cooperation among governmental, non-governmental, for-profit, non-profit and university entities.
- D. Increasing state and local resilience to flooding by working to improve response to flooding and reduce the instances, damages, and amount of time needed to recover from flooding.
- E. Creating a path for the state and its various jurisdictions and political subdivisions to coordinate at a statewide and watershed level to maximize flood risk reduction in coordination with the natural and beneficial functions of the watershed and its floodplains, and to consistently manage floodplains using contextually appropriate best practices.
- F. Working within the interdependencies of our communities, infrastructure, political jurisdictions and natural environment to increase Louisiana's resilience and its ability to adapt and thrive.
- G. Promoting actions, including legislative, administrative, and regulatory, where appropriate, to enhance watershed and floodplain management in Louisiana.
- H. Identifying, prioritizing, acquiring and establishing funding mechanisms to enhance the Louisiana Watershed-based Floodplain Management Program.
- I. Facilitating watershed-based floodplain management by working to create watershed-bounded entities across the state.
- J. Developing an approach to watershed-based floodplain management that is recognized as a model for others nationally and internationally.





3. Membership structure discussion



Membership structure discussion

Reminders

- Oct. 19 discussion. Pat Forbes (OCD) stated that they do not need anything else from the regions for the purpose of developing legislation

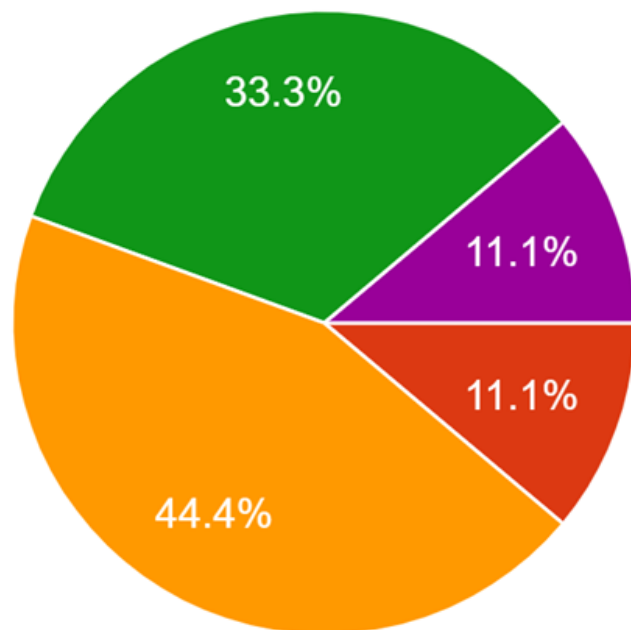


Membership structure discussion

Survey results

How do you think the Region 7 RSC should continue with regards to discussions about draft membership structures?

9 responses



- I'm not sure
- Continue the discussion on membership structures during the November meeting to make a recommendation to OCD A...
- Wait until legislation is drafted to continue membership structure discus...
- Wait until the 2022 legislative session is over to continue membership structure...
- The Region 7 RSC should not continue discussions about draft membership st...



Voting (yay/nay/abstain)

Instructions

Motion to amend recommendation brought forward to change proposed recommendation to be 13 voting members, one from each Parish

AFFILIATION	VOTE	AFFILIATION	VOTE
Ascension Parish	yay	St. Tammany Parish	yay
East Baton Rouge Parish	yay	Tangipahoa Parish	yay
East Feliciana	-	Washington Parish	yay
Iberville Parish	yay	West Feliciana Parish	yay
Livingston Parish	yay	Amite River Basin Commission	nay
St. Charles Parish	yay	Regional rep - Home Builders Association of Greater Baton Rouge	abstain
St. Helena Parish	-	Regional rep - Pontchartrain Conservancy or Tangipahoa Parish Council	yay
St. James Parish	yay	Regional rep - St. John Coastal Advisory Committee, LA Recycling Coalition, Keep St. John Beautiful, etc.	nay
St. John the Baptist Parish	abstain		





4. Public comment prior to vote on membership structure and vote



Public Comment

If members of the RSC or public would like to make a comment, please do so by unmuting your microphone or by use of the chat pod at this time.

When speaking, please keep comments to 3 minutes or less.

Thank you.

Voting (yay/nay/abstain)

Instructions

- The region will recommend the amended membership structure proposed by Steve Kistler during today's meeting.

AFFILIATION	VOTE	AFFILIATION	VOTE
Ascension Parish	yay	St. Tammany Parish	yay
East Baton Rouge Parish	yay	Tangipahoa Parish	yay
East Feliciana		Washington Parish	yay
Iberville Parish	yay	West Feliciana Parish	yay
Livingston Parish	yay	Amite River Basin Commission	nay
St. Charles Parish	yay	Regional rep - Home Builders Association of Greater Baton Rouge	
St. Helena Parish		Regional rep - Pontchartrain Conservancy or Tangipahoa Parish Council	yay
St. James Parish	yay	Regional rep - St. John Coastal Advisory Committee, LA Recycling Coalition, Keep St. John Beautiful, etc.	nay
St. John the Baptist Parish	abstain		





5. Region 7 modeling update





6. Public comment



Public Comment + Request for feedback

If members of the RSC or public would like to make a comment, please do so by unmuting your microphone or by use of the chat pod at this time. Thank you.

Request for feedback... provide us with some “pluses” and “deltas” in the chat pod or on [our board](#).

- Pluses are what you liked about today
- Deltas are things you’d like to offer to help us improve



6. Closeout



Closeout

- Adoption of August 26 meeting minutes
- **Reminder - ethics certifications**
- Upcoming meetings:
 - November 16, 1 to 3:30pm
- Action items
- Visit CRPC's website at <https://crpcla.org/> for more information on Region 7
- Visit the LWI website at <https://watershed.la.gov/> for more information on LWI



Contact information

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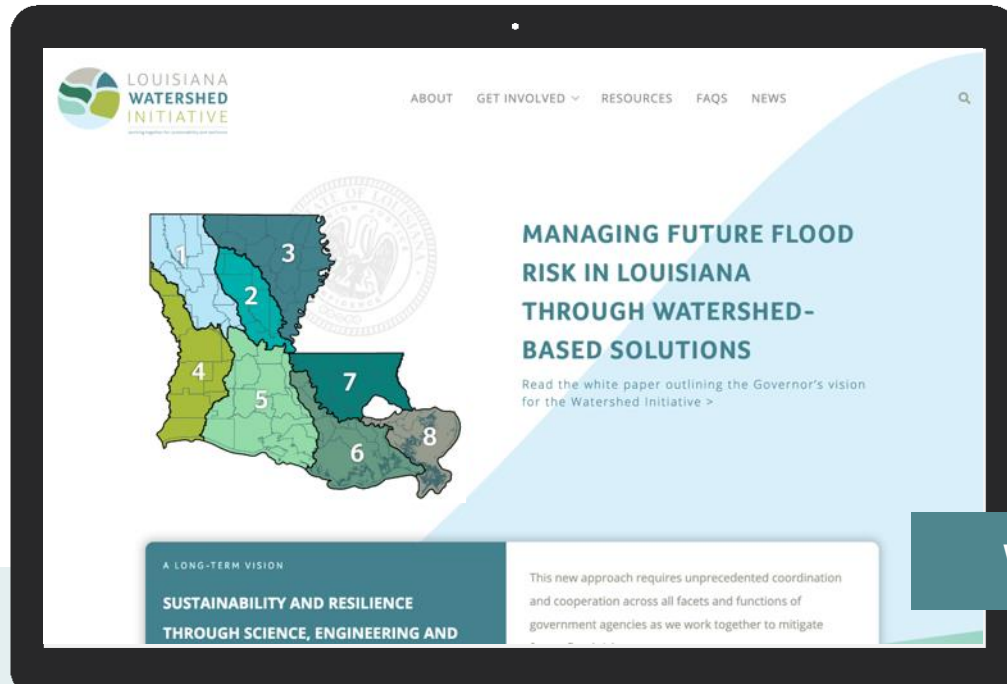


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THANK YOU



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