



STATE OF LOUISIANA
DIVISION OF ADMINISTRATION
LOUISIANA OFFICE OF COMMUNITY DEVELOPMENT

LOUISIANA
Office of
COMMUNITY
DEVELOPMENT

REPORTING PERIOD START
REPORTING PERIOD END
WATERSHED REGION
NATIONAL OBJECTIVE
ELIGIBLE ACTIVITY
EXPENDITURE/COMPLETION STATUS

| |
|---------------------------------------|
| 7/1/2020 |
| 9/30/2020 |
| 7 |
| N/A – Planning Activities |
| Planning: HCDA Sec. 105(a)(12) |
| \$32,703.45 (thru September 25, 2020) |

RCBG PROGRAM QUARTERLY REPORT

| REPORTING CONTACT INFORMATION | |
|-------------------------------|--|
| CONTACT PERSON NAME | Rachelle Sanderson |
| CONTACT PHONE | 816.830.3633 |
| CONTACT EMAIL | rsanderson@crpcla.org |

| WATERSHED COORDINATION METRICS | |
|--|---|
| HOURS OF WORK PERFORMED (by Watershed Coordinator) | 829.50 hours |
| NUMBER OF MEETINGS FACILITATED | 4 total: July 28 RSC meeting , August 19 Values, Vision, Goals workshop, September 1 RSC meeting, September 23 RSC meeting |
| ATTENDANCE PER MEETING | July 28 RSC meeting (67 participants) , August 19 Values, Vision, Goals workshop (40 participants), September 1 RSC meeting (60-70 participants), September 23 RSC |
| DIVERSITY OF DISCIPLINES/INTERESTS REPRESENTED AT MEETINGS | RSC members, CRPC staff, Parish staff, NGO staff, concerned citizens, DOTD and OCD consultants, and state employees |
| DESCRIPTION OF OTHER COORDINATION ACTIVITIES UNDERTAKEN | Please see submitted attachments (1) setup of watershed coordinator community calls (2) one-to-one calls with strategic stakeholders (3) build out regional governance structure (4) build out project inventory (5) leveraging activities (6) LSU deliverables |

| REGIONAL CAPACITY ANALYSIS AND REGULATORY REVIEW METRICS | |
|---|---|
| DESCRIPTION OF DELIVERABLES COMPLETED BY LSU OR WITH INPUT BY LSU | In progress. LSU provided a governance 101 presentation and a presentation on updates on plan analysis work being undertaken during two separate RSC meetings. LSU has been participating in weekly coordination calls to strategize the build out of the governance structure and activities for RSC members. Work continues on (1) Subdivision rules, zoning, and regulations in Region 7 (2) Plan evaluation and mapping of issue networks across the region (3) Network mapping governance and actor networks based on planning documents |

| PUBLIC OUTREACH METRICS | |
|---|---|
| NUMBER OF CITIZEN INTERACTIONS OR COMMUNITY-ORIENTED EVENTS HELD | one-to-one conversations with Tulane Water Law and Policy, Gulf Coast Center for Law and Policy, Foundation for Louisiana, Housing NOLA/Louisiana, Sierra Club, HealthyGulf, Healthy Community Services, Governor's Office of Coastal Activities, |
| NUMBER OF ATTENDEES AT EVENTS | 1 to 6 people per conversation |
| NUMBER OF PUBLIC INFORMATION PIECES DISSEMINATED | 0 |
| NUMBER OF CONTINUING EDUCATION HOURS OR CERTIFICATIONS AWARDED TO PARISH, MUNICIPAL OR REGIONAL STAFF | 0 |
| NUMBER OF CONTINUING EDUCATION HOURS OR CERTIFICATIONS AWARDED TO LOCAL PROFESSIONALS | 0 |
| DESCRIPTION OF OTHER PUBLIC OUTREACH ACTIVITIES UNDERTAKEN | N/A |

| CRS PARTICIPATION METRICS | |
|--|---|
| CRS SCORES AND/OR NUMBER OF PARTICIPATING COMMUNITIES (one input per year) | Updates are recorded in the attachment, "CRS Region 7 Map (Oct. 2020 data)" The only community scores to change are: Central from 8 to 7; Covington from 9 to 8; Denham Springs from 9 to 8 |

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



LOUISIANA
WATERSHED
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REGION 7

2020 QUARTER 3 (07/01/2020 – 09/30/2020) 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.

July 28, 2020 Regional Steering Committee (RSC) Meeting

The July 28 RSC meeting focused on the flood risk and vulnerabilities presentation where RSC members were asked for additional information on flood risk in their region. During this meeting, the project inventory survey and project viewer were also introduced. Minutes for this meeting and a complete list of RSC members are attached to the report

August 19, 2020 Values, vision, goals virtual workshop

The August 19 Values, Vision, Goals Virtual Workshop was the first public workshop for Region 7. The purpose of this meeting was to brainstorm the vision, values, and goals for Region 7 of the Regional Watershed Initiative that will inform guiding principles for overall work of the region and the Regional Steering Committee. This workshop included a brief presentation to introduce participants to Region 7 of the Louisiana Watershed Initiative and key terms for the session. After the presentation, participants were split into several facilitated breakout groups and were asked to answer key questions. This meeting produced a guiding principles framework document that can be found in the attachments.

September 1, 2020 Regional Steering Committee Meeting

The September 1 RSC meeting was rescheduled from August 26, 2020 because of Hurricanes Marco and Laura. This meeting focused on:

- Providing a modeling update from consultant teams;
- Governance 101 that was provided by Dr. Thomas Douthat with LSU's College of the Coast. This presentation provided critical information with regards to the needs for developing a governance structure, and existing watershed governance models; and
- Leading participants through a root cause analysis discussion to identify root causes for the flood risk challenges that were identified during the July 28 meeting.

September 23, 2020 Regional Steering Committee Meeting

The September 23 RSC meeting focused on:

- Methodology and preliminary results for plan analyses work being conducted by Dr. Thomas Douthat's team. This work focuses on analyzing Parish and Municipal plans, such as Comprehensive and Hazard Mitigation plans, to identify existing actor and issue network;
- Discussing existing stakeholders in Region 7 by leveraging work conducted by OCD and their consultants Baker Donelson, work from Dr. Thomas Douthat through his plan analyses, and from Rachelle Sanderson with Capital Region Planning Commission. Participants were asked to provide additions to the stakeholder lists; and
- Leading participants through a goals and potential solutions discussion to identify potential solutions and actions to be taken in the Region to inform the design of the governance 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:

SETUP OF WATERSHED COORDINATOR COMMUNITY CALLS

In the previous report, one-to-one conversations with other Watershed Coordinators was a focus of capacity building. Since those conversations, Watershed Coordinator Community calls have been established as an intentional space for Watershed Coordinators to find consistency and alignment in activities and to share existing knowledge around existing challenges and opportunities. It is a collaborative space where Watershed Coordinators also provide agenda items for topics that are most pressing for the regularly scheduled Watershed Coordinator calls with OCD and relevant consultants.

ONE-TO-ONE CALLS WITH STRATEGIC STAKEHOLDERS

Intentional conversations are scheduled on an on-going basis with strategic stakeholders who are a part of existing organizations, and governments, that are critical to ensuring the success of work within Region 7. 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. A list of organizations for which these conversations have been had are listed below in no particular order:

- Tulane Water Law & Policy
- Gulf Coast Center for Law & Policy
- Foundation for Louisiana
- Housing NOLA/Louisiana
- Sierra Club
- HealthyGulf
- Health Community Services
- Governor's Office of Coastal Activities
- Municipalities (Denham Springs and Gonzales)
- Livingston Parish President and select Council Members
- Pontchartrain Conservancy, formerly Lake Pontchartrain Basin Foundation

Build out of regional governance structure

The Regional Steering Committee has been meeting monthly to build out the regional governance structure. Below is an image that shows the path to achieving the build out of that governance structure from September through January 2021.

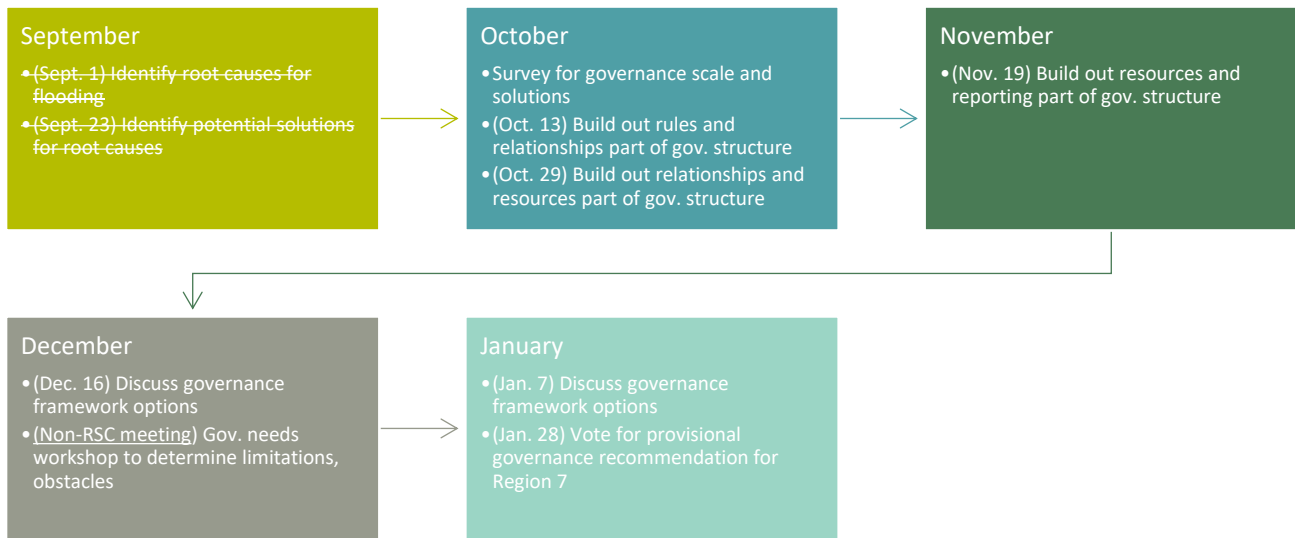


Figure 1: Roadmap of Region 7 Regional Steering Committee meetings to develop the provisional governance recommendation

As of September 30, 2020, RSC members have taken the following steps towards building out the governance structure:

- Identified root causes for flooding, which informs the purpose of the governance body; and
- Identified potential solutions to root causes for flooding and actions that support the potential solution. The potential solutions and actions, coupled with determining the scale at which they should occur, will inform what the purpose and structure of the governance body will need to be.

Build out of project inventory

The first iteration of the project inventory is due October 31, 2020. Regular reminders have been sent out to our listserv of over 150 individuals, including RSC members and alternates.

Leveraging Activities

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 are strategic alignment. Below are activities that Region 7 is leveraging for the purpose of mutually advancing activities between LWI and our partners.

MAUREPAS WATERSHED DISCOVERY PROCESS

Region 7 of LWI and CRPC have been involved in stakeholder outreach and engagement meetings for the Watershed Discovery process that is being led by The Water Institute of the Gulf, in partnership with FEMA. This is a critical first step in establishing new flood insurance rate maps and the collection of this data is critical for the success of the region. This data is being leveraged into model development for Region 7.



NOAA RESTORE SCIENCE PROGRAM FUNDING OPPORTUNITY: PLANNING FOR ACTIONABLE SCIENCE

This funding opportunity will provide natural resource managers, researchers, and other stakeholders with funding to plan a research project that informs a specific management decision impacting natural resources in the Gulf of Mexico. CRPC in partnership with Louisiana’s Office of Community Development and Department of Environmental Quality, LSU’s Colleges of Coast and Environment and Department of Agricultural Economics, and Pontchartrain Conservancy submitted a letter of intent on September 29. The proposal focuses on decisions to be made in Region 7 and the development of a multi criteria decision making tool with a cost-benefit element that incorporates water quality would augment the current process and would reduce uncertainties with regards to project selection. The total cost of the 12-month effort is \$125,000. We will pursue the write-up of a full proposal if the review team provides a positive review of the LOI.

LSU Deliverables

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

PLAN EVALUATION AND NETWORKS

Since the quarter 2 report:

- A plan evaluation protocol, and network methodology using NVivo and KUMU has been finalized;
- Regional planning documents, ranging from comprehensive plans, to resilience and stormwater planning, to parish hazard management plans, were inventoried for eventual evaluation and analysis with NVIVO Software; and
- An initial stakeholder analysis using planning documents was conducted and presented to the RSC (image below). This provides information as to who is, and is not, collaborating across the region.

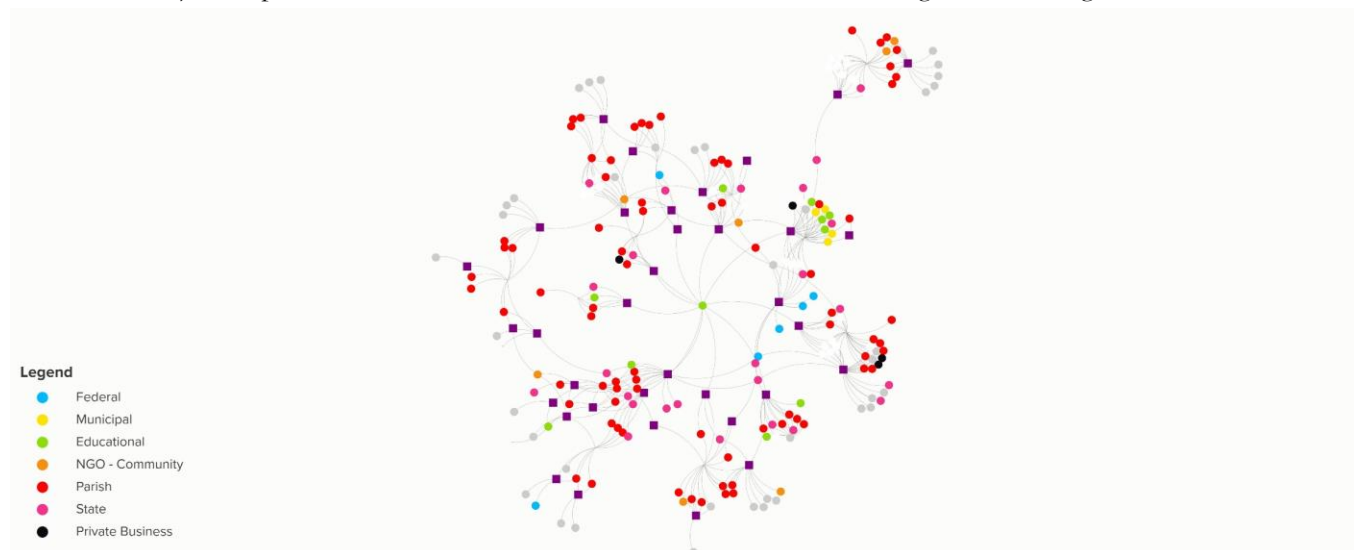


Figure 2: A network map of actors identified in Parish planning documents. Please note that this is a preliminary result and that it is subject to change.



SUBDIVISION CODE EVALUTION

Since the quarter 2 report, Dr. Thomas Douthat and his team have completed initial review of Parish and Municipal residential subdivision regulation for hazard related elements. In quarter 4, CRPC will be working closely with the LSU team to vet the review with local stakeholders prior to conducting an analysis of the information.

ASSISTANCE WITH BUILD OUT OF GOVERNANCE STRUCTURE

Dr. Thomas Douthat has been participating in weekly discussions on the development of the regional governance structure. Dr. Douthat has played a critical role in bringing best practices through literature and research into our conversations and has provided support by sending relevant papers, offering technical advice and expertise, and by seeding and developing content ideas to build the out the structure through activities with RSC members.

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?

2020 has been a challenging year across the globe and it is important to recognize that this work is occurring during a global pandemic, hurricane season, and a racial justice movement that has captured global attention. RSC members have their own emergency obligations that are related to their jobs, organizations, families, etc. so the continuation of this work in the face of overlapping crises shows their dedication and ability to adapt. ***It is critical to note that while there are many challenges, we have also realized opportunities that have provided us with ways to better connect in the face of adversity and to call out the humanity in others as we embrace our vulnerabilities during these times.***

Record Breaking Hurricane Season

As anticipated, the 2020 hurricane season has exceeded averages for number of storms and number of major hurricanes¹. As of September 30, 2020, we have seen 24 named storms and five of those storms have included Louisiana within the cone of uncertainty (Fig. 3). Region 7 has been fortunate to have experienced minimal impacts from these storms but office closures, storm preparation, rescheduling, and preparing for another storm in the midst of a global pandemic has led to impacts to individuals mental and emotional health across the state. Many who do disaster, climate, flood mitigation, and other related areas of work are experiencing compassion fatigue² as they work to manage, in some cases, being triggered from anticipating another traumatic event to navigating how to effectively,

¹ <https://www.noaa.gov/media-release/busy-atlantic-hurricane-season-predicted-for-2020>

² <https://digitalcommons.andrews.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=1004&context=pubs>



and compassionately, engage with individuals who are responding to conversations about future flood risk mitigation activities from one, or more, traumatic experiences they have had in the past that are now being triggered.

The previous text is not to say that an individual's lived experiences of living through a disaster are cumbersome for those managing this work. Instead, it takes a particular set of skills involving empathy, emotional intelligence, and the ability to manage one's own thoughts around current circumstances to step back and see the humanity that exists within someone who may be yelling, crying, or not responding at all so that we can react with compassion instead of frustration and anger.

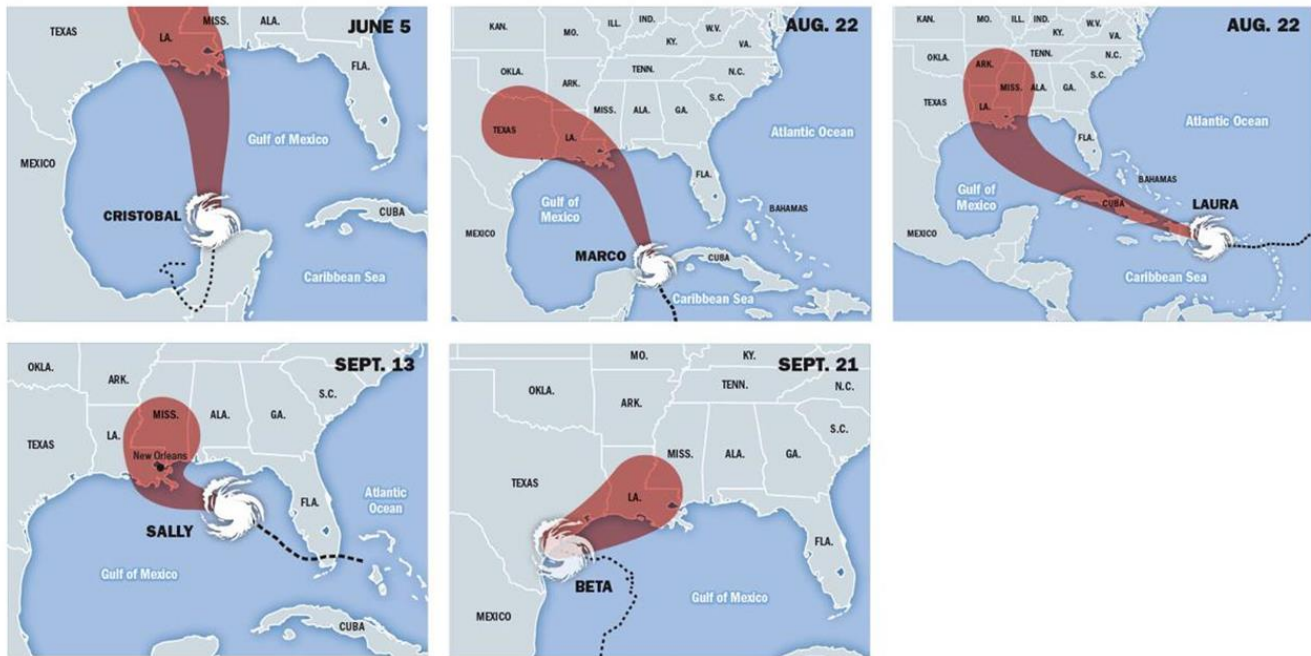


Figure 3: Graphic of tropical systems from June 1 to September 30, 2020 where Louisiana has been included in the cone of uncertainty for hurricane forecasts. Please note this graphic has been modified from https://www.nola.com/news/hurricane/article_bbb1a810-0745-11eb-8d40-db2e3520acca.html.



COVID-19

Louisiana has seen a decrease in overall cases from July 1 to September 30, 2020. While this is a great news, communities and businesses continue to be impacted by COVID-19. Businesses are struggling, many are still unemployed as a result of impacts from the virus, and individuals are struggling to find ways to maintain social connections and a sense of community. A graph showing new cases compared to 7-day average percent positive From March through September can be found below.

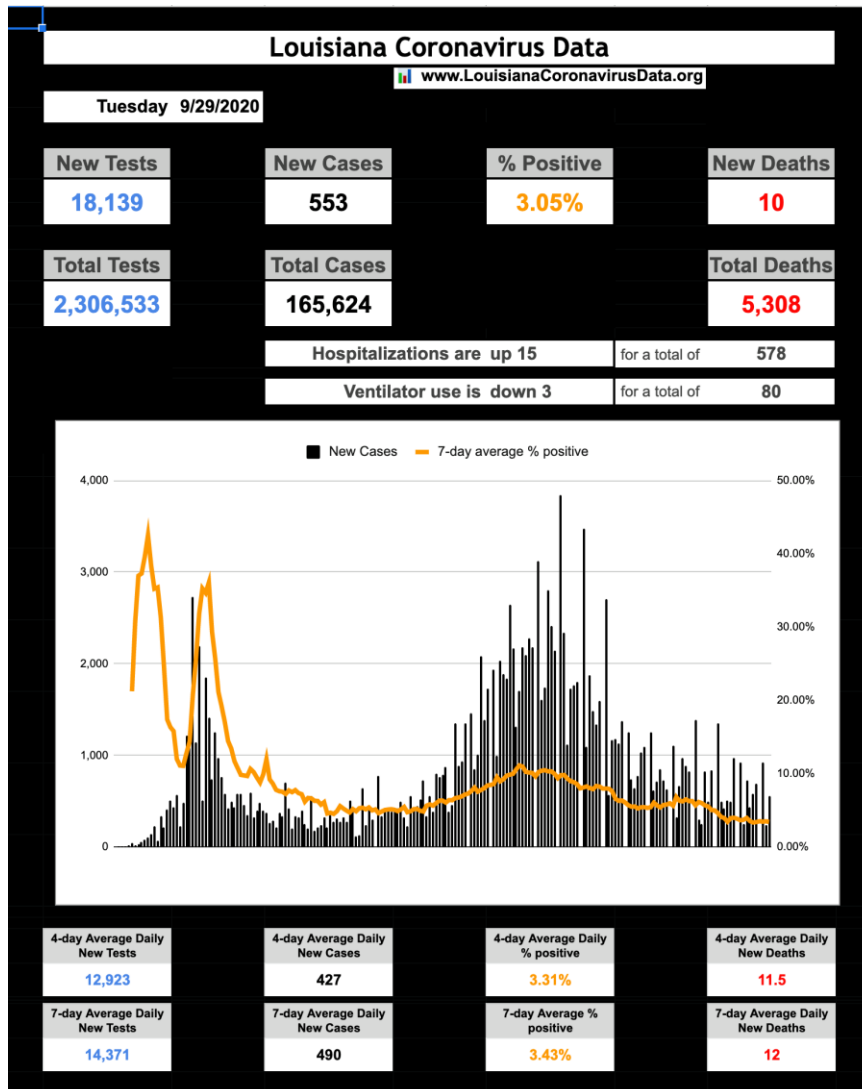


Figure 4: New cases, percent positive and daily numbers reported for September 30, 2020. Source: Louisiana Coronavirus Data <https://docs.google.com/spreadsheets/d/1vAjTeWvVllrzHCV1tahVThl9ZkUZIIIEEX7uAq7TsIao/edit?usp=sharing> modified from Louisiana Department of Health <http://ldh.la.gov/Coronavirus/>.



Federal Election

This Federal election season has been challenging for many. Similar to the discussion about trauma-informed responses and compassion fatigue in the section on hurricanes above, many individuals are triggered by the divisiveness and topics of the current Federal election. This context is important as we consider that our most anticipated deliverable of creating a provisional governance recommendation for watershed management at a regional level is being completed during this time. Additionally, voting in the midst of a global pandemic and the most active hurricane season to date presents unique challenges for populations who are most vulnerable to COVID-19 and disaster-induced migration.

Please note that this is not a declaration by Capital Region Planning Commission, Louisiana's Office of Community Development, the Louisiana Watershed Initiative, or any of our partners advocating for any particular outcome. It is simply an acknowledgement of an additional challenge that is being faced while pursuing activities to achieve our goals.

HAVE THE GOALS AND OBJECTIVES CHANGED? HOW?

The goals and objectives have not changed.

REGION 7

JULY 28, 2020 MEETING MINUTES

ROLL CALL

Participants: 67

RSC Members and Alternates

| Affiliation | Name (bold indicates primary member, not alternate) | Present (Y/N) |
|--|---|---------------------------------|
| Ascension Parish | Michael Enlow and Ron Savoy | Y |
| East Baton Rouge Parish | Fred Raiford | Y |
| East Feliciana | James Stewart | N |
| Iberville Parish | John Clark | Y |
| Livingston Parish | Steve Kistler | Y (came on after introductions) |
| St. Charles Parish | Earl Matherne | Y |
| St. Helena Parish | Major Coleman | Y |
| St. James Parish | Ryan Donadieu | Y |
| St. John the Baptist Parish | Devin Foil | Y |
| St. Tammany Parish | Ross Liner | Y |
| Tangipahoa Parish | Bridget Bailey | Y |
| Washington Parish | Bobbi Jo Breland and Alex Sumrall | Y |
| West Feliciana Parish | Gary Mego | Y |
| Amite River Basin Commission | Dietmar Rietschier | Y |
| Home Builders Assc. Of Greater Baton Rouge | Karen Zito | Y |
| Department of Environmental Quality | Chuck Berger , John Sheehan, and Binh Dao, | Y |
| Lake Pontchartrain Basin Foundation | Ronny Carter | Y |

FLOOD RISK AND VULNERABILITIES

Presented by Patrick Forbes and Evelyn Campo from OCD

Objective: Develop a common understanding of known flood risks, vulnerabilities, and priorities in Region 7.

Building on previous efforts: Region 7 planning and policy professionals worked with LWI to identify these priorities based on their region's flood risk and mitigation needs.

- Enhance public understanding of flooding probability



- Align regional methods statewide
- Achieve long-term results through a water management district approach
- Lean on technical experts to develop policy guidelines
- Use data and science to guide policy shifts

We are trying to make this a tool that works for you.

REGION 7 FLOOD RISK ASSESSMENT

We must accomplish the following

- Build a common vocabulary
- Consider various risk factors
- Work with nature

Region 7 watersheds

- Lake Maurepas
- Lake Pontchartrain
- Lower Mississippi-Baton Rouge
- Pearl

Types of flood risk

- Coastal floods - surge and tidal.
 - Comments, questions, and feedback:
 - From Matthew Allen: Coastal Storm Surge flooding goes up the rivers. The Tchefuncte/Bogue Falaya System sees tides into Covington
- Extreme rainfall or precipitation
 - Fluvial (river) floods – river overflows its banks during rainfall in a watershed.
 - Pluvial floods – urban/suburban overloading of drainage systems; not caused by an overflowing body of water.
 - Comments, questions, and feedback:
 - From Chuck Berger: Can attest to spots between Baker and Zachary where the land is flat, and the water has nowhere to go; ponding in yards
 - From Mike Enlow: Please zoom into Prairieville area on map.
 - Southeast BR, Livingston, Ascension all have backwater flooding impacts, opportunities for collaboration.
 - From Ryan Donadieu: Is there a way to determine which homes flooded during a storm surge event versus those that flooded during rain events? 2005 mostly storm surge; 2016 mostly pluvial/fluvial/backwater.
 - Note: illumination of different types of flooding is useful
 - From Thomas Douthat: Will the map be public? Is it yet? Can one download the layers?
_Pat F says yes



- From Honora Buras: Will you include differential effects of impervious pavement, channelized streams vs. natural streams and naturally vegetated (especially forested) areas that can absorb floodwaters (including in headwaters as well as floodplains) rather than rapid runoff that floods neighbors.
 - Dietmar: 1% etc. – those are FEMA maps. Those are dated at this time.
 - Caution against planning from outdated data.
 - Land use, deforestation affects these as well. Population densities make tremendous difference.
 - Development of scenarios is useful in planning. – Dietmar – running models under basic scenarios give us good look at future for potential planning through those scenarios.
 - From Alexandra Carter: These types of Standard Operating Procedures or SOPs (developed in advance of events to help guide effective response during an event and based on predictive modeling and rainfall occurrence) are being requested in other areas of the state as well. Namely Region 5.
 - Fred: systems set up for older issues.
 - Older infrastructure was designed for different standards and create challenges in today's environments.
 - From Ross Liner: How will the modeling be conducted in areas of ephemeral streams?
 - From Honora Buras: Bayou Manchac gets backwater flooding from Amite. In 2016 Manchac was overwhelmed also with extra channelized runoff from BR due to clearing of floodplain forests for development along those bayous
 - John Clark: Maurepas, Amite aren't being dredged. How can we work together to address impacting issues?
 - Dietmar: we've evolved into a system where one jurisdiction fights the other. We have to stand above that and look from a holistic point of view to see how we can resolve that problem. Nobody maintains waterways. Development continues – agencies need to be responsible for drainage systems.
- Backwater floods

TRADITIONAL GAPS IN UNDERSTANDING FLOOD RISK

- 44% of Region 7 is located in a FEMA Special Flood Hazard Area (SFHA).
- V zones – Coastal High Hazard Areas (high risk)
 - Comments, questions, and feedback:
 - From Melissa Kennedy: We should encourage folks outside the "regulatory" floodplain to obtain flood insurance as well. We need to stop saying "people don't need it because they aren't in the floodplain".
 - From Jacqueline Ward: Since Region 7 is in such a FLOOD ZONE shouldn't we stop the development and keep this Undeveloped area to soak up some of this water when it hits region 7. dirt soaks up water cement doesn't



- Dietmar: wind impact, hurricane impacts on lower basin with different dynamics from riverine issues.
- Questions exist related to components/elements of the H&H models and resolution.
- Models... Question from Thomas Douthat_
- Chuck provided some background.
 - The resolution of the models will vary for different areas based on the flood risks they need to address for the different areas. The models that are being developed are baseline models. They are tools. They will not provide answers to all of the questions we have. It will be up to local entities to work with contractors to take the models and enhance them to answer specific questions.
- Will compile modeling-related questions from today and plan a brief check-in with responses as part of next RSC meeting. /Alex
- From Bridget Bailey: I'd be interested in seeing the data Dietmar is discussing if it could be shared with our steering committee.
- From Jacqueline ward: With every heavy rain Gonzales floods out, people's homes flood, streets flood. Should we maintain grass areas instead of all this Subdivision that are being built, which is causing more flooding in Gonzales.
- Dietmar: Risk is the main discussion for the future.
- From Matthew Allen: St. Tammany still uses 1989 FIRM maps and refuses to update.
- From Ross Liner: St. Tammany is currently working with FEMA to update and adopt maps.
- From Honora Buras: Ascension FIRMs are also horrible.
- From Gary Mego: West Feliciana, 1979, SFHA isn't even on the map in that slide
- Modeling that is underway will provide improved tools
- Areas near rivers have issues even when rivers don't overflow.
- Along Brightside Lane near the Mississippi River, when the river is high that impacts area residential issues/chuck.
- Same along Manchac/Dietmar
- From Jacqueline ward: Developments are replacing the wetlands in Gonzales; thousands of acres of wetlands have been replaced with Development Sites/Cements.

FEMA REPETITIVE AND SEVERE LOSS DATA

Case study: March and August 2016 floods

- 86,304 homes impacted in Region 7
- 56% of structures impacted located within a SFHA

BEST PRACTICE: WORKING WITH NATURE

- Using the natural functions of wetlands, forests, agricultural areas in order to improve our flood management and enhance the value of those natural features
 - Comments, questions, and feedback:



- Chuck - We need some new solutions to some old but continuing and increasing problems. These problems are not going to be solved with the answers/tools used in the past.
- Ideas – Dietmar/Amite River – not in contradiction with Darlington Reservoir/USACE effort, but there was a proposal 15 years ago to do some retention along the Amite.
- “Dry Dams” or “dry lakes” could hold water in an interim period during storm events. Use areas that are damaged environmentally, creating three small-impact dams along the Amite River to hold a certain amount of floodwater. They could hold a substantial amount of water. Open space during non-flooding (parks/etc.) and access east/west.
- From Jacqueline Ward: If ponds are already filled, how much water can they hold to protect neighborhood from flooding. Ponds we are told is to hold water and let it out slowing to streams. DOESN'T NOT WORK IF THE PONDS ARE ALREADY FULL OR CLOSE TO FULL.
- From Honora Buras: There should be policies that prevent clearing of floodplain forests (swamps and bottomland hardwoods) where they still exist, or at least a large buffer zone along all streams.
- Chuck: LDEQ reviewed/provided comments on dry dam ideas proposed by the US Army Corps of Engineers. As a result, the COS evaluated the possibility of using abandoned sand and gravel mines to restore the meanders in the Amite River at various abandoned/closed sand and gravel mines.
- Dietmar/Pat: Meanders slow water.
- From Matthew Allen: Ponds for storage are not the whole story. Ponds do nothing for the loss of conveyance due to fill in floodplains
- From Jacqueline Ward: These Developers say these ponds will replace wetlands to prevent flood to current residents - really.
- From Ryan Donadieu: Every area is different, even within our regional watershed. On the southern end, we are seeing saltwater encroachment destroying our wetlands/swamps and converting them into marsh types of vegetation, which allows the coastal surge to increase as it moves at a much faster pace incoming from storms.

CDC SOCIAL VULNERABILITY INDEX

- Based on the following factors:
 - Socioeconomic status
 - Household composition and disability
 - Minority status and language
 - Housing and transportation

PROJECT TOOL OVERVIEW

- The state **does not** have project funds available yet (waiting on grant agreement from HUD).



- The Regional Project Inventory is to be filled out by **October 31**. The submission of a project **does not** mean that it will be funded.
- Rachelle and OCD staff can assist if you have a question. If you have a suite of projects that fit together as one unified project, try and group those projects into one Project Type.
- Please double check that your project was submitted and is not missing.
- Question: When do you think the agreement will be signed?
- Answer: Soon, we hope.
- Round 1 Project Viewer
- Shows all projects and their details that were submitted in the project survey tool and as applications for Round 1.
- Project inventory survey tool - Region 7: <https://arcg.is/1SCmHj>.
- Round 1 project inventory viewers – Region 7: <https://arcg.is/0iaD0G>.
- Visit <https://crpcla.org/projects> to view all links.
- ****Links are public – feel free to share****
- Public Comment
- Note: These comments may not be verbatim. To see a full recording of the presentation, please visit Capital Region Planning Commission’s website at <https://crpcla.org/previous-events>.
- Marie Constantin – Special machines could be the solution to removing litter. An example is Pensacola, Florida.
- Chuck Berger – We have someone who is working on identifying trash and the overflow into drainage and waterways.
 - Through restoration projects, DEQ has become involved with citizens addressing trash. They have partnered with someone who develops a device that captures trash in a waterbody. They are then able to analyze the trash and determine where it comes from. They can then go to the source and see if there are simple ways to eliminate/minimize trash from entering local waterways.
- Honora Buras – I would like to see an effort to identify key lands that should be targeted for conservation – either by easement or fee title acquisition.
- Jacqueline Ward – New development is causing past development to flood more often. Developers say that ponds will help this issue. Does anyone put these maps into consideration?
- Matthew Allen – Would like to see tax credits for landowners preserving floodplains or at a minimum river valleys.

CLOSEOUT

- Motion to Adopt May and June Meeting Minutes
 - Motion carried
- (OPTIONAL) Mid- August: Values, visions, goals, workshop
- The next meeting is August 26, 1-4 PM: LSU – Governance 101, CSRS – Root Cause Analysis workshop



- Rachele Sanderson sent a survey to Regional Steering Committee members to determine dates for meetings in mid-August (optional RSC meeting), September, and October.
- Motion to adjourn the meeting
 - Motion carried

DRAFT



LWI Region 7

Regional Steering Committee (RSC) Meeting

JULY 28, 2020

Phone: +1 312 626 6799

Meeting ID: 889 9807 6367

Password: 288472



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working together for sustainability and resilience

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
 - ❖ We are live streaming today’s meeting on Facebook

Recognizing that...

- We're meeting during a global pandemic and global civil unrest during hurricane season in the Gulf.

- Thank you for being here!

Objectives

- Flood risk and vulnerabilities presentation and discussion
- Overview of project viewer and project inventory survey form and questions

AGENDA

| TIME | ITEM |
|------------------|---|
| 2:00 – 2:20 p.m. | 1) Introductions and meeting logistics |
| 2:20 – 3:50 p.m. | 2) Risk and vulnerabilities presentation |
| 3:50 – 4:10 p.m. | 3) Project Viewer & Inventory Survey Tool |
| 4:10 – 4:20 p.m. | 4) Public comment |
| 4:20 – 4:30 p.m. | 5) Closeout |



Introductions

| NAME | AFFILIATION |
|--------------------|--|
| Mike Enlow | Ascension Parish |
| Tom Stephens | East Baton Rouge Parish |
| James Stewart | East Feliciana |
| John Clark | Iberville Parish |
| Mark Harrell | Livingston Parish |
| Earl Matherne | St. Charles Parish |
| Major Coleman | St. Helena Parish |
| Ryan Donadieu | St. James Parish |
| Devin Foil | St. John the Baptist Parish |
| Ross Liner | St. Tammany Parish |
| Bridget Bailey | Tangipahoa Parish |
| Bobbi Jo Breeland | Washington Parish |
| Gary Mego | West Feliciana Parish |
| Dietmar Rietschier | Amite River Basin Commission |
| Karen Zito | Home Builders Association of Greater Baton Rouge |
| Chuck Berger | Department of Environmental Quality |
| Ronny Carter | Lake Pontchartrain Basin Foundation |



FLOOD RISK & VULNERABILITIES

Flood Risk & Vulnerabilities

- **Purpose:** Develop a common understanding of known flood risks, vulnerabilities and priorities in Region 7
- [Link to presentation](#)
- **Questions?**



PROJECT SURVEY OVERVIEW

Project Inventory Survey Form

- **Please note:**
- The state **does not** have project funds available yet (waiting on grant agreement from HUD)
- Questions about Round 1 may be answered in this [FAQs document](#). If your question on Round 1 projects has not been answered in the FAQs document, please contact LWI-Round1@la.gov
- The deadline for the project inventory to be filled out is October 31. This will be a “living” database and will continue to be updated over time



Project Inventory Survey Form

- **Purpose:** The goal of this tool is to have a comprehensive project inventory across the region.
- **What can be submitted:** New ideas (including programs), projects that are under construction, and projects that have been constructed in the last two years.
- **Who can submit:** Anyone
- **Note:** The submission of a project does not mean that it will be funded, and the submission *is not* the same as a formal submission for funding.
- **How to use it:** <https://arcg.is/1SCmHj>
- **Questions? Visit** <https://crpcla.org/projects> to view all links





ROUND 1 PROJECT VIEWER

Round 1 Project Viewer

- **Purpose:** This tool shows all projects, and their details, that were submitted in the project survey tool and as applications for Round 1.
- **How to use it:** <https://arcg.is/0iaD0G>
- **List of eligible pre-applications:** <https://www.watershed.la.gov/eligible-pre-application-projects>
- **Questions?**
- **Visit** <https://crpcla.org/projects> to view all links



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. Thank you.



Upcoming meetings *subject to change

MID-
AUG.

- Values, vision, goals workshop

AUG. 26

- **LSU:** Governance 101
- **CSRS:** Root cause analysis workshop

SEPT.

- **CSRS:** Governance gap analysis

OCT.

- **LSU:** Existing conditions overview
- Building out governance recommendation



RSC member meeting (business occurs)



Open meeting (no business, not req. for RSC members)



Closeout

- Adoption of May and June meeting minutes
- August **optional** meeting for setting vision, values, goals
- Schedule meeting dates <https://www.surveymonkey.com/r/59B5M3C>
- Next Meeting: August 26th from 1 to 4 pm. This is different than the optional meeting
- Action items



Contact information

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

Drew Ratcliff, Regional Disaster Recovery Manager
DRatcliff@crpcla.org

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



Capital Region Planning Commission

Local Governments Working Together Since 1967

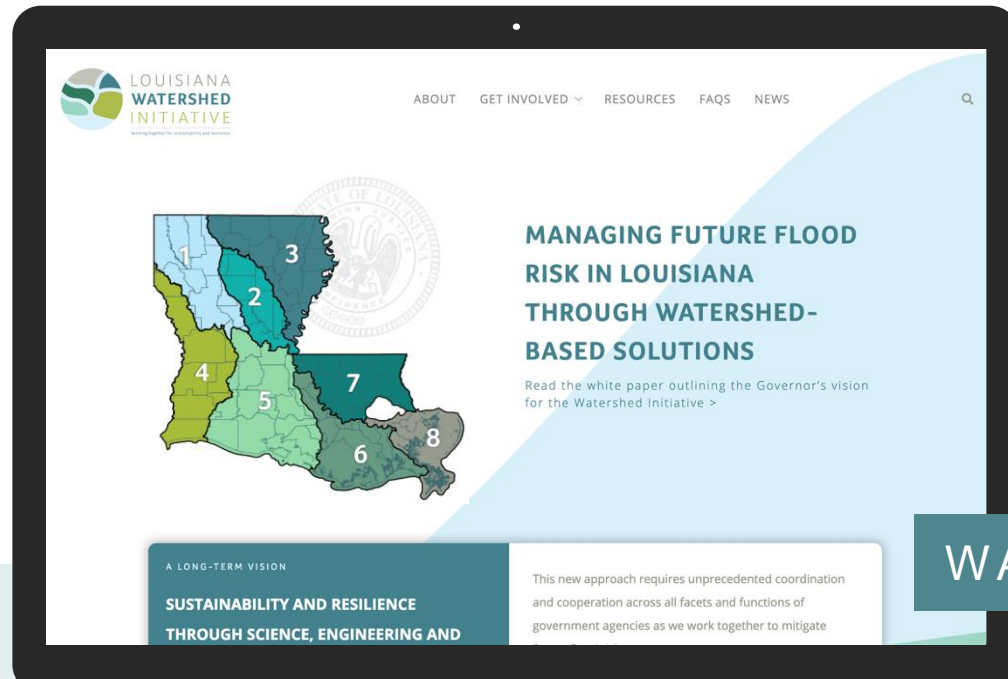


 @LAWATERSHEDINITIATIVE

 @LAWATERSHED

 WATERSHED@LA.GOV

THANK YOU



WATERSHED.LA.GOV

REGION 7

items in bold were added based on comments from the public comment period

The mission of the Louisiana Watershed Initiative is to reduce flood risk, improve floodplain management throughout the state and maximize the natural and beneficial functions of floodplains. The values, vision, and goals that are provided below support this mission and reflect input from residents of Region 7 that was collected during a virtual workshop on August 19, 2020. A recording of that meeting can be found at <https://crpcla.org/previous-events>. This document may change over time as we learn more about the current state of practice in the region and as our needs shift.

GUIDING PRINCIPLES FRAMEWORK

The values, vision, and goals below are centered around the following two concepts:

1. Region 7 understands that our current, and future flood risk challenges, are intrinsically tied to every other part of our lives. This includes education, housing, transportation, and more.
2. Our challenges can be turned into opportunities to develop solutions that reduces flood risk and leads to equitable outcomes.

VALUES

- Advocating for equitable solutions and outcomes – We believe that we can develop solutions that address disparities and that our outcomes will lead to more equitable futures for individuals and communities.
- Access – we value ensuring that everyone has access to resources, information, and opportunities to be a part of conversations about our communities.
- Culture – We celebrate our many cultures and believe that paying homage to and acknowledging our culture within the work will lead to better outcomes.
- Community – Sharing life together is a part of who we are, we are one big family, and showing up for each other is a part of how we take care of one another and express our shared belonging.
- Creativity and innovation – We believe that Louisianan creativity and innovation is going to make us more successful.
- Diversity –Louisiana’s challenges impact everyone and to solve them, we’re going to need everyone to be at the table. This is why we celebrate and value a diversity of opinions and world experiences.
- Economy and environment – Our economy and environment are tied to one another and we should strive to create economic opportunities that support the environment that we are a part of.



- History – The best solutions and outcomes are created by letting history guide us as we look to the future.
- Living with water – Water is what connects us. It is in our genes and bone marrow. It has shaped our lives, our culture, and economies. Water is our life and it is the root of everything that we love about our Region and about Louisiana.
- Sustainable growth – The best kind of growth is strategically planned, planned with (not for) community, is done in harmony with environmental conditions, and is responsive to the needs of the region.
- Shared destiny – Our destiny across the region is tied together and that we must work together toward a shared vision and goals.
- **Quality of life – We value our quality of life and all people have the right to a healthy environment, clean air, clean water, and natural areas that protect and preserve our natural areas for future generations.**

VISION

As long as Region 7 of the Louisiana Watershed Initiative exists with an advisory body, we will pursue the following vision and goals.

Vision statement: 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.

This vision is one where:

- Communities and sectors converge to collaborate around managing water, like the tributaries to our rivers do.
- We are responsive to our communities, changing environments, and subsequent impacts.
- We live with water instead of trying to control it.
- Solutions are developed for access to safe, low risk housing that is also affordable.
- Our environment and economy go together and do not exist at the expense of one another.
- Our projects, programs, policies, and planning efforts support a future with less flood risk, cleaner water, and opportunities to create more equitable outcomes.
- Floodplain management, land use, and development decisions across the region incentivize sustainable growth, minimize competition, and are consistent.
- Water quality in our surface water bodies is improved, creating healthier environments for all.



- We return to our roots and traditions as they relate to living with water and our natural environments.
- We transform today's challenges into opportunities for future generations.

GOALS

OVERALL GOALS

- Equitable flood risk reduction (climate and environmental equity)
- Address urban/rural split and resource disparity
- Upstream/downstream coordination
- Identify funding sources (short and long-term)
- Regional planning efforts and the development of a comprehensive strategy that is beyond political terms
- **Understand, anticipate, and incorporate the impacts of migration and population shifts due to acute (flood events) and chronic (land loss and rising seas) disasters within our strategies**

POLICY AND PLANNING GOALS

- Incentivize improved development standards and the enforcement of them
- Consistent ~~and continuous~~ regulation and development standards
- Development standards are enforced consistently
- Build in resilience practices, planning and regulatory capacity at all levels of our local, parish, and regional offices
- Update and develop preservation ordinances for the purpose of keeping floodplains and adjacent undeveloped land for flood storage capacity
- Strategic placement of development across the region based on best available data and planning practices
- Development of decision-making and support tools that support local government decision-making
- Integrate flood risk information, data, and planning efforts with updates to codes, regulations, and ordinances
- Provide examples and tools to update codes, regulations, and ordinances
- Improve quality of decision-making
- **Key areas that provide significant flood storage, ecosystem, and other benefits are identified, and preserved**



PROGRAMS AND PROJECTS GOALS

Outreach and education

- Opportunities for citizen, parish, and elected official (Municipal, Parish, State) education, building awareness and creating champions
- Courses and training opportunities on water management for Parish and municipal staff
- Opportunities for input planning, public and private investment at all levels
- Development of outreach materials that convey concise, understandable, and actionable information and messages
- Develop an intentional process for accountability associated with activities conducted by the Regional Steering Committee
- Connecting locals to information on projects, jobs, and businesses within the water management sector

Projects

Design and fund projects that are responsive to our needs. Examples may include:

- Equitable buyout and elevation projects/programs. Find opportunities to provide matching funds.
- Retrofit already developed areas utilizing innovation and learning from best practices
- Projects that reduce negative impacts downstream, like reservoirs
- Projects that improve the natural function of the floodplain
- **Projects have multiple uses and co-benefits (ex: open space reserves that also serve as public recreation space)**

DATA COLLECTION AND MANAGEMENT GOALS

- Use data (such as rain and river gauge network data) and develop models to give us visual representations of flood risk
- Use data and models for the purpose of project evaluation, scenario planning, and plan updates
- Collect and house data for model, project use, and more informed decision-making
- Collect and consider traditional ecological and community data and information for planning efforts and decision-making



LWI Region 7
Regional Steering
Committee (RSC) Meeting
SEPTEMBER 1, 2020



LOUISIANA
WATERSHED
INITIATIVE

working together for sustainability and resilience

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



Values, vision, goals workshop

- Living with water
- Our economy and the environment are tied
- Diversity in culture and industry
- Our culture is rooted in water
- Inspiration as a result of Innovation, Education, Preservation, and Collaboration
- Necessity for differing opinions and points of view
- Design-year storm terminology
- Collaborate and exchange information
- Benefitting low-to-moderate income communities
- Good science and data drive decisions



Objectives

- Identify and discuss elements of governance structures
- Identify and discuss key concerns and root causes for flooding in Region 7





AGENDA

1. Introductions and meeting logistics
2. Modeling update
3. Governance 101
4. Root cause analysis discussion
5. Public comment
6. Closeout



Introductions

| NAME | AFFILIATION |
|--|--|
| Mike Enlow 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 |
| Mark Harrell and/or Steve Kistler | 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 |
| Devin Foil and/or Rene Pastorek | St. John the Baptist Parish |
| Ross Liner (Chair) and/or Jay Watson | St. Tammany Parish |
| Bridget Bailey and/or Melissa Cowart | Tangipahoa Parish |
| Bobbi Jo Breeland and/or Alex Sumrall | Washington Parish |
| Gary Mego and/or Emily Cobb | West Feliciana Parish |
| Dietmar Rietschier | Amite River Basin Commission |
| Karen Zito and/or Diane Baum | Home Builders Association of Greater Baton Rouge |
| Chuck Berger (Vice-Chair) and/or John Sheehan, Binh Dao | Department of Environmental Quality |
| Ronny Carter and/or Kim Coates | Lake Pontchartrain Basin Foundation |





1. Modeling update



Update and meet and greet

- Introductions to Region 7 modeling team
- Data collection and a brief update
- Statewide H&H modeling FAQs
- Model data management team members

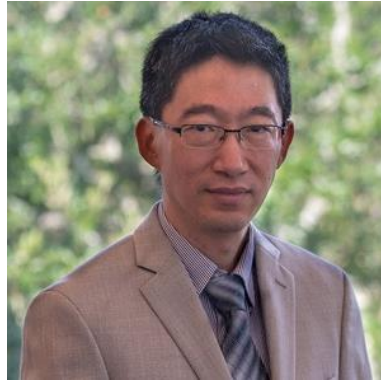


Model data management team members

DEVELOPING RECOMMENDATIONS ON MODEL USE, UPDATES AND STORAGE



**Emad Habib,
Ph.D.**
UL Lafayette



Kelin Hu, Ph.D.
Tulane University



**Ehab Meselhe,
Ph.D.**
Tulane University



**Brian Miles,
Ph.D.**
UL Lafayette



**Mohamed
ElSaadani, Ph.D.**
UL Lafayette



Liz Skilton, Ph.D.
UL Lafayette





2. Governance 101





Governance for Watershed Organizations 101: Cases and Examples

Thomas H. Douthat, JD, PhD

LSU College of the Coast and Environment

tdouthat1@lsu.edu

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Topics to Cover

- Watershed governance and organizations
- 4Rs – Rules, Resources, Relationships, Reporting
- Cases and examples
- Conclusions

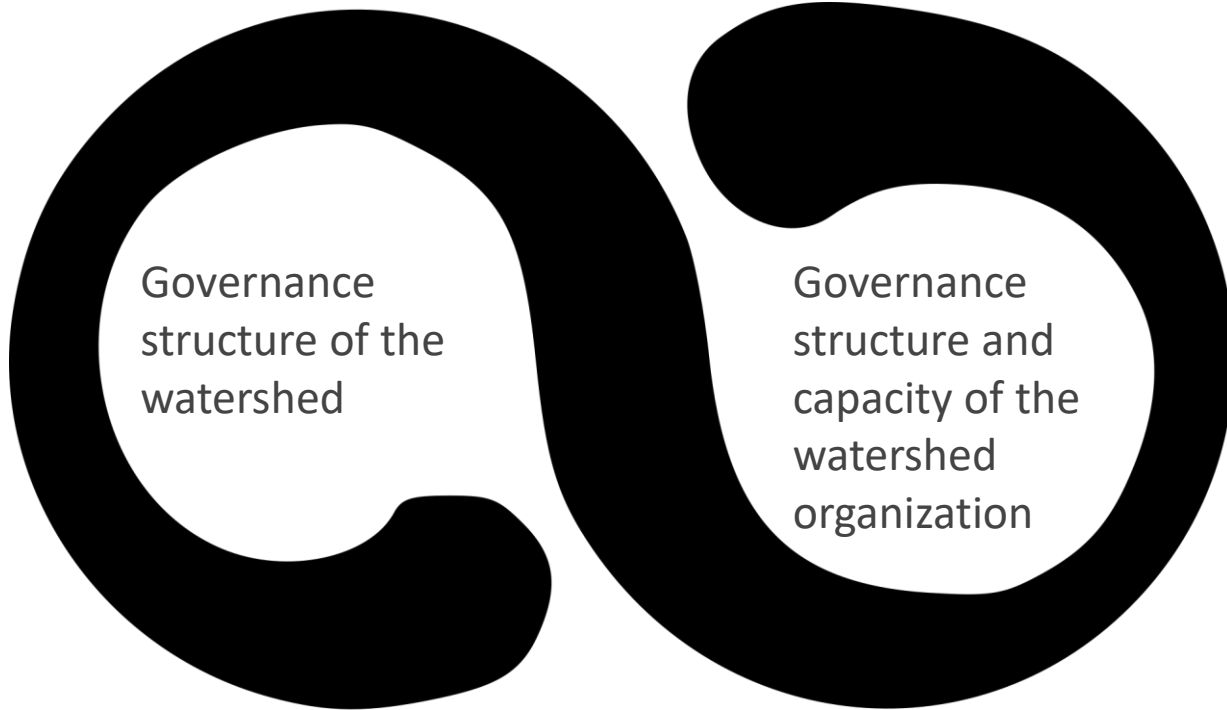
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Watershed governance and organizations



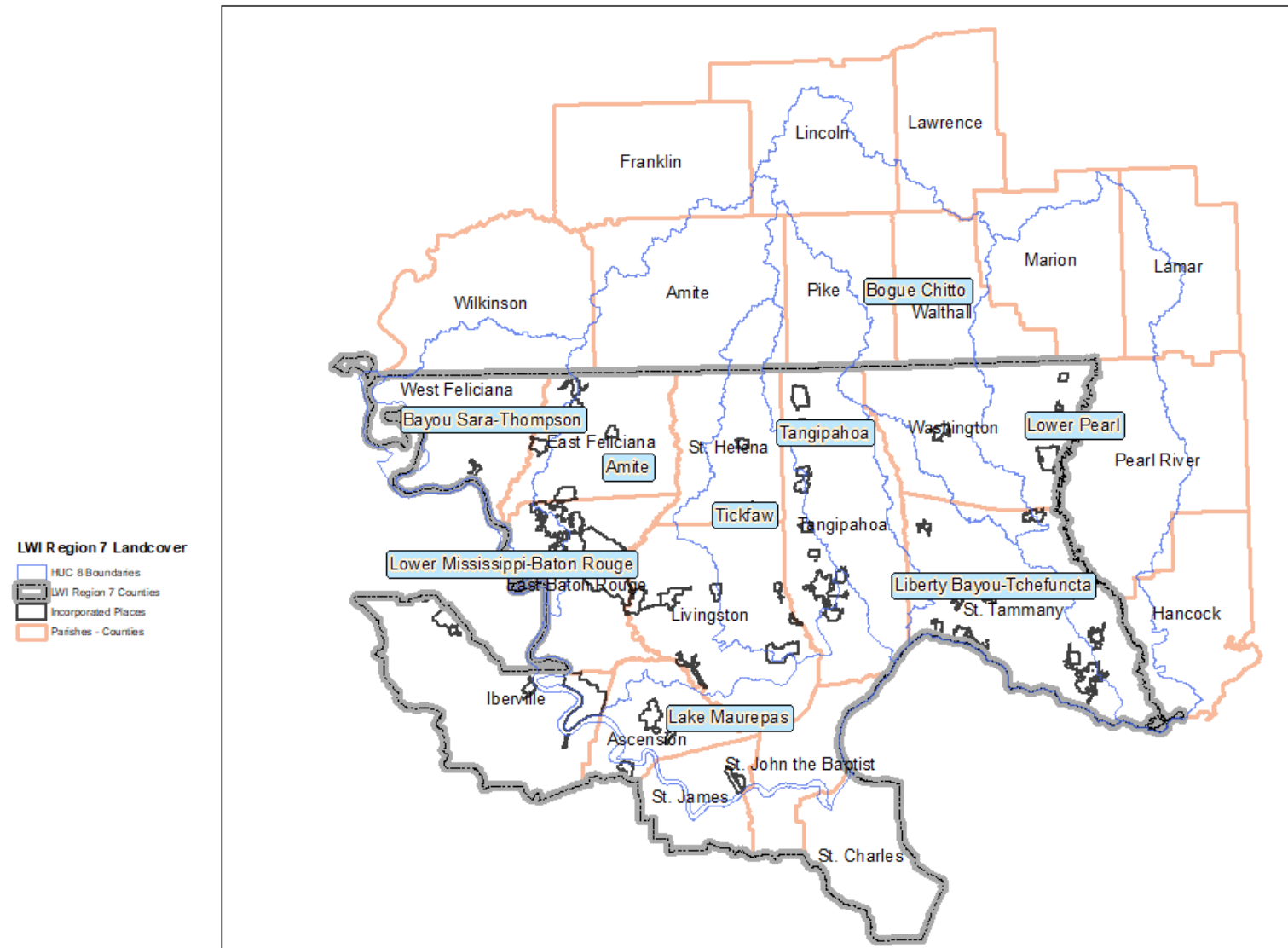


- Institutions: The rules, constraints, and structure of the game
- Organizations: Groups perusing a common interest
 - Corporate (for profit or ngo
 - governmental, non-governmental, etc.)

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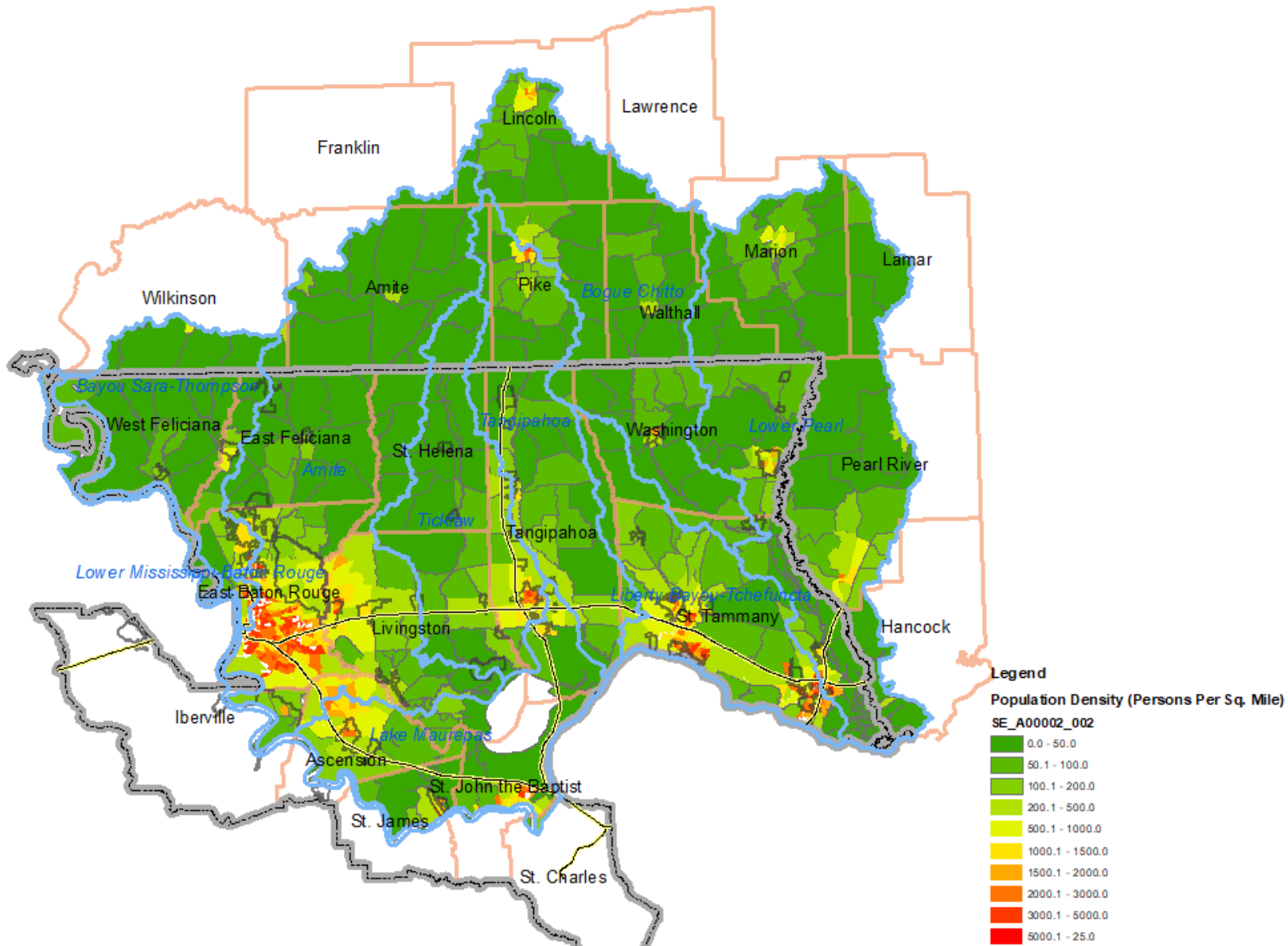
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LWI Region 7 Parishes & Watersheds



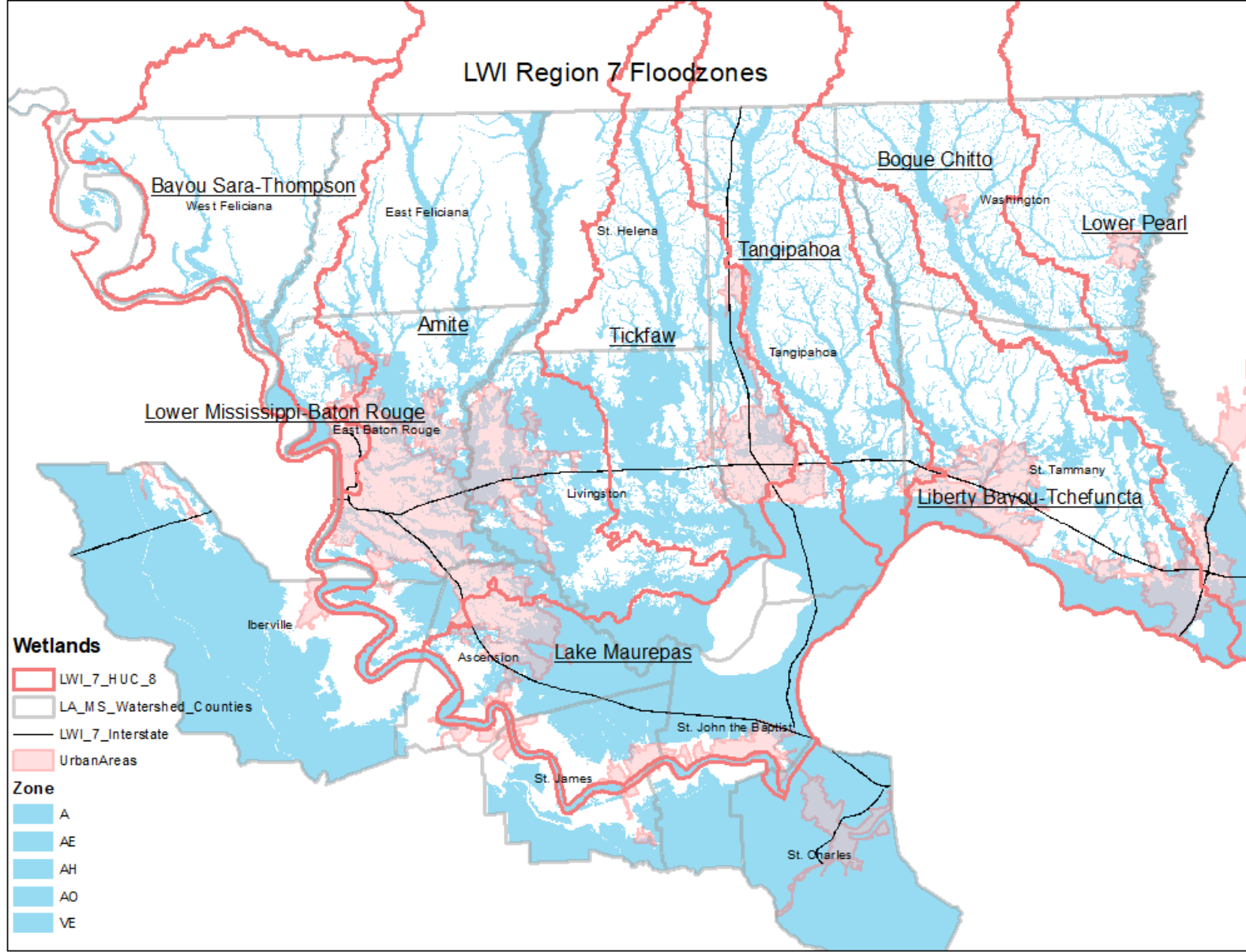
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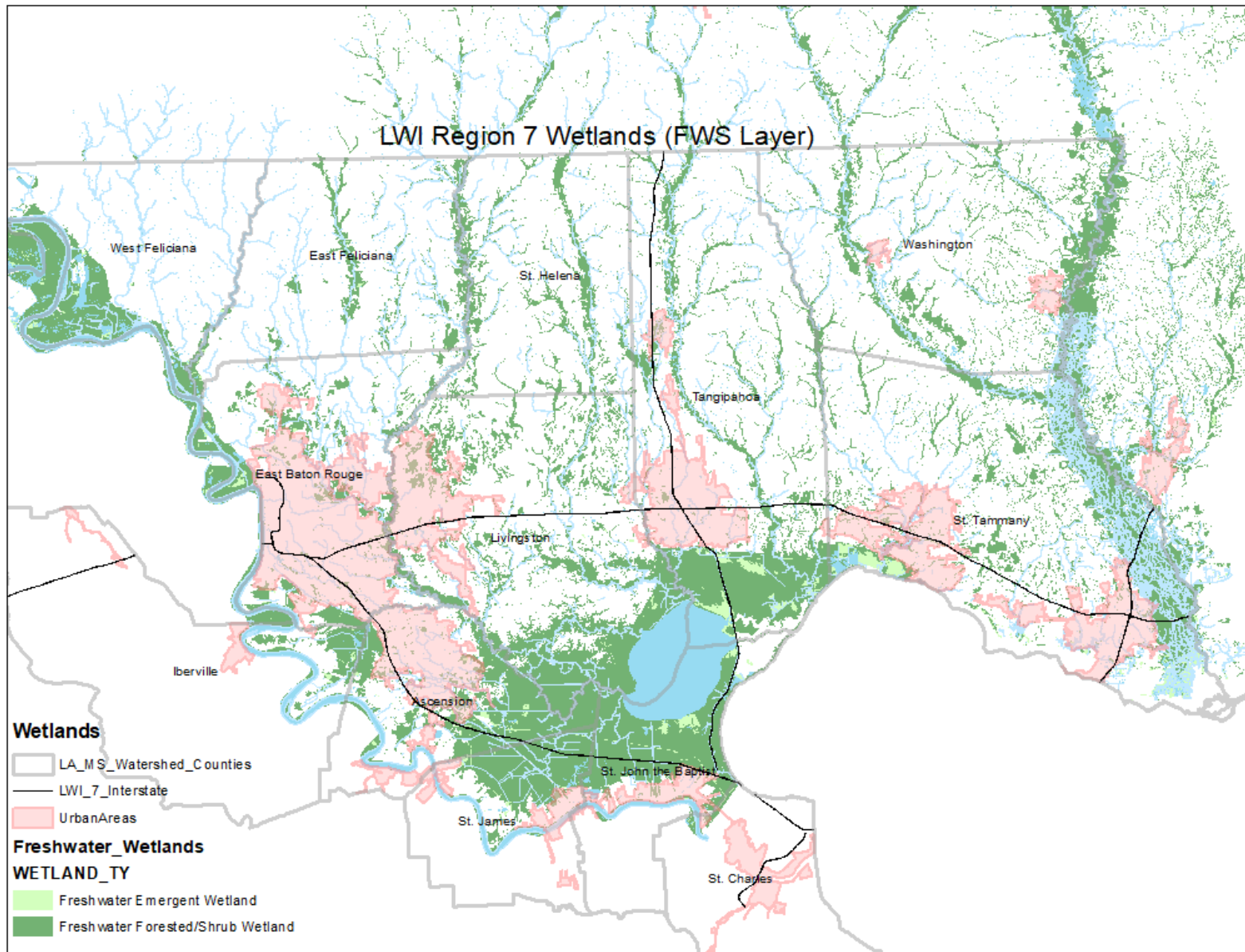
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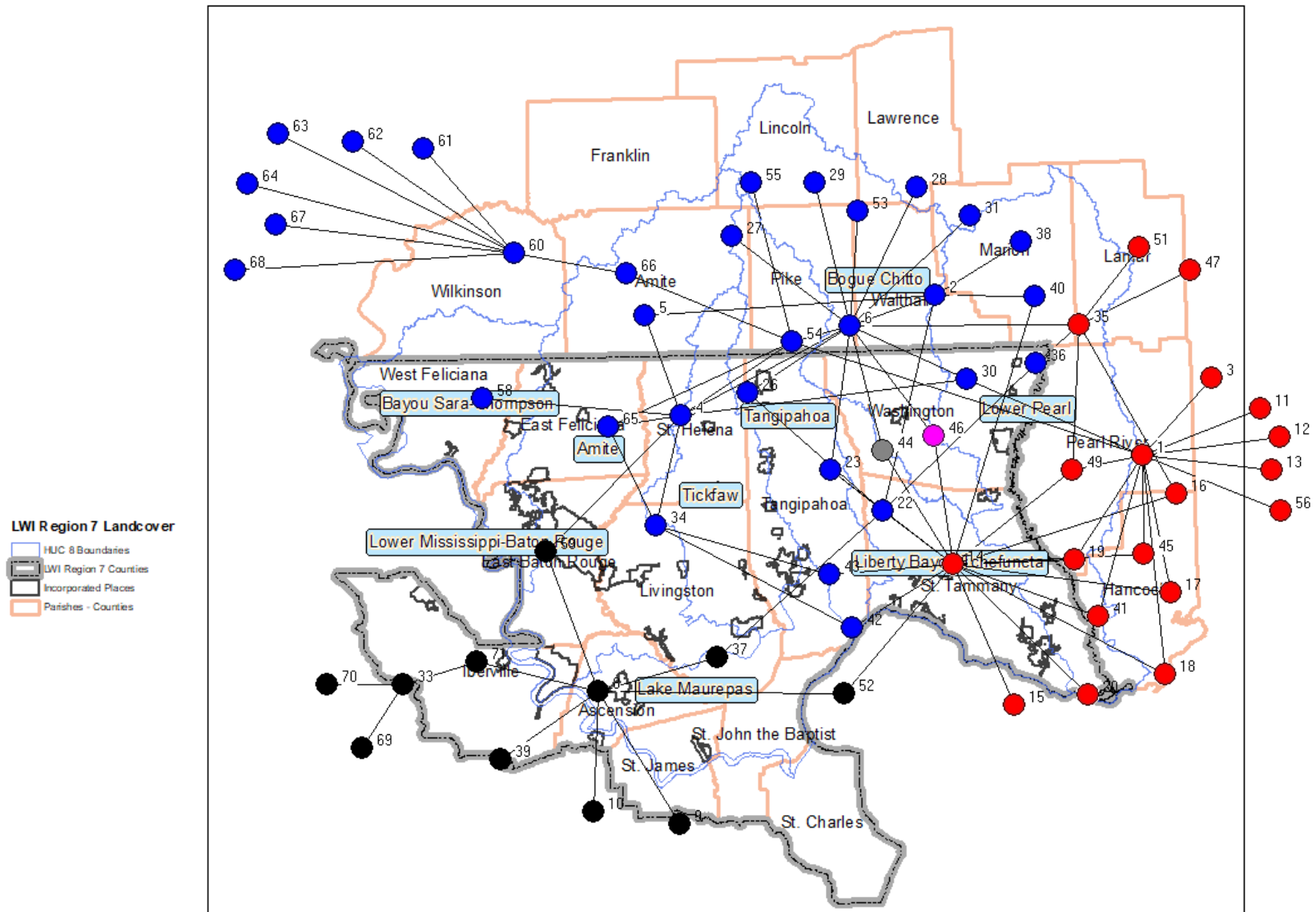
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Watershed Governance Challenges

- Governance capacity is an emergent property the governance institutions, management behaviors, and challenges in managing the complex problems related to water quality, drainage, storm water, and flooding

- Socio-ecological fit
- Fragmented decision making
- Knowledge gaps
- Uncertainty
- Divergent interests
- Scarce resources (\$)
- Others?

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Without Institutional Change: History Repeats Itself



- *1960s: Louisiana Identifies Need for Multijurisdictional Drainage Solutions*

- *1960 - “A statewide drainage program is being encouraged and assisted by the Department of Public Works to effect better coordination of the drainage systems throughout entire parishes and watersheds, as the projects of some districts have aggravated drainage and flooding problems in others.”*

- *Some legal aspects of water use in Louisiana (Borton, 1960)*

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Organizational
Governance
Structure Must
Should Fit
Tractable
Pathways to
Achieving Goals

- What is right for Louisiana, for Region 7's Watersheds?
 - Develop a knowledge management system?
 - Cultivate new leadership?
 - Organize outreach campaigns?
 - Influence policy/local regulations?
 - Provide technical and financial expertise?
 - **Land use authority?**
 - **Plan coordination and review?**



Governing Watershed Organizations

Elements of Success

- Human Capital
- Social Capital
- Policy Framework
- Finance Framework
 - Power & Rao (2019)

Organizational Design

- Organizational scope & capacity should reflect the challenges and institutions of the region

4 Rs

- Rules
- Relationships
- Resources
- Reporting

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4Rs – Rules, Resources, Relationships, Reporting



Rules: Charter and Authority

- How is the organization incorporated or chartered?
 - Organized by the legislature under state charter? Organized locally under state charter?
 - Organized under state charter and environmental regulatory program?
 - Organized as a citizen-driven membership organization? (501(c)3)
 - Organized as a collaborative governmental and civic group (501(c)3) E.g. Lake Pontchartrain Basin Foundation
- What authority does the organization have?
 - Is there a state-wide or metropolitan water management or floodplain statute?
 - Does the organization have a role in a regulatory process?
 - Do formal agreements among jurisdictions exist?
 - Is participation voluntary?



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Rules: Representational structure

- Citizen: primarily composed of private citizens
- Agency: primarily composed of public representatives
- Mixed: composed of an equal mix of public and private representatives
 - *Moore et al 2003*



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Resources

- Funding
 - Ability to obtain external funding (taxation, issuing debt, grants)
 - Stable local-regional-state funding
 - E.g., Clean Water Legacy Fund in Minnesota
 - Funding varies by type of organizational mission
- Staffing
 - Stable staffing that allows for trust building, local relationships, and expertise
 - Will technical components be in-house?
 - Management structure must reflect the nested-nature of watershed management

Academic Insight:
“...watershed groups have been found to be more successful when they are well funded.”
Babin et al 2015

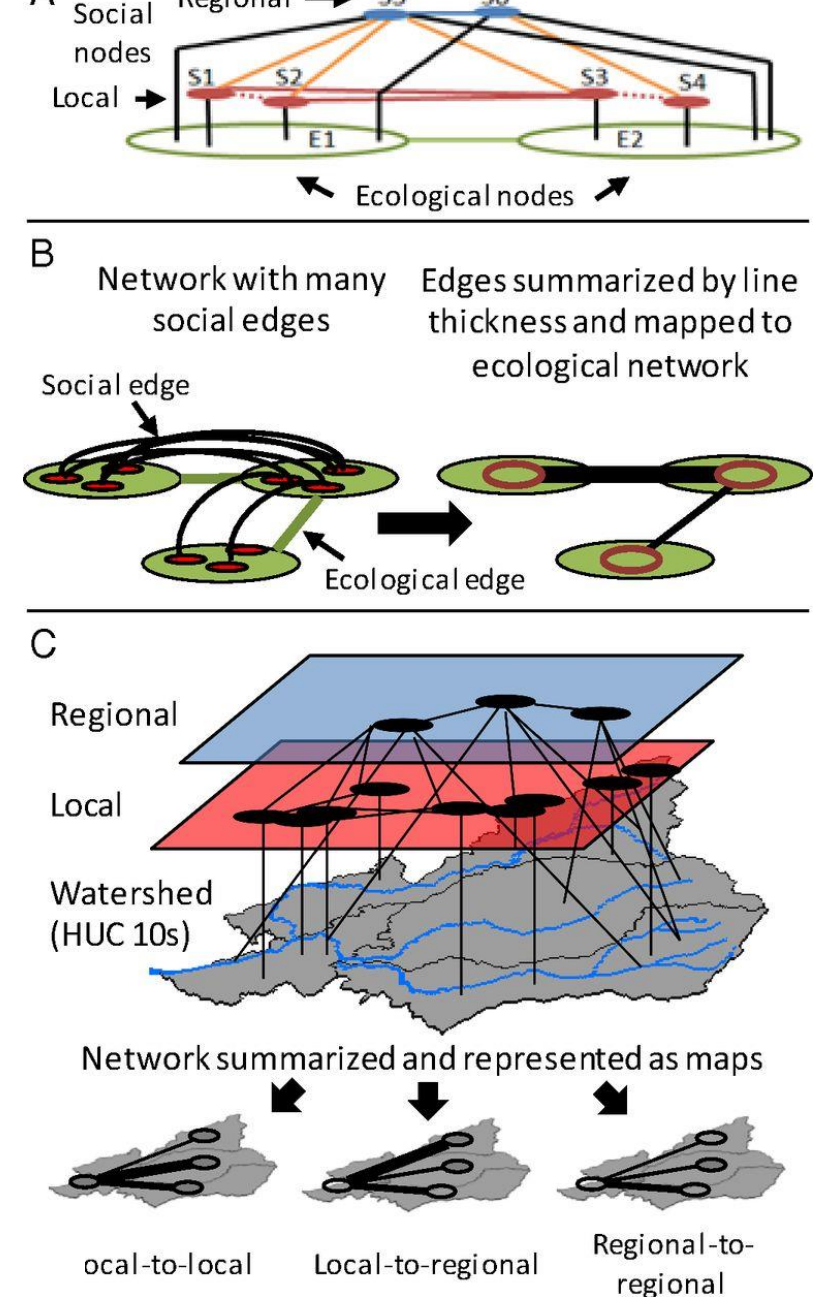
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Relationships: Multilevel

- Across groups
 - **Vertical** - Local, Regional, State, and Federal
 - **Horizontal** - Public-private, across domains of knowledge, across stakeholder groups, engaging traditionally marginalized communities

Sayles & Baggio (2017)



Relationships: Scale

- Many larger management decisions are well suited to HUC 8 scales (Rao and Power 2018)
- Local community and civic networks often are more coherent at HUC 10 (40,000-250,000 acres) and HUC 12 (about 10,000-40,000) scales, and thus these are key geographies for implementation
- If a regional approach is desired, a patchwork of smaller organizations may not suffice within a metropolitan context or if jurisdictions are in multiple watersheds



Reporting & Accountability

- Organizations Need Transparent Accounting and Public Reporting Processes
 - Need for measurable goals, and objectives and an institutionalized publication process for evaluation along a predictable and public-facing timeline
 - Public facing and systematic reporting of projects and project financials
 - Mechanisms for presenting how decisions/policy changes/infrastructure tangibly effects H&H models
 - Basis for evaluation and organizational learning



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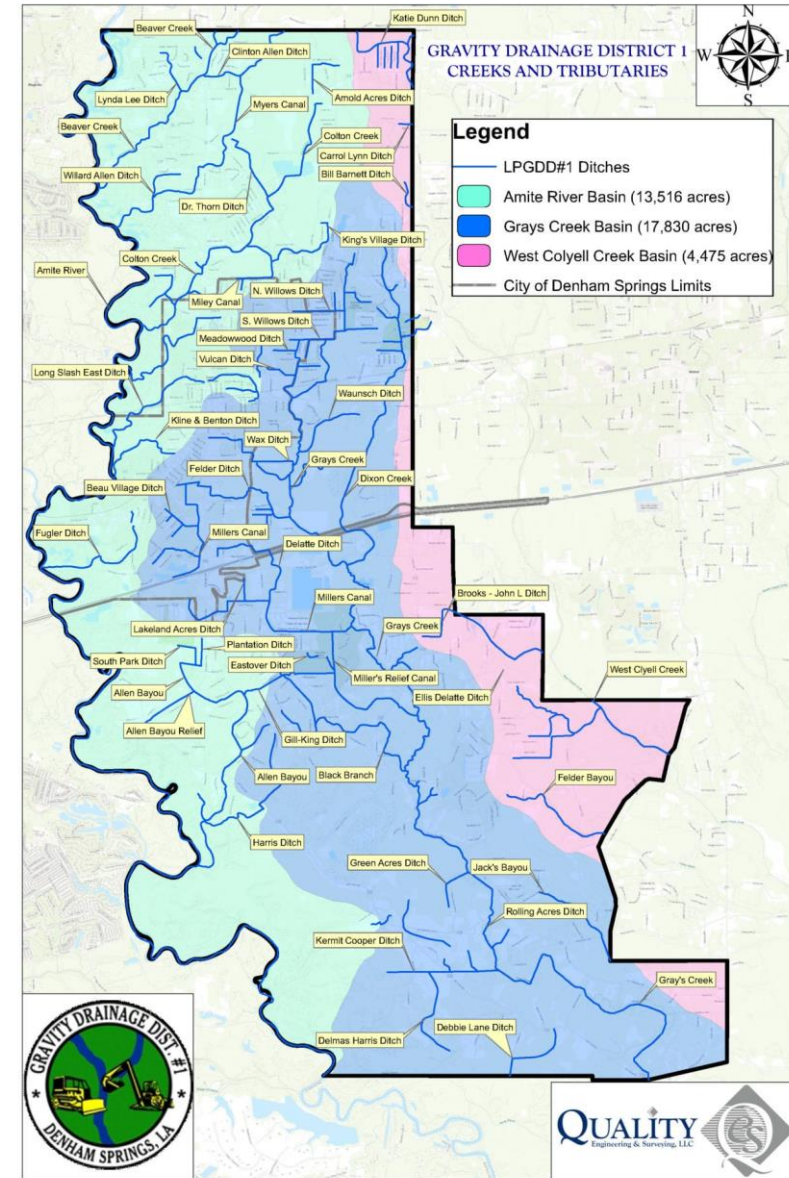
Cases and examples



Louisiana

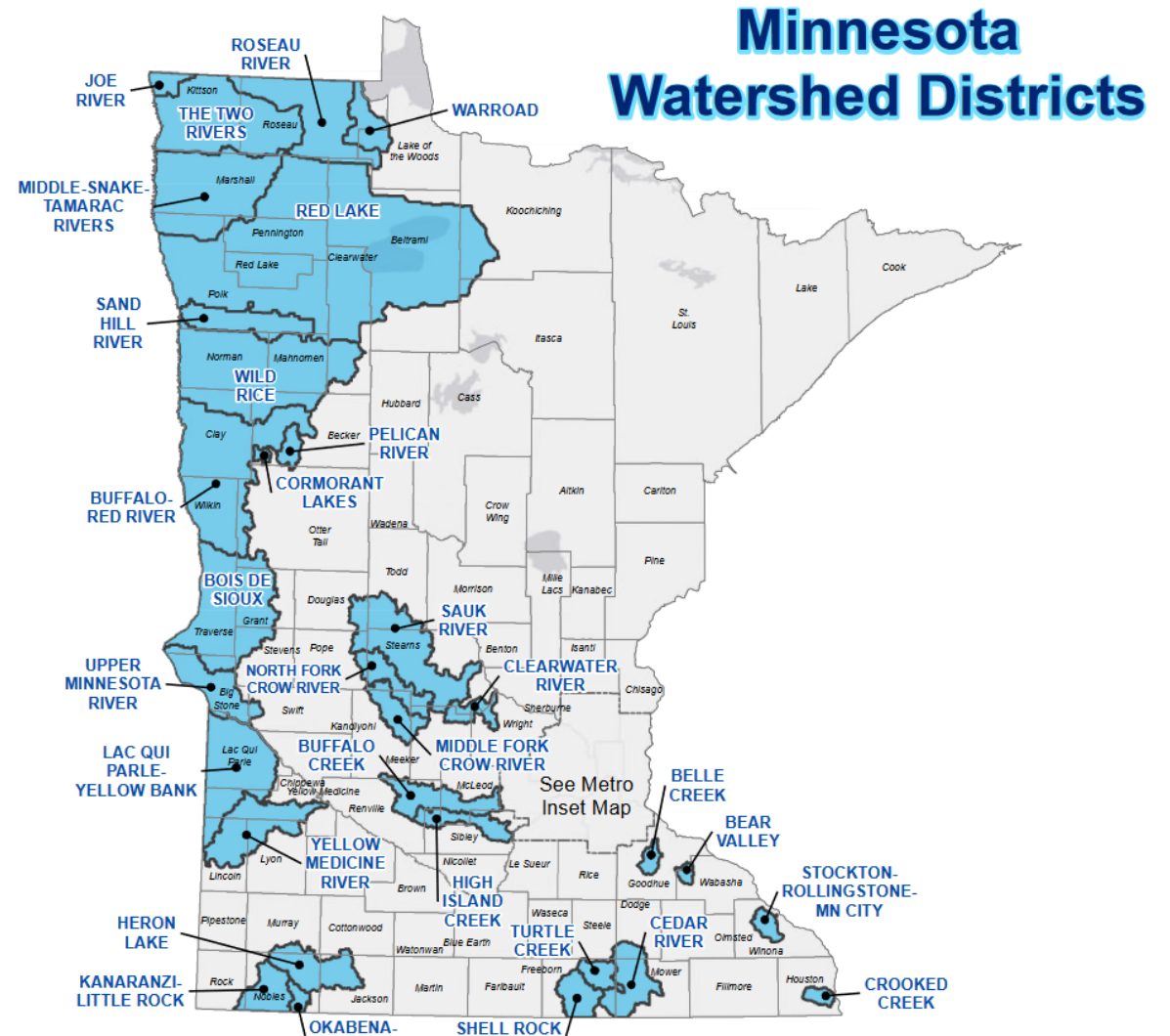
Drainage and levee districts

- Gravity drainage districts:
 - Sub-municipal, may be consolidated
 - Any drainage district shall constitute a body corporate in law, with all the powers of a corporation.
 - May: expropriate property; issue bonds, tax, and incur debt; collaborate with other districts
- Special Legislatively Created Districts:
 - [Amite River Basin Drainage and Water Conservation District Board of Commissioners](#)
 - [Atchafalaya Basin Levee District Board of Commissioners](#)
 - [Atchafalaya Basin Technical Advisory Group](#)



Minnesota: MWDs

- Primarily water quality, but also flooding and storm-water
- State statute grants planning and regulatory authority and taxation powers
- In Metro Areas there is an overarching Metro Management Organization for the relevant smaller watersheds
- Drainage is a separate law, but districts can be a County Board of Commissioners, a Joint County Board of Commissioners, or a Watershed District Board of Managers.

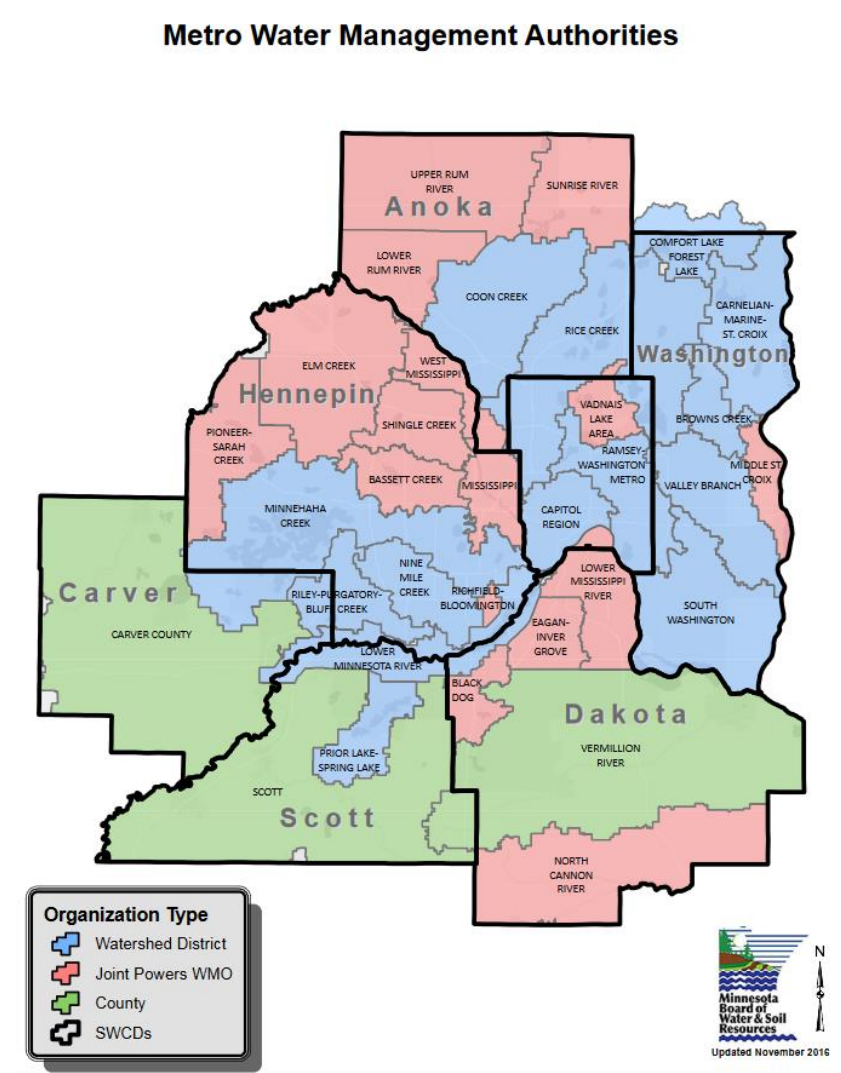


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Minnesota: Metropolitan Scale

- In Metro Areas, smaller watershed units and jurisdictions must prepare and implement comprehensive surface water management plans through membership in a Watershed Management Organization (WMO)
- Organized Under: [Metropolitan Area Surface Water Management Act](#)



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History

In 1955, the Minnesota Legislature authorized the creation of watersheds through the [Watershed Act](#). The intent of the Act was to develop water management policies on a watershed basis, because water does not follow political boundaries.

Purpose

Watershed districts conserve the natural resources of the state by doing:

- Land use planning,
- Flood control projects, and
- Other conservation projects by using sound scientific principles for the protection of public health and natural resources.

Authority

Watershed districts have been given broad authorities, including the authority to:

- Adopt rules with the power of law to regulate, conserve, and control the use of water resources within the district.
- Contract with units of government and private and public corporations to carry out water resource management projects.
- Hire staff and contract with consultants.
- Assess properties for benefits received and levy taxes to finance district administration.
- Accept grant funds, both public and private, and encumber debt.
- Acquire property needed for projects.
- Acquire, construct, and operate drainage systems, dams, dikes, reservoirs, and water supply systems.
- Enter upon lands within and without the district to make surveys and conduct investigations.

Organizational Structure

Board

Each watershed district is governed by a 3-9 member board of managers appointed by the county boards of commissioners with land in the watershed district. Manager responsibilities are to provide:

- Organizational support
- Planning, programming and budgeting
- Financial management
- Reporting and evaluation
- Leadership
- Regulation

Committees

Each watershed district is also required to have a citizen advisory committee to provide input to the managers on projects and activities.

Staff

Many watershed districts have paid, full-time staff; others rely on contract employees, primarily for engineering and legal services. BWSR maintains a [Watershed District Directory \(pdf\)](#) that contains contact information for board and staff (if applicable), as well as, the district address and telephone number.

Rules: Incorporation and grant of authority

Defined Organizational Mandate

Rules: Some regulatory powers

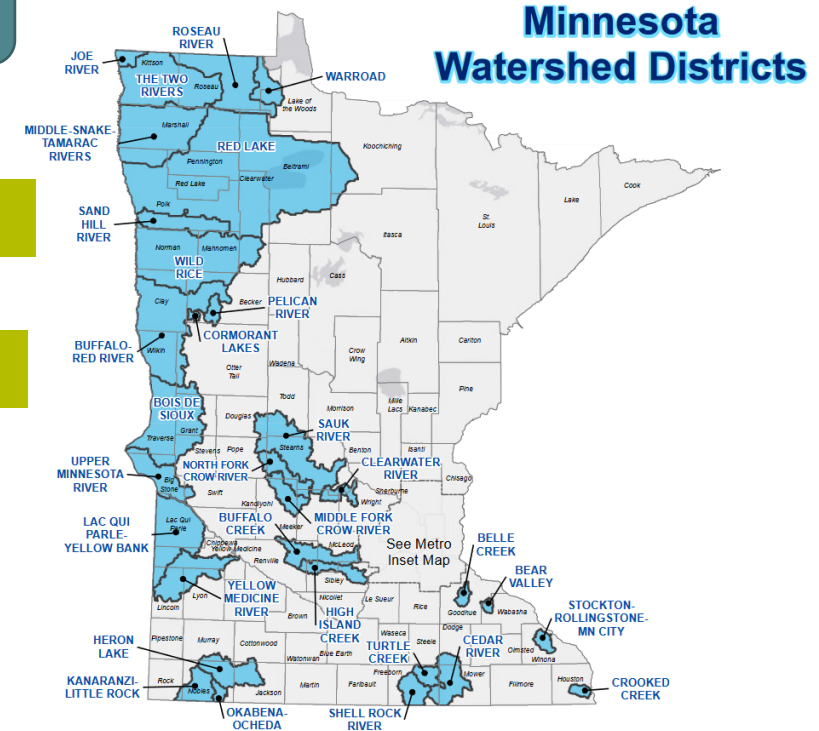
Resources: Tax, Contract, Staff, etc.

Relationships: Counties empowered

Rules: Roles and responsibilities

Reporting: Clarifies responsibilities

Relationships: Formal Community Forum



Iowa: Organization under Voluntary Technical Assistance Framework

- 2009 Floods -> Rebuild Iowa + Iowa Flood Center + State Statue for Watershed Management Authorities
- Statewide Mapping and Technical Assistance and Models via IFC
- MAs forums for collaboration and joint scenario planning around IFC models with the Iowa Watershed Decision Support System (IoWaDS)
 - Iowa Watershed Approach Information System (IWAIS)
- Leads to Creation of Watershed Plan

Relationships: Links local intergovernmental decision makes with scientific and state agencies managing the IWAIS

What is a Watershed Management Authority?

The WMA is formed by an intergovernmental (Chapter 28E) agreement by two or more eligible political subdivisions within a specific eight-digit hydrologic unit code watershed. A board of directors governs the WMA, which may undertake the following activities:

- Assess and reduce flood risk
- Assess and improve water quality
- Monitor federal flood risk planning and activities
- Educate residents of the watershed regarding flood risks and water quality
- Allocate moneys made available to the Authority for purposes of water quality and flood mitigation



REQUIREMENTS

- Requirements of a WMA:**
(per Iowa Code Chapter 466B Subchapter II)
- Must be located within an 8-digit HUC watershed
 - All eligible political subdivisions (cities, Counties, SWCDs) must be notified and provided the opportunity to participate within 30 days prior to WMA organization
 - A Chapter 28E agreement that includes a map of the watershed must be filed with the Secretary of State
 - The WMA must be governed by a Board of Directors and adopt by-laws
 - WMAs may not acquire land through eminent domain and do not have taxing authority

- Benefits of forming a WMA:**
- There are multiple benefits to cooperating with other jurisdictions within a watershed:
- Conduct planning on a watershed scale, which has greater benefits for water quality improvement and flood damage reduction
 - Foster multi-jurisdictional partnership and cooperation
 - Leveraging resources such as funding, technical expertise
 - Facilitate stakeholder involvement in watershed management

Rules: WMAs do not have taxing authority and cannot compel governmental organizations within the watershed to participate (Iowa Code 2010).



Iowa: Voluntary Data-Driven Integrated Watershed Management

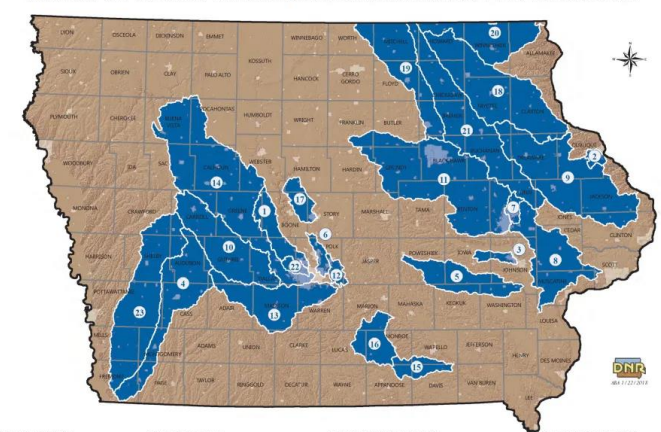
Rules: WMAs do not have taxing authority and cannot compel governmental organizations within the watershed to participate (Iowa Code 2010). Implementation based on persuasive value of plan and planning process.

Resources: State provides data and scenario building support and platform. Funding is largely local and grant or county/municipally provided.

Relationships: Boards are mostly composed of government and subject matter experts, but outreach and cross sectoral collaboration are key elements of the planning process.

Reporting: Implementation reported on via annual updates, but there is not always a clear reporting or evaluation criteria or process

STATUS OF IOWA'S WATERSHED MANAGEMENT AUTHORITIES



- 1. Beaver Creek WMA
- 2. Catfish Creek WMA
- 3. Clear Creek Watershed Coalition
- 4. East Nishnabotna Watershed Coalition
- 5. English River WMA
- 6. Fourmile Creek WMA
- 7. Indian Creek WMA
- 8. Lower Cedar WMA
- 9. Maquoketa River WMA
- 10. Middle-South Raccoon WMA
- 11. Middle Cedar WMA
- 12. Mud Creek, Spring Creek & Camp Creek WMA
- 13. North & Middle Rivers WMA
- 14. North Raccoon River Watershed Management Coalition
- 15. Soap Creek Watershed Board
- 16. South Central Iowa Cedar Creek WMA
- 17. Squaw Creek WMA
- 18. Turkey River WMA
- 19. Upper Cedar River WMA
- 20. Upper Iowa WMA
- 21. Upper Wapispinicon River WMA
- 22. Walnut Creek WMA
- 23. West Nishnabotna Watershed Coalition



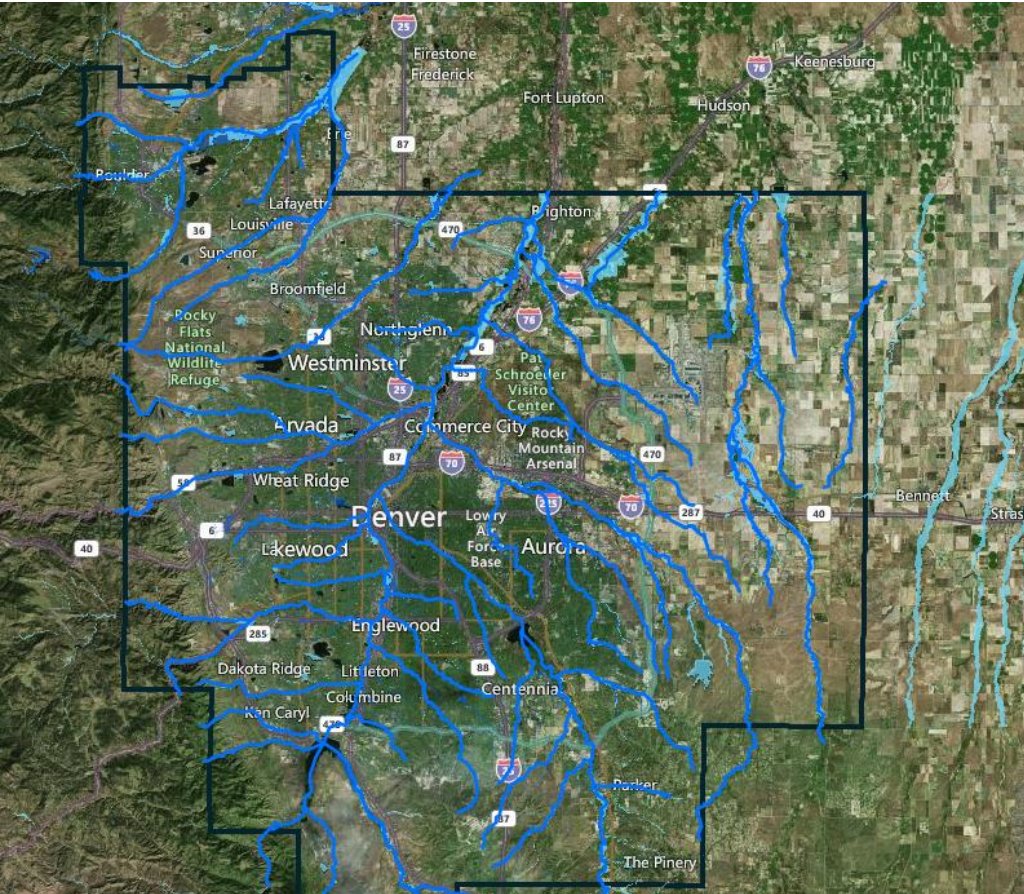
Walnut Creek Watershed:

<https://watershed-wc.frb.io/assets/documents/Management-Plan-Overview-Presentation-wecompress.com.pdf>



College of the Coast & Environment

Colorado: Mile High Flood District (Metropolitan)



Rules: statutory **authority** to adopt and enforce **floodplain** regulations, but in practice works with local authorities to develop consistent regulations and plan, and operates an incentivized maintenance program

Resources: Funding via local governments, grants, and a guaranteed funding source from property tax via state legislation

Relationships: Board is composed of local and county government stakeholders. MHFD operates a stream management academy, and develops multi-level relationships via its diverse range of activities.

Reporting: Extensive public reporting of financial activities required by statute, and also complimented by an annual report, and project level reports.



Development Referrals
Local governments can refer development or construction projects in or near floodplains to MHFD for review.



Floodplain Management
MHFD assists local governments in assessing flood risk potential and updating floodplain boundaries.



Flood Warning Program
Learn about the flood risks in your area and how to protect your home and property.



Stream Projects
MHFD leads design, construction and maintenance activities through partnerships with local governments.



Watershed Master Planning
MHFD creates watershed master plans for the valued communities within our boundaries.



Research
MHFD monitors a number of stormwater Best Management Practice (BMP) sites in the Denver metropolitan area.

LSU

College of the Coast & Environment

Colorado Springs: Organizational Structure & Representation

- **District Board: representative of county and municipal interests**
- **Supported by**
 - **Citizens Advisory Group**
 - **Staffed with permanent outreach coordinator**
 - **Technical Advisory Committee**
 - **Makes recommendation regarding studies and issues within data collection, reporting, and project selection**

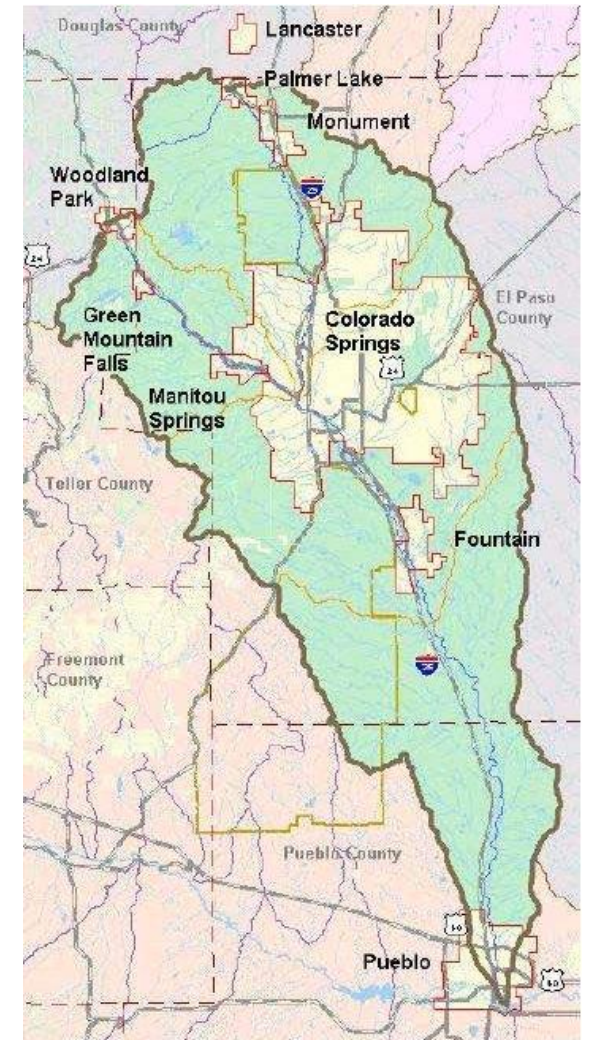
Fountain Creek Watershed Flood Control & Greenway District

Purpose: The district consists of the counties of El Paso and Pueblo and is governed by a Board of Directors consisting of a representative from the cities of Colorado Springs, Fountain, and Pueblo; El Paso and Pueblo counties; small municipalities in El Paso County; the Lower Arkansas Valley Water Conservancy District; and the FCW Citizens Advisory Group. A Technical Advisory Committee and Citizens Advisory Group provide input to the Board.

The district is authorized to manage, administer, and fund the capital improvements necessary in the Fountain Creek Watershed to:

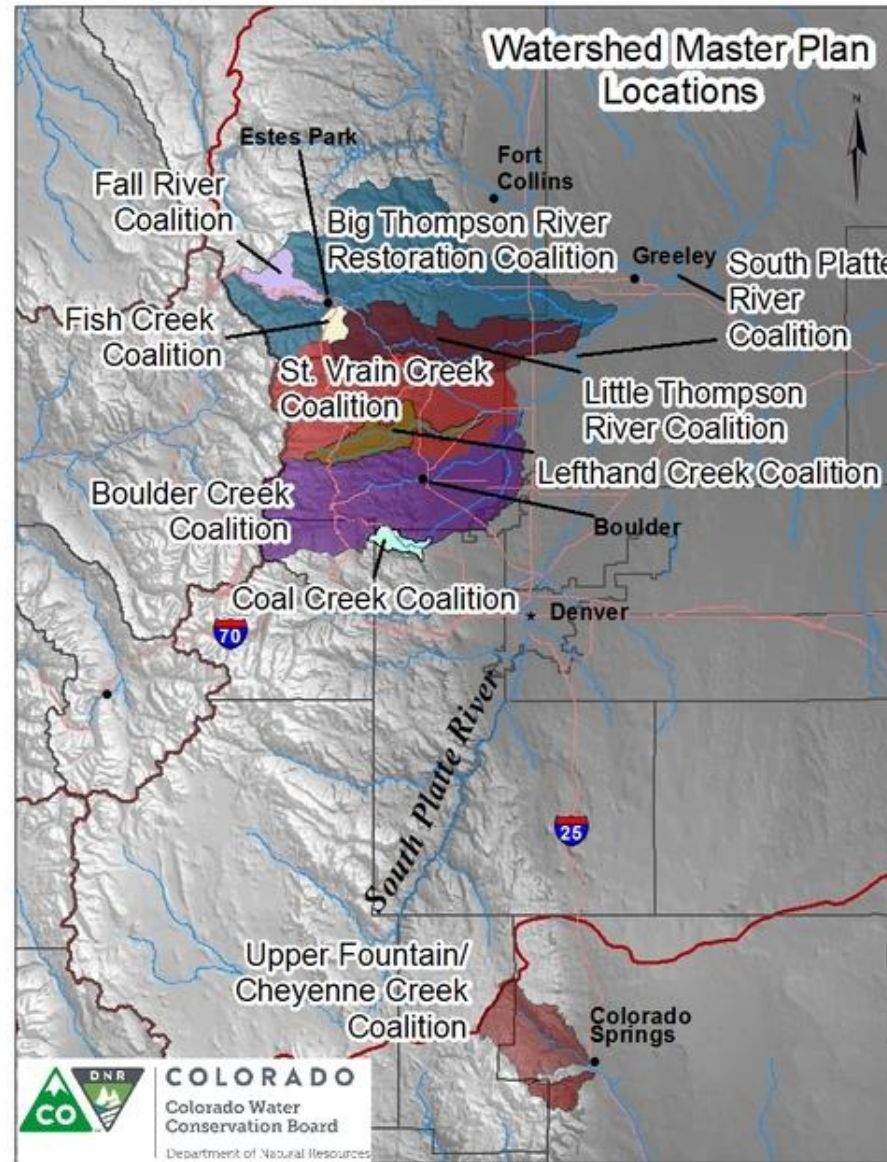
mitigate flooding, erosion and sedimentation;
address water quality issues;
improve drainage;
protect open space;
and develop public recreational opportunities including open space.

The district only has land use authority in the 100-year floodplain between El Paso and Pueblo counties (south of the City of Fountain and north of the City of Pueblo). Outside of this area, the district can provide input to public bodies on land use applications that may have direct or indirect impacts to the watershed.



Colorado: Emergency Watershed Protection (EWP) Program - Watershed Resilience Pilot Program (WRPP)

- Aimed at local watershed coalitions in affected watersheds
- **Helped establish non-advocacy watershed coalitions around 501©(3) model**
- Collaboratively plan and construct recovery projects that simultaneously enhance the resilience of disaster-affected watersheds
 - “short term successes on individual projects, supported by the broader capacity-building.”



Rules: Given authority to assist in project prioritization for recovery projects. Long-term, not within formal decision making structures.

Resources: Channeled state and CDBG recovery funds to aid planning and project prioritization. No stable long-term funding

Relationships: Leveraged many existing environmental groups in area of high environmental engagement

Reporting: Project level reporting requirements, and longer-term mission related issues are subject to specific watershed plans (weak)



Conclusions

4Rs – Rules, Resources, Relationships, Reporting

Rules

- Who will appoint your board?
- What powers or roles should the coalition fill?
- What is the current governance context of your watershed?
- Will you operate under a state regulatory structure or special statute?
- What are the geographical and interest group considerations to consider when creating a representative structure?

Resources

- Will your staff resources be internal or external to the organization?
- What structures and strategies can help build stable long-term funding?
- Will the creation of the organization include a funding stream?

Relationships

- How can you include diversity and engagement in your structure?
- Will you have sub-committees composed of specific jurisdictional representation, technical representatives, social group representatives?
- Will the organization include staffing for outreach and engagement?
- How will you manage relationship building at different geographical scales?

Reporting (accountability)

- Structure your reporting around the goals of the coalition
 - Collaboration- How to measure?
 - Mitigation - How to measure?
 - Project implementation - How to measure?
- Need to establish transparent strategy and responsibilities for reporting
- Should include publication and communication strategy



Citations:

- Bodin, Ö. (2017). Collaborative environmental governance: achieving collective action in social-ecological systems. *Science*, 357(6352).
- Mair, Johanna, Judith Mayer, and Eva Lutz. "Navigating institutional plurality: Organizational governance in hybrid organizations." *Organization Studies* 36.6 (2015): 713-739.
- Floress, K., Akamani, K., Halvorsen, K. E., Kozich, A. T., & Davenport, M. (2015). The role of social science in successfully implementing watershed management strategies. *Journal of Contemporary Water Research & Education*, 154(1), 85-105.
- Babin et al (2015). Using social criteria to select watersheds for non-point source agricultural pollution abatement projects. *Land Use Policy*
- Rao, A., Power, R. et al. (2019). "Successful Watershed Management in the Midwest: Getting to Scale"
- Sayles, J. S., & Baggio, J. A. (2017). Social–ecological network analysis of scale mismatches in estuary watershed restoration. *Proceedings of the National Academy of Sciences*, 114(10), E1776-E1785.
- Weber, L. J., Muste, M., Bradley, A. A., Amado, A. A., Demir, I., Drake, C. W., ... & Thomas, N. W. (2018). The Iowa Watersheds Project: Iowa's prototype for engaging communities and professionals in watershed hazard mitigation. *International journal of river basin management*, 16(3), 315-328.
- Koebele, E. A., Crow, D. A., & Albright, E. A. (2020). Building Resilience during Recovery: Lessons from Colorado's Watershed Resilience Pilot Program. *Environmental Management*, 1-15.





3. Governance Exercise No. 1



This is about action

- The governance exercises are about creating better coordination among existing entities, agreeing on common goals and using science to inform decisions.
- Can we do this work within existing entities or does it make more sense to create a new entity?
- We can start this work now.





AGENDA

1. Governance exercises overview
2. Goals for today
3. Analysis of known issues
4. Roles, responsibilities and authorities
5. Questions and next steps

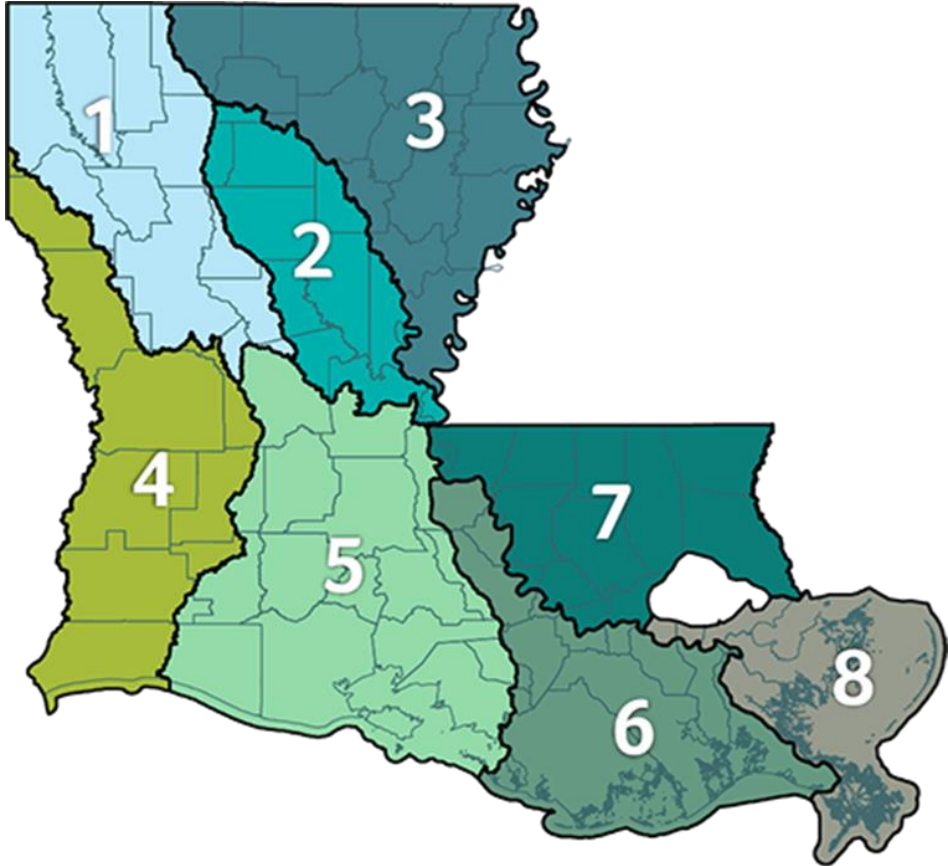




1. Governance exercises overview



Let's start talking about governance



PROVISIONAL WATERSHED REGIONS

Why?

- Refer to the Regional Watershed Management Governance Exercises Briefing Book

RCBG Program Goals

- Build staff capacity in each region
- Provide recommendations for regional governance structures for watershed management
- Establish watershed coalitions



How will we do this?



GOVERNANCE EXERCISE NO. 1

What is the work?

- Conduct root cause analysis

GOVERNANCE EXERCISE NO. 2

Who does it?

- Identify the need for regional roles, responsibilities and authorities
- Build consensus around solutions

GOVERNANCE OUTCOMES

How?

- Recommend coalition structure
- Develop action items for implementation



Governance webinar (optional)

WHY SHOULD WE DO THIS?

- Review case studies
- Discuss pros and cons of regional approaches to watershed management



What happens after recommendation?



PROVISIONAL RECOMMENDATIONS

OUTREACH AND ENGAGEMENT

REFINED RECOMMENDATIONS

An iterative planning process requiring vetting and revisiting recommendations

November – January

Make recommendations based on best available data, practices, expertise and information

January – April

Engage parish leadership, stakeholders and the public to gather feedback

RESOURCE: O&E TOOLKIT

May – June

Consider feedback from outreach and engagement and refine recommendations





The work

2. Goals for today



FEEDBACK FROM REGIONAL RISK DISCUSSION

Review and prioritize regional issues



Regional flood risk concerns

Please note, these notes were taken during the meeting and they reflect the discussion

Meeting participants will identify key concerns here, which we'll use as a starting point for discussions about why these concerns exist on the next slide.

NOTES TAKEN DURING MEETING:

1. Limit Amite River flooding and flooding overall
2. Pluvial flooding - flat and water has nowhere to go
3. Heavy rainfall (dancing manhole covers - rainfall overburdened system and water comes out of manholes) and flooding
4. Development in areas (2016 flood areas), where can it go that will not add to existing flood problems
5. People moving to "high ground"
6. Natural drains are not regulated in a sense where when we move dirt/cut timber it creates brush, etc., keeping drainage clean and maintained
7. Resources for regulation to maintain natural drainage and make sure after-storms that the drainage is clear
8. Storm surge and wind-driven high tide (hurricane seasons)
9. Gap in technology use across region (river, bayou stream gauges that are electronically monitored, share data real-time across region to see how flooding is happening - tech isn't readily available)



Regional flood risk concerns

Please note, the notes below were taken during the meeting

Meeting participants will identify key concerns here, which we'll use as a starting point for discussions about why these concerns exist on the next slide.

NOTES TAKEN DURING MEETING #2.:

1. Continued development with large fill projects for subdivisions
2. Destruction of natural river systems - tax dollars
3. Incongruent planning (address on the front end during planning through a regional approach for development)
4. Lack of public understanding of fill requirements increases flood risk (difficult to pass no-fill)
5. Use gauge networks for collaborative planning - ref. earlier comment
6. Understand what water is coming downstream (it's intuitive), consider old drainage standards compared to new understandings based on collaborative planning and gauge network data
7. Control impervious surface area and changes to lowland terrain with fill
8. Conversion of natural floodplain habitats (forests /streams) to developments with huge amounts of fill and concrete, relying on drainage ditches and detention ponds that make matters worse for adjacent/downstream lands.
9. Changing natural floodplain area to developed area
10. Building commercial and residential in marshlands---smart, comprehensive land management template needed in decision making.



Regional flood risk concerns

Please note, the notes below were taken during the meeting

Meeting participants will identify key concerns here, which we'll use as a starting point for discussions about why these concerns exist on the next slide.

NOTES TAKEN DURING MEETING #3:

1. Infill of houses in older subdivisions creates issues inside of those subdivisions (new FEMA, building standards) - infill lots create small problems at the lot-scale but bigger problems at neighborhood-scale, especially if they don't have drainage built in
2. floodplain projection needs to be reviewed and monitored, new subdivisions have a different level to build to - try to forecast future needs so we live together above water
3. Local control about water drainage, need parishes and municipalities to coordinate so we're managing water together
4. Need to remember and manage historical structures (houses, cemeteries, etc)
5. Inter-basin overflow during major flood events - need more detailed studies
6. Backwater flooding - prominent in our region
7. Basic understanding of hydrology (lack of), consider letting water soak in instead of rushing it out (more natural floodplain management strategies)
8. Lack of planning for larger storms or increased flashiness of rainfall with climate change.



Region 7

CONNECTING FLOOD RISK CONCERNS TO ROOT CAUSES

Please note, the notes below were taken during the meeting

Key flood risk concern

1. Limit Amite River flooding and flooding overall
2. Pluvial flooding - flat and water has nowhere to go
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9. Gap in technology use across region (river, bayou stream gauges that are electronically monitored, share data real-time across region to see how flooding is happening - tech isn't readily available)

Root causes

1. Impact to where people are living; BR in middle of basin where the people live, water coming from north where there is little development. How to reduce flooding in metro area some structural solutions and some planning solutions
2. Determine the localized drainage issues vs. the larger regional issues that need to be addressed. Geography has major issues
3. ARBC has robust gauge system - need to utilize
4. ARBC important due to settlement pattern/impacts.
5. local consideration of development; under-educated planning committees/decision-makers. (better educate them on flooding issues).
6. Live in an area subject to flooding and storm surge, topography causes water to sit, riverine flooding combined with surge
7. Combination of storm surge and riverine flooding is a unique problem, requires unique solutions in these areas
8. raising regulations difficult without a deeper education and understanding about water-related impacts



Region 7

CONNECTING FLOOD RISK CONCERNS TO ROOT CAUSES

Please note, the notes below were taken during the meeting

Key flood risk concern

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9. Changing natural floodplain area to developed area
10. Building commercial and residential in marshlands---smart, comprehensive land management template needed in decision making.

Root causes

1. trade off between cost to develop and long term impacts due to flood risk
2. growing pains with stronger standards, older subdivisions feel the brunt of the impacts, will become RF properties, exacerbated with more growth
3. regulations may be a little too little too late, retrofitting options for existing subdivision and housing areas needed
4. coordination of systems for monitoring
5. Money (gauges, equipment, tech are expensive)
6. Don't have adequate technology to address needs.
7. Spend more dollars on prevention rather than recovery from disasters
8. Need to learn to live with water: development, education, planning
9. Current development sits within a topography that furthers the flooding potential
10. Type of building does not compliment the flooding potential. we don't build anymore in a way that allows the water to pass through and not flood



Region 7

CONNECTING FLOOD RISK CONCERNS TO ROOT CAUSES

Please note, the notes below were taken during the meeting

Key flood risk concern

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8. Lack of planning for larger storms or increased flashiness of rainfall with climate change.

Root causes

1. Altered the nutrient replenishment by engineering water solutions
2. Dredging doesn't provide the benefit; local snags and natural areas provide benefit
3. Need to focus on our history of why we live here and preserve/protect what we have
4. Politics - will to enforce the codes that are currently written, Decision makers and decision influencers
5. Many plans are well done but lacking in enforcement
6. Culture in decision-making, education of general citizens to reflect better decision making and support for better decisions



Region 7

CONNECTING FLOOD RISK CONCERNS TO ROOT CAUSES

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8. Lack of planning for larger storms or increased flashiness of rainfall with climate change.

Root causes

1. Subsidence meets lake level rise meets anthropogenics
2. I concur with Honora Buras comment about developers, therefore, how do we address this mindset that is marketed as "growth" of a parish? Is this a platform that we want to address?
3. Root cause is also relying on the minimum FEMA standards and not using the most up-to-date data concerning flood elevations. We need higher standards to truly address our unique flood issues.
4. I agree, however the general public can be very shortsighted. When you do an ounce of prevention and it works, the public usually doesn't appreciate it How to educate the public???
5. we need a long term plan to move peoples inland



Region 7

CONNECTING ROOT CAUSES TO POTENTIAL SOLUTIONS

Root causes #1



1. Impact to where people are living; BR in middle of basin where the people live, water coming from north where there is little development. How to reduce flooding in metro area some structural solutions and some planning solutions
2. Determine the localized drainage issues vs. the larger regional issues that need to be addressed. Geography has major issues
3. ARBC has robust gauge system - need to utilize
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8. raising regulations difficult without a deeper education and understanding about water-related impacts



Potential solutions

Increased capacity and capability

Knowledge and skills are shared, and staff is not overworked or given unrealistic expectations.

Increased accountability

Roles and responsibilities are clearly defined.

Standardized process

Decision-making is based on best practices.

Increased authority

Leaders are empowered to make difficult choices.

Increased coordination

Agencies are encouraged to collaborate and streamline processes.



Region 7

CONNECTING ROOT CAUSES TO POTENTIAL SOLUTIONS

Please note, the notes below were taken during the meeting

Root causes #2



1. trade off between cost to develop and long term impacts due to flood risk
2. growing pains with stronger standards, older subdivisions feel the brunt of the impacts, will become RF properties, exacerbated with more growth
3. regulations may be a little too little too late, retrofitting options for existing subdivision and housing areas needed
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Region 7

CONNECTING ROOT CAUSES TO POTENTIAL SOLUTIONS

Please note, the notes below were taken during the meeting

Root causes #3



1. Altered the nutrient replenishment by engineering water solutions
2. Dredging doesn't provide the benefit; local snags and natural areas provide benefit
3. Need to focus on our history of why we live here and preserve/protect what we have
4. Politics - will to enforce the codes that are currently written, Decision makers and decision influencers
5. Many plans are well done but lacking in enforcement
6. Culture in decision-making, education of general citizens to reflect better decision making and support for better decisions



Potential solutions

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Region 7

CONNECTING ROOT CAUSES TO POTENTIAL SOLUTIONS

Please note, the notes below were taken during the meeting

Root causes #4



1. Subsidence meets lake level rise meets anthropogenics
2. I concur with Honora Buras comment about developers, therefore, how do we address this mindset that is marketed as "growth" of a parish? Is this a platform that we want to address?
3. Root cause is also relying on the minimum FEMA standards and not using the most up-to-date data concerning flood elevations. We need higher standards to truly address our unique flood issues.
4. I agree, however the general public can be very shortsighted. When you do an ounce of prevention and it works, the public usually doesn't appreciate it How to educate the public???
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Potential solutions

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Standardized process

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Increased authority

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Increased coordination

Agencies are encouraged to collaborate and streamline processes.





4. Public comment & closeout



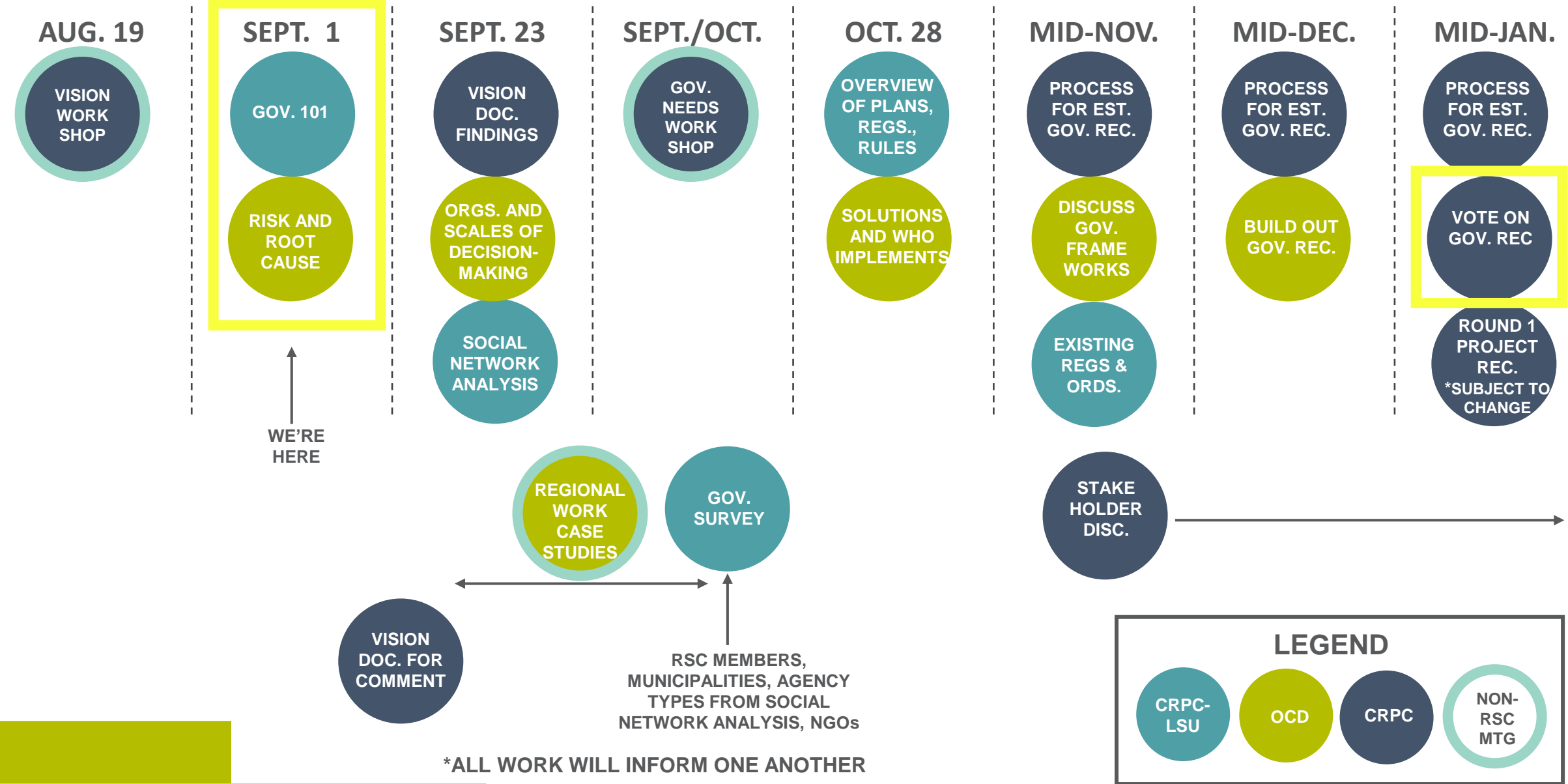
Public Comment

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. Thank you.

Next six months* subject to change

MEETINGS

IN BETWEEN MEETINGS



Upcoming items *subject to change

SEPT.
23

- Workshop findings
- Root cause and solutions workshop
- Social network analysis

SEPT/
OCT

- Potential public governance workshop

OCT.
28

- Overview of Parish plan, zoning, and regulation analyses
- Follow up on solutions, begin to build out governance recommendation

OCT. 31

- **First “completed draft” of project inventory**



RSC member meeting (business occurs)



Deadline



Closeout

- Adoption of July meeting minutes
- Upcoming meetings:
 - September 23 from 9 to 11:30 a.m.
 - October 28 from 9 to 11:30 a.m.
- Action items
- Reminder about project inventory
- 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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Rsanderson@crpcla.org

Drew Ratcliff, Regional Disaster Recovery Manager
DRatcliff@crpcla.org

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



Capital Region Planning Commission

Local Governments Working Together Since 1967

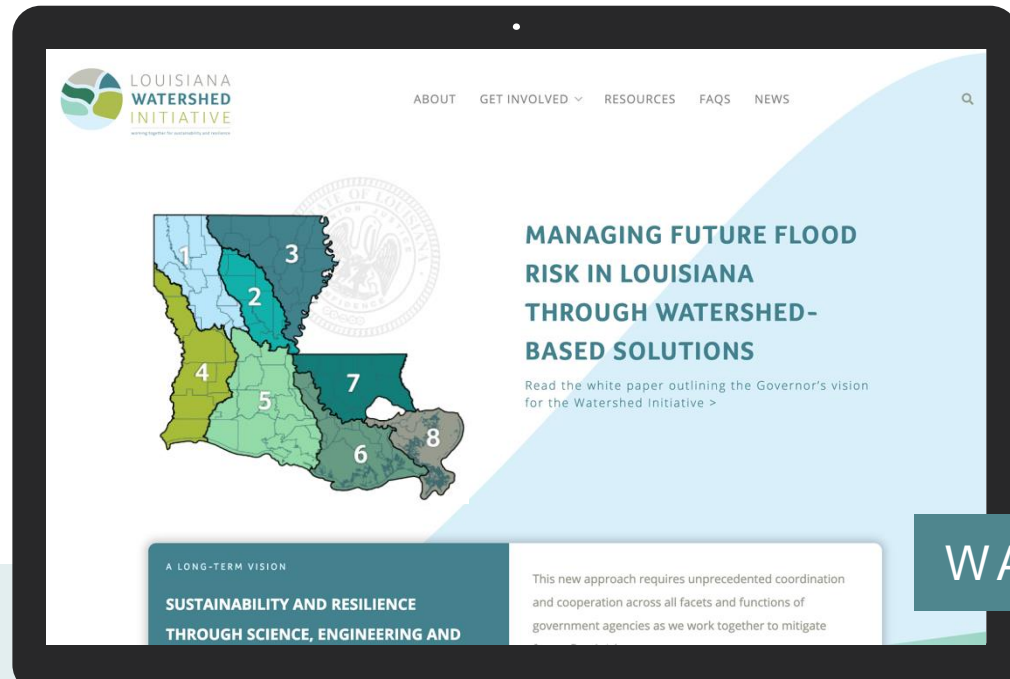


 @LAWATERSHEDINITIATIVE

 @LAWATERSHED

 WATERSHED@LA.GOV

THANK YOU



WATERSHED.LA.GOV

REGION 7

SEPTEMBER 1 REGIONAL STEERING COMMITTEE MEETING

VALUES, VISION, AND GOALS WORKSHOP RECAP

- In Louisiana, everything is tied to water- our culture, industry, etc.
- Innovation, education, preservation, and collaboration.
- Design-year storm terminology – in reality, it is a statistic that changes as you get more data.
- Base our decisions on good science and data.

MODELING UPDATE

Jie Gu of DOTD - in final stage of approving HUD proposal.

Introductions to Region 7 modeling team

- Sam Crampton and Jerri Daniels made introductions.
- Jerri Daniels - planning on having a webinar for each HUC in the region for data collection outreach. Data requests will also be at parish and local level.
- Dietmar Rietschier – we need to engage with individuals and organizations who have been doing modeling and data collection work sooner.
- Fred Raiford – we need to look at one model not several models. EBR does not want to impact their neighbors downstream.

Statewide H&H modeling FAQs

- This will be sent out to RSC members after the meeting

Model data management team members

- Ehab Meselhe – want to work closely to determine the most sustainable way to... will be working with the Watershed Coordinators to keep this moving forward.
- Brian Miles – looking forward to reaching out and working with everyone.



GOVERNANCE FOR WATERSHED ORGANIZATIONS 101: CASES AND EXAMPLES (PRESENTED BY DR. THOMAS DOUTHAT - LSU)

WATERSHED GOVERNANCE AND ORGANIZATIONS

Governance structure of the watershed and governance structure and capacity.

- Goal of the watershed governance is to positively influence actions and behaviors at the watershed level.
- Where is this new regional governance organization for watersheds?

Watershed governance challenges:

- Socioecological fit
- Fragmented decision making
- Knowledge gaps
- Uncertainty
- Divergent interests
- Scarce resources, such as funding.

Organizational governance structure must fit tractable pathways to achieving goals

- Develop a knowledge management system
- Cultivate new leadership
- Organization outreach campaign
- Influence policy/local regulations
- Provide technical and financial expertise
- Land use authority
- Plan coordination and review

Elements of Success

- Human capital – internal knowledge and expertise to address the challenges presented.
- Social capital- ability to get people to move towards collective goals and actions
- Policy framework – select what the goals and objectives are.
- Finance framework – financial capacity, recurring allocations, taxing authority, grant, or fundraising campaign.

Organizational Design

4R'S – RULES, RESOURCES, RELATIONSHIPS, AND REPORTING

Rules

- How is the organization incorporated or chartered?
- What authority does the organization have?
- Representational structure – citizen, agency, or mix of public and private representatives.

Resources



-
- Funding – varies by type of organizational mission.
 - Staffing – human resources are at the core; stable staffing is important for relationship/trust building and creating institutional knowledge.

Relationships: Multilevel

- Vertical – local, regional, state, and federal.
- Horizontal – public-private, across domains of knowledge, across stakeholder groups, engaging traditionally marginalized communities.

Relationships: Scale

- Many larger management decisions are well-suited to HUC 8 scales.
- Metropolitan structure

Reporting and Accountability

- Need transparent accounting and public reporting processes.
- Overall, leads to basis for evaluation and organizational learning.

CASES AND EXAMPLES

Drainage and levee districts

- Driven with a representational structure around local property owners.

Minnesota: MWDs

- Long-standing watershed management approach originating around water quality but also includes flooding and stormwater.
- **Metropolitan Scale** - watershed organizations that cover the entire metro area.
 - Structure based around building relationships with counties.
 - Rules for accountability and reporting structures.
 - Board is locality driven by have community advisory committee.

Iowa: organization under voluntary technical assistance framework

- Provide funds for joint scenario planning around GIS models.
- Create watershed plans
- Focus on linking governmental decisions with scientific.
- **Voluntary data-driven integrated watershed management**
 - Unlike Minnesota, do not have taxing authority
 - **Large parts of the state that do not have organization**
 - **Planning process will lead to more and**

Colorado: Mile High Flood District (Metropolitan)

- In practice, has worked collaborative model with local jurisdiction
 - Can overrule local jurisdictions that can give them authority in the region
 - Funding that can give local grants and regional village
 - Board is local and county government composed
-



-
- Bridge relationships between local government authorities through outreach, and other committee structures.
 - **Colorado Springs: organizational structure and representation**
 - Board is mostly county and municipal interests
 - Permanent and staff supported citizen advisory group and technical advisory committee
 - **Emergency watershed protection (EWP) program – watershed resilience pilot program (WRPP)**
 - Collaborative model

CONCLUSIONS

Rules

- Who will appoint your board?
- What powers or roles should the coalition fill?
- What is the current governance context of your watershed?
- Will you operate under a state regulatory structure or special statute?
- What are the geographical and interest group considerations to consider when creating a representative structure?

Resources

- Will your staff resources be internal or external to the organization?
- What structures and strategies can help build stable long-term funding?
- Will the creation of the organization include a funding stream?

Relationships

- How can you include diversity and engagement in your structure?
- Will you have sub-committees composed of specific jurisdictional representation, technical representatives, social group representatives?
- Will the organization include staffing for outreach and engagement?
- How will you manage relationship building at different geographical scales

Reporting (accountability)

- Structure your reporting around the goals of the coalition
- Collaboration- How to measure?
- Mitigation - How to measure?
- Project implementation - How to measure?
- Need to establish transparent strategy and responsibilities for reporting
- Should include publication and communication strategy

GOVERNANCE EXERCISE NUMBER ONE

GOVERNANCE EXERCISES OVERVIEW



Why?

- Refer to the Regional Watershed Management Governance Exercises Briefing Book – sets the stage for where we are today.

RCBG Program Goals

- Isolated main goals to help us move towards long-term vision.

How will we do this?

- **Governance Exercise No. 1 – What is the work?**
- Governance Exercise No. 2 – Who does it?
- Governance Outcomes – How?

Governance Webinar (optional) - October

- Unpacks what we know about previous research, reviews case studies

What happens after recommendation?

- Think through making sure we have vertical and horizontal alignment.
- Provisional recommendations (Nov. – Jan.)
- Outreach and engagement (Jan. – Apr.)
- Refined recommendations (May – Jun.)



IDENTIFYING REGIONAL FOOD RISK CONCERNS

1. Limit Amite River flooding and flooding overall
 2. Pluvial flooding - flat and water has nowhere to go
 3. Heavy rainfall (dancing manhole covers - rainfall overburdened system and water comes out of manholes) and flooding
 4. Development in areas (2016 flood areas), where can it go that will not add to existing flood problems
 5. People moving to “high ground”
 6. Natural drains are not regulated in a sense where when we move dirt/cut timber it creates brush, etc., keeping drainage clean and maintained
 7. Resources for regulation to maintain natural drainage and make sure after-storms that the drainage is clear
 8. Storm surge and wind-driven high tide (hurricane seasons)
 9. Gap in technology use across region (river, bayou stream gauges that are electronically monitored, share data real-time across region to see how flooding is happening - tech isn’t readily available)
 10. Continued development with large fill projects for subdivisions
 11. Destruction of natural river systems - tax dollars
 12. Incongruent planning (address on the front-end during planning through a regional approach for development)
 13. Lack of public understanding of fill requirements increases flood risk (difficult to pass no-fill)
 14. Use gauge networks for collaborative planning - ref. earlier comment
 15. Understand what water is coming downstream (it’s intuitive), consider old drainage standards compared to new understandings based on collaborative planning and gauge network data
 16. Control impervious surface area and changes to lowland terrain with fill
 17. Conversion of natural floodplain habitats (forests /streams) to developments with huge amounts of fill and concrete, relying on drainage ditches and detention ponds that make matters worse for adjacent/downstream lands.
 18. Changing natural floodplain area to developed area
 19. Building commercial and residential in marshlands---smart, comprehensive land management template needed in decision making.
 20. Continued development with large fill projects for subdivisions
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 26. Control impervious surface area and changes to lowland terrain with fill
 27. Conversion of natural floodplain habitats (forests /streams) to developments with huge amounts of fill and concrete, relying on drainage ditches and detention ponds that make matters worse for adjacent/downstream lands.
-



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28. Changing natural floodplain area to developed area
 29. Building commercial and residential in marshlands---smart, comprehensive land management template needed in decision making.

IDENTIFYING ROOT CAUSES FOR FLOOD RISK CONCERNS

1. Impact to where people are living; BR in middle of basin where the people live, water coming from north where there is little development. How to reduce flooding in metro area some structural solutions and some planning solutions
2. Determine the localized drainage issues vs. the larger regional issues that need to be addressed. Geography has major issues
3. Amite River basin has robust gauge system - need to utilize
 - a. USGS Gauge Network: <https://waterdata.usgs.gov/la/nwis/rt>
 - b. Lower Mississippi River Forecast Center River forecast platform: <https://www.weather.gov/lmrfc/>
4. Amite River basin important due to settlement pattern/impacts.
5. local consideration of development; under-educated planning committees/decision-makers. (better educate them on flooding issues).
6. Live in an area subject to flooding and storm surge, topography causes water to sit, riverine flooding combined with surge
7. Combination of storm surge and riverine flooding is a unique problem, requires unique solutions in these areas
8. raising regulations difficult without a deeper education and understanding about water-related impacts
9. Tradeoff between cost to develop and long term impacts due to flood risk
10. Growing pains with stronger standards, older subdivisions feel the brunt of the impacts, will become RF properties, exacerbated with more growth
11. Regulations may be a little too little too late, retrofitting options for existing subdivision and housing areas needed
12. Coordination of systems for monitoring
13. Money (gauges, equipment, tech is expensive)
14. Don't have adequate technology to address needs.
15. Spend more dollars on prevention rather than recovery from disasters
16. Need to learn to live with water: development, education, planning
17. Current development sits within a topography that furthers the flooding potential
18. Type of building does not compliment the flooding potential. we don't build anymore in a way that allows the water to pass through and not flood
19. Altered the nutrient replenishment by engineering water solutions
20. Dredging doesn't provide the benefit; local snags and natural areas provide benefit
21. Need to focus on our history of why we live here and preserve/protect what we have
22. Politics - will to enforce the codes that are currently written, Decision makers and decision influencers
23. Many plans are well done but lacking in enforcement
24. Culture in decision-making, education of general citizens to reflect better decision making and support for better decisions



25. Subsidence meets lake level rise meets anthropogenics
26. I concur with Honora Buras comment about developers, therefore, how do we address this mindset that is marketed as "growth" of a parish? Is this a platform that we want to address?
27. Root cause is also relying on the minimum FEMA standards and not using the most up-to-date data concerning flood elevations. We need higher standards to truly address our unique flood issues.
28. The general public can be very shortsighted. When you do an ounce of prevention and it works, the public usually doesn't appreciate it How to educate the public?
29. We need a long-term plan to move peoples inland

PUBLIC COMMENT

- R. J. Saucier: The area below the Darlington Reservoir would still allow that 2016 Flood to occur and even greater. There are weirs that can be established along with the Darlington along the Amite that can be less expensive. [Mr. Saucier proceeded to present maps.]
- Matthew Allen: All individual landowners have their own agendas for land use. Landowners that want to preserve their land are averse to ideas. Is there any way we can push tax credits for preserving floodplains for landowners?
- Ren Clark: The watershed initiative could get surveyors to submit their coordinates to a repository that you maintain and keep anonymous. This would help us to refine our understanding of our landscape to get the most accurate measurements of our terrain.

CLOSEOUT AND MEETING BUSINESS S1

ADOPTION OF JULY MEETING MINUTES

Motion to adopt by Ross Liner
Motion seconded by Chuck Berger
No objections, motion passes

MOTION TO ADJOURN

Motion to adjourn: Major Coleman
Second motion: Devin Foil
No objections, motion passes

REGION 7

SEPTEMBER 23 REGIONAL STEERING COMMITTEE MEETING

RECAP FROM SEPTEMBER 1

- Review process for building out the governance structure and subsequent outreach and engagement.
- The Regional Steering Committee will vote on a provisional governance structure recommendation at the end of January 2021.

PLAN ANALYSES – LSU

- Dr. Thomas Douthat provided a review of parish and municipal plan evaluation research efforts being undertaken by LSU College of the Coast and Environment.
- Process
 - Collecting data from parish and municipal plans and then importing them into a qualitative data analysis software. This creates cases for plans, geographical features, organizations, and policies. Additional social network analyses are also conducted that provide socio-ecological, actor, policy, and goals networks.
- LSU presented *preliminary* results for actor networks across the region. More detailed information can be found in the September 23 presentation at <https://crpcla.org/previous-events>.

EXISTING STAKEHOLDERS

Rachelle Sanderson led the Regional Steering Committee through existing organizations that are enabled through statute and organizations that are stakeholders for watershed/floodplain management. Participants were asked to add organizations that may be missing. Please reference the September 23 presentation and meeting packet at <https://crpcla.org/previous-events> for a complete list. Additions that were made to the list are as follows:

- Capital Resource & Conservation Development District
- US Fish & Wildlife
- Maybe also development authorities and boards. E.g., Build Baton Rouge or TIF districts?
- Land Trust for LA
- Nature Conservancy
- LDWF Natural Heritage program



- Louisiana Scenic Rivers
- New Orleans Redevelopment Authority and Finance New Orleans

GOALS AND POTENTIAL SOLUTIONS

ROOT CAUSES, WHAT CAN WE IMPACT?

Rachelle Sanderson led the group through a discussion to determine which root causes members of the RSC thought that they could impact. These root causes were identified during the September 1 meeting. RSC members indicated that they could positively impact all root causes. See the full list below.

1. Individualism
2. Area prone to flooding
3. Holistic approach to flood risk activities
4. Scale of challenges vs scale of decision making
5. Lack of collaboration
6. Lack of education on risks
7. Need greater than resources
8. Migration
9. Uneven development standards
10. Lack of enforcement
11. Systems not designed for growth v sustainability
12. Decisions on time horizon shorter than generation
13. Investments not focused on preventative actions
14. Design gap
15. Development vs flood map timing
16. Consequences of old decisions

POTENTIAL SOLUTIONS AND ACTIONS

Prior to the meeting, RSC members were asked to fill out a survey that matched root causes to potential solutions. The results were presented to the committee for discussion. Below is a list of potential solutions, in order, that were selected across multiple root causes by 12 respondents. To see the full survey results, please see the Appendix A.

1. Increase in informed decision making- 18%
2. Increased coordination and collaboration- 15%
3. Increased capacity and capability - 15%
4. Increased accountability (11%)
5. Standardized and predictable process (11%)
6. Increased standards (10%)
7. Increased political will (10%)



8. Access to more funding (8%)

Comments on this discussion are as follows:

- It is not surprising that access to more funding is the lowest percentage. Plan first, funding can come later.
- The group wants the info to be able to improve decisions, working together in RSC aligns with direction this group is taking.
- The best and most innovative ideas are developed when funds are removed from the "table" Allows creative process to flow and better use of existing resources when not thinking about new funding. Equipment, talents, etc.
- Sometimes people need increased standards in order to give them backup to push changes
- There were some responses that were listed as other, do any of these stand out?
 - Don't discount work in other areas, they may have use
 - Design student involvement

The RSC was then asked to identify actions related to the potential solutions listed above. Below are comments related to this discussion.

1. **Potential solution: Increase in informed decision making** –

- Modeling and data
- Education and training on nature-based solutions (decision makers in public, designers, development of future workforce like schools and universities)
- Model development - determine parameters and refine it
- Modeling targeted for specific goals (are we looking at built infrastructure, green infrastructure, scale of modeling, and audience who benefits from models, etc.)
- Make information easier to understand (general public, etc.)
- Accurate and objective data to support decisions
- Establish decision making matrix (Lean Six Sigma to help filter info)
- Establish a common language of understanding built on mission and vision
- know model limitations and how the model is defined
- Accurate data needs to go into models to provide more accurate results -LIDAR DOTD DATA
- Use models for scenario building
- Determine scale for modeling and scenarios
- Other data needs to help make better decisions (frequency, duration, degree of floods, elevation, etc. could help without modeling in place).
- Consider population for model development (resolution)
- LWI models are base models - scenario model development will come after that; they will need to be built out. Determine what we want them to do
- manage expectations, and limitations, of models with other decision-making tools/resources



- Select the best model that will answer the questions about our needs - use the tool to match the problem
- Surveys - ask for feedback to see people's interest, knowledge, and they can be used to influence. Survey muni personnel to gauge understanding of perception of resources and problems, match this to what is available to them to inform the request for needs
- Understand capacity of municipality and parishes to integrate technical info, etc. and then match up to what their needs are

2. **Potential solution: Increase capacity and capability**

- Partnerships and collaboration to leverage and utilize to fill gaps that parishes and municipalities have, partner with other agencies who fill gaps that RSC has. Recruit professional organizations, strategically staff technical expertise that can be shared across jurisdictions (not one jurisdiction needs to have all of the staff, they can be shared)
- Establish points of contact for one organization/agency to take on a particular task (like modeling for subdivision development across a region). Creates consistency in the reports as well. Burden shifts to an established point of contact instead of being across the entire region with multiple points. Consistency and concurrency review. Would lead to better information down the road because we're building data over time.
- Integrate academia and the business community
- Consultants developing items should present on a regular basis to the members of the long-term governance structure, so information is shared. Continual engagement with committee members to move us forward.
- People and process development/improvements through group training to understand and utilize creativity and diversity
- Include CPRA
- Going back to a Master Plan, using better understanding of flood control, environmental based solutions, and funding availability then incorporate this information into policy and plans
- if the leaders (Presidents) issued a joint statement at a critical point in the process.
- Provide on-demand knowledge presentations from key experts, linked from CRPC website, to be viewed on your own time to increase information availability/resources/capacity

3. **Potential solution: Increased accountability**

- Periodically revisit the master plan and mission statement to see if they still apply.
- Monitoring - establish strategies/guidelines are being followed, plans are being reviewed, projects are being monitored for impacts. Keep monitoring projects for the long term, even after construction.
- Establishing metrics for success - we need to define these, when do we do it? Maybe it's established through monitoring as we have more information
- Have a landing page for flood vulnerability information and how they can make decisions on an individual basis to reduce their risk/get involved (pre-disaster and post-disaster)
- Climate conferences - face to face (pending COVID) meeting where you have all of the data from monitoring, issues, etc. and touch upon them



PUBLIC COMMENT

1. Russell Kelly - RiverBend Subdivision - appears we've been left out of process. People very concerned with flooding here, development upstream and downstream, and issue of subsidence that is being ignored by EBR.
2. Tina Gassen - to address individualism - look at the Nature Conservancy model that informs property owners for conservation set-asides and long-term approaches (servitude/easement)
3. Nelwyn McInnis - work with La Land Trust now. Explained the servitude/easement concept.
4. Matthew Allen - maybe it's time for state to take over floodplain regulations. Developers almost extort. Consistency would resolve that issue.
5. John Sheehan - one of prime objectives of watershed initiative is to start managing flood risk using hydrologic rather than political boundaries.
6. Honora Buras - Open space preservation can improve Community Rating System and decrease flood insurance rates
7. Matthew Allen - State needs to legislate higher floodplain accountability instead of deferring to local government.
8. Risa Mueller - The state's current buyout programs incorporate servitude/easement options, and some are in conjunction with NRCS/USDA to create long term floodplain restoration areas.
9. Dietmar Rietschier - created map of region 7 showing its 7 HUC-8 watersheds that normally flood independently. This should be the foundation of all that we do. Reference link that Rachelle will provide.
10. Evelyn Campo - earlier note - Gary Mego said 1-foot freeboards allowed now, previously amended out? Her understanding is it is still amended out. Tom: Standards differ by jurisdiction. Ross: not yet required; in future SFHA's will require?

MEETING CLOSEOUT

- Review of RSC timelines coming up
- October 13 RSC meeting
- Vision document feedback
- Dr. Douthat's info- regional case studies info to be shared across state
- Round 1 project timelines adjusting. Jan. 22, 2021 is deadline for full application submittals from pre-applicants who were deemed eligible.
- Meeting availability survey pending
- Project inventory reminder, please include ideas that aren't formal
- September minutes adoption - Bridget moved, Devin seconded
- Adjourn - Devin moved, Bridget seconded



ADOPTION OF SEPTEMBER 1 MEETING MINUTES

Motion to adopt by Bridget Bailey

Motion seconded by Devin Foil

No objections, motion passes

MOTION TO ADJOURN

Motion to adjourn: Devin Foil

Second motion: Bridget Bailey

No objections, motion passes

MEETING CHAT

- 08:55:58 From Rachele Sanderson : Name, Parish, Organizational Affiliation, What you're looking forward to about fall?
- 08:56:32 From Marvin McGraw : Marvin McGraw, OCD. LSU Football!
- 08:56:45 From Thomas Douthat : 1) Looking Forward to Fall: Nice weather to ride my bike, and what excuses I
- 08:56:52 From Jenny Schexnayder : Jenny Schexnayder, Office of Coastal Support at Nicholls State University
- 08:56:55 From Stephanie Bruning : Stephanie Brüning, St. Charles Parish (Alternate for Earl Matherne). Looking forward to Hurricane season being over.
- 08:56:59 From Thomas Douthat : and what excuses I'll make up to avoid exercise.
- 08:57:08 From Gary Mego : Gary Mego, West Feliciana. Definitely football.
- 08:57:18 From R.J. Saucier : R. J. Saucir, Consultant
- 08:57:20 From Risa Mueller : Risa Mueller, Franklin Associates/LWI team; more time outside!
- 08:58:14 From Rachele Sanderson : Name, Parish, Organizational Affiliation, What you're looking forward to about fall?
- <https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/5f62106f611fb43ecc0c89ce/1600262257515/Region+7+September+23+Packet+09162020.pdf>
- 08:58:15 From Chuck Berger : Chuck Berger, LDEQ, East Feliciana; looking forward to Halloween
- 08:58:25 From Bobbi Jo Breland : Bobbi Jo Breland
- 08:58:57 From kim marousek : Kim Marousek, CRPC
- 08:59:01 From Bobbi Jo Breland : Washington Parish.... no storms in gulf!!!



- 08:59:18 From Mary Gentry : Mary Gentry, LDEQ, East Baton Rouge Parish; looking forward to cooler weather and an end to hurricane season!
- 08:59:52 From Kendra Hendricks : Kendra Hendricks, CRPC. Looking forward to cooler weather.
- 08:59:54 From Binh Dao : Binh Dao, LDEQ, Ascension Parish; fishing
- 09:00:05 From Tina Gassen : Looking forward to working in my garden in the nice weather
- 09:00:24 From Rachelle Sanderson : Name, Parish, Organizational Affiliation, What you're looking forward to about fall?
- <https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/5f62106f611fb43ecc0c89ce/1600262257515/Region+7+September+23+Packet+09162020.pdf>
- 09:00:37 From Randy Pausina : Randy Pausina, St Tammany
- 09:00:51 From Donna O'Dell : Donna O'Dell, St Tammany parish
- 09:01:44 From Devin Foil : Devin A. Foil, St. John the Baptist Parish Govt.
- 09:02:02 From Ivy Mathieu : GM! Ivy Mathieu, St. John Parish Coastal Advisory Committee. Looking forward to cool weather and Hurricanes fading away starting today!
- 09:02:10 From Matthew Allen : Matthew Allen: Northshore Riverwatch
- 09:02:30 From Mark Goodson : Mark Goodson, CSRS
- 09:02:35 From Mike Enlow : Mike Enlow - Ascension Parish
- 09:06:40 From Rachelle Sanderson : Name, Parish, Organizational Affiliation, What you're looking forward to about fall?
- <https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/5f62106f611fb43ecc0c89ce/1600262257515/Region+7+September+23+Packet+09162020.pdf>
- 09:12:38 From Bridget Bailey : Hi I'm here!
- 09:12:56 From Ken Wheat : Ken Wheat here without mic at this time. Washington Parish
- 09:13:05 From Andreanecia Morris : Andreanecia Morris, Orleans, HousingNOLA/GNOHA/HousingLOUISIANA. Learning more about this initiative!
- 09:19:27 From Risa Mueller : Reminder: please let everyone know your name, parish, organizational affiliation in the chat box
- 09:20:35 From Helen Waller : Helen Waller, OCD
- 09:21:23 From Jay Watson : Jay Watson, Parish Engineer, St. Tammany Parish
- 09:21:51 From Honora Buras : Honora Buras, Ascension Parish, CPRA
- 09:22:04 From Ronny Carter : Ronny Carter LPBF Member at large
- 09:23:51 From Kimberly Coates : Kim Coates, Tangipahoa Parish Council
- 09:34:42 From Nelwyn McInnis : What were your sources for environmental conservation?
- 09:40:52 From Rachelle Sanderson : 1 min



- 09:43:34 From Gary Mego : I think LA revisions to building code now allow 1ft freeboard. It had previously been amended out.
- 09:44:19 From Russell Kelly : There is missing data on flooding and subsidence for a significant area. How do we get this factual and proven data into the arena to be evaluated and acted upon?
- 09:45:03 From Rachelle Sanderson :
<https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/5f62106f611fb43ecc0c89ce/1600262257515/Region+7+September+23+Packet+09162020.pdf>
- 09:45:14 From Risa Mueller : Dr. Douthat's slides will be posted to the CRPC website after today's meeting for everyone to dive in deeper
- 09:45:34 From Devin Foil : Will Dr. Douthat's research culminate in a report that the Steering Committee will be able to read before the establishment of the formal Coalition?
- 09:46:02 From Chuck Berger : I suggest we consider Louisiana's Water Quality Management Plan and the Integrated Report. Both are documents required by the Clean Water Act.
- 09:49:02 From Bridget Bailey : Looking at Dr. Douthat's overview of what plans each parish has, if we DO have a plan that was identified as not being in place, how do we get this plan to his group so it can be added to the report?
- 09:49:45 From Risa Mueller : @Bridget - please submit information to Rachelle, thanks!
- 09:50:17 From Thomas Douthat : Maybe also development authorities and boards. E.g., Build Baton Rouge or TIF districts?
- 09:51:59 From Rachelle Sanderson : rsanderson@crpcla.org
- 09:52:39 From Gary Mego : US Fish and Wildlife
- 09:52:41 From Nelwyn McInnis : NGOs - Land Trust for LA, The Nature Conservancy, LDWF Natural Heritage Program
- 09:53:01 From Matthew Allen : Louisiana Scenic Rivers
- 09:53:25 From Andeanecia Morris : New Orleans Redevelopment Authority and Finance New Orleans—I can do an intro
- 09:54:06 From David Campbell : Little Tchefuncte River Association
- 09:55:12 From John Sheehan : Would the Lake Pontchartrain Basin Foundation be appropriate?
- 09:55:37 From John Sheehan : Sorry, I missed that.
- 09:56:52 From Chuck Berger : Possibly add the Hypoxia Task Force.
- 09:57:09 From Rachelle Sanderson :
<https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/5f62106f611fb43ecc0c89ce/1600262257515/Region+7+September+23+Packet+09162020.pdf>
- 09:57:22 From Bobbi Jo Breland : Should Dept of Natural Resources or Army Corp of Engineers be added?
- 09:58:12 From Chuck Berger : Add Coastal Restoration and Protection Authority, if not already on the list of stakeholders.



- 09:58:30 From Rachelle Sanderson :
<https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/5f62106f611fb43ecc0c89ce/1600262257515/Region+7+September+23+Packet+09162020.pdf>
- 10:00:19 From Thomas Douthat : If we are missing any plans, please let us know, my graduate students have done the best they can to scour the internet, and in many cases call, but I am sure we are missing some, and your help will improve our work. Please email (randerson@crpcla.org, and CC tdouthat1@lsu.edu (Tom Douthat), llaman2@lsu.edu (Ms. Lindsey Lamana, Master's student). We want to our very best to bring all the plans together, and eventually hand them over to the coalition for custody, and to keep a regional inventory as they are updated moving forward.
- 10:00:44 From Thomas Douthat : Correction: rsanderson@crpcla.org
- 10:02:10 From Russell Kelly : Can control accurate factual data input.
- 10:03:51 From Tina Gassen : Not sure control is the correct word....however use that to help our cause
- 10:04:21 From Matthew Allen : we can direct public opinions and individualism with correct branding
- 10:07:25 From Risa Mueller : Reminder - if you have not yet "signed in" on the chat box, please do :)
- 10:12:54 From Matthew Allen : only thing we cannot impact is that we are prone to flooding issues because of natural environment.
- 10:15:07 From Tina Gassen : I guess the question is scale....the key work is "some" degree of impact
- 10:18:25 From Tina Gassen : I was thinking too
- 10:18:50 From Karen Zito : Agree with Chuck - Fund the plan
- 10:22:31 From Rachelle Sanderson : Refer to your meeting packet to match root cause numbers to their descriptions
<https://static1.squarespace.com/static/54cbd54fe4b047a0380cae54/t/5f62106f611fb43ecc0c89ce/1600262257515/Region+7+September+23+Packet+09162020.pdf>
- 10:22:51 From Steve Kistler : Steve the best and most innovative ideas are developed when funds are removed from the "table"
- 10:36:22 From Russell Kelly : Not sure if this applies but studies used for decision making have not been fully objective leaving out key data which maybe negative.
- 10:43:27 From Russell Kelly : ACCURATE and OBJECTIVE data for the best decision making. This is an issue.
- 10:43:40 From Tina Gassen : Make the information easier to understand by general public
- 10:43:52 From Matthew Allen : Take politics out of floodplain managers' decision making process.
- 10:44:53 From Matthew Allen : make floodplain managers civil servants instead of at will employees
- 10:44:58 From Ivy Mathieu : Establish decision making matrix template that information is filtered through like a Lean Six Sigma or fishbone model, etc. Also, establish a common language of understanding or definitions with the underscoring of mission and vision. Just an example to consider of a concrete example showing how a decision was arrived...



- 10:45:22 From Thomas Douthat : Can the model be used for scenario building? At what scale? In what domains?
- 10:50:28 From Russell Kelly : Yes some models exclude critical data needed whether by design or accident.
- 10:53:12 From Risa Mueller : Great example Chuck!
- 10:55:36 From David Campbell : It would be good if the l
- 10:56:05 From Risa Mueller : Provide on-demand knowledge presentations from key experts, linked from CRPC website, to be viewed on your own time to increase information availability/resources/capacity
- 10:56:57 From David Campbell : if the leaders (Presidents) issued a joint statement at a critical point in the
- 10:57:12 From David Campbell : process.
- 11:00:46 From Tina Gassen : Going back to a Master Plan, using better understanding of flood control, environmental based solutions, and funding availability then incorporate this information into policy and plans
- 11:03:48 From Russell Kelly : People and process development/improvements through group training (6 thinking hats, parker team player, etc.) to understand and utilize creativity and diversity. But I must say I am impressed with this meeting flow.
- 11:08:55 From Russell Kelly : Periodically revisit the master plan and mission statement to see if they still apply.
- 11:12:12 From Tina Gassen : I agree with monitoring... and keep monitoring projects for the long term, even after construction. Then show public results
- 11:14:08 From Matthew Allen : Statee needs to legislate higher floodplain accountability instead of deferring to local government.
- 11:19:38 From Risa Mueller : The state's current buyout programs incorporate servitude/easement options and some are in conjunction with NRCS/USDA to create long term floodplain restoration areas.
- 11:20:32 From Honora Buras : Open space preservation can improve Community Rating System and decrease flood insurance rates
- 11:21:19 From Tina Gassen : good comment
- 11:21:49 From Robert Seemann : Great comment
- 11:24:28 From John Sheehan : Thank you Dietmar, I'd like to see the map.
- 11:29:00 From Rachelle Sanderson : Round 1 information can be found at watershed.la.gov
- 11:29:37 From Rachelle Sanderson : watershed@la.gov
- More information on projects and where to submit projects to the inventory <https://crpcla.org/projects>



LWI Region 7

Regional Steering Committee (RSC) Meeting

SEPTEMBER 23, 2020

Presented by: Rachelle Sanderson, Kim Marousek, and
Dr. Thomas Douthat



LOUISIANA
WATERSHED
INITIATIVE

working together for sustainability and resilience

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



Objectives & RSC goals

- Objectives
 - Recap from Sept. 1
 - Overview of plan analyses being conducted by LSU
 - Discuss existing stakeholders
 - Discuss goals and potential solutions
- RSC Goals
 - Develop long-term governance structure
 - Project Inventory due October 31
- **What we're here to discuss today**



Grant agreement

- \$1.2B agreement with HUD has been signed
- We wanted to take a **brief** moment to celebrate
- We'll talk more about it at the end of the meeting



Thank you...

- For being here during:
 - The most active hurricane season to date
 - The most active wildfire season to date
 - COVID-19 global pandemic



Introductions



| NAME | AFFILIATION |
|--|--|
| Mike Enlow 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 |
| Mark Harrell and/or Steve Kistler | 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 |
| Devin Foil 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 |
| Chuck Berger and/or John Sheehan, Binh Dao | Department of Environmental Quality |
| Ronny Carter and/or Kim Coates | Lake Pontchartrain Basin Foundation |





AGENDA

1. Introductions and meeting logistics
2. Recap from Sept. 1
3. Plan analyses
4. Existing stakeholders
5. Goals and potential solutions
6. Public comment
7. Closeout





2. Recap from Sept. 1 meeting



Recall the 4 R's

Credit: Dr. Thomas Douthat, LSU College of the Coast and Environment

Rules

- Who will appoint your board?
- What powers or roles should the coalition fill?
- What is the current governance context of your watershed?
- Will you operate under a state regulatory structure or special statute?
- What are the geographical and interest group considerations to consider when creating a representative structure?

Resources

- Will your staff resources be internal or external to the organization?
- What structures and strategies can help build stable long-term funding?
- Will the creation of the organization include a funding stream?

Relationships

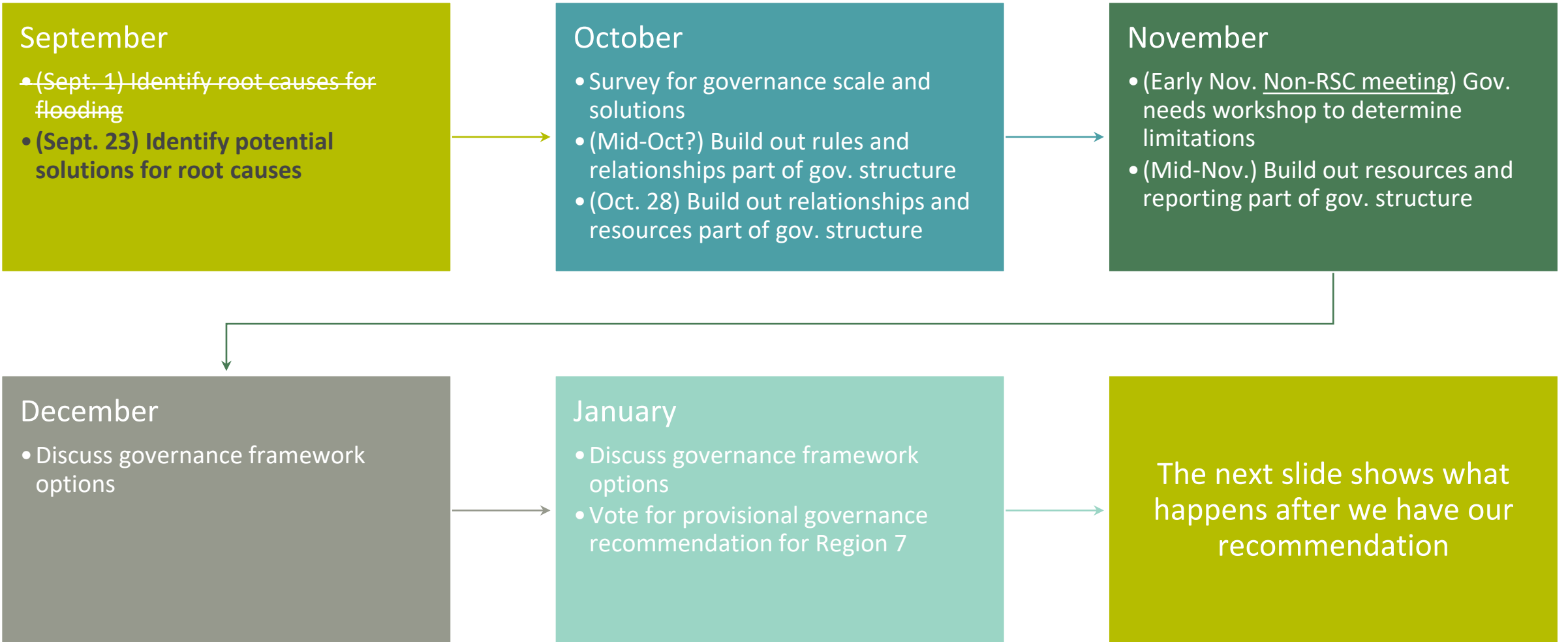
- How can you include diversity and engagement in your structure?
- Will you have sub-committees composed of specific jurisdictional representation, technical representatives, social group representatives?
- Will the organization include staffing for outreach and engagement?
- How will you manage relationship building at different geographical scales?

Reporting (accountability)

- Structure your reporting around the goals of the coalition
 - Collaboration- How to measure?
 - Mitigation - How to measure?
 - Project implementation - How to measure?
- Need to establish transparent strategy and responsibilities for reporting
- Should include publication and communication strategy



How will we build out our gov. structure?



What happens after recommendation?



Provisional recommendations

Outreach and engagement

Refined recommendations

An iterative planning process requiring vetting and revisiting recommendations

November – January

Make recommendations based on best available data, practices, expertise and information

January – April

Engage parish leadership, stakeholders and the public to gather feedback

RESOURCE: O&E TOOLKIT

May – June

Consider feedback from outreach and engagement and refine recommendations





3. Plan analyses



An Introduction to Research on LWI 7's Land Use Regulation & Planning Networks

Thomas H. Douthat, JD, PhD

LSU College of the Coast and Environment

9/23/2020

LOUISIANA
WATERSHED

LSU

College of the Coast & Environment

Watershed Coalition:

- New institutional structures
- Coordinating increasing investments in infrastructure & mitigation
- Improving building and development codes
- H&H models for decision-making



Roman Foundations in
Tarragona, Spain

- State of watershed planning in the region?
- Current governing structure and actors
- Variations in development regulations across jurisdictions

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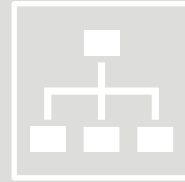
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LSU Douthat Group (Environmental Regulation & Planning “Lab”) - Technical Research Support

- **Measuring the State of the Governance Network**
 - Coordination among plans, organizations, and jurisdictions
 - Consistency of values, norms, and policy preferences
 - Integration among plans
- **Land Use and Regulatory Environment**
 - Consistency and variation of development rules
 - Possible patterns and best practices?
- **Support for Understanding the Foundations Upon Which the Regional Coalition will be Built**



An Introduction to Our Current Research



Description of our Plan Evaluation and Network Analysis Methods (and some preliminary examples)



Review of Subdivision and Storm water Related Rules in Residential Development

LSU

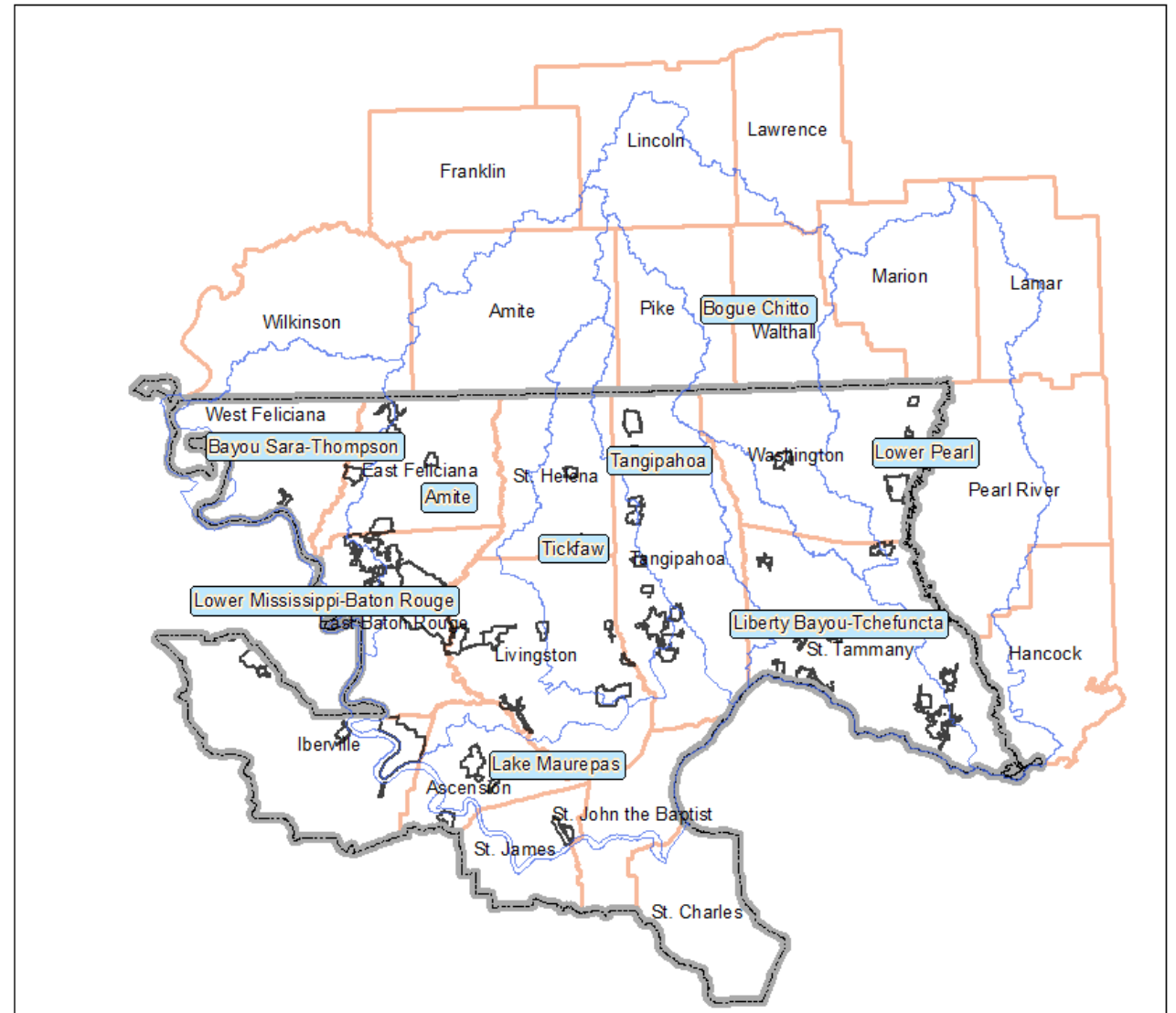
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Regional Analysis of the System of Planning Documents

- 12 Parishes
- 45 Municipalities

LWI Region 7 Landcover

- HUC 8 Boundaries
- LWI Region 7 Counties
- Incorporated Places
- Parishes - Counties



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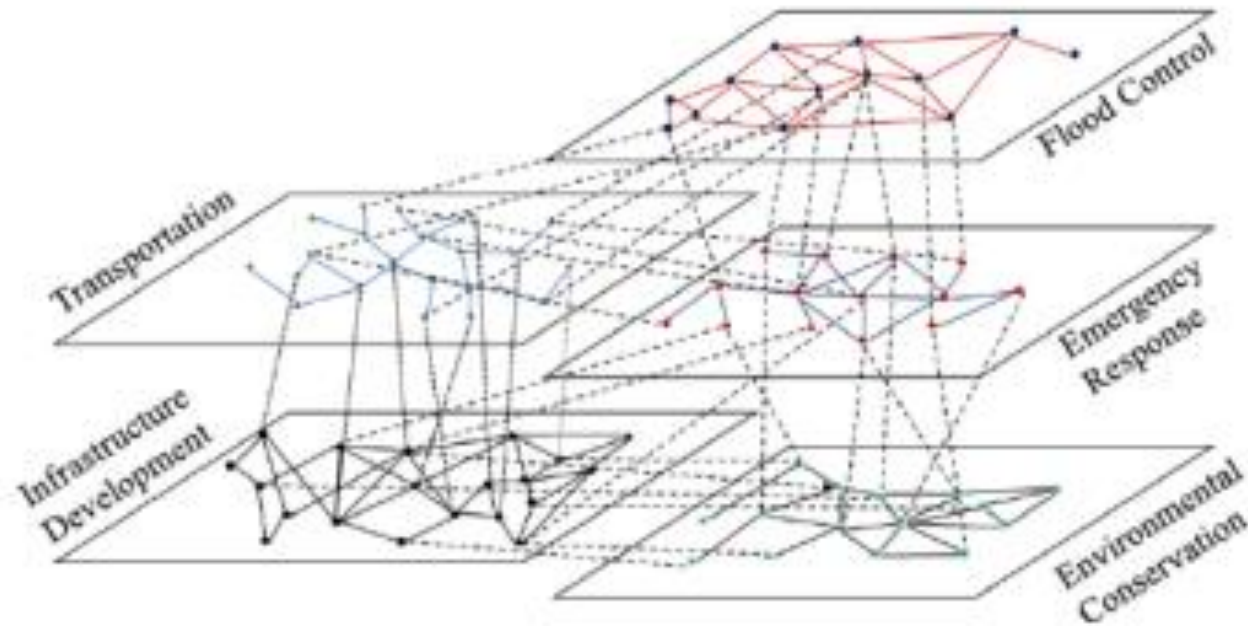
Existing Conditions: Systematically evaluate the content of current plans

Plan Evaluation in a Planning Process

“...plan quality is a powerful driver on local government adoption of land use and building code regulations that reduce damage from an earthquake, integration of stormwater mitigation techniques in development permits, adoption of mitigation tools through increased commitment of local planners, and the strength of landscape protection provisions of zoning ordinances.” (Berke et al)



Existing Conditions: Implement methodologies to describe and analyze how plans/ watershed actors relate among one another



Conceptual Image: Li et al (2019), Texas A&M

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Our Process

Data Collection

- Inventory Parish, Municipal, and Regional plans.
- Comprehensive/Master Plans, including Land Use and Strategic Plans
- GOHSEP Hazard Mitigation Plans
- Louisiana Department of Natural Resources (DNR) Coastal Zone Management Programs and Local Coastal Programs
- Stormwater Management Plans, Resiliency Plans, LA Safe, and Adaptation Plans

Plan Evaluation and Network Coding

- Import all plans into NVivo (qualitative data analysis software).
- Review documents individually and “code” to Plan Evaluation Coding Protocol.
- Create “cases” for plans, geographical features, organizations, and policies.
- Create relationships (undirected, directed, or symmetrical) between cases.

Social Network Analysis

- Import network data into KUMU.
- Socio-Ecological Network (Watershed Features)
- Actor Network
- Policy Network
- Goals Networks
- Review centrality measures and identify gaps and patterns in networks.

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Inventory (Working) of Parish-Level Planning Documents

| Parish | Principal Plan Categories | | | | Secondary Plan Categories | | | | |
|----------------------|---------------------------|-------------------|-----------------|-------------------|---------------------------|----------|------------|----------------|----------------------|
| | Comprehensive/Master | Hazard Mitigation | Stormwater Mgmt | Coastal Zone Mgmt | Resiliency | Recovery | Adaptation | Emergency Ops. | Metro Transportation |
| Ascension | 2019 | 2015 | N/A | N/A | N/A | N/A | N/A | 2016 | N/A |
| East Baton Rouge | 2018 | 2016 | 2018 | N/A* | N/A | N/A | N/A | N/A | N/A |
| East Feliciana | 2013 | 2017 | N/A | N/A* | N/A | N/A | N/A | N/A | N/A |
| Iberville | 2005 | 2011 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livingston | 2013 | 2015 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| St. Charles | 2011 | 2015 | 2018 | 2014 | N/A | N/A | N/A | N/A | N/A |
| St. Helena | N/A | 2015 | N/A | N/A* | N/A | N/A | N/A | N/A | N/A |
| St. James | 2014 | 2016 | 2018 | 1982 | N/A | N/A | N/A | N/A | N/A |
| St. John the Baptist | 2014 | 2015 | 2019 | 2017 | N/A | N/A | 2019 | N/A | N/A |
| St. Tammany | 1999 | 2015 | 2017 | 2017 | 2014 | N/A | 2019 | N/A | N/A |
| Tangipahoa | 2008 | 2015 | N/A | N/A | N/A | 2017 | N/A | N/A | 2018 |
| Washington | N/A | 2015 | N/A | N/A* | N/A | N/A | N/A | N/A | N/A |
| West Feliciana | 2008 | 2017 | N/A | N/A* | N/A | N/A | N/A | N/A | N/A |

Pre-2006 2006-2014 2015-Present



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Inventory of Municipal-Level Planning Documents

45 Municipalities (Note,
this list is still being
revised. Please, tell us if
we are missing anything)

| Parish | Municipality | Comprehensive | Hazard Mitg. | Stormwater Mgmt. | Coastal Mgmt. | Emergency Ops. | Recovery | Transportation |
|------------------|------------------------------|---------------|--------------|------------------|---------------|----------------|----------|----------------|
| Ascension | City of Donaldsonville | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Ascension | City of Gonzales | 2015 | N/A | 2019 | N/A | 2016 | N/A | N/A |
| Ascension | Town of Sorrento | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| East Baton Rouge | City of Baker | 2013 | N/A | N/A | N/A* | N/A | 2018 | N/A |
| East Baton Rouge | City of Baton Rouge | 2018 | 2016 | 2018 | N/A* | N/A | N/A | N/A |
| East Baton Rouge | City of Central | 2007/2010 | N/A | N/A | N/A* | N/A | N/A | 2013 |
| East Baton Rouge | City of Zachary | 2010 | N/A | N/A | N/A* | N/A | N/A | N/A |
| Iberville | City of Plaquemine | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |
| Iberville | City of St. Gabriel | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |
| Iberville | Town of Maringouin | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |
| Iberville | Town of White Castle | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |
| Iberville | Village of Grosse Tete | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |
| Iberville | Village of Rosedale | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |
| Livingston | City of Denham Springs | N/A | N/A | 2007 | N/A | N/A | N/A | N/A |
| Livingston | Town of Livingston | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livingston | Town of Killian | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livingston | Town of Springfield | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livingston | Town of Walker | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livingston | Village of Albany | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livingston | Village of French Settlement | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Livingston | Village of Port Vincent | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| St. Helena | Town of Greensburg | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |
| St. Helena | Village of Montpelier | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |
| St. James | Town of Gramercy | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| St. James | Town of Lutcher | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| St. Tammany | City of Covington | 2016 | N/A | N/A | N/A | N/A | N/A | N/A |
| St. Tammany | City of Mandeville | 2007 | N/A | N/A | N/A | N/A | N/A | N/A |
| St. Tammany | City of Slidell | 2020 | N/A | N/A | N/A | N/A | N/A | N/A |
| St. Tammany | Town of Abita Springs | N/A | N/A | 2013 | N/A | N/A | N/A | N/A |
| St. Tammany | Town of Madisonville | 2019 | N/A | N/A | N/A | N/A | N/A | N/A |
| St. Tammany | Town of Pearl River | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| St. Tammany | Village of Folsom | 2014 | N/A | N/A | N/A | N/A | N/A | N/A |
| St. Tammany | Village of Sun | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Tangipahoa | City of Hammond | 2011 | N/A | N/A | N/A | N/A | N/A | N/A |
| Tangipahoa | City of Ponchatoula | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Tangipahoa | Town of Amite City | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Tangipahoa | Town of Independence | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Tangipahoa | Town of Kentwood | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Tangipahoa | Town of Roseland | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Tangipahoa | Village of Tangipahoa | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Tangipahoa | Village of Tickfaw | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Washington | City of Bogalusa | 2012 | N/A | N/A | N/A* | N/A | N/A | N/A |
| Washington | Town of Franklinton | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |
| Washington | Village of Angie | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |
| Washington | Village of Varnado | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |
| West Feliciana | Town of St. Francisville | N/A | N/A | N/A | N/A* | N/A | N/A | N/A |



Our Process

Data Collection

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Social Network Analysis

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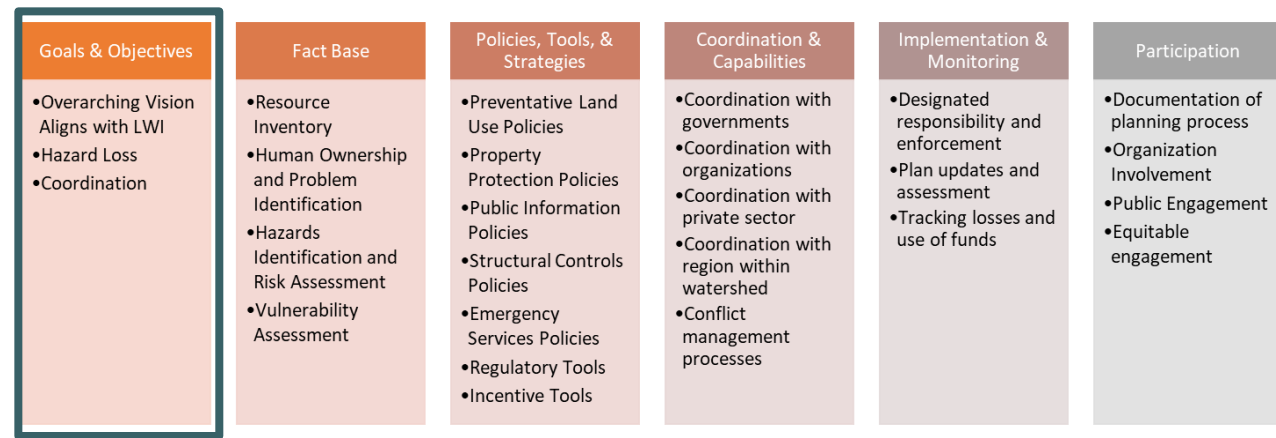
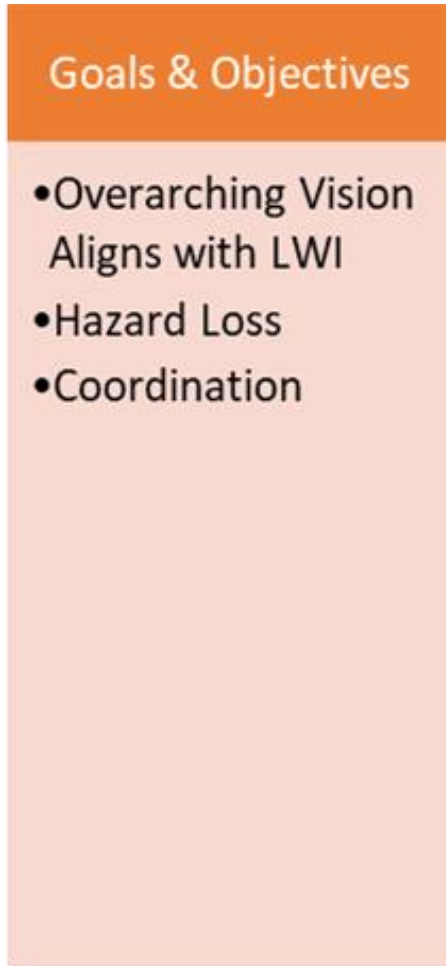
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Principle Categories of the Plan Evaluation Coding Protocol

| Goals & Objectives | Fact Base | Policies, Tools, & Strategies | Coordination & Capabilities | Implementation & Monitoring | Participation |
|---|--|---|--|--|--|
| <ul style="list-style-type: none"> • Overarching Vision • Hazard Loss • Coordination | <ul style="list-style-type: none"> • Resource Inventory • Human Ownership and Problem Identification • Hazards Identification and Risk Assessment • Vulnerability Assessment | <ul style="list-style-type: none"> • Preventative Land Use Policies • Property Protection Policies • Public Information Policies • Structural Controls Policies • Emergency Services Policies • Regulatory Tools • Incentive Tools | <ul style="list-style-type: none"> • Coordination with governments • Coordination with organizations • Coordination with private sector • Coordination with region within watershed • Conflict management processes | <ul style="list-style-type: none"> • Designated responsibility and enforcement • Plan updates and assessment • Tracking losses and use of funds | <ul style="list-style-type: none"> • Documentation of planning process • Organization Involvement • Public Engagement • Equitable engagement |

Network Coding



- Where are common values present in existing plans?
 - Inventory & Categorize relevant watershed and hazard management goals
 - Create Cases for Common Themes
 - Code linkages of plans to

Network Coding

| Fact Base |
|--|
| <ul style="list-style-type: none"> •Resource Inventory •Human Ownership and Problem Identification •Hazards Identification and Risk Assessment •Vulnerability Assessment |

| Goals & Objectives | Fact Base | Policies, Tools, & Strategies | Coordination & Capabilities | Implementation & Monitoring | Participation |
|--|--|--|---|---|--|
| <ul style="list-style-type: none"> •Overarching Vision Aligns with LWI •Hazard Loss •Coordination | <ul style="list-style-type: none"> •Resource Inventory •Human Ownership and Problem Identification •Hazards Identification and Risk Assessment •Vulnerability Assessment | <ul style="list-style-type: none"> •Preventative Land Use Policies •Property Protection Policies •Public Information Policies •Structural Controls Policies •Emergency Services Policies •Regulatory Tools •Incentive Tools | <ul style="list-style-type: none"> •Coordination with governments •Coordination with organizations •Coordination with private sector •Coordination with region within watershed •Conflict management processes | <ul style="list-style-type: none"> •Designated responsibility and enforcement •Plan updates and assessment •Tracking losses and use of funds | <ul style="list-style-type: none"> •Documentation of planning process •Organization Involvement •Public Engagement •Equitable engagement |

- Inventory & Categorize relevant watershed and hazard management features mentioned or mapped in the plans (e.g., Amite River, Tangipahoa River, or a particular levee system, or highway)
- Create cases for principle watershed related planning features
- Code linkages for plans that mention the features



Network Coding

| Coordination & Capabilities | Participation |
|---|--|
| <ul style="list-style-type: none"> •Coordination with governments •Coordination with organizations •Coordination with private sector •Coordination with region within watershed •Conflict management processes | <ul style="list-style-type: none"> •Documentation of planning process •Organization Involvement •Public Engagement •Equitable engagement |

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|--|--|--|---|---|--|
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- Inventory and categorize all organizations mentioned in the plans as cases (e.g., Parish X Planning Department, Community Group Y)
- Create representative relationship classes (e.g., offered technical expertise, or participated)
- Code linkages from organizations



Network Coding

| Coordination & Capabilities | Participation |
|---|--|
| <ul style="list-style-type: none"> •Coordination with governments •Coordination with organizations •Coordination with private sector •Coordination with region within watershed •Conflict management processes | <ul style="list-style-type: none"> •Documentation of planning process •Organization Involvement •Public Engagement •Equitable engagement |

| Goals & Objectives | Fact Base | Policies, Tools, & Strategies | Coordination & Capabilities | Implementation & Monitoring | Participation |
|--|--|--|---|---|--|
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NOTE: THIS IS A FIRST-RUN ATTEMPT AT UNDERSTANDING THE EXSITING ACTORS AND PARTICIPATORY STRUCTURE OF THE WATERSHED. IT WILL BE COMPLIMENTED WITH



Summary of Goals and Objectives: Parish Comprehensive Plans Only

Goals & Objectives

- Overarching Vision
Aligns with LWI
- Hazard Loss
- Coordination

| Goals & Objectives | Year | | | | | | |
|---|----------|----------|----------|----------|----------|----------|----------|
| | 1999 (1) | 2005 (1) | 2008 (2) | 2011 (3) | 2013 (2) | 2014 (1) | 2018 (1) |
| Coordination | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| Increase mitigation information availability | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| Increase parish-local coordination | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Increase parish-regional coordination | 1 | 0 | 0 | 1 | 0 | 1 | 1 |
| Hazard Loss | 1 | 1 | 2 | 2 | 1 | 1 | 1 |
| Improve stormwater management and drainage | 1 | 0 | 2 | 1 | 0 | 1 | 1 |
| Protect public safety | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| Reduce damage to property | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| Reduce economic loss | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Reduce impacts on environment and natural areas | 1 | 1 | 1 | 2 | 0 | 1 | 1 |
| Reduce social inequities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Overarching Vision | 1 | 0 | 1 | 3 | 1 | 1 | 1 |
| Increase resiliency to natural hazards | 1 | 0 | 1 | 2 | 1 | 1 | 1 |
| Promote sustainable development | 1 | 0 | 0 | 2 | 1 | 1 | 1 |
| Total (unique) | 1 | 1 | 2 | 3 | 1 | 1 | 1 |



Organization Type by Plan Category

- Coordination & Capabilities**
- Coordination with governments
 - Coordination with organizations
 - Coordination with private sector
 - Coordination with region within watershed
 - Conflict management processes

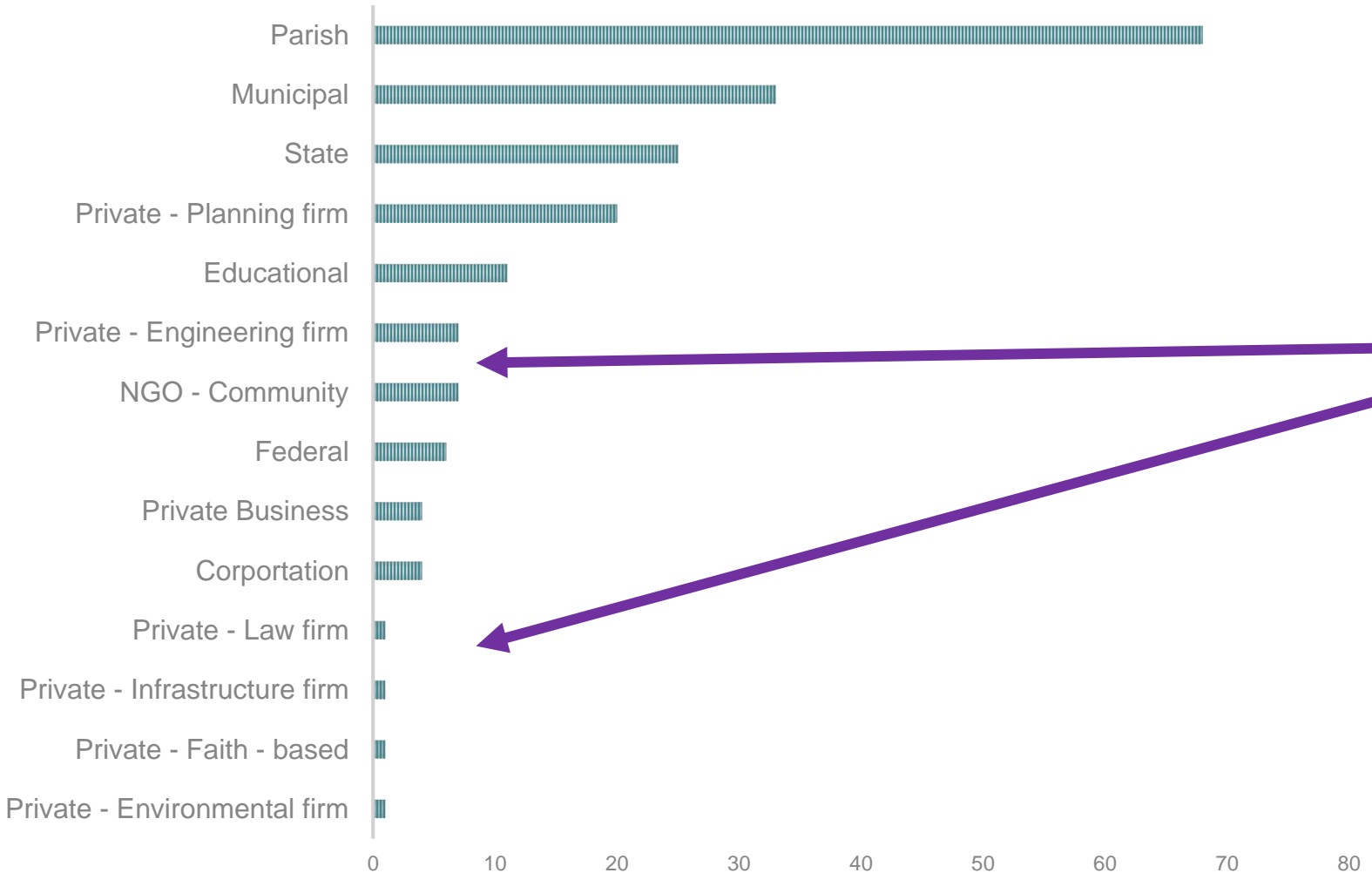
- Participation**
- Documentation of planning process
 - Organization Involvement
 - Public Engagement
 - Equitable engagement

| | Principle Plan Types (Parish Level Only) | | | | Additional Plan Categories | |
|-------------------------------|--|--------------------|-------------------|-----------------------|----------------------------|----------------------|
| | Comprehensive | Coastal Zone Mgmt. | Hazard Mitigation | Stormwater Management | Economic Development Plan | Emergency Operations |
| Parish (Offices) | 37 | | 6 | 26 | 3 | 2 |
| Municipal (Offices) | 6 | | | 32 | 3 | |
| State (Offices) | 7 | | 2 | 21 | 4 | 1 |
| Educational | 3 | | | 20 | | |
| Private - Planning firm | 18 | | 1 | 1 | | 1 |
| NGO - Community | 9 | | 2 | | | 1 |
| Federal | 2 | | 1 | 1 | 5 | |
| Private - Engineering firm | 4 | | | 1 | 2 | |
| Corportation | 2 | | | 1 | | 1 |
| Private Business | 2 | | | 2 | | |
| Private - Infrastructure firm | 1 | | | | 1 | |
| Private - Environmental firm | 1 | | | | | |
| Private - Faith - based | 1 | | | | | |
| Private - Law firm | 1 | | | | | |

| From | To | Type |
|------------------------------|--------------------------------------|------------------------|
| FEMA | East Baton Rouge Parish SWMP | Technical Contribution |
| FEMA | East Baton Rouge Parish SWMP | Sponsored |
| NOAA | East Baton Rouge Parish SWMP | Technical Contribution |
| USACE – New Orleans District | East Baton Rouge Parish SWMP | Technical Contribution |
| USACE – New Orleans District | Iberville Parish Master Plan | Participated |
| USACE – New Orleans District | St. John the Baptist Parish HMP | Participated |
| USGS | East Baton Rouge Parish SWMP | Technical Contribution |
| USDA | Tangipahoa Parish Comprehensive Plan | Participated |
| USDOC | St. James Parish CZMP | Sponsored |
| Albany | Livingston Parish HMP | Participated |
| Baker | East Baton Rouge Parish SWMP | Participated |



COUNT OF ORGANIZATION TYPE IN PARISH PLANS



Who is mentioned in the Parish Planning Documents?

Are the plans fully engaging a full spectrum of community and business stakeholders?



Our Process

Data Collection

- Inventory Parish, Municipal, and Regional plans.
- Comprehensive/Master Plans, including Land Use and Strategic Plans
- GOHSEP Hazard Mitigation Plans
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- Create “cases” for plans, geographical features, organizations, and policies.
- Create relationships (undirected, directed, or symmetrical) between cases.

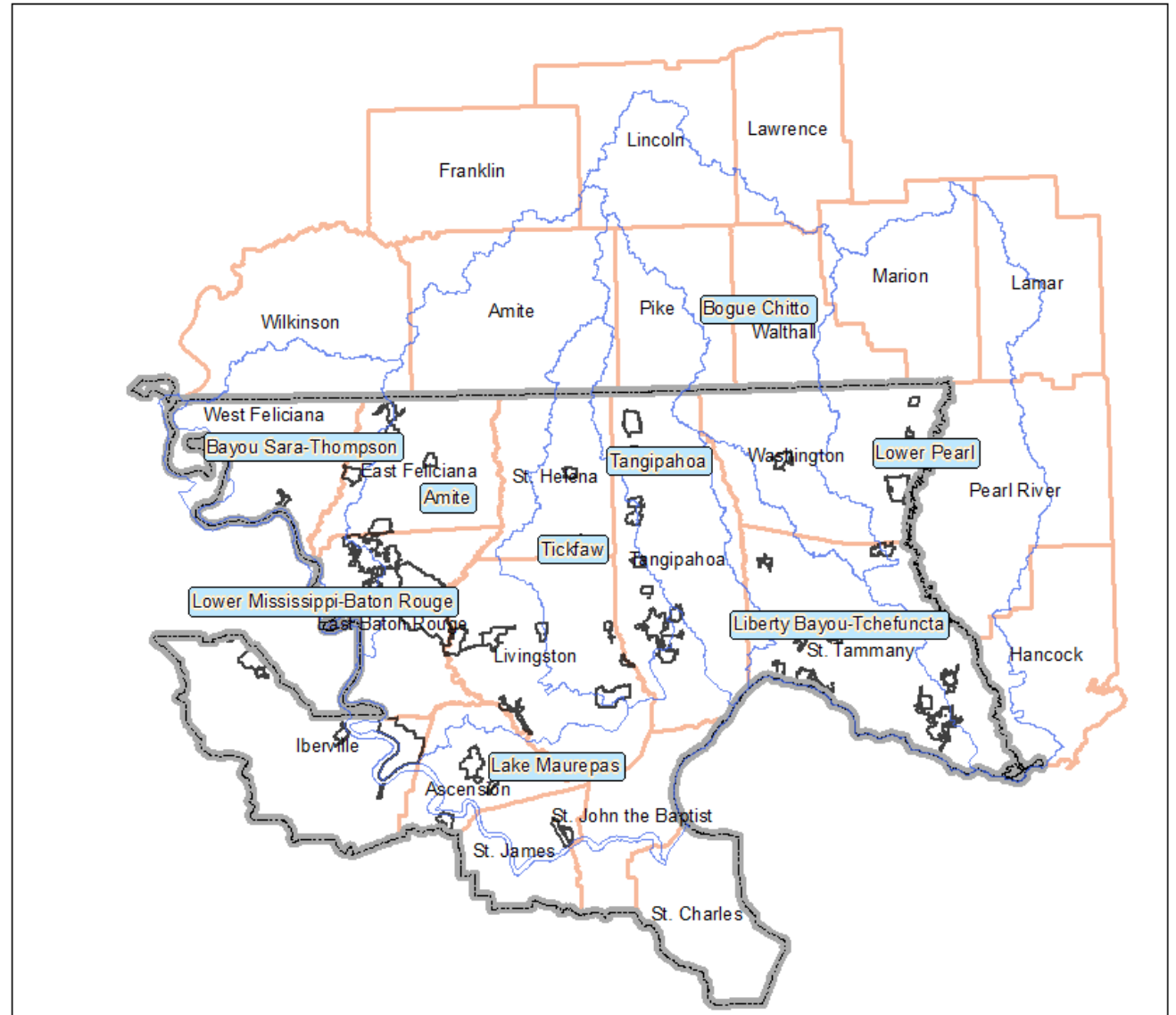
Social Network Analysis

- Import network data into KUMU.
- Socio-Ecological Network (Watershed Features)
- Actor Network
- Policy Network
- Goals Networks
- Review centrality measures and identify gaps and patterns in networks.

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Preliminary Results from Parish Plans



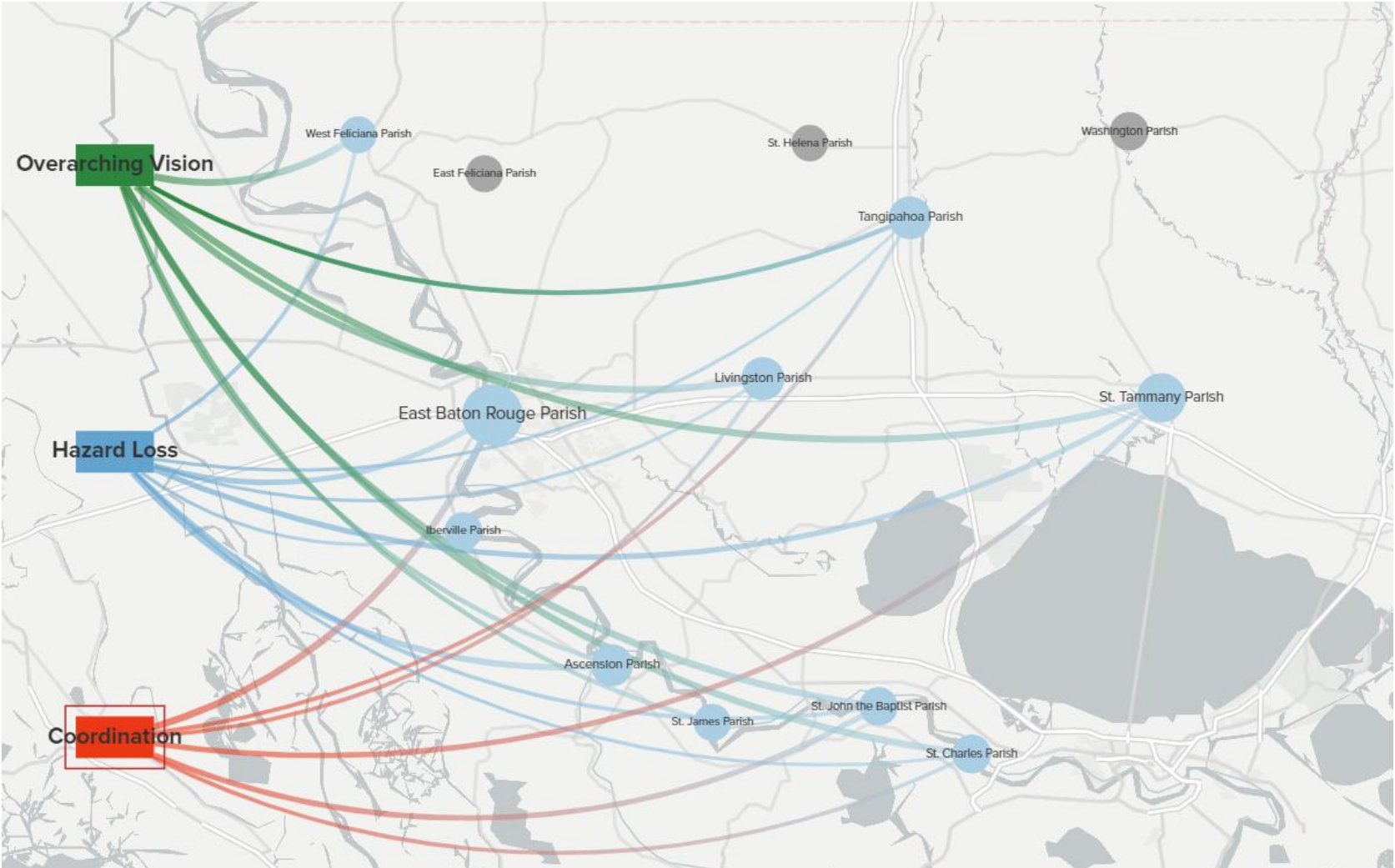
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Goals and Objectives – Parish Comprehensive Plans

Goals & Objectives

- Overarching Vision Aligns with LWI
- Hazard Loss
- Coordination



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Plan and Organization Network

Coordination & Capabilities

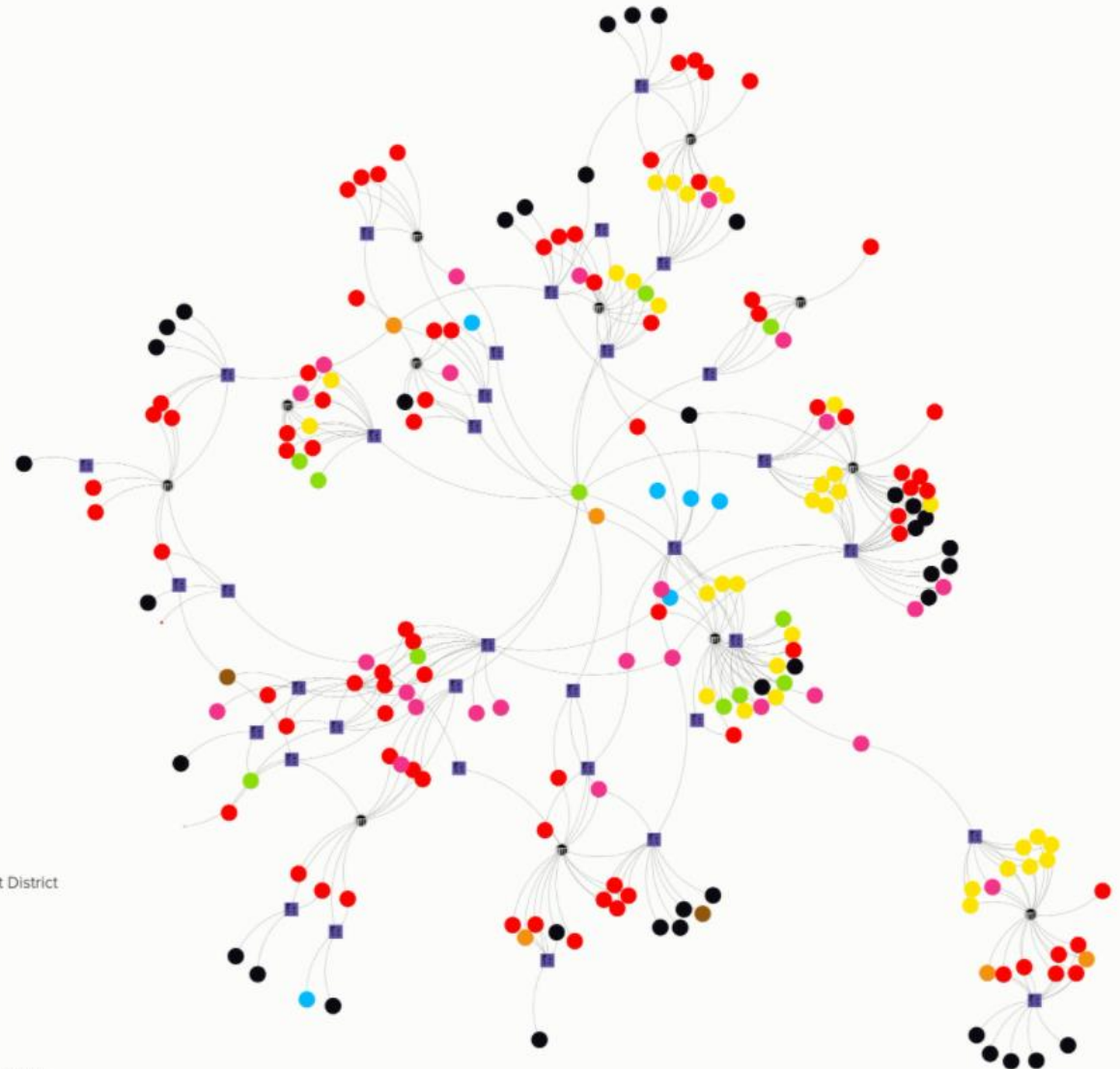
- Coordination with governments
- Coordination with organizations
- Coordination with private sector
- Coordination with region within watershed
- Conflict management processes

Participation

- Documentation of planning process
- Organization Involvement
- Public Engagement
- Equitable engagement

Legend

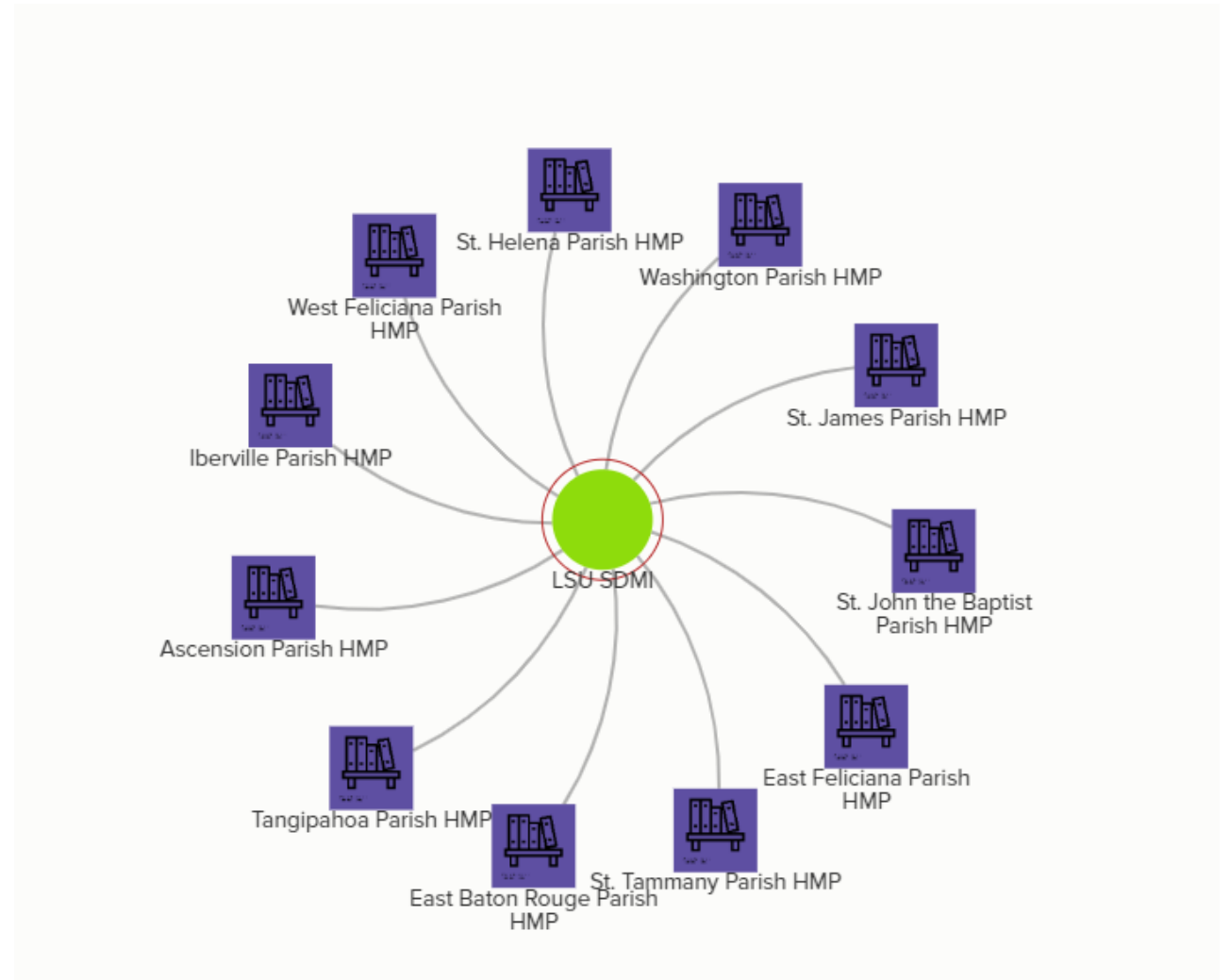
- Parish
- Plan
- Planning and Development District
- Federal
- Municipal
- Educational
- NGO - Community
- Parish Government
- State
- Private/Professional Service Firm



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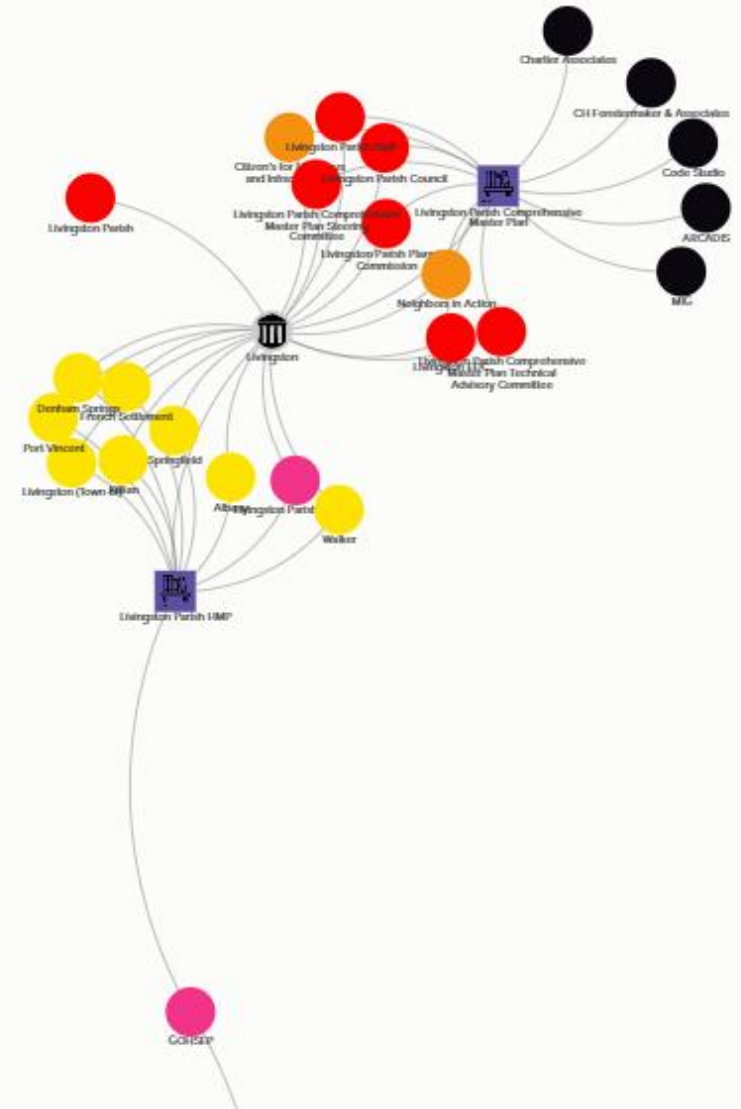
- Some Organizations are Very Embedded in Certain Planning Processes



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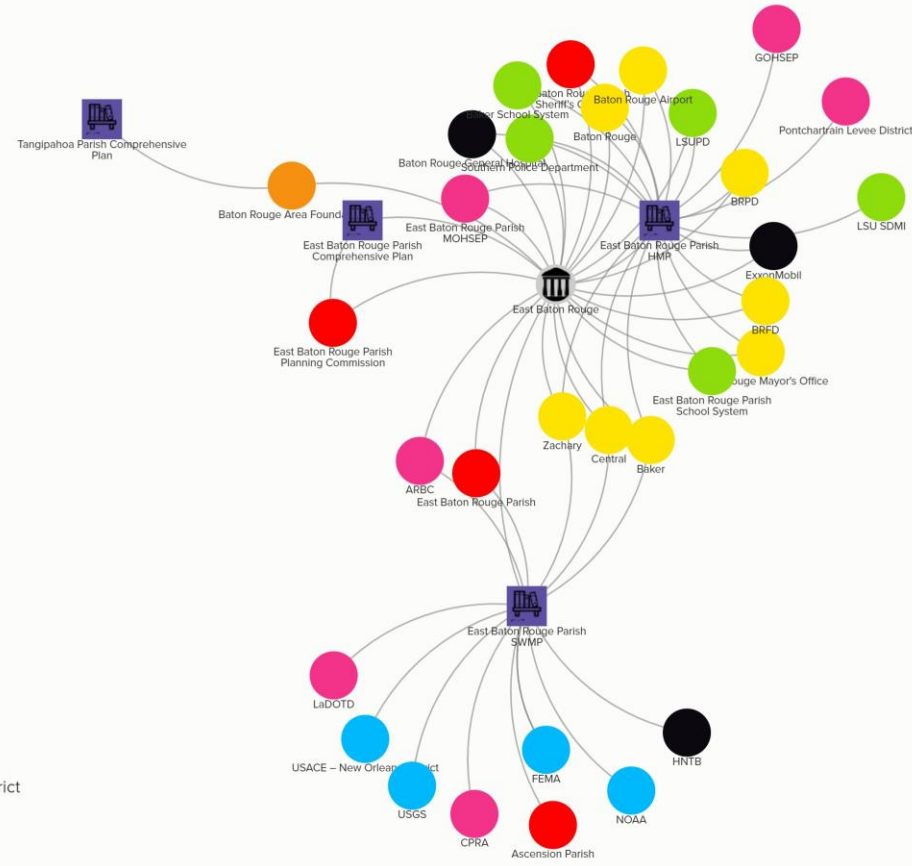
Are some places more isolated from other planning processes?



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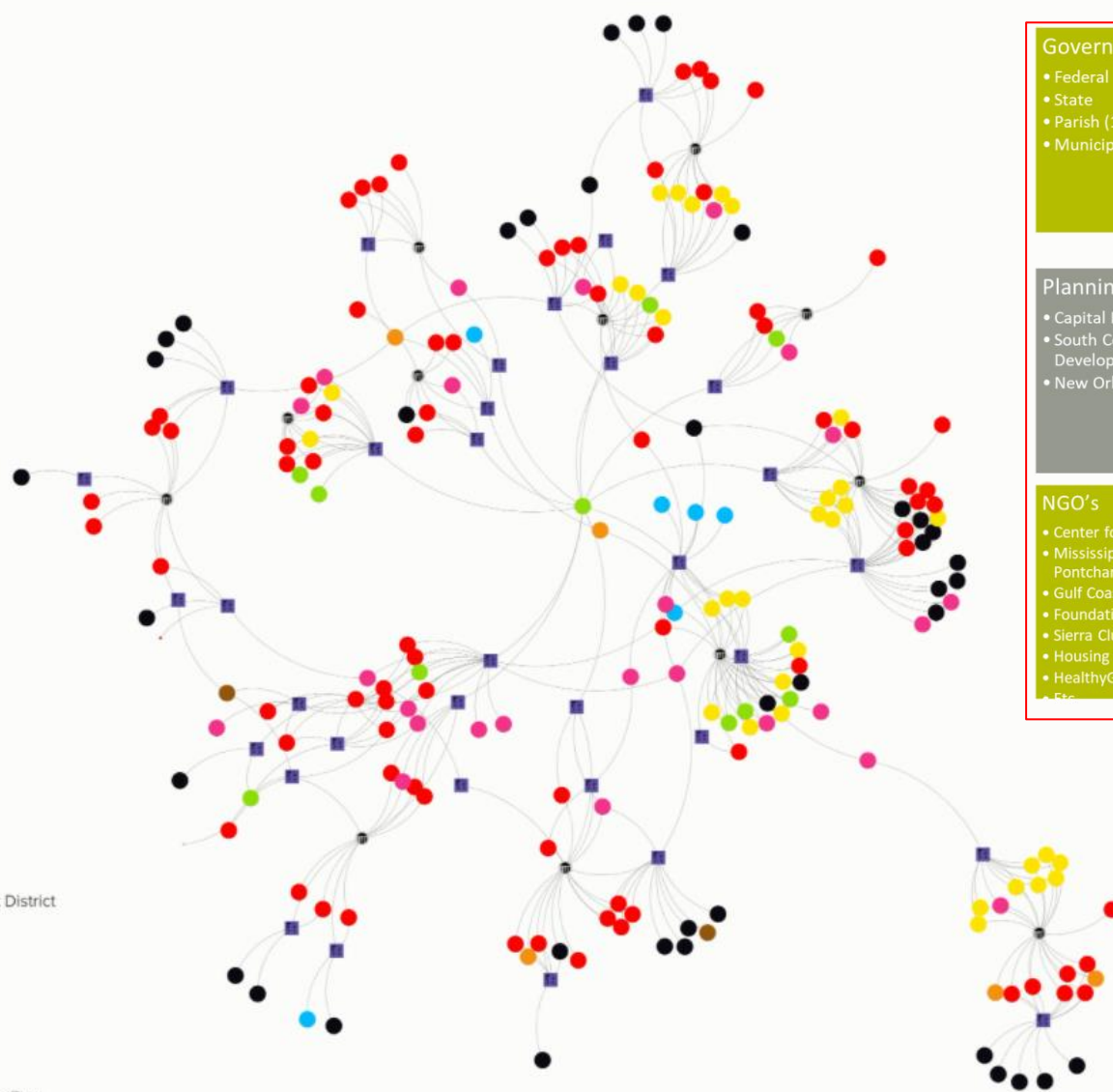
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Larger Places Seem to Have More Robust Networks



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Government

- Federal
- State
- Parish (13)
- Municipal (40+)

Gravity Drainage Districts

- 19 across the region
- Some are funded, some are not

Levee Districts

- Southeast Louisiana Flood Protection Authority – East (Tangipahoa Levee District)
- Pontchartrain Levee District
- Atchafalaya Basin, Lafourche Basin and Fifth Louisiana Levee District barrier in the region

Planning and Development Dist.

- Capital Region Planning Commission
- South Central Region Planning and Development Commission
- New Orleans Regional Planning Commission

Soil, Water Conservation

- Amite River Basin Commission/Drainage and Water Conservation District
- Capital Area Groundwater Conservation District
- Soil and Water Conservation Districts: Crescent, Lower Delta, Mississippi River, Bogue, Chenier, Lower Mississippi, Tangipahoa-St. Helena

Others?

NGO's

- Center for Planning Excellence
- Mississippi River Delta Coalition (Ex: Pontchartrain Conservancy)
- Gulf Coast Center for Law & Policy
- Foundation for Louisiana
- Sierra Club
- Housing Louisiana
- HealthyGulf
- Etc.

Home Builders

- Home Builders Association of Greater Baton Rouge
- Northshore Home Builders Association

Others

- Neighborhood/Homeowner's Associations
- Technical firms/consultants
- Hypoxia Task Force
- Lower Mississippi River Conservation Commission
- Gulf of Mexico Alliance

- Legend**
- Parish
 - Plan
 - Planning and Development District
 - Federal
 - Municipal
 - Educational
 - NGO - Community
 - Parish Government
 - State
 - Private/Professional Service Firm

• Certain Key Actor Groups Mentioned Very Scarcely in Existing Planning Documents



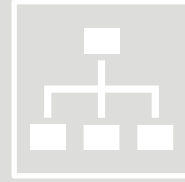
Next Steps: Plan Evaluation & Network Analysis

Methodology

- Complete Evaluation Process
- Documenting Watershed Governance Networks
 - Incorporate Municipal and Regional Plans
 - Review Data: E.g., we can infer GOHSEP as a sponsor of Hazard Mitigation Plans (even if they are not mentioned)
 - Review whether plans refer to one another
 - Expand data collection via interviews and surveys.
 - What key relationships are missing from the planning documents?
- Compile a Final Briefing Document for the Steering Committee



An Introduction to Our Current Research



Description of our Plan Evaluation and Network Analysis Methods (and some preliminary examples)



Review of Subdivision and Storm water Related Rules in Residential Development

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DOCUMENTATION

- Jurisdiction Name

- Parish

- Comprehensive Plan

- Hazard Included Comprehensive Plan

- StormWater Masterplan

- Personnel In Building, Planning, Public Works (CFM, AICP, PE, ASLA)

- Zoning

- Elevation, Freeboard, Other Requirements For Baseflood Level

- FloodPlain Ordinance and Criteria

- Subdivision Ordinance

- Hazard Area Mapping

- Plat Requirements, Fill Requirements, Riparian Buffer

- Development Restriction on FloodPlain.

- Drainage Impact Study (On-site Capacity, Off-site Capacity)

- No Adverse Impact : General (Property, Safety Health, Natural Function, Floodplain Preservation)

- Post-development Peak-flow Standard

- Drainage Detention Rules and Standards

- Infiltration Rules and standards

- No Adverse Impact : Floodplain (Property, Safety Health, Natural Function, Floodplain Preservation)

- Drainage Retention Rules and Standards

- Infiltration Rules and standards

- Restriction on Floodplain Lots

- Streets in 100-year Storm Elevation

- Utilities Under 100-year Flood Standard

- Estimate of Stormwater Maintenance Costs

- Minor_Subdivision

- Includes_Hazards_Provisions

- Included_FloodPlaneRestrictions

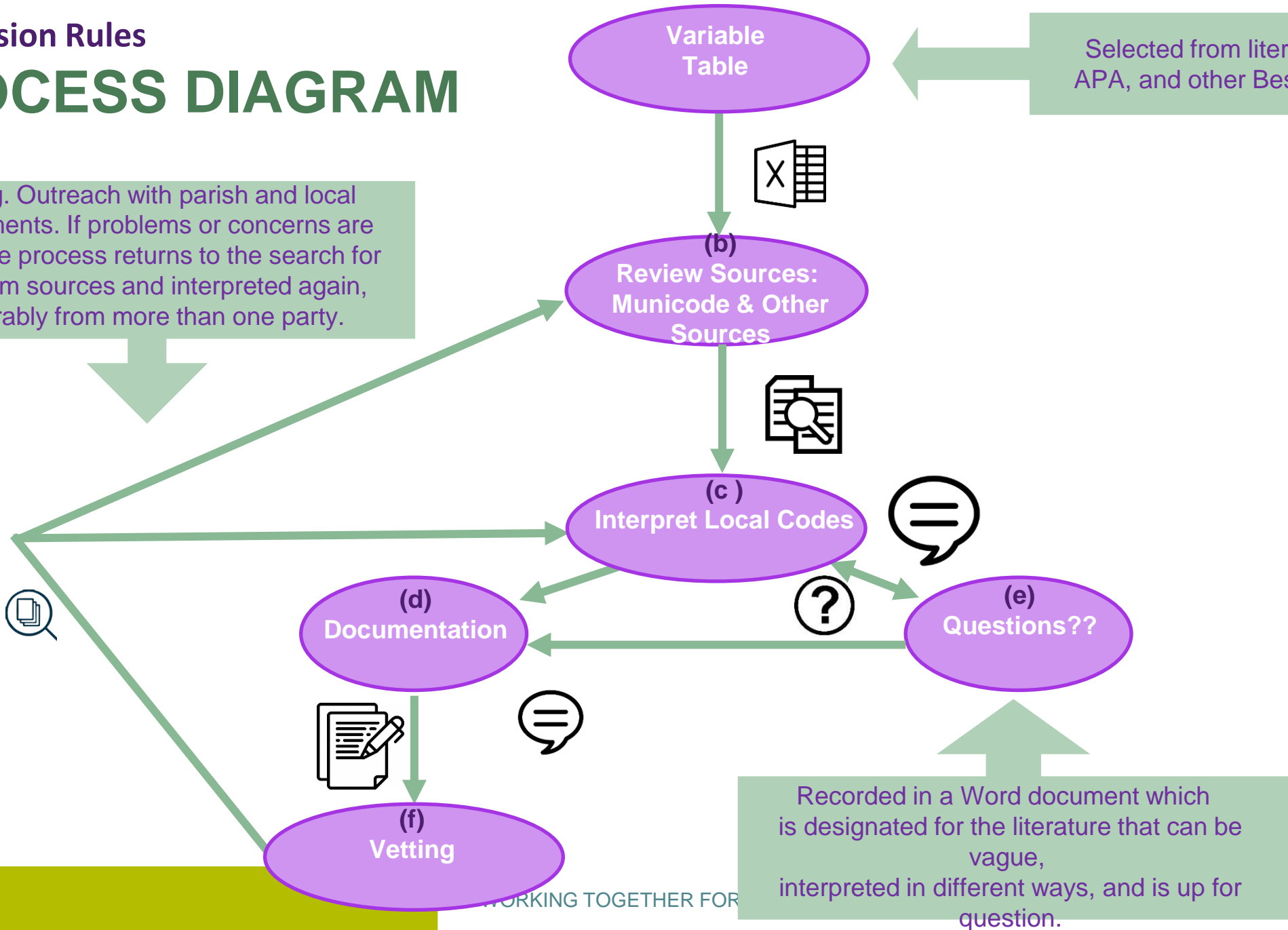


Subdivision Rules

PROCESS DIAGRAM

Vetting. Outreach with parish and local governments. If problems or concerns are found, the process returns to the search for data from sources and interpreted again, preferably from more than one party.

Selected from literature review of FEMA, APA, and other Best Practices Documents



Recorded in a Word document which is designated for the literature that can be vague, interpreted in different ways, and is up for question.



DOCUMENTATION

Variable Names →

← **Values**

| | A | B | C | D | E | F | G | H | I | J |
|----|----------------------------|------------------|---------------------|--------------------|-------------------------------------|------------------------|--|------|----|------|
| 1 | | | | | | | | | | |
| 2 | Name | Name | P/M | Y/N | Y/N | c | Personelle In Building, Planning, Public Works | | | |
| 3 | JurisdictonName | Parish | Parish_Municipality | Comprehensive_Plan | Hazards_Included_Comprehensive_Plan | Stormwater_Maisterplan | CFM | AICP | PE | ASLA |
| 7 | Town of Sorrento | Ascension | M | N | N | N | N | N | N | N |
| 8 | Parish of East Baton Rouge | East Baton rouge | P | Y | N | Y | Y | Y | N | N |
| 9 | City of Baker | East Baton Rouge | M | Y | Y | Y | Y | N | N | N |
| 10 | City of Central | East Baton Rouge | M | Y | N | Y | Y | N | N | N |
| 11 | City of Zachary | East Baton Rouge | M | Y | N | Y | Y | N | N | N |
| 12 | Parish of East Feliciana | East Feliciana | P | Y | N | N | N | N | N | N |
| 13 | Town of Jackson | East Feliciana | M | N | N | N | N | N | N | N |
| 14 | Village of Norwood | East Feliciana | M | N | N | N | N | N | N | N |
| 15 | Town of Slaughter | East Feliciana | M | N | N | N | N | N | N | N |
| 16 | Village of Wilson | East Feliciana | M | N | N | N | N | N | N | N |

| | K | L | M | N | O | P | Q |
|----|--------|-----------|-----------|--|-----------------------|-------------------------------|---|
| 1 | | | | | | | |
| 2 | Y/N | | Y/N | Y/N | Y/N | None,10,25,100,500 | Y/N |
| 3 | Zoning | Elevation | Freeboard | Multiple Requirements | Flood_Plain_Ordinance | Flood_Plain_Orinance_Criteria | Subdivision_Ordinance_Mentions_Floodplain |
| 4 | Y | N | 0 | AO/AH : 2; FEMA Flood Zone A, A1-A99:1 | Y | 100 | Y |
| 5 | N | N | 0 | AO/AH : 2; | Y | None | Y |
| 6 | Y | N | 1 | AO/AH : 2; | Y | 25 | Y |
| 7 | N | N | 0 | AO/AH : 2; | Y | 25 | N |
| 8 | Y | N | 0 | N | N | 100 | Y |
| 9 | Y | N | 0 | AO/AH : 2; A1-30/AE: 1 | Y | 100 | Y |
| 10 | Y | N | 2 | AO/AH : 3; A1-30/AE: 1 | Y | 100 | N |
| 11 | Y | N | 1 | AO/AH : 1; A/AE: 1 | Y | 100 | Y |
| 12 | Y | N | 2 | AO/AH : 2; A1-30/AE:1 | Y | 100 | Y |
| 13 | N | N | N | N | N | None | N |
| 14 | N | N | N | N | N | None | N |
| 15 | Y | N | 1.5 | N | Y-not enough | 25 | Y |
| 16 | N | N | N | N | N | None | N |
| 17 | N | N | N | N | N | None | N |
| 18 | Y | N | 0 | N | Y-not enough | None | N |
| 19 | Y | N | 0 | AO/AH : 2; A1-30/AE/AH: 0 | Y | 100 | N |
| 20 | N | N | 0 | AO/AH : 2; A1-30/AE: 1 | Y | 100 | Y |
| 21 | Y | N | 0 | AO/AH : 2; A1-30/AE:1 | Y | None | Y |

| | R | S | T |
|----|--------------------------|------------------|-------------------|
| 1 | | | |
| 2 | NONE,SOME,ALL,FLOODPLAIN | | |
| 3 | DrainageImpactStudy | On_Site_Capacity | Off_Site_Capacity |
| 4 | ALL | ALL | ALL |
| 5 | NONE | NONE | NONE |
| 6 | ALL | ALL | ALL |
| 7 | NONE | NONE | NONE |
| 8 | ALL | ALL | ALL |
| 9 | NONE | FLOODPLAIN | SOME |
| 10 | ALL | ALL | ALL |
| 11 | SOME | NONE | ALL |
| 12 | NONE | NONE | NONE |
| 13 | NONE | NONE | NONE |
| 14 | NONE | NONE | NONE |
| 15 | NONE | NONE | NONE |
| 16 | NONE | NONE | NONE |
| 17 | NONE | NONE | NONE |
| 18 | NONE | NONE | NONE |
| 19 | NONE | NONE | NONE |
| 20 | ALL | ALL | ALL |
| 21 | ALL | SOME | SOME |
| 22 | NONE | NONE | NONE |

Y AND R



| | A | B | C | D | E | F | G | | | | | | | | | | | | | |
|----|---|--------------------------------------|--|------------------------------|---|---------------------------------|--------------------------------|--|--------------------------------|--------------------------------|------------------------------------|--|---|----------------------------------|--|--|--|--|--|--|
| 1 | | Variable Name | Values | Description | | | | | | | | | | | | | | | | |
| 2 | | JurisdictionName | Name | | Parish of Ascension | City of Donaldsonville | City of Gonzales | | | | | | | | | | | | | |
| 3 | | Parish | Name | | Ascension | Ascension | Ascension | | | | | | | | | | | | | |
| 4 | | Parish_Municipality | P/M | Alphabetical Variable descri | Municode Lib (Version: April 6,2020) | Municode Lib (Version Feb 28,2) | Municode Lib (March 27,2020) | | | | | | | | | | | | | |
| 5 | | Comprehensive_Plan | Y/N | | http://www.ascensionparish.net/downloads/planning/masterplanfinaldraft.pdf | | | | | | | | | | | | | | | |
| 6 | | Hazards_Included_Comprehensive_Plan | Y/N | | http://www.ascensionparish.net/downloads/planning/masterplanfinaldraft.pdf | | | | | | | | | | | | | | | |
| 7 | | Stormwater_Masterplan | c | | n/a | | | | | | | | | | | | | | | |
| 8 | | CFM | | | | | | | | | | | | | | | | | | |
| 9 | | AICP | | | | | | | | | | | | | | | | | | |
| 10 | | PE | | | | | | | | | | | | | | | | | | |
| 11 | | ASLA | sonelle In Building, Planning, Public Wc | | | | | | | | | | | | | | | | | |
| 12 | | Zoning | Y/N | | http://www.ascensionparish.net/downloads/planning/code05_App_II_Zoning_Code.pdf | | | | | | | | | | | | | | | |
| 13 | | Elevation | Y/N | | Municode Sec. 9.5-33 | Municode Sec. 5-57. | Municode Sec. 10-52 | | | | | | | | | | | | | |
| 14 | | Freeboard | Y/N | | Sec. 9.5-32 | | Municode | | | | | | | | | | | | | |
| 15 | | Multiple Requirements | | | Municode Sec. 9.5-34. | Municode Sec. 5-59 | Municode Sec. 10-53; | | | | | | | | | | | | | |
| 16 | | Flood_Plain_Ordinance | Y/N | | Municode Chapter 9.5 | Municode ARTICLE III | Municode Chapter 10 | | | | | | | | | | | | | |
| 17 | | Flood_Plain_Ordinance_Criteria | None,10,25,100,500 | | http://www.ascensionparish.net/downloads/planning/DrainageImpactStudyProcedure-FinalApprovedDocument(051619).pdf | | | | | | | | | | | | | | | |
| 18 | | Subdivision_Ordinance_Mentions_Flood | Y/N | | Municode Sec. 9.5-33. | Municode Sec. 5-58 | Municode Sec. 10-54 | | | | | | | | | | | | | |
| 19 | | Map Hazard Areas | Y/N | | Parish of East Feliciana | Town of Jackson | Village of Norwood | Town of Slaughter | Village of Wilson | Town of Clinton | Parish of West Feliciana | Town of St. Francisville | Parish of Iberville | City of Plaquemine | | | | | | |
| 20 | | Plat Hazard Areas | Y/N | | East Feliciana Municode Lib | East Feliciana Municode Lib | East Feliciana Municode Lib | East Feliciana Municode Lib | East Feliciana Municode Lib | East Feliciana Municode Lib | West Feliciana Municode Lib | West Feliciana Municode Lib | Iberville Municode Lib | Iberville Municode Lib | | | | | | |
| 21 | | Riparian_Zone_Protections | Y/N | | | | | | | | | | | | | | | | | |
| | | | | | Municode Sec. 5A-91. Municode | Municode | Municode | Municode Sec. 20-66. Municode Sec. 20-66. | Municode | Municode | Municode Sec. 110-92.; Municode | Municode Sec. 5-57. Municode | Municode Sec. 7.5-76. Municode | Municode Sec. 6-392; Municode | | | | | | |
| | | | | | Municode Sec. 5A-93. Chapter 5A - FLOODS file:///C:/Users/sruhsj/Downloads/East%20Feliciana%20HM%20Plan.pdf | Municode | Municode | Municode Sec. 20-66; Municode Sec. 28-23. | Municode | Municode | Municode Sec. 110-92. | Municode Sec. 5-59; ARTICLE II - FLOOD DAMAGE | Municode Chapter 7.5 - ARTICLE X - FLOOD DAI | Municode Sec. 6-394; Municode | | | | | | |
| | | | | | Municode Sec. 5A-92. | Municode | Municode | Municode Sec. 20-67. | Municode | Municode | Municode | Municode | Municode ARTICLE 6 6.A-5 | Municode Sec. 9-123. | | | | | | |



| Parish/ Municipality | Variables | Reference | Description |
|-------------------------|--------------------------|--|---|
| Parish of Ascension | Zoning | | |
| | Elevation | | |
| | Freeboard | Municode: Ascension Parish, LA Sec. 9.5-32. | 1. Residential construction. New construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated to or above the base flood elevation. |
| | Multiple Requirements | Municode: Ascension Parish, LA Sec. 9.5-33; Sec. 9.5-34; | 1. Minimum elevation for development. All primary buildings located on land which is designated as FEMA Flood Zone A, A1-A99 shall be constructed with a minimum elevation of one (1) foot above the base flood elevation. 2. All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two (2) feet if no depth number is specified). |
| | Floodplain Ordinance | Municode: Ascension Parish, LA Chapter 9.5 - FLOOD DAMAGE PREVENTION | Statutory authorization; Findings of fact; Statement of purpose; Methods of reducing flood losses; Definitions; Lands to which this ordinance applies; Basis for establishing the areas of special flood hazard; Establishment of development permit; Compliance.; Abrogation and greater restrictions; Interpretation; Warning and disclaimer or liability; Floodplain manager; Same—Duties and responsibilities; Permit procedures; Variance procedures; PROVISIONS FOR FLOOD HAZARD REDUCTION; General standards; Specific standards; standards for subdivision proposals; Standards for areas of shallow flooding (AO/AH zones); Penalties for noncompliance; Severability; |

| | | | |
|--|---|---|---|
| | Flood_Plain_Orinance_Criteria | http://www.ascensionparish.net/downloads/planning/DrainageImpactStudyProcedure-FinalApprovedDocument(051619).pdf | <ol style="list-style-type: none"> 1. Pre-development work maps shall include determined existing peak 10-year, 25-year, and 100-year runoff rates at entry and exit points 2. post development work maps of the development shall include determined peak 10-year, 25-year, and 100-year runoff rates at entry and exit points. 3. The impact of the 100-year design storm shall be checked for maximum water surface elevation, and total site runoff peak discharge rates to allow Engineer Review Agency to assess impact on properties and infrastructure. 4. The 100-yr event is to be checked to ensure emergency weir is properly sized to prevent pond overtopping and to safely convey overflow to the receiving body of water. The 100-year 24-hour flow is also to be checked to estimate impact on development and upstream and downstream boundaries. |
| | Subdivision_Ordinance_Mentions_Floodplain | Municode: Ascension Parish, LA Sec. 9.5-33 | <p>(a) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with sections 9.5-2, 9.5-3 and 9.5-4 of this chapter.</p> <p>(b) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet development permit requirements of section 9.5-8; section 9.5-23; and the provisions of Article III of this chapter.</p> <p>(c)</p> <p>Base flood elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home</p> |



- **4 Steps of Documentation :**
4. Word File 02:To Make A List For Questions/
 Confusions/ Issues. (In Progress)

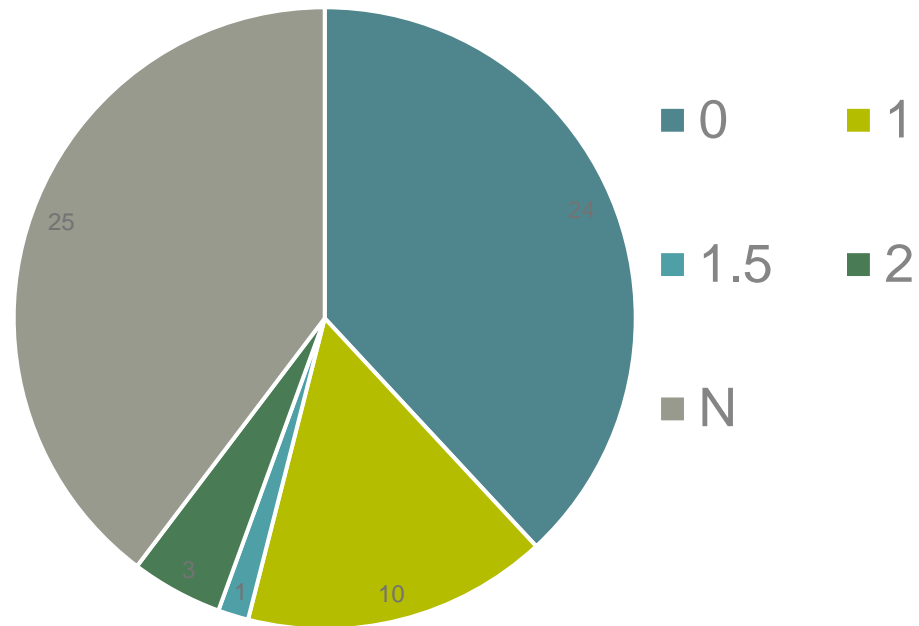


| Parish/Municipality | Variables/Policy Type | Code | Question |
|---------------------|-------------------------------|---|---|
| Parish of Ascension | Flood_Plain_Orinance Criteria | <ol style="list-style-type: none"> 1. Pre-development work maps shall include determined existing peak 10-year, 25-year, and 100-year runoff rates at entry and exit points 2. post development work maps of the development shall include determined peak 10-year, 25-year, and 100-year runoff rates at entry and exit points. 3. The impact of the 100-year design storm shall be checked for <u>maximum water</u> surface elevation, and total site runoff peak discharge rates to allow Engineer Review Agency to assess impact on properties and infrastructure. 4. The 100-yr event is to be checked to ensure emergency weir is properly sized to prevent pond overtopping <u>and to</u> safely convey overflow to the receiving body of water. The 100-year 24-hour flow is also to be checked to estimate impact on development and upstream and downstream boundaries. | <ul style="list-style-type: none"> • Can we consider the Flood plain as a 100-year flood plain? |
| Donaldsonville | NAI_Property | <ul style="list-style-type: none"> • When a regulatory floodway has not been designated, the floodplain administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base | <ul style="list-style-type: none"> • Can we consider it as "No Adverse Impact" rule for floodplain? • Does it indicate a strong/weak rule for No Adverse Impact: Property? • How do we measure |



Preview of Subdivision Regulation Inventory

Freeboard in LWI Region 7 By Jurisdiction (Required Elevation over Basal Flood Elevation)



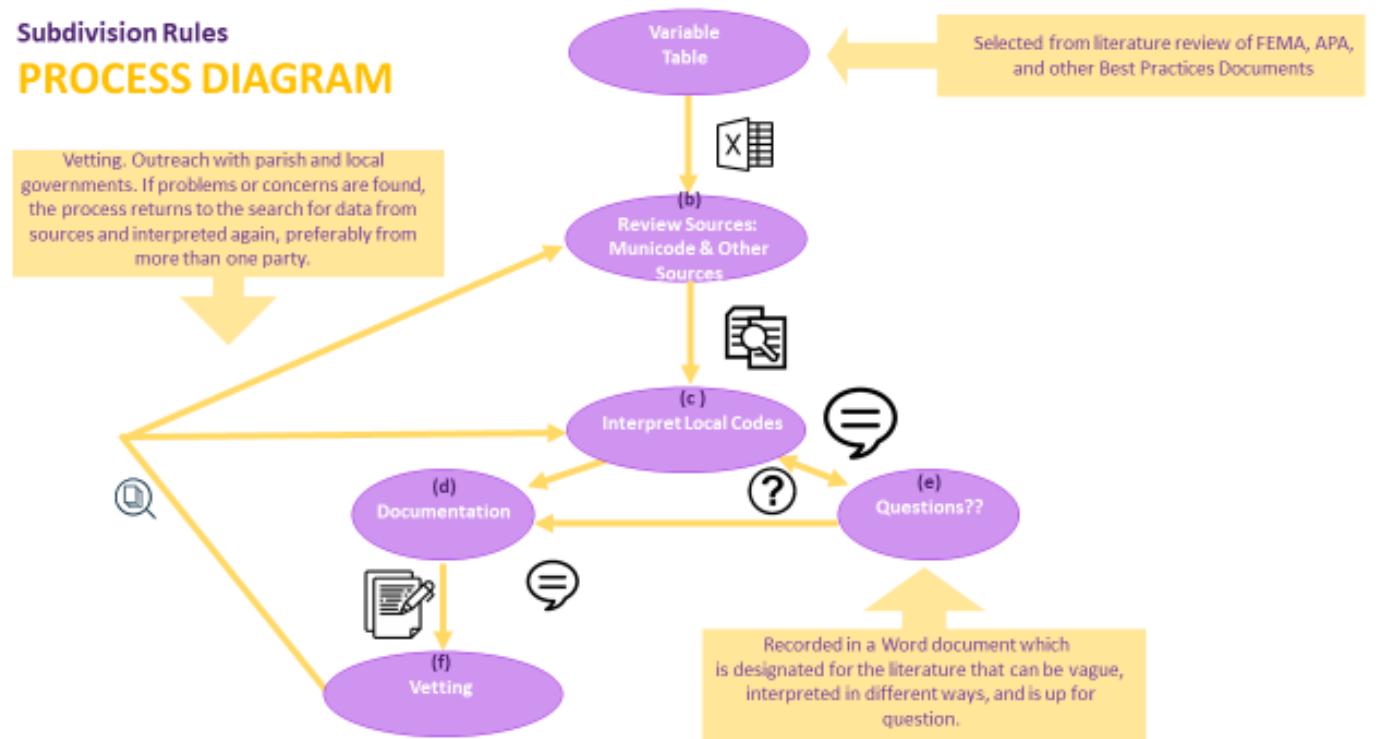
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Next Steps

- Review in conjunction with Parishes and Municipalities (Quality Control)
- Map
- Statistical Analysis for Patterns and Trends
- Share Results with Stakeholders

Subdivision Rules PROCESS DIAGRAM



Summary

- Documenting Networks
 - Identify gaps and patterns of participation
 - Identify potential governance gaps in the watershed planning practice
- Documenting Regulations
 - Understand the regulatory landscape
 - Compare approaches among regional partners
- A more informed coalition and a more robust regional watershed plan



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4. Existing stakeholders



Stakeholders enabled in statute (Region 7)

*Please note, this is not a comprehensive list, refer to your meeting packet

Government

- Federal
- State
- Parish (13)
- Municipal (40+)

Gravity Drainage Districts

- 19 across the region
- Some are funded, some are not

Levee Districts

- Southeast Louisiana Flood Protection Authority – East (Tangipahoa Levee District)
- Pontchartrain Levee District
- Atchafalaya Basin, Lafourche Basin, and Fifth Louisiana Levee District barely in the region

Planning and Development Dist.

- Capital Region Planning Commission
- South Central Region Planning and Development Commission
- New Orleans Regional Planning Commission

Soil, Water Conservation

- Amite River Basin Commission/Drainage and Water Conservation District
- Capital Area Groundwater Conservation District
- Soil and Water Conservation Districts:
 - Crescent, Lower Delta, New River, Bogue Chitto-Pearl River, Feliciana, Tangipahoa-St. Helena

Others?

- Capital Resource & Conservation Development District
- US Fish & Wildlife

Stakeholders (Region 7)

*Please note, this is not a comprehensive list, refer to your meeting packet

NGO's

- Center for Planning Excellence
- Mississippi River Delta Coalition (Ex: Pontchartrain Conservancy)
- Gulf Coast Center for Law & Policy
- Foundation for Louisiana
- Sierra Club
- Housing Louisiana
- HealthyGulf
- Gulf of Mexico Alliance

Home Builders

- Home Builders Association of Greater Baton Rouge
- Northshore Home Builders Association

Others

- Neighborhood/Homeowners Associations
- Technical firms/consultants
- Hypoxia Task Force
- Lower Mississippi River Conservation Commission
- Little Tchefuncte River Association

Who is missing?

- Maybe also development authorities and boards. E.g., Build Baton Rouge or TIF districts?
- Land Trust for LA
- Nature Conservancy
- LDWF Naturla Heritage program
- Louisiana Scenic Rivers
- NEW Orleans Redevelopment Authority and Finance New Orleans





5. Goals and potential solutions



Discussing potential solutions...

- We will...
 - Reminder of goals from Values, Vision, Goals exercise
 - Discuss root causes and solutions through the lens of those goals
- How we got to what we're going to discuss today...
 - Multiple RSC meetings (July 28, September 1)
 - Survey to identify potential solutions for root causes that was sent out to RSC members



Goals – takeaways from Aug. 19




Examples are below, refer to your meeting packet

- Overall Goals
 - Upstream/downstream coordination
- Policy and Planning Goals
 - Incentivize improved development standards and the enforcement of them
 - Consistent and continuous regulation and development standards
- Programs and Projects Goals (outreach and engagement)
 - Opportunities for citizen, parish, and elected official (Municipal, Parish, State) education, building awareness and creating champions
- Programs and Projects Goals (projects)
 - Design and fund projects that are responsive to our needs. Examples may include:
 - Equitable buyout and elevation projects/programs. Find opportunities to provide matching funds.
- Data Collection and Management Goals
 - Use data and models for the purpose of project evaluation, scenario planning, and plan updates



Root causes and imagining the future

Instructions for the exercise

- Go over root causes from September 1st meeting and determine which are/are not within our “control.” Categories are:
 -  Red = can't impact
 -  Yellow = unsure
 -  Green = can impact
- We will use our “green” root causes, plus the results from our survey, to determine what we would need to turn those into opportunities
- Lastly, we'll determine what we would do if our needs were met



Root causes and what can we impact

Please note, these notes were taken during the meeting and they reflect the discussion

-  Can't impact
-  Unsure
-  Can impact

(1) Culturally, we favor individualism, less regulations, and autonomy to make our own decisions

(5) There is a lack of collaboration and coordination between government and non-government organizations and decision-makers.

(9) Uneven development standards and expectations

(13) Investments and resources are focused on current, immediate needs instead of preventative actions that resolve both current and future challenges.

(2) We live in an area prone to flooding

(6) There is a lack of education and understanding of flood risk and its impacts and relationship to land-use.

(10) There is a lack of enforcement with regard to regulations and variances are granted often.

(14) There is a design gap. Current design and development ideas and standards do not offer opportunities to build resiliently at multiple scales

(3) Flood risk activities are not considered from a holistic perspective

(7) The need is greater than the existing resources

(11) Our systems and institutions are not designed to effectively balance growth with sustainability

(15) Our development does not happen on the same timescale as the updates to our flood map.

(4) The scale of our challenges does not match the scale of our decision-making

(8) Our growth is occurring as a result of migration.

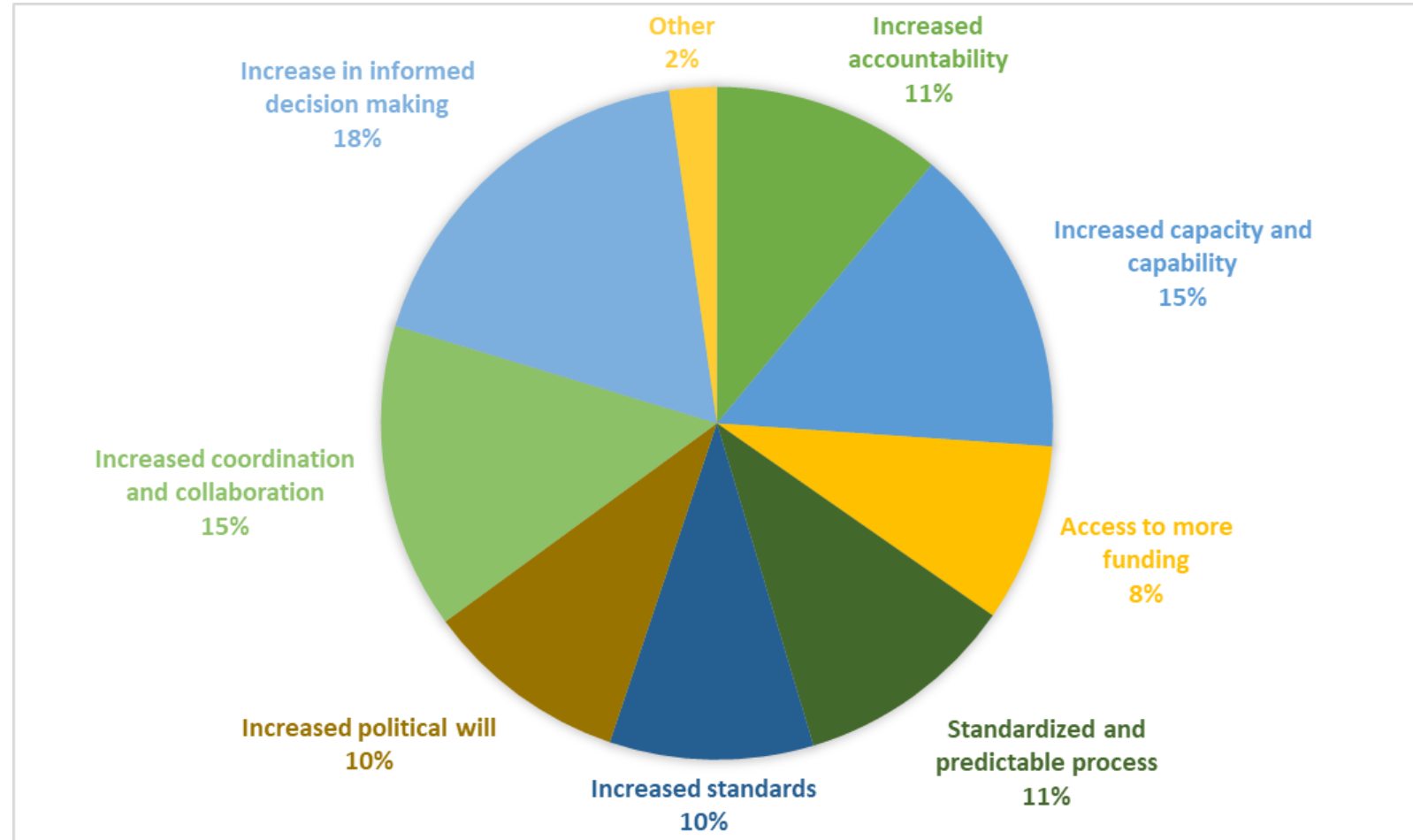
(12) Decisions are made on a time horizon that is shorter than the length of a home mortgage or a generation

(16) We're managing the consequences of years-old decisions while trying to reduce flood risk within the development decisions we're making today.



Survey results

- 12 responses out of 17 RSC members
- Most selected: Increase in informed decision making (18%)
- Second most selected: increased coordination and collaboration (15%)
- Least selected: access to more funding (8%)
- Increased political will and increased standards (10%)



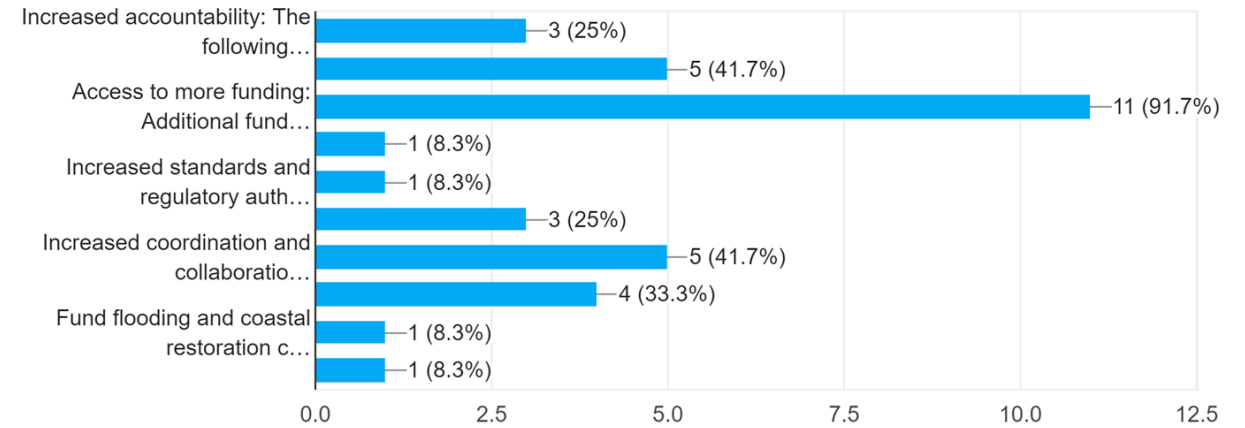
Survey results

High Points - refer to your packet

- For root cause # 7, access to more funding was almost unanimously chosen as a potential solution
- Root causes # 2, 3, and 16 have multiple potential solutions, there is not one potential solution to stand out

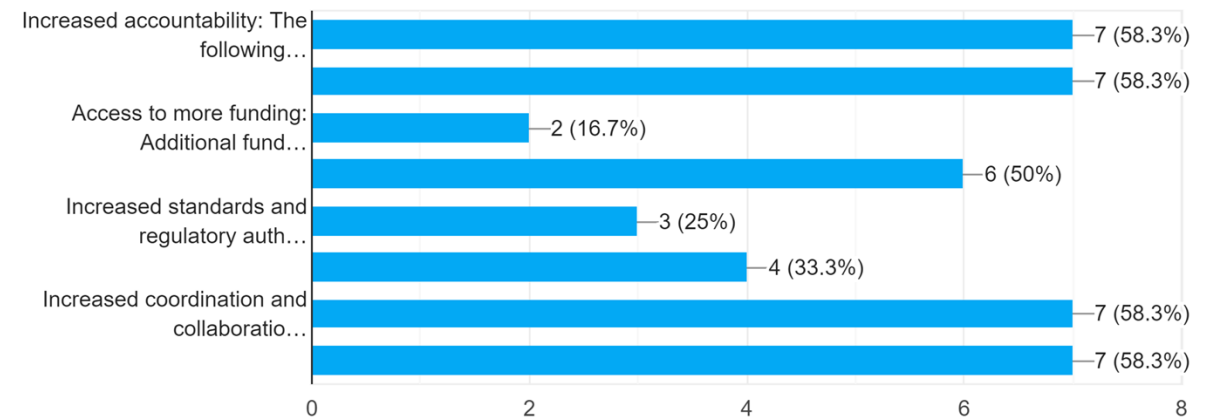
(7) The need is greater than the existing resources that are available to fund necessary projects, planning efforts, and technology.

12 responses



(3) Flood risk activities are not considered from a holistic perspective. In other words, we don't consider the impacts of flood risk and flood mitigation activities across multiple sectors and issues.

12 responses

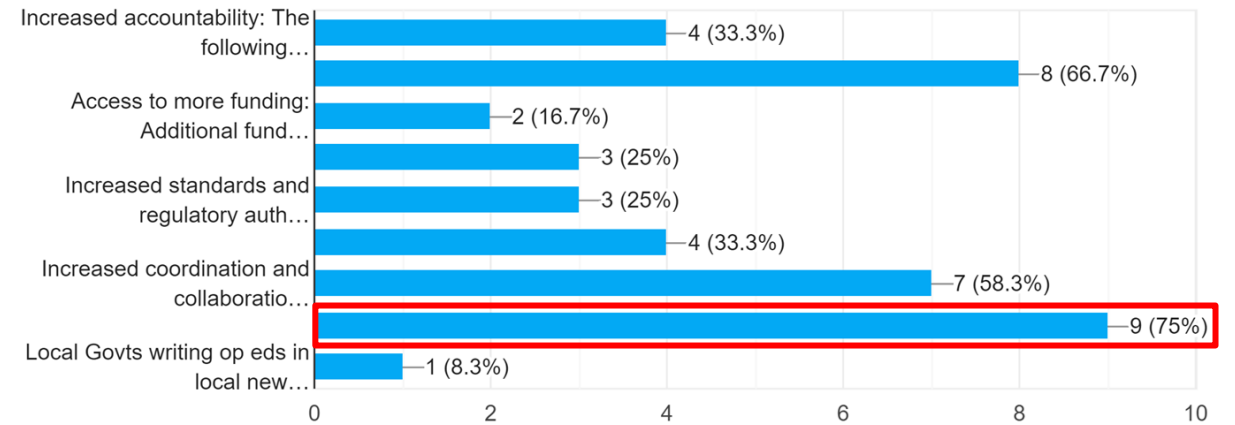


Survey results

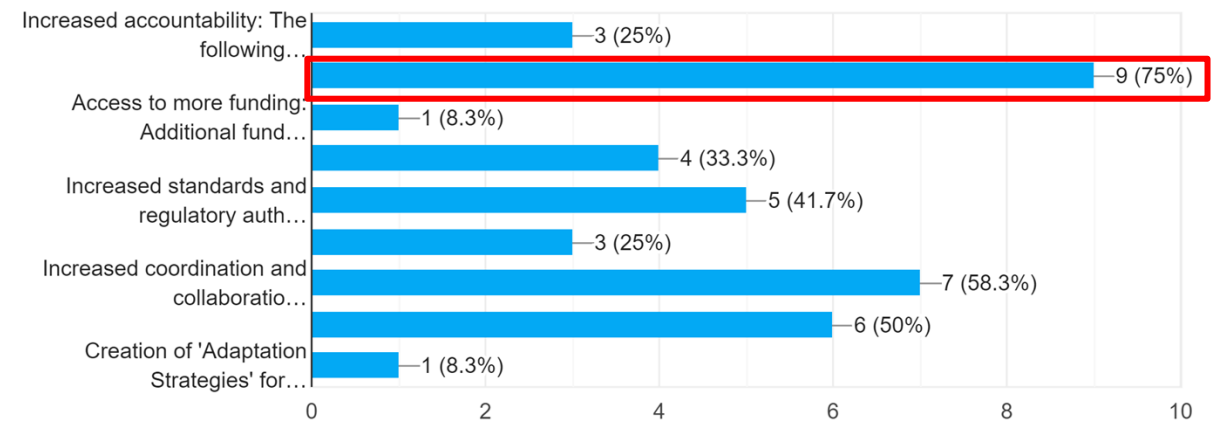
High Points - refer to your packet

- Over 75% of respondents said that an increase in informed decision-making is a potential solution for root cause #6
- Over 75% of respondents said that an increase in capacity and capability is a potential solution for root cause #8

(6) Lack of education and understanding of flood risk, the impacts of flood risk and the relationship to land use, zoning, and planning with ..., decision-makers, decision-influencers, and staff.
12 responses



(8) Our growth is occurring as a result of migration, but our planning doesn't proactively incorporate population growth and migration. Instead, our planning decisions are reactive.
12 responses



Survey results

Added as “other” - Would you have selected these if they would have been options?

- Effective and persistent public outreach to educate public on the negative impacts of individualism in regards to flood risk.
- Creation of State "Climate Conferences" where state agency reps must attend to discuss the impacts of climate change on state and sectors (organized by State Resilience Officer)
- Local governments writing op eds in local newspapers on the negative effects of certain types of land uses in a floodplain
- Fund flooding and coastal restoration classes at local Community Colleges that are mostly geared towards equipping locals with skills to work at petrochemical plants.
- Creation of 'Adaptation Strategies' for each region (use LA SAFE as a model). Strategies include model ordinances and outreach ideas.



Survey results

Added as “other” - Would you have selected these if they would have been options?

- State led effort to increase regulations concerning flooding across the board.
- Increase education. Require members of local Zoning Board of Adjustment to attend yearly flood seminar (in a similar way that planning commissioners must attend mandatory training sessions).
- Provide adaptation strategies for each region with strategies and model ordinances for growth zones to accommodate climate migrants, and curb construction in floodplains.
- Look to places that are implementing climate plans now that will help in the future. Boston for example. Don't take "well, that wouldn't work in Louisiana" without actually investigating why exactly something like that wouldn't work.
- Local governments are much too dependent on federal dollars for flood risk reduction. There are barely any local or state mechanisms in place to continuously finance flood risk reduction efforts.
- Fund design programs at public universities and community colleges. Invest in the state's human capital.



Survey results

Added as “other” - Would you have selected these if they would have been options?

- Create regional climate adaptation strategies that identify the most pressing risks in the region, and outline action steps to mitigate the risk. Report the progress at state-led "climate conferences" (mentioned above).
- Initiation of state-led "climate conferences" to gather all agency reps and local govt leaders to frequently discuss flood risk and the issues that exacerbate it.
- Master Plans
- Partnerships, partnerships, partnership! We will need LESS funding, IF we value the relationships we build and will have the ability to "share" the financial responsibilities for creating the solutions we need.
- Need to use more modern technology to track real-time flood hazard and flooding events, to help inform our decision making at the local level.



Turning opportunities into actions

WHAT DO WE NEED TO DO TO TURN THESE CHALLENGES INTO OPPORTUNITIES

INSERT, IN ORDER, MOST SELECTED SOLUTIONS

1. Increase in informed decision making (18%)
2. Increased capacity and capability (15%)
3. Increased coordination and collaboration (14%)
4. Increased accountability (11%)
5. Standardized and predictable process (10%)
6. Increased standards (9.8%)
7. Increased political will (9.8%)
8. Access to more funding (8.6%)
9. Other (2.3%) - are there additions we'd like to discuss?
10. *fund design programs t publics and community colleges

WHAT DO THESE OPPORTUNITIES LOOK LIKE AS AN ACTION?

1. Now we'll discuss what each of these solutions look like as actions
2. Are there any potential solutions that were added in the "other" category of the survey, or otherwise, that we would like to add?



Turning opportunities into actions

Please note, these notes were taken during the meeting and they reflect the discussion

WHAT DO WE NEED TO DO TO TURN THESE CHALLENGES INTO OPPORTUNITIES

INSERT, IN ORDER, MOST SELECTED SOLUTIONS

1. Increase in informed decision making (18%)

WHAT DO THESE OPPORTUNITIES LOOK LIKE AS AN ACTION?

1. Modeling and data
2. Education and training on nature based solutions (decision makers in public, designers, development of future workforce like schools and universities)
3. Model development - determine parameters and refine it
4. Modeling targeted for specific goals (are we looking at built infrastructure, green infrastructure, scale of modeling, and audience who benefits from models, etc.)
5. Make information easier to understand (general public, etc.)
6. Accurate and objective data to support decisions
7. Establish decision making matrix (Lean Six Sigma to help filter info)
8. Establish a common language of understanding built on mission and vision
9. know model limitations and how the model is defined
10. Accurate data needs to go into models to provide more accurate results -LIDAR DOTD DATA
11. Use models for scenario building
12. Determine scale for modeling and scenarios



Turning opportunities into actions

Please note, these notes were taken during the meeting and they reflect the discussion

WHAT DO WE NEED TO DO TO TURN THESE CHALLENGES INTO OPPORTUNITIES

INSERT, IN ORDER, MOST SELECTED SOLUTIONS

1. Increase in informed decision making (18%) continued
2. * indicates that it was mentioned an additional time

WHAT DO THESE OPPORTUNITIES LOOK LIKE AS AN ACTION?

1. Other data needs to help make better decisions (frequency, duration, degree of floods, elevation, etc. could help without modeling in place).
2. Consider population for model development (resolution)
3. LWI models are base models - scenario model development will come after that, they will need to be built out. Determine what we want them to do
4. manage expectations, and limitations, of models with other decision-making tools/resources
5. Select the best model that will answer the questions about our needs - use the tool to match the problem
6. Surveys - ask for feedback to see people's interest, knowledge, and they can be used to influence. Survey muni personnel to gauge understanding of perception of resources and problems, match this to what is available to them to inform the request for needs**
7. Understand capacity of municipality and parishes to integrate technical info, etc. and then match up to what their needs are

Turning opportunities into actions

Please note, these notes were taken during the meeting and they reflect the discussion

WHAT DO WE NEED TO DO TO TURN THESE CHALLENGES INTO OPPORTUNITIES

INSERT, IN ORDER, MOST SELECTED SOLUTIONS

1. Increased capacity and capability (15%)

WHAT DO THESE OPPORTUNITIES LOOK LIKE AS AN ACTION?

1. Partnerships and collaboration to leverage and utilize to fill gaps that parishes and municipalities have, partner with other agencies who fill gaps that RSC has. Recruit professional organizations, strategically staff technical expertise that can be shared across jurisdictions (not one jurisdiction needs to have all of the staff, they can be shared)
2. Establish points of contact for one organization/agency to take on a particular task (like modeling for subdivision development across a region). Creates consistency in the reports as well. Burden shifts to an established point of contact instead of being across the entire region with multiple points. Consistency and concurrency review. Would lead to better information down the road because we're building data over time.
3. Integrate academia and the business community
4. Consultants developing items should present on a regular basis to the members of the long-term governance structure so information is shared. Continual engagement with committee members to move us forward.

Turning opportunities into actions

WHAT DO WE NEED TO DO TO TURN THESE CHALLENGES INTO OPPORTUNITIES

INSERT, IN ORDER, MOST SELECTED SOLUTIONS

1. Increased capacity and capability (15%) continued

WHAT DO THESE OPPORTUNITIES LOOK LIKE AS AN ACTION?

1. People and process development/improvements through group training to understand and utilize creativity and diversity
2. Include CPRA
3. Going back to a Master Plan, using better understanding of flood control, environmental based solutions, and funding availability then incorporate this information into policy and plans
4. if the leaders (Presidents) issued a joint statement at a critical point in the process.
5. Provide on-demand knowledge presentations from key experts, linked from CRPC website, to be viewed on your own time to increase information availability/resources/capacity



Turning opportunities into actions

Please note, these notes were taken during the meeting and they reflect the discussion

WHAT DO WE NEED TO DO TO TURN THESE CHALLENGES INTO OPPORTUNITIES

INSERT, IN ORDER, MOST SELECTED SOLUTIONS

1. Increased accountability (11%)

WHAT DO THESE OPPORTUNITIES LOOK LIKE AS AN ACTION?

1. Periodically revisit the master plan and mission statement to see if they still apply.
2. Monitoring - establish strategies/guidelines are being followed, plans are being reviewed, projects are being monitored for impacts. Keep monitoring projects for the long term, even after construction.
3. Establishing metrics for success - we need to define these, when do we do it? Maybe it's established through monitoring as we have more information
4. Have a landing page for flood vulnerability information and how they can make decisions on an individual basis to reduce their risk/get involved (pre-disaster and post-disaster)
5. Climate conferences - face to face (pending COVID) meeting where you have all of the data from monitoring, issues, etc. and touch upon them





6. Public comment



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. Thank you.



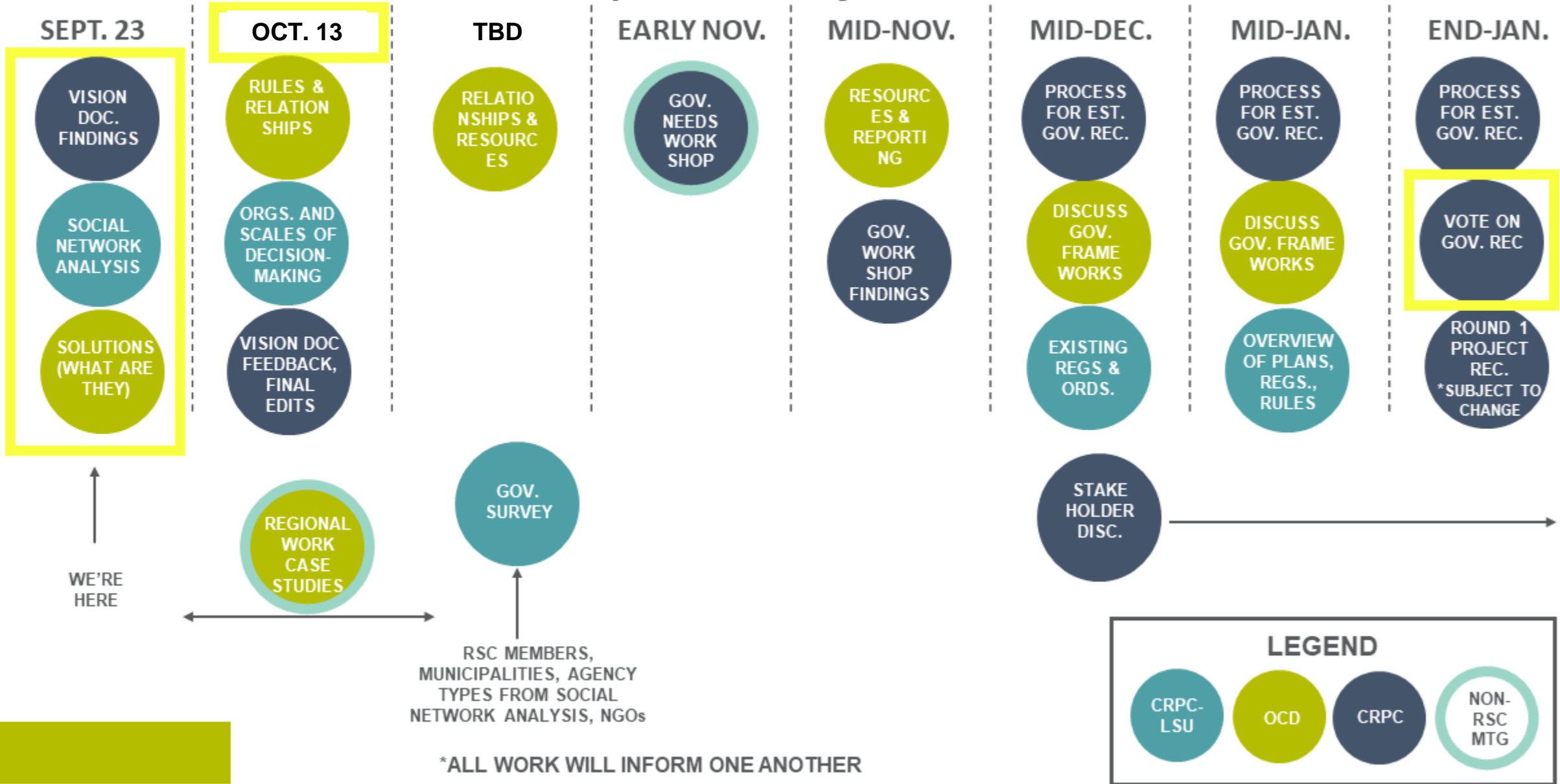
7. Closeout



Next six months*subject to change

MEETINGS

IN BETWEEN MEETINGS



Upcoming items *subject to change



- Workshop findings
- Root cause and solutions workshop
- Social network analysis



- Discuss rules and relationships for gov. structure
- Shorter meeting?



- Discuss relationships and resources for gov. structure



- **First “completed draft” of project inventory**



RSC member meeting (business occurs)



Deadline



Grant agreement

- \$1.2B grant agreement signed
- Next steps for Round 1 project process are below

| Event | Date |
|--|----------------|
| State issues NOFA and solicits project applications | Nov. 22, 2019 |
| Deadline to submit project pre-applications | Jan. 17, 2020 |
| Round 1 application period opens | Sept. 18, 2020 |
| Deadline to submit project full applications | Jan. 22, 2021 |
| Awards announced for \$60 million in statewide projects* | March 2021 |
| Recommendations for \$40 million in regional projects | June 2021 |

* Note: The number of applications received may impact projected timelines.



Closeout

- Adoption of September 1 meeting minutes
- Upcoming meetings:
 - October 28 meeting **rescheduled** to October 13 from 1:00 to 3:30pm
 - Meeting availability survey through January for RSC members to complete
- Action items
- Reminder about project inventory
- 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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Drew Ratcliff, Regional Disaster Recovery Manager
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Kim Marousek, AICP, Director of Planning
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Capital Region Planning Commission

Local Governments Working Together Since 1967



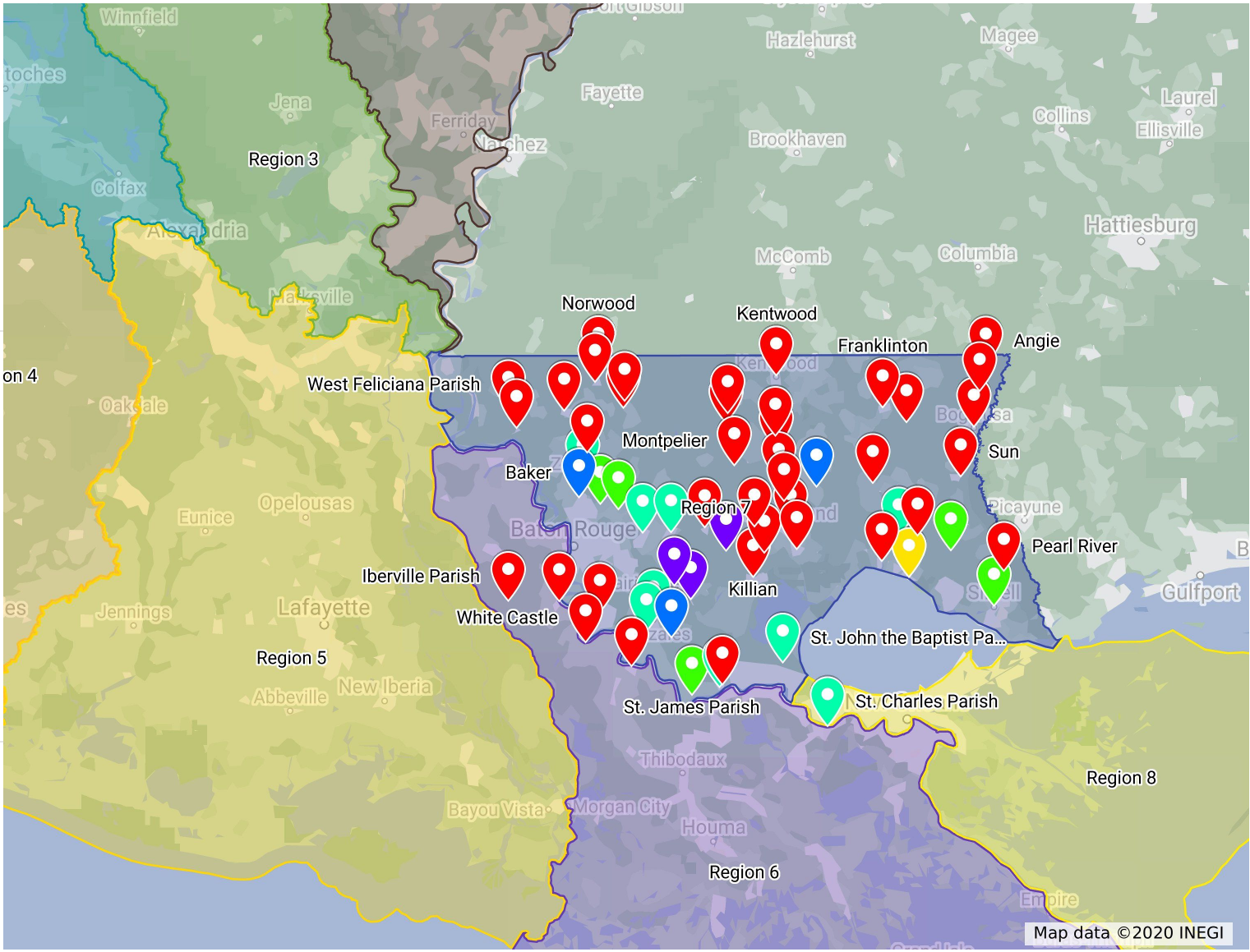
CRS Region 7 Map (Oct. 2020 data)

CRS Scores - October 2020

- 📍 Not participating
- 📍 6
- 📍 7
- 📍 8
- 📍 9
- 📍 10

Watershed Regions

- 📍 Region 1
- 📍 Region 2
- 📍 Region 3
- 📍 Region 4
- 📍 Region 5
- 📍 Region 6
- 📍 Region 7
- 📍 Region 8



Map data © 2020 INEGI

Title: Incorporating co-benefits and costs to coastal hazard mitigation decision-making

Investigators: Names, institutions, and roles (briefly) of all investigators, including the natural resource manager(s) from the management body responsible for the management decision.

Louisiana Office of Community Development: Alex Carter, Resilience Planning Manager

- Role: provide program guidance to ensure consistency with programmatic needs

Louisiana Department of Environmental Quality: Chuck Berger, Senior Engineer

- Role: provide guidance, review and feedback on proposals and deliverables; provide access to existing tools and information developed by LDEQ;

Louisiana State University, Dept. of Environmental Sciences: Thomas Douthat, JD, PhD

- Role: engage in the creation of a benefit cost decision-making tool for LWI

Louisiana State University, Dept. of Agricultural Economics & Agribusiness: Jerrod Penn, PhD

- Role: provide benefit transfer value that is an element of the benefit cost tool

Capital Region Planning Commission: Rachelle Sanderson, Regional Watershed Coordinator

- Role: engage as regional manager to ensure consistency with programmatic needs

Lake Pontchartrain Basin Foundation dba Pontchartrain Conservancy: Exec. Director Kristi Trail, PE; Water Quality Prog. Director Brady Skaggs, PhD, MSPH; Certified Wastewater Op. IV Ronald Carter

- Role: provide water quality and modeling expertise and identify variables, and data sources, for benefit transfer

Brief description of management decision: The Louisiana Watershed Initiative (LWI) includes eight regions. This proposal focuses on decisions to be made in Region 7. From 2021 to 2023, the region will develop a regional watershed management plan that will identify projects, programs, and policies that will support improved floodplain management in the region. From 2021 to 2025, the region will identify regional flood risk projects for funding. The current project application process considers a narrow range of the benefits and does not include variables and costs related to water quality and the impacts it has on recreation, commercial fisheries, and property values – all of which are critical aspects of Region 7’s economy. The development of a multi-criteria decision-making tool with a cost-benefit element that incorporates water quality would augment the current process and would reduce uncertainties with regards to project selection.

Approximate timeline for the management decision: From 2021 to 2023 a regional watershed management plan will be created. From 2021 to 2025 there will be an investment of at least \$450M to mitigate flood risk across the state.

Activities and steps to scope and design the project:

To scope and design work across 2-5 coastal watersheds within Region 7 representative coastal parishes: assemble team and MOU’s as needed for research to:

- Determine benefits and costs of the impacts of water quality related to property values, seafood, and recreation;
- Promote the integration of water quality into the decision-making processes for flood mitigation activities; and
- Promote policies and planning activities that prioritize water quality and flood mitigation.

Approximate budget: \$100,000 over 12 months to support staff time for management of the grant, the collection of existing data for the benefit transfer analysis, and for the development of a benefit-cost analysis decision-making tool.