Building Resilience in the Greater New Orleans Region

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2/26/2015

UNO-CHART

- Mission:
  - To assist residents, local and state officials, and communities in understanding and reducing risk to hazards
- Applied Research with focus on mitigation
- Multi-disciplinary
- Established in 2001
- www.uno.edu/chart

Applied Projects

- Repetitive Flood Loss
  - Community Rating System (CRS) Users' Groups
- Sci-TEK
- Community Education & Outreach (CEO)
  - Continuity Planning for Community Organizations
  - Risk Literacy
  - Executive Risk Management
  - Resilience Curriculum
  - Disaster Resistant University Workshops

Community Education & Outreach

Community Education & Outreach

1. Continuity Planning for Community Organizations
2. Hazards Resiliency Curriculum
3. Risk Literacy
4. DRU Workshop
5. Executives Program in Risk Management

GOVERNOR'S OFFICE
HOMELAND SECURITY & EMERGENCY PREPAREDNESS

GET A GAME PLAN

EDUCATE to MITIGATE™

Continuity Planning for Community Organizations

Project Background

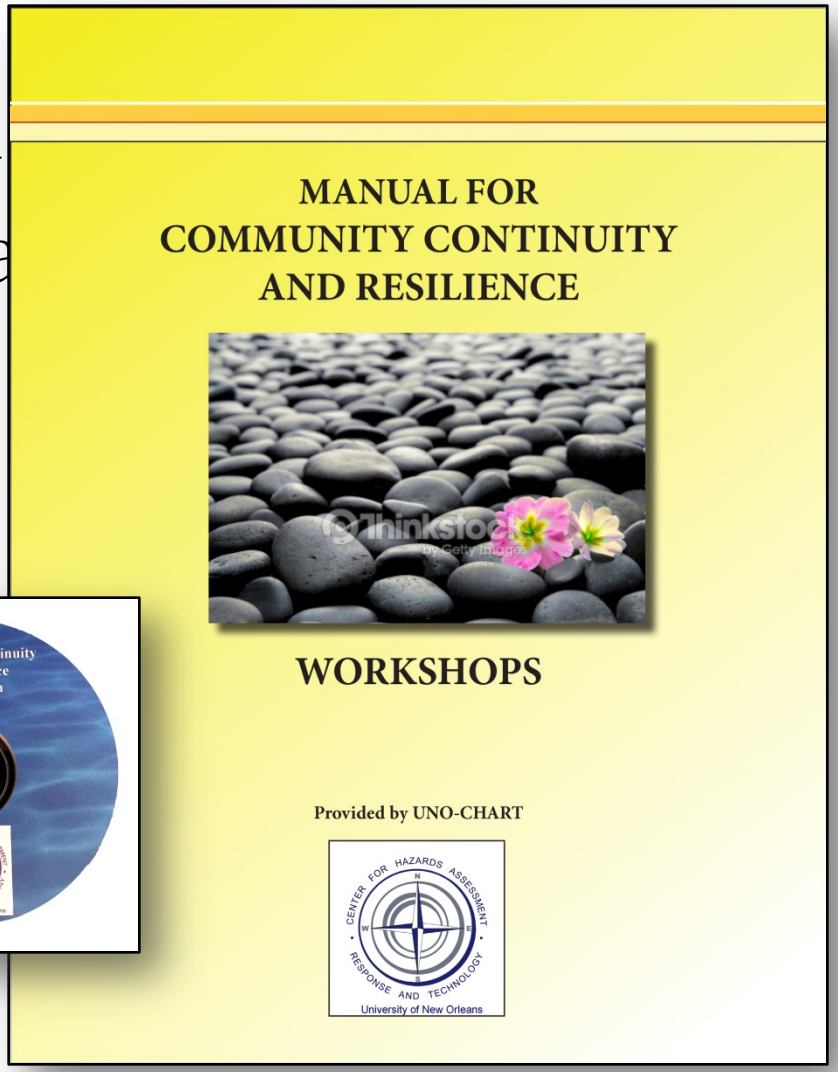
- Held statewide continuity workshops
- Targeted small community organizations, nonprofits, and faith-based groups

Curriculum Development

- Through focus groups and workshops, created a curriculum for community continuity and resilience
  - Community Resilience
  - Understanding Your Hazards
  - Community Mapping
  - Ideas for Successful Response and Recovery
  - Strengthen Your Continuity Plan

Creation of a Manual

- So that agencies and communities can tra themselves

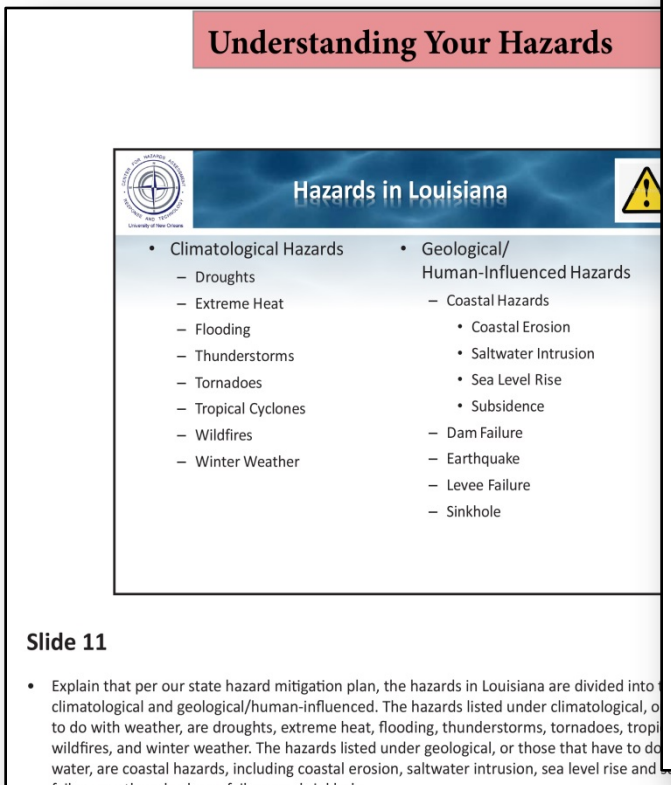


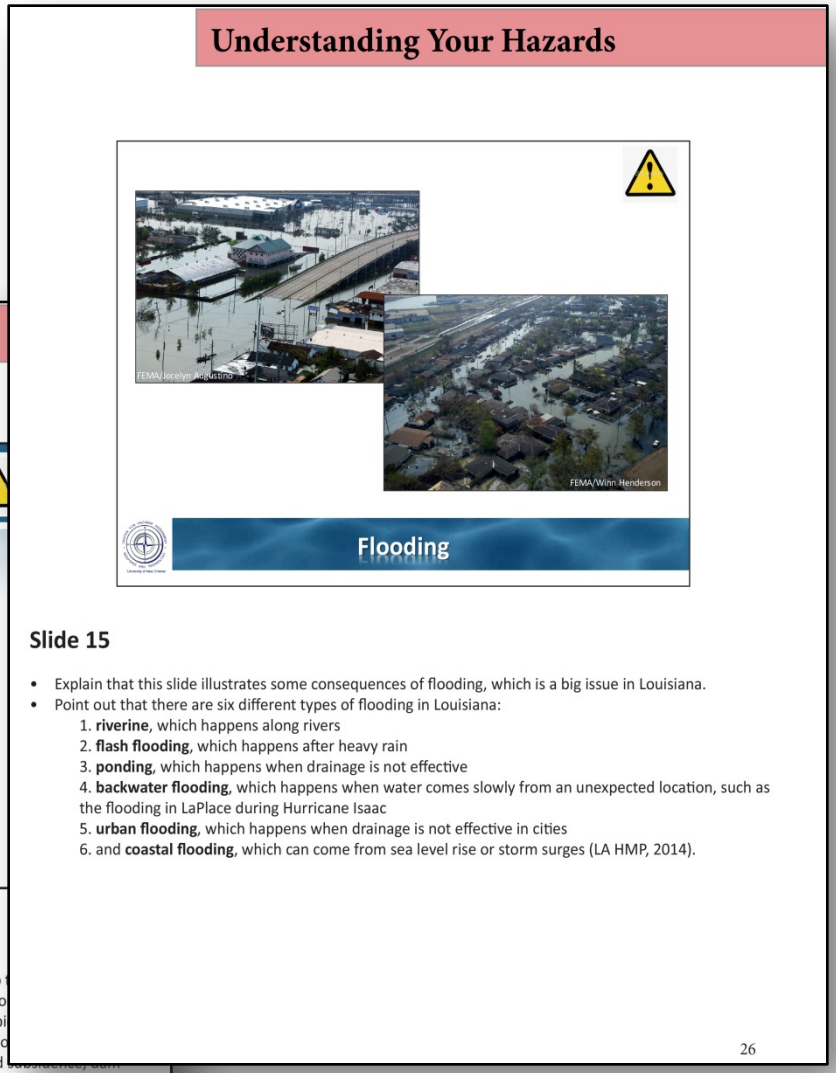
Inside the Manual

- Defining resilience

Inside the Manual

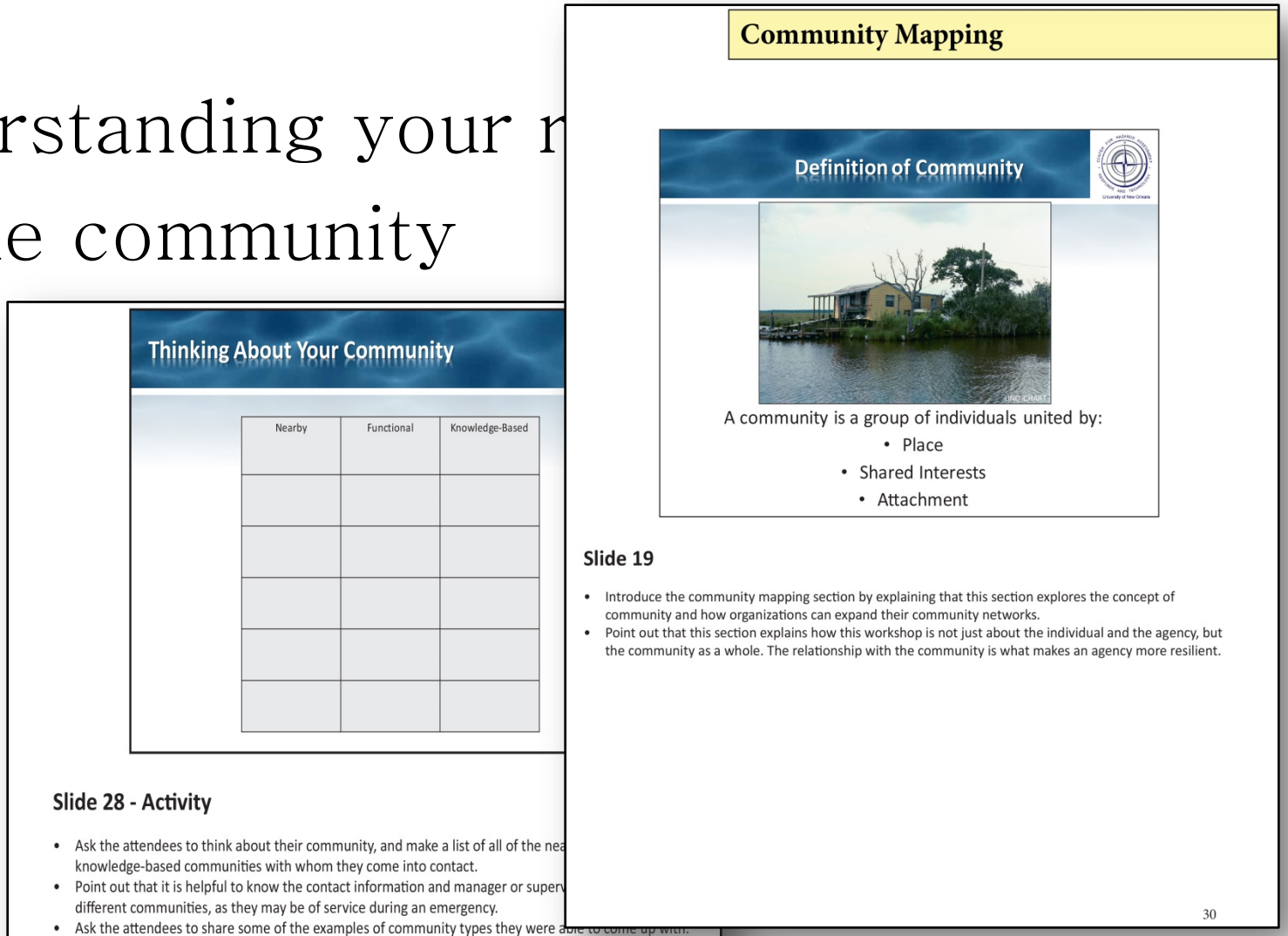
- An in-depth look at hazards





Inside the Manual

- Understanding your r
  in the community



Community Mapping

Definition of Community

A community is a group of individuals united by:

- Place
- Shared Interests
- Attachment

Slide 19

- Introduce the community mapping section by explaining that this section explores the concept of community and how organizations can expand their community networks.
- Point out that this section explains how this workshop is not just about the individual and the agency, but the community as a whole. The relationship with the community is what makes an agency more resilient.

30

Thinking About Your Community

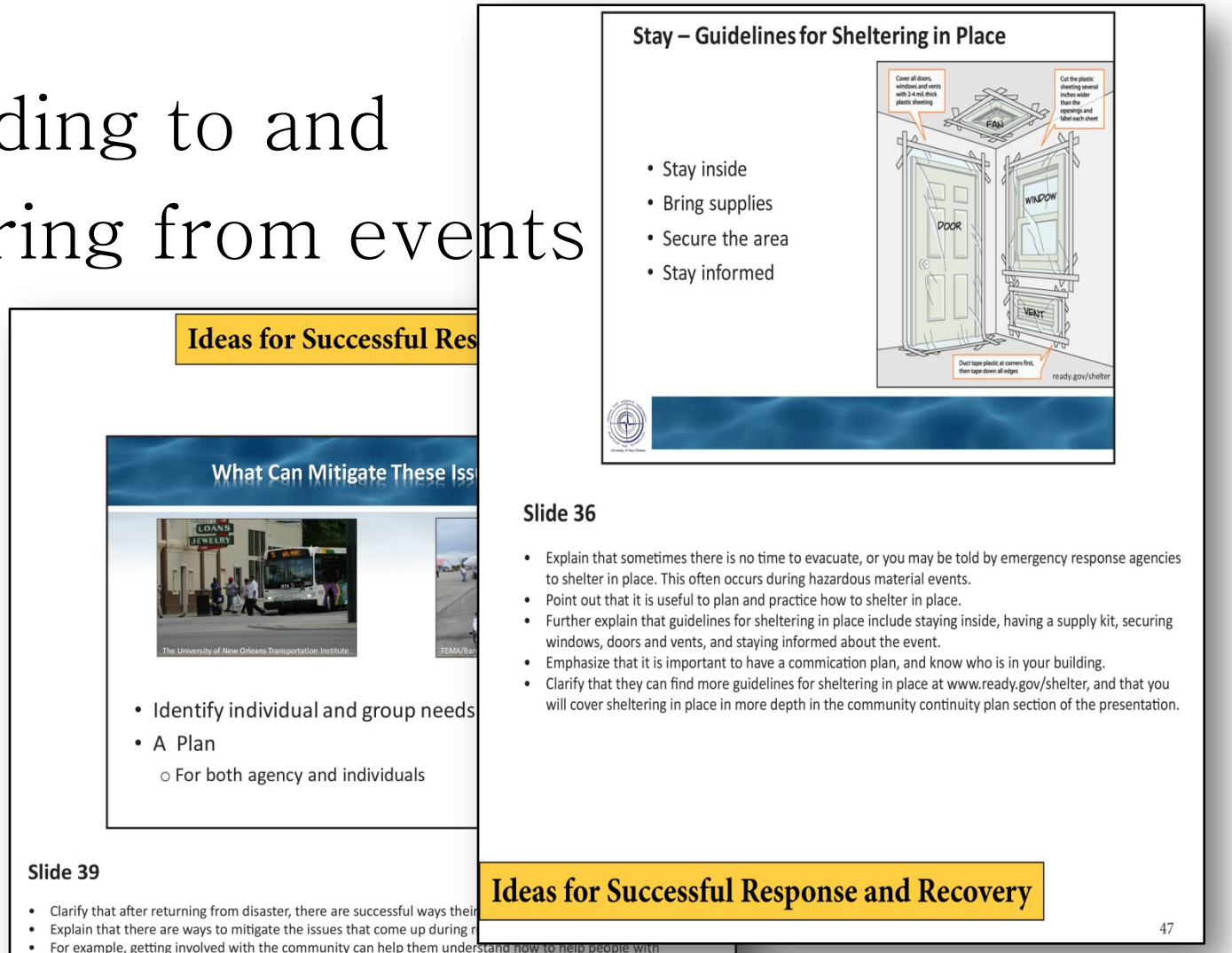
Nearby	Functional	Knowledge-Based

Slide 28 - Activity

- Ask the attendees to think about their community, and make a list of all of the nea
  knowledge-based communities with whom they come into contact.
- Point out that it is helpful to know the contact information and manager or superv
  different communities, as they may be of service during an emergency.
- Ask the attendees to share some of the examples of community types they were able to come up with.

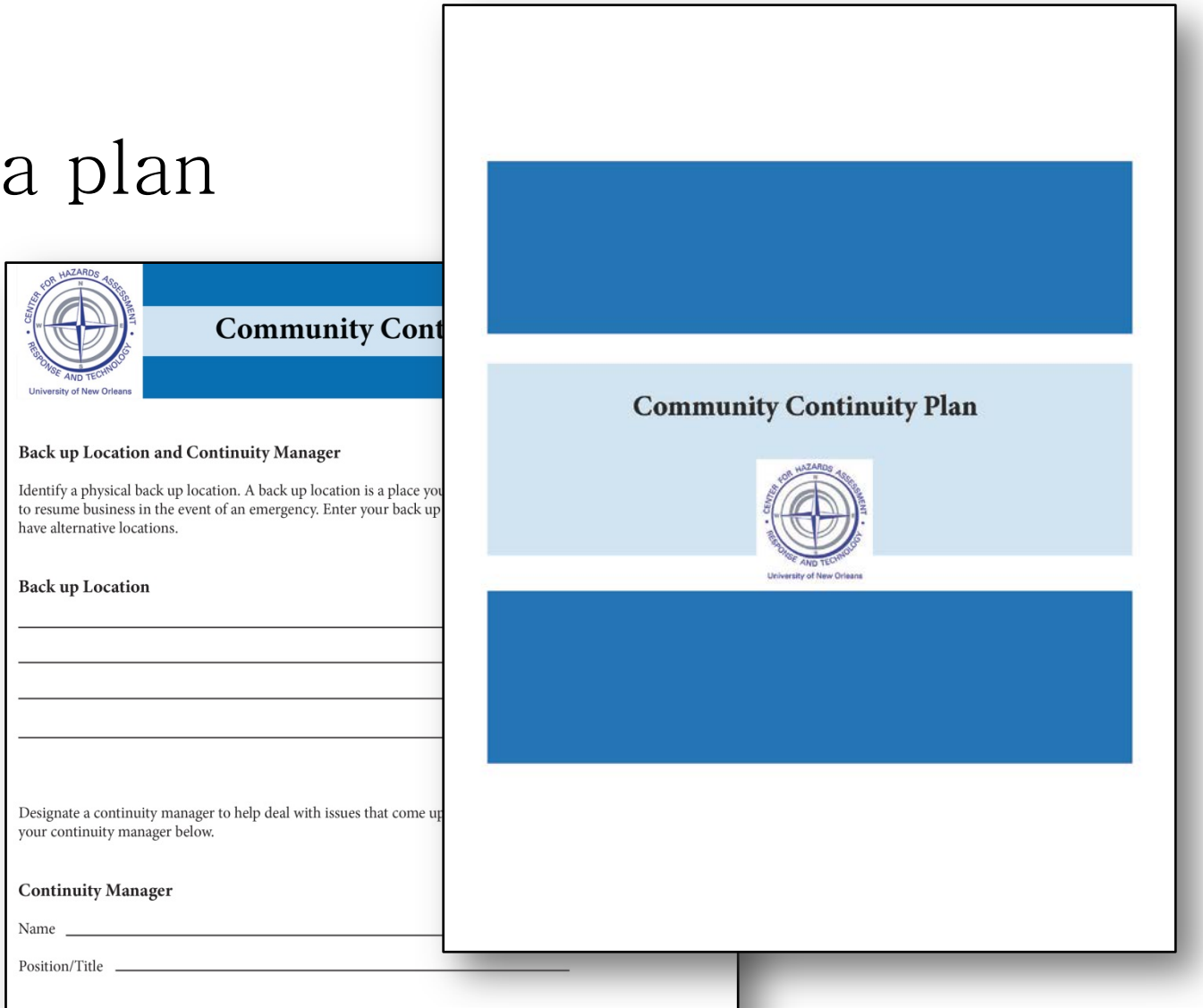
Inside the Manual

- Responding to and recovering from events



Inside the Manual

- Making a plan



Sharing Resources

- Online Disaster Toolkit:

Community Education & Outreach

1. Continuity Planning for Community Organizations
2. Hazards Resiliency Curriculum
3. Risk Literacy
4. DRU Workshop
5. Executives Program in Risk Management

GOVERNOR'S OFFICE
HOMELAND SECURITY & EMERGENCY PREPAREDNESS

GET A GAME PLAN

EDUCATE to MITIGATE™

Risk Literacy

Literacy, Risk and Mitigation

- Difficulties with vulnerable populations
- Constructing risk message with awareness of literacy issues
- National planning process geared toward high-level readers

Separate Yet Critical Tasks

Learning to Read

Understanding Risk

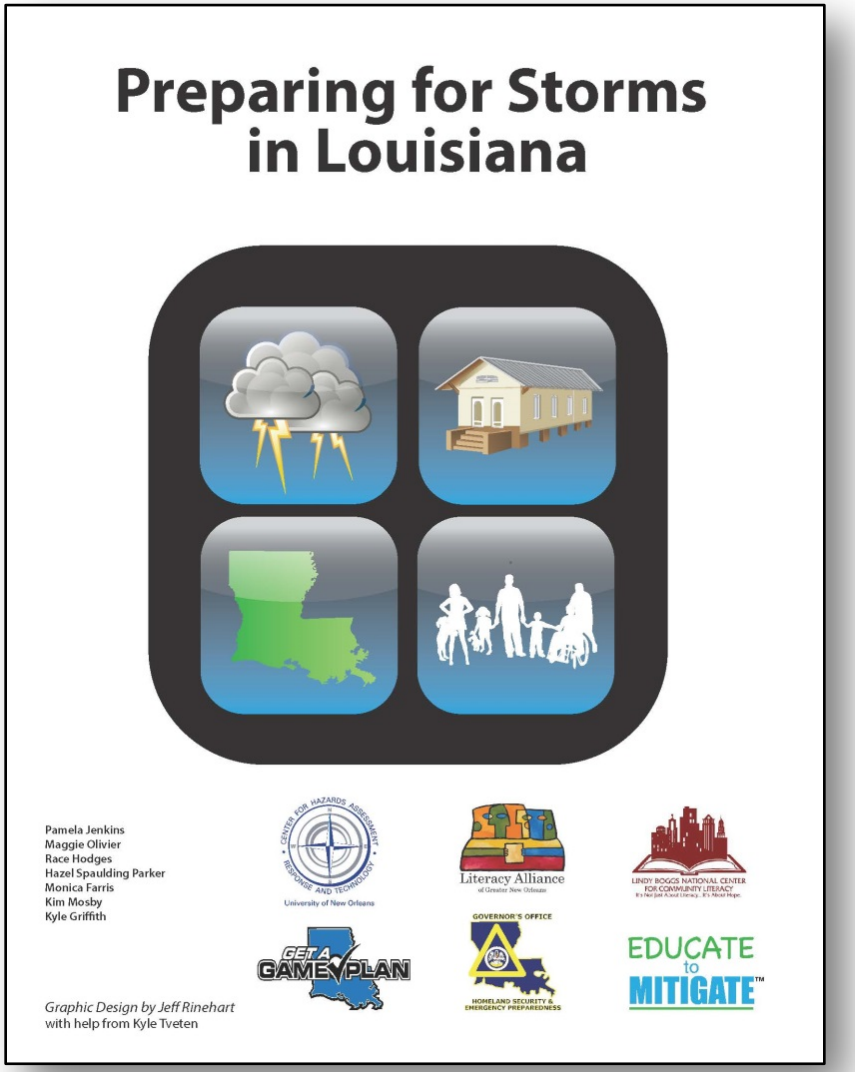
Process

- Ongoing Collaboration with:
  - Adult literacy groups
  - Literacy providers

- Review Materials
  - Enhance content
  - Improve structure

Overview of the Manual

- Plain Language- writing that delivers clear and easy to understand information
- With actions, deconstruct step by step
- Graphics and text that



V. Protection

Key Words

- Flood Insurance
- Hazard Mitigation
- Retrofitting

Things to Know...

Hazard Mitigation

Hazard mitigation is any action you take to protect your life and property from future disaster damages.

Retrofitting

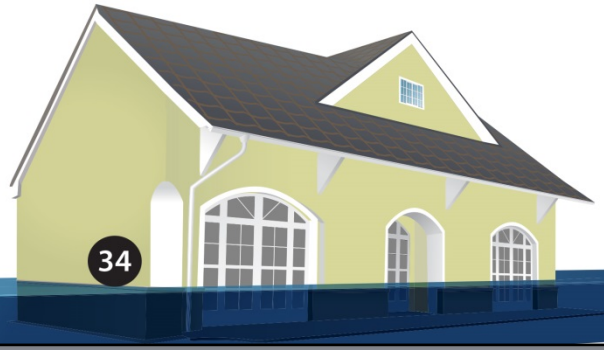
Retrofitting is a change you make to your home to strengthen it from flooding and high winds. Retrofitting is an example of hazard mitigation.

Insurance

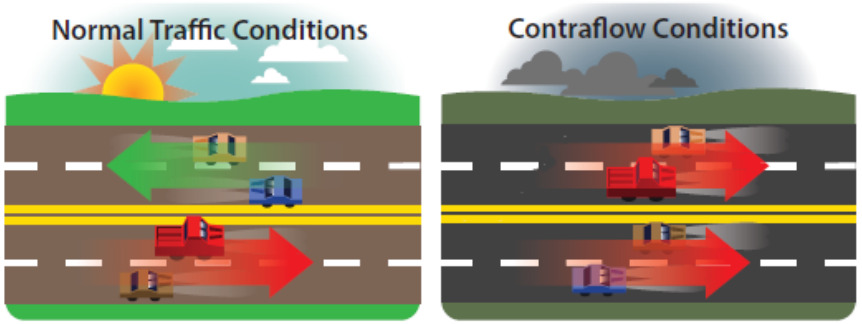
- Flood insurance helps cover the cost of damages from floods. Only flood insurance covers flood damage from storms. There is a 30-day waiting period on new policies.
- Homeowners insurance helps cover the cost of wind damage. Homeowners insurance does not cover flood damage.

Tip:

Both renters and homeowners can get flood insurance. Visit www.floodsmart.gov or call 1-888-379-9531.



Contraflow



- Contraflow is when both sides of the interstate are used to evacuate the city.
- Look for signs and directions.

- Some interstate exits will close. You will not be able to take some exits from the interstate during contraflow.

Tip:

- During contraflow, it can take 4 times as long to reach your destination.
- Fill your gas tank because you will have to travel a long distance before you can exit for gas.
- Hotels and shelters fill up quickly, so be ready to drive further.

Cost of Evacuation

Plan ahead for evacuation costs.

Car

Keep your car in good shape.

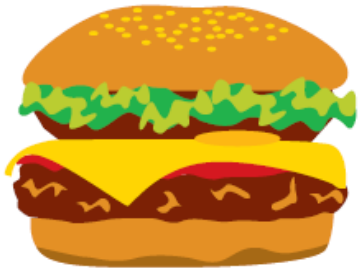
- ✔ Keep your gas tank full.
- ✔ Check tire pressure.
- ✔ Check your windshield-wiper blades.
- ✔ Check condition of engine oil.

Tip 1:
Leave early to avoid traffic.

Have Enough Money To:

- Fill your gas tank 4 times.
- Pay for 3 nights at a hotel ($80-$120/night).
- Eat 3 meals a day at a restaurant for 3 days.

Sample Cost: A New Orleans family of four evacuates to a Shreveport hotel for 3 days. The cost is around $750.



Cost of Food

Average Price of a Meal:

Fast Food	$	$5-15/person
Chain Restaurants	$$	$15-25/person
Fine Dining	$$$	$25-50/person

Ways to Save:

- Bring food from home.
- Shop at grocery stores.
- Cook your own meals.

Tip 2:
Stay at hotels with microwaves and refrigerators so you can cook your own meals.

Driving Times and Costs

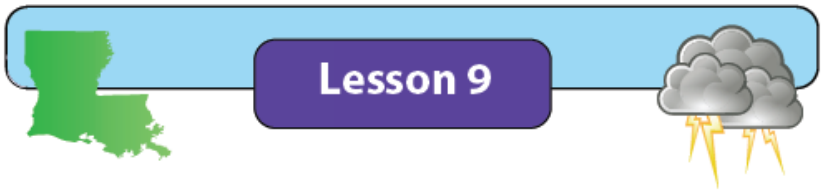
Driving from New Orleans, LA

City	Average Time	Evacuation Time	Miles	Average Price*	Evacuation Price*
Alexandria, LA	3.5 hours	12 hours	220	$105	$205
Atlanta, GA	7.5 hours	30 hours	480	220	440
Baton Rouge, LA	1.5 hours	8 hours	80	40	75
Birmingham, AL	5 hours	20 hours	340	160	320
Dallas, TX	8.5 hours	34 hours	520	245	485
Houston, TX	5.5 hours	22 hours	350	165	325
Jackson, MS	3 hours	24 hours	190	95	190
Memphis, TN	6 hours	24 hours	400	185	370
Shreveport, LA	5.5 hours	20 hours	340	160	320

*Round trip based on a gas price of $3.50 per gallon for a car that travels 15 miles per gallon.

Driving from Lafayette, LA

City	Average Time	Evacuation Time	Miles	Average Price*	Evacuation Price*
Alexandria, LA	1.5 hours	6 hours	90	$40	$80
Austin, TX	6 hours	24 hours	375	175	350
Baton Rouge, LA	1 hours	4 hours	60	30	55
Dallas, TX	5.5 hours	22 hours	390	170	365
Houston, TX	3.5 hours	14 hours	215	100	200
Jackson, MS	3.5 hours	14 hours	230	110	215
Lake Charles, LA	1.5 hours	5.5 hours	75	35	70
San Antonio, TX	6 hours	21 hours	410	190	385
Shreveport, LA	3 hours	10.5 hours	210	100	200



Parish Assistance for Evacuation, Know Your Rights, Shelter Basics

(Pages 23, 24 and 25 of the *Preparing for Storms in Louisiana* student manual)

Reading Comprehension Strategy:	**Think Aloud**

Framework

Students learn where to find evacuation help and basic information about shelters. The reading comprehension strategy of this lesson teaches students to generate questions as they are reading a passage.

Learning Objectives

The students will-

- Review their personalized list of important words or phrases for Section III.
- React verbally and in writing to evacuation buses and shelters.
- Engage with a passage by vocalizing questions.
- Learn where to find help during an evacuation.
- Learn their rights in a shelter.
- Learn basic tips for staying at a shelter.

Materials

In addition to the materials listed on page 7 of this guide, the instructor will need:

- The lesson 9 previewing video:

  http://bit.ly/18CvtA0 *(1:17 in length)

- 2 videos available at:

  http://bit.ly/18os33P *(0:23 in length)
  http://bit.ly/1giRMKG *(0:41 in length)

Preparing for Storms in Louisiana

Evacuation with Elderly or Disabled Persons

Check List

- ☐ Extra Prescription Refills
- ☐ Wheelchair or Walker
- ☐ Personal Medical Devices
- ☐ Backup power source for medical devices
- ☐ Backup plan for health services

Made by UNO-CHART

Preparación para tormentas en Louisiana

Evacuación con personas mayores o con discapacidad

Lista de verificación

- ☐ Recetas adicionales de reabastecimientos de medicinas
- ☐ Silla de ruedas o andador
- ☐ Dispositivo médico personales
- ☐ Fuente de energía de reserva para los dispositivos médicos
- ☐ Plan de respaldo para servicios de salud

Hecho por UNO-CHART

Supply Kit

Safety Supplies

Inside your kit


First Aid Kit ☐


Aspirin / Tylenol ☐


Flashlights ☐


Battery Radio ☐


Wrench ☐


Pliers ☐


Whistle ☐


Batteries ☐

Personal Supplies

Inside your kit


Important Documents in a waterproof container ☐


3 gallons water per person ☐

Canned food ☐


Can opener ☐


Change of clothes and shoes for each person ☐


Blanket or sleeping bag for each person ☐


Towels ☐


Money ☐

Sanitation Supplies

Inside your kit


Soap ☐


Wet Wipes ☐

Hand Sanitizer ☐


Toothbrush ☐


Deodorant ☐


Garbage bags ☐


Toothpaste ☐


Shampoo ☐

Repetitive Flood Loss

Project Background

Repetitive Loss (RL): two or more claim payments of more than $1,000

Severe Repetitive Loss (SRL):four or more claim payments of more than $5,000 each and the cumulative amount of claims exceeds $20,000 **or** two separate claims that cumulatively exceed the building's market value.

Privacy Act of 1974:restricts the release of certain types of data to the public

Project Background

- FEMA funded (Region VI)
- **Project Partners**: Solutient, French Wetmore, RL Communities
- Deliverables
  - Rep Loss database and web portal
    - www.floodhelp.uno.edu
  - Area analyses
  - Outreach

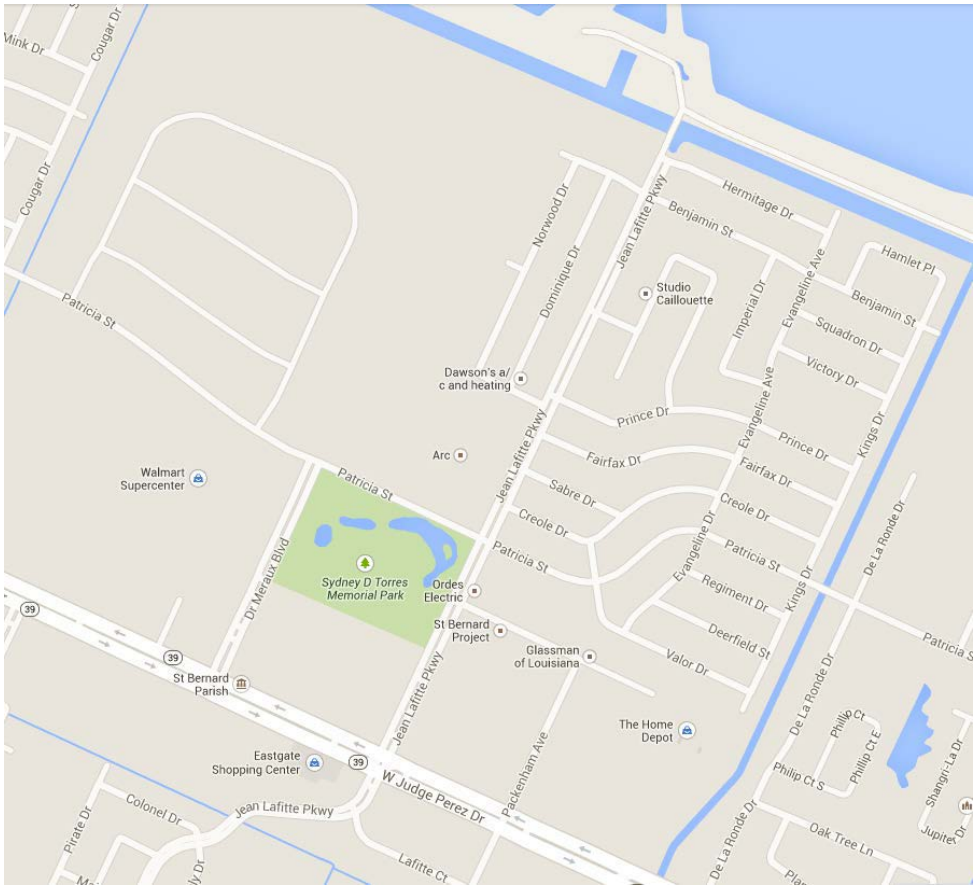
The Repetitive Loss Area Analysis (RLAA)

- Flood mitigation plan
  - Identifies the source(s) of repetitive flooding
  - Offers mitigation measures to combat that flooding
  - Includes resident participation

RLAA Process

- Step 1: Advise all property owners in the RL area
- Step 2: Contact agencies/organizations that may have information
- Step 3: Visit each building and collect data
- Step 4: Review potential mitigation measures
- Step 5: Document the findings

Selection of Study Area



52 RLs
185 Claims
$8,336,635.74

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University of New Orleans

Step 1

St. Bernard Parish Government
8201 West Judge Perez Drive
Chalmette, Louisiana 70043
278-4227 278-4330(fax)

David E. Peralta
Parish President

November 4, 2013

Dear St. Bernard Parish Resident:

St. Bernard Parish has partnered with the University of New Orleans Center for Hazards Assessment, Response and Technology (UNO-CHART) to conduct a study on repetitive flooding in your neighborhood. The purpose of this study is to get a better understanding of what flooding issues exist in the neighborhood, as well as to offer ideas about how to mitigate the flood losses.

During the week of November 18, 2013, a project team from UNO-CHART will be in the area conducting fieldwork (i.e., taking pictures from the street of each building, noting the foundation type and estimating elevation above the street, etc.). If you would like to talk to the research team about your flooding experiences, this information would greatly enhance this study. The research team **will not** enter your home unless you invite them.

This work will also be greatly improved with additional information that you might be able to provide. Attached is a data sheet that we hope you will complete as soon as possible. After you complete the form, please fold, tape, and mail to the address on the opposite side. Postage has been provided.

After the study is completed, some preliminary recommendations will be developed. You will be invited to a final meeting with Parish officials and the UNO-CHART team to review the findings. The meeting time and location will be announced once the analysis is near completion. If you have any questions about this project, please feel free to contact William McCartney, St. Bernard Parish Coastal Zone Manager at (504) 278-4303; if you would like to speak to a member of the research team, please contact Monica Farris, Director of UNO-CHART at (504)280-4016.

Thank you for your assistance in helping us to complete this project.

David Peralta
St. Bernard Parish, President

Step 1

St. Bernard Repetitive Flooding Analysis - Flood Protection Data Sheet

Name: _____

Property address: _____

1. In what year did you move into the home at this address? _____

2. What type of foundation does your house have? ☐ Slab ☐ Crawlspace
   ☐ Posts/piles ☐ Other: _____

3. If your house has a **crawlspace or post/piles foundation**, please indicate approximately how high from grade your lowest floor of living space is. _____

4. Has the property ever flooded?
   ☐ Yes ☐ No (if "no," please skip to question 9)

5. In what year(s) did it flood (you may also refer to storm names)?
   _____

6. Besides Hurricane Katrina, what was the deepest flooding experienced?
   ☐ In house: _____ deep
   ☐ In yard only: _____ deep
   ☐ Water kept out of house or building by sandbagging or other protective measure

7. Besides Hurricane Katrina, what was the longest time that the water stayed in the house?
   ___ hours or ___ days
   a. When was this? _____(month/year)

8. What was the cause of your flooding? Check all that apply.
   ☐ Drainage from nearby properties
   ☐ Storm surge from nearby waterways
   ☐ Clogged/undersized drainage ditch
   ☐ Overbank flooding from nearby ditch
   ☐ Storm sewer backup
   ☐ Sanitary sewer backup
   ☐ Standing water next to house
   ☐ Other: _____

9. Have you taken any flood protection measures on your property? Check all that apply.
   ☐ Moved utilities/contents to a higher level
   ☐ Regraded yard to keep water away from building
   ☐ Installed drains or pipes to improved drainage
   ☐ Elevated all or parts of the building
   Year Elevated_____
   ☐ Sandbagged when water threatened
   ☐ Waterproofed the outside walls
   ☐ Built a wall to keep water away
   ☐ Other: _____

10. Did any of the measures checked in Question 9 work? If so, which ones? If not, do you know why they didn't work?_____

11. Do you have Flood Insurance? ☐ Yes ☐ No

12. Are you interested in pursuing measures to protect the property from flooding?
    ☐ Yes ☐ No If yes, please refer to our website (www.floodhelp.uno.edu) for useful information.

~~ Please return this data sheet by Monday, December 2, 2013 ~~

Step 2

- Identifying Agencies/Organizations
- Making Contact
  - Floodplain Manager
  - Permits
  - Stormwater Manager
  - Levee District/flood control
  - Engineers

Step 3 – Field Data

Street Name	Building number	Neighborhood	Occupied?	EC Diagram	# of Stories	Elevated above grade	Elevated above street	Structure type	Comments - adequate vents, foundation, HVAC, retrofit
Alexander		Arabi Area	yes	8	2	2-3	3-4	Masonry	only 2 vents visible
Alexander		Arabi Area	yes	5	1	1-2	1-2	w	mail box in bush
Alexander		Arabi Area	yes	5	2	4-5	5-6	w	red barn
Alexander		Arabi Area	yes	1A	1	0-1	1-2	Masonry	tan brick, blue trim
Alexander		Arabi Area	yes	5	1	1	1-2	w	blue house four bushy columns
Alexander		Arabi Area	yes	8	1	3-4	4-5	w	pale yellow brick steps ?
Alexander		Arabi Area	yes	5	1	3-4	4-5	w	raised AC green house wood door
Alexander		Arabi Area	yes	5	1	1-2	1-2	w	green closed shutters, big wreath

Step 4 – Review Mitigation Measures

- Acquisition
- Elevation
- Barriers to floodwaters
- Dry Floodproofing
- Wet Floodproofing
- Utility Improvements
- Maintaining Flood Insurance

Step 5 – Document Findings

- Summary of process
- Problem statement and map
- Building information
- Mitigation options reviewed
- Action Items

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Website/Portal – www.floodhelp.uno.edu

FEMA

REPETITIVE FLOOD PORTAL

THE UNIVERSITY of NEW ORLEANS

Welcome...
Repetitive Loss Area Analyses and Other Reports
Protecting Yourself
Protecting Your Pets
Protecting Your Home
Flood Recovery
Flood Insurance
Drainage Problems
Funding
Floodplain Management
Community Contacts
Secure Portal Access
Glossary of Terms
FEMA Publications
Related Links

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solutient
Contact Site Administrator

Welcome...

Welcome to the Repetitive Floodloss Information Site – This website is brought to you by the University of New Orleans with funding support from FEMA.

Headlines and Information

- Repetitive Loss Area Analyses and Other Reports
- Current Disaster Declarations
- In the News
- Hurricanes Katrina and Rita

What to do when...

- You want to be prepared for a flood event
- A hurricane or tropical storm warning has been issued
- Flooding has started
- Your home has just been flooded

If you are a local mitigation management official please contact CHART for more information on the repetitive loss portal.

These homes will be protected from the base flood

This homeowner built a small floodwall surrounding the structure

Repetitive Loss Area Analyses and Other Reports

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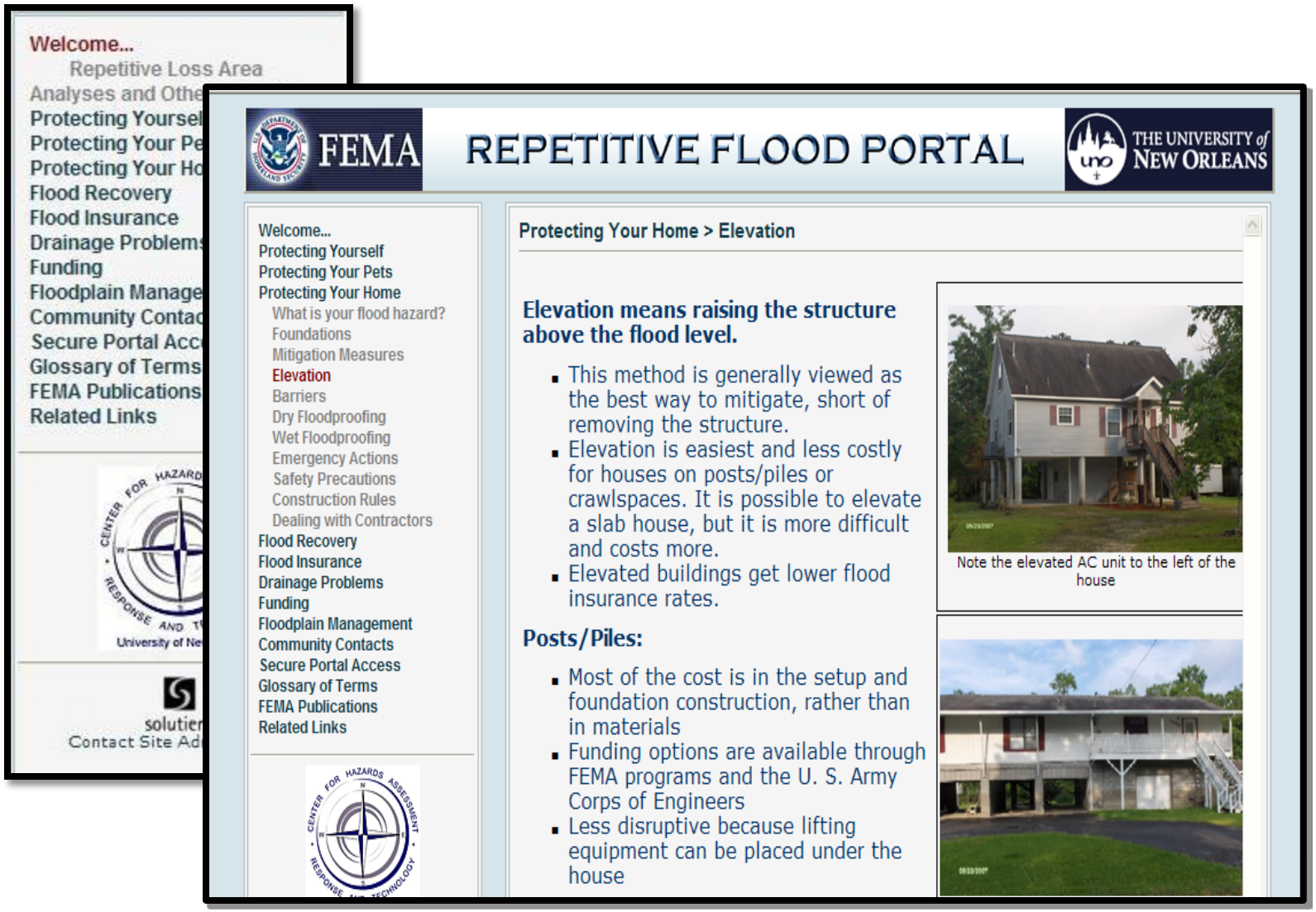
Public Information



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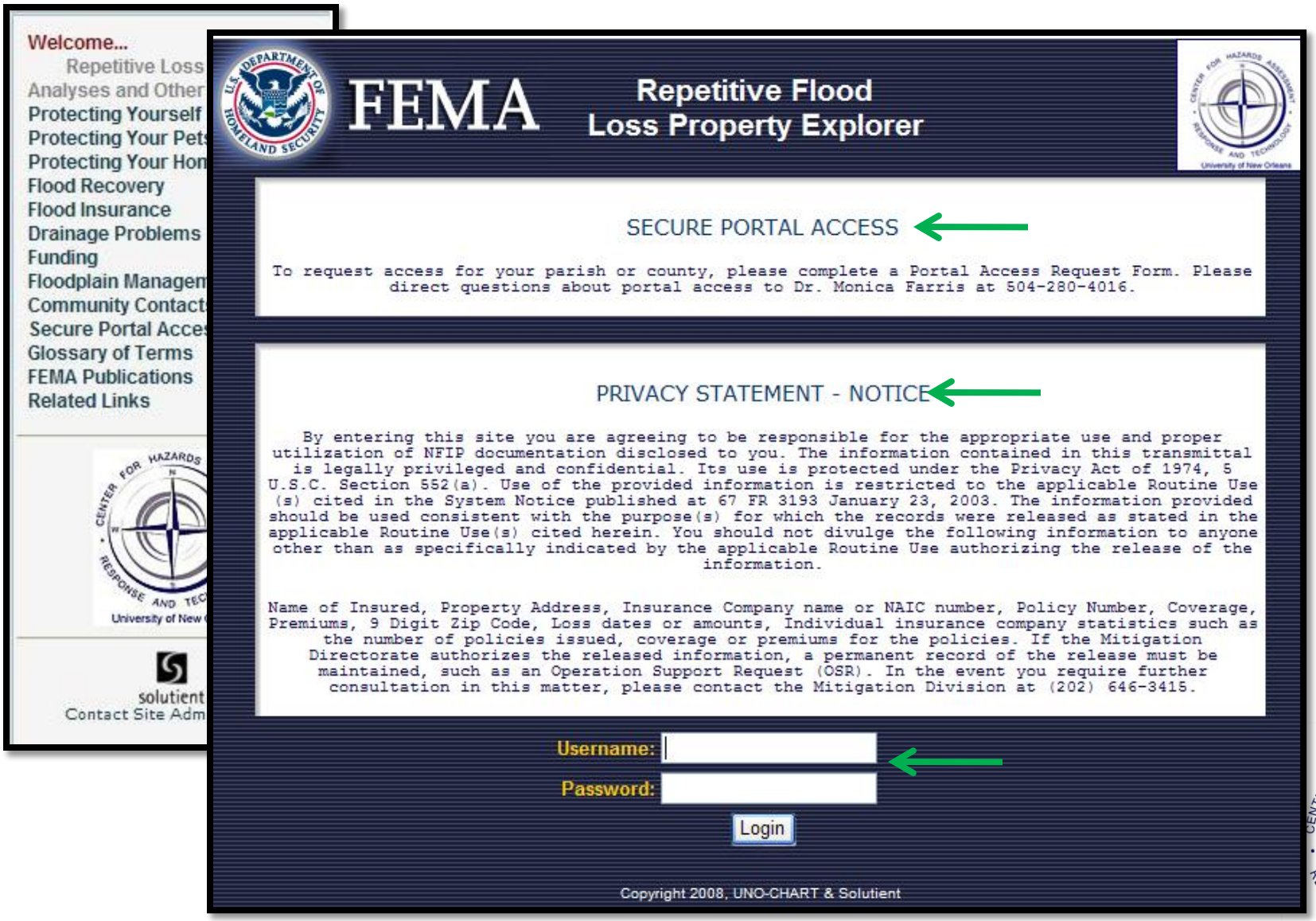
Secure Access to the Repetitive Loss Portal



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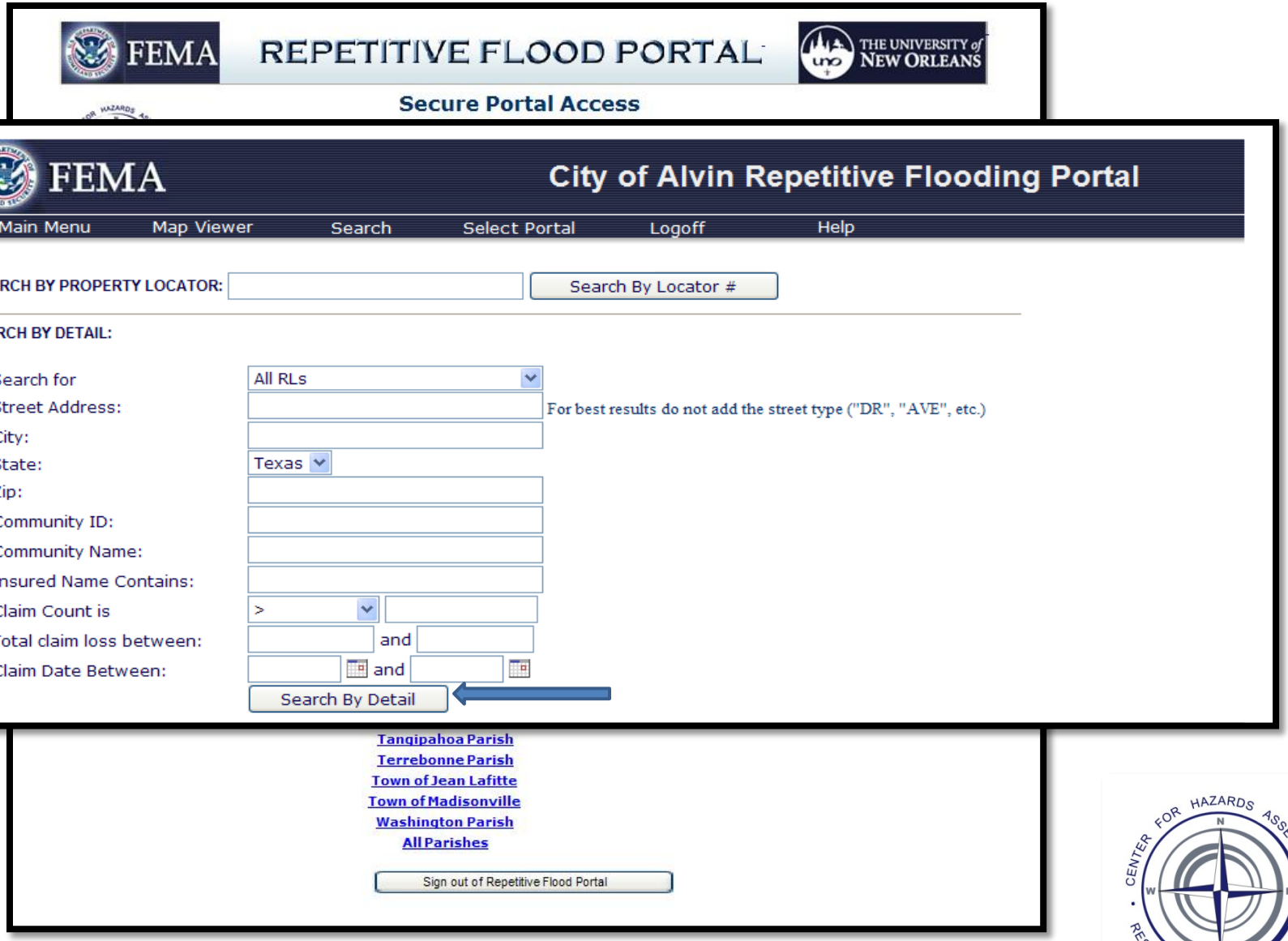

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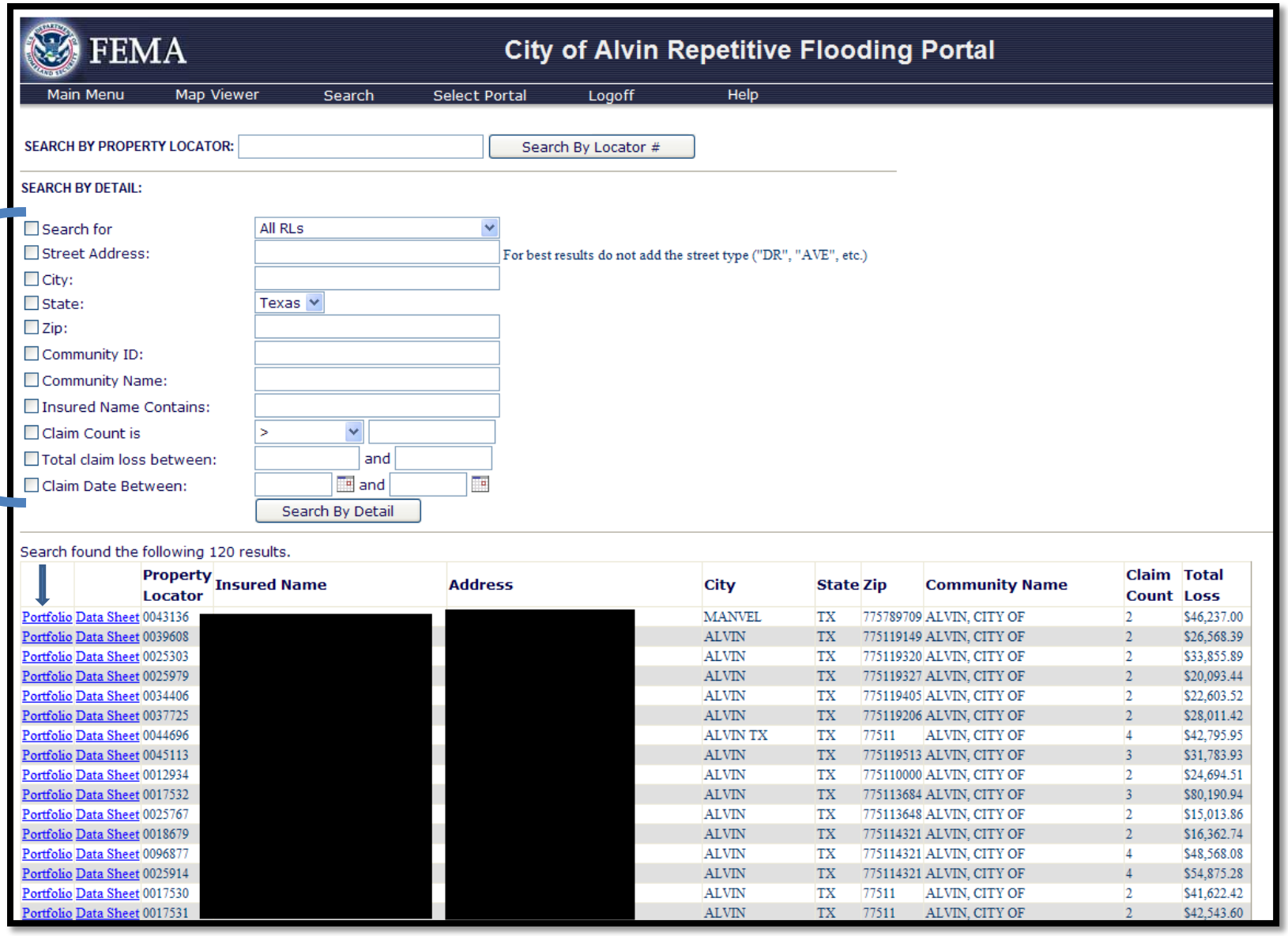


FEMA

City of Alvin Repetitive Flooding Portal

Main Menu | Map Viewer | Search | Select Portal | Logoff | Help

SEARCH BY PROPERTY LOCATOR: [ ] Search By Locator #

SEARCH BY DETAIL:

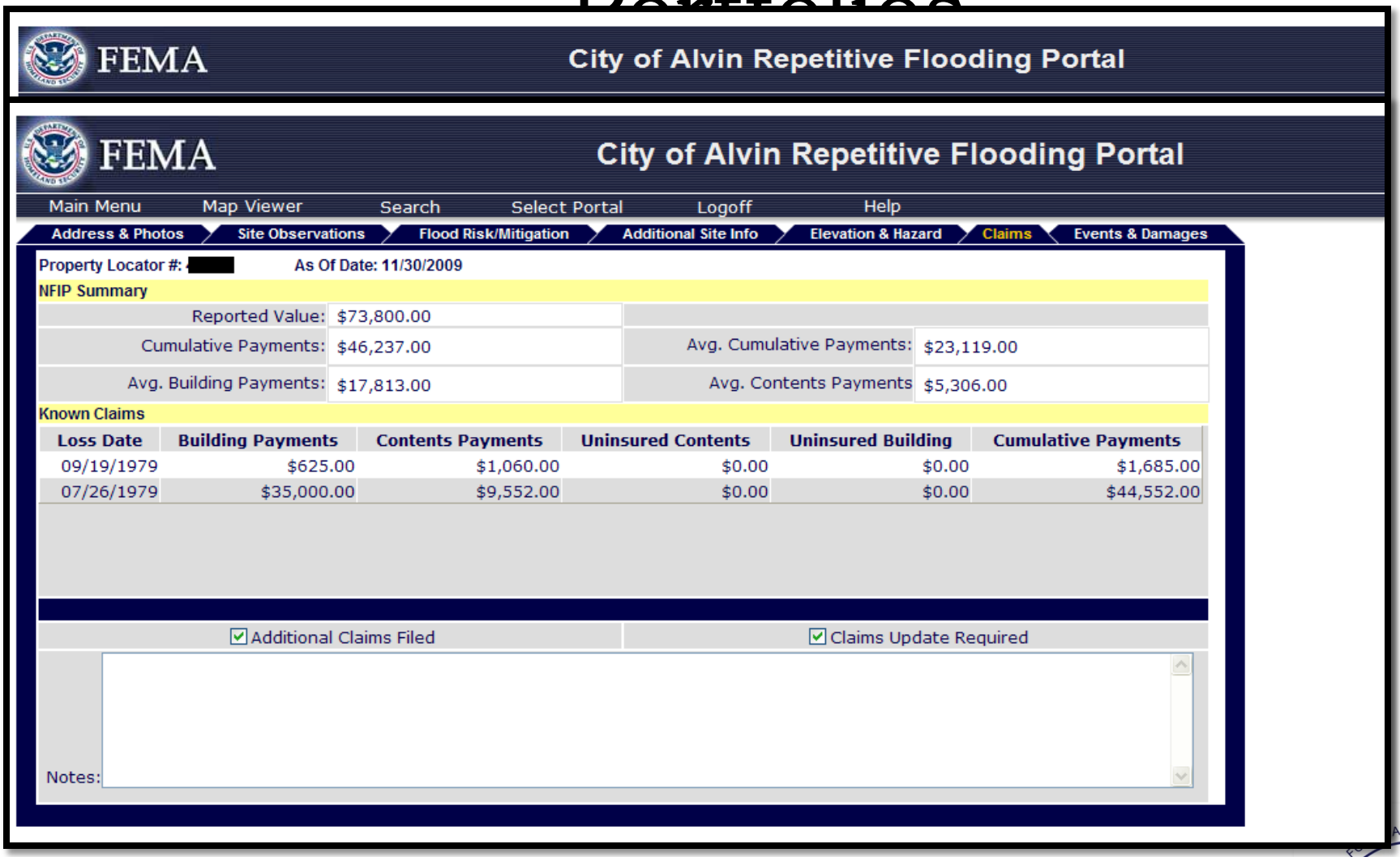
- [ ] Search for: All RLs
- [ ] Street Address: [ ] For best results do not add the street type ("DR", "AVE", etc.)
- [ ] City: [ ]
- [ ] State: Texas
- [ ] Zip: [ ]
- [ ] Community ID: [ ]
- [ ] Community Name: [ ]
- [ ] Insured Name Contains: [ ]
- [ ] Claim Count is > [ ]
- [ ] Total claim loss between: [ ] and [ ]
- [ ] Claim Date Between: [ ] and [ ]

Search By Detail

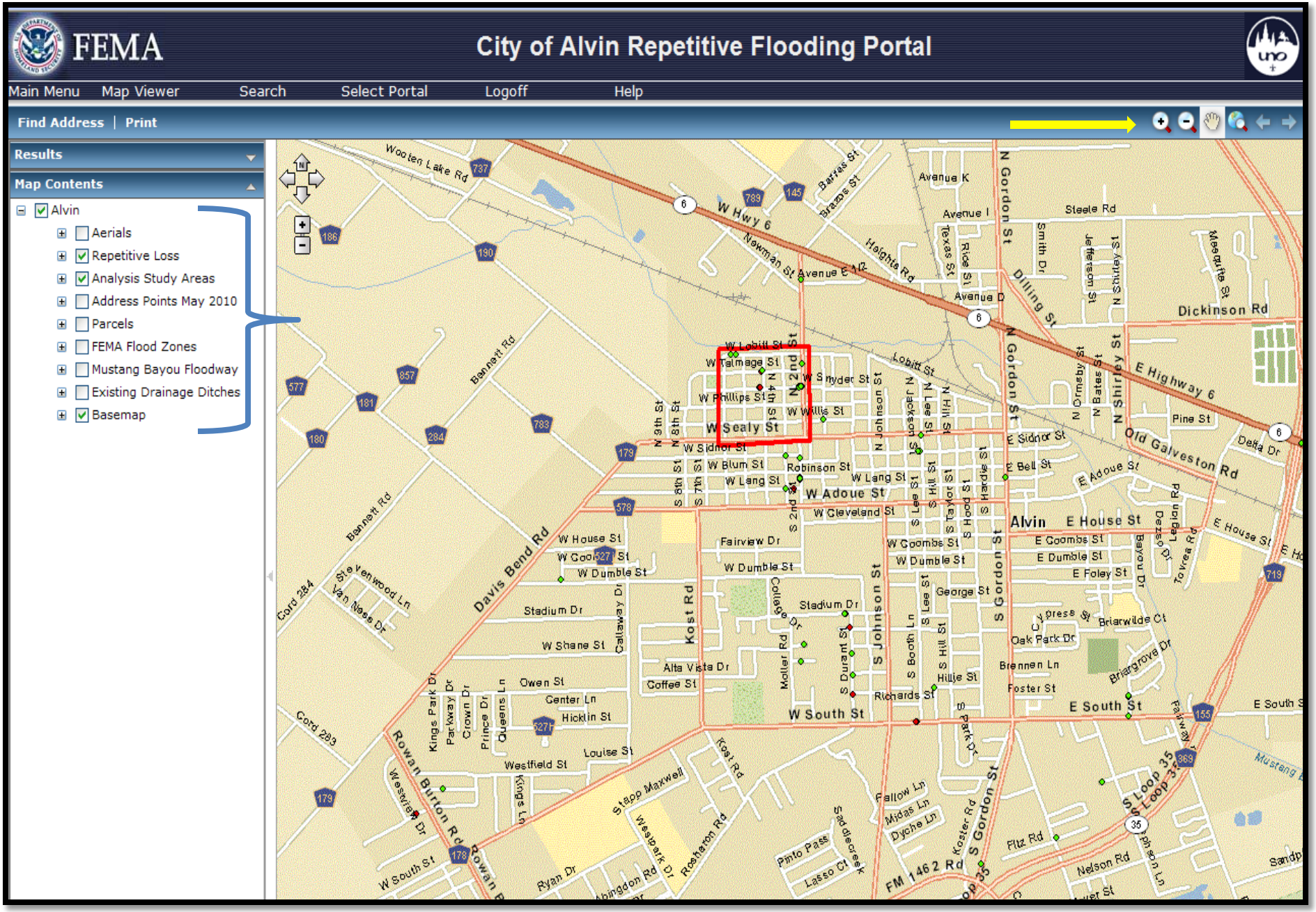
Search found the following 120 results.

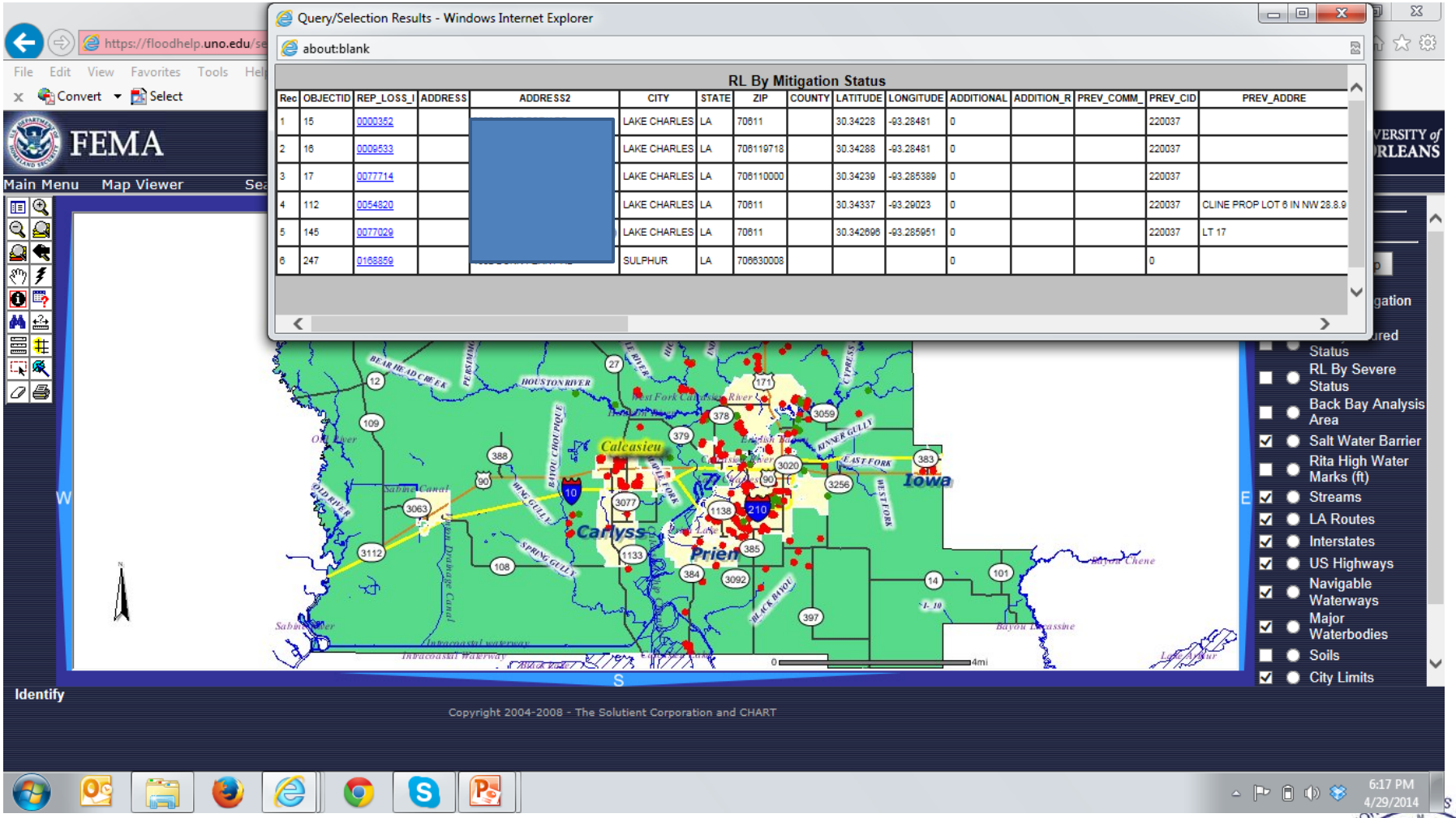
	Property Locator	Insured Name	Address	City	State	Zip	Community Name	Claim Count	Total Loss
Portfolio Data Sheet	0043136	[redacted]	[redacted]	MANVEL	TX	775789709	ALVIN, CITY OF	2	$46,237.00
Portfolio Data Sheet	0039608			ALVIN	TX	775119149	ALVIN, CITY OF	2	$26,568.39
Portfolio Data Sheet	0025303			ALVIN	TX	775119320	ALVIN, CITY OF	2	$33,855.89
Portfolio Data Sheet	0025979			ALVIN	TX	775119327	ALVIN, CITY OF	2	$20,093.44
Portfolio Data Sheet	0034406			ALVIN	TX	775119405	ALVIN, CITY OF	2	$22,603.52
Portfolio Data Sheet	0037725			ALVIN	TX	775119206	ALVIN, CITY OF	2	$28,011.42
Portfolio Data Sheet	0044696			ALVIN TX	TX	77511	ALVIN, CITY OF	4	$42,795.95
Portfolio Data Sheet	0045113			ALVIN	TX	775119513	ALVIN, CITY OF	3	$31,783.93
Portfolio Data Sheet	0012934			ALVIN	TX	775110000	ALVIN, CITY OF	2	$24,694.51
Portfolio Data Sheet	0017532			ALVIN	TX	775113684	ALVIN, CITY OF	3	$80,190.94
Portfolio Data Sheet	0025767			ALVIN	TX	775113648	ALVIN, CITY OF	2	$15,013.86
Portfolio Data Sheet	0018679			ALVIN	TX	775114321	ALVIN, CITY OF	2	$16,362.74
Portfolio Data Sheet	0096877			ALVIN	TX	775114321	ALVIN, CITY OF	4	$48,568.08
Portfolio Data Sheet	0025914			ALVIN	TX	775114321	ALVIN, CITY OF	4	$54,875.28
Portfolio Data Sheet	0017530			ALVIN	TX	77511	ALVIN, CITY OF	2	$41,622.42
Portfolio Data Sheet	0017531			ALVIN	TX	77511	ALVIN, CITY OF	2	$42,543.60

Repetitive Loss Property Portfolios



CENTER FOR HAZARDS ASSESSMENT RESPONSE AND TECHNOLOGY
University of New Orleans

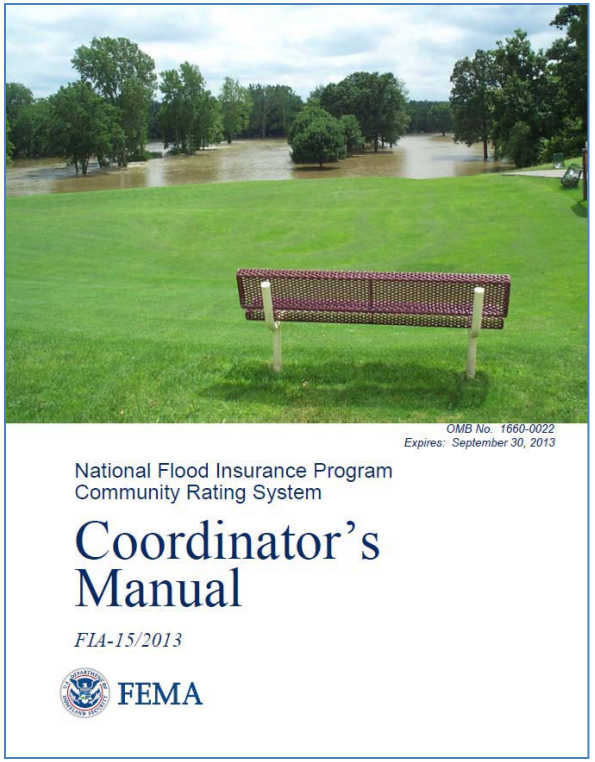

FEMA
City of Alvin Repetitive Flooding Portal
Main Menu
Map Viewer
Search
Select Portal
Logoff
Help
Find Address | Print
Results
Map Contents
Alvin
Aerials
Repetitive Loss
Analysis Study Areas
Address Points May 2010
Parcels
FEMA Flood Zones
Mustang Bayou Floodway
Existing Drainage Ditches
Basemap
W Hwy 6
E Highway 6
Old Galveston Rd
Dickinson Rd
N Gordon St
S Gordon St
N Shirley St
W Sealy St
W Adoue St
E House St
E South St
W South St
S Johnson St
Davis Bend Rd
Rowan Burton Rd
Kost Rd
Bennett Rd
FM 1462 Rd
Loop 35
Alvin



CRS Users' Groups

What is the CRS?

- Voluntary Program
- Provides incentives for going beyond minimum NFIP requirements
- Administered for FEMA by the ISO since 1991



CRS Rating Scale

Class	Points	SFHA	Non-SFHA	PRP
1	4,500	45%	10%	0
2	4,000	40%	10%	0
3	3,500	35%	10%	0
4	3,000	30%	10%	0
5	2,500	25%	10%	0
6	2,000	20%	10%	0
7	1,500	15%	5%	0
8	1,000	10%	5%	0
9	500	5%	5%	0
10	< 500	0	0	0

CRS Communities in Louisiana

- 42 Communities
  - Policies in Force: 391,362
  - Premiums $284,871,427
  - Savings: $35,071,512

CRAFT

- Ascension Parish (8)
- East Baton Rouge Parish (6)
- West Baton Rouge Parish (8)
- City of Denham Springs (8)
- City of Walker (8)
- City of Gonzales (8)
- City of Zachary (7)
- City of Central (*8)*

FLOAT

- City of Mandeville (7)
- Orleans Parish (8)
- St. Bernard Parish (*Not yet in CRS*)
- St. John the Baptist Parish (8)
- St. Tammany Parish (7)
- City of Covington (*Not yet in CRS*)
- City of Slidell (8)
- Tangipahoa Parish (9)
- Terrebonne Parish (6)

Jefferson Parish

- Jefferson Parish (6)
- City of Gretna (8)
- City of Westwego (8)
- Town of Jean Lafitte (*Not yet in CRS*)
- City of Kenner (7)
- City of Harahan (8)
- City of Grand Isle (*Not yet in CRS*)

SWIFT

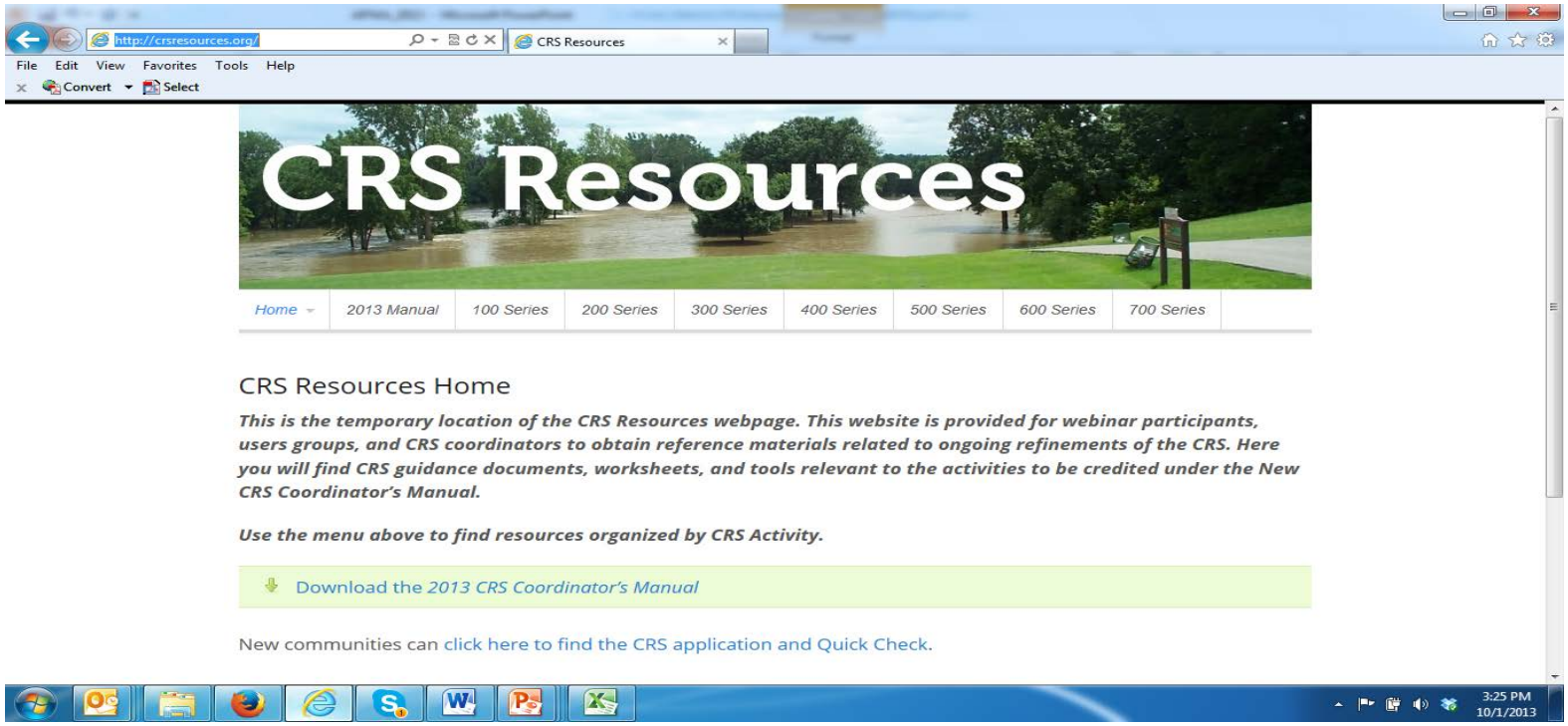
- Calcasieu Parish (8)
- Cameron Parish (Not yet in CRS)
- Vermilion Parish (Not yet in CRS)
- City of Lake Charles (8)
- City of Sulphur (Not yet in CRS)
- Town of Iowa (Not yet in CRS)
- City of Abbeville (Not yet in CRS)
- Iberia Parish (Not yet in CRS)

Benefits of a CRS Users Group

- Share information
- ISO
- CECs for CFMs
- Joint projects
- Attract new communities
- Provide feedback on CRS

For more information

- www.fema.gov
- http://crsresources.org/



Questions?

Thank you.

Contact Information

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- Tara Lambeth - tlambet1@uno.edu
- Online Resources -

  www.uno.edu/chart

- Follow UNO-CHART