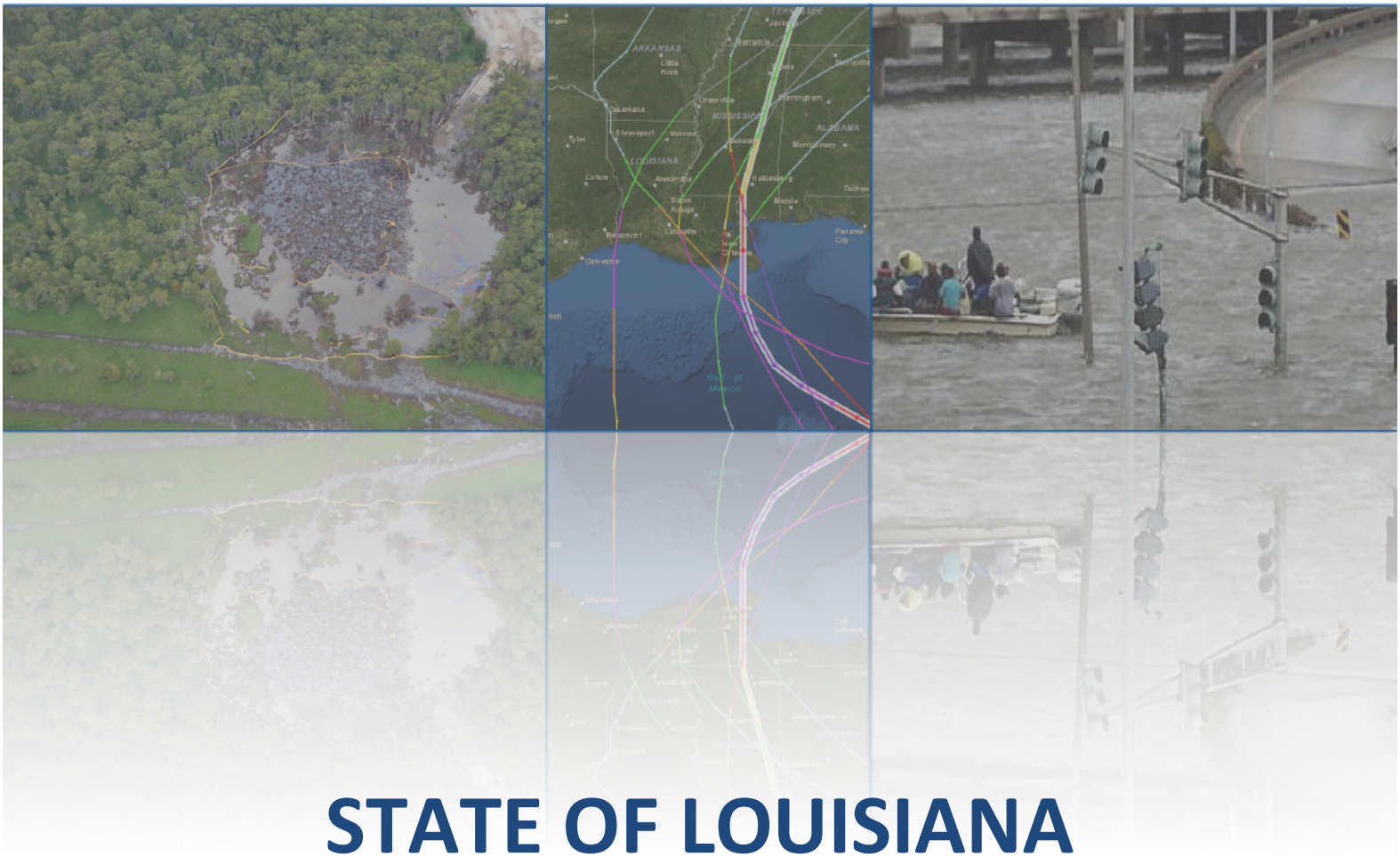

STATE OF LOUISIANA HAZARD MITIGATION PLAN

2014 UPDATE

GOVERNOR'S OFFICE

HOMELAND SECURITY &
EMERGENCY PREPAREDNESS

PAGE INTENTIONALLY LEFT BLANK

Prepared By:

Louisiana Governor's Office of Homeland Security
and Emergency Preparedness
7667 Independence Blvd.
Baton Rouge, LA 70806

With Support From:

Department of Geography and Anthropology
Department of Construction Management
Louisiana State University
Baton Rouge, LA 70803

PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

This 2014 State Hazard Mitigation Plan Update was coordinated by the State Hazard Mitigation Planning Committee (SHMPC) in collaboration with faculty, staff, and students at Louisiana State University and East Tennessee State University. The Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) and its director, Kevin Davis, wish to thank all of the members of the entire State Hazard Mitigation Planning Committee (SHMPC) for their work on plan. Particularly, State Hazard Mitigation Officer Jeffrey Giering's vision for a mitigation plan that is readable and useful to the public inspired the whole development of this Update. Finally, GOHSEP would like to thank the wide range of stakeholder representatives from federal, state, and local levels of government who provided feedback and expertise on this document, as well as personnel from non-governmental organizations. This document is the richer for such inclusive help.

A list of those individuals who generously aided in the creation of this document follows.

2014 GOHSEP STATE HAZARD MITIGATION PLANNING COMMITTEE

Courtney Maciasz	Capital Region Planning Committee
Jim Ferguson	City of Baton Rouge Department of Public Works
Bonnie Anderson	City of Carencro
Melanie Saucier	Coastal Protection and Restoration Authority
Karim Belhadjali	Coastal Protection and Restoration Authority
Andrea Galinski	Coastal Protection and Restoration
Wayne Ryland	Department of Corrections
Richard Hollowell	Department of Health and Hospitals
Bo Bolourchi	DOTD
George Chike	DOTD
Cindy O'Neal	DOTD
Manuel Martinez	Facility Planning and Control
John Callahan	GOHSEP
Preston Bates	GOHSEP
Scott Van Keuren	GOHSEP
Jeffrey Giering	State Hazard Mitigation Officer
Jason Lachney	GOHSEP
Rusti Liner	GOHSEP
Steve Garcia	GOHSEP
Kathleen Smith	GOHSEP
Brenda Cooper	GOHSEP Mitigation Planner
Nicolette English	GOHSEP Mitigation Planner
Keith Horn	Louisiana Department of Environmental Quality
Jubal Marceaux	Louisiana Department of Wildlife and Fisheries

Eddie Skena	Louisiana Department of Wildlife and Fisheries
Nikki Blazies	LMA
Nicole Hobson-Morris	Louisiana State Historical Preservation Office
Angie White	OCD-DRU/HMGP
Dodi Langlois	Office of Risk Management
Joe Delaune	Office of State Fire Marshal
Melissa Becker	Rapides Area Planning Commission
John Rahaim	SBPO/GOHSEP
Jennifer Gerbasi	Terrebonne Parish Consolidated Government
Charles Reulet	LDNR
Ronald Moore	DOC
Sara Krupa	LDNR
Gary Ramsey	CRT
Melissa Harris	ORM
Sandra Turley	Town of Iowa
Darren Guidry	GOHSEP /Region 2
Pam Roussel	GOHSEP/Region 3
Rebecca Broussard	Vermilion Parish OEP
Doug Zettlemoyer	GOHSEP / Region 5
Collin Simoneaux	GOHSEP / Region 9
Tommy Theibaud	Washington Parish OEP
Linda Pace	DNR
Jim Ferguson	Floodplain Management Association
Bonnie Anderson	Floodplain Management Association
Sandra Gunner	Office of Community Development Disaster Recovery Unit
William Haygood	Office of Community Development Disaster Recovery Unit
Lara Robertson	Office of Community Development Disaster Recovery Unit
Pamela Ehlers	U.S Department of Commerce (Economic Development Administration)
Steven Tassin	DOTD
Pat Skinner	LSU AgCenter

2014 GOHSEP State Hazard Mitigation Plan Update Members

Mark Riley	Deputy Director, Disaster Recovery
Jeffrey Giering	State Hazard Mitigation Officer
Steven Garcia	Problem Resolution Officer
Erin Tramontozzi	Problem Resolution Officer
Brenda Cooper	Senior Planner
Nicolette English	Planner
Sandy Dugas	Disaster Recovery Specialist Team Lead
Kim Barnett	Disaster Recovery Specialist Team Lead

2014 SHMPC Louisiana State University Advisory Team

Carol J. Friedland, Ph.D., P.E., C.F.M.	Project Manager, Assistant Professor	Department of Construction Management
T. Andrew Joyner, Ph.D.	Assistant Project Manager, Hazard Mapping/GIS	Department of Geography and Anthropology
Kristopher M. Mecholsky, Ph.D.	Technical Writer	Department of Geography and Anthropology
Robert V. Rohli, Ph.D.	Project Manager, Professor	Department of Geography and Anthropology
Joshua Gilliland, M.S.	Hazard Mapping/GIS	Department of Geography and Anthropology
Seyed Armin Madani, M.S.	Hazus Modeling	Engineering Science Program
Shandy Ogea, B.S.	SHPO Assessments	Department of Construction Management
Lynne M. Carter, Ph.D.	Climate Subject Matter Expert	Southern Climate Impacts Planning Program
Rebekah Jones	Climate Subject Matter Expert	Department of Geography and Anthropology

State Hazard Mitigation Planning Committee Agencies

Coastal Protection and Restoration Authority
Department of Agriculture and Forestry (DAF)
Department of Corrections
Department of Culture, Recreation & Tourism
Department of Environmental Quality (DEQ)
Department of Health and Human Services
Department of Historic Preservation
Department of Natural Resources (DNR)
Department of Public Safety (DPS)
Department of Transportation and Development (DOTD)
Department of Wildlife and Fisheries (DWF)
Division of Administration, (Facility, Planning & Control)
Division of Administration, Office of Community Development, Disaster Recovery Unit (DOA-OCD-DRU)
Division of Administration, Office of Risk Management (DOA-ORM)
Governor's Office of Coastal Activities (OCA)
Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)

TABLE OF CONTENTS

Acknowledgments ..... **i**

Table of Contents ..... **iv**

1. Introduction **1-1**
Location and Hazard Risk 1-1
Hazard Mitigation 1-2
General Strategy 1-4
The 2014 Plan Update 1-5

2. Hazard Identification and Statewide Risk Assessment **2-1**
Local Risk Assessments 2-1
State Profile 2-5
Geography 2-5
Climate 2-7
History 2-8
Changes in Development Through Land Cover Change Detection 2-13
Climatological Hazards 2-15
Drought 2-17
Extreme Heat 2-22
Flooding 2-27
Thunderstorms 2-65
Tornadoes 2-108
Tropical Cyclones 2-130
Wildfires 2-176
Winter Weather 2-197
Geological/Human-Influenced Hazards 2-217
Coastal Hazards 2-218
Dam Failure 2-244
Earthquake 2-257
Levee Failure 2-261
Sinkholes 2-273
Summary of Risk Assessments 2-292
Coastal Parishes 2-293
Inland Southern Parishes 2-294
Central Parishes 2-294
Northwest Parishes 2-295

3. State Historical Properties Risk Assessment **3-1**

4. Capability Assessment **4-1**
State Policies and Programs 4-1
Policies 4-1
Programs 4-5

Hazard Management Capabilities 4-17
Personnel Capability 4-17
Technical Capability 4-19
Financial Capability 4-20
Local Capability Assessment 4-36
Coordination of Local Planning 4-38
Local Plan Review Process 4-41
Prioritizing Parish and Municipal Assistance 4-41
Maximizing Benefits According to Benefit-Cost Review of Local Projects 4-43
Prioritization of Parishes to Receive HMGP Funding 4-44

5. Mitigation Strategy 5-1
Goals 5-1
Actions 5-2
Mitigation Monitoring and Review 5-11

6. Mitigation in Action 6-1
Louisiana Mitigation Projects 6-2
Community Education Outreach 6-2
City of Slidell 6-81
Parish Mitigation Projects 6-87
Town of Jean Lafitte 6-93

APPENDICES

A. Planning Process A-1
Purpose A-1
Planning A-1
Coordination Among Agencies A-5
Program Integration A-7
Documentation A-9
Meeting #1 ..... A-10
Meeting #2 ..... A-19
Meeting #3 ..... A-23
Meeting #4 ..... A-25
Meeting #5 ..... A-31
Meeting #6 ..... A-35

B. Plan Maintenance B-1
Purpose B-1
Monitoring, Evaluating and Updating the Plan B-1
Responsible Parties B-1
Methods for Monitoring and Evaluating the Plan B-2
Plan Evaluation Criteria B-3
Updating the Plan B-3
2011 Plan Method and Schedule Evaluation B-4

C. Mapping Methodology C-1
State Information C-1
Population C-1
State Property C-1
Land Cover C-2
Climatological Hazards C-3
Droughts C-3
Extreme Heat C-3
Flooding C-4
Thunderstorms C-5
Tornadoes C-6
Tropical Cyclones C-6
Wildfires C-9
Winter Weather C-9
Geological/Human-Influenced Hazards C-9
Coastal Hazards C-10
Dam Failure C-10
Earthquake C-11
Levee Failure C-11
Sinkholes C-11
Risk and Vulnerability C-11
D. Plan Adoption D-1
E. Endnotes E-1