DOTD’S ROLE IN HURRICANE FLOOD PROTECTION

Office of Public Works, Hurricane Flood Protection and Intermodal Transportation
Hurricanes
Katrina and Rita

Back to back hurricanes less than 1 month apart

Greatest natural disaster in the history of LA - - 1500 plus dead - - several hundred still unaccounted for

The protection system that for years everyone had taken for granted failed catastrophically
MUTIPLE FAILURES

From poor design, to construction not matching plans, to levees not high enough to withstand the storms they were designed for, man-made weaknesses in the hurricane protection system failed metro New Orleans on August 29.
Numerous influential groups claimed flooding caused by an institutional failure as well as a structural failure.

Public began demanding sweeping changes in the state’s approach to addressing flooding problems.

Elected representatives of the people – the Legislature – took action.
LEGISLATIVE MANDATES FOR CHANGE

• First Extraordinary Session, 2005
  • Act 8 – Created CPRA

• First Extraordinary Session, 2006
  • Act 1 – Created 2 Regional Flood Protection Authorities
  • Act 6 – Assigned additional duties & responsibilities to Public Works
Coastal Protection and Restoration Authority

- Places responsibility for the direction and development of the state’s comprehensive master coastal protection plan within the office of the governor

- Provides state leadership and direction in the development and implementation of policies, plans and programs for comprehensive coastal protection

- Combines and unifies hurricane protection and coastal restoration efforts

- Coordinates local, state and federal efforts to protect Louisiana’s coastline
C P R A, Continued

- Renames the Wetlands Authority the Coastal Protection and Restoration (CPR) Authority
- Renames the Wetlands fund the Coastal Protection and Restoration Fund allowing it to be used to fund coastal protection projects
- Authorizes the CPRA to enforce compliance with the coastal protection and restoration master plan
- Requires Legislative approval of coastal protection projects
CPRA Membership
Governor’s Office of Coastal Activities
Chair

- Transportation & Development
- Natural Resources
- Wildlife and Fisheries
- Environmental Quality
- Economic Development
- Division of Administration
- Agriculture
- Insurance
- Levee District, Region 1
- Levee District, Region 2
- Levee District, Region 3
- Levee District, Region 4
- Police Jury Assoc, West
- Police Jury Assoc, East
- Commission on Coastal Protection

Legal Counsel – Attorney General
CPRA Responsibility
Governor’s Directive

1. Approve contracts
2. Create inspection programs
3. Develop operations and maintenance standards
4. Audit levee board operations
5. Establish criteria for monthly critical issue reporting
6. Establish criteria for remediation reporting
7. Produce recommendation for statewide position on MRGO
8. Detail consequences of non-compliance
COASTAL MASTER PLAN INITIATIVES

- STATE CPRA MASTER PLAN
- USACOE TECHNICAL REPORT (LaCPR)
  - Interim report
  - Final report
- LRA MASTER PLAN
Act 1 of the 1st Extraordinary Session of 2006
Regional Flood Protection

Reorganization of governance and structure of Levee Districts into the following Geographic Basins:

Southeast Louisiana Flood Protection Authority- East: (11 members)
- Lake Borgne Basin Levee District
- Orleans Levee District (east bank)
- East Jefferson Levee District
- St. Tammany Levee District (new – coastal zone only)
- Tangipahoa Levee District (new – coastal zone only)
  *portion of St. Charles Parish lying east of the Mississippi River.*
  *portion of St. John the Baptist lying east of the Mississippi River.*

Southeast Louisiana Flood Protection Authority- West: (7 members)
- West Jefferson Levee District
- Orleans Levee District (west bank)
REORGANIZED LEVEE DISTRICTS

Legend
- SELA Flood Protection Authority - EAST
- SELA Flood Protection Authority - WEST
- North Lafourche Conservation, Levee and Drainage District

4 Atchafalaya Levee District
27 East Jefferson Levee District
30 Grand Isle Independent Levee District
6 Lafourche Basin Levee District
8 Lake Borgne Basin Levee District
24 North Lafourche Conservation, Levee and Drainage District
7 Orleans Levee District
5 Pontchartrain Levee District
25 South Lafourche Levee District
10 Terrebonne Levee and Conservation District
28 West Jefferson Levee District

Waterbodies

Prepared by: DOTD Public Works, Hurricane Flood Protection and Intermodal Transportation
Team composed of DOTD, DOA, Legislative Auditor’s Office, Attorney General’s Office, Levee Board Representatives

Goal is to ensure seamless transition without compromising level of service

Charged with identifying and, if necessary, resolving:
- Institutional road blocks to seamless transition
- Temporary delegations of authority to staff during transition
- Final actions required by outgoing Boards
- Items and issues requiring prompt actions by new Boards

Facilitate organizational meeting of each Authority
- Develop 1st meeting agenda
- Arrange for administering Oath of Office
- Provide orientation and informational briefings
Act 6 of the 1st Extraordinary Session of 2006
HURRICANE FLOOD PROTECTION IN DOTD

• Reorganizes DOTD’s Office of Public Works into the Office of Public Works, Hurricane Flood Protection and Intermodal Transportation

• Authorizes the Office to administer all matters relating to engineering, design, construction, extension, improvement, repair and regulation of hurricane flood protection systems

• Creates a Hurricane Flood Protection Advisory Commission

• Creates the Hurricane Flood Protection, Construction, and Development Priority Program

• Authorizes the Office to establish maintenance, repair and inspection program
Restructuring of Public Works

- Increased authorized staffing level from 34 to 53 to provide greater emphasis on hurricane protection
- Created a field operations unit at the Headquarters level
  - Specifically for existing hurricane protection infrastructure
  - Oversee and guide inspection, operation and maintenance
  - Ensure uniform compliance with established standards
  - Ensure uniform reporting of system integrity and state of readiness
  - Ensure timely identification and correction of defects
- Created a program/project management unit
  - Oversee and guide all flood control initiatives – both structural and non-structural – at the federal, state and local levels
  - Proactively participate in all levels of federal development from inception to completion
HURRICANE FLOOD PROTECTION ADVISORY COMMISSION

MEMBERSHIP: 5 members appointed by Governor from nominations submitted by a 9 member Nominating Committee composed of civic and technical organizations

PURPOSE: Provide advice to DOTD concerning:
- Establishing policies for administering Hurricane Protection Priority Program
- Developing guidelines for submission, review and evaluation of project applications
- Reviewing project applications

DOTD’s ROLE: Secretary and custodian of records for Nominating Committee

SUNSET: June 30, 2008, unless recreated
HURRICANE FLOOD PROTECTION
CONSTRUCTION AND DEVELOPMENT
PRIORITY PROGRAM

Highlights

- Competitive program
- Systematic process for evaluating and ranking projects
- Priorities based on uniform criteria
- Ensures compatibility with other water management/restoration projects in same hydrologic basin
- Requires public hearings and public input prior to final ranking
- Prioritized list of recommended projects submitted to CPRA for inclusion in the comprehensive Coastal Protection and Restoration Annual Plan
- Projects funded through Coastal Protection and Restoration Fund
- Projects must be approved by Legislature
HURRICANE FLOOD PROTECTION
CONSTRUCTION AND DEVELOPMENT
PRIORITY PROGRAM

Application Requirements

Applications are prepared by sponsoring authorities and must be submitted by November 1 of each year for consideration of funding in the following fiscal year.

Information required in application:
- Description of magnitude of problem and demonstration of immediate need
- Preliminary project design and cost estimate
- Description of geographical area and flooding history
- Regulatory permit requirements
- Description of benefits to be derived
- Benefit-to-cost information
- Analysis of nonstructural alternatives
- Impact on agricultural lands
- Statement of sponsorship including entity responsible for long-term operation, maintenance and monitoring
HURRICANE FLOOD PROTECTION CONSTRUCTION AND DEVELOPMENT PRIORITY PROGRAM

Evaluation Criteria

Projects are evaluated and prioritized based on:
- Reduction of threat to human lives
- Benefit-to-cost data
- Technical feasibility
- Ability to secure required permits
- Agricultural uses affected
- Impact on adjacent areas
- Population and effect on existing developments
- Flooding history and location relative to flood-prone areas
- Compatibility with other projects within hydrologic basin
- Effectiveness in protecting existing development without encouraging expansion into flood hazard areas
- Extent of local support
O & M Program

**Purpose:** Assure all flood protection features will perform as intended by requiring:
- Stringent adherence to Corps O&M Manuals for each project feature
- Periodic operation of project features
- Timely detection and repair/replacement of damaged/malfunctioning equipment
- Continuous monitoring, documenting and reporting of condition of every component of overall system

**Features:**
- Standardized check lists
- Defined maintenance intervals
- Documentation procedures
Levee Inspection Program

**Purpose:** to ensure continued hurricane protection system serviceability by verifying and documenting:

- All project features function as intended
- Periodic preventative maintenance is accomplished at prescribed intervals
- Problems and/or deficiencies are located and identified before they can escalate
- Remedial measures are implemented timely

**Features:**
- Standardized Inspection Forms
- Uniform rating procedures
- Manageable and easily identifiable inspection reaches
OTHER INITIATIVES

- Levee and Flood Control Works Inspection Course (In Conjunction with LTRC)
  - Provides training and certification in the identification, inspection, and assessment of flood control features and their associated components.

- Levee Training School (In Conjunction with LSU and DNR)
  - Improve state of knowledge among decision makers regarding condition and capabilities of levees and other flood protection systems in Louisiana
HURRICANE FLOOD PROTECTION

QUESTIONS ?