


**CITY OF ALABASTER**  
FLOODPLAIN MANAGEMENT PLAN



FMPC Meeting #4  
March 13, 2018



**SCHDEL**  
Sustainable Engineering & Planning

**Lehe Planning**  
LOCAL AND ENVIRONMENTAL PLANNING

---

---

---

---

---

---

---

---

CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN

**ORGANIZATION OF 2017 FMP**

2017 Floodplain Management Plan Structure

- Chapter 1 – Introduction
- Chapter 2 – Community Profile
- Chapter 3 – The Planning Process
- Chapter 4 – Risk Assessment
- **Chapter 5 – Mitigation Strategy**
- Chapter 6 – Plan Maintenance Procedures

**SCHDEL**  
Sustainable Engineering & Planning

**Lehe Planning**  
LOCAL AND ENVIRONMENTAL PLANNING

---

---

---

---

---

---

---

---

CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN

**ORGANIZATION OF 2017 FMP APPENDICES**

2017 Floodplain Management Plan Structure

- **Appendices and Supporting Documentation:**
- A - Resolution Establishing Planning Process
- B - Hazard Profile Data
- C - Risk Assessment Data
- **D - Community Mitigation Capabilities**
- E - Committee Meeting Documentation
- F - Community Involvement Documentation
- G - Adopting Resolution

**SCHDEL**  
Sustainable Engineering & Planning

**Lehe Planning**  
LOCAL AND ENVIRONMENTAL PLANNING

---

---

---

---

---

---



---

---

CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN

## 10-STEP PLANNING PROCESS

FMP Chapters	CRS Planning Step
Chapter 1 – Introduction	
Chapter 2 – Community Profile	
Chapter 3 – The Planning Process	Step 1: Organize to prepare the plan Step 2: Involve the public Step 3: Coordinate
Chapter 4 – Risk Assessment	Step 4: Assess the hazard Step 5: Assess the problem
Chapter 5 – Mitigation Strategy	Step 6: Set goals Step 7: Review possible activities Step 8: Draft an action plan
Chapter 6 – Plan Maintenance	Step 9: Adopt the plan Step 10: Implement, evaluate, revise

---

---

---

---

---

---

---

---

---

---



---

---

CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN

## CHAPTER 5, SECTION 5.1

\*\*\*  
Floodplain Management Goals

---

---

---

---

---

---

---

---

---

---

---



---

CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN

## CHAPTER 5, SECTION 5.1

5.1.1 Purpose & Basis for Goals

- Vision – City aims to achieve active resistance to the threats of flooding and related natural hazards to human life and property through publicly-supported mitigation actions.
- Consistent with 2016 Shelby County Multi-Jurisdictional Multi-Hazard Mitigation Plan

---

---

---

---

---

---

---

---

---

---

---

---

## CHAPTER 5, SECTION 5.1

### 5.1.2 Goals for Floodplain Management

- **Preventive** – Manage the development of land & buildings to minimize the risk of loss due to flooding and related natural hazards.
- **Property Protection** – Protect structures and their occupants/contents from the damaging effects of flooding and related natural hazards.
- **Public Education and Awareness** – Educate and inform the public about the risks of flooding and related natural hazards and the techniques available to reduce threats to life and property.

---

---

---

---

---

---

---

---

## CHAPTER 5, SECTION 5.1

### 5.1.2 Goals for Floodplain Management

- **Natural Resources Protection** – Preserve and restore the beneficial functions of floodplains and the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.
- **Structural Projects** – Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of flooding and related natural hazards, where found to be cost effective and environmentally suitable.
- **Emergency Services** – Improve the efficiency, timing, and effectiveness of response and recovery efforts for flooding and related disasters.

---

---

---

---

---

---

---

---

## CHAPTER 5, SECTION 5.2

• • •  
Review of Floodplain  
Management Activities

---

---

---

---

---

---

---

---

CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN

**CHAPTER 5, SECTION 5.2**

**5.2.1 Review of Current CRS Floodplain Management Activities**

**Preventive**

- Activity 310 – Elevation Certificates (38 points)
- Activity 320 – Map Information Service (30 points)
- Activity 430 – Higher Regulatory Standards (177 points)
- Activity 440 – Flood Data Maintenance (100 points)
- Activity 450 – Stormwater Management (84 points)

SCHÖDEL  
CONSULTING ENGINEERS

Lehe Planning  
LOCAL GOVERNMENTS • PUBLIC

---

---

---

---

---

---

---

---

CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN

**CHAPTER 5, SECTION 5.2**

**5.2.1 Review of Current CRS Floodplain Management Activities**

**Property Protection**

- No credit.

SCHÖDEL  
CONSULTING ENGINEERS

Lehe Planning  
LOCAL GOVERNMENTS • PUBLIC

---

---

---

---

---

---

---

---

CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN

**CHAPTER 5, SECTION 5.2**

**5.2.1 Review of Current CRS Floodplain Management Activities**

**Public Education and Awareness**

- Activity 330 – Outreach Projects (? points)
- Activity 340 – Hazard Disclosure (? points)
- Activity 350 – Flood Protection Information (? points)

SCHÖDEL  
CONSULTING ENGINEERS

Lehe Planning  
LOCAL GOVERNMENTS • PUBLIC

---

---

---

---

---

---

---

---

CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN



---

**CHAPTER 5, SECTION 5.2**

5.2.1 Review of Current CRS Floodplain Management Activities

**Natural Resources Protection**

- Activity 420 – Open Space Preservation (? points)

---

---

---

---

---

---

---

---

CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN



---

**CHAPTER 5, SECTION 5.2**

5.2.1 Review of Current CRS Floodplain Management Activities

**Structural Projects**

- No credit.

---

---

---

---

---

---

---

---

CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN



---

**CHAPTER 5, SECTION 5.2**

5.2.1 Review of Current CRS Floodplain Management Activities

**Emergency Services**

- No credit.

---

---

---

---

---

---

---

---

## CHAPTER 5, SECTION 5.2

### 5.2.2 Review Criteria: STAPLEE

#### Social Considerations

- Environmental justice
- Neighborhood impact
- Community support
- Impact on social & cultural resources

---

---

---

---

---

---

---

---

## CHAPTER 5, SECTION 5.2

### 5.2.2 Review Criteria: STAPLEE

#### Technical Considerations

- Is the proposal technically feasible?
- Remaining technical issues?
- Does the measure effectively solve the problem?
- Consideration of secondary impacts?

---

---

---

---

---

---

---

---

## CHAPTER 5, SECTION 5.2

### 5.2.2 Review Criteria: STAPLEE

#### Administrative Considerations

- Staffing
- Maintenance
- Timing

---

---

---

---

---

---

---

---



CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN

**CHAPTER 5, SECTION 5.2**

**5.2.2 Review Criteria: STAPLEE**

**Political Considerations**

- Do the Mayor & City Council support the proposed measure?
- Does the public support the measure?
- Do stakeholders support the measure?
- Any advocates?

---

---

---

---

---

---

---

---



CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN

**CHAPTER 5, SECTION 5.2**

**5.2.2 Review Criteria: STAPLEE**

**Legal Considerations**

- Does the City have legal authority to implement the measure?
- Legal consequences of taking action vs. taking no action?
- Will new legislation be required?

---

---

---

---

---

---

---

---



CITY OF ALABASTER  
FLOODPLAIN MANAGEMENT PLAN

**CHAPTER 5, SECTION 5.2**

**5.2.2 Review Criteria: STAPLEE**

**Environmental Considerations**

- NEPA Compliance
- Compliance with State & local environmental regulations
- Environmental conservation goals

---

---

---

---

---

---

---

---

## CHAPTER 5, SECTION 5.2

### 5.2.2 Review Criteria: STAPLEE

#### Economic Considerations

- Availability of funds
- Benefits to be derived from proposed measure
- Costs
- Economic feasibility
- Impact on local economy
- Economic development goals

---

---

---

---

---

---

---

---

## CHAPTER 5, SECTION 5.2

### 5.2.3 Individual Mitigation Action Program of the County Plan

Hazard Goal & Actions	Action/Project Description	Responsibility	Funding Source	Estimated Cost/Benefit	Start/End Date	Priority
FL1a	Distribute flood awareness and preparedness literature at events. City website.	Local Govt.	Local funds	1,104 110,350	2015 2020	81
HW3a	Adopt/enforce comprehensive Building Code legislation. Use the IBC codes.	Planning	Local funds	1,104 110,350	2015 2020	81
AH3y	Inspect building code compliance. Inspections are conducted on construction projects.	Building Services	Local funds	11,035 110,350	2015 2020	79
FL3a	Participate in the National Flood Insurance Program (NFIP).	City Govt.	Local funds	1,104 110,350	2015 2020	78
FL3h	Educate developers on Watershed, Floodplain, and wetland development considerations.	Building	Local funds	1,104 110,350	2015 2020	77

---

---

---

---

---

---

---

---

## CHAPTER 5, SECTION 5.2

### 5.2.4 Discussion of Alternative Mitigation Activities

---

---

---

---

---

---

---

---



## Alternative Mitigation Measures Exercise

- Review alternative mitigation measures
- Use STAPLEE approach
- Eliminate measures that should NOT be included in the five-year plan
- Provide comments and suggestions.



---

---

---

---

---

---

---

---

## Preventive Activities

Keep flood problems from getting worse through planning, permitting, and regulatory tools

...



---

---

---

---

---

---

---

---

## Property Protection

Activities are measures taken to permanently protect property from flood damage, usually undertaken on a building-by-building basis

...



---

---

---

---

---

---

---

---

## Public Information

Activities advise people about the flood hazard, encourage the purchase of flood insurance, and provide information about ways to reduce flood damage. These activities also generate data needed by insurance agents for accurate flood insurance rating. They generally serve all members of the community.

...



---

---

---

---

---

---

---

---

## Natural Resource Protection

Activities preserve or restore natural areas or the natural functions of floodplain and watershed areas. They are implemented by a variety of agencies, primarily parks, recreation, or conservation agencies or organizations.

...



---

---

---

---

---

---

---

---

## Structural Projects

Provide flood damage protection through activities such as maintaining drainage systems, retrofitting existing building to prevent flood damage, and structural flood control and drainage projects.

...



---

---

---

---

---

---

---

---

## Emergency Services

Measures protect life and property during a flood, through flood warning and response programs during an emergency to minimize its impact. These measures are usually the responsibility of local emergency management staff and the owners or operators of critical facilities.

...



---

---

---

---

---

---

---

---

## CHAPTER 5, SECTION 5.3

### Floodplain Management Action Plan



---

---

---

---

---

---

---

---

## Floodplain Management Action Plan

Mitigation Actions by Goal Areas	Implementation Responsibility	Timeframe for Completion	Funding Source	Priority
<b>1 Goal for Prevention.</b> Manage the development of land and buildings to minimize risks of loss due to flooding and related natural hazards.				
1.2 Amend the City's flood hazard prevention ordinance to include higher regulatory standards for development limitations, freeboard, foundation protection, cumulative substantial improvements, lower substantial improvements threshold, and protection of critical facilities. (CRS activity 430 Higher Regulatory Standards)	Office of the City Engineer	Short Range	Existing City funds	High



---

---

---

---

---

---

---

---

## APPENDICES

### App. D – Community Mitigation Capabilities

- Planning & Regulatory Tools
- GIS Resources
- Staffing & Administrative Resources
- Fiscal Resources
- Public Education & Outreach Programs
- Insurance Service Office (ISO) Ratings

---

---

---

---

---

---

---

---

## FMPC MEETING DATES AND TOPICS

### Upcoming Meetings

- Meeting #5: \_\_\_\_\_ – Ch 5,  
Part B; and Ch 4

---

---

---

---

---

---

---

---

## COMMUNITY MEETINGS

### Schedule of Meetings

- 2<sup>nd</sup> community meeting (optional) –  
15 points

---

---

---

---

---

---

---

---

## CONSULTING TEAM

**Walter Schoel Engineering  
Company, Inc.**

**William Thomas, PE, CFM**  
Senior Project Manager  
1001 22<sup>nd</sup> Street South  
Birmingham, AL 35205  
(205) 313-1150  
[wthomas@schoel.com](mailto:wthomas@schoel.com)



**Lehe Planning, LLC**  
Urban and Environmental  
Planning

**Jim Lehe, AICP**  
Manager  
300 Century Park South, Ste. 216  
Birmingham, AL 35226  
(205) 978-3633  
[jelehe@leheplanning.com](mailto:jelehe@leheplanning.com)



---

---

---

---

---

---

---

---