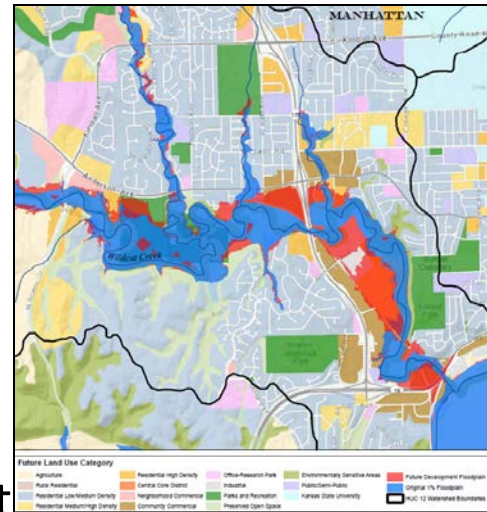


Project Description

- Pilot Project for USACE Institute of Water Resources
- Floodplain Management Plan
- This is a strategic plan that describes flood hazards, documents decisions made on managing flood risks, and formalizes an action plan with specifics and schedules
- Public involvement through a local work group meeting monthly for over 18 months
- The full spectrum of flood risk management tools is used based on strategies the Federal Interagency Floodplain Management Task Force



Flood Risk Reduction Outcomes

- Identified current flood risks clearly by reach
- Stated goals tied to problems (depth, velocity, rate of rise, etc)
- Established future action plan with who does what and when
- Organized the next step in pursuing action items towards comprehensive flood hazard mitigation work
- Developed a new freeboard ordinance (example action item) BFE+2 feet requirement for managing future development
- Created a systems approach through a watershed
- Engaged the public in decision process
- Tied action items to county (local) hazard mitigation plan

Challenges Overcome / Continuing Challenges

- Listening to public and patiently resolving confusion of causes of flooding
- Gaining public understanding of actions that would be most cost effective, as a thorough review of all possible structural and nonstructural measures
- Coordinating a work group made up of six different sub-committees at start
- Evaluating future conditions runoff

Partners and Project Cost

Agency	Investment
Community	\$340K In-kind
Kansas Hazard Mitigation Team	\$4K In-kind
USACE	\$28K
FEMA	\$4k In-kind
Communities' Comprehensive Plan	(unknown value)
TOTAL	\$376,000

Successes/Best Practices

- Leads public work group using local champion
- Harnesses the window of opportunity after flood
- Evaluates full menu of measures (structural and nonstructural) and narrowing to the right tools
- Captures a decision history for managing floods
- Validates ordinances with public (BFE+2 feet)
- Gives FEMA Community Rating System credit
- Adds two new communities to KS FEMA CRS

USACE Project Point of Contact

Brian Rast
 Kansas City District

Wildcat Creek-Floodplain Management Plan

ACTION ITEMS FOR FLOOD RISK MANAGEMENT

Strategies and Tools

1. Strategy: Modifying Human Susceptibility To Flood Hazards

- Tool: Land Use Regulations
- Tool: Public Redevelopment Policies
- Tool: Flood Warning Systems
- Tool: Flood Proofing Of Structures In The Floodplain
- Tool: Process For Relocation Of Structures

2. Strategy: Modifying The Impact Of Flooding

- Tool: Information And Education
- Tool: Flood Insurance
- Tool: Tax Adjustments
- Tool: Emergency Relief
- Tool: Post-Flood Recovery Processes

3. Strategy: Preserving And Restoring Floodplains' Environmental Quality

- Tool: Wetlands Protection And Restoration
- Tool: Erosion And Sediment Control
- Tool: Water Quality Enhancement
- Tool: Enhancement Of Recreation And Educational Opportunities
- Tool: Preservation Of Cultural Resources

4. Strategy: Modifying Floodwaters

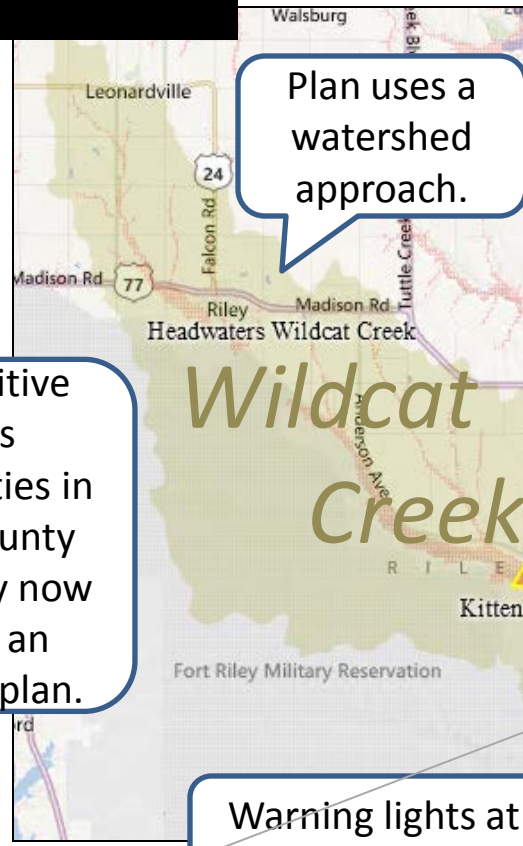
- Tool: Stormwater Detention Basins
- Tool: Levees, Floodwalls, And Landforms
- Tool: Channel Alterations, Diversions, And Bypasses
- Tool: Pump Stations

Use the tools like a check list. A complete and effective floodplain management plan applies these terms and helps the public better understand what was evaluated as acceptable and what was screened:

- "Not Recommended"
- "Further Evaluation Needed"
- "Effective" (or "Highly Effective")
- "Recommended"

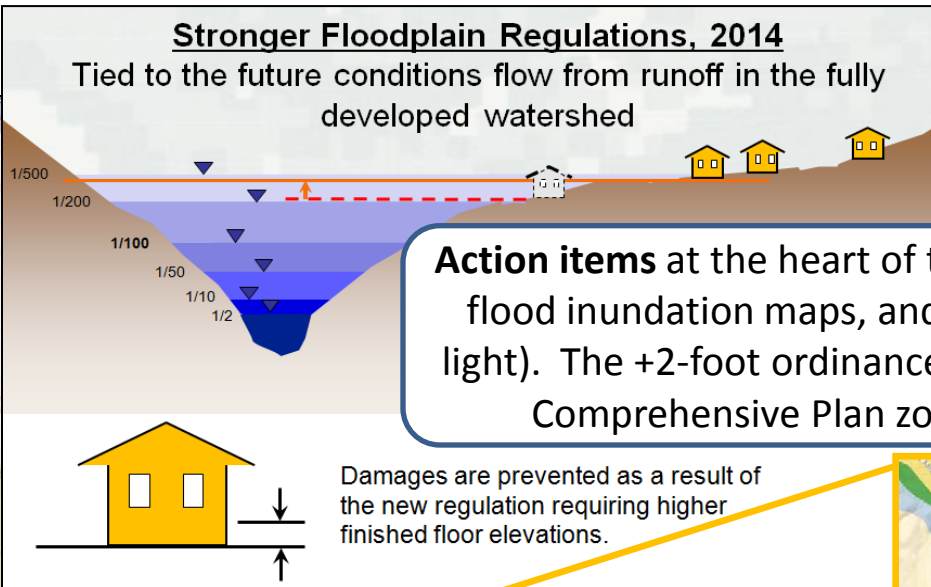
The term "Further Evaluation Needed" would be a future **Action Item** along with the "Recommended" tools and evaluated in one of the required, periodic updates (annual revisions for FEMA CRS).

FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODWATERS



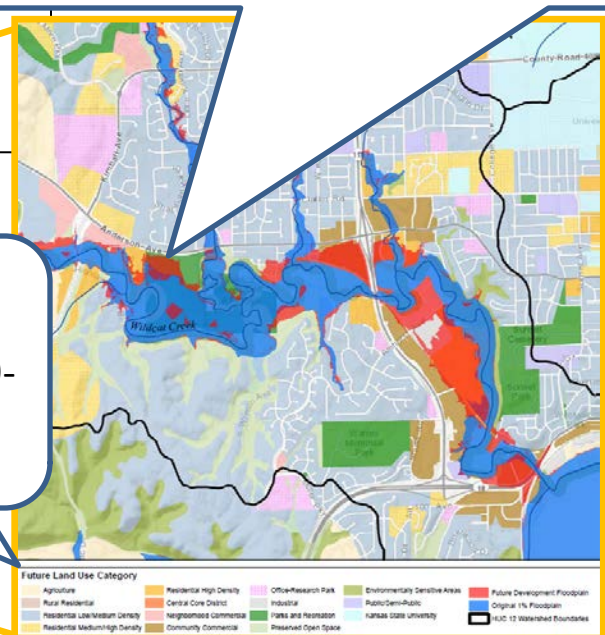
Repetitive loss properties in the county and city now have an action plan.

Warning lights at bridge tie to gage.



Action items at the heart of the FMP include: freeboard ordinance, flood inundation maps, and a flood warning system (with bridge light). The +2-foot ordinance has quantifiable benefits using local's Comprehensive Plan zoning and future flood areas (red).

Development pressure in the bottom 2% of a 99-square mile basin is now managed.



What is a floodplain management plan?

A floodplain management plan (FMP) is like a "playbook" used by teams in sports.

This playbook

- Identifies flood risks and clearly describes the problem
- Based on the flood risk assessment, states the **goals** to address the flood problems
- Provides the full "menu of measures" or the tools for reducing risks to property owners
- Narrows down the menu of measures to the right tools
- Establishes an **action plan**, clarifying the specifics and whom will pursue each action
- Includes public participation in decisions
- Complements the existing local hazard mitigation plan
- Gets points in the FEMA Community Rating System and allows a reduction to a community's flood insurance premiums

The result is a decision history for the community, and a resource that enhances local hazard mitigation plans.

Find Out More

- The plan: <http://cityofmhk.com/index.aspx?NID=2150>
- Training: <http://www.nfrmp.us/frmpw/2013webinarweek/session1.cfm>
- Policy: <http://planning.usace.army.mil/toolbox/library.cfm?Option=Listing&Type=Corps%20National%20Libraries&Search=Library&Sort=Default>
- This project as a Best Practices example: <http://www.nfrmp.us/state/bestpracticeskansas.cfm>

