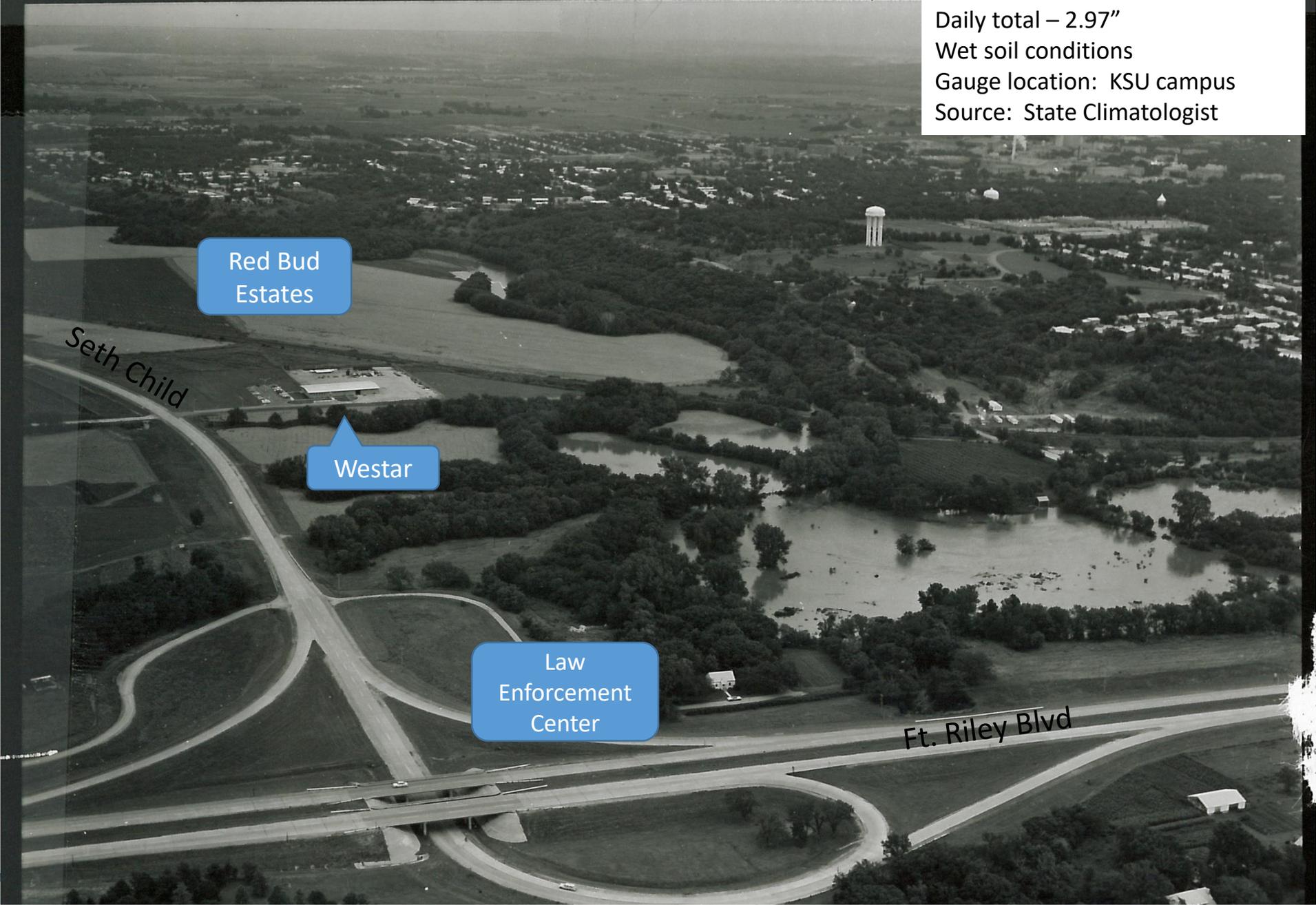




Resilient

Wildcat Creek



Daily total – 2.97”
Wet soil conditions
Gauge location: KSU campus
Source: State Climatologist

Red Bud Estates

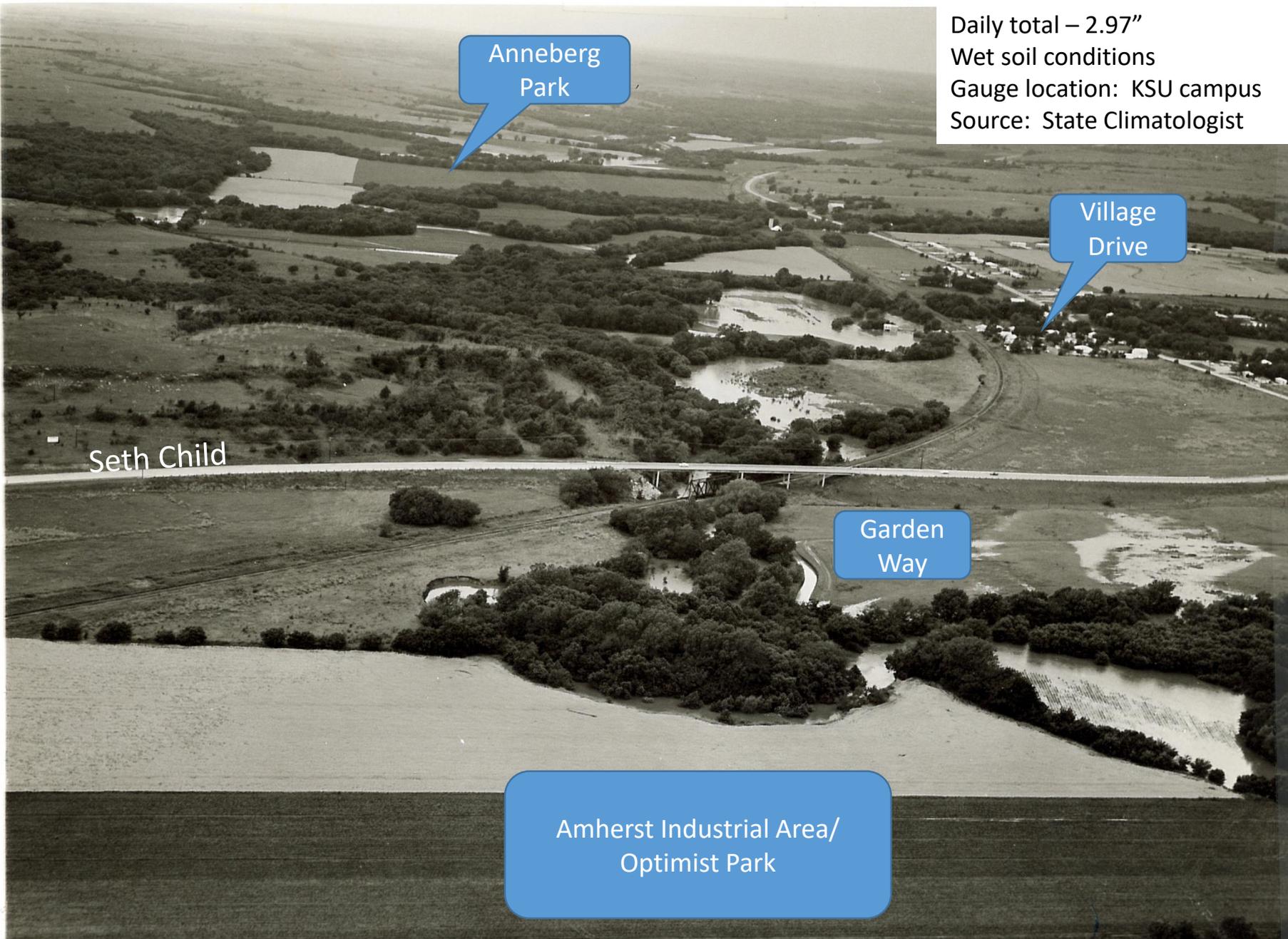
Seth Child

Westar

Law Enforcement Center

Ft. Riley Blvd

June 28, 1965 Wildcat Creek Flood Event



June 28, 1965 Wildcat Creek Flood Event



5.24.2007

2010



Wildcat Creek Bridge
Water impact entire bridge length beginning to wash over
WL ~ 1065.6
Bridge = 1066.40 Low pt.

2011



Wildcat Creek Floodplain Management Plan

For Communities Along Wildcat Creek



Wildcat Creek Watershed Working Group

November 15, 2013
Originally authored by:
Chad Bunger, AICP, CFM
Brian Rast, PE, CFM
Steve Higgins, CFM

Wildcat Creek Floodplain Management Plan – Action Plan

Wildcat Creek Floodplain Management Plan adopted in 2013 as part of the Manhattan Urban Area Comprehensive Plan, and in 2015 with the Comprehensive Plan update.



Action Item	City	County	Timeline
Adopt the Wildcat Creek Floodplain Management Plan (FMP)	✓ X	✓ X	3 months
Create a City/County Development Coordination Process	✓ X	✓ X	3 months
Amend the Multi-Jurisdictional Hazard Mitigation Plan to include the FMP		✓ X	6 - 12 months
Research and, if acceptable, form a Wildcat Creek Watershed District		X	2+ years
Develop a comprehensive flood hazard mitigation plan	✓ X	X	2+ years
Adopt Future Conditions model and Flood Insurance Rate Maps	✓ X	✓ X	1 year
Research and adopt higher standard floodplain regulations	✓ X	X	1 year
Develop a Wildcat Creek recreation plan	X	X	12 - 18 months
Develop a comprehensive public outreach plan	✓ X	X	12 months
Research and update, where needed development policies and regulations	✓ X	✓ X	12 months
Adopt stormwater detention/retention policies	✓	X	12 - 18 months
Join the Community Rating System	✓	✓ X	12 - 18 months
Maintain and expand the existing flood warning systems	✓ X	✓ X	On-going

Manhattan Floodplain Regulations

- Future Conditions Flood Mapping
 - Lowered the threshold for substantial damage & improvements
 - Increased the “freeboard” for new construction
 - Compensatory Storage Requirements
-

Community Response after the 2011 Flood

Wildcat Creek Watershed Working Group was formed



Stream Gauges

[NOAA Advance Hydrologic Prediction Service](#)



2018



Resilient

Wildcat Creek



Resiliency in Disaster Management

Striving to improve each phase of disaster management to reduce the impacts of the event`

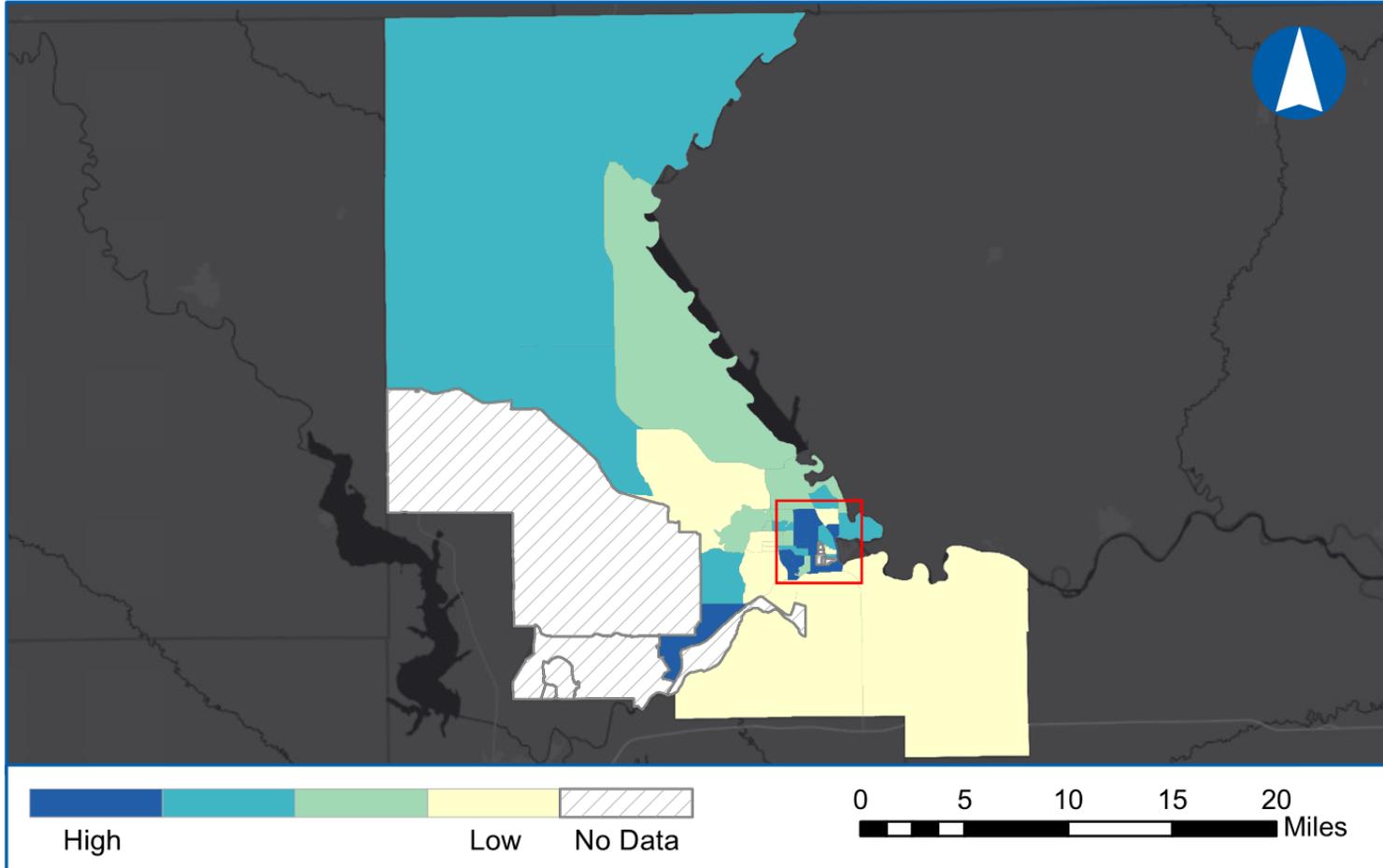
Resiliency planning steps

- 1. *Vision & Goal Creation***
 - 2. *Social Vulnerability Assessment = “who is being flooded”***
 - 3. *Physical Risk Assessments = “what is being flooded”***
 - 4. *Level of Risk Acceptances & Solutions Brainstorming***
 - 5. *Test Solutions***
 - 6. *Develop Action Plan & Budget***
 - 7. *Adoption***
 - 8. *Monitoring and Evaluation***
-

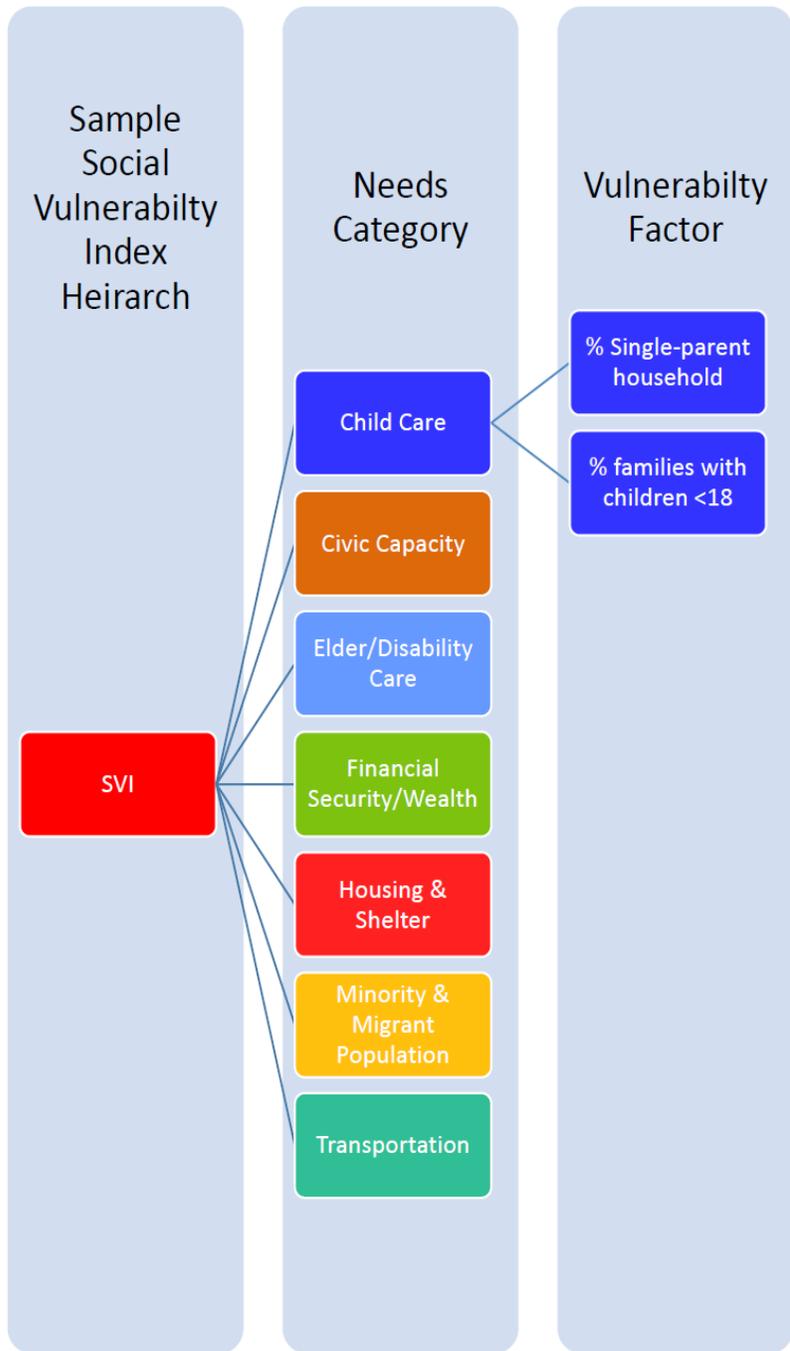
Understand who the flooding impacts

- Who lives in the floodplain
 - Who has flood insurance
 - What are the emergency response needs
 - What are the recovery needs
 - What is the best way to protect and mitigate the risk
-

Overall Social Vulnerability



Social Vulnerability Index



Identify the problems & EVALUATE SOLUTIONS





Resilient

Wildcat Creek

Planning working group make-up

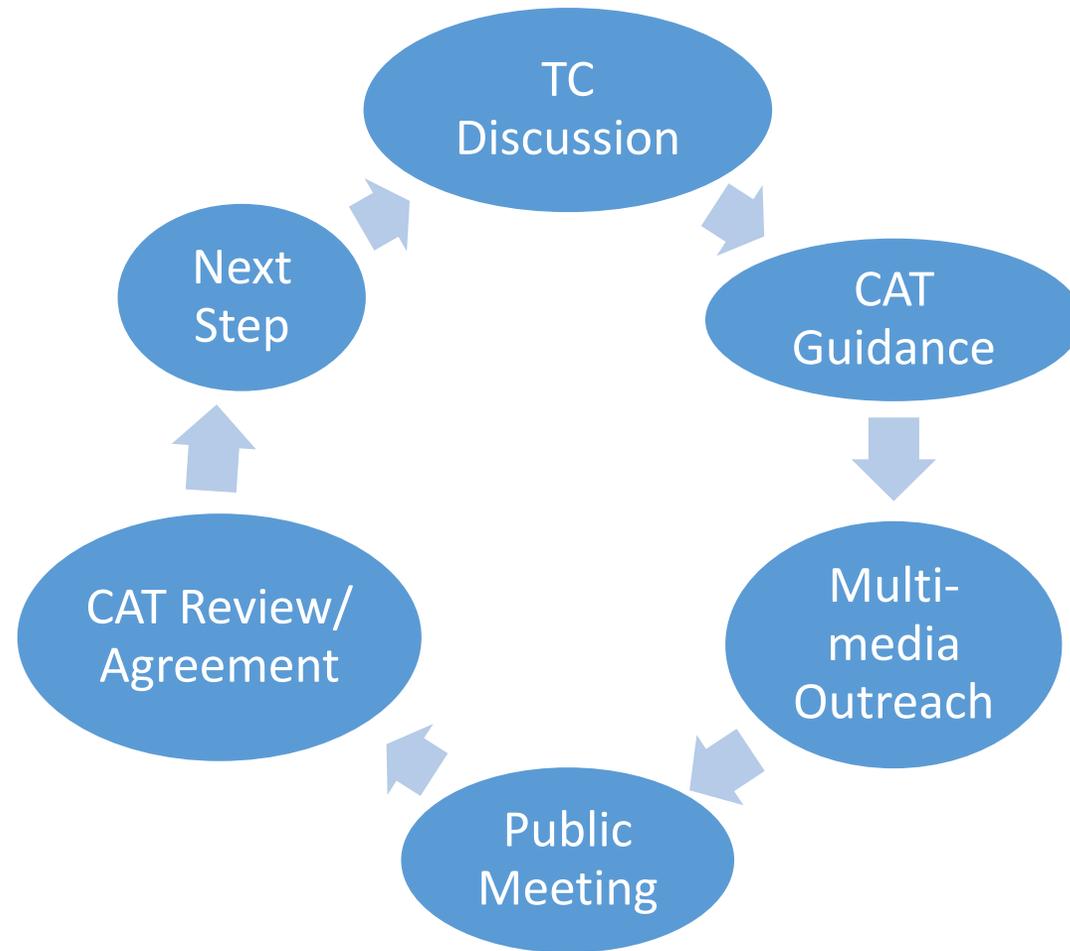
Citizen Advisory Team

- Homeowners – 2
- Business owner – 1
- Rental property owners – 2 – 3
- Rental tenants – 2- 3
- Farmer - 1
- City Commissioners
- County Commissioners

Technical Committee

- City & County staff
 - Emergency response personnel
 - MPO/ATA
 - State & Federal partners
 - Kansas State University partners
 - Area design professionals
 - Social service partners
-

Planning and Outreach process



MUST CONTINUE TO MITIGATE & PREPARE

- FLOODPLAIN REGULATIONS
 - PURCHASING SEVERE FLOODPRONE PROPERTIES
 - IMPROVE PREPARATION
 - IMPROVE WARNING AND RESPONSE TO EMERGENCIES
-

Summary

Comprehensive planning process to better understand the flooding problem and developing sound solutions to help residents, business owner and property owners “bounce forward” after a flood.

www.cityofMHK.com/KnowYourFloodRisk

