

Indianapolis Flood Response Plan

*This story was made with [Esri's Story Map Journal](#).
Read the interactive version on the web at <https://arcg.is/jibST>.*

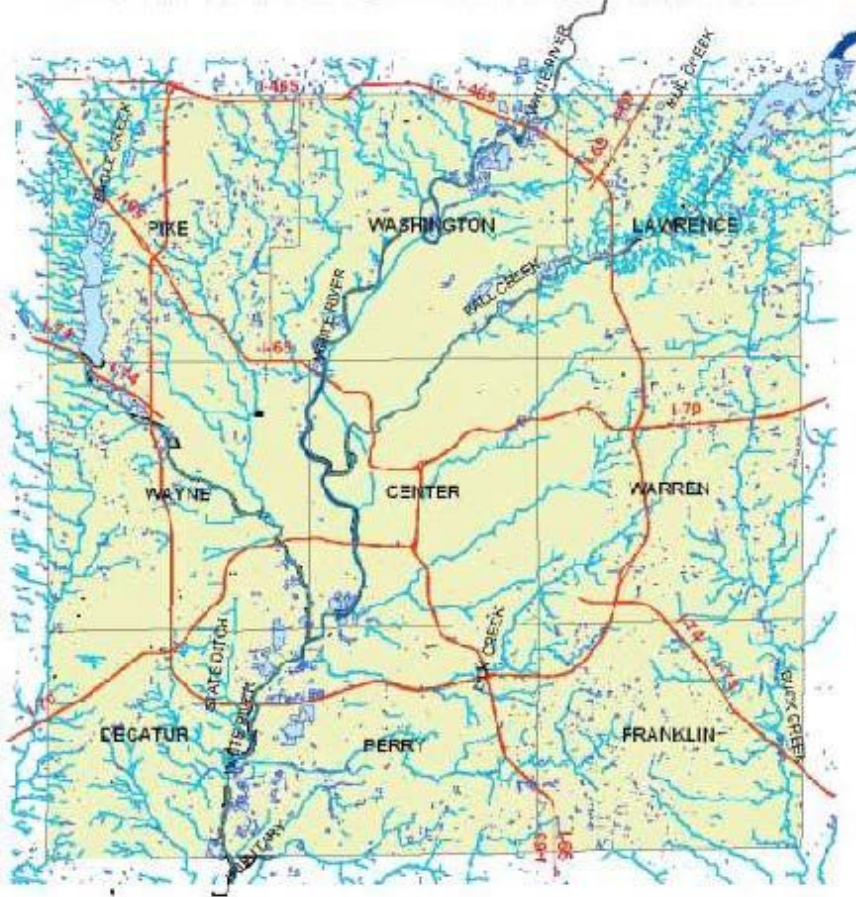




Indianapolis Flooding

2006 - In the Beginning....

CITY OF INDIANAPOLIS DEPARTMENT OF PUBLIC WORKS FLOOD WARNING / PREPAREDNESS PLAN



PROCEDURES

The 2006 flood (preparedness) plan was limited to the White River and did not address flooding on small to medium sized streams

- Paper Document (view)
- Main focus is on White River and key neighborhoods
- Activated by Nora Stream Gage (11 feet)
- Levee Overtopping - around the clock levee watch
- Predictions of flooding from Flood Command Supervisor/Team
- Challenges
 - Tracking for FEMA reimbursements
 - Asset Management (levees, outfalls)
 - Response to flooding beyond White River

2009 - The First Update

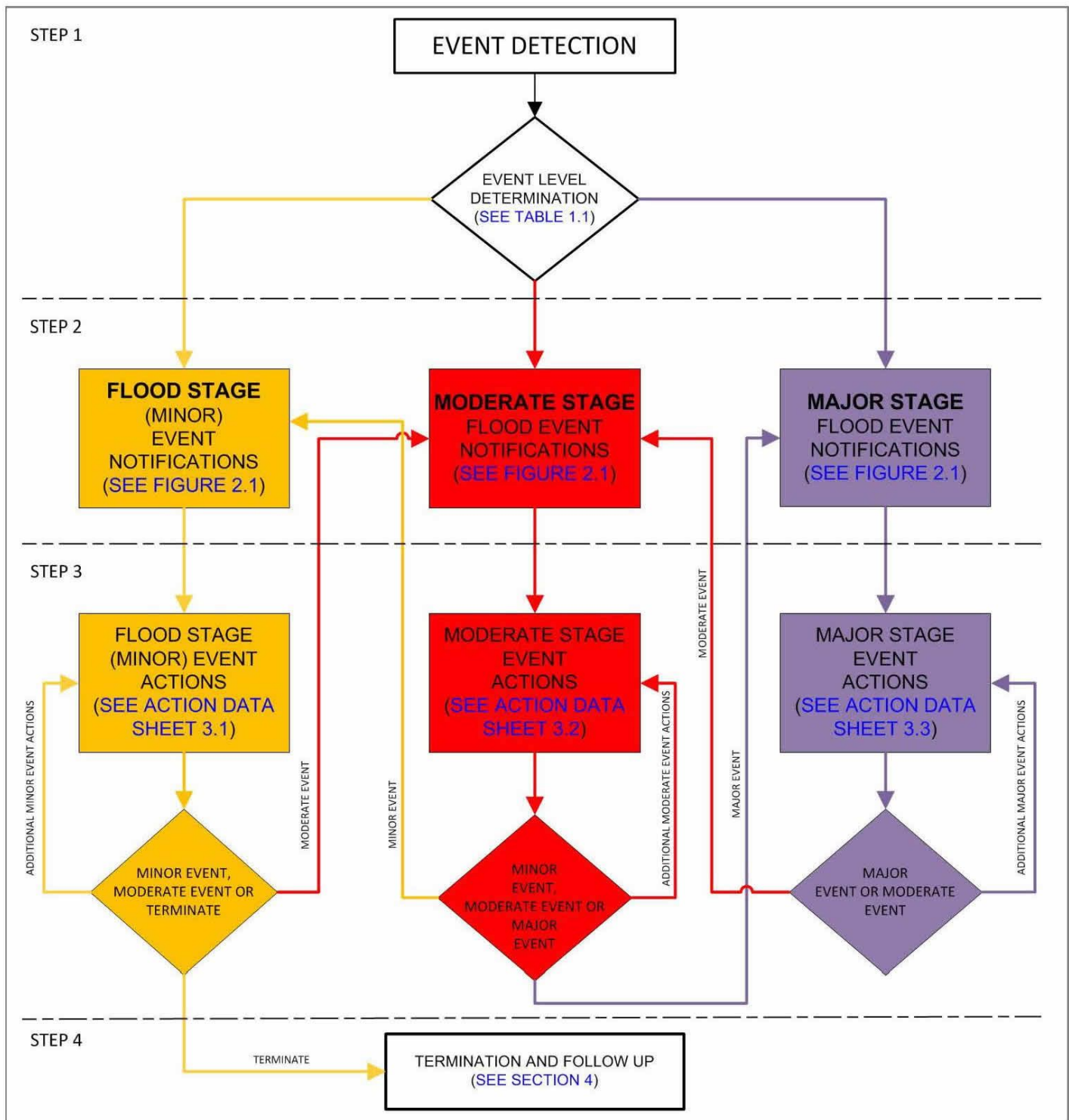


The 2009 plan has a holistic, web-based approach that uses real-time stream gage readings and the National Weather Service's Advanced Hydrologic Prediction Service (AHPS) to direct the flood fight effort.

- Printed Document with static maps
- Web-based version developed using .html ([view](#))
- Real-time NWS AHPS Stream Gage Data
- The 4-step Process
 - Event Detection and Level Determination
 - Notification and Communication
 - Expected Actions
 - Termination and Follow-up

2013 - Back to Paper

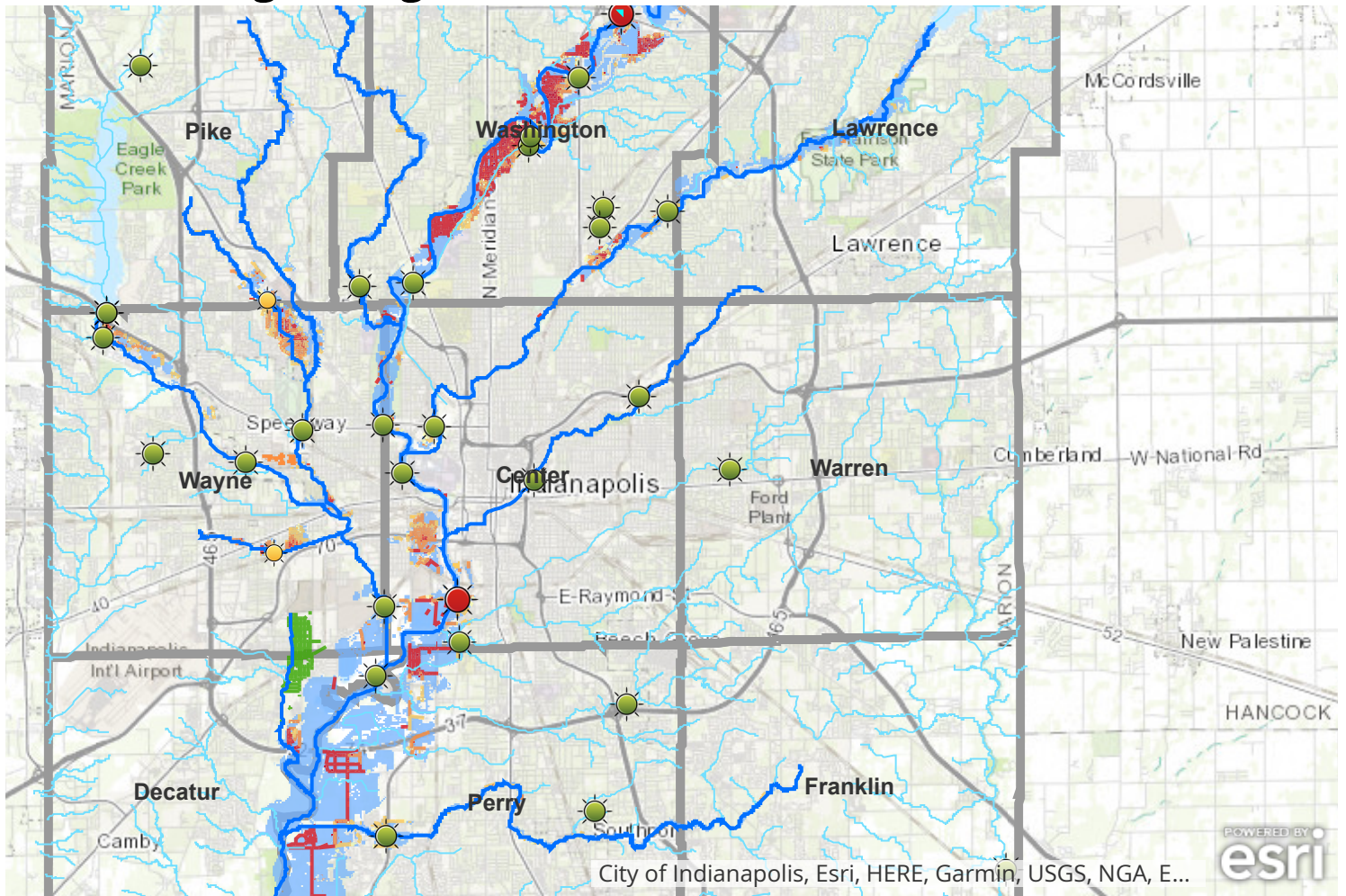
Chart i: FRP Flow Chart






- Interactive PDF format ([view](#))
- Updated notification charts
- Added vertical gate closure guidance
- Flood depth mapping for White River and impact of flooding to key neighborhoods

- Updated Flood Fight Crews SOP

2019 - Going All Digital!




USGS Stream Gages

-  Probability & Forecasts
-  Observations Only
-  Information (Not a gage)






Streams with Enhanced Data**Other Streams****Flooded Structures (100-year Levee Breach)**

100-year Flood Depth (ft.)

-  > 5 – 16
-  > 3 – 5
-  > 2 – 3
-  > 1 – 2
-  0 – 1

Over-topped Roads (100-year Levee Breach)

Maximum 100-year Flood Depth (ft.)

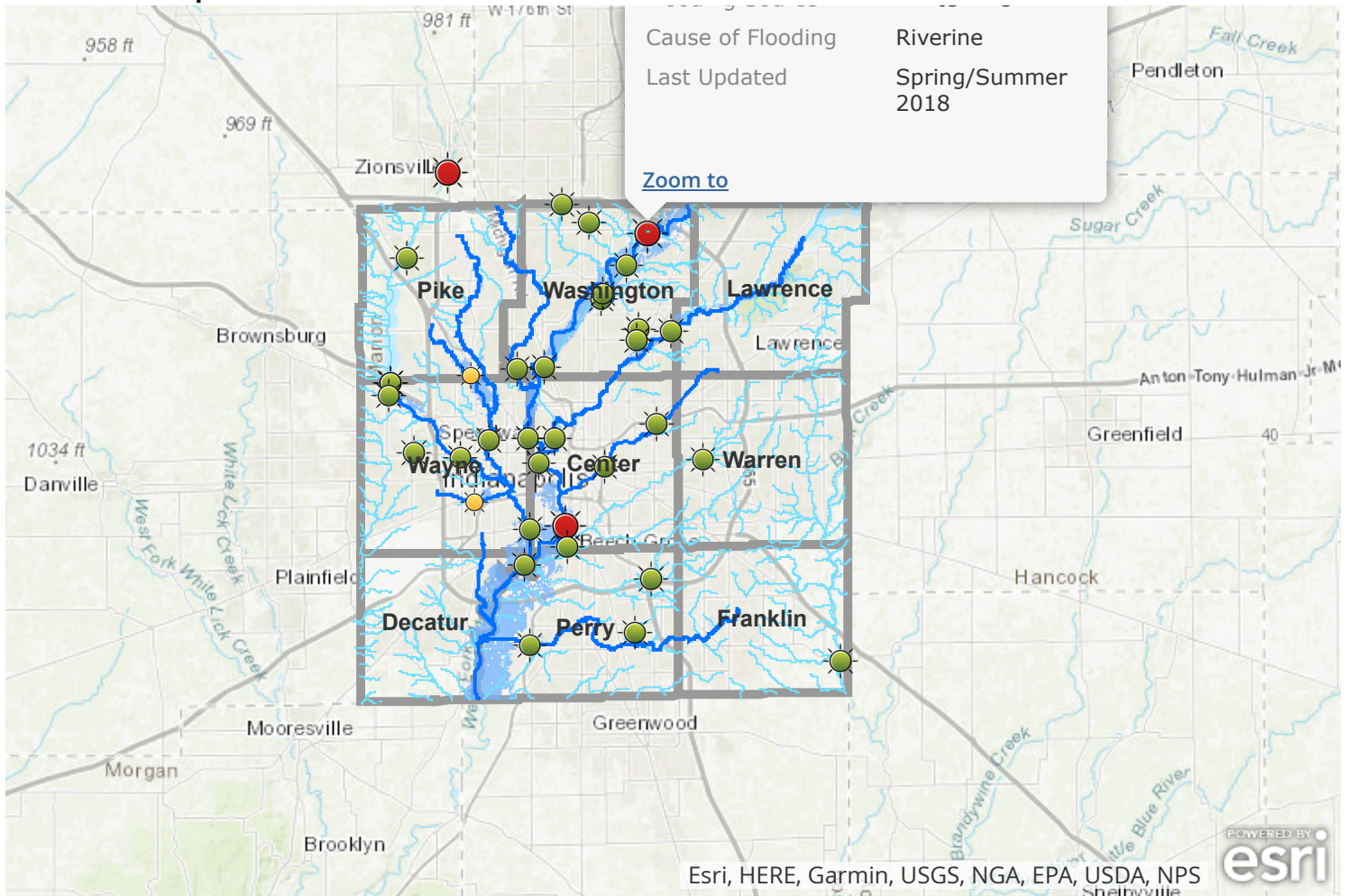
-  > 5 – 20
-  > 3 – 5
-  > 1 – 3
-  0 – 1
-  Flood Depth Not Available

Flooded Area (100-year Levee Breach)**Townships**

The 2019 plan update includes:

- Updated flood impact areas and flood-safe routes for evacuation
- Added flooded structures and over-topped roads
- Updated Vertical Gate Guidance
- Detailed studies for White River, Little Eagle Creek, Little Buck Creek, Fall Creek, Eagle Creek, Harmon and State Ditch, Falcon Creek, Crooked Creek, and Need Ditch
- Updates to procedures for warning, evacuation, and sheltering
- Updated post-flood damage assessment protocols
- Smart PDF format ([view](#))
- [ArcGIS Online](#)

Future Updates



USGS Stream Gages

- Probability & Forecasts
- Observations Only
- Information (Not a gage)

Streams with Enhanced Data

-
- Other Streams**
-

Flooded Area (100-year Levee Breach)

-
- Townships**
-

As the city becomes more comfortable with using online mapping, future enhancements might include:

- Using Collector and Survey 1-2-3
 - Documenting events and actions taken
 - Syncing with Flood Fight Headquarters
 - Post flood damage assessment
- Optimize Online Application
- Add documents to AGOL
 - FRP Flow Chart
 - Notification Charts

- Action Data Sheets
- Notification of Affected Residents/Businesses (Reverse 911)
- Link to other City Maps

Questions?



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