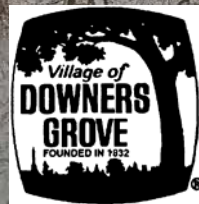
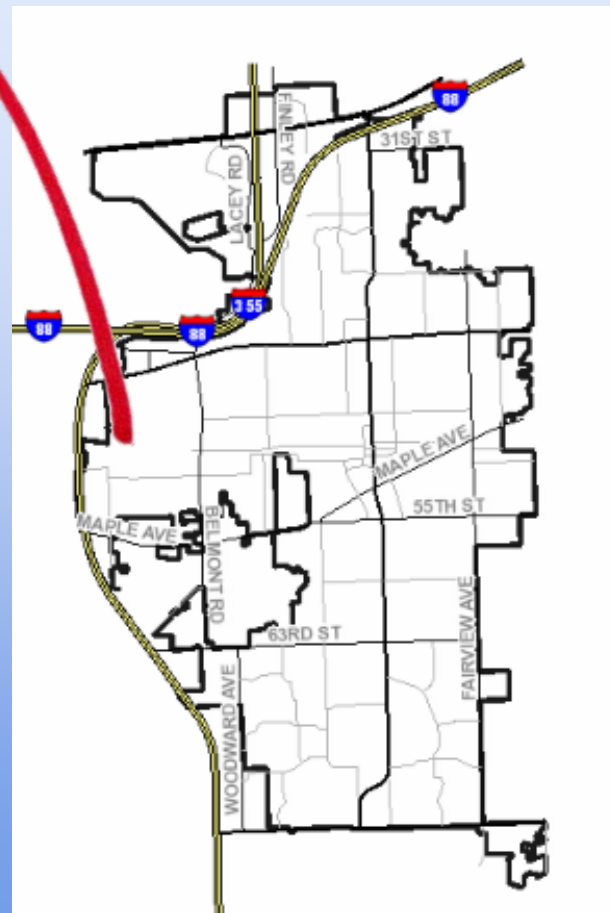


Administrating Local Flood Areas





Village of Downers Grove

Downers Grove
founded by
Pierce Downer

1832



Railroad
extended from
Aurora to
Chicago
through
Downers
Grove

1862

First
subdivision
developed



1863



Construction
of I-88

1958

First Stormwater
Master Plan –
Focus on
construction of
storm sewer



1961

Second
stormwater
plan – 1st
detention basin
constructed



Village
program for
stormwater
management
projects



First county-wide
stormwater and flood
plain ordinance with
runoff and **detention**
requirements

1971

1976

1976-
1983

1987

1992



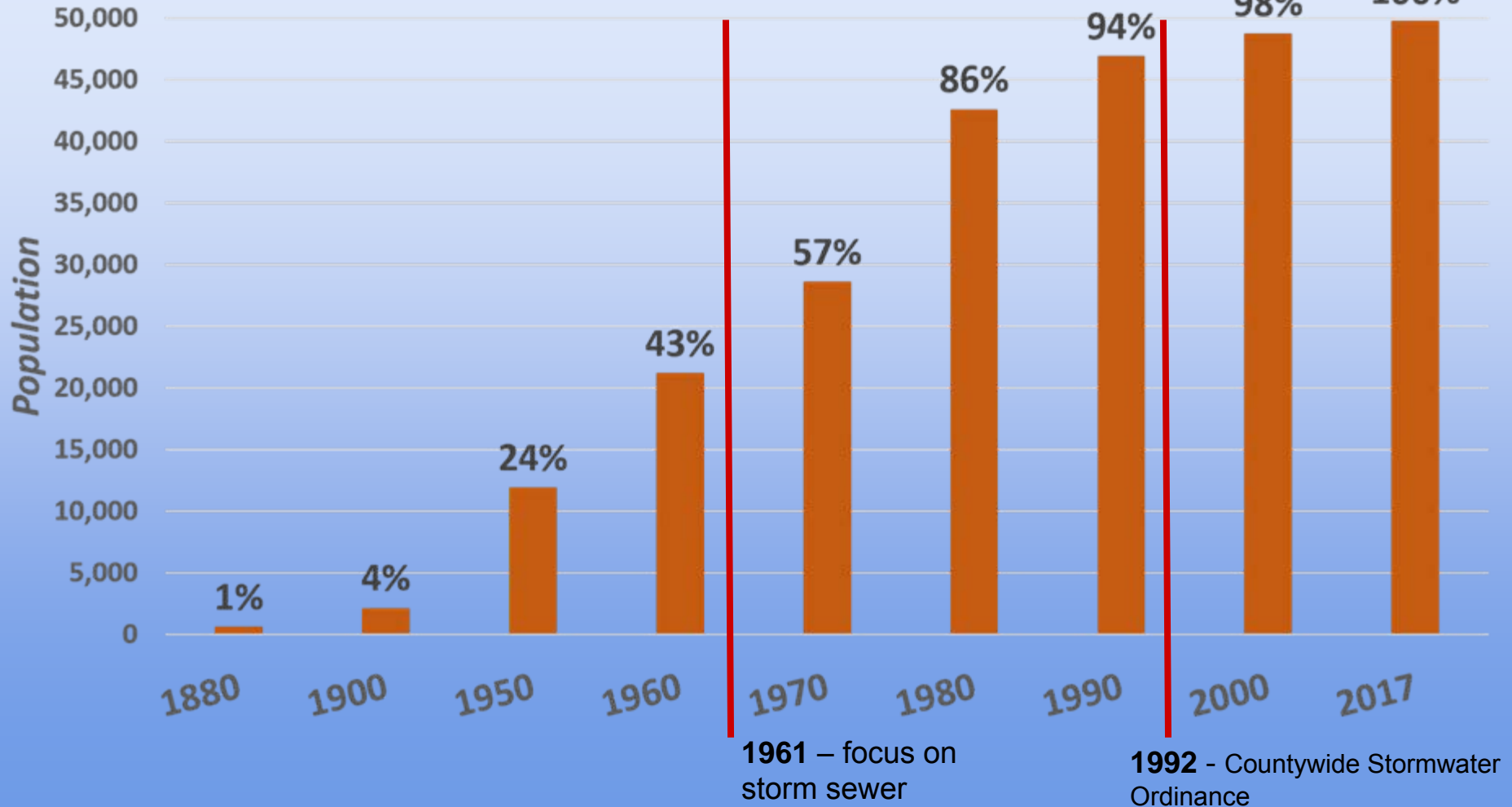
First Village
stormwater
ordinance with
runoff and
detention
requirements.

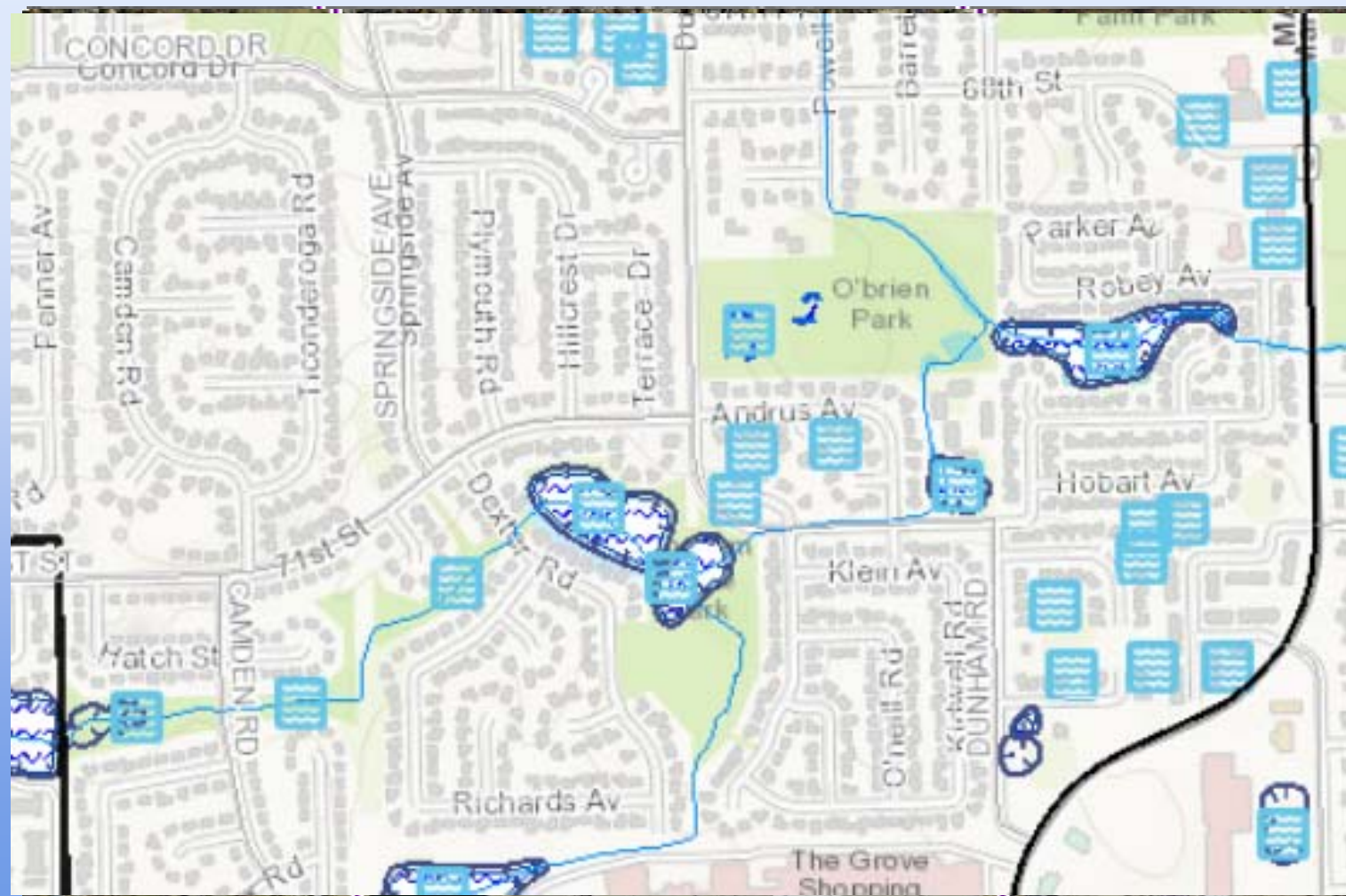


Historic flood
in DuPage
County
(and NE IL)

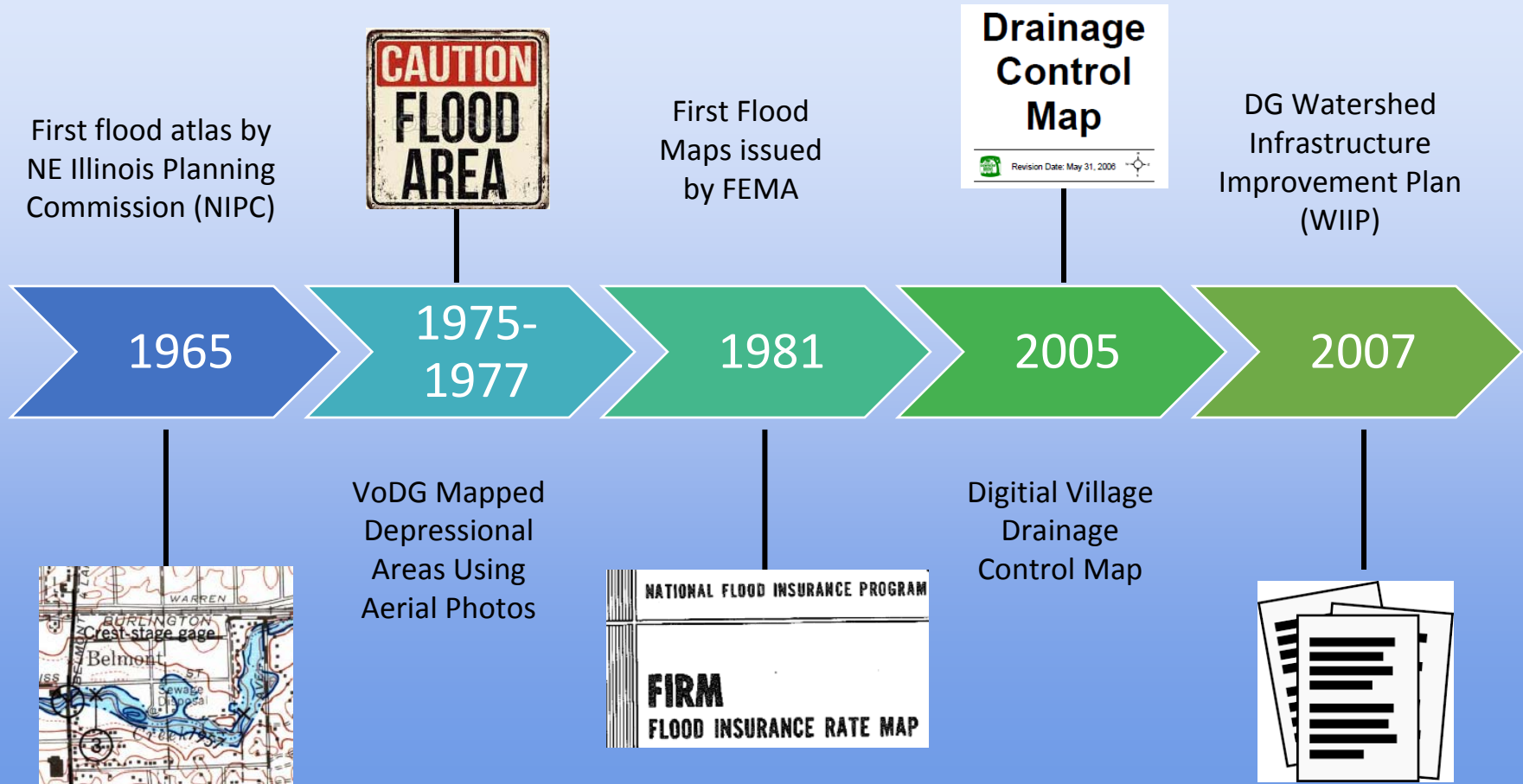


Downers Grove's Population Trend





Downers Grove LPDA Timeline



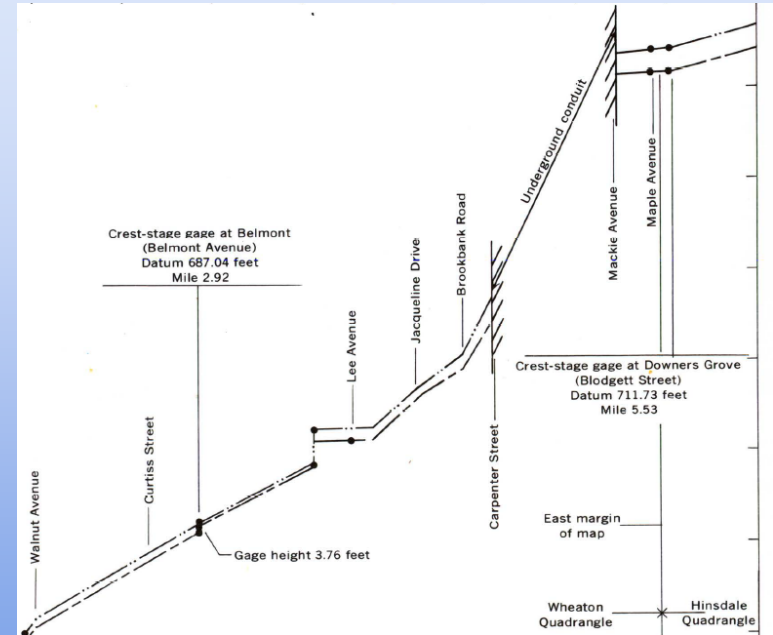
1965

1975-
1977

1981

2005

2007



1965 Floods in Wheaton Quadrangle, Northeastern IL
(flood of record maps)

1965

1975-
1977

1981

2005

2007



Aerial Photos with Depressional Areas
Circa 1977



1965

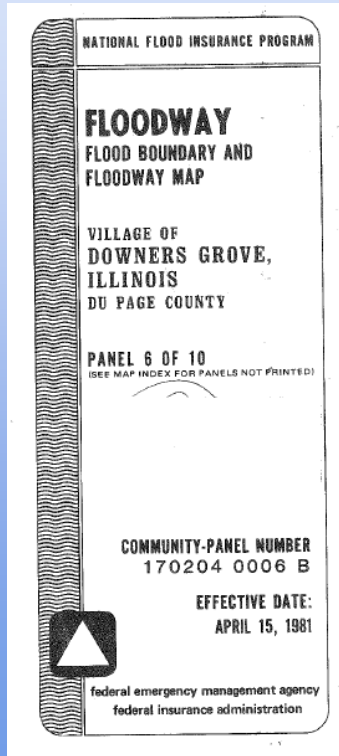
1975-1977

1981

2005



2007





1965

1975-
1977

1981



2005



2007



2005 Drainage Control Map

1965

1975-
1977

1981

2005

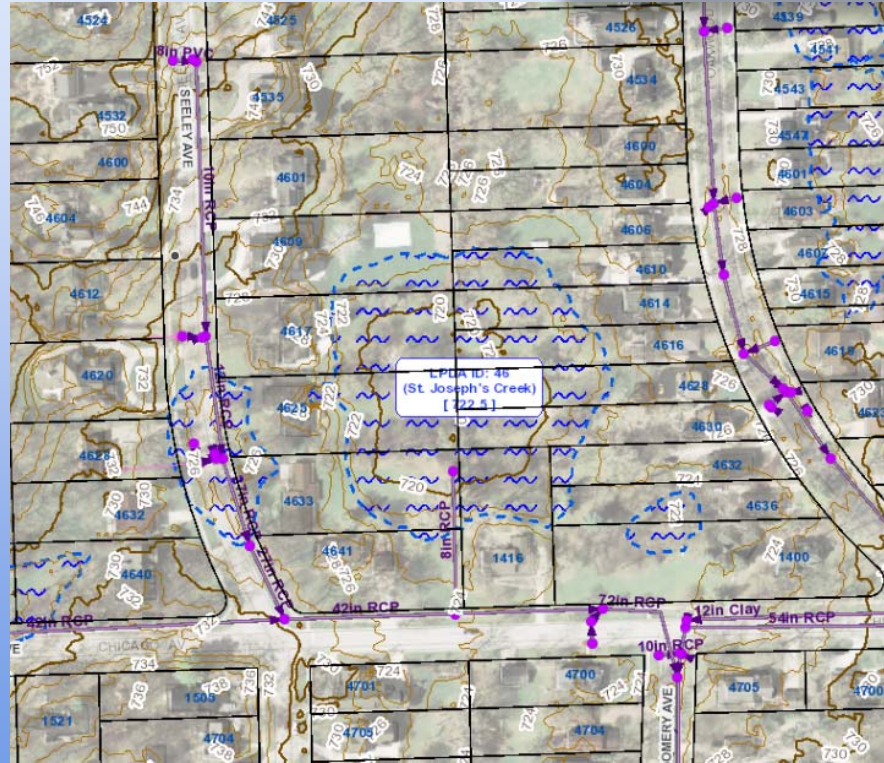
2007

Localized

Poor

Drainage

Area



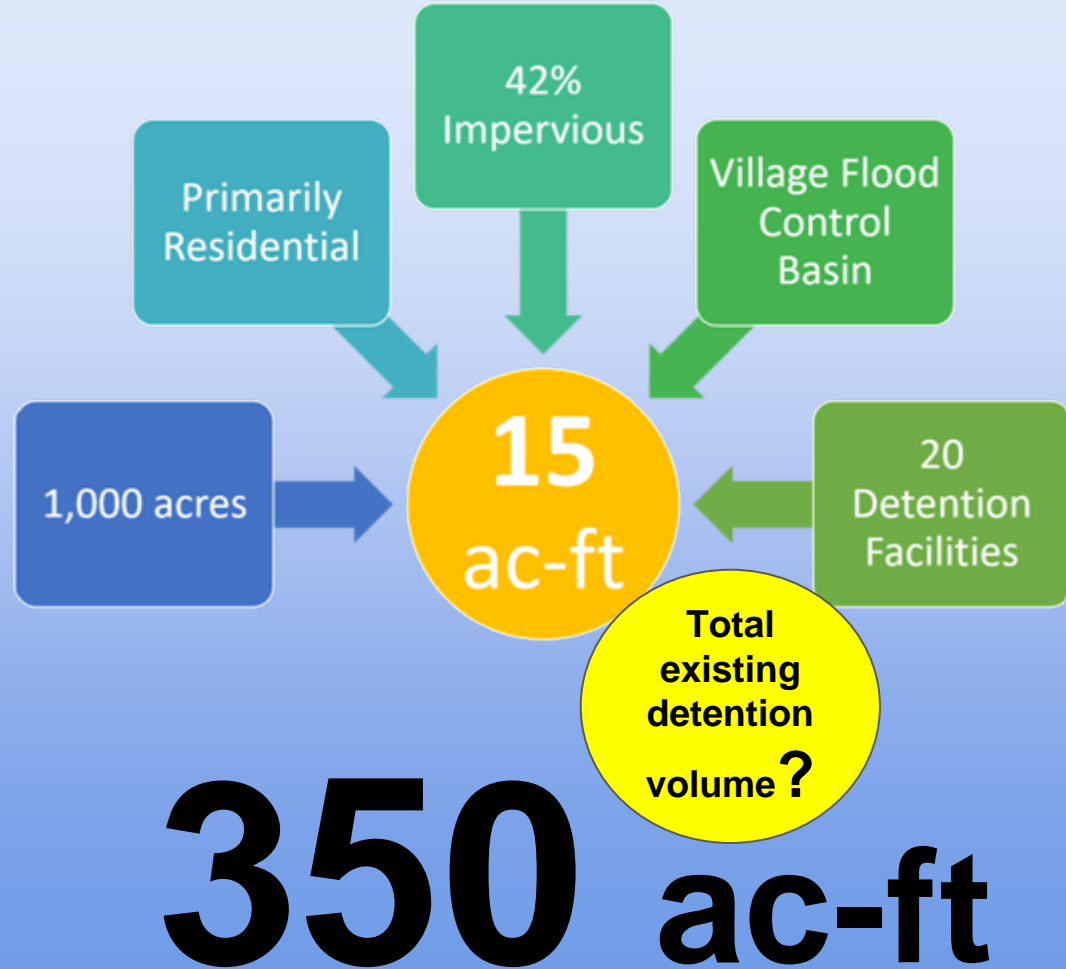
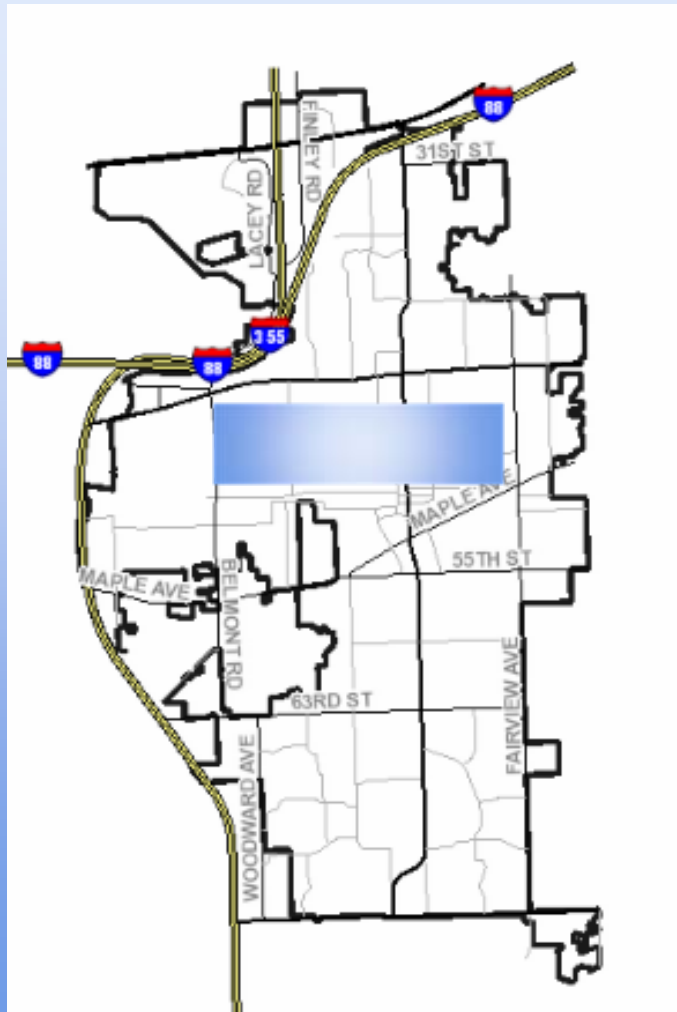
Current Parcel Navigator Map (GIS)



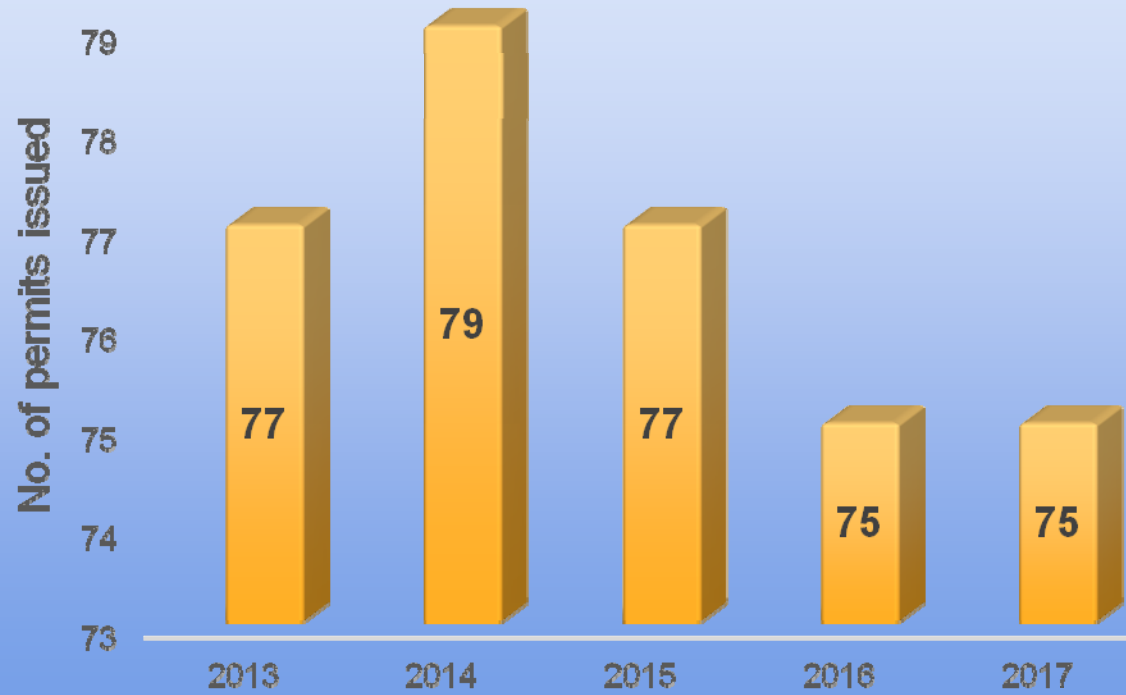
1956 Aerial Image



2014 Aerial Image



New Single Family Permits





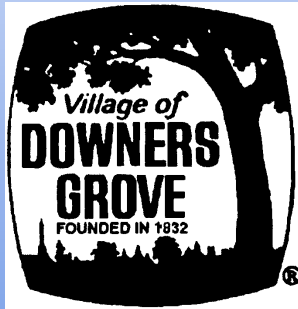
New Homes

- **Larger footprint homes**
- **Deeper basements**
- **Increased impervious: patio, outdoor kitchen, 3 car garage, pool**
- **Less green space**
- **Reduced overland flow path width (fences, sheds)**



WIIP

2007

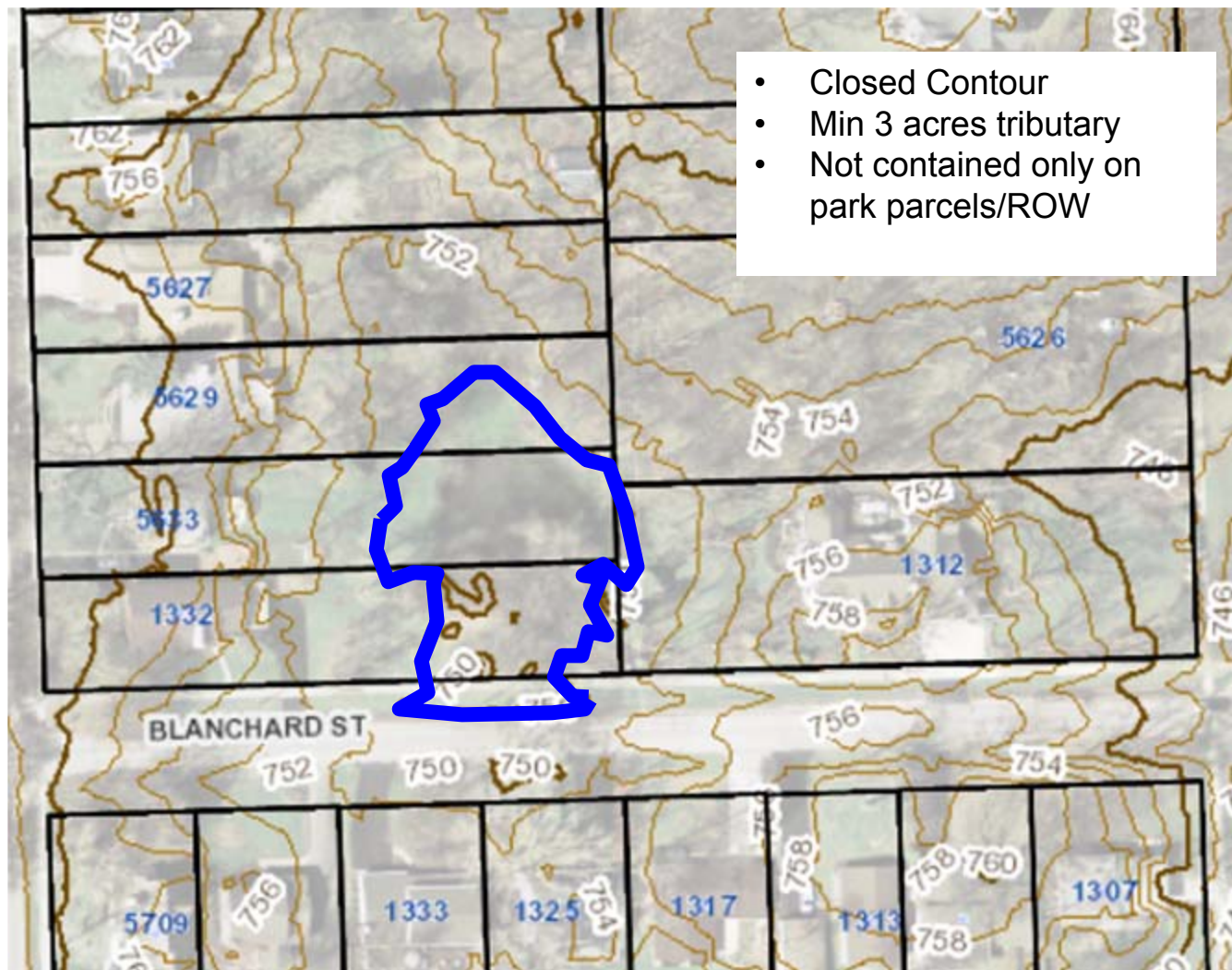


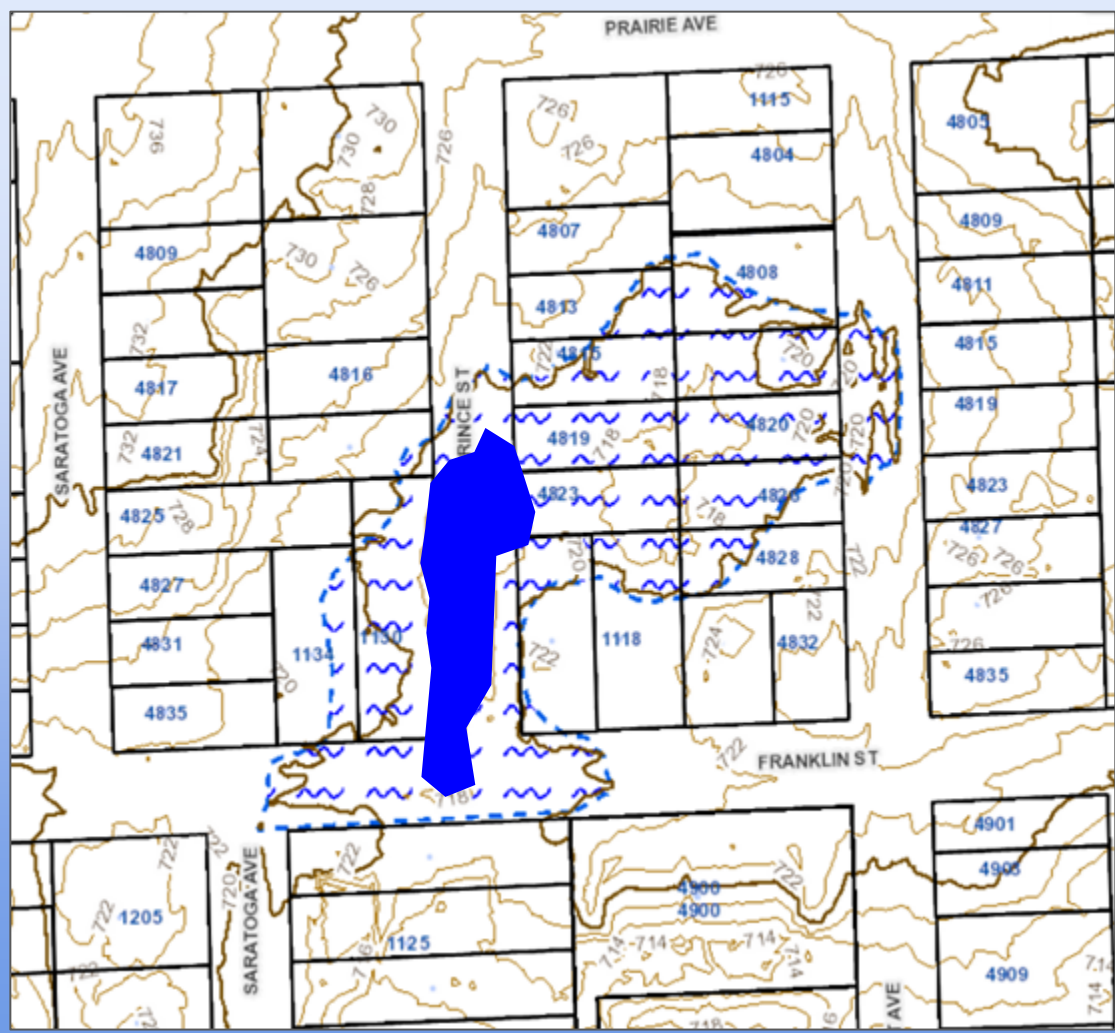
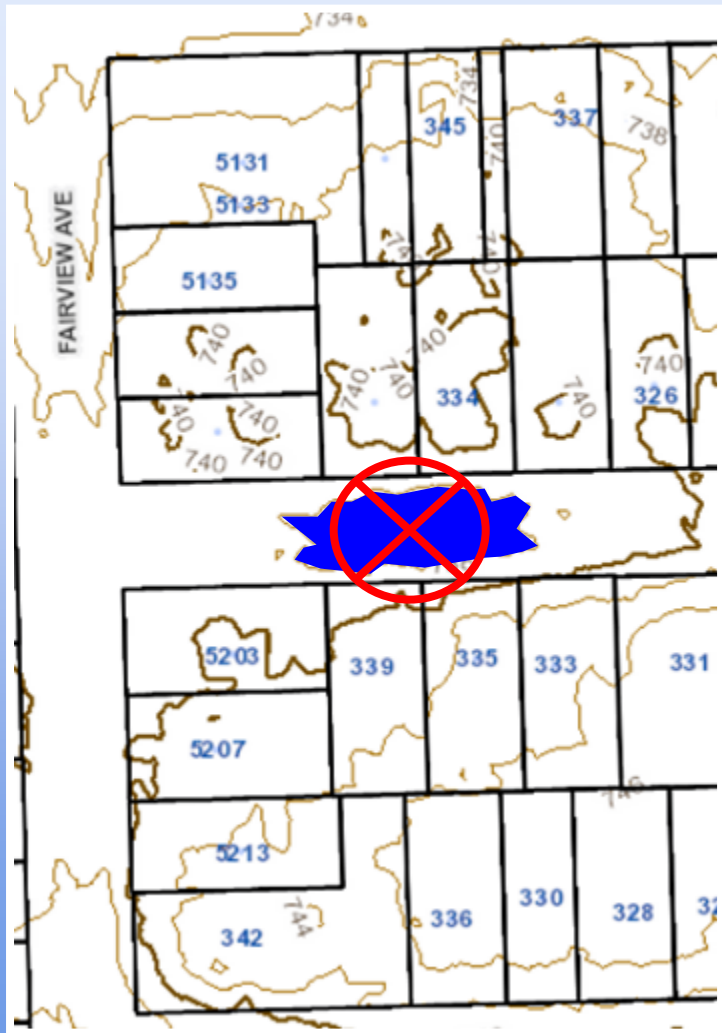
Section 26.1302 Localized Poor Drainage Area (LPDA).

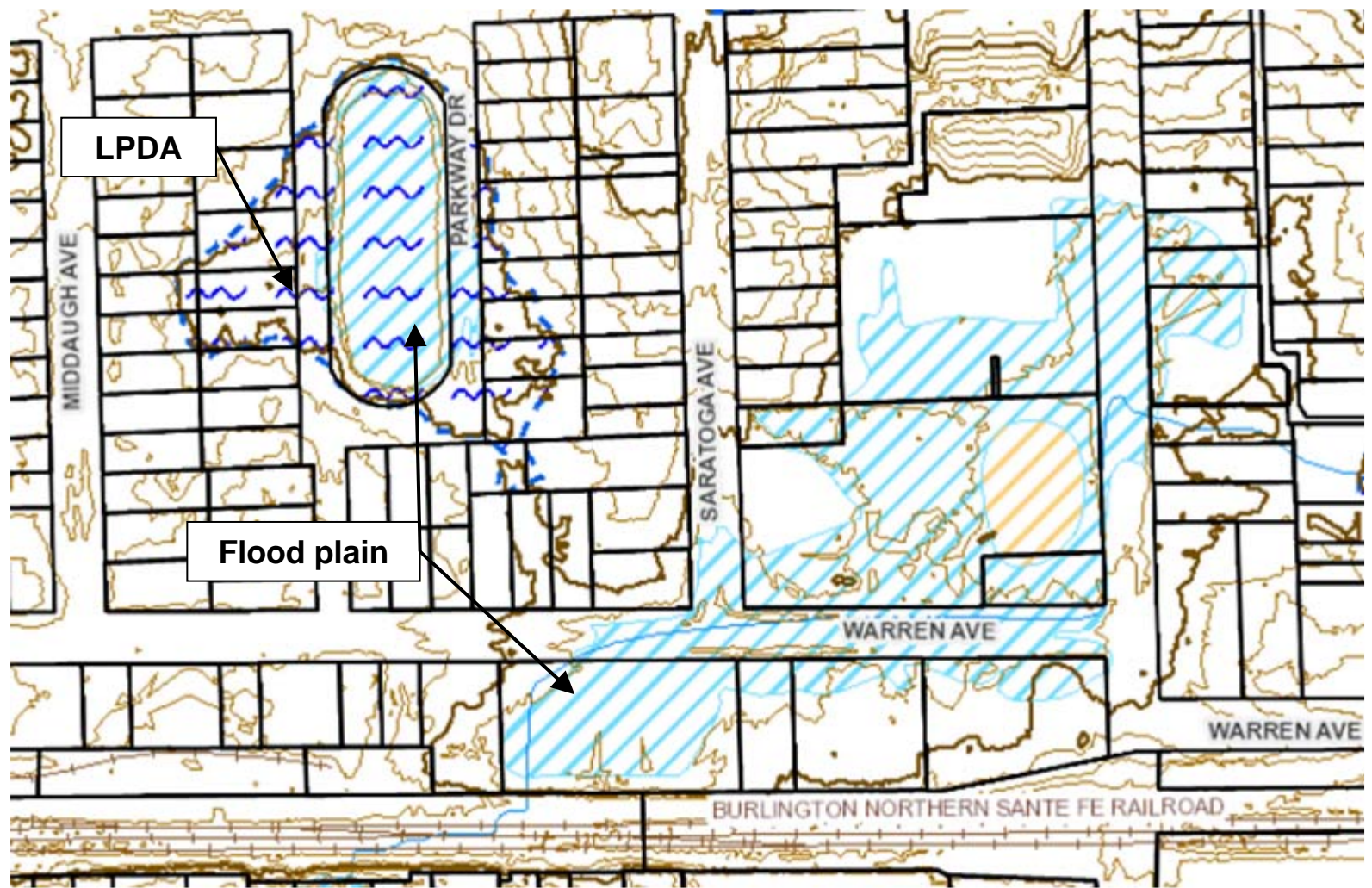
LPDAs shall be designated where all of the following criteria are met, and shall be included on the Drainage Control Map:

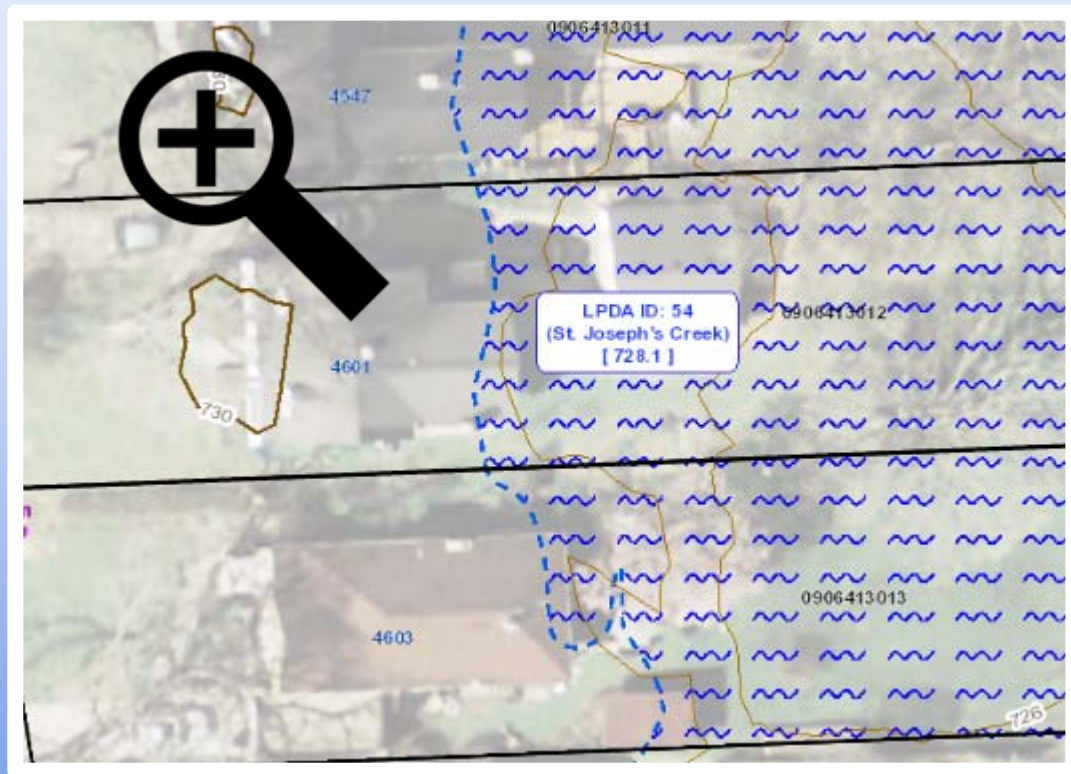
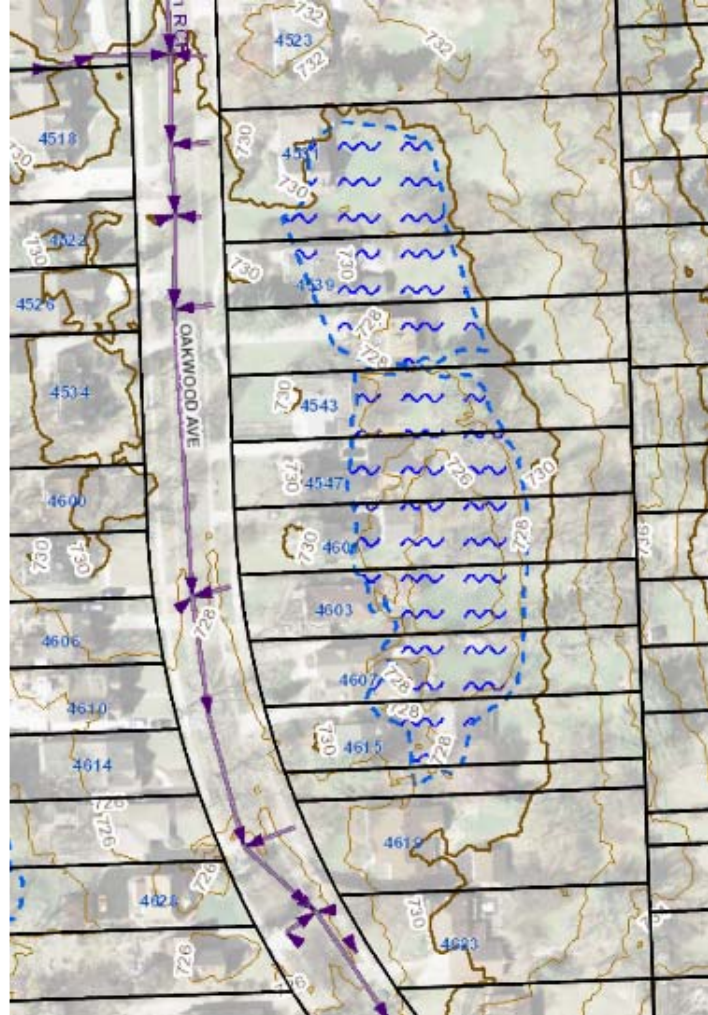
- A. LPDA limits coincide with or encompass at least one closed elevation contour (1-foot increments) that represents a depression on a topographic map or survey;
- B. LPDA limits are not confined solely to a public right-of-way served by an adequate drainage system (including overflow) where building setbacks are a minimum of ten (10) feet from the right-of-way;
- C. LPDA limits are not confined to publicly-owned property natural areas where development is restricted (e.g. Maple Grove Forest Preserve, Lyman Woods, Belmont Prairie);
- D. LPDA tributary area limits are not confined to a single undeveloped parcel with an adequate drainage system (including overflow);
- E. LPDA limits are not mostly contained within regulatory flood plain as shown on the FIRM;
- F. Tributary area is equal to or greater than three (3) acres, based on a delineation from the DuPage County topographic map or other topographic survey with higher accuracy;
- G. LPDA and associated overflow routes are not confined to adequate recorded stormwater management easements where all adjacent structures are protected to required flood protection elevations as specified in this Ordinance;
- H. The area contained by the base flood elevation contour, as determined by the best available information and accepted by the Administrator, shall represent the regulatory boundary of the LPDA. These elevations shall be published in the WIIP.

(Ord. 5330, Amended, 08/20/2013; Ord. 5262, Add, 05/08/2012)







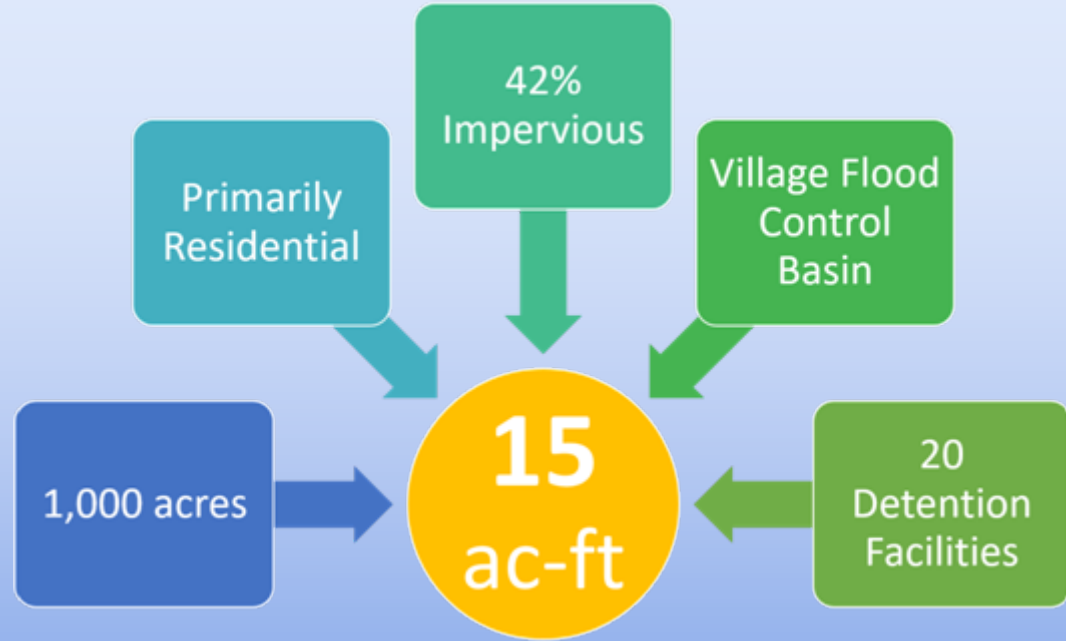
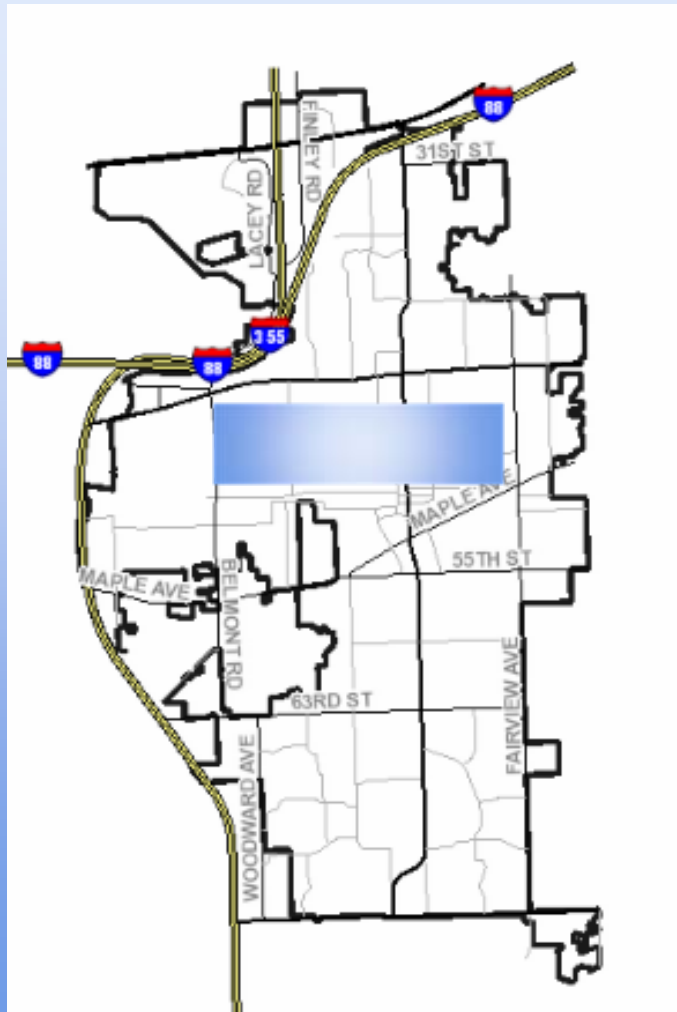




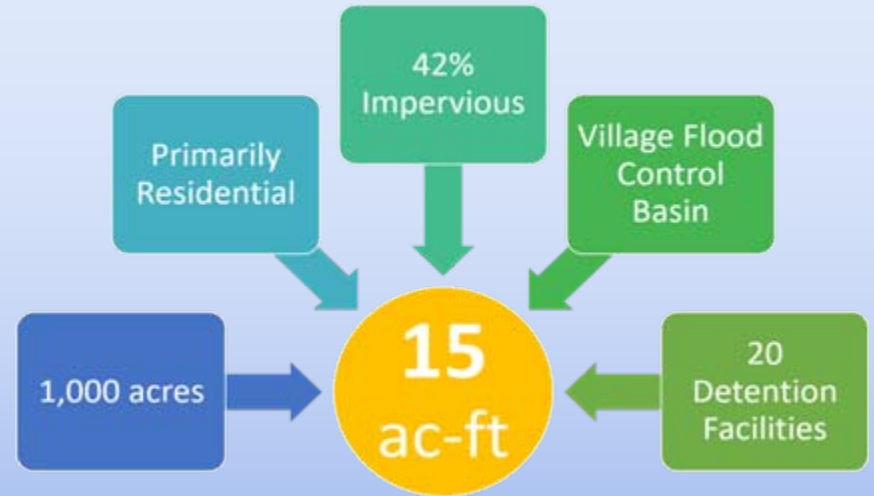
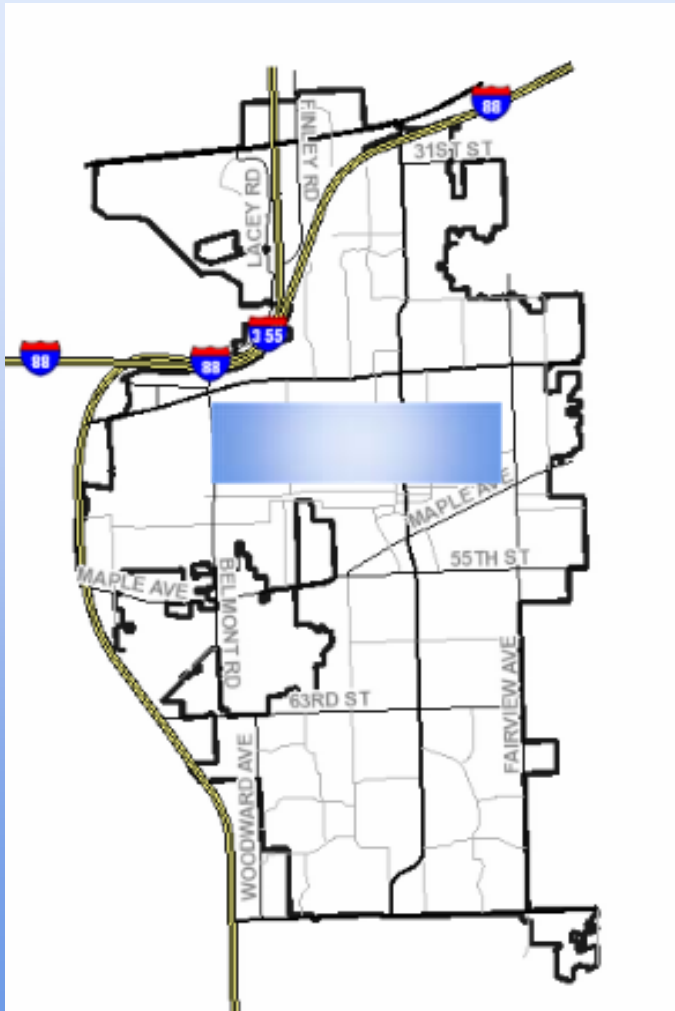
Why regulate LPDAs?

Flood Protection

Storage Volume



350 ac-ft



33 LPDAs

97.5 ac-ft

LPDA Regulations:

- Similar to Floodplain
- Comp Storage (1:1)
- Flood proofing
- Freeboard
 - 3 feet above BFE
 - 1 foot for detached garage
- “LOMR-F”
- Permit for all work



Regulating LPDAs - Considerations

- Long term property owners unaware of restrictions
- New property owners may not be aware
- Permitting Process
- Limits basic improvements
- Currently in your code????



Regulating LPDAs - Challenges

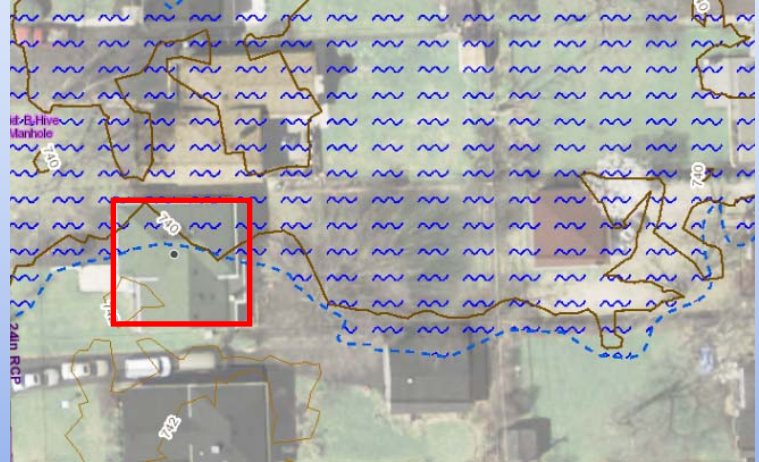
- Substantial Damage Regulation

Example – Existing home value \$100k

Fire damaged home (exceeds \$50k to restore)

Unable to rebuild without bringing house into compliance (i.e. full demo)

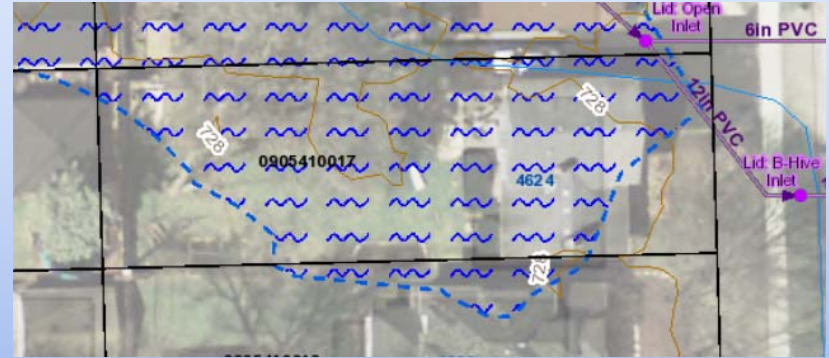
Insurance won't cover some of these costs (and no ICC Coverage available)



Regulating LPDAs - Challenges

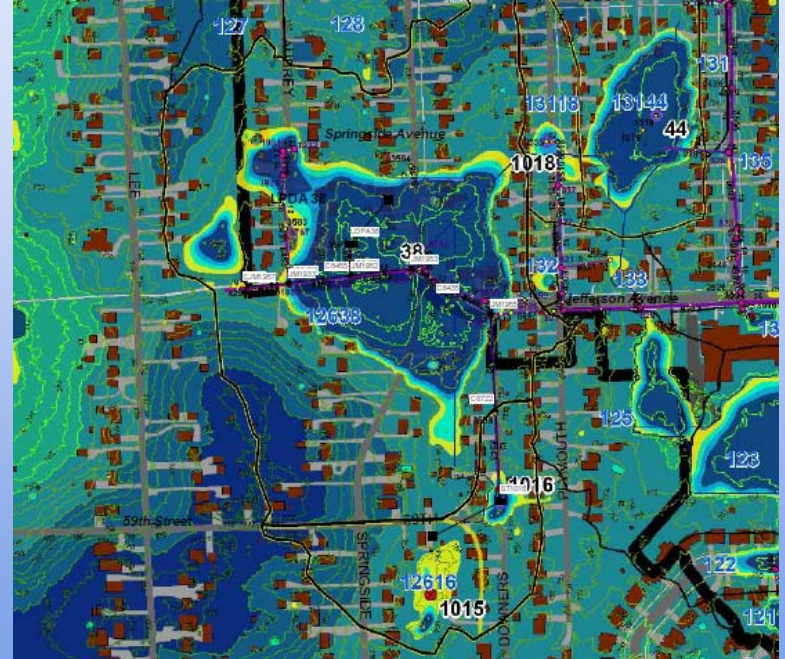
- Substantial Improvement Regulation

not just for properties with damages from flood or fire – any improvements can kick in the “Substantial Improvements”



Next Steps...LPDA

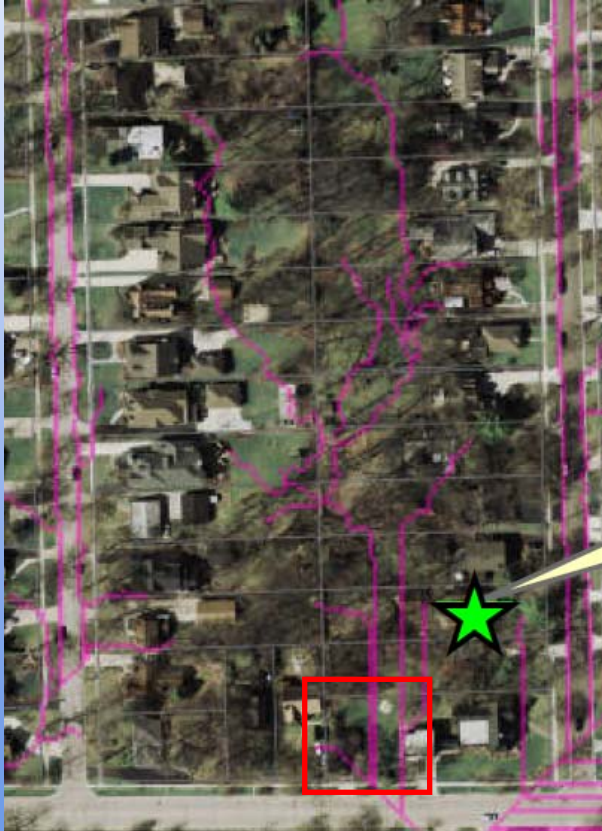
- Update to the LPDAs
- Public meeting and open houses
- Homeowner Notification
- Note to Title
- Cost Share Program



Next Steps...map overland flow paths



Next Steps...map overland flow paths



Next Steps...map overland flow paths

Uses/benefits:

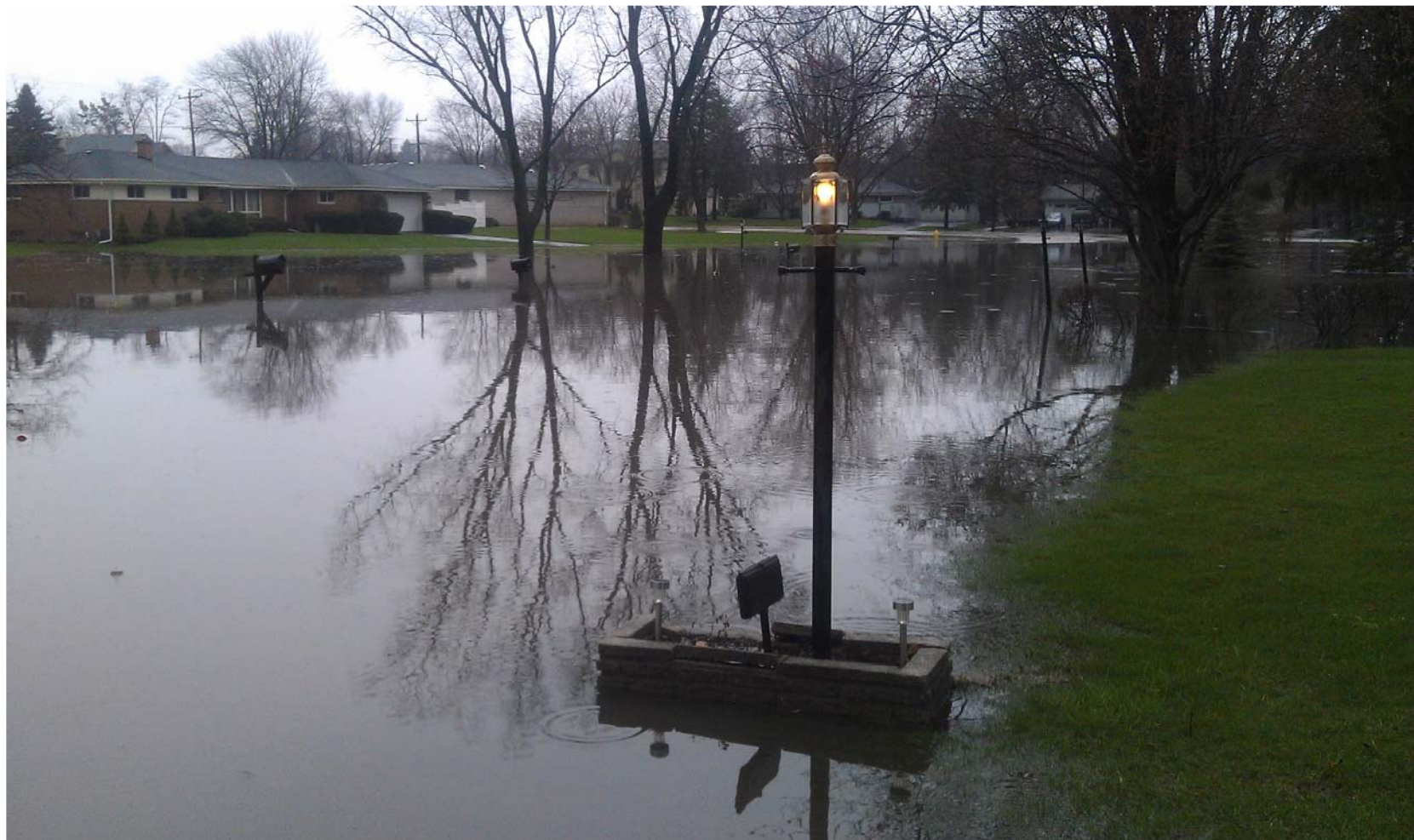
- Permitting fence/shed
- Educating residents about water flow paths
- Locating BMPs verses installing infrastructure



More Next Steps . . .

- Public Outreach/Education
- Green infrastructure / BMPs
- Impervious Coverage limits
- Political challenges



















Kerry Behr kbehr@downers.us

Julie Lomax jlomax@downers.us

