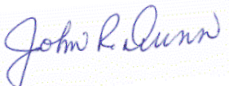




To: Mayor and Council
From: John Dunn 
Date: October 12, 2012
Subject: Flood Mitigation Study Progress Update

At your October 16, 2012 workshop, HDR Engineers will provide Council with a brief update on the community-wide flood mitigation study's progress to date. The briefing will give a quick overview of the scope of the study, share with Council the public involvement efforts and the public input and feedback received to date, provide a first look at some of the early modeling and mapping results, and describe the study process moving forward.

It is our hope to keep the presentation to less than one half hour, leaving time for Council questions and discussion before wrapping up by 8:00 p.m. for the Neighborhood Summit.

The attached materials offer a look ahead at the conversation we will have next Tuesday evening.

The Study

Method

Collect public input, develop and analyze alternatives and strategies, summarize impacts.

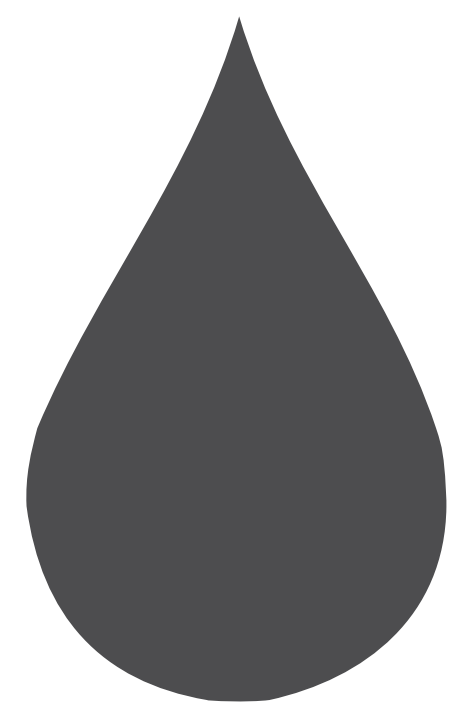
Focus

Determine impacts—positive and negative—of flood mitigation alternatives and strategies.

Goal

Present the best alternatives and strategies to City Council.

Evaluation Process



1

Update flood maps
Determine flood magnitudes
Evaluate sensitivity to rainfall events



2

Evaluate water levels associated with various flood events



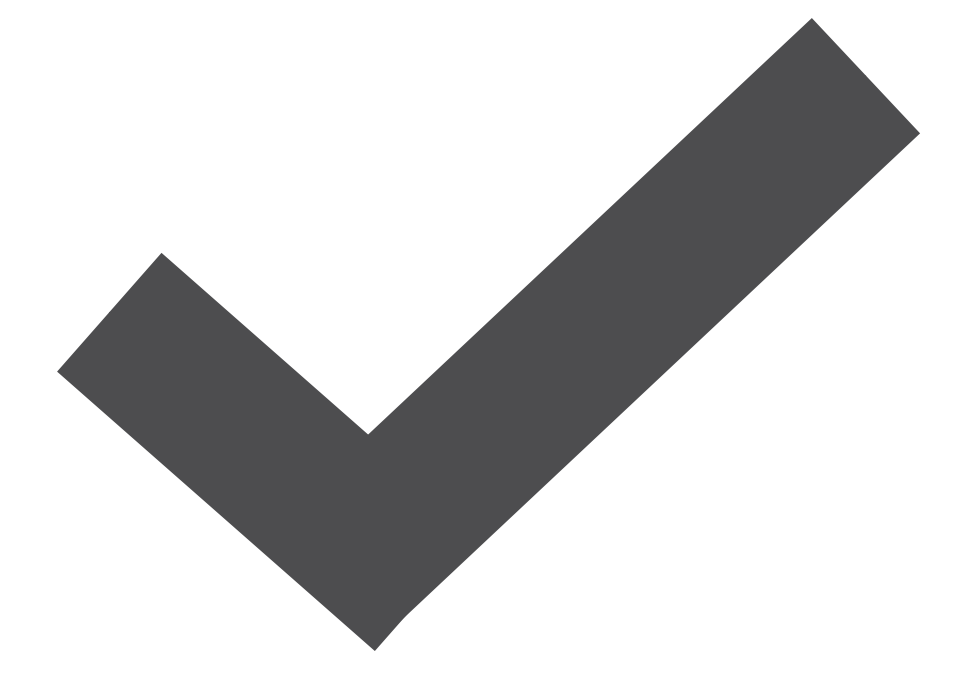
3

Evaluate and refine potential flood mitigation alternatives and strategies



4

Identify environmental and societal impacts of alternatives and strategies



5

Present the best alternatives and strategies to City Council

Evaluation Criteria

The following criteria may be used to determine the feasibility of each alternative.

Criteria may include such elements as:

Social and environmental impacts

Impact to private property

Technical feasibility

Floodplain and flood insurance impacts

Level of protection provided

Floodplain impacts (immediate area and cumulative)

Existing infrastructure impacts

Permitting constraints

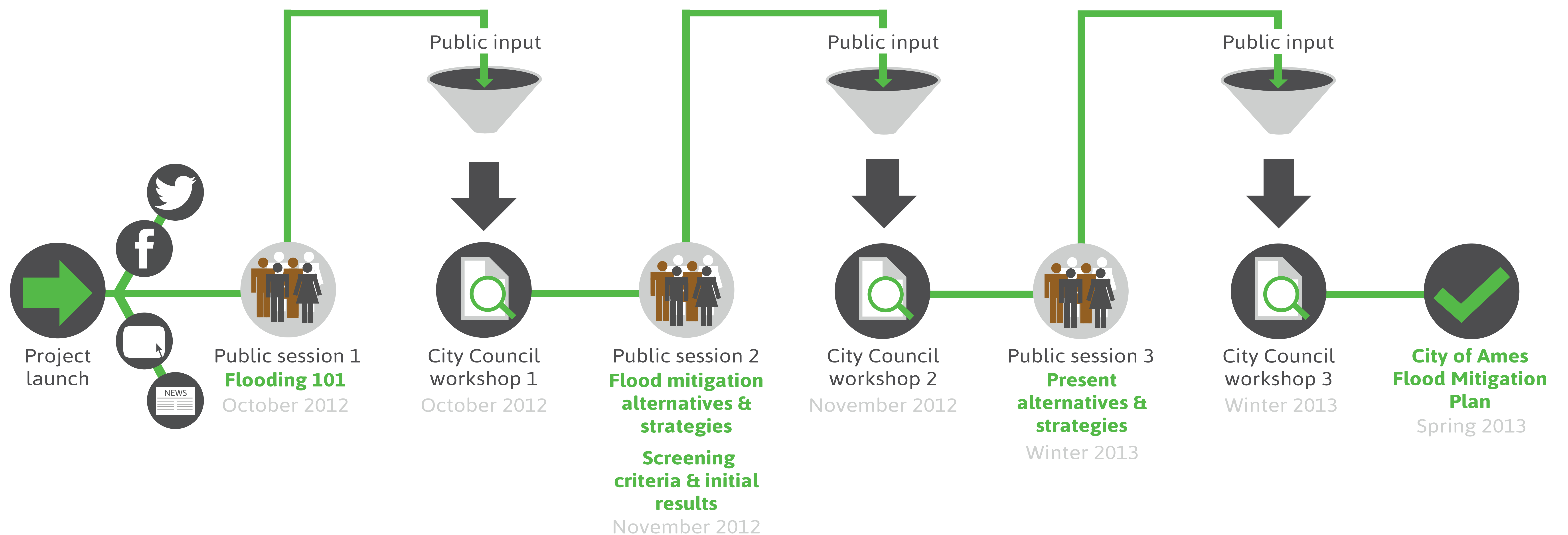
Utility impacts

Coordination/impacts with adjacent infrastructure projects

Costs

?????

Community Involvement



The City of Ames is hosting a series of events to gather feedback from the greater Ames community regarding flooding issues and prevention alternatives and strategies.

Public Session 1 Meeting Summary – October 2012

This public participation opportunity was designed to provide a forum for the public to offer their input and concerns regarding the project. The City presented the study, the process, and the opportunities to get involved. The City hosted four meetings: two open house workshops and two open microphone public forums. The forums were held during an afternoon and evening session. The open house meeting format allowed for one-on-one interactions with City officials and project team members. Informational display boards and handouts were available for review by the public. The open microphone public forum allowed the public to make public statements regarding their flooding experiences.

Week #	Date & Time	Attendance
1 Open House	Tues, Oct 2, 6:00 p.m. – 8:00 p.m. Holiday Inn	32
	Wed, Oct 3, 1:00 p.m. – 3:00 p.m. Hampton Inn	22
2 Open Mic	Wed, Oct 10, 6:00 p.m. – 8:00 p.m. Scheman Building	17
	Thurs, Oct 11, 1:00 p.m. – 3:00 p.m. City Hall, Council Chambers	27
	TOTAL	98

Outreach Tools & Techniques

The following outreaches were used to promote awareness of the Study and attendance at the meetings. Multiple methods of outreach were developed to ensure identified stakeholder groups and the public were made aware of the opportunities to participate in the study process.

Tool	#'s
Postcard	2844 landowners in the 100 & 500 year flood plain, and 230 grassroots outreach contacts

Door Hanger	1000 mobile homes and multi-family units
Social Media	8 Twitter Posts between 9/21/12 and 10/08/12
Media	4 articles, 9/14/2012, 10/4/2012, 10/6/2012, and 10/11/2012
Neighborhood Emails	26 neighborhood contacts
Emails	249
Website Mailing List	6
City Newsletter	1 article, between September and October

Online Meeting & Website

The online meeting served as an online portal for all interested parties to find information about the project, updates on different milestones reached throughout the planning process, and opportunities to participate and provide input and feedback on the project planning. The same information presented at each of the Public Meetings was presented in an online, self-directed open house meeting. The online meeting provided an electronic comment form. The form was made accessible throughout the online meeting experience. *As of October 12, 2012, the City of Ames website had 380 unique visitors, generating 529 hits, 71 online meeting hits, and 54 online comment form submissions.*

Comments

In order to provide the context for mitigation solutions to the City of Ames, the study team asked three questions of the public. Between all four meetings, 28 comment forms and letters were

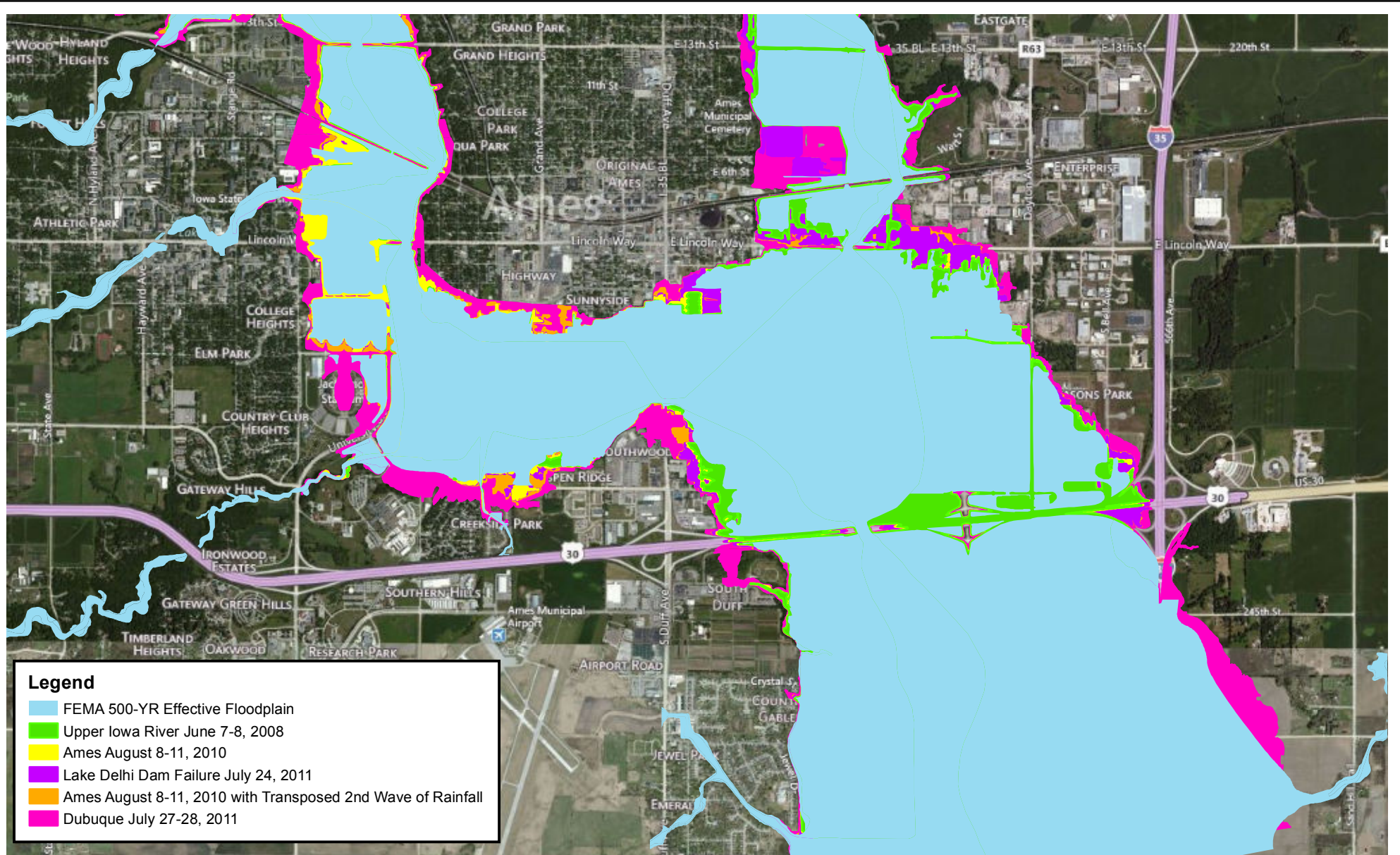
submitted to the City and 22 comments were submitted on the web. The following is a summary of comments and concerns.

1. How have you been impacted by flooding?
 - Sewer backup
 - Access to roads
 - Repairs and maintenance
 - Flooding from the municipal airport
 - Flooded homes and apartments
 - High water approximately 100-150 feet away from house
 - Damage to mobile homes
 - Lack of emergency response
 - Taxpayer impacts
 - Lack of drinking water
 - Loss of business revenue

2. What do you think are the flooding issues impacting the greater Ames community?
 - Older businesses on South Duff Avenue
 - Mobile Home Court
 - Restricted water flow by bridges and small river channel
 - Watersheds above Ames
 - Fill along South Duff
 - Loss of property
 - Displacement from homes
 - Cost of clean-up and repairs
 - Building in the floodplain
 - Flooding to the east of the airport
 - Too much development on flood plains
 - Too much development on College Creek on either side of S. Dakota Ave
 - Hwy 30 across the Skunk River
 - Amount and speed of rainwater to the north of Ames needs to be controlled

3. How do you think these flooding issues should be solved?
 - Promote businesses on Airport Road
 - Restrict development on South Duff
 - Build reservoir
 - Prevent fill

- Buyout businesses in the floodplain
- Watershed-wide solutions
- Limit building in the floodplain
- Stop promoting urban sprawl
- 500-year plain and ordinances to prevent building on the flood plain
- Re-using old buildings rather than building new ones
- Provide a statewide solution
- A dam on South Skunk and/or Squaw Creek
- Enlarge Squaw Creek channel
- Have businesses construct water holding ponds
- Watershed management
- Build water outlet in the highway
- Put water pumps into buildings
- Using engineering judgments
- Make plans using a higher standard
- Provide information regarding FEMA programs
- Better storm water management
- Dayton Road conveyance



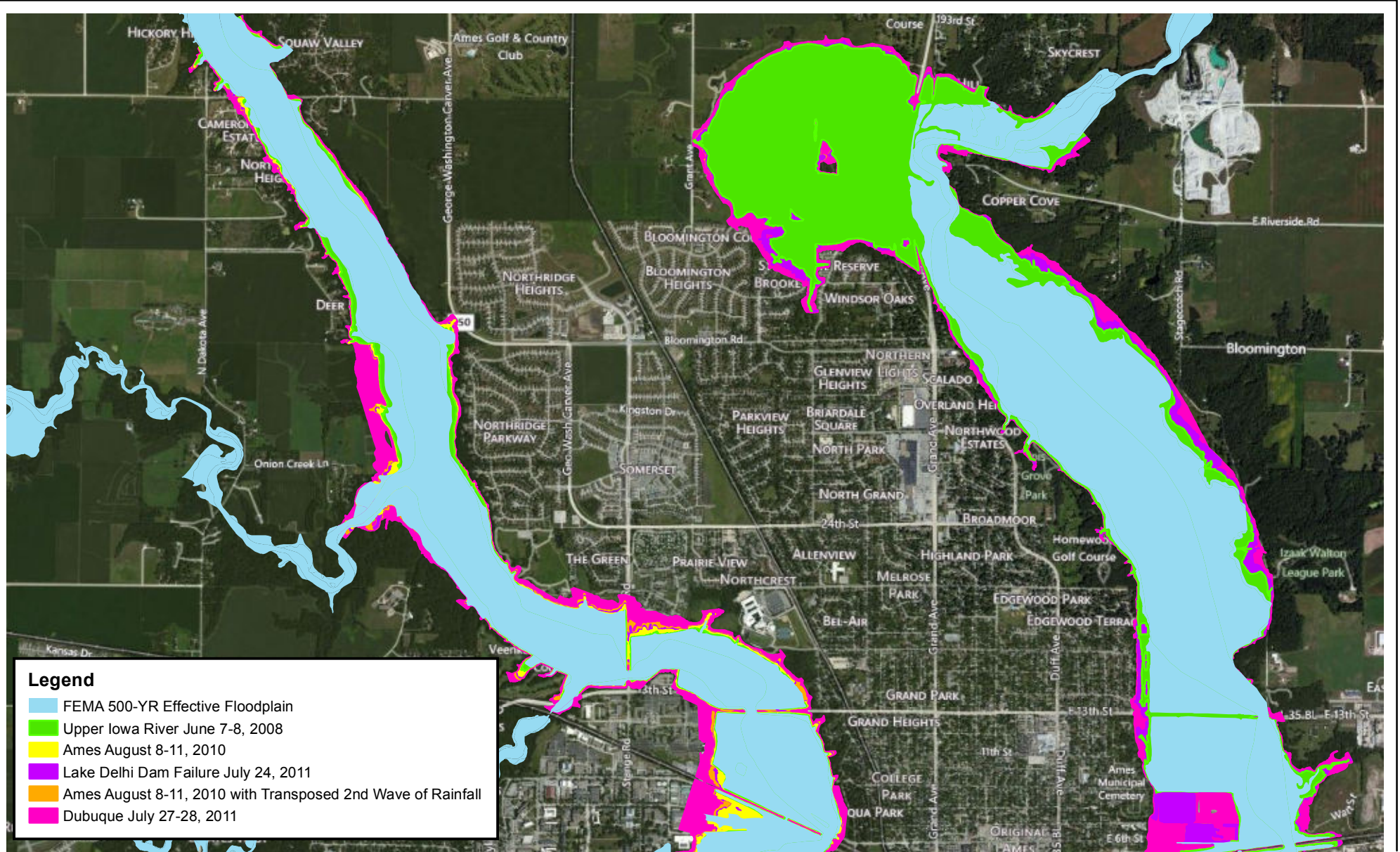
0 0.5 1 Miles



Transposed Storm Boundaries

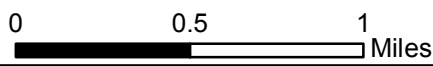
2012 City of Ames Flood Mitigation Study

DATE	10/12/2012
FIGURE	2



Legend

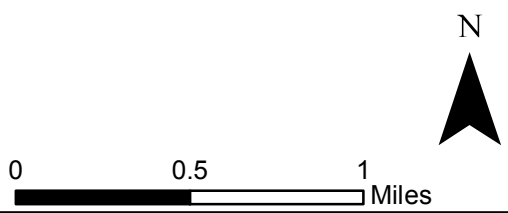
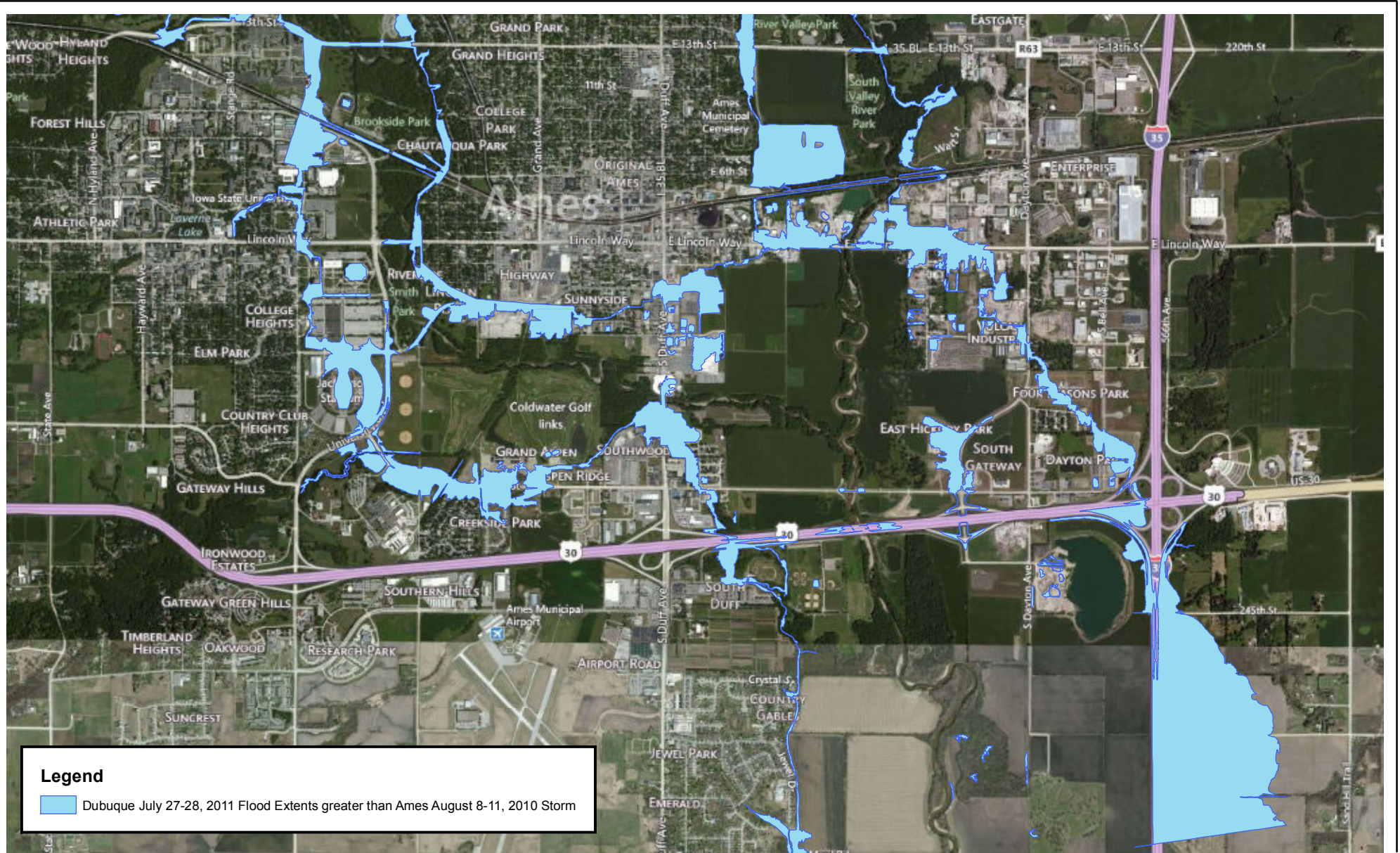
- FEMA 500-YR Effective Floodplain
- Upper Iowa River June 7-8, 2008
- Ames August 8-11, 2010
- Lake Delhi Dam Failure July 24, 2011
- Ames August 8-11, 2010 with Transposed 2nd Wave of Rainfall
- Dubuque July 27-28, 2011



Transposed Storm Boundaries

2012 City of Ames Flood Mitigation Study

DATE	10/12/2012
FIGURE	1



Flood extents for Dubuque July 27-28, 2011 Storm greater than Ames August 8-11, 2010 Storm

2012 City of Ames Flood Mitigation Study

DATE	10/12/2012
FIGURE	1



Legend
 [Light Blue Box] Dubuque July 27-28, 2011 Flood Extents greater than Ames August 8-11, 2010 Storm



0 0.5 1 Miles



Flood extents for Dubuque July 27-28, 2011 Storm greater than Ames August 8-11, 2010 Storm
 2012 City of Ames Flood Mitigation Study

DATE	10/12/2012
FIGURE	1