



Water Resources Report

RKLD Annual Meeting 2014

August 16, 2014



Topics

- Hydrology Report
- Indianford Dam Inspection Results
- Experimental Project update
- New Initiatives



Low flow last winter followed by Spring & Summer Flood



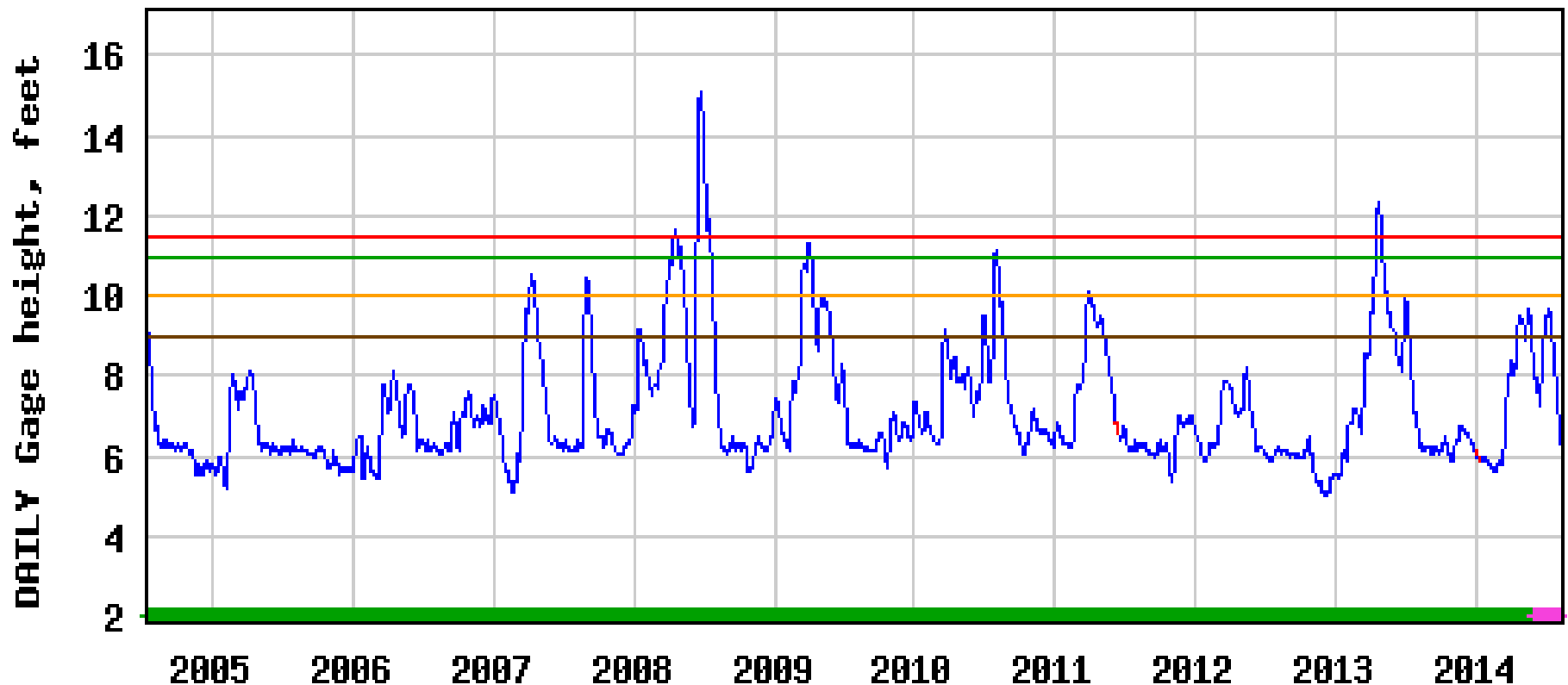
USGS 05427235 LAKE KOSHKONONG NEAR NEWVILLE, WI



2014 flood was ~typical in height, longer duration

2013 was largest flood since 2008

2012 low flow lowest since 1988



New Floodplain Mapping

- New modeling of the Rock River basin post-2008 flood
- County-by-County
- New Flood Storage district
- Fill in the storage district must be compensated by cut

Jefferson County Flood Storage District Panel 3 of 13

Modeled with Wetland Storage

Sources of Study: WDNR

FSD date: February 4, 2015

Approved by: WDNR

Affected Map Panels:

0260F	0287F	0294F
0267F	0288F	0311F
0269F	0289F	0382F
0280F	0291F	0402F
0286F	0292F	0406F

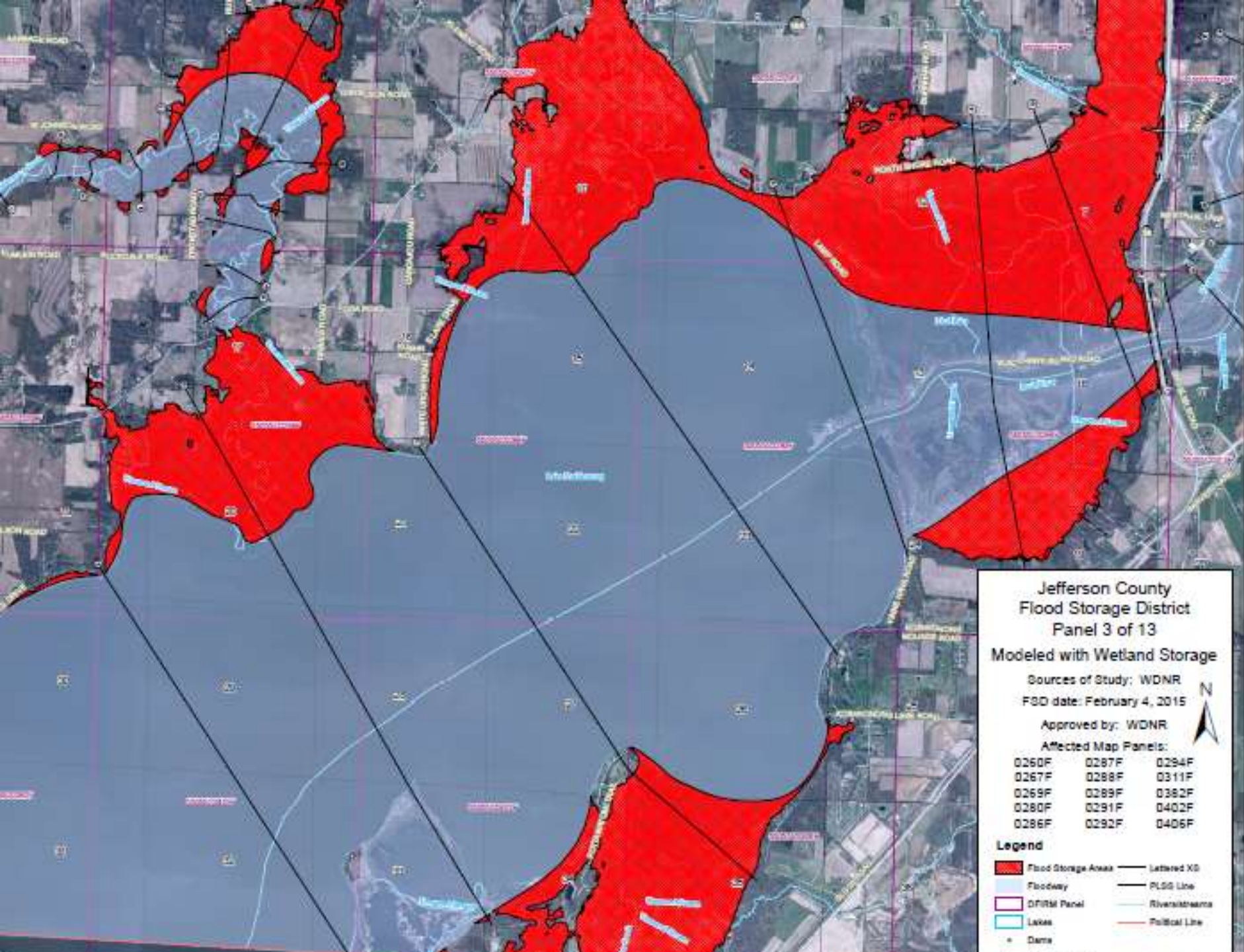


Legend

	Flood Storage Areas		Lettered XS
	Floodway		PLSS Line
	DFIRM Panel		Rivers/streams
	Lakes		Political Line
	Dams		

0 0.25 0.5 1 Miles

1:15,000



**Jefferson County
Flood Storage District
Panel 3 of 13**

Modeled with Wetland Storage

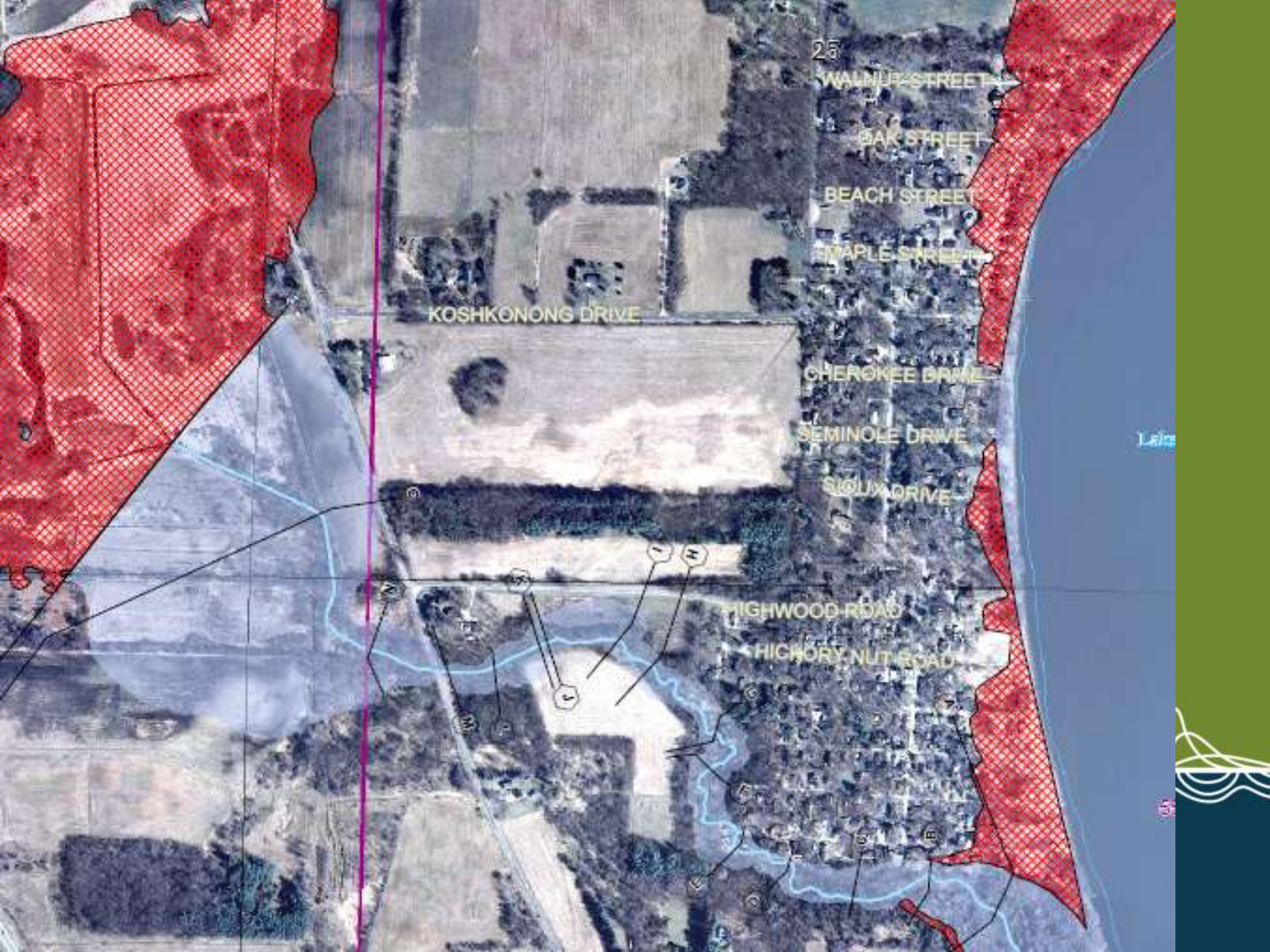
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Legend

Flood Storage Area	Lettered X0
Floodway	PLSS Line
DFIRM Panel	Rivers/streams
Lakes	Political Line
Dams	



25

WALNUT STREET

OAK STREET

BEACH STREET

MAPLE STREET

KOSHKONONG DRIVE

CHEROKEE DRIVE

SEMINOLE DRIVE

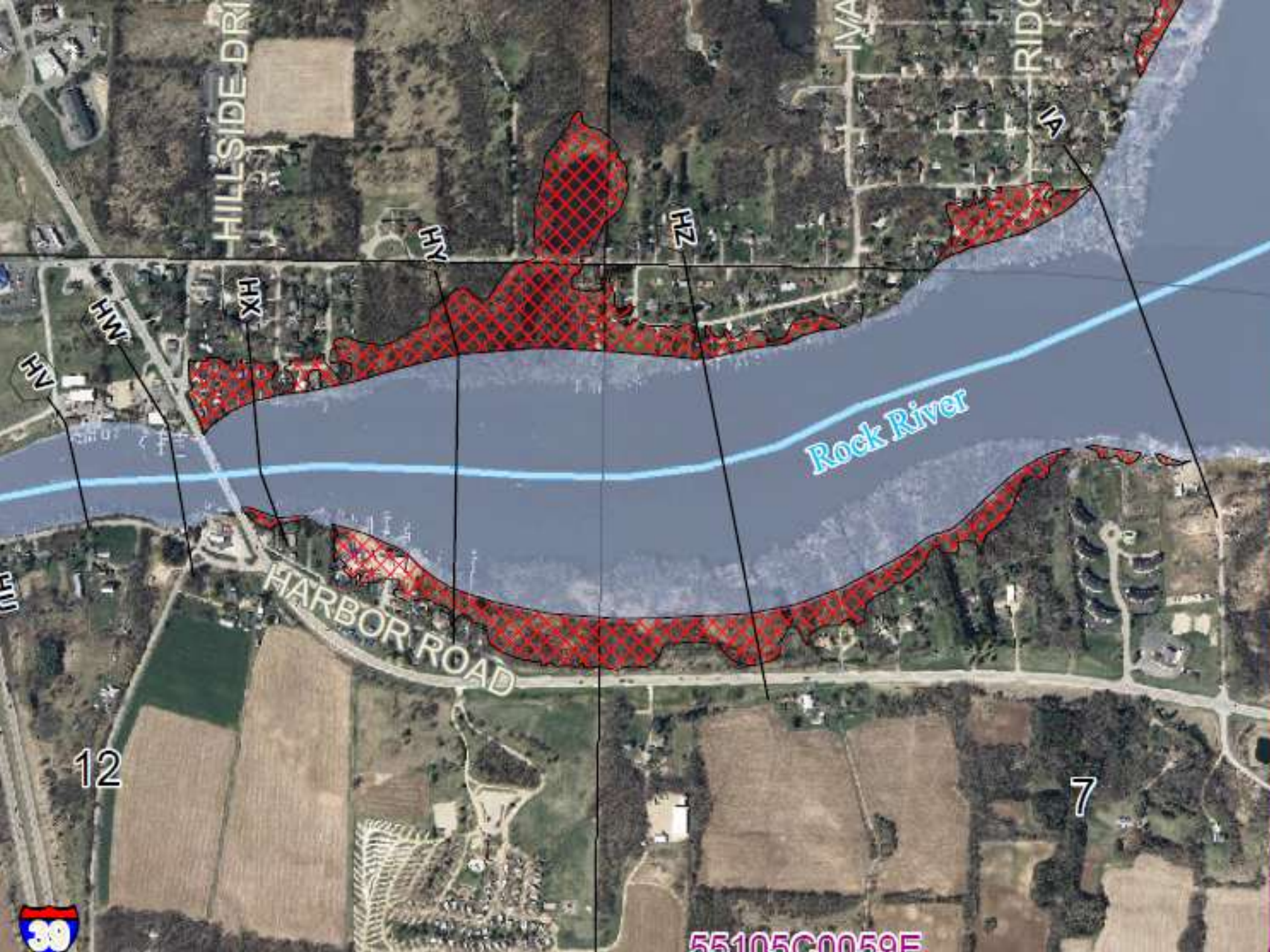
SIOUX DRIVE

HIGHWOOD ROAD

HICKORY NUT ROAD

Leis





HILLSIDE DRIVE

IVA

RIDGE ROAD

IA

HZ

HZ

XH

HW

HV

Rock River

HARBOR ROAD

12

7



55105C0059E

New Floodplain Mapping

- 100-Year Flood Elevations
- Examples:

Location	Existing Elevation	New Elevation
Indianford	782.5	782.0
Koshkonong	784.8	785.0
US 14	785.6	786.3



Indianford Dam

- Safety Inspection conducted 2013 per DNR Requirement
- Report Issued, Schedule Agreed
- Issues for Dec 2014:
 - Update emergency and operating plans
 - Develop Plan for trashrack cleaning





Experimental Project update

- Seeding completed Dec 2013
- Supplemental riprap placed Feb 2014
- Site flooded March – August
- Ecological and dredge area monitoring planned for October
- Carp gate will be set this winter for use in Spring 2015



PAS Project Goals

1. Improve navigation in Lake Koshkonong and on the Rock River
2. Protect and improve aquatic habitat and shoreline wetlands
3. Preserve and increase property values and lake-related economic activity
4. Make Lake Koshkonong a top Wisconsin recreational destination



Dam, data collection/display and shoreline protection discussion issues

Rob Montgomery

Chin Wu



Objectives of Website and monitoring enhancement

- Firepoint Media looking at website upgrades
- Public education & promotion of recreational activities
- Public safety
- Environmental management
- Building RKLD to be resource
- Example of monitoring and web-based display: Yahara infos



INFOS

Integrated Nowcast/Forecast Operation System for Yahara Lakes

[Home](#) | [About INFOS](#)

OBSERVATIONS

Surface Water

Weather

Rainfall

Groundwater

Beaches

Water Levels

MODELS

Nowcast

Hydrologic

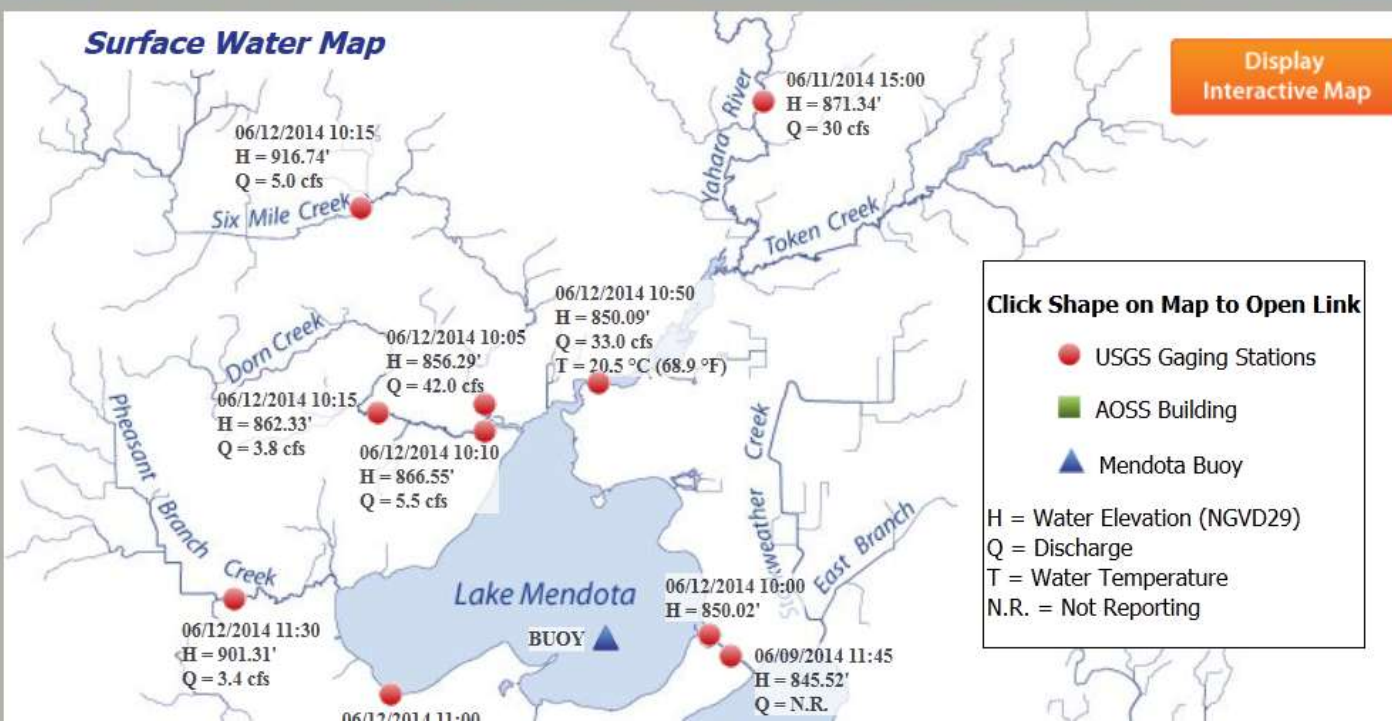
Hydraulic

Hydrodynamic

Forecast

Water Level & Discharge

Surface Water Map



Current Conditions

Air Temperature
21.9°C (71.5°F)

Humidity
54.0%

Wind Direction

WNW
282.0°

Wind Speed
10.4 m/s (23.3 mph)

Pressure
969.0 hPa

All Data Updated
06/12/2014

Partnership

Water Resource Data Collection

- Useful parameters: Turbidity, wave height, nutrients (?)
- Methods:
 - at USGS monitoring stations Newville & Ft. Atkinson (not on Lake)
 - Lake buoy (problems)
 - Submerged sensors
- Can be integrated with real-time and web-based display
- Suggest work group to develop specific options
- Direction from Board



Questions?

