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NFFA Webinars Hosted By

Natural Floodplain Functions Alliance (NFFA)
BIMONTHLY WEBINAR SERIES PRESENTS:

The Nature Conservancy's Emiquon Project: Restoring Functional Floodplain for Nature and People

K. Douglas Blodgett
Director of River Conservation
The Nature Conservancy, Illinois Chapter

April 28, 2016
2:00pm – 3:30pm CT

AGENDA

1. NFFA Federal Updates (15 min):
   - Disaster Deductible (Larry Larson / Sarah Murdock)
   - Implementation Status of the FFRMS (Larry Larson)
   - The National Wetland Condition Assessment – Status & Trends of Wetlands (Jeanne Christie)
2. Quarterly Webinar Topic (45 min):
   - TNC's Emiquon Project: Restoring Functional Floodplain for Nature & People (K. Douglas Blodgett)
3. Webinar Q&A

Photo courtesy of U.S. Fish & Wildlife Service

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NFFA Federal Update: The National Wetland Condition Assessment – Status & Trends of Wetlands

Jeanne Christie
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Association of State Wetland Managers
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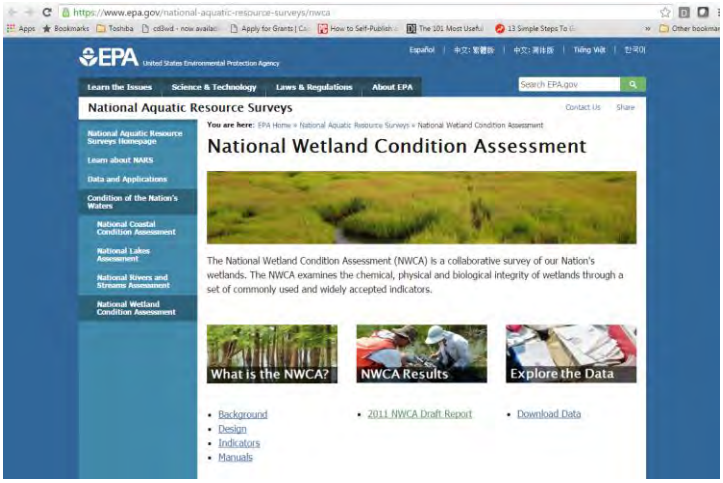
Final Report: Mid-May

https://www.epa.gov/national-aquatic-resource-surveys/nwca

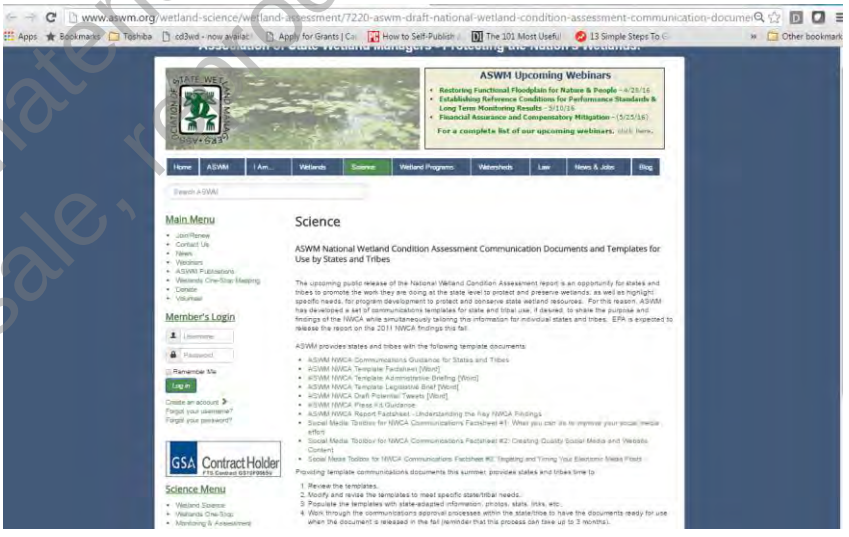


Important Opportunity for States

http://www.aswm.org/wetland-science/national-wetland-condition-assessment

Templates for State Communication

http://www.aswm.org/wetland-science/wetland-assessment/7220-aswm-draft-national-wetland-condition-assessment-communication-documents-and-templates-for-use-by-states-and-tribes



Factsheet on Overall Report

http://www.aswm.org/pdf_lib/wetland_assessment/nwca_report_factsheet.pdf

Understanding the Key Findings of the National Wetland Condition Assessment: A Summary for Non-scientists

Compiled by the Association of State Wetland Managers (Last revised 2-16-16)

The National Wetland Condition Assessment (NWCA) is an evaluation of the environmental health of the nation's wetland resources that has been carried out by the U.S. Environmental Protection Agency along with state and tribal partners. The NWCA is one of four National Aquatic Resource Surveys initiated in 2006. These studies provide nationally-consistent and scientifically-defensible assessments of our lakes, rivers, wadeable streams, coastal waters, and wetlands, and can be used to track changes over time. The first NWCA survey was completed in the summer of 2011; the survey will be repeated in 2016.

EPA National Aquatic Resource Surveys (NARS) are conducted every year with each resource type sampled on five year cycles. This will allow us to evaluate changes in aquatic resource conditions over time

2007	2008-2009	2010	2011
Lakes	Rivers and Streams	Coastal Waters	Wetlands
2012	2013-2014	2015	2016
Lakes	Rivers and Streams	Coastal Waters	Wetlands

NWCA provides an overview of the condition (quality) of wetlands that remain in existence, and does not address wetland loss due to drainage or filling. It is intended to compliment national wetland status and trends studies by the U.S. Fish and Wildlife Service that measure wetland gains and losses, and estimate the area (quantity) of the nation's remaining wetlands. It is assumed that an ecologically healthy wetland will not only provide superior fish and wildlife habitat, but will be better able to provide other ecological services that benefit the public, such as reducing pollutants from stormwater runoff, buffering storm surges, and storing/releasing water supplies. Therefore, identifying factors associated with poor or degraded condition was also an important component of the study.

What was actually measured during the NWCA and why?

Photo courtesy of U.S. Fish & Wildlife Service

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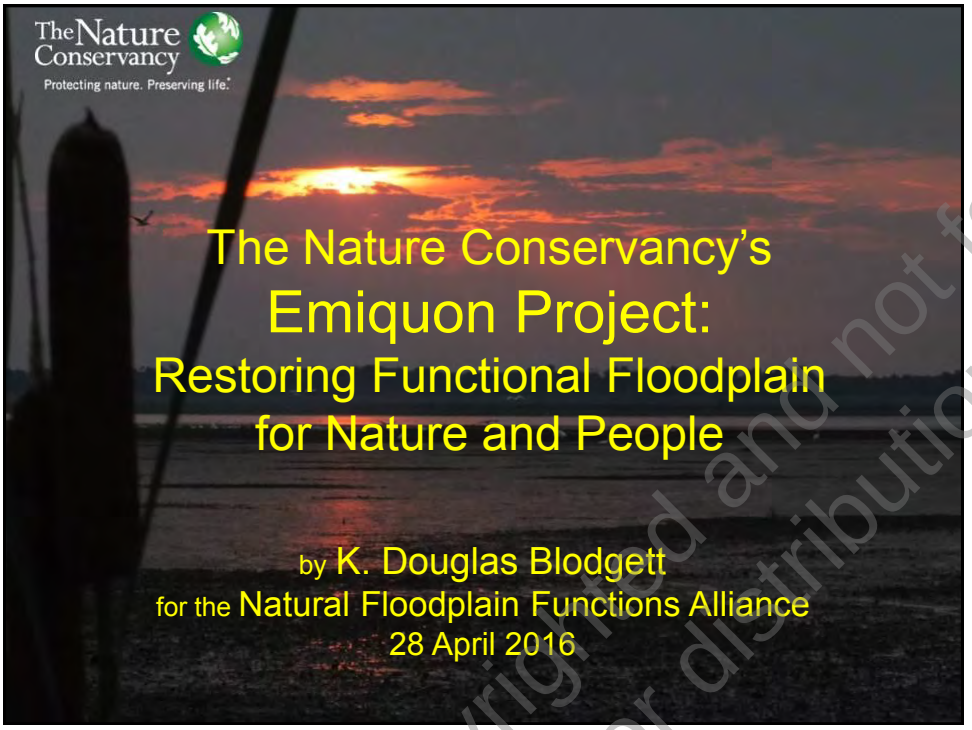

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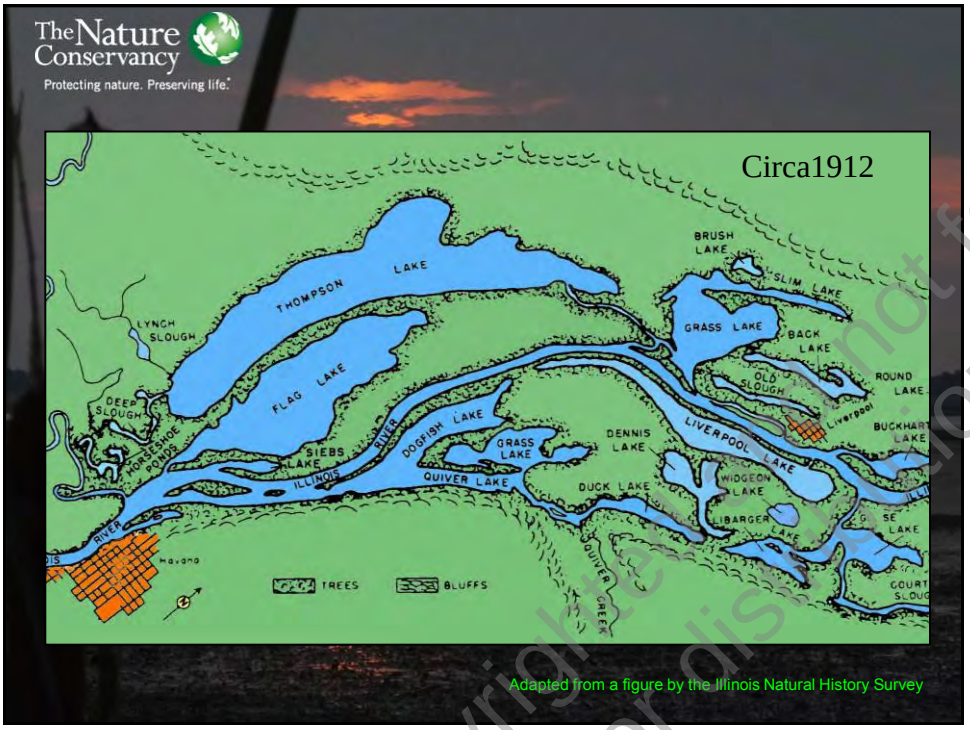

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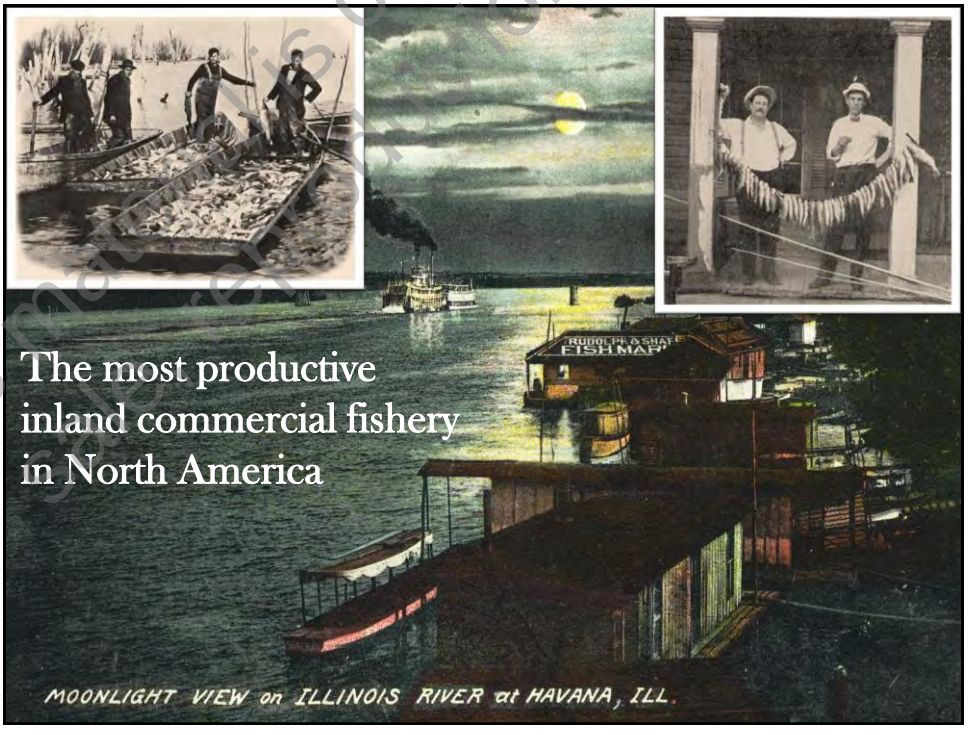

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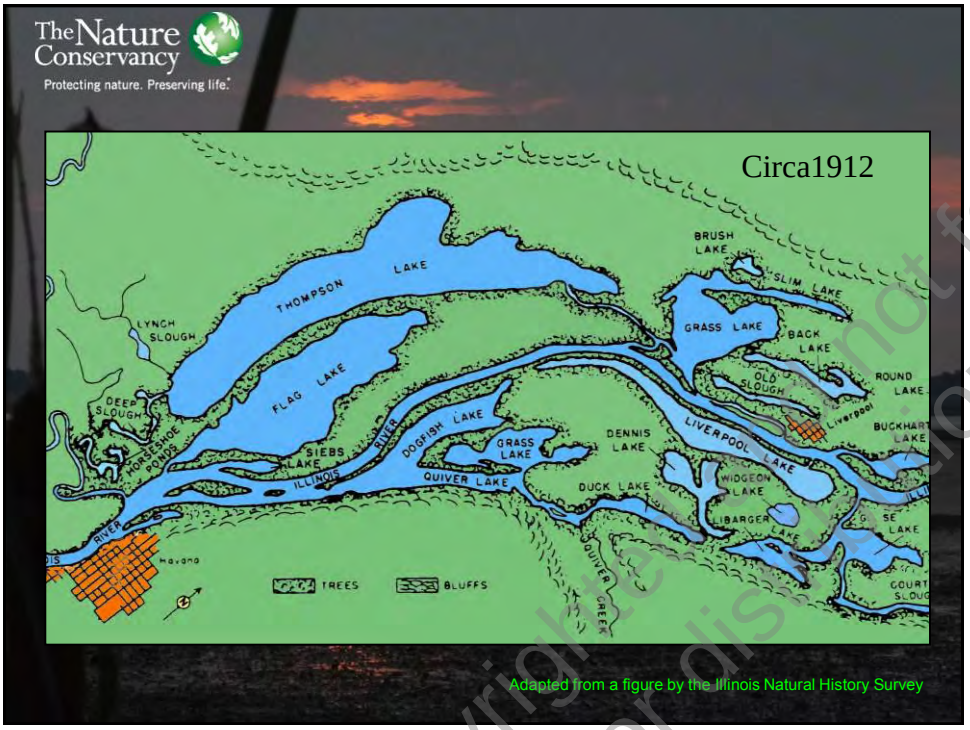

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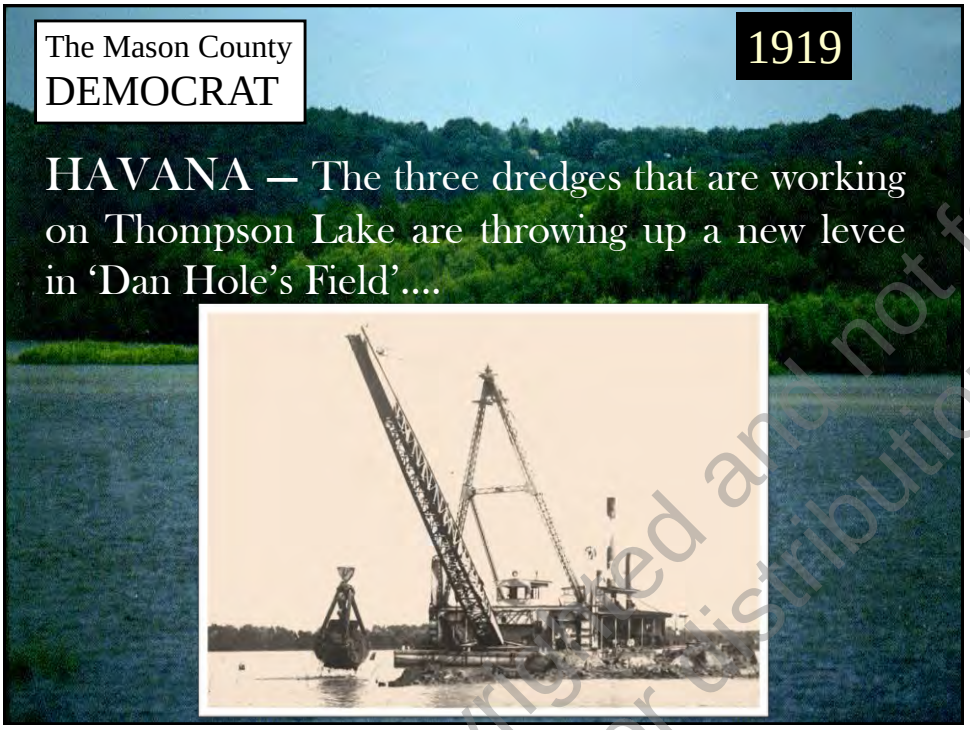

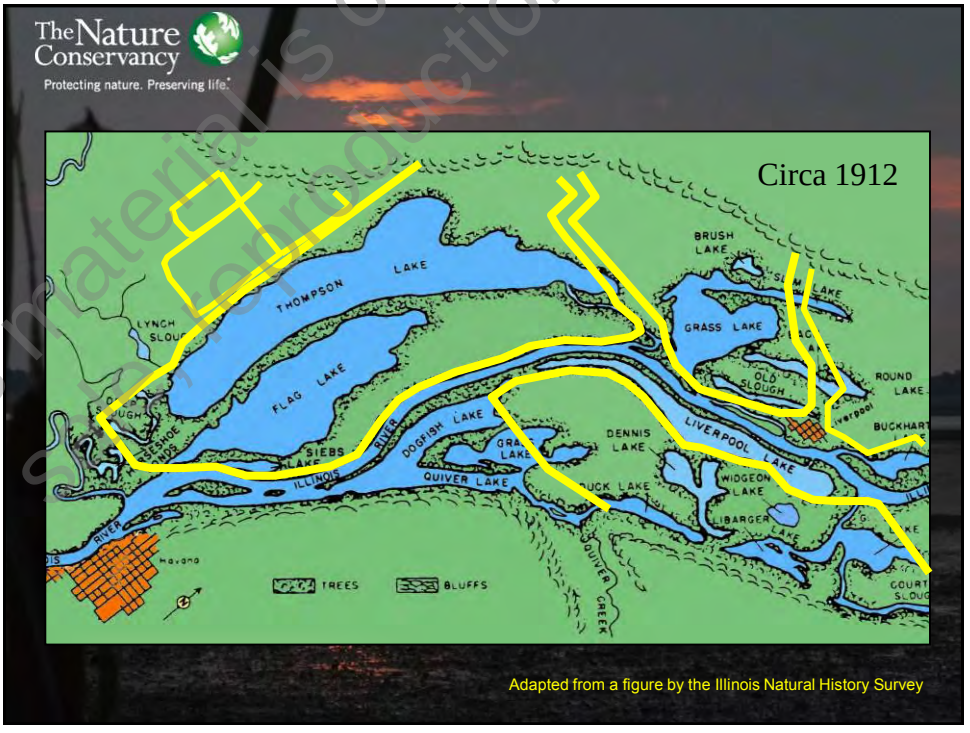

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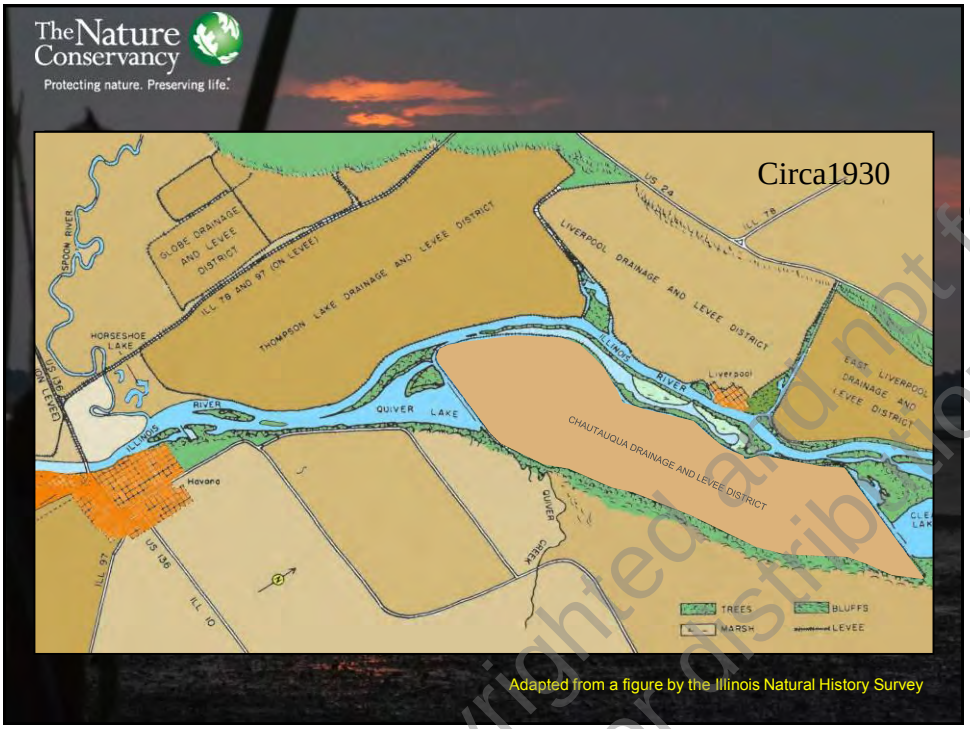

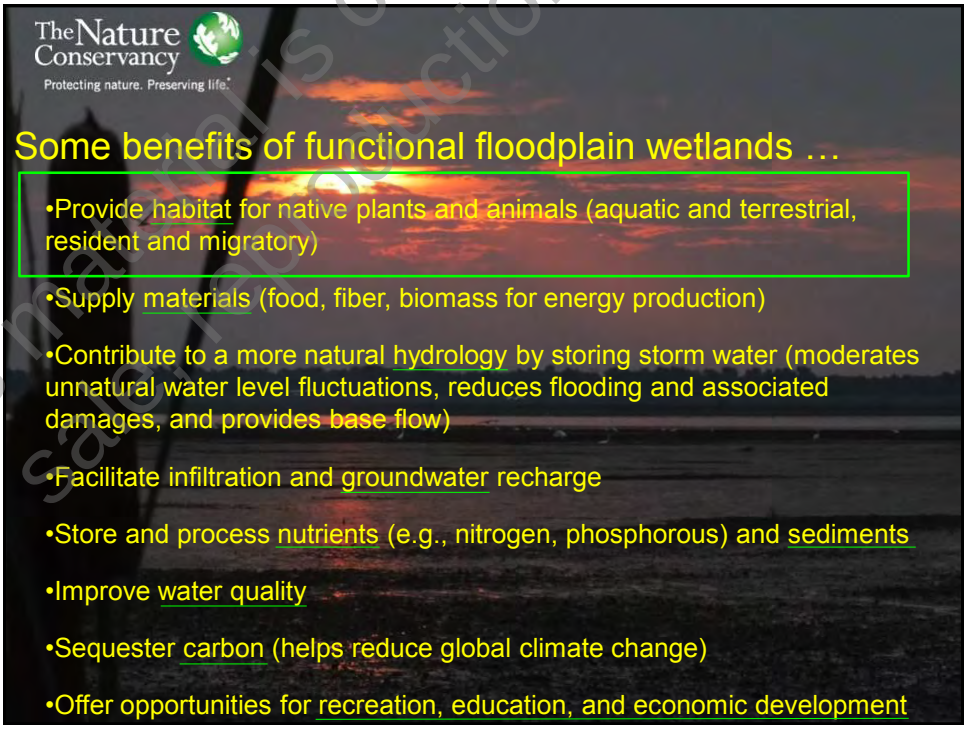

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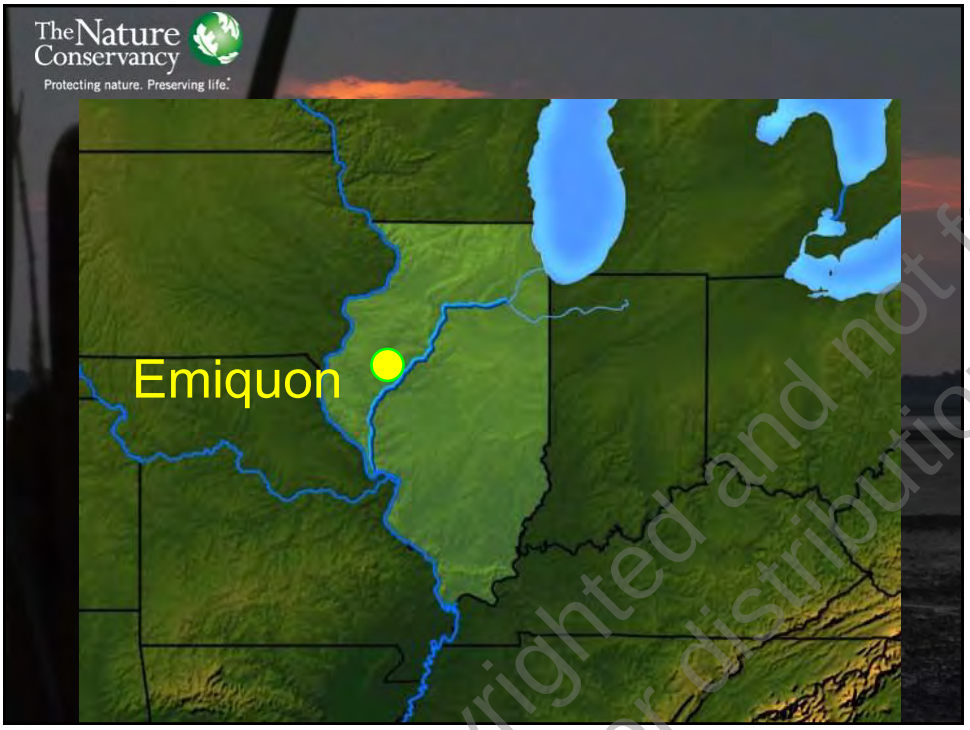

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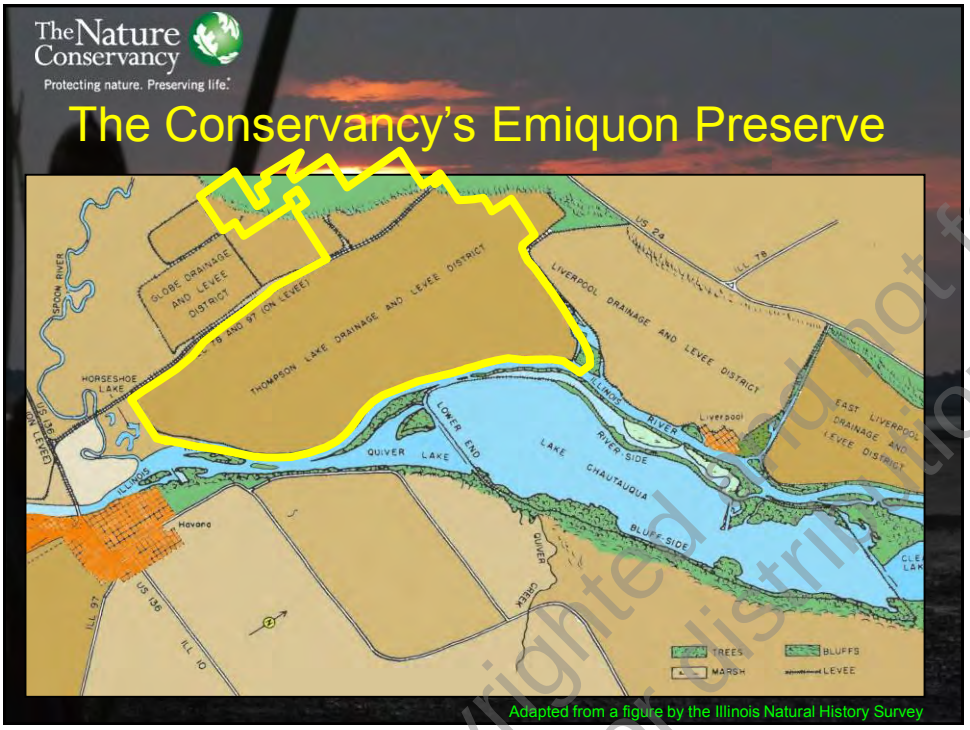

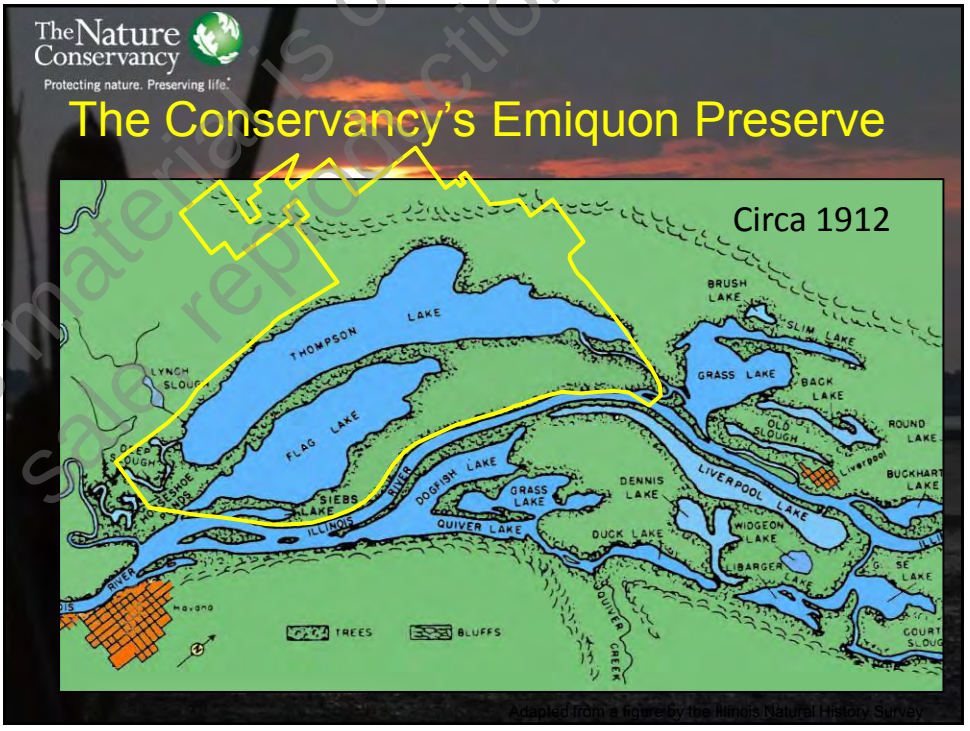

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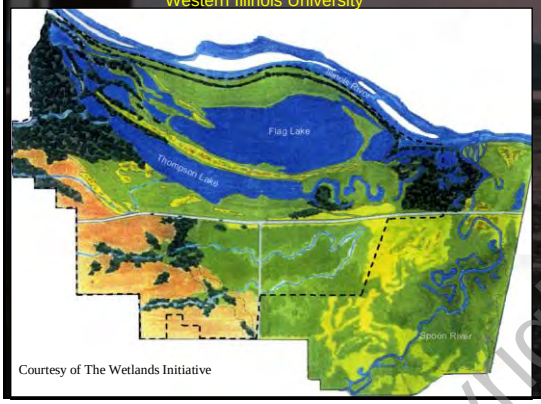
Emiquon Science Advisory Council

Bradley University
Southern Illinois University-Carbondale
Southern Illinois University-Edwardsville
University of Illinois at Urbana-Champaign
University of Illinois at Springfield
Western Illinois University



Courtesy of The Wetlands Initiative

Michigan State University
Texas A&M University-College Station
University of Georgia-Athens
University of Michigan-Ann Arbor
University of Missouri-Columbia
University of Wisconsin-Madison
Winona State University

Illinois Department of Natural Resources
Illinois Natural History Survey
Illinois State Museum-Dickson Mounds
Illinois State Water Survey
Illinois Water Resources Center
National Great Rivers Research and Ed Center

Missouri Coop Fish and Wildlife Unit
Natural Resources Conservation Service
US Army Corps of Engineers, Rock Island Dist.
US Army Corps of Engineers, Environmental Modeling, Simulation and Assessment Center
US Army Corps of Engineers, Water Quality and Aquatic Plant Res. and Technology Center
US Fish and Wildlife Service Refuges
USGS Columbia Env. Res. Center
USGS Upper Midwest Env. Science Center
USGS National Wetlands Research Center

Applied Ecological Services
Ducks Unlimited
Field Museum of Natural History
Smithsonian Environmental Research Center
The Nature Conservancy
The Wetlands Initiative

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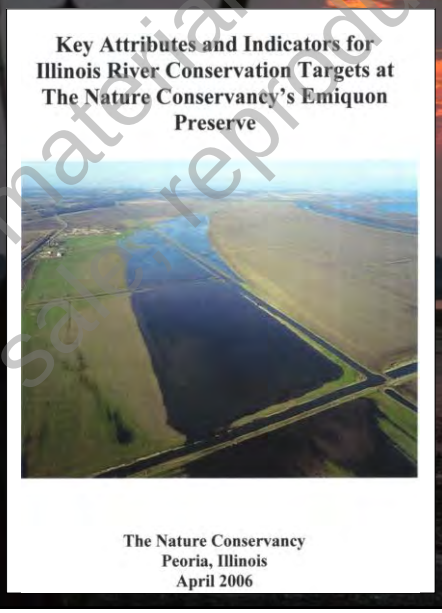

11 Targets (e.g., submersed aquatic vegetation, fish, waterfowl)

~26 Key Ecological Attributes or KEAs (e.g., underwater irradiance, hydrology, community composition, spawning, feeding)

~52 Indicators (% exotics, timing/duration/recession of flood, dissolved oxygen concentration, nest habitat availability)

google Emiquon Key Attributes

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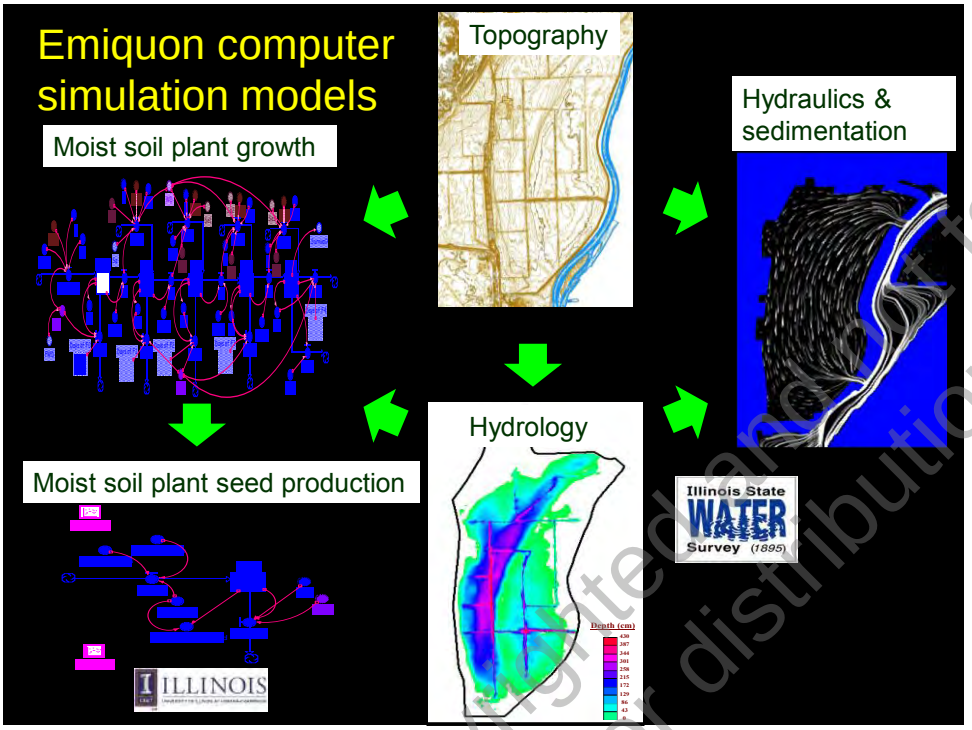

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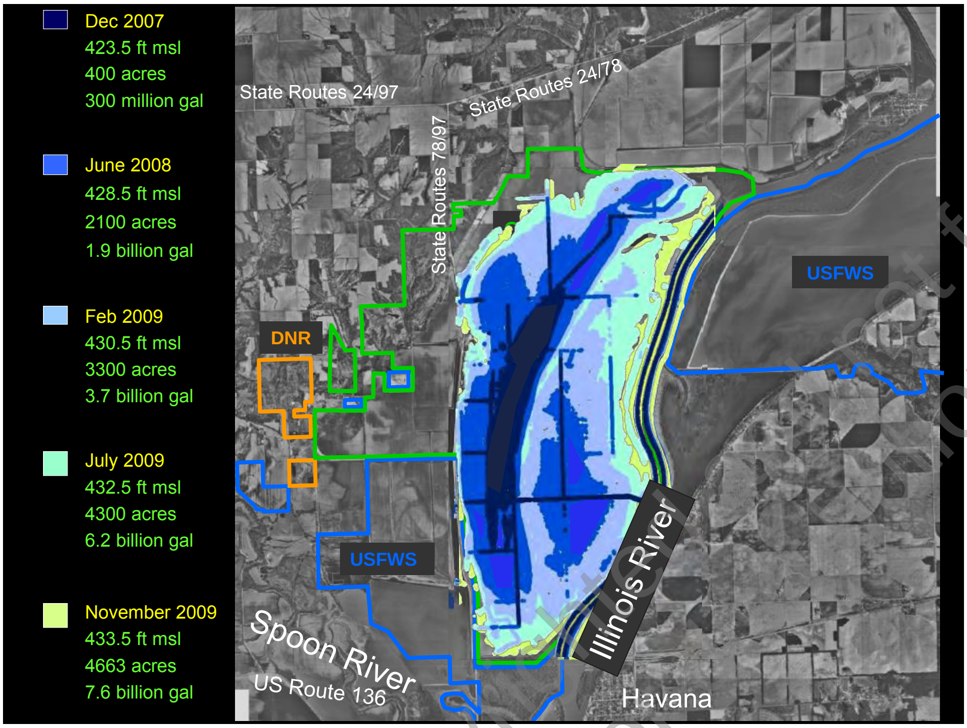

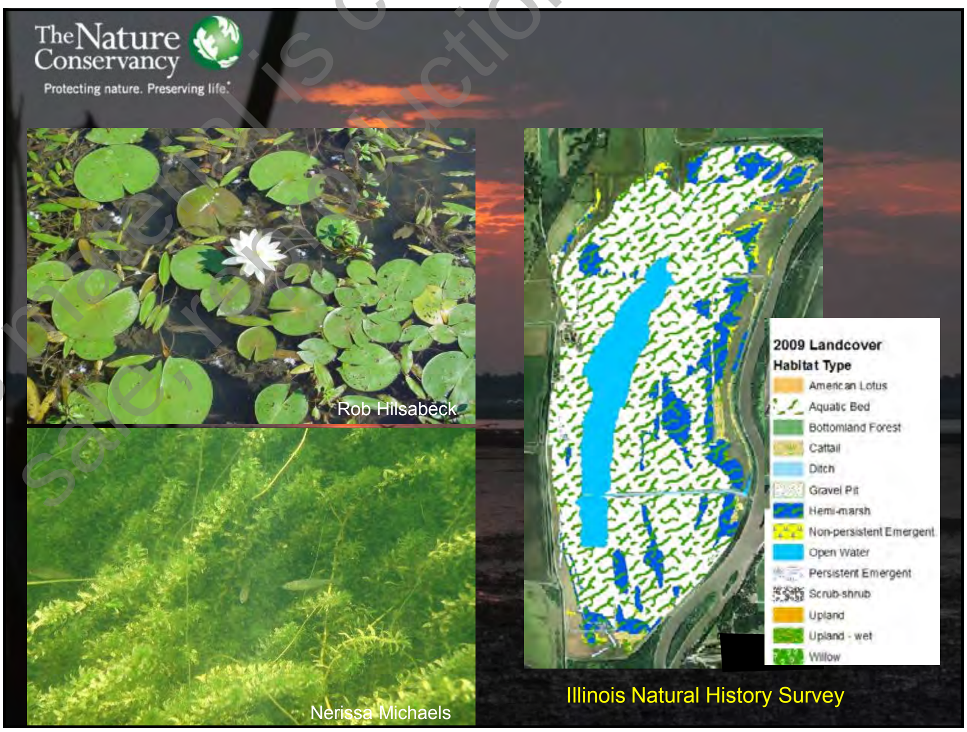

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Some benefits of functional floodplain wetlands …

- Provide habitat for native plants and animals (aquatic and terrestrial, resident and migratory)
- Supply materials (food, fiber, biomass for energy production)
- Contribute to a more natural hydrology by storing storm water (moderates unnatural water level fluctuations, reduces flooding and associated damages, and provides base flow)
- Facilitate infiltration and groundwater recharge
- Store and process nutrients (e.g., nitrogen, phosphorous) and sediments
- Improve water quality
- Sequester carbon (helps reduce global climate change)
- Offer opportunities for recreation, education, and economic development

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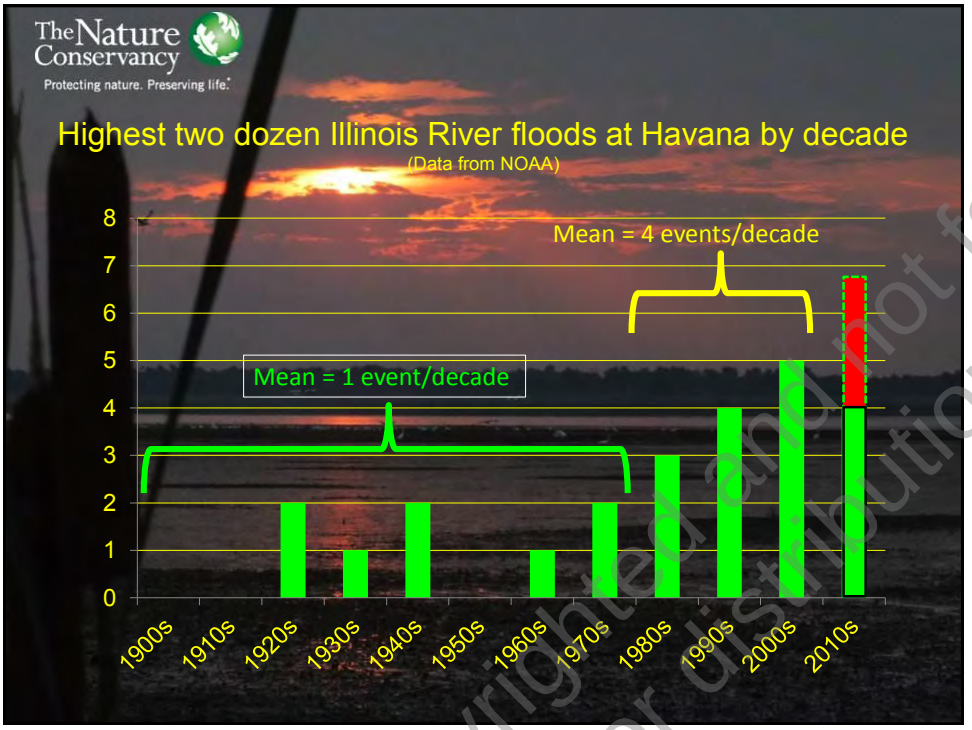

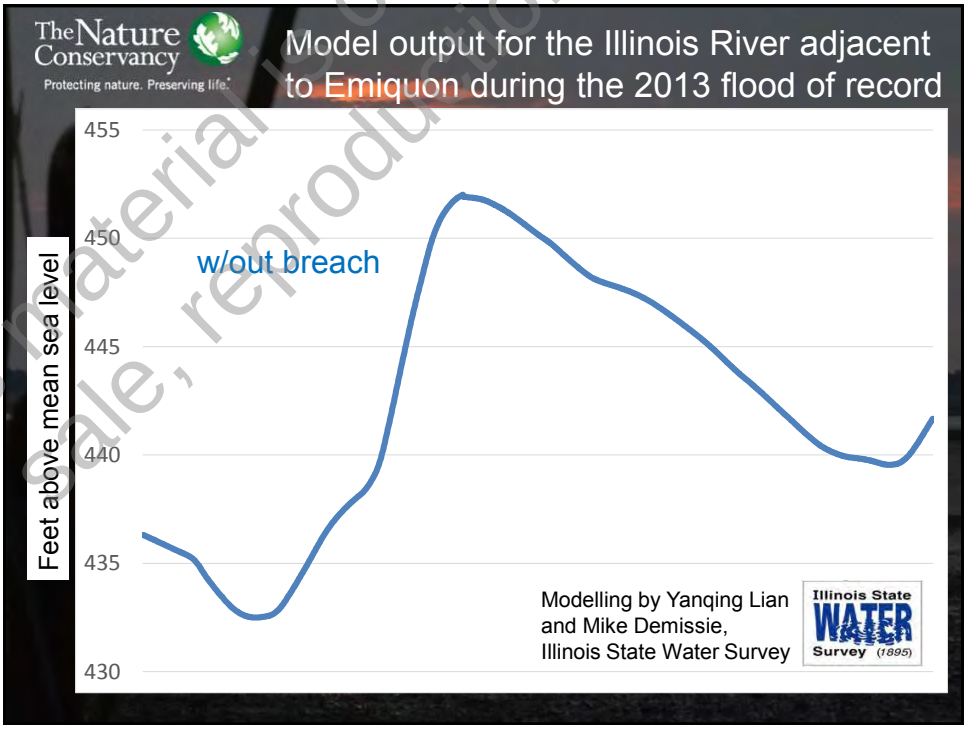

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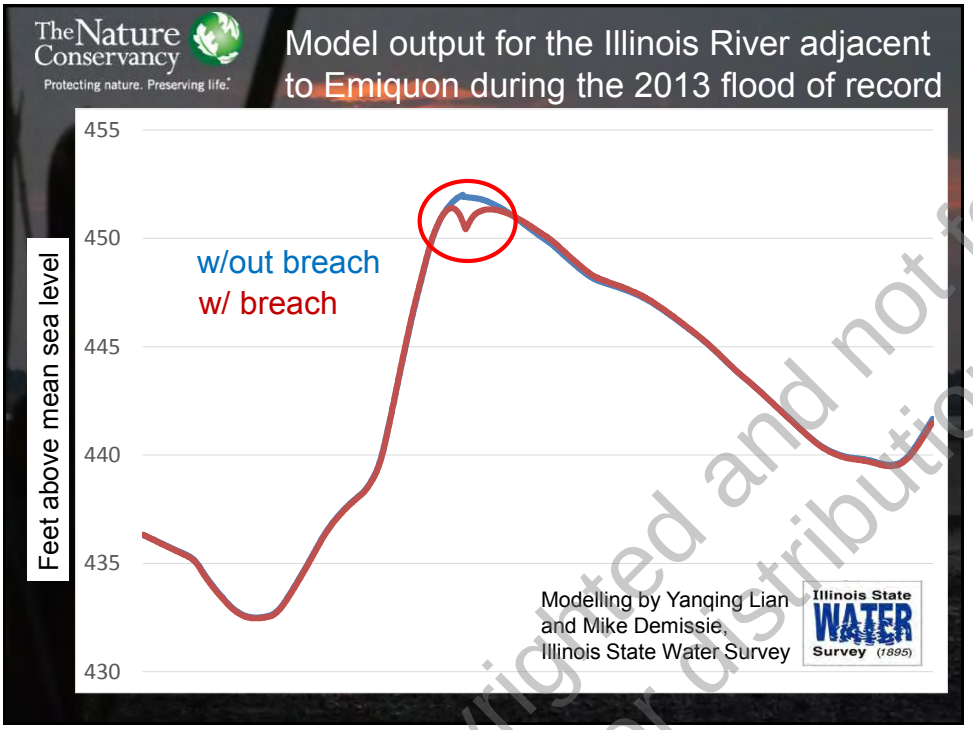

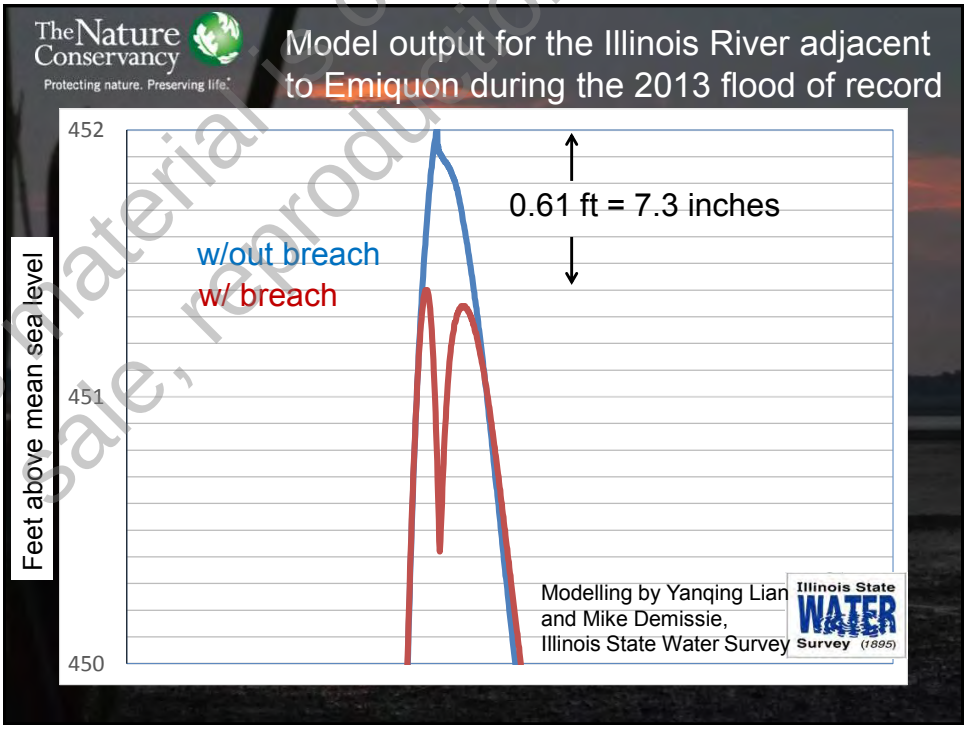

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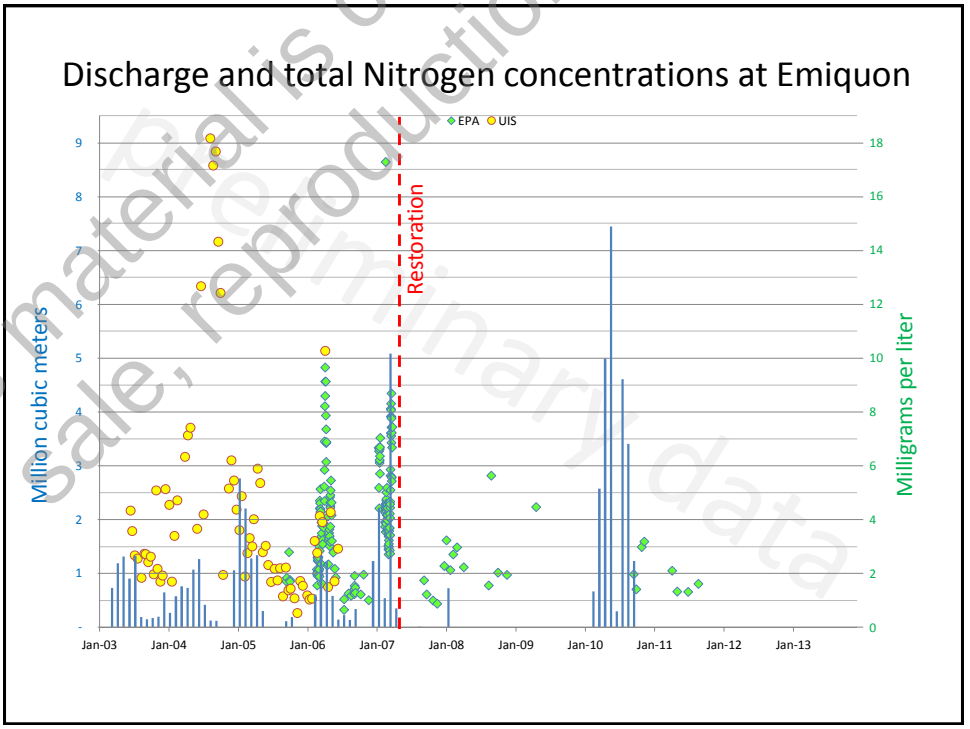

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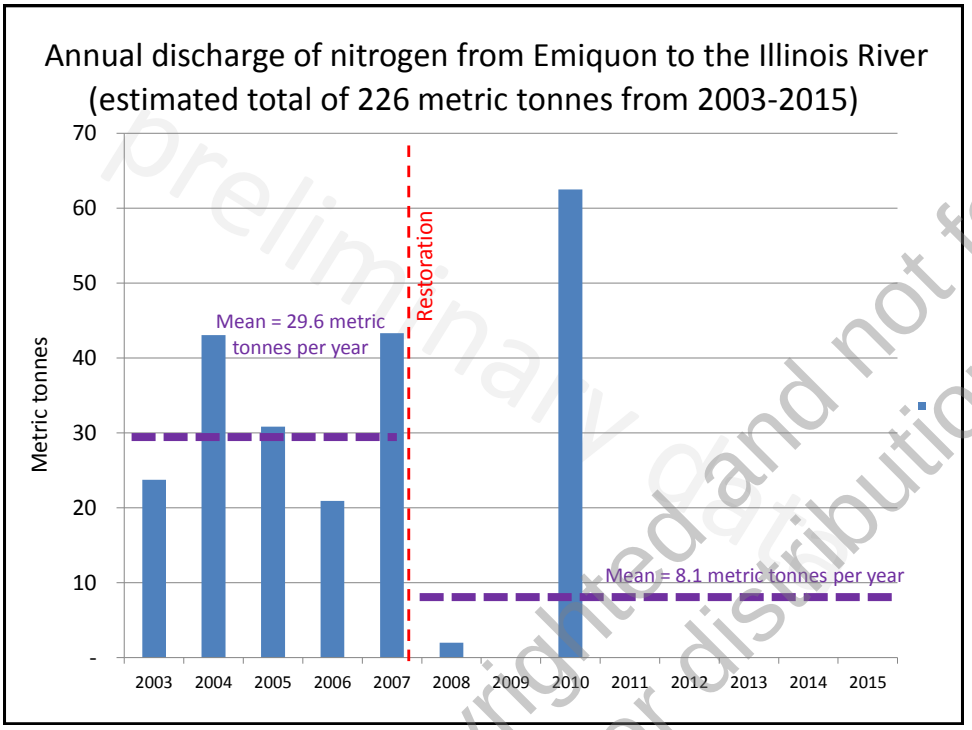

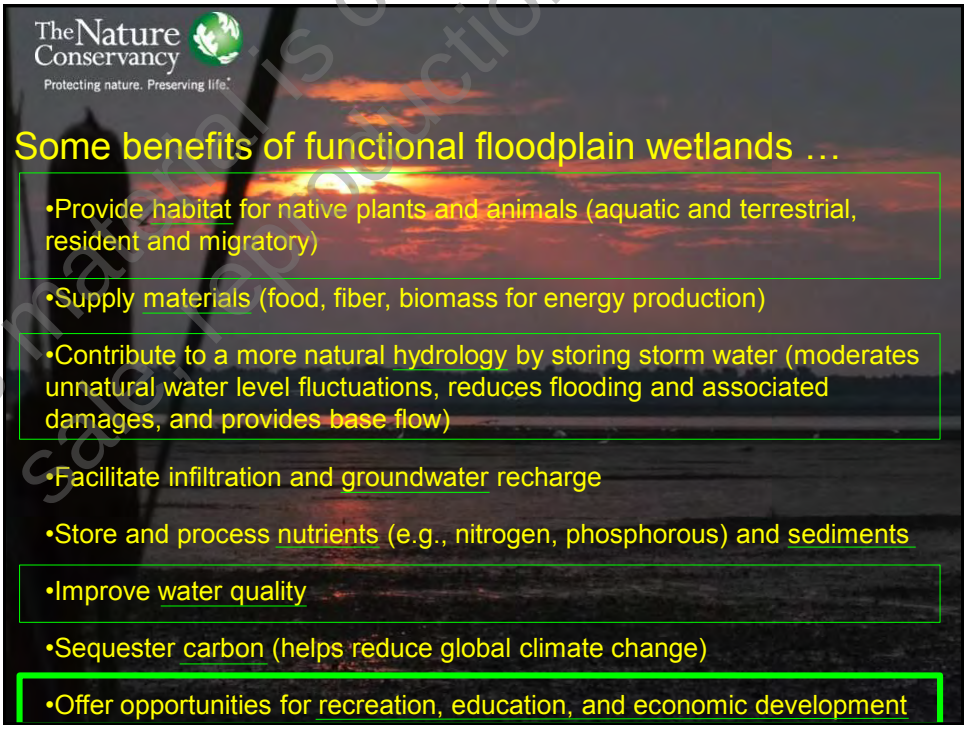

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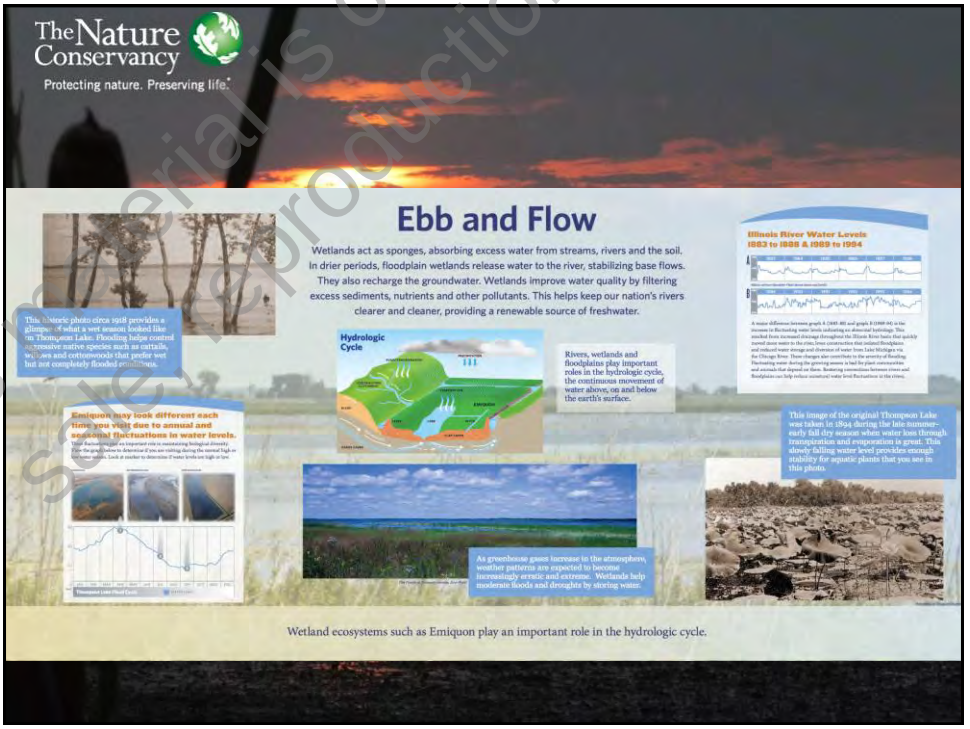

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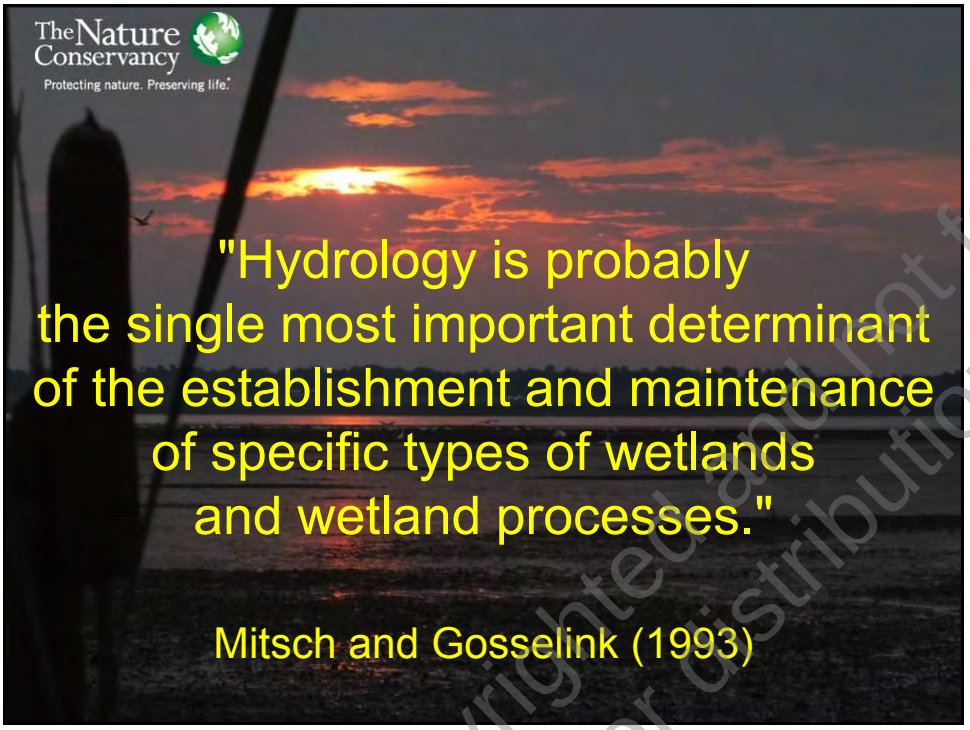

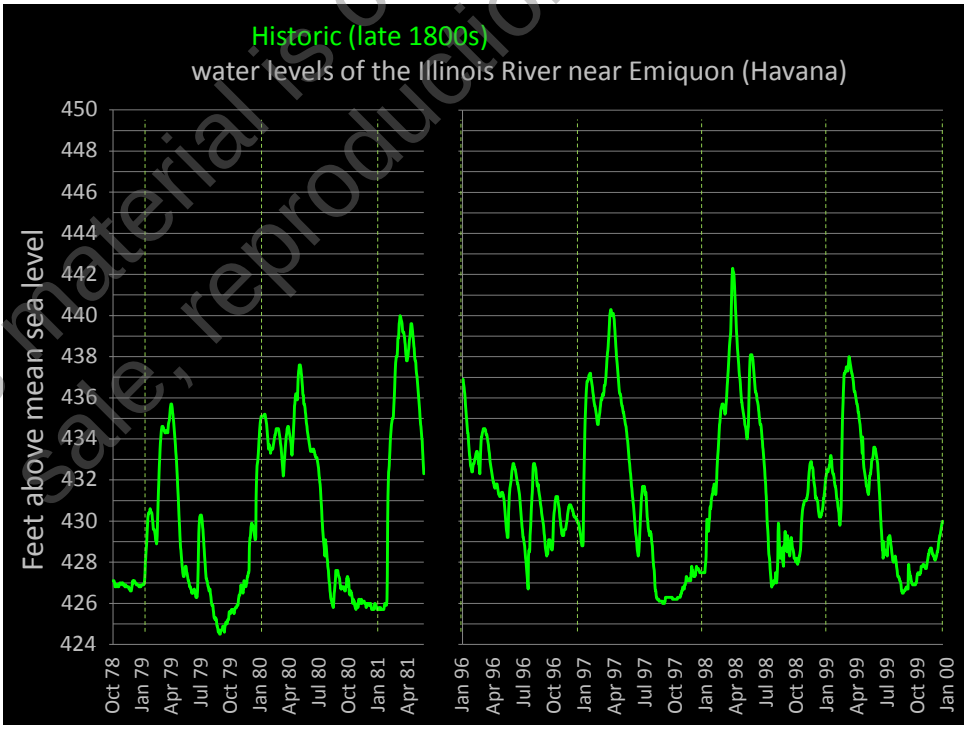

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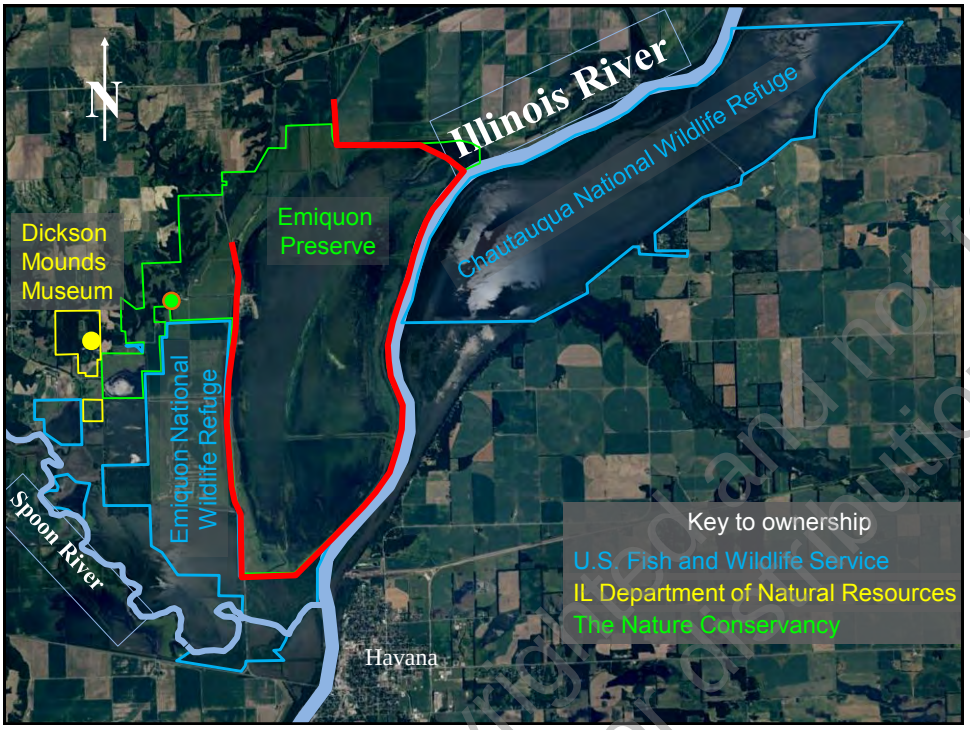

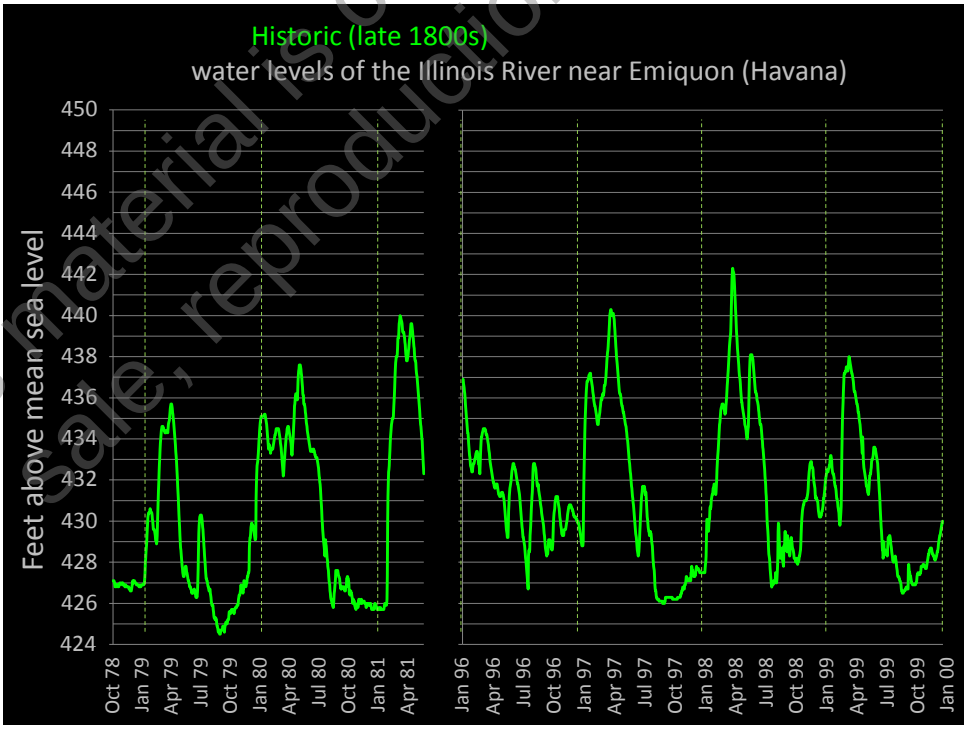

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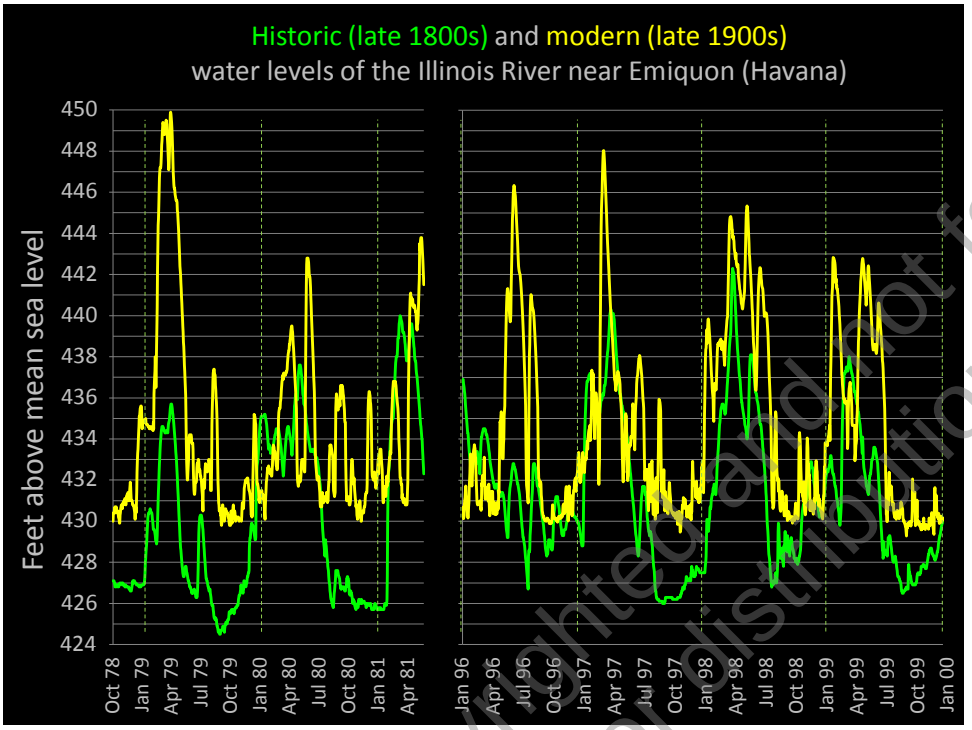
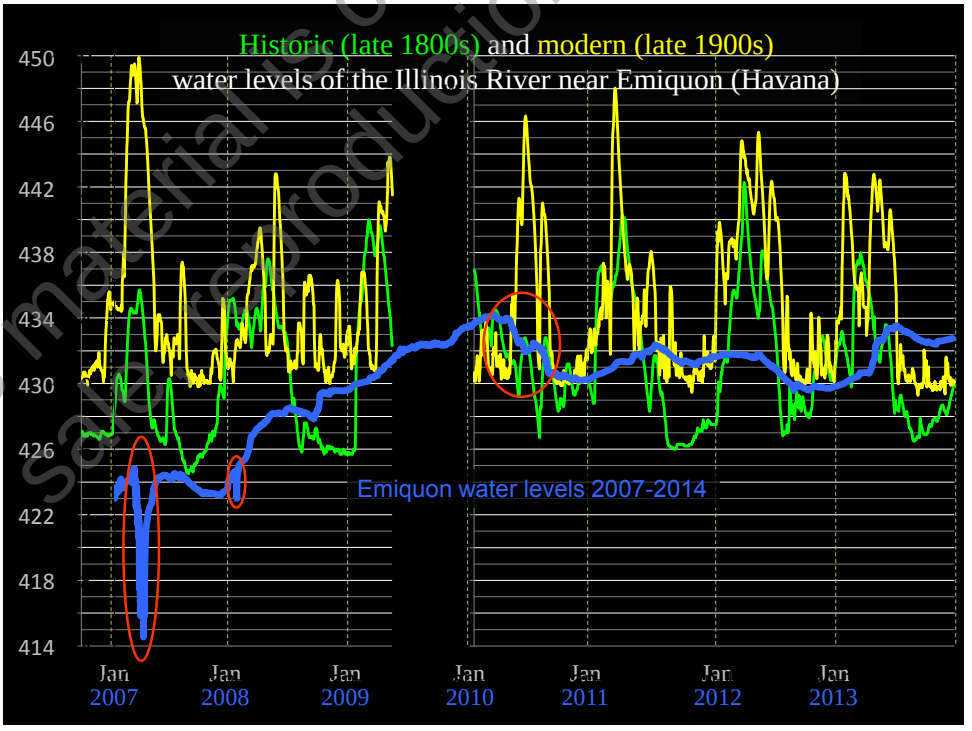
Webinar 4/28/2016





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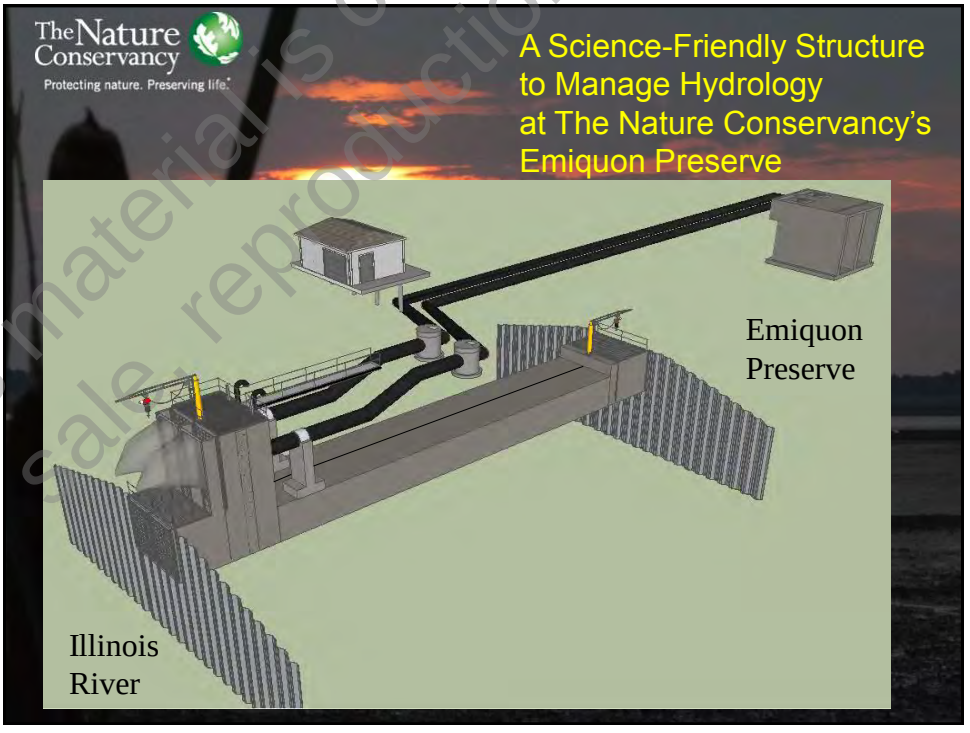

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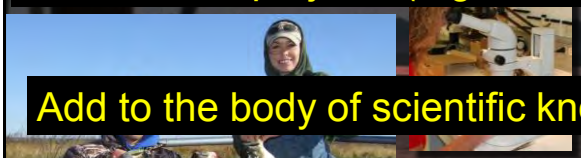
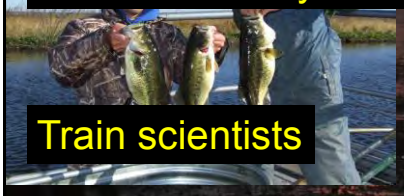
Science at Emiquon

Guide restoration and management at Emiquon
… and other projects (e.g. IDNR, USFWS, USACOE)



Add to the body of scientific knowledge



Train scientists

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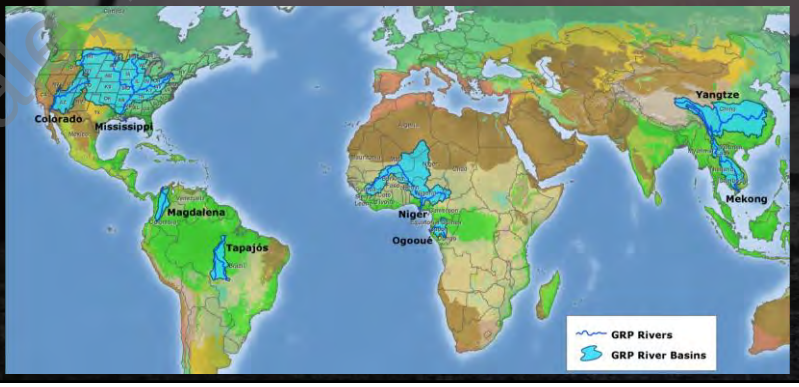
Sharing Science and Lessons Learned through Conservancy Initiatives

Upper Mississippi River Project

North American Freshwater Program

Great Rivers Partnership

Global Freshwater Program



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http://www.aswm.org/watersheds/natural-floodplain-function-alliance

-OR-

http://bit.ly/243JqTp

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