



Mississippi National River
and Recreation Area (MNRRA)
National Park Service

A History of the Upper Mississippi River

**Sustainable Water Resources
Roundtable, October 21-22,
2010**

**John O. Anfinson
Mississippi National River and
Recreation Area
National Park Service**

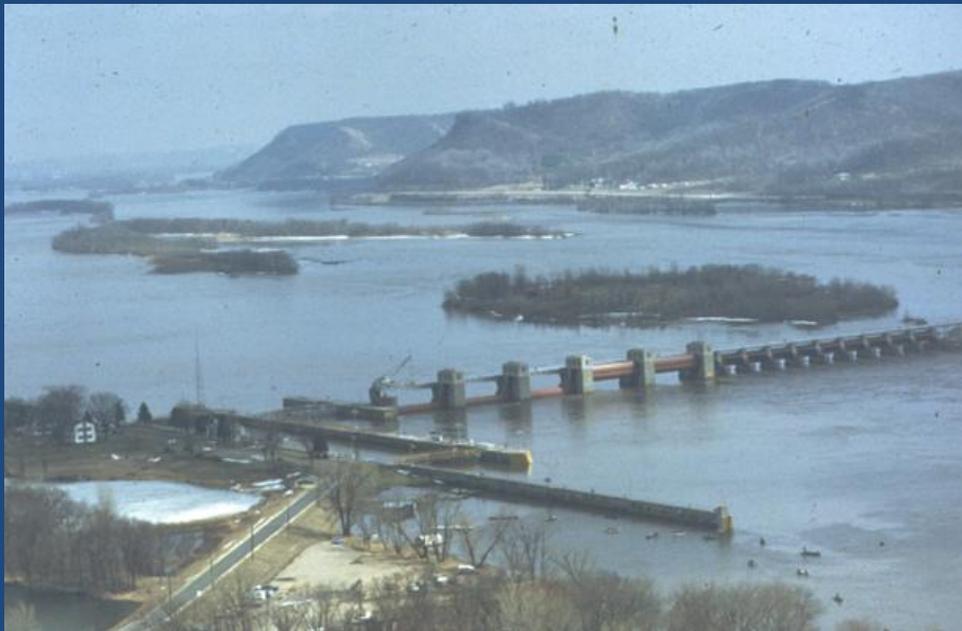
Some Lessons from the Environmental History of Rivers

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Mississippi National River and
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Sustainability Principles

- *Discussions of water sustainability offer most promise when they take place with an understanding of major driving forces*



4th
River ?

Dividing the Pie on the Columbia River?



Grand Coulee Dam



Migrating Salmon

EMP projects

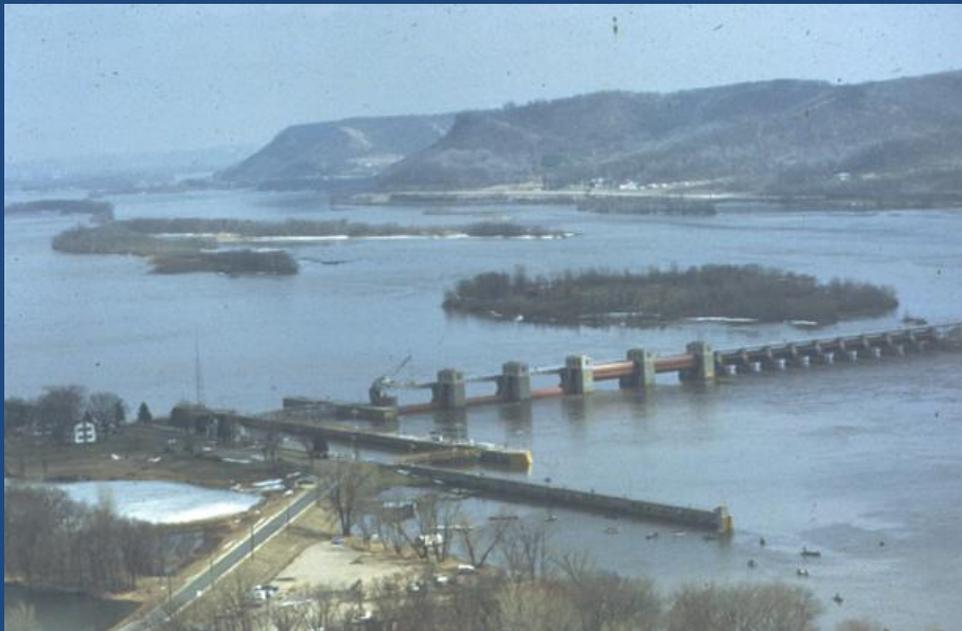
The West's Hydraulic Trap?



Boulder Dam, Colorado River

The Natural River





First Three Upper Mississippi Rivers

1. Natural River, Up to 1878
2. Constricted River, 1878-1930s
3. Locked & Dammed River, 1930s-Present

Snagging Scene



Wing dams below Nininger, 4.5-Foot Channel Project



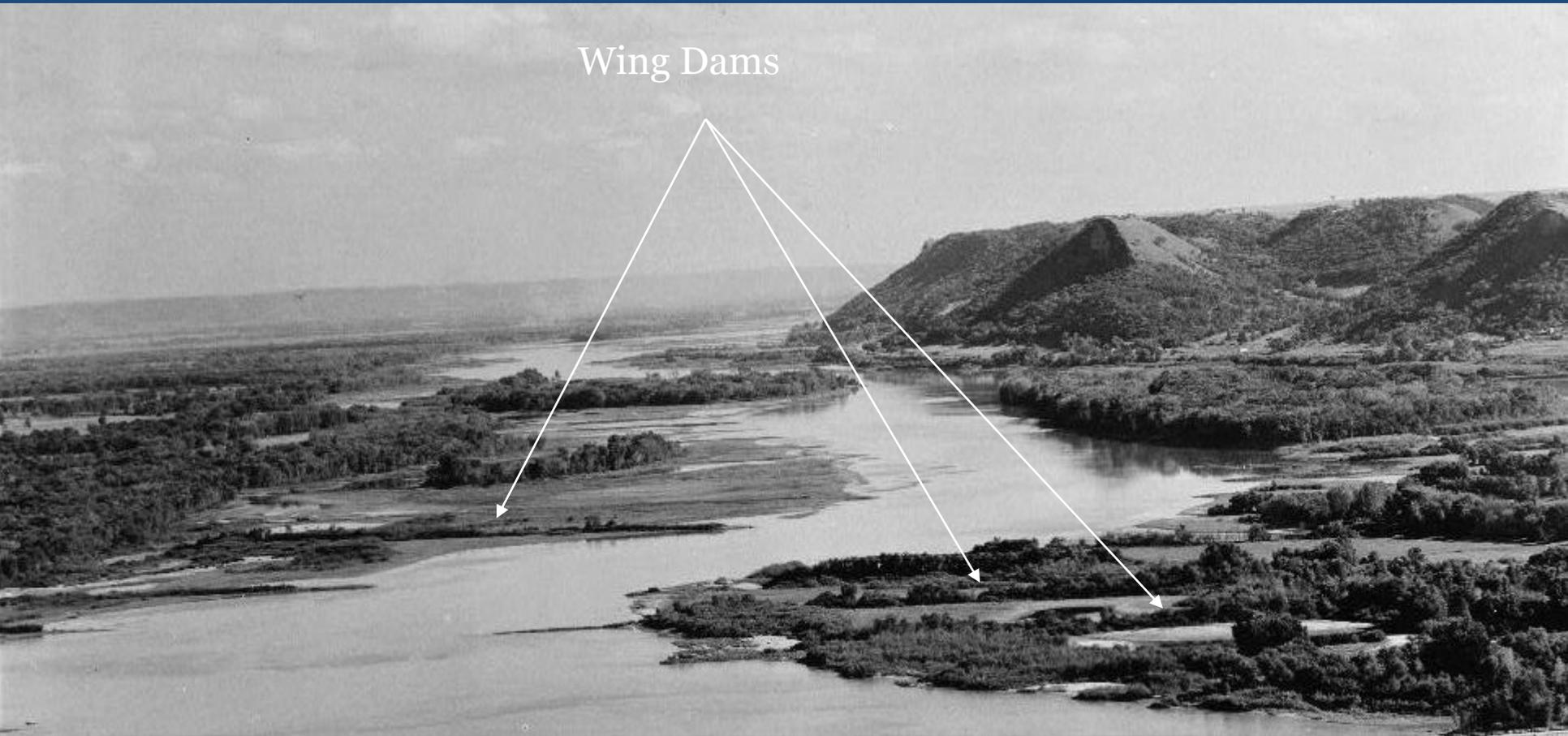
Pine Bend, MN, 1891, 4.5-Foot Channel Project



Channel Constriction, 6-Foot Channel



Channel Constriction, 6-Foot Channel



Minneapolis-St. Louis RR



Mississippi River, 9-Foot Channel Project



UPPER MISS. RIVER -- DAM NO. 8
E.R.A. - CONT. No. E.R. - W923 ENC. 15
GENERAL VIEW--CLASS "D"
CONCRETE 100% COMPLETE
U. S. Engineer Office, St. Paul, Minn.
December 4, 1936. No. 252.

Floodplain Agriculture



Mississippi River floodplain agriculture near Waterloo, Illinois



Mississippi River floodplain at Gorham, Illinois.



Will Dilg,
Izaak Walton
League co-
founder &
refuge
champion



Upper Mississippi National Wildlife & Fish Refuge





Refuge above Rock Island



Levees below Rock Island



Channel constriction, whole
Upper Mississippi River



WHAT
KIND
OF
RIVER?

Image Sources

- Need to fix the numbering and double check the attribution, if needed.
- Slides 5, 6 & 10. Natural River. Seth Eastman(1808-1875) . View on the Mississippi 70 Miles below the Falls of St. Anthony. Art Collection, Watercolor, 1846-1848.
- Slide 7. Grand Coulee Dam, www.physics.uiowa.edu/.../nov_06-04.html and Migrating salmon, staff.washington.edu/jltran/My%20favorite%20g.
- Slide 8. EMP
- Slide 9. Boulder Dam, Colorado River. bridgepros.com/.../index.htm.
- Slide 12. Snagging Scene by Henry P. Bosse, Rock Island District, Corps of Engineers.
- Slide 13. Wing Dams below Nininger by Henry P. Bosse. St. Paul District, Corps of Engineers.
- Slide 14. Pine Bend by Henry P. Bosse. St. Paul District, Corps of Engineers.
- Slide 15. 6-Foot Channel images. St. Paul District, Corps of Engineers.
- Slide 16. L&D 6. St. Paul District Corps of Engineers.
- Slide 16. Minneapolis & St. Louis Railroad. Hibbard Studio. Photograph Collection, 1918-1920, Minnesota Historical Society.
- Slide 17. Minneapolis to St. Louis Railroad. Minnesota Historical Society.
- Slide 18. Lock & Dam 8 Construction. St. Paul District, Corps of Engineers.

Image Sources, Continued

- Slide 19. Floodplain Agriculture. Minnesota Historical Society. Minnesota Harvest Field, Painter: Joseph Rusling Meeker (1827-1889), Art Collection, Oil 1877 .
- Slide 20. Floodplain near Waterloo, Illinois. American Environmental Photographs Collection, [AEP Image Number, e.g., AEP-MIN73], Department of Special Collections, University of Chicago Library.
- Slide 21. Mississippi River floodplain at Gorham, Illinois. American Environmental Photographs Collection, [AEP Image Number, e.g., AEP-MIN73], Department of Special Collections, University of Chicago Library.
- Side 22. Will Dilg, Izaak Walton League.
- Slides 23 & 24. Upper Mississippi River Wildlife & Fish Refuge.
www.scienceiniowa.org.
- Slide 25. Tow and Backwaters. St. Paul District, Corps of Engineers.