

BALDHILL DAM AND LAKE ASHTABULA WATER CONTROL MANUAL UPDATE

Public Open House
11 October 2023



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We are here to:

share about the Corps effort to update the Baldhill Dam
Water Control Manual

AND

listen to your ideas for Baldhill operations



This presentation is also
streaming on YouTube



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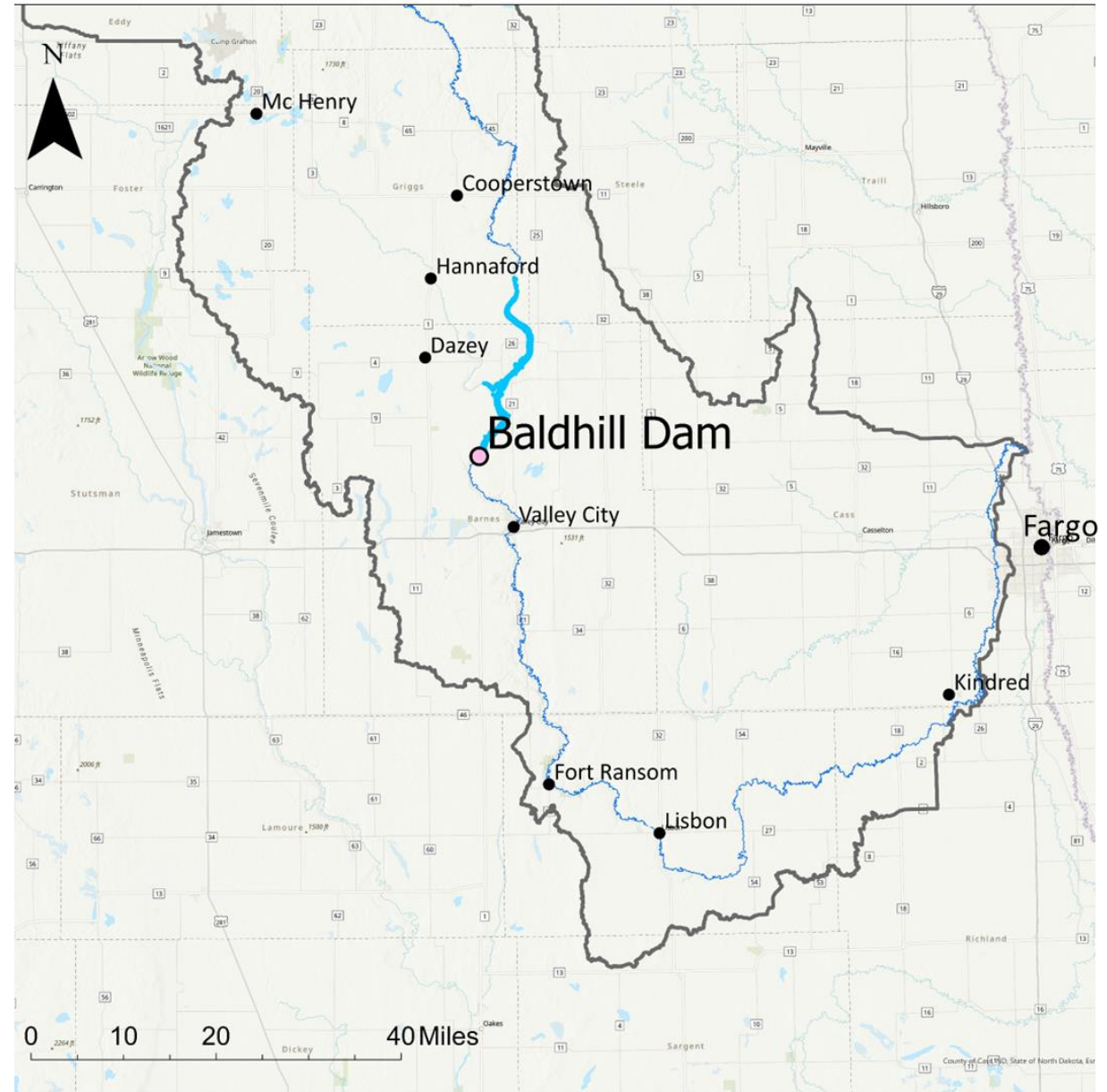


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BALDHILL DAM/ LAKE ASHTABULA PROJECT

- **Main Purposes**
Flood Control and Water Supply
- **Secondary Purposes**
Recreation, Fish and Wildlife, Water Quality





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WHAT IS A WATER CONTROL MANUAL?

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The water control manual dictates how the Corps manages the water at the project under various conditions

→ Corps staff cannot deviate from the manual unless it is an emergency **or** higher-level approvals have been received



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BALDHILL DAM GENERAL OPERATION: **CURRENT**

MANUAL

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Summer

- Maintain steady pool level

Fall/Winter

- Lake Ashtabula is lowered for flood storage to a level dependent on snowpack.

Spring

- Lake Ashtabula is managed to minimize downstream flooding and raised to summer level.



Valley City 2/24/23

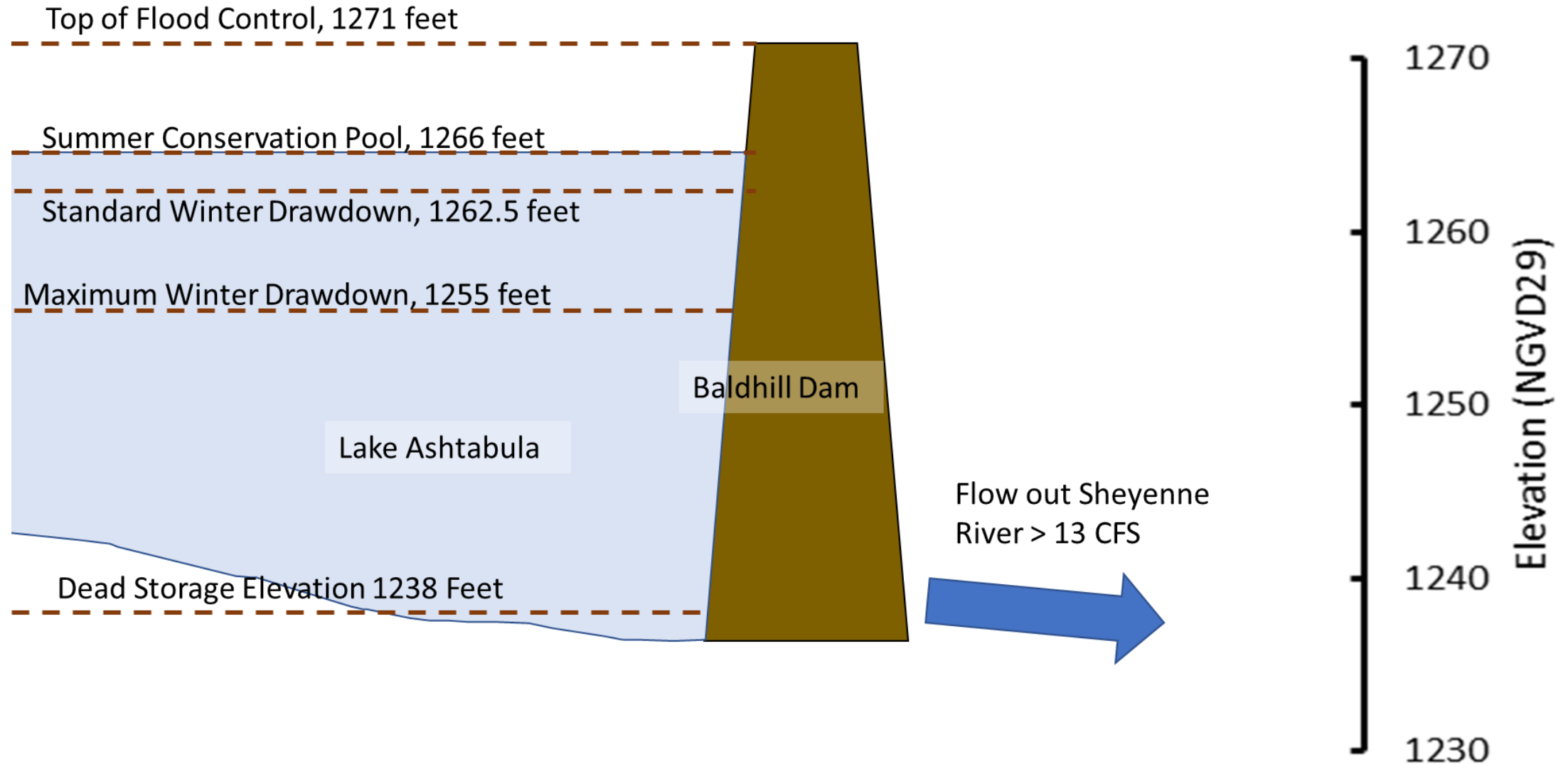


USGS Gage at Valley City 4/14/23



Pool at summer conservation level from the dam, 8/2/23

NORMAL OPERATIONS- *CURRENT MANUAL*





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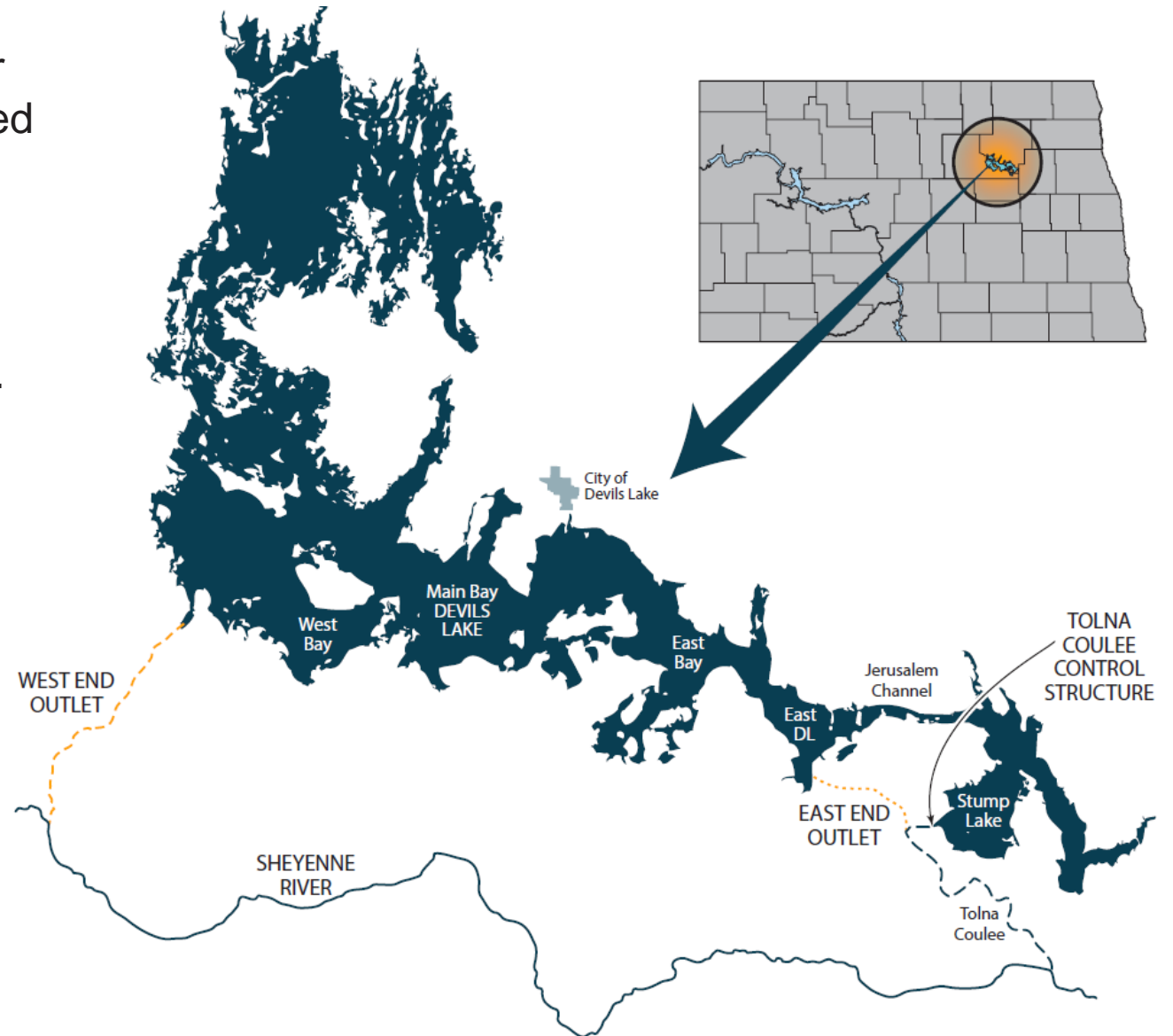


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DEVILS LAKE OUTLET

- Devils Lake outlets into the Sheyenne River upstream of Baldhill Dam via two constructed outlets, constructed in 2005 and 2012
- Total capacity 600 CFS
- Not controlled by USACE
- Average summer flow into and out of Lake Ashtabula is much higher than before 2005.





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RED RIVER VALLEY WATER SUPPLY PROJECT

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Overview:

- Non-federal project
- A proposed project to provide water to the cities of Eastern North Dakota and Western Minnesota during periods of extreme drought.
- Project plans to treat and convey water from the Missouri River Basin to the Sheyenne River.

Impacts to Baldhill Dam Operations:

- Water would be pumped into the Sheyenne River above Lake Ashtabula.
- When operational, this project would require outflow from Baldhill Dam to meet water supply needs downstream.
- Increased outflow from the dam would be partially or fully offset by water inputs from the project.



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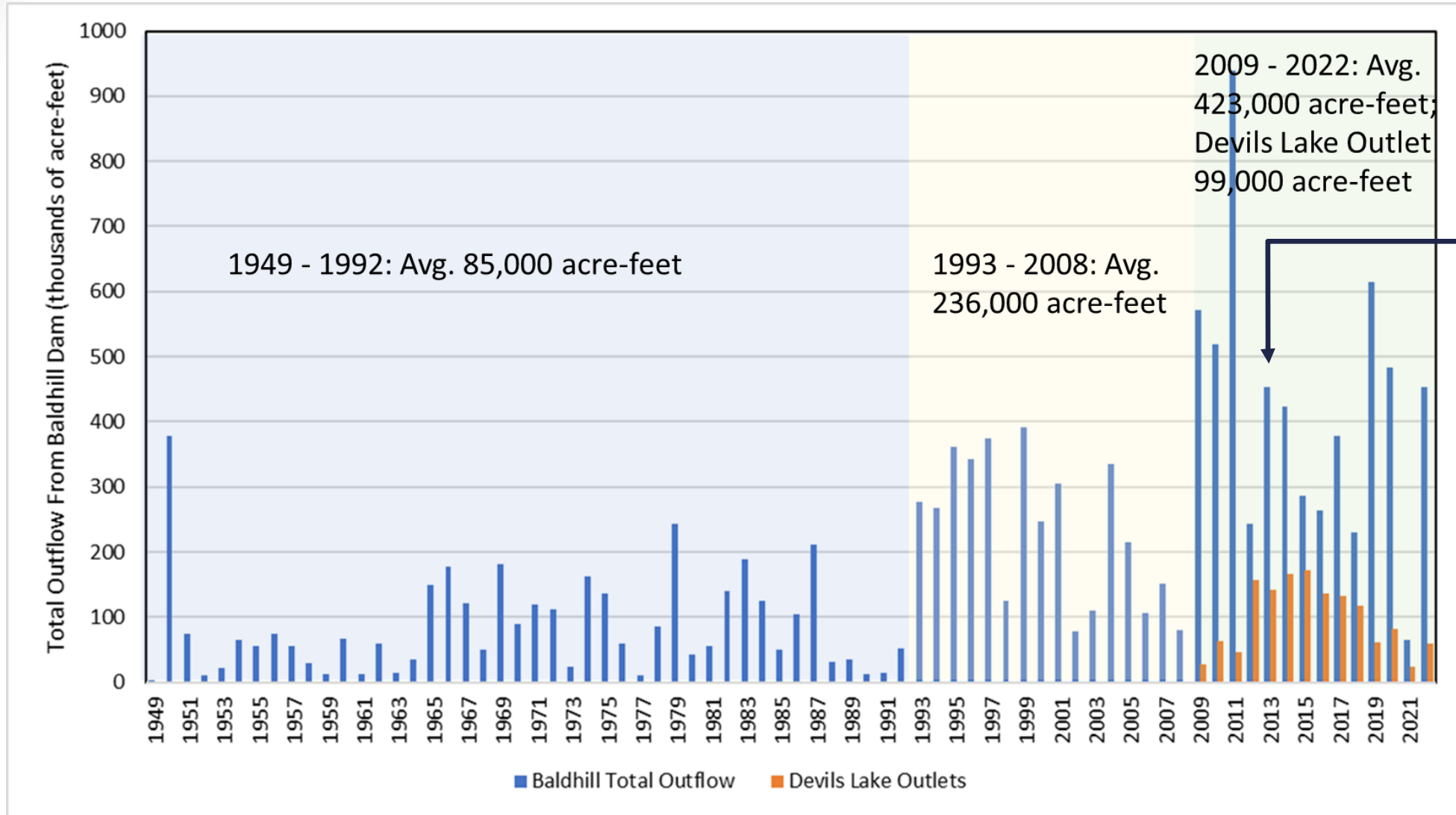


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WHAT HAS CHANGED IN RECENT YEARS?

Annual Total Discharge from Baldhill Dam



Last WCM
Update 2013



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LAKE ASHTABULA – POSITIVES

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- Fish and wildlife
 - Productive sport fishery
 - Waterfowl
 - Migratory birds
 - Mississippi Flyway
- Vegetation
 - Shrubs and forests
- Wetlands
 - 114 Acres of emergent wetlands





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LAKE ASHTABULA ENVIRONMENT – IMPAIRMENTS

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- Poor water quality in both lakes
 - High nutrient levels
 - Farm field run-off
 - Algae blooms
- Fish kills
- Erosion
- Sedimentation
- Loss of aquatic vegetation
 - Turbidity
 - Lake level fluctuation



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ENDANGERED SPECIES

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Species	Status	Group
Northern Long-eared Bat	Endangered	Mammal
Dakota Skipper	Threatened	Insect
Monarch Butterfly	Candidate	Insect





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MIGRATORY BIRD SPECIES

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Common Name

Breeding Period

American Golden-plover

Breeds elsewhere

Bald eagle

Dec 1 - Aug 31

Black tern

May 15 - Aug 20

Bobolink

May 20 - July 31

Clark's Grebe

Jun 1 to Aug 31

Franklin's Gull

May 1 to Jul 31

Golden Eagle

Jan 1 to Aug 31

Lesser yellowlegs

Breeds elsewhere

Long-eared Owl

Mar 1 to Jul 15

Marbled Godwit

May 1 to Jul 31

Western grebe

Jun 1 - Aug 31

Willet

Apr 20 - Aug 5



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TIMELINE FOR WATER CONTROL MANUAL UPDATE

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NOW



Part 1: Sep 8 – Nov 10, 2023

- ☐ Collect and organize public comments on areas for possible improvement

Part 1: Nov 2023 – Apr 2024

- ☐ Prepare modeling and performance indicators
- ☐ Study alternatives based on feedback on areas for possible improvement



Part 1: Apr – Jun 2024

- ☐ Second set of public meetings and comment period on alternative operating plans

Part 1: Jun – Sep 2024

- ☐ Study alternatives based on feedback on 1st round of results



Part 2 of update (to be scheduled, pending funding)

- ☐ Final set public meetings and comment period on recommended plan
- ☐ Approval of plan and approval of updated Water Control Manual



Opportunities for
public input



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HOW TO SHARE INPUT

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Share comments by 10 Nov 2023:

1. **Written** in open house session

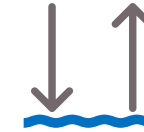
2. **Electronically**

to LakeAshtabula@usace.army.mil

An updated water control manual could address:



Lake sedimentation



Changes to normal pool
elevation (higher or lower)



Changes to outflow from dam



Modifications for
environmental benefits



Other ideas?




FINDING ADDITIONAL INFO

GENERAL LAKE ASHTABULA INFOMATION:

www.mvp.usace.army.mil/Missions/Recreation/Lake-Ashtabula-Baldhill-Dam/

UPDATED GAGE DATA:

www.mvp-wc.usace.army.mil

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Lakes & Recreation Areas

- [Blackhawk Park](#)
- [Cross Lake](#)
- [Eau Galle](#)
- [Recreation Area](#)
- [Gull Lake](#)
- [Homme Lake](#)
- [Lac qui Parle](#)
- [Lake Ashtabula & Baldhill Dam](#)
- [Lake Traverse](#)
- [Lake Winnibigoshish](#)
- [Leech Lake](#)
- [Orwell Lake](#)
- [Pokegama Recreation Area](#)
- [Sandy Lake](#)
- [Volunteer Opportunities](#)
- [Boating Safety](#)

Ashtabula Lake and Baldhill Dam


Lake Ashtabula is located 12 miles northwest of Valley City, N.D., and is situated in one of the most scenic river valleys in the region, offering visitors a wide range of recreation opportunities. The lake offers activities for every season of the year. Fishing and snowmobiling are available in the winter. The spring and fall bring a beautiful view of the migrating waterfowl. There are plenty of activities available in the summer, such as fishing, boating, camping, swimming and picnicking.

There are three designated swimming areas around the lake. Seven boat launching ramps are maintained to provide boaters and fisherman access to all areas of the lake. Picnic facilities and playgrounds are located at most sites. All sites have access to drinking water and rest rooms.

Anglers get your fishing poles oiled and geared. Lake Ashtabula has an abundant population of walleye, northern pike, white bass, yellow perch and black bullheads. The name "Ashtabula" is a Native American word meaning "Fish River," which suits its fish population.


The Corps of Engineers operates seven recreation areas at Lake Ashtabula, providing a variety of facilities and services, as well as actively manages 14 separate wildlife areas at Lake Ashtabula. These areas provide quality habitat for many species of wildlife. All Corps' wildlife management areas are open to the public for hunting. Contact the North Dakota Game and Fish Department for seasons, restrictions and licenses.


Campground reservations



RESERVE NOW

[Click here](#) to make a reservation for Lake Ashtabula campground






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St. Paul District

Water Management Date : Wed, 30 Aug 2023 13:52:11 GMT

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Baldhill Dam

PHOTO



CURRENT VALUES

Parameter	Latest Value	Date
Pool (ft) :	1266.02	30 Aug 2023, 13:00
Tailwater (ft) :	1224.85	30 Aug 2023, 13:00
Flow-In (cfs) :	254	30 Aug 2023, 01:00
Flow-Out (cfs) :	287	30 Aug 2023, 13:00
Total 24 hr Precip. (in) :	0.00	28 Aug 2023, 13:00

Water Control Manual available on national website:
water.usace.army.mil



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Public Input

- Keep remarks brief to allow enough time for all
- There will be time for additional comments or answering your questions during the open house



Open House

- Corps employees answer questions one on one
- Public has opportunity to submit written public comments in person



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PUBLIC INPUT

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It's time to **listen** to your ideas
for Baldhill Dam operations



What issues or
resources
should be
studied?

What do you
want to stay
the same or
change?

What potential
water
management
options for
Baldhill Dam
should be
considered?