### ATTACHMENT 1: STAKEHOLDER AND PUBLIC PARTICIPATION MATERIALS

STAKEHOLDER WORKSHOP SUMMARY (NOVEMBER 29, 2023)
PUBLIC OPEN HOUSE MEETING SUMMARY (FEBRUARY 13, 2024)
CITY OF HASTINGS PROJECT WEBSITE

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# STAKEHOLDER WORKSHOP SUMMARY

## **Lake Hastings Watershed Plan**

Stakeholder Workshop Wednesday, November 29, 2023 5:00 - 7:00 p.m.

Hastings Public Library 314 N Denver Ave Hastings, NE 68901

### **Overview**

A stakeholder visioning workshop for the Upper Big Blue Natural Resources District (NRD) Lake Hastings Watershed Plan was held on November 29, 2023, from 5:00-7:00 p.m. at the Hastings Public Library. The purpose of the visioning session was to bring together a select group of community leaders and stakeholders to learn about the current water quality issues facing Lake Hastings and to generate ideas and a vision for the future of the lake as a widely-shared community asset in the city of Hastings.

Approximately 30 stakeholders attended the meeting, including a handful from the Nebraska Department of Environment and Energy, city staff, and project team members. Meeting sign-in sheets are provided in Appendix A.



The Lake Hastings Watershed Plan Stakeholder Visioning Workshop took place at the Hastings Public Library.

The meeting was broken into two halves (see Appendix B for the official workshop agenda). The first half of the workshop was dedicated to a pre-existing conditions presentation by project team members, in which staff from JEO presented findings from a water quality analysis of the lake and a review of the lake's history in the community. See Appendix C for a copy of the pre-existing conditions presentation.



The second half of the workshop engaged attendees in a visioning session where they were able to step into the role of the project team and design their own future Lake Hastings.

During this portion of the workshop, facilitators led attendees through a prioritization activity that presented different types of lake amenities and uses. Attendees then ranked their top amenities/uses as a group, and concluded with a consensus on which ones were most important for the future of Lake Hastings. These results were used to help guide the next portion of this visioning session where attendees were able to design their own lake. See Appendix D for the final list of amenities/use rankings.

Workshop facilitators then broke attendees into small groups and gave each group their own aerial map of Lake Hastings, a set of markers, and scratch paper. These would become their tools as they began to sketch out their improvements to Lake Hastings.

Once groups were finished with their designs, they presented their final deliverable to the entire stakeholder group and explained their reasonings behind what amenities and uses they chose to include in their final design. Copies of these lake designs can be found in Appendix E.



Small group members work together on their lake designs at the stakeholder visioning workshop.







### **Project Stakeholders**

The final list of stakeholders was developed with support from the City of Hastings, Little Blue NRD, and Upper Big Blue NRD. Stakeholders include community leaders, city staff, Lake Hastings residents, Citizen Engagement Group committee members, and Lake Hastings watershed landowners and producers. For a complete list of stakeholders, view Appendix F.

Because the workshop was invite only, no public notification of the event was prepared ahead of the meeting. However, the Hastings Tribune was invited by the City of Hastings and project team members to attend the workshop and cover the content discussed during the meeting. Consequently an article was written and posted in the Hastings Tribune on November 30<sup>th</sup>, 2023. To read the full article, please see Appendix G.

### **Meeting Conversations and Observations**

Project team members made note of conversations and topics discussed during the meeting that were of note. These notes will be incorporated into the public engagement section of the final watershed plan. Some topics of discussion included:

- Discussion around sediment build-up in the lake and potential causes for this in certain areas and not others.
- Need to improve education around Best Management Practices (BMPs) for rural and urban property owners.
- BMP Discussion
  - Water use and reduction
  - o Chemical use and reduction on urban properties
  - Education on Urban-based BMPs for homeowners in the area and community at large.
    - Opportunity to work with schools to engage children on BMP education.
  - BMP information station posted at Lake Hastings
  - Educational programming with homeowners
    - Master Gardeners
    - UNL Extension office

### **Appendices**

- A. Sign-In Sheets
- B. Workshop Agenda
- C. Existing Conditions Presentation
- D. Lake Amenities Rankings
- E. Small Group Lake Design Concepts
- F. Stakeholder List
- G. Hastings Tribune Article





# **APPENDIX A**

Sign-In Sheets







# Lake Hastings Water Quality Improvement Project – Stakeholder Meeting

Address	JMWV
---------	------

NAME	ADDRESS Street #, Street Name, City, Zip	<b>EMA</b> (option	Company of the Compan	PHONE	Group Representing
Noah Hovorka					NDEE
					Stake holden
Mason Wallpran					Start Cristian gy
Jack Wergin					Upper Big Blue ARD
Trever Wilkerson					Disc Golf Course
Katie Hickle					NOEE
Tarry Inlessor 2					UBBNRD
Dennis Coats					fishing Access
STRUE RIEHLE					City of Hastings
BRYCE HELMS					city of Hastings
Alan Andras					Homoound

## Lake Hastings Water Quality Improvement Project – Stakeholder Meeting

NAME	ADDRESS Street #, Street Name, City, Zip	ÉMAIL (optional)	PHONE	Group Representing
SCOT SNEW				
Lee Vrooman				City of Hastings
Seff Hostenstab				11 //
AOM Stury				LIMITEUS POLICE
Now ARD SHELEY				CITIZEN RESIDENT
Elbert Tray by				566 60V.
MIKE Walenz				LAKE HASTINGS ROSIDENT
THER GESCHEL				LITTLE BLUE NRD
John Nelson				Husting 4
Jessica Hedges				LBURD

NAME Address Email Phase Grap
Marty Sange
Phyllis Salvands
Communay

# **APPENDIX B**

Workshop Agenda







# Lake Hastings Stakeholder Workshop



### **Facilitation Plan**

### **Meeting Details**

November 29, 2023 5:00 to 7:00 p.m.

In-person Only Event Hastings Public Library 314 N Denver Ave, Hastings, NE 68901

### **Meeting Objectives**

To host a visioning session with a select group of community leaders and stakeholders to learn about the current water quality issues facing Lake Hastings and to generate ideas and a vision for the future of the lake as a widely-shared community asset in the City of Hastings.

### **Meeting Layout**

This facilitated conversation will use tables set up in pods or clusters, which will break attendees into teams where they can have small-group conversations but still be able to participate as an entire group with the facilitation activities taking place at the front of the room.

Small group tables will be equipped with note pads/post-it notes for attendees to write ideas on, and multiple writing utensils to use during facilitation activities with the entire group.

### **Meeting Invitation**

- Stakeholder invitation selected attendees were chosen to participate in this
  conversation and will be invited by email or phone call from a JEO team member the
  week of 11/13.
- Press release

  sent to City 11/17, decided to not share with media
- Follow-up phone calls/messages will be sent to individual stakeholders the week of the meeting by Kristen Ohnoutka, JEO Consulting Group (kohnoutka@jeo.com).
- Project website

### **Anticipated Attendance**

- Technical Team
  - Kristen Ohnoutka, JEO
  - o Adam Rupe, JEO
  - o Amelia Long, JEO
  - Jake Miriovsky, JEO
  - Tyler Goeschel, LBNRD

- o LBNRD Board Member
- o Jack Wergin, UBBNRD
- o Terry, UBBNRD
- o Lee Vrooman, City of Hastings
- o Chad Bunger, City of Hastings
- o Bryce Helms, City of Hastings
- o Elbert Traylor, NDEE
- o Noah Hovorka, NDEE
- o Alex Engel, Nebraska Game and Parks

	Stakeholder Name	Invited On	RSVP	
	Phyllis Salyard, M.D. (retired)	11/14	Yes	
Citizen Engagement Group	John Nelson	11/14, called on 11/16 and confirmed	Yes	
	Scott Snell	11/14, called on 11/16 left voicemail	Yes	
eut	Scott Runck	11/16 called	Yes	
Ĕ	Mary Peterson	11/14		
gage	Matt Sheehan	11/14 & called on 11/16 but not in service		
E	Carol & Mike Kleopenger	11/14 & 11/15	No	
iizen	Howard Sheley	11/14 & called on 11/16 left voicemail	Yes	
Ë	Julie Jackson	11/16 called left voicemail	Yes	
	Marty Stange	11/14	Yes	
	Craig Oswald	Called 11/16, left voicemail	Yes	
onal S	Dennis Coats, Fishing	11/15	Yes	
Recreational Groups	Trevor Wilkerson, Disc Golf		Yes	
	Adam Story, Fishing/Boating	11/15,	Yes	
Schools	Jeff Linden, Principal @ Hastings High School	11/14		
Scho	Jeff Janda, Principal @ Watson Elementary	11/14		
	Dale Bonifas,	Emailed on 11/21		
Landowners	Kerwin Kroger,	Emailed on 11/21		
	Larry Schutte,	Emailed on 11/21		
	Todd Burr,	Emailed on 11/21		
	Kevin Bruntz,	Emailed on 11/21		
	Mason Hoffman,	Emailed on 11/21	Yes	
	Alan Anderson,	Emailed on 11/21	Yes	

### **Refreshment Table**

- Sandwich meals provided by JEO (need RSVP the week before for meal count, November 20<sup>th</sup>-24<sup>th</sup>)
- Drinks (City of Hastings bring cooler with water/drinks)

### **Meeting Agenda**

\*Prior to meeting starting, invite attendees to grab food and then find a seat.

### Welcome & Introductions (5 minutes) – City/Adam/Kristen

- Welcome attendees
- Goals/schedule of the project vs. long-term goals for the lake
  - Recap from spring 2023 public meeting and Citizen Engagement Group meetings.
- Purpose of the meeting no costs will be discussed, as those are identified as the plan is developed; only looking for their input, ideas, and feedback.
- Introductions stakeholders and technical team

### Existing Conditions Presentation (20 minutes, 5 minutes or less for Q&A) - Amelia/Jake

- Background info on watershed 101, water quality modeling, etc.
- Present draft plan (focus on WQ conditions, sources of pollution, in-lake sedimentation estimates, reductions needed)
- Outline general types of recommendations and emphasize voluntary approach
- Watershed approach vs in-lake improvement approach
  - Initial interest in BMPs
  - Next step is a visioning session for in-lake improvements
- Have copy of lake design created by JEO ready to share if necessary

### Gauge interest in potential BMPs – (5-10 minutes) - Adam

- Voluntary participation provide a handout with information on BMPs
- Feedback on upstream BMPs
- Closing question:
  - What would you be willing to do on your property to ensure a healthy future for Lake Hastings?

### Break - 5 minutes

### Visioning Session: Future of Lake Hastings – (45 minutes) - Kristen

- Amenities ranking as a group
  - o Pre-written cards with amenities and uses listed on individual cards
    - List from spring meeting
    - Give ideas on potential in-lake improvements for them to consider with amenities list. Use Heartwell Lake as an example.
  - Answer the question: What other things in the community would help to build interest and support for the lake?
    - We will include final list of ideas in the plan as support for the physical improvements.

- Go through conversation with whole group about ranking these amenities/uses (achieve general consensus, do not push for complete consensus)
  - Start with all amenities on a horizontal line at "0" and move up and down
     1 level each according to prioritization. Start from left to right.
- o Write final list of ranking on flip chart at front of the room
- Visioning activity
  - Break into small groups
    - Hand out 30"x40" aerial maps of lake and park
    - Markers
    - Flip chart sheets
  - Ask groups to review master list of prioritized amenities and uses they just brainstormed (flip chart at front of room)
  - o Give groups 30 minutes to brainstorm their final vision.
    - Groups should use the easel paper as their first draft and 30"x40" map as the final to present their park/lake designs to the entire group.
    - Notes:
      - Preface that this vision is a long-term vision or a first step to dream about what this lake can be.
      - Mix technical team members among tables. But emphasize technical team's role is to record comments and help encourage conversation, not to participate in the visioning.

### Resolve (20 minutes) - Kristen/Adam

- Small groups each present their final vision for the lake (5 minutes each).
- ORID conversation (closing roundtable-style conversation)
  - o O What stood out to you most from this activity?
  - o R Was there any ideas that really challenged you or made you hesitate?
  - o R What ideas really excited you or gave you energy?
  - o I What impact could some of these ideas have on the future of Hastings?
  - o D What needs to be done in order for these things to happen?

#### Materials:

- 30x40 maps (include extras)
- Easel pad
- Markers
- 30x40 lake design, only pull out if they ask about it
- Easel
- Amenities/Uses sheets
- 0, +1, -1 sheets
- Sign in sheet
- Create a list of question prompts for technical team

•

# **APPENDIX C**

# **Existing Conditions Presentation**







# Lake Hastings Water Quality Improvement Project

STAKEHOLDER WORKSHOP 11/29/2023











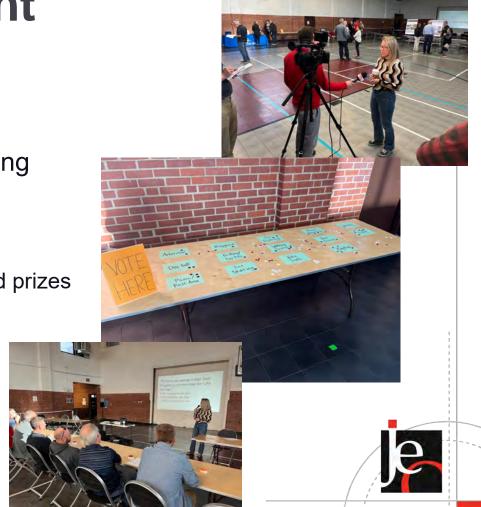
# **Meeting Overview**

- Welcome and Introductions
  - Please sign in!
- Project Background
- Lake and Watershed Issues
- Voluntary Approaches to Improve Water Quality
- Community Visioning Session (we want your input!)
- Roundtable Discussion and Closing



# **Prior Public Involvement**

- Lake Hastings Water Quality Public Meeting
  - April 6, 2023
  - Parks and Recreation Community Center
  - − 70~ total attendees
  - Formal presentation, followed by activities and prizes
- Citizen Engagement Group Meetings
  - May-November 2023



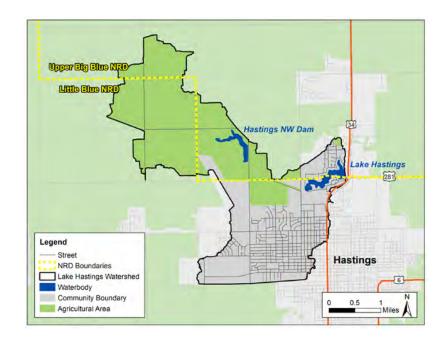
# **Project Overview**

- Project schedule: May 2023 May 2024
- Current project is planning only
  - Future phases include design and construction (when funding is available)
- Develop a watershed plan
  - Analyze water quality sampling data
  - Identify pollutant sources and potential solutions
  - Develop conceptual lake restoration drawing
- Planning is guided by community input
  - Nov 2023 Stakeholder meeting
  - Jan 2023 Open house public meeting
- A finalized plan will help bring grant funds

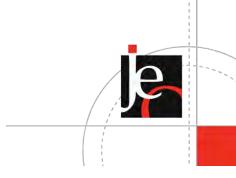


# **Project Partnerships**

- Public input is integral!
- City of Hastings is lead partner
- Additional funding
  - Nebraska Department of Environment and Energy (NDEE)
  - Upper Big Blue Natural Resources District (UBBNRD)
  - Little Blue Natural Resources District (LBNRD)



# Lake and Watershed Issues



# Background

- Lake Hastings constructed in 1959 for recreation and flood control
- Dredged in 1970
- Hastings Northwest Dam constructed in 1980
- Lake Hastings is owned by the City of Hasting
- Surrounded by public parkland and private residences
- Surface area of 68 acres



1993 aerial of Lake Hastings



# **Water Quality Status**

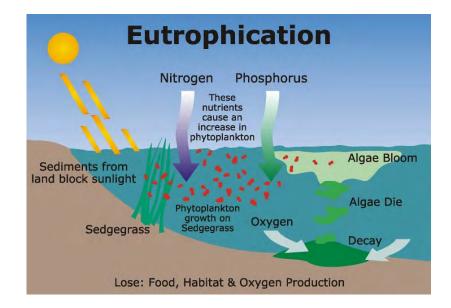
- Water quality standards are based on designated uses
- Lake Hastings designated uses are Recreation, Aquatic Life, Agricultural, and Aesthetics
- Impaired for Aquatic Life due:
  - Chlorophyll a (resulting from nitrogen and phosphorus)
  - Fish consumption advisory (due to PCBs and mercury levels sampled in carp)
- Impaired for Aesthetics due to sedimentation

**Note:** Fish consumption advisory will not be directly addressed as part of this plan, due to the global nature of the pollutant sources. Mercury contamination primarily originates through air emissions, which are not contained by watershed boundaries.



# **Pollutant Dynamics**

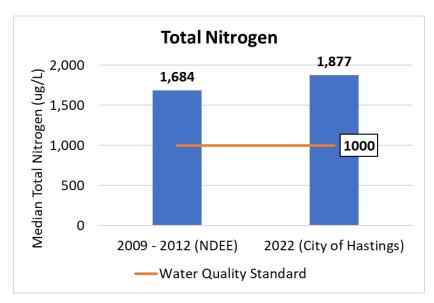
- Excess nutrients can result in an overgrowth of algae
- Decomposing excess algae leads to oxygen decrease in water, which is bad for aquatic life
- Sediment in the water can block light and temper this effect
- Phosphorus is often limiting nutrient and sticks to sediment particles
  - Thus, limiting phosphorus and sediment loading to the lake is key

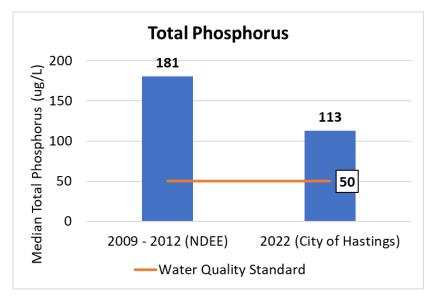


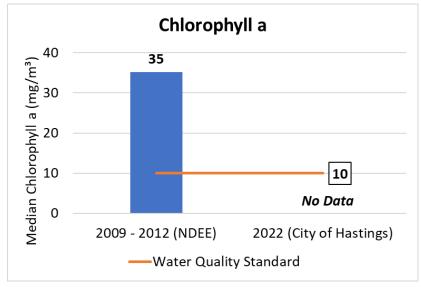
# **Water Quality Sampling**

Data Source	Data Period	Number of Samples	Parameters of Interest
NDEE	2009-2012	20	Total Nitrogen Total Phosphorus Total Suspended Solids (TSS) Chlorophyll <i>a</i>
City of Hastings	2022-2023	Depends on parameter (4-15)	Total Nitrogen Total Phosphorus Total Suspended Solids (TSS)



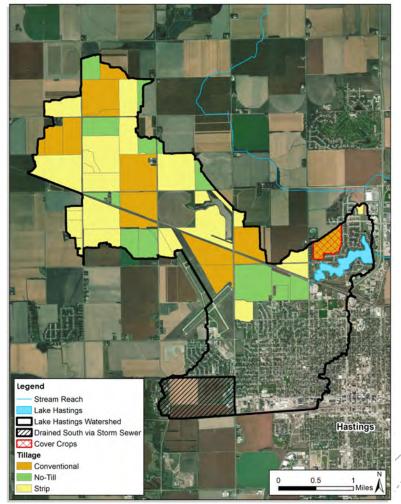






# **Watershed Overview**

- Headwaters watershed with minimal perennial stream network
- Watershed drains ~5,400 acres
- 60% farmland, 36% urban
- Some adoption of conservation tillage, very low adoption of cover crops
- Few known urban best management practices



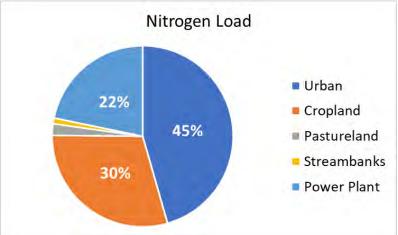


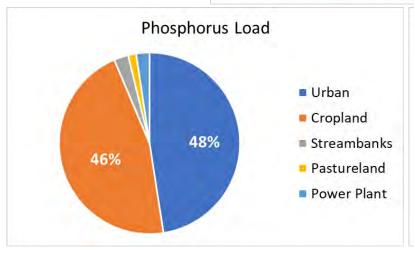
# **Pollutant Modeling**

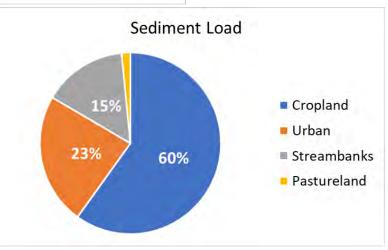
- EPA Pollutant Load Estimation Tool (PLET) used to estimate loading at the watershed level (Nitrogen, Phosphorus, Sediment)
- Canfield-Bachmann equations used to calibrate loading to sampled conditions within the lake for Nitrogen and Phosphorus
- North Denver Power Station is major point source to consider



# **Estimated Watershed Pollutant Sources (Draft)**

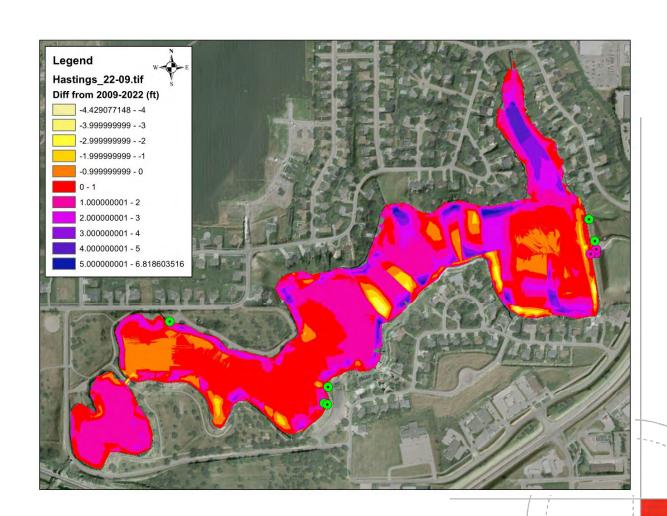




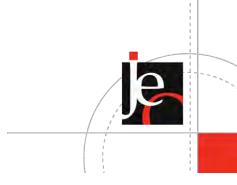


# **Sedimentation**

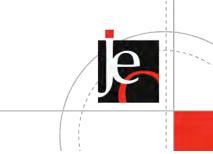
- Bathymetric surveys conducted in 2009 and 2022
- 1970 volume postexcavation and dredging is estimated
- Volume in 1970 was ~525 ac-ft
- Decreased to 404 ac-ft in 2022 (>23% volume lost)



# Questions?



# Voluntary Approaches to Improve Water Quality



# **A Voluntary Approach**

- Increased adoption of BMPs
- Work with willing farmers and homeowners
- Provide financial assistance (cost-share)
- Starts with outreach and education
- 3 primary areas....

## **Best Management Practices (BMP):**

A broad set of conservation practices that help conserve soil and water resources. Examples include buffer strips, no-till farming, wetlands, nutrient management, and many others.



# **Three Primary Areas with Examples**

### Farmland

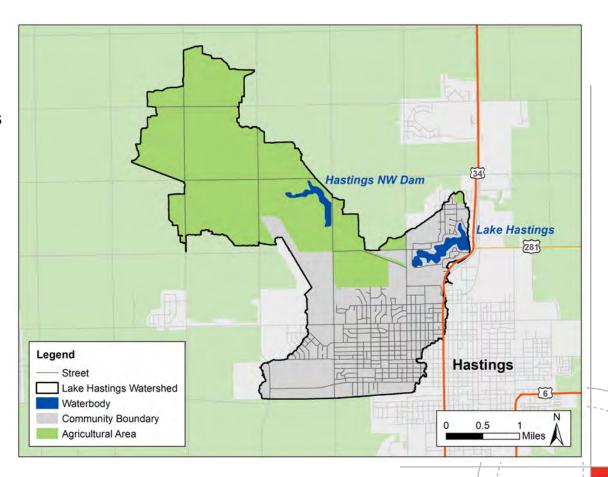
- No-till farming
- Grass waterways / buffer strips
- Cover crops
- Nutrient management

### 2. Urban area

- Rain barrels and gardens
- No/low-phosphorus fertilizer
- Bioretention areas
- Landscape enhancements

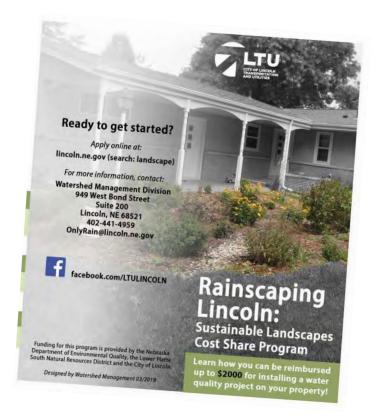
### 3. In-Lake/Public land

- Sediment removal (dredging)
- Sediment settling basin
- Nutrient reduction wetland



# Additional Resources (Example only)



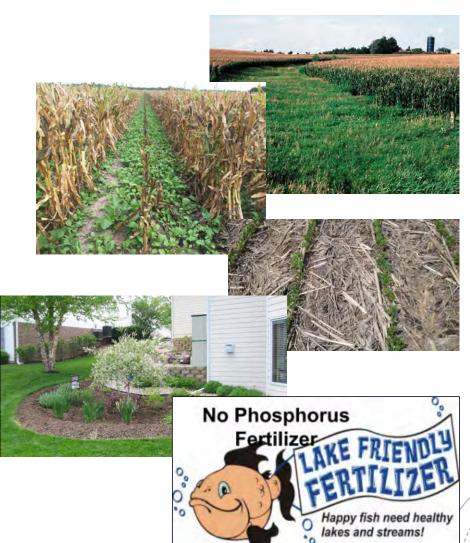




# Let's Consider....

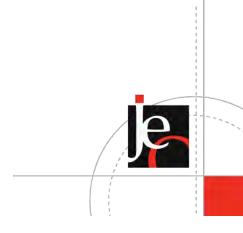
What are you willing to do to ensure a healthy future for Lake Hastings?

What would encourage your neighbors to participate?





# Thank you!



# **APPENDIX D**

# Lake Amenities Rankings







Ranking	Lake Amenity/Use
	Swimming
	Kayaking
+1 – Increase use	Disc Golf Course
or opportunities in	Fishing
Lake Hastings	Boating
	Urban BMPs
	Community Events
	Arboretum
<b>0</b> – Maintain current	Grilling/Fire Pits
use/opportunities in Lake Hastings	Bike Trails
a raogo	Walking Trails
-1 – Decrease use	Camping
or do not permit in	Ice Fishing
Lake Hastings	Ice Skating



# **APPENDIX E**

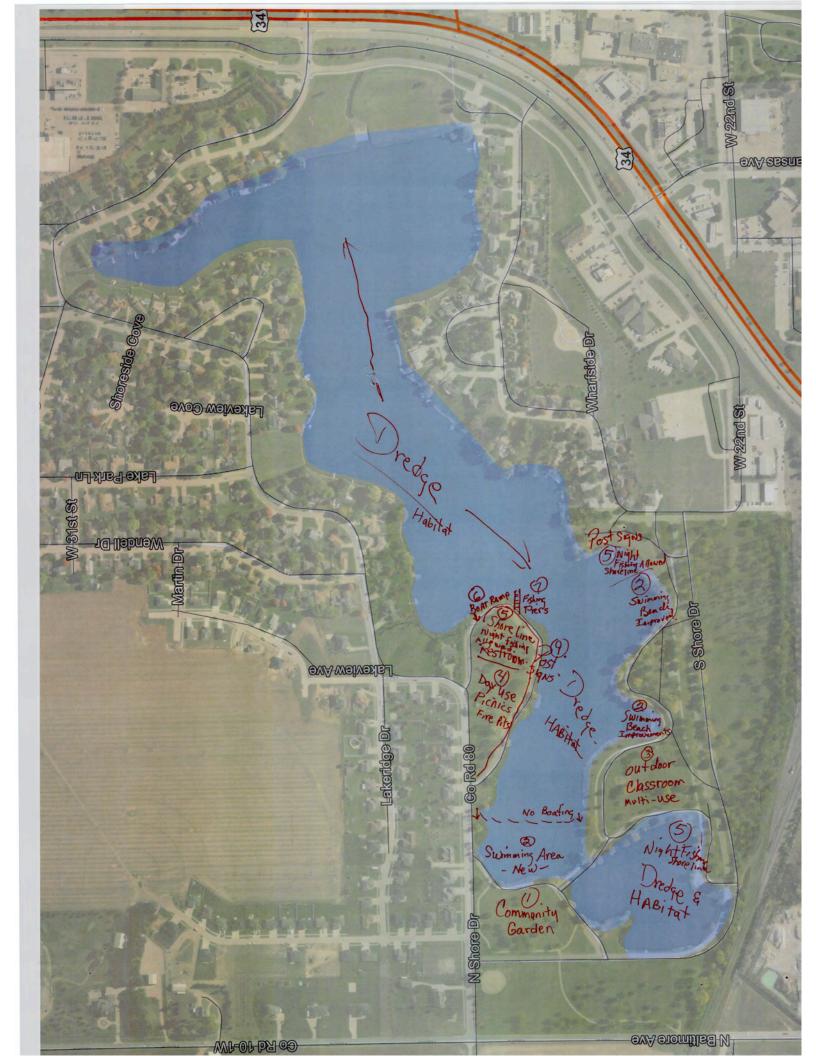
# Small Group Lake Design Concepts



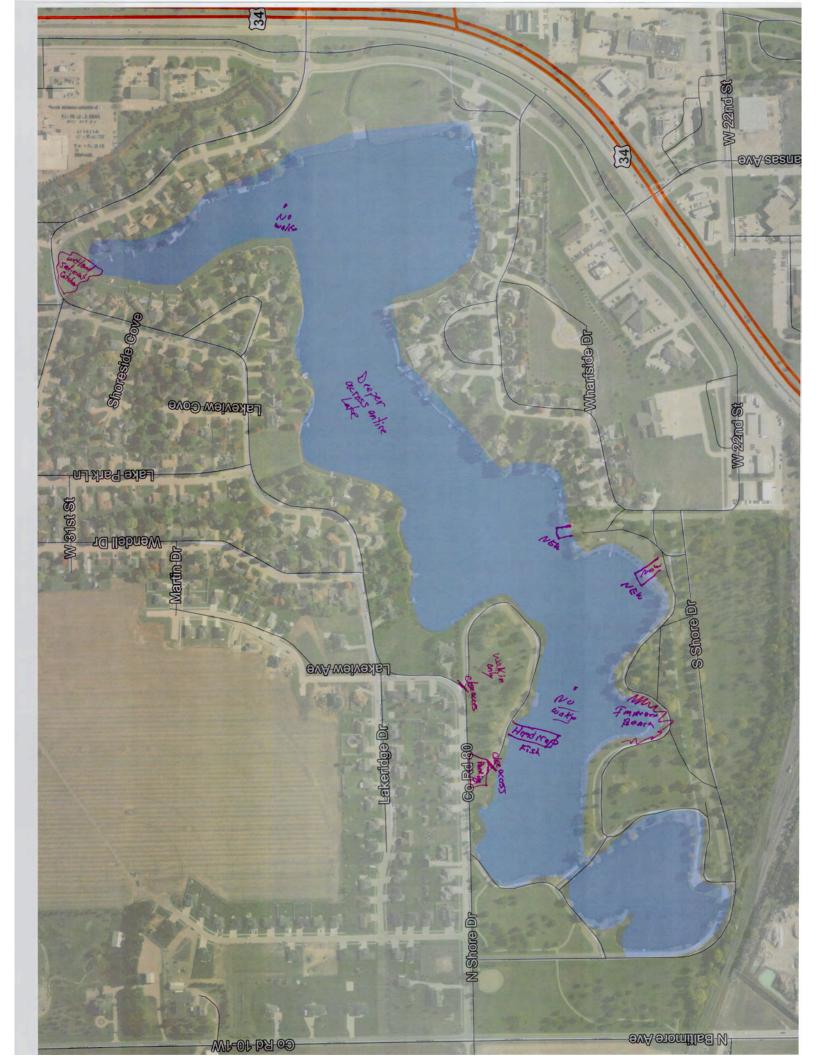














# **APPENDIX F**

# Stakeholder List







	Stakeholder Name	Invited On	RSVP
	Phyllis Salyard, M.D. (retired)	14-Nov	Yes
۵	John Nelson	11/14, called on 11/16 and confirmed	Yes
Citizen Engagement Group	Scott Snell	11/14, called on 11/16 left voicemail	Yes
ž	Scott Runck	11/16 called	Yes
Ĕ	Mary Peterson	14-Nov	
ngage	Matt Sheehan	11/14 & called on 11/16 but not in service	
ш	Carol & Mike Kleopenger	11/14 & 11/15	No
itizen	Howard Sheley	11/14 & called on 11/16 left voicemail	Yes
10	Julie Jackson	11/16 called left voicemail	Yes
	Marty Stange	14-Nov	Yes
	Craig Oswald	Called 11/16, left voicemail	Yes
_	Dennis Coats, Fishing	15-Nov	Yes
Recreational Groups	Trevor Wilkerson, Disc Golf	11/15,	Yes
Rec G	Adam Story, Fishing/Boating	11/15,	Yes
Schools	Jeff Linden, Principal @ Hastings High School	14-Nov	
Sch	Jeff Janda, Principal @ Watson Elementary	14-Nov	
	Dale Bonifas,	Emailed on 11/21	
ပ္	Kerwin Kroger,	Emailed on 11/21	
Landowners	Larry Schutte,	Emailed on 11/21	
<u></u>	Todd Burr,	Emailed on 11/21	
ang Bug	Kevin Bruntz,	Emailed on 11/21	
تا	Mason Hoffman,	Emailed on 11/21	Yes
	Alan Anderson,	Emailed on 11/21	Yes

# **APPENDIX G**

# Hastings Tribune Article







# Planners consider improvement options at Lake Hastings

Will Vraspir wvraspir@hastingstribune.com

Nov 29, 2023 Updated Nov 30, 2023



Hastings Public Library Laura Beahm/Tribune

Planners weighing ideas for improvements at Lake Hastings conducted a stakeholder group meeting Wednesday at the Hastings Public Library.

JEO Consulting Group was hired to create a watershed management plan.

The Upper Big Blue Natural Resources District, the Little Blue NRD, city of Hastings, Nebraska Department of Environment and Energy, and Nebraska Game and Parks Commission are collaborating to develop a plan to improve the water quality and mitigate future harm.

The watershed of Lake Hastings is included in both the UBBNRD and LBNRD.

The groups held a public hearing in April with about 70 attendees.

From that meeting, a Citizen Engagement Group was created to provide feedback on improvements the public would like to see.

"Getting the public engagement in this is very important," said Kristen Ohnoutka, JEO's community planner.

Amelia Long, a natural resources specialist with JEO, provided background on the lake.

Lake Hastings was constructed in 1959. It initially was created by Hastings Utilities as part of its wastewater management plan, but also served for recreational purposes and flood control.

After partially filling with sediment, Long said, the lake was dredged in 1970. During that time, the lake was made a bit larger. It now has a surface area of 68 acres. In 1980, the northwest dam was constructed.

The lake's designated uses are for recreation, aquatic life, agricultural and aesthetics. It is currently considered impaired for aquatic life and aesthetics.

Long said water quality sampling data shows an increase in nitrogen, phosphorus and sediment in the lake.

Adam Rupe, project manager for JEO, said JEO was hired in May and the planning phase is expected to be completed in May 2024, at which time a full plan will have been developed with cost estimates included.

He said a comprehensive plan is important to include the upstream watershed so as to prevent any further damage to the lake.

Wednesday's meeting with select stakeholders continued the gathering of public input as participants shared their visions for the future of the lake.

Another open house meeting is expected in February 2024, when JEO plans to report on a finalized plan. A watershed plan is needed to apply for grant funds that could be used to help pay for the proposed improvements.

Rupe said sets of best management practices can be used to help mitigate the amount of sediment eroding into the lake. These would be completed on a volunteer basis.

For the farmland areas, no-till farming, grass waterways and cover crops could help.

In urban areas, landowners can use rain barrels and gardens, landscape enhancements and bioretention areas.

As for the lake itself, dredging, sediment settling basins and nutrient reduction wetlands are options.

Ohnoutka led an activity where participants ranked a list of which amenities to prioritize.

The group agreed priorities include improvements for swimming, kayaking, boating, fishing, disc golf course, community events and urban best management practices. They believe the bike trails and walking trails, trees, grilling and fire pits are acceptable as currently managed.

They said items like camping shouldn't be included because it isn't allowed at the lake. Ice fishing and ice skating also were dropped because the ice doesn't get solid enough to be safe.

Participants worked in small groups to do some actual designing of the lake and incorporate those priorities into the design.

Options on the wish list included expanding the swimming beach area, making dock improvements for boats and kayaks, adding fountains to circulate water, adding silt dams or sediment basins, and including a community garden and an outdoor classroom.

# PUBLIC OPEN HOUSE MEETING SUMMARY









# **Lake Hastings Watershed Management Plan**

Public Open House Tuesday, February 13, 2024 4:00 – 6:00 PM

Hastings Municipal Airport 3300 W 12<sup>th</sup> Street Hastings, NE 68901

#### **Overview**

A public open house for the Lake Hastings Watershed Management Plan was held on February 13, 2024, from 4:00 – 6:00 PM at the Hastings Municipal Airport. The purpose of the open house was to inform the public about the water quality issues, the planning process, and conceptual improvements to Lake Hastings. Additionally, the project team hoped to get input on recommended best management practices (BMPs) for the watershed and feedback on what would help the farmers and landowners adopt them.

A total of 33 members of the public attended the meeting. Meeting sign-in sheets are provided in Appendix A.

The meeting was arranged in five (5) information stations around the edge of the room for attendees to visit in sequence, with a public comment station positioned in the center of the room. The informational display boards and corresponding fact sheet are provided in Appendices B and C, respectively.



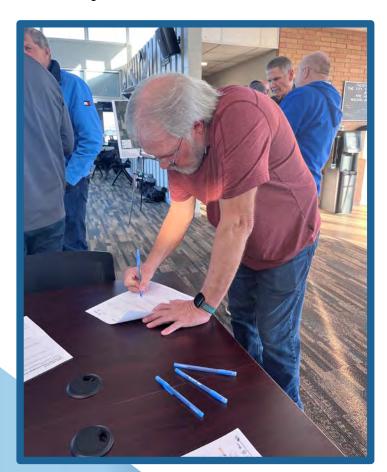


The meeting featured five (5) informational stations around the room, with the public comment station in the center.

**Station 1** provided an overview of the project. The informational board featured necessary context to understand the current condition of Lake Hastings, a map of the watershed area, project funding information, and a comprehensive project timeline.

**Station 2** explored the lake's existing water quality conditions and known sources of pollution. The informational board featured bar charts of different pollutants that compared both water quality samples taken by NDEE (2009-2012) and the City of Hastings (2022) against the state water quality standard. The board also featured pie charts that detailed the sources of each pollutant, such as urban or cropland sources.

**Station 3** outlined Best Management Practices (BMPs). The informational board identified nine (9) recommended rural and urban BMPs that the public could voluntarily implement to help conserve soil and water resources. Team members highlighted the option of cost-sharing to help adopt recommended BMPs for Lake Hastings Watershed.









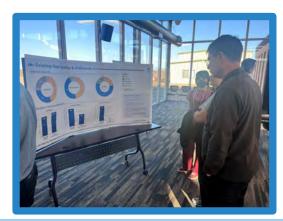


Attendees were encouraged to identify their property locations and any areas of concern for water quality within the watershed area.

Station 4 explored conceptual in-lake improvements. The informational board featured a detailed map of the lake area with potential in-lake improvement concepts for the City's consideration. Photos of stakeholders in a visioning workshop where they provided key input on amenities and created a series of draft lake design concepts, were also included.

Station 5 provided a glimpse into the future and next steps for the project. The informational board highlighted the necessity of cooperation between the City, NRDs, homeowners and other partners to make the watershed and lake improvements possible. The board also noted that no in-lake improvements will proceed to construction at this time.

The public comment station was equipped with comment forms for attendees to provide feedback. Eight (8) comment forms were completed. The completed comment forms are provided in Appendix D.



Project team members were available at each station to answer any questions and provide additional context to the figures displayed.



UPPER BIG BLUE





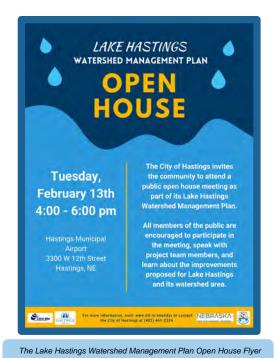
#### **Public Notification**

A project flyer was developed to help advertise the open house event. The flyer was displayed at multiple locations around the community, and is provided in Appendix E.

A series of social media graphics were also posted to advertise the open house. All social media content is provided in Appendix F.

Other advertisements for the open house included news posts on KGFW, Upper Big Blue website, the Hastings Tribune, and News Channel Nebraska Central. KSNB Channel 4 featured a news post and video detailing the open house. Advertisement was also featured in UBBNRD's newsletter, and a notice and invite were sent to stakeholders. The news content, Channel 4 video, UBBNRD newsletter, and stakeholder's notice are also all provided in Appendix F.

The City of Hastings also shared a press release for the open house with the community via local media and radio. The press release is provided in Appendix G.



## **Meeting Conversations and Observations**

Overall, attendees were supportive of action being taken to improve the water quality issues that currently exist at Lake Hastings. Some attendees expressed interest in adopting BMPs to their property and indicated so via their submitted comment forms.

Other topics project team members recall discussing with attendees include:

- Interest in dredging even more sediment than was budgeted for in the conceptual plan.
- Nearly every attendee indicated they were ready for the project to move forward right away.
- Suggestions on additional project funding sources and wetland enhancement areas.
- Questions on how the lake would be dredged (draining or hydraulic), and how long the process would take.

#### **Appendices**

- A. Sign-In Sheets
- B. Meeting Displays
- C. Fact Sheet
- D. Completed Comment Forms
- E. Open House Flyer
- F. Social Media Content
- G. Open House Press Release
- H. News Coverage



Project staff from JEO, the City of Hastings, UBBNRD, and LBNRD were all in attendance.

# **APPENDIX A**

Sign-In Sheets









Name(s)	Address (Street, City, ST, Zip)	How did you hear about the meeting?					
Jim Krebsbach			Earchook		Word of Mouth Flyer	Þ	Other: Newspapes
Jim Krebsbach Quelie Jackson			City Website		Word of Mouth Flyer	ا سعر	Other:
Katie Hickle					Word of Mouth Flyer		Other:
					Word of Mouth Flyer		Other:
			Facebook City Website		Word of Mouth Flyer		Other:
			Facebook City Website		Word of Mouth Flyer		Other:
			Facebook City Website		Word of Mouth Flyer		Other:
			Facebook City Website		Word of Mouth Flyer		Other:
. `			Facebook City Website		Word of Mouth Flyer		Other:
			Facebook City Website		Word of Mouth Flyer		Other:
			Facebook City Website		Word of Mouth Flyer		Other:
			Facebook City Website		Word of Mouth Flyer	_	Other:
			Facebook City Website		Word of Mouth Flyer		Other:







Name(s)	Address (Street, City, ST, Zip)	How did you hear about the meeting?				
John Nelson		Facebook	Word of Mouth Flyer	☑ Other:		
Randall Mills Datus		Facebook	Word of Mouth Flyer	Other:		
PAUL HAMELINK		Facebook	Word of Mouth Flyer	M Other: KHAS Radio		
Lynn a Barb Crdell		Facenook	Word of Mouth Flyer	<b>凶</b> Other:		
Elayne + Jim Landwehr		Facebook City Website	Word of Mouth Flyer	₩ Other: Newspapen		
Day & Shain Jah		Facebook City Website	Word of Mouth Flyer	Other:		
Mike & Carol Kleppinger		Facebook	Word of Mouth Flyer	□ Other:		
Alan May L. Anderson			Word of Mouth Flyer	☐ Other:		
		Facebook	Word of Mouth Flyer	Other:		
KEVIN BRUNTZ		Facebook	Word of Mouth Flyer	Other:		
Ron Seymour		Facebook  City Website	Word of Mouth Flyer	Other:		
Chuck Bauer.		Facebook Q City Website	Word of Mouth Flyer	□ Other:		
Neil Wolford		Facebook  City Website	Word of Mouth Flyer	Other: Newspaper		
Ron Seymour Chuck Bauer		Facebook City Website  Facebook City Website  Facebook City Website  Facebook City Website	Word of Mouth Flyer  Word of Mouth Flyer  Word of Mouth Flyer  Word of Mouth Word of Mouth	Other:    Other:   Other:   Other:   Other:		









Name(s)	Address (Street, City, ST, Zip)		How did y	ou	hear about the	e me	eting?	
Da Conjers			Facebook City Website		Word of Mouth Flyer		Other:	
Harol Esons			Facebook City Website		Word of Mouth Flyer		Other:	
Richio Hubl			Facebook City Website		Word of Mouth Flyer		Other:	
Bruce + Alisa Sandahl			Facebook City Website		Word of Mouth Flyer		Other:	
Mark DeDiana			Facebook City Website		Word of Mouth Flyer		Other:	
late full			Facebook City Website		Word of Mouth Flyer		Other:	
Pea Dwald			Facebook City Website		Word of Mouth Flyer		Other:	
Gody Studence			Facebook City Website		Word of Mouth Flyer		Other:	
Nate Karl		•	Facebook City Website		Word of Mouth Flyer		Other:	
Sapt Thomasy			Facebook City Website		Word of Mouth Flyer		Other:	
Am A Suran			Facebook City Website		Word of Mouth Flyer		Other:	
Doy's hars			Facebook City Website		Word of Mouth Flyer		Other:	
Ahoun + Bob Elander			Facebook City Website		Word of Mouth Flyer	/₽\	Other:	-









Name(s)	Address (Street, City, ST, Zip)	How did you hear about the meeting?				
Greg Exathy Sinne			Word of Mouth Flyer	□ Other:		
, ,			] Flyer (	Other:		
Roges Edgingten Jennifer Clancy Pat Mertens			] Word of Mouth ] Flyer	□ Other: Newspaper		
Pat Mertens				Q Other: Newspaper		
		I I i Facebook	Word of Mouth Flyer	☐ Other:		
		III Eacabook	Word of Mouth Flyer	☐ Other:		
			Word of Mouth Flyer	☐ Other:		
		I I Facebook	Word of Mouth Flyer	☐ Other:		
		III Facebook	Word of Mouth Flyer	☐ Other:		
		III Facebook	Word of Mouth Flyer	□ Other:		
		III Facebook	Word of Mouth Flyer	☐ Other:		
		III Facebook	Word of Mouth Flyer	☐ Other:		
		I I Facebook	Word of Mouth Flyer	☐ Other:		

# **APPENDIX B**

**Meeting Displays** 



Public Open House Summary Lake Hastings Watershed Management Plan

# Project Overview



Lake Hastings does not meet state water quality standards due to high levels of nutrients (phosphorus and nitrogen), and excessive sedimentation. The lake has been listed as "impaired" since 2010 due to these issues.

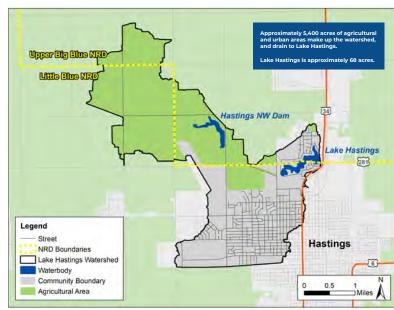
The lake and surrounding park have been an asset to the community since it was originally constructed in 1959. However, no major restoration has been completed since 1970.

Now, guided by public input, the City is developing a watershed plan to address water quality concerns and restore lake for beneficial uses. Implementation of this plan will be based on voluntary cooperation by property owners and farmers and will rely on significant education and outreach efforts.

#### **PROJECT TIMELINE**



#### MAP OF LAKE HASTINGS WATERSHED AREA



Funding assistance to develop this plan has been provided by the City of Hastings, Nebraska Department of Energy and Environment (NDEE), Upper Big Blue Natural Resources District (UBBNRD), and Little Blue Natural Resources District (LBNRD).

NEBRASKA DEPT. OF ENVIRONMENT AND ENERGY





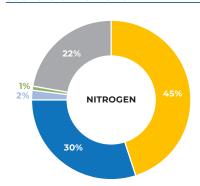


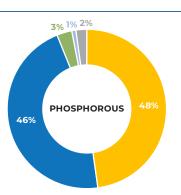
for potential watershed improvements.

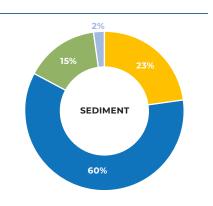
# Existing Water Quality & Pollutants -



#### **SOURCES OF POLLUTION:**



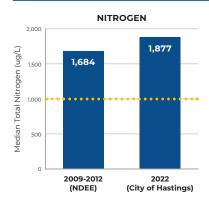


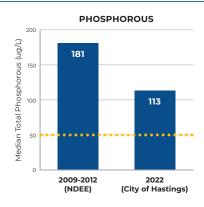


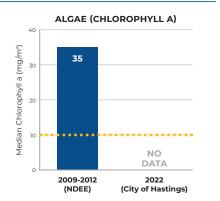
# URBAN CROPLAND STREAMBANKS PASTURELAND POWER PLANT

••• STATE WATER
QUALITY STANDARD

#### WATER QUALITY CONDITIONS IN LAKE HASTINGS:







#### **EFFECTS OF POLLUTANTS**

- » Excess nutrients can result in an overgrowth of algae (measured through sampling of Chlorophyll a)
- » Decomposing excess algae leads to oxygen decrease in water, which is stressful to aquatic life
- » Sedimentation has led to an average loss of 2 feet of lake depth, with some areas losing up to 5 feet of depth
- » Shallow water contributes to poor water quality, degraded fish habit, and reduced boat access

NEBRASKA





# What Can You Do?



## **Best Management Practices (BMPs)** are defined as a broad set of conservation practices that help to conserve soil and water resources.

Priority BMPs were identified based on stakeholder input and a review of existing BMPs in the watershed. Approximately 71% of the watershed is already practicing some level of conservation tillage - indicating a willingness, feasibility, and capacity to increase adoption.

Adoption of BMPs is based on a voluntary process.

Cost-share may already be available to help implement many of these BMPs.

#### **RECOMMENDED BMPs**













RURAL URBAN







NO-TILL









If you are interested in learning more or implementing a BMP on your property or farm, please speak to project team member!

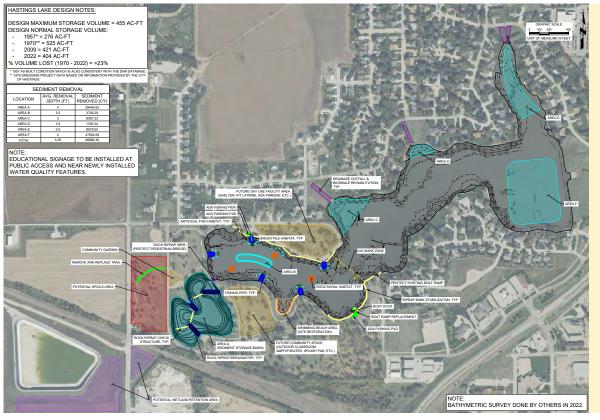






# Conceptual In-Lake Improvements -





# PROPOSED IN-LAKE AND PARK IMPROVEMENTS

- » Sediment catch basin restoration
- » Dredging and sediment removal
- » Wetland retention area
- » Improved drainage outfalls and bioswales
- » Fish Habitat/attractors
- » Bank stabilization
- » Boat dock and fishing piers
- » Improved ADA accessibility
- » Swimming beach area
- » Community garden
- » Community event space

Disclaimer: In-lake improvements have not been finalized and will go through a final design process before being implemented. Concepts presented are drafts of potential inlake improvements for the City to consider.

#### **HOW WE GOT HERE**

- » Stakeholders participated in a visioning workshop with project team members in November 2023 (pictured below).
- » Stakeholders provided input on key amenities and created a series of draft lake design concepts.
- » This input was used by the project team to help design the full concept presented at left.





















Proposed in-lake improvements have not been finalized and will go through a final design process before being implemented.

No in-lake improvements would start construction until significant BMP adoption in the watershed area has taken place.

Watershed and lake improvements will only be possible with cooperation between the City, NRDs, homeowners, farmers, and other partners. All possible grant funding sources will be leveraged to help for these recommendations.

#### **TIMELINE**



For questions about this project, please contact **Bryce Helms** with the City of Hastings at **(402) 461-2324**; or Project Manager **Adam Rupe**, JEO Consulting Group **(arupe@jeo.com)**.

The city is asking for additional review and feedback on the draft plan through the following ways:



Speak to a project team member today



Fill out a comment form today



Review the plan at the project website



Submit a comment via email or through the project website



Learn more about the project by scanning the QR code with your phone's camera or visit the project website at https://bit.ly/46g9Xyr.

# **APPENDIX C**

**Fact Sheet** 



Public Open House Summary Lake Hastings Watershed Management Plan

# Lake Hastings Watershed Plan



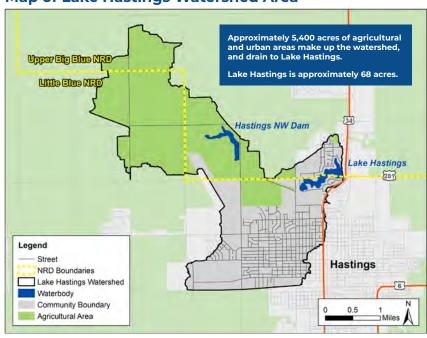
#### **PROJECT OVERVIEW**

Lake Hastings does not meet state water quality standards due to high levels of nutrients (phosphorus and nitrogen), and excessive sedimentation. The lake has been listed as "impaired" since 2010 due to these issues.

The lake and surrounding park have been an asset to the community since it was originally constructed in 1959. However, no major restoration has been completed since 1970.

Now, guided by public input, the City is developing a watershed plan to address water quality concerns and restore the lake for beneficial uses. Implementation of this plan will be based on voluntary cooperation by property owners and farmers and will rely on significant education and outreach efforts.

#### **Map of Lake Hastings Watershed Area**



Funding assistance to develop this plan has been provided by the City of Hastings, Nebraska Department of Environment and Energy (NDEE), Upper Big Blue Natural Resources District (UBBNRD), and Little Blue Natural Resources District (LBNRD).

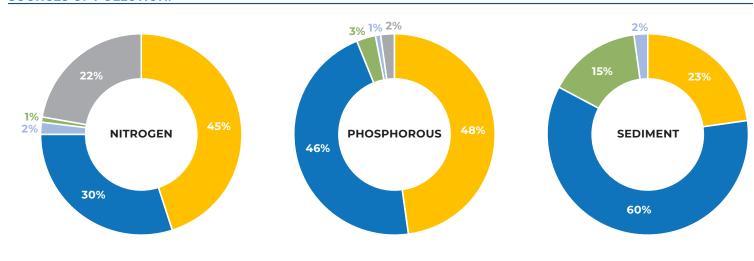
#### **PROJECT TIMELINE**



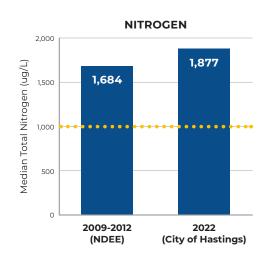
# Existing Water Quality & Pollutants -

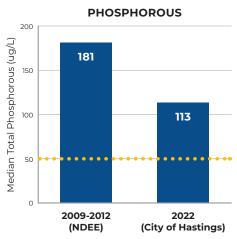


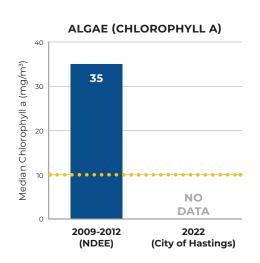
#### **SOURCES OF POLLUTION:**



#### WATER QUALITY CONDITIONS IN LAKE HASTINGS:







#### **LEGEND**



#### **EFFECTS OF POLLUTANTS**

- » Excess nutrients can result in an overgrowth of algae (measured through sampling of Chlorophyll a)
- » Decomposing excess algae leads to oxygen decrease in water, which is stressful to aquatic life
- » Sedimentation has led to an average loss of 2 feet of lake depth, with some areas losing up to 5 feet of depth
- » Shallow water contributes to poor water quality, degraded fish habit, and reduced boat access

# What Can You Do? —



URBAN

# Best Management Practices (BMPs) are defined as a broad set of conservation practices that help to conserve soil and water resources.

Priority BMPs were identified based on stakeholder input and a review of existing BMPs in the watershed. Approximately 71% of the agricultural land used within the watershed is already practicing some level of conservation tillage - indicating a willingness, feasibility, and capacity to increase adoption.

Adoption of BMPs is based on a voluntary process.

Cost-share may already be available to help implement many of these BMPs.

#### **RECOMMENDED BMPs**





**PET WASTE SIGNAGE & OUTREACH** 











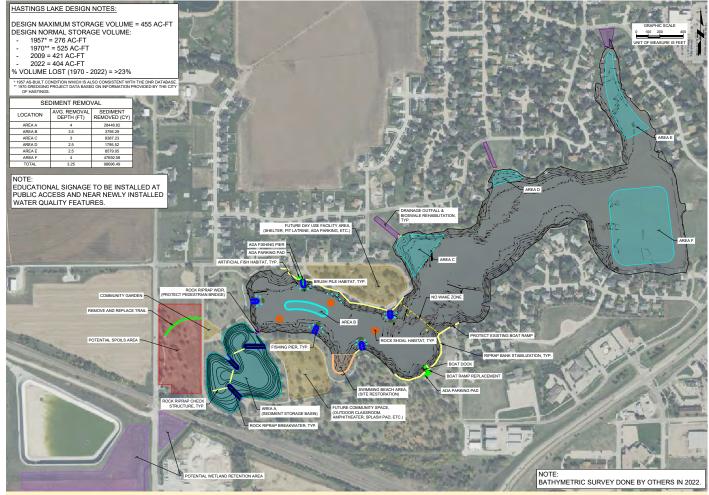




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# Conceptual In-Lake Improvements -





# PROPOSED IN-LAKE AND PARK IMPROVEMENTS

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Disclaimer: In-lake improvements have not been finalized and will go through a final design process before being implemented. Concepts presented are drafts of potential in-lake improvements for the City to consider.

# Next Steps



Proposed in-lake improvements have not been finalized and will go through a final design process before being implemented.

No in-lake improvements would start construction until significant BMP adoption in the watershed area has taken place.



Watershed and lake improvements will only be possible with cooperation between the City, NRDs, homeowners, farmers, and other partners. All possible grant funding sources will be leveraged to help for these recommendations.

The plan sponsors are asking for additional review and feedback on the draft plan through the following ways:



Speak to a project team member today



Review the plan at the project website



Fill out a comment form today



Submit a comment via email or through the project website



Learn more about the project by scanning the QR code with your phone's camera or visit the project website at <a href="https://bit.ly/46g9Xyr">https://bit.ly/46g9Xyr</a>

For questions about this project, please contact **Bryce Helms** with the City of Hastings at **(402) 461-2324**; or Project Manager **Adam Rupe**, JEO Consulting Group **(arupe@jeo.com)**.

## **APPENDIX D**

## **Completed Comment Forms**



Public Open House Summary Lake Hastings Watershed Management Plan









February 13, 2024 OPEN HOUSE COMMENT FORM

1. How did you hear about tonight's meeting? Hastings Tribune

2. What are three most important things you learned about the project tonight? - NRD'S & Hastings plan to encourage best management practices
The lake will be dradged of silt 1 - The Trecoversion areas will be maintained

3. Please describe any questions or concerns that were not addressed during tonight's meeting that you would like the project team to follow up with you about. Lucit practices one planned to keep I silt tram form fields above the lake

4. Any additional comments, questions or concerns?

Maybe Consider purchase of form field between Mariar Rd and the Loke to better manage the area and posside open space for the community 10 W main teaance











February 13, 2024 OPEN HOUSE COMMENT FORM

1. How did you hear about tonight's meeting?



2. What are three most important things you learned about the project tonight?

To aprive at a Bost Practices Solution

3. Please describe any questions or concerns that were not addressed during tonight's meeting that you would like the project team to follow up with you about.

There hasheen a verified decrease in migrating waterfowl in the PAST 15 years, especially critical These past Two years.

EAGLES Still catch fish as do Commorants adving ducks.

4. Any additional comments, questions or concerns?

Fewer beaver, muskrat, awis, song birds, snakes, It LAKA drained - How long beginning to Rull refill.







February 13, 2024
OPEN HOUSE COMMENT FORM

1. How did you hear about tonight's meeting?

Facebook

2. What are three most important things you learned about the project tonight?

Project Ormien - the concern for our water quality & what we can do as a lake resident a learned more strout the proposed drelging project

3. Please describe any questions or concerns that were not addressed during tonight's meeting that you would like the project team to follow up with you about.

4. Any additional comments, questions or concerns?







AAV LEIVOHED MIVIAVOEMIEM LEVIA
February 13, 2024
OPEN HOUSE COMMENT FORM

1. How did you hear about tonight's meeting? Mempaper What are three most important things you learned about the project tonight? 1) Algae in lake could make summing unsafe. 2) Plantodredge may not befor 2-3 ys. 3) We allowed to work together to make the Lake \$
3. Please describe any questions or concerns that were not addressed during tonight's meeting that you would like the project to a to the series to a the series to a to the that you would like the project team to follow up with you about. How much is this going to cost? who How well it he paid for? 4. Any additional comments, questions or concerns? asting reeds to past if it is unsafe to seem, boot, ....







### February 13, 2024 **OPEN HOUSE COMMENT FORM**

1. How did you hear about tonight's meeting?

Legg 2 Cagn

2. What are three most important things you learned about the project tonight?

you weed grant funding?

3. Please describe any questions or concerns that were not addressed during tonight's meeting that you would like the project team to follow up with you about.

4. Any additional comments, questions or concerns?

I would like to some on the citizens group for the lake. Flease contact me





HASTINGS

February 13, 2024 OPEN HOUSE COMMENT FORM

- 1. How did you hear about tonight's meeting?

  Has from Trabone
- 2. What are three most important things you learned about the project tonight?

  In seliment feel to catch solt just

  prior to lake entrance.

  2. seliment removal from lake itself

  3. Improve for heigh by decreasing

  amount of feet lives.
- 3. Please describe any questions or concerns that were not addressed during tonight's meeting that you would like the project team to follow up with you about.

4. Any additional comments, questions or concerns?

- money de project is from ? Lesides LBNRD and UBBNRD



February 13, 2024 OPEN HOUSE COMMENT FORM





1. How did you hear about tonight's meeting?

Trib

2. What are three most important things you learned about the project tonight?

Step 1) Watershed cleanp via education, incentives

- 2) BPMS
- 3) Tarsisle Lake improvements
- Please describe any questions or concerns that were not addressed during tonight's meeting that you would like the project team to follow up with you about.

Since step 3 above would be a wasted investment without proper completion of steps I and 2, how does the education [incentive set communicated to rural and residential land owners? Who is responsible for this crucial step? Rural is maybe one to

4. Any additional comments, questions or concerns? two dozen individuals 5+ west Hastings is maybe 5,000 individuals. There is

is maybe 5,000 individuals. There is certainly more efficiency in targeting education (incentives on rural landowners.

But again, who is responsible for

executing this education and communication?







February 13, 2024 OPEN HOUSE COMMENT FORM

- 1. How did you hear about tonight's meeting?
- 2. What are three most important things you learned about the project tonight?

Proposed Improvents

3. Please describe any questions or concerns that were not addressed during tonight's meeting that you would like the project team to follow up with you about.

4. Any additional comments, questions or concerns?

In retired and living a block off North Shore, so interested in helping/volunteering

## **APPENDIX E**

Open House Flyer



Public Open House Summary Lake Hastings Watershed Management Plan



Tuesday, February 13th 4:00 - 6:00 pm

Hastings Municipal
Airport
3300 W 12th Street
Hastings, NE

The City of Hastings invites the community to attend a public open house meeting as part of its Lake Hastings Watershed Management Plan.

All members of the public are encouraged to participate in the meeting, speak with project team members, and learn about the improvements proposed for Lake Hastings and its watershed area.







## **APPENDIX F**

### Social Media Content



Public Open House Summary Lake Hastings Watershed Management Plan

## LAKE HASTINGS WATERSHED MANAGEMENT PLAN OPEN HOUSE









#### Social Media Content



Thanks to everyone who attended the Lake Hastings water quality management plan Tuesday and to our partners Upper Big Blue Natural Resources District, Little Blue Natural Resources District, Nebraska Department of Environment and Energy and JEO Consulting Group. We had about 40 people in attendance during the 2-hour event. Read more about the project here: https://www.cityofhastings.org/../lake-hastings-water...



City of Hastings - City Hall February 13 at 11:12 AM · 😚

Thanks News Channel Nebraska for helping get the word out about the open house for our Lake Hastings Water Quality Management Plan. Join us 4-6 p.m.; tonight; at the Hastings Municipal Airport. 3300 W. 12th St.



CENTRAL, NEWSCHANNELNEBRASKA.COM

Lake Hastings project doesn't include draining and dredging, final open house on Tuesday



6 comments 2 shares

City of Hastings - City Hall February 8 · 🕙

City of Hastings - City Hall

Please join us Tuesday for an open house as part of its Lake Hastings Water Quality Management Plan. The open house will be 4-6 p.m., at the Hastings Municipal Airport Terminal, 3300 W. 12th St. Read more here:

https://www.cityofhastings.org/.../city,nrds-to-host.../



Thanks KHAS Radio and Brandon J McDermott for having Stormwater Technician Bryce Helms on PARTYLINE to talk about our Lake Hastings Water Quality Management Plan open house. Read more here:

https://www.cityofhastings.org/.../city,nrds-to-host.../





● 89 4 comments 17 shares

Send message

**6** 

## **APPENDIX G**

## Open House Press Release



Public Open House Summary Lake Hastings Watershed Management Plan

#### PRESS RELEASE

For Immediate Release January 16, 2024

Media Contact: Bryce Helms, City of Hastings (402) 461-2324

#### City of Hastings, UBBNRD, and LBNRD to Host Lake Hastings Watershed Plan Open House

HASTINGS, NE (January 16, 2024) – The City of Hastings (City), invites the community to attend a public open house as part of its Lake Hastings Water Quality Management Plan. The open house will be held at the Hastings Municipal Airport (3300 W. 12th Street, Hastings, NE) on Tuesday, February 13, 2024, from 4:00 – 6:00 p.m. All members of the public are invited to participate in the meeting. No formal presentation will be made, and attendees may drop in anytime.

The meeting is part of public involvement steps to inform the development of a watershed management plan for Lake Hastings and its contributing watershed. The project team will be on hand to answer attendee's questions. The informational displays and handouts will cover known water quality issues in the lake, sources of pollution, and recommended management practices being considered to improve water quality in Lake Hastings and its watershed. Practices are anticipated to consist of agricultural best management practices (BMPs), urban stormwater BMPs, and in-lake improvements. This project is partially funded with support from the City, Upper Big Blue Natural Resources District (UBBNRD), Little Blue Natural Resources District (LBNRD), and Nebraska Department of Environment and Energy (NDEE).

Prior to this open house two other meetings were held as part of the planning process in 2023. The first community meeting was held in April 2024 at the Parks and Recreation Building. At this meeting, members of the public heard a formal presentation from the City. This presentation covered topics of water quality issues in the watershed area, sources of pollution, impact to watershed ecosystems and wildlife, and potential improvements being considered by the City and NRDs. The second meeting was a visioning workshop, which was held in November 2023, with a stakeholder group consisting of city residents, lake users, recreational group representatives, Lake Hastings residents, farmers/producers in the Lake Hastings watershed area, and other community leaders. At this workshop, stakeholders were given the opportunity to consider potential improvements and lake amenities and design their own future Lake Hastings.

This open house is the final community meeting planned as part of this planning effort. The project team anticipates finalizing the watershed plan in spring 2024.

Visit <a href="https://bit.ly/46g9Xyr">https://bit.ly/46g9Xyr</a> for more information about this project.

## **APPENDIX H**

**News Coverage** 



Public Open House Summary Lake Hastings Watershed Management Plan

screenshot-kgfw.com/2024.02.02-11\_31\_49 https://kgfw.com/2024/02/01/lake-hastings-watershed-management-plan-open-house/# https://kgfw.com/2024/02/01/lake-hastings-watershed-wa



#### Lake Hastings Watershed Management Plan open house

By Brian Neben

O Feb 1, 2024 | 8:58 AM



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Lake Hastings, (City of Hastings, Courtesy)

HASTINGS — The City of Hastings invites the community to attend a public open house as part of its Lake Hastings Water Quality Management Plan.

The open house will be held at the Hastings Municipal Airport Terminal, 3300 W. 12th St., 4-6 p.m., Tuesday, Feb. 13, 2024. All members of the public are invited to participate in the meeting. No formal presentation will be made, and attendees may drop in anytime.

The meeting is part of public involvement steps to inform the development of a watershed management plan for Lake Hastings and its contributing watershed. The project team will be on hand to answer attendees' questions. The informational displays and handouts will cover known water quality issues in the lake, sources of pollution, and recommended management practices being considered to improve water quality in Lake Hastings and its watershed.

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screenshot-central.newschannelnebraska.com-2024.02.15-11 36 45

https://central.newschannelnebraska.com/story/50441711/lake-hastings-project-doesnt-include-draining-and-dredging-final-open-house-on-tuesday





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HASTINGS, Neb. - Officials in Hastings are getting closer to implementing a plan to revamp Lake Hastings

The city is teaming up with the Upper Big Blue Natural Resources District, Little Blue Natural Resources District, and the Nebraska Department of Environment and Energy on the project. It's hosting the third open house meeting on the topic on Tuesday evening.

Stormwater Technician Bryce Helms says the first steps of the project will involve the land that drains into the waterways that feed

"You gotta start from outside of the lake and work with the filtration system, how the water gets into the lake," Helms said. "It's cleaning itself, essentially, before it gets to the lake."



Lake Hastings is classified as an impaired lake, and has been for nearly 20 years, because of high levels of phosphorous and

Helms says the project includes the implementation of better management practices to reduce the concerning chemical levels. He

The plan doesn't include a full dredging of the lake, but parts of it could be dredged.

Tuesday's meeting is at the Hastings Airport from 4:00-6:00.







Garner files motion to dismiss in former Kearney girls basketball coach's defamation lawsuit

GICC hires former college head coach as new volleyball coach

A true Love story: How UNK brought Hunter and Jeslynn together

After departing Kearney Catholic Conner to become coach at Riverside

St. Francis & Wynot Paint the Town

Kearney Police searching for man accused of assaulting woman, burglarizing home

Kearney Catholic volleyball coach Kris Conner steps down after 35 years, 753 wins

New Adams County Jail still months away from completion, 4 months after projected opening date

Hall County Commissioners form committee, urge state-level action after JBS sewage leak

98.9 The Vibe Valentine's Day Sweetheart Photo Contest



#### **Upcoming Events**



## Open house on Lake Hastings project Feb. 13

#### **HASTINGS TRIBUNE**

tribune@hastingstribune.com

A final community event related to watershed management planning to improve Lake Hastings is scheduled for Feb. 13 at the Hastings Municipal Airport Terminal, 3300 W. 12th St.

A public open house will run 4-6 p.m. No formal presentation will be made, and attendees may come and go as

they wish.

The open house will be the last of three public gatherings that have been conducted since April 2023 as part of developing the city of Hastings' Lake Hastings Water Quality Management Plan. The project team expects to finalize the plan this spring.

The project team will be on hand Feb. 13 to answer questions. Informational displays and handouts available that day will address known water quality issues in thee lake, sources of pollution, and recommended management practices that might im-

prove water quality in Lake Hastings and its watershed.

Officials anticipate the selected practices will include agricultural best management practices (BMPs), urban stormwater BMPs, and in-lake improvements.

The project is receiving funding from the city of Hastings; the Upper Big Blue and Little Blue Natural Resources Districts, respectively; and the Nebraska Department of Environment and Energy.

The first community meeting relating to the Hastings Water Quality Management Plan was conducted in April 2023. That meeting included a formal presentation.

The second meeting was a "visioning workshop" in November 2023, with a stakeholder group that included Hastings residents, lake users, representatives of recreation groups, Lake Hastings residents, farmers I the watershed area, and other community leaders.

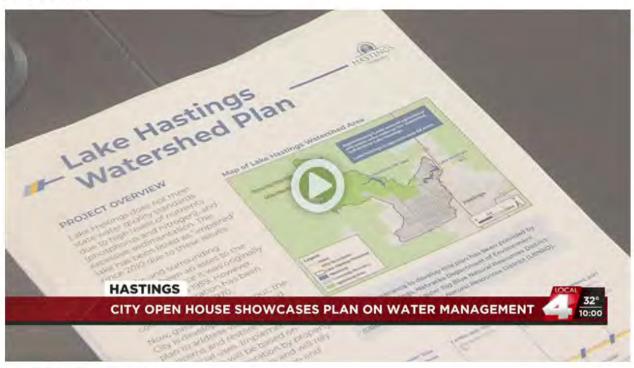




## **City of Hastings Shares Water Plans**

Updated: Feb. 19, 2024 at 5:00 AM CST

**⊕** × **⊕ □** 



Hastings holds open house for water plan.

#### **GIPD Warns About Distracted Driving**

Updated: 4 hours ago

There were 18 traffic related deaths in the state of Nebraska in the month of January alone and now the Grand Island Police Department is working to crack down on distracted driving.



#### Chicago man arrested in Kearney for vehicle theft

Updated: 10 hours ago Local4 News at 6



screenshot-www.ksnblocal4.com-2024.02.21-08\_54\_32 https://www.ksnblocal4.com/business/city-hastings-holds-open-house-water-quality-plan/21.02.2024



HASTINGS, Neb. (KSNB) - On Tuesday, members of the Hastings community attended a public open house at the Hastings Municipal Airport. The meeting was held from 4:30 to 6:30 p.m.

There was no formal presentation, but members of the project were present to interact with attendees. The meeting is to help inform the plan for Lake Hastings and its contributing watershed.

There were informational displays and handouts available that mapped out current issues in the lake, sources of pollution and practices that are being considered to help improve the water quality.

JEO Consulting has been been a huge help towards the process. Project Manager Adam Rupe gave some thoughts about what this will do for the community.

"Lake Hastings is already a good asset to the community, and this is an opportunity to enhance it, make it a lot better," Rupe said. "Improving the water quality, improving the fisheries in the lake, is going to dramatically improve the ability for people to visit it, to recreate there, and improve the quality of life for the community."

This was the final community meeting, and the project team plans to finalize the watershed plan in Spring 2024.

To learn more about the water management plan, visit City of Hastings. For further questions, email Public Information Manager Tony Herrman.

Click here to subscribe to our KSNB Local4 daily digest and breaking news alerts delivered straight to your email inbox.



https://www.hastingstribune.com/news/community-open-house-on-lake-hastings-project-feb-13/article\_2fb5b45a-c641-11ee-a57d-4b36a7b792c2.html

### Community open house on Lake Hastings project Feb. 13

Hastings Tribune tribune@hastingstribune.com Feb 7, 2024

A final community event related to watershed management planning to improve Lake Hastings is scheduled for Feb. 13 at the Hastings Municipal Airport Terminal, 3300 W. 12th St.

A public open house will run 4-6 p.m. No formal presentation will be made, and attendees may come and go as they wish.

The open house will be the last of three public gatherings that have been conducted since April 2023 as part of developing the city of Hastings' Lake Hastings Water Quality Management Plan. The project team expects to finalize the plan this spring.

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#### Andy Raun

Editor/News Director

#### Latest News & Events from the Upper Big Blue NRD



Upper Big Blue Natural Resources District <info@upperbigblue.org>

To Adam Rupe

(i) If there are problems with how this message is displayed, click here to view it in a web browser.

environment, and the economy. More...

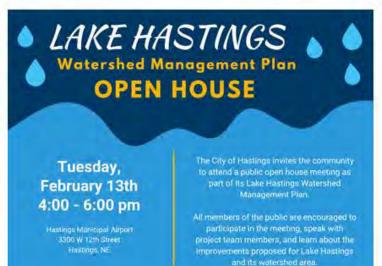


Fri 1/19/2024 2:30 PM



The City of Hastings invites the community to attend a public open house as part of its Lake Hastings Water Quality Management Plan. The open house will be held at the Hastings Municipal Airport (3300 W. 12th Street, Hastings, NE) on Tuesday, February 13, 2024, from 4:00 - 6:00 p.m. All members of the public are invited to participate in the meeting. No formal presentation will be made, and attendees may drop in anytime. More ....















#### Lake Hastings Watershed Plan Open House



January 9, 2024

#### City of Hastings, UBBNRD, and LBNRD to Host Public Event

HASTINGS, NE (January 16, 2024) – The City of Hastings, invites the community to attend a public open house as part of its Lake Hastings Water Quality Management Plan. The open house will be held at the Hastings Municipal Airport (3300 W. 12th Street, Hastings, NE) on Tuesday, February 13, 2024, from 4:00 – 6:00 p.m. All members of the public are invited to participate in the meeting. No formal presentation will be made, and attendees may drop in anytime.

The meeting is part of public involvement steps to inform the development of a watershed management plan for Lake Hastings and its contributing watershed. The project team will be on hand to answer attendees' questions. The informational displays and handouts will cover known water quality issues in the lake, sources of pollution, and recommended management practices being considered to improve water quality in Lake Hastings and its watershed. Practices are anticipated to consist of agricultural best management practices (BMPs), urban stormwater BMPs, and in-lake improvements. This project is partially funded with support from the City, Upper Big Blue Natural Resources District (BBNRD), Little Blue Natural Resources District (LBNRD), and Nebraska Department of Environment and Energy (NDEC).

Prior to this open house two other meetings were held in 2023 as part of the planning process. The first community meeting was held in April 2024 at the Parks and Recreation Building. At this meeting, members of the public heard a formal presentation from the City. This presentation covered topics of water quality issues in the watershed area, sources of pollution, impact to watershed ecosystems and wildlife, and potential improvements being considered by the City and NRDs. The second meeting was a visioning workshop, which was held in November 2023, with a stakeholder group consisting of city residents, lake users, recreational group representatives, Lake Hastings residents, farmers/producers in the Lake Hastings watershed area, and other community leaders. At this workshop, stakeholders were given the opportunity to consider potential improvements and lake amenities and design their own future Lake Hastings.

This open house is the final community meeting planned as part of this planning effort. The project team anticipates finalizing the watershed plan in spring 2024.

Visit https://bit.ly/46g9Xyr for more information about this project



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### 2023 - 2024 Lake Hastings Water Quality Management Plan



The City of Hastings is partnering with the Upper Big Blue Natural Resources District (UBBNRD), Little Blue Natural Resources District (LBNRD) and the Nebraska Department of Environment and Energy (NDEE) to develop a watershed management plan for Lake Hastings and its surrounding watershed. The city has hired JEO Consulting Group, to assist in the planning process.

The plan will include voluntary recommendations to improve water quality, ensure public safety, enhance aquatic life and improve fishing opportunities within the lake.

#### Study Area

- The Lake Hastings Watershed area is approximately 5,400 acres.
- Of this total, about 60% of land area is farmland, 36% is classified as urban, and the remaining is the lake itself or other natural features, including forests and wetlands.
- The Lake area covers just under 70 acres, not including the sediment basin.

#### What is a watershed area?

A watershed area is the defined land area that channels rainfall and snowmelt into existing creeks, streams, and rivers.

The size of a watershed (also called a drainage basin or

catchment) varies greatly. A watershed can be small, such as a modest inland lake or a single county or large and encompass thousands of square miles.

Water from hundreds, and often thousands, of creeks and streams flow from higher ground to rivers that eventually wind up in a larger waterbody. As the water flows, it often picks up pollutants, which may impact the ecology of the watershed.



#### Why is the plan needed?

Due to pollution from many sources, Lake Hastings does not currently meet the needs of the community. Through routine monitoring, NDEE first identified the lake as "impaired" in 2010, when it was discovered that the lake did not meet state water quality standards. Since that time, project partners have been looking for opportunities to address the problems and enhance this regularly used community asset.

The lake is considered "impaired" due to poor water quality. Sampling has found high levels of algae growth, which can be caused by high nutrient levels (nitrogen and phosphorus), or excess sedimentation (usually from



erosion or sedimentation). These issues can impact human health and safety, harm aquatic life and fish habitat, and decrease recreational opportunities.

#### What is a watershed plan?

The watershed plan is a 100% voluntary process and includes the following elements:

- In-depth study of the existing lake conditions
- Identification of pollutant sources
- Recommendations for projects and best practices that could be adopted by community members and farmers
- Identification of funding sources to assist with implementation
- The planning process is being guided and receiving feedback from local stakeholders and includes several opportunities for public involvement.

#### Who is involved?

Residents, businesses, farmers, and recreational users in the Lake Hastings watershed will be invited to participate in the study through a stakeholder workshop with opportunities to review the draft recommendations. The draft plan will be shared with the public for review and feedback at an open house meeting in early 2024. The goal is to have a plan that is supported by the public to improve the future voluntary adoption of practices. Following public review the plan will be finalized and adopted by the city.

#### How is this process funded?

The NDEE has provided grant funding for the planning process, which covers approximately 60% of the cost. The remaining costs are being split equally between the city, UBBNRD, and LBNRD. Potential funding for future design or implementation of recommendations will be identified within the plan. It should be noted that the city is not obligated to implement the plan.

#### LATEST NEWS

- A project kick-off meeting was held on August 22, 2023, with the project sponsors
- The stakeholder workshop will be held on November 29, 2023, from 5-7 p.m. at the Hastings Public Library.
- The draft plan will be available for public review and input in early 2024.
- An public open house meeting will be held on Tuesday, February 13, 2024 from 4:00 6:00pm at the Hastings Municipal Airport. All members of the public are encouraged to attend and learn about the final plan recommendations to improve water quality in the Lake Hastings watershed area. There will be no formal presentation. Attendees are encouraged to walk through open house stations at their own pace and speak to project team members at the meeting.

#### ADDITIONAL LINKS

- <u>Upper Big Blue NRD Water Quality Plan</u>
- Little Blue NRD
- NDEE Watershed Program (Section 319)
- UNL Extension Watershed & Water Quality Information
- NGPC's Aquatic Habitat Program
- February 13th Open House Display Boards
- February 13th Open House Comment Form
- <u>Lake Hastings Watershed Plan DRAFT</u>

#### PROJECT CONTACT INFORMATION

To learn more about this project or for questions, please contact Bryce Helms, City of Hastings Stormwater Technician at (402) 461-2330 or email <u>Storm Water General Questions</u>.