



Presentation of Findings

**Upper Big Blue NRD
Bruce L. Anderson Recreation
Area Funding/Grants
Research Project**



UPPER BIG BLUE
Natural Resources District

EA® EA Engineering,
Science, and
Technology, Inc., PBC

April 17, 2025

EA Presenters & Team



Robb Lutz, P.E.

Role: *Project Manager*

- 20+ years experience in civil & environmental engineering, lake rehab, rec areas
- Registered Professional Engineer (P.E.) in Nebraska



Rodney Verhoeff, PMP

Role: *Grant Research Lead*

- 28+ years in environmental projects, natural resources, watershed management
- Project Mngmt Professional (PMP)

Other Technical Team Members

- **Heather Young** – National Grants Specialist
- **Miranda Hanson, PWS** – Environmental and Wetlands Specialist
- **Matt Drelicharz** – Environmental and GIS specialist / Science Team Leader

Senior Leadership

- **Dale Schlautman, P.E.** – Principal in Charge
- **Dan Bigbee, PWS/CERP** – QA/QC

Study Purpose

- Conduct a **comprehensive funding research project** for the Recharge Lake and Bruce L. Anderson Recreation Area
- Identify **grants, other funding opportunities, and partnerships** to support these areas:
 - Recreational enhancements
 - Aquatic habitat restoration
 - Water quality improvements
 - Watershed best management practices (BMPs)
 - Terrestrial habitat restoration
- Focused on **funding options for the two alternatives** and other BMPs in the Recharge Lake WQIP and the District-Wide WQMP
- **Recreation:** Discussions with staff, field trip info, and other facilities as examples



WQIP Alternatives

BMP Component	Alternative 1 – WQMP Concept	Alternative 2 – TFG Concept
	Estimates of Conceptual Costs	Estimate of Conceptual Costs
Near Lake Detention Ponds	\$869,000	\$1,079,000
Floating Treatment Wetlands	-	\$244,000
In-Lake Wetlands	\$309,000	\$309,000
Reservoir Deepening	\$2,053,000	\$1,821,000
Island Restoration	\$149,000	\$149,000
Shore-line Protection	-	\$684,000
Aquatic Habitat Structures	-	\$65,000
General Costs	\$338,000	\$432,000
Construction Cost Total	\$3,718,000	\$4,747,000
30% Contingency	\$1,115,000	\$1,424,000
Construction + Contingency	\$4,833,000	\$6,171,000

Source: Bruce L. Anderson Recreation Area -Recharge Lake Water Quality Improvement Study, 2024

BRUCE A. ANDERSON RECREATION AREA RECHARGE LAKE

WATER QUALITY IMPROVEMENT STUDY



7 JUNE 2024

Research Approach & Methodology

- Extensive funding and grant search and evaluation process
 - Funding Database
 - EA Grants Tracking System
 - Network
 - Notifications / Websites / Research
 - Past Experience / Internal Expertise
- **Greater than 120 opportunities** initially identified
- **Preliminary screening** to reduce to **over 60 funding opportunities** that align with the core goals and desired outcomes
- **Strategies** were identified to develop a funding approach, better focus efforts, and leverage monetary and technical assistance for the extensive list of BMPs

Grant/Funding Opportunity Name:
WATERSMART AQUATIC RESTORATION PROGRAM

Granting Organization:
Bureau of Reclamation (BOR)

Summary:
Leverages Federal and non-Federal funding to work cooperatively with States, Tribes, and other entities as they study, design and construct aquatic ecosystem restoration projects that are collaboratively developed, have widespread regional benefits, and result in an improvement to the health of fisheries, wildlife, and aquatic habitat through restoration or improved fish passage. As used here, "aquatic ecosystem" refers to freshwater and brackish water habitats such as lakes, ponds, rivers, streams, wetlands, swamps, and estuaries and the adjacent floodplains, riparian corridors, deltas, and shallow aquifers that interact with surface water.

Additional Details / Information:
Funds for Design and Construction; Eligible restoration activities include, but are not limited to:

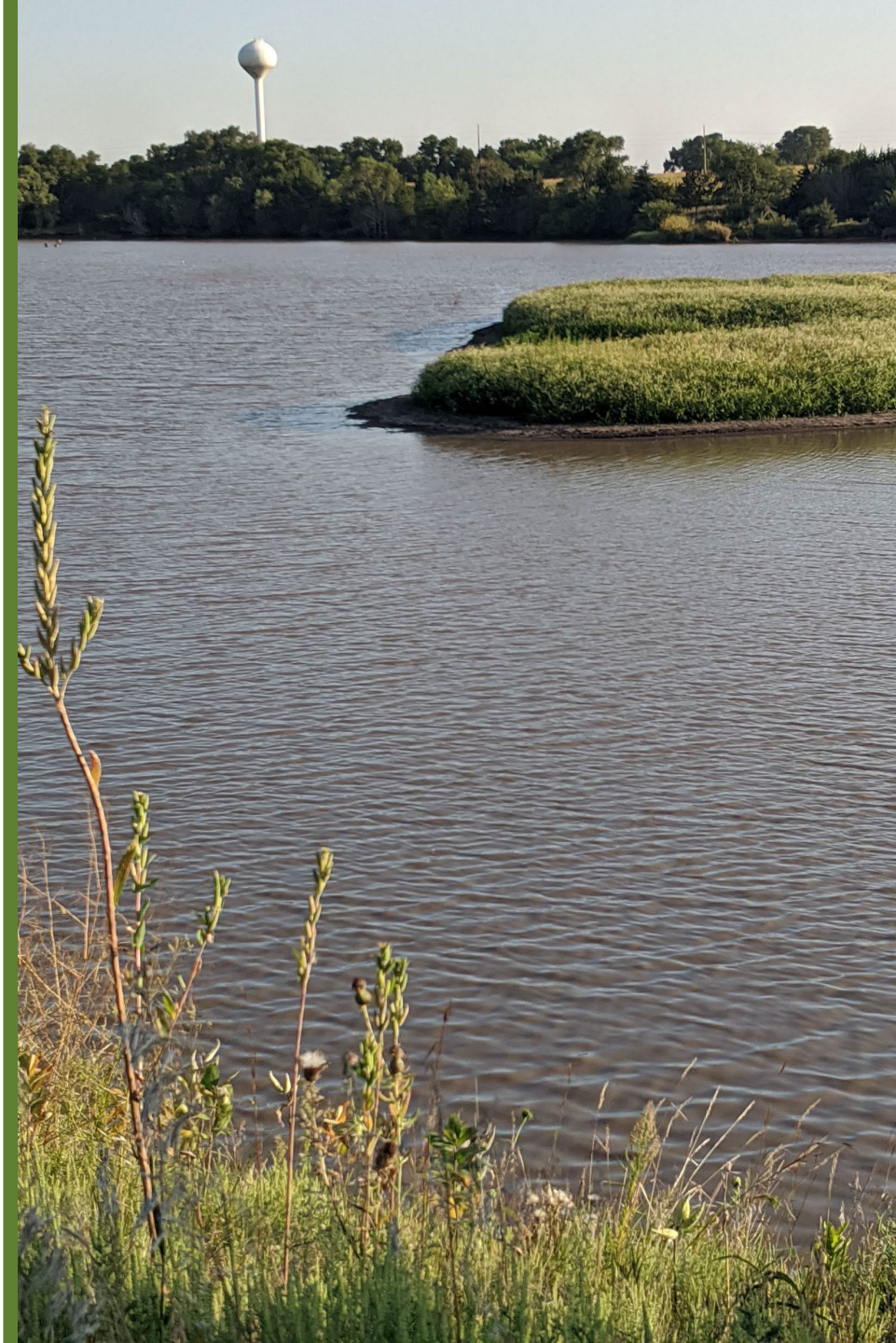
- Removal or Modification of Barriers to Fish Passage
- Restoration of Floodplain Connectivity
- Restoration of Aquatic Habitat
- Implementation of Nature-Based Solutions Projects
- Improvement of Water Availability, Quality, and Temperature
- Other Related Activities

Notes: This program is paused for review. Future priorities are unknown at this time. Cost-share funding from sources outside the applicant's organization (e.g., non-federal loans or state grants) should be secured and available to the applicant prior to award.

UBBNRD Eligible: Yes	Applicant Match: Yes <ul style="list-style-type: none">• Amount: 35%• Type: \$ and in-kind	Funding Ranges <ul style="list-style-type: none">Construction Projects: \$3,000,000 - \$10,000,000Design Projects: \$500,000-\$2,000,000
Previous Round Open: December	Active/Inactive: Active	
Previous Round Closed: February		
Grant Website: https://www.usbr.gov/watersmart/aquatic/index.html	Link to Past Awards: https://www.usbr.gov/watersmart/aquatic/selected.html	

Strategies

- **Master Planning** – Comprehensive vision
- **Prioritizing** and **sequencing** BMPs based on dependencies
- **Combining multiple grants** or other assistance:
 - **Stacking** – multiple grants tracked/separately for individual BMPs
 - **Braiding** – multiple grants woven together for overall large project
- **Partnering** and **Collaborating** – e.g. Nonprofit
- **Donations** and **Technical Assistance**
- Leverage **community** resources and projects



Scoring Rubric & Prioritized Funding Options

Score (pts)	Scoring Criteria Factors				
	Match Required	Geographic Scope	Maximum Funding Amount	Level of Effort (LOE)	Applicant
3	No match or minimal match (<10%)	State/local grant (specific to Nebraska or NRDs)	\$250K+	Simple application (few forms, minimal attachments)	UBBNRD eligible
2	Moderate match (10–49%)	Regional grant (Midwest/Plains)	\$50K–\$249K	Moderate effort (some complexity, standard grant requirements)	Undetermined or may require inquiry
1	High match (50%+ required)	National with high competition	<\$50K	High effort (multiple-steps, extensive documentation)	Other entity required such as Nonprofit

Scoring criteria based on discussion with staff regarding **most important considerations**:

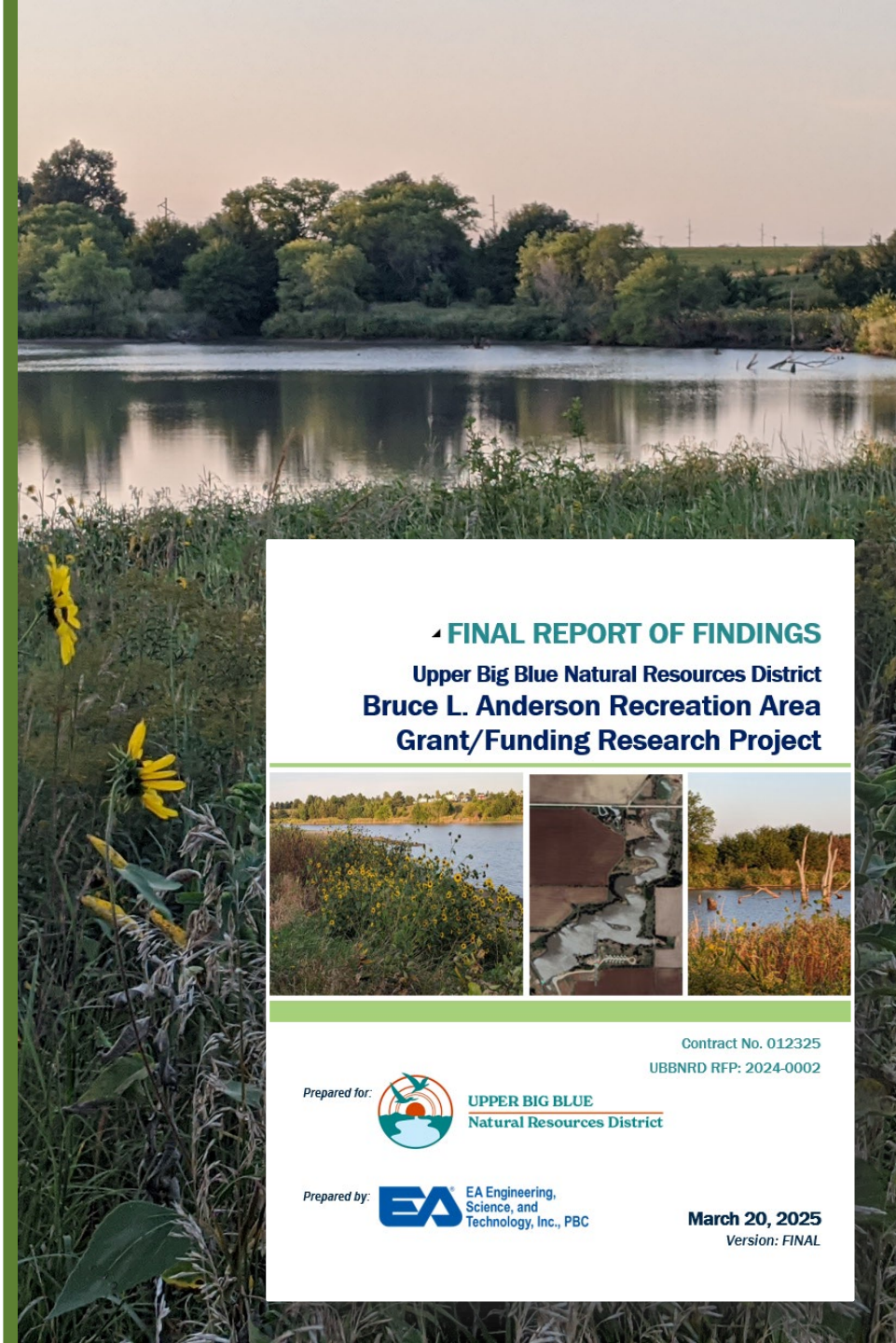
- Match and Amount
- Geographic Scope
- Funding Amounts
- Level of Effort
- Eligibility

Resulting tables of **priority funding options** at or **above the median score** for each category (e.g. Aquatic Habitat)

Grant/Funding Opportunity	Grantor	Funding Range	Score (pts)
Nebraska Environmental Trust – Habitat*	Nebraska Environmental Trust	Unspecified	13
WaterSMART Aquatic Restoration Program (Construction)	Bureau of Reclamation	\$3,000,000-\$10,000,000	11
WaterSMART Aquatic Restoration Program (Design)	Bureau of Reclamation	\$500,000-\$2,000,000	11
Bass Pro – Cabela’s Outdoor Fund	Bass Pro Shops-Cabela’s	Max \$10,000	10
BNSF Railway Foundation	BNSF Foundation	\$1,000-\$10,000	9
Friends of Reservoirs: Large Grant	Reservoir Fisheries Habitat Partnership	\$10,000-\$75,000	9
Friends of Reservoirs: Mossback Grant	Friends of Reservoirs	Max \$1,000	9
Friends of Reservoirs: Small Grant	Friends of Reservoirs	Max \$2,000	9
The Conservation Alliance	Conservation Alliance	Max \$50,000	9
The Five Star and Urban Waters Restoration Program	National Fish and Wildlife Foundation	\$30,000-\$60,000	9
<i>Note: The NGPC Aquatic Habitat Program may be a good, non-grant option; It is discussed below.</i> <i>* Recent trends in allocations indicate fewer project of this nature awarded funding; May need re-evaluation.</i>			

Results

- Comprehensive Matrix
- Funding opportunities organized into 5 categories to address BMPs and funding options to make more manageable:
 - **Recreational Enhancements**
 - **Aquatic Habitat Restoration**
 - **Water Quality Improvements**
 - **Watershed BMPs**
 - **Terrestrial Habitat**
- Priority Grant Summaries
- Recommendations for priority funding options and other options warranting consideration
- Grants Calendar
- Final Report of Findings



FINAL REPORT OF FINDINGS

Upper Big Blue Natural Resources District
Bruce L. Anderson Recreation Area
Grant/Funding Research Project



Contract No. 012325
UBBNRD RFP: 2024-0002

Prepared for:



UPPER BIG BLUE
Natural Resources District

Prepared by:



EA Engineering,
Science, and
Technology, Inc., PBC

March 20, 2025
Version: FINAL



Key Findings & Recommendations

- **Recreational Enhancements** (*Trails, Camping, Access, Amenities*)
 - **Primary Funding Opportunities:**
 - Land and Water Conservation Fund
 - Rivers, Trails, and Conservation Assistance Program
 - For: Multiuse trail and public access improvements
 - **Other Options:**
 - Trek Foundation
 - People for Bikes
 - The Conservation Alliance
 - For: Trail infrastructure and community engagement



Key Findings & Recommendations

- **Aquatic Habitat Restoration** (*Fisheries, In-lake Enhancements*)
 - **Primary Funding Opportunities:**
 - NGPC Aquatic Habitat Program for aquatic habitat rehabilitation
 - Nebraska Environmental Trust – Habitat
 - BOR WaterSMART Aquatic Restoration Program for lake deepening, mussel beds, and in-water habitat structures
 - **Other Options:**
 - Friends of Reservoirs
 - Bass Pro-Cabela's Outdoor Fund
 - For: Smaller habitat restoration projects



Key Findings & Recommendations

- **Water Quality Improvements** (*Floating Treatment, Wetlands, Shoreline Protection*)
 - **Primary Funding Opportunities:**
 - Section 319 Watershed Projects via NDEE
 - Nebraska Environmental Trust – Surface & Groundwater
 - Nebraska Water Sustainability Fund (WSF) via NDNR
 - **Other Options:**
 - EPA Regional Source Reduction Assistance Grants
 - Five Star & Urban Waters Program
 - For: BMPs such as floating wetlands and shoreline stabilization



Key Findings & Recommendations

- **Watershed BMPs**(*Sediment/Nutrient Load & Runoff Reduction*)
 - **Primary Funding Opportunities:**
 - Conservation Partners Program – National Fish & Wildlife Foundation (NFWF)
 - Nebraska Environmental Trust
 - For: Buffer strips, cover crops, and nutrient management
 - **Other Options:**
 - National Association of Conservation Districts (NACD) - Outreach and Technical Assistance Grants
 - NRCS Programs
 - For: Education and producer engagement



Key Findings & Recommendations

- **Terrestrial Habitat** (*Pollinator & Grassland Restoration*)
 - **Primary Funding Opportunities:**
 - Monarch Butterfly & Pollinators Conservation Fund
 - Southern Plains Grassland Program
 - For: Native habitat restoration
 - **Other Options:**
 - The National Environmental Education Foundation (NEEF) Biodiversity Conservation Grants
 - The Dr. Scholl Foundation
 - For: Pollinator gardens and habitat outreach

Implementation Strategy & Next Steps

• Priority Funding Sources

- Summaries in report – “Cards”
- Check for updates / websites
- Review past awards

• Alternative Funding Sources

- Adjust as needed / Some sources on pause or not re-authorized
- Consider secondary sources – Comprehensive Matrix in report
- Smaller grants for matching or to stack & braid

Grant/Funding Opportunity Name: WATERSMART AQUATIC RESTORATION PROGRAM		
Granting Organization: Bureau of Reclamation (BOR)		
Summary: Leverages Federal and non-Federal funding to work cooperatively with States, Tribes, and other entities as they study, design and construct aquatic ecosystem restoration projects that are collaboratively developed, have widespread regional benefits, and result in an improvement to the health of fisheries, wildlife, and aquatic habitat through restoration or improved fish passage. As used here, “aquatic ecosystem” refers to freshwater and brackish water habitats such as lakes, ponds, rivers, streams, wetlands, swamps, and estuaries and the adjacent floodplains, riparian corridors, deltas, and shallow aquifers that interact with surface water.		
Additional Details / Information: Funds for Design and Construction; Eligible restoration activities include, but are not limited to: <ul style="list-style-type: none"> • Removal or Modification of Barriers to Fish Passage • Restoration of Floodplain Connectivity • Restoration of Aquatic Habitat • Implementation of Nature-Based Solutions Projects • Improvement of Water Availability, Quality, and Temperature • Other Related Activities Notes: This program is paused for review. Future priorities are unknown at this time. Cost-share funding from sources outside the applicant's organization (e.g., non-federal loans or state grants) should be secured and available to the applicant prior to award.		
UBENRD Eligible: Yes	Applicant Match: Yes • Amount: 55% • Type: \$ and in-kind	Funding Ranges Construction Projects: \$3,000,000 - \$10,000,000 Design Projects: \$500,000-\$2,000,000
Previous Round Open: December Previous Round Closed: February	Active/Inactive: Active	
Grant Website: https://www.usbr.gov/watersmart/aquatic/index.html	Link to Past Awards: https://www.usbr.gov/watersmart/aquatic/selected.html	

Table F-1. Full Table of Recreational Funding Opportunities

Grant Program (Funding Organization)	Funding Range	Asst Type	Funding Org Type	Previous Round Opened (Month)	Previous Round Closed (Month)	Grant Website	Past Awards Link	Notes (For Opportunity or limitations and tips)	March	Geographic Scope	Funding Amount	LOE	UBENRD	Score
U.S. Department of Transportation, Recreational Trails Program (Nebraska Game and Parks (Through FHA))	\$50,000-\$250,000	Funds	Federal	May	August	https://outdoornebraska.gov/about/community-resources/grants/recreational-trails-program/		This program provides funding to states to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational users. The Infrastructure Investment and Jobs Act reauthorized this program through FY2026 under the Transportation Alternatives Set-Aside from the Surface Transportation Block Grant program.	2	3	3	3	3	14
BUILD/ formerly RAISE (U.S. Department of Transportation)	\$1,000,000-\$25,00,000	Funds	Federal	November	January	https://www.transportation.gov/BUILDgrants		Should be integrated with a larger, regional effort- i.e. connecting bike trail with the city. Federal priorities may be adjusted in the future to no longer fund bike path infrastructure.	3	1	3	3	3	13
Land and Water Conservation Fund (Nebraska Game and Parks (Through NPS))	\$75,000-\$600,000	Funds	State	May	August	https://outdoornebraska.gov/about/community-resources/grants/land-and-water-conservation-fund/		Align with the Nebraska Statewide Comprehensive Outdoor Recreation Plan	1	3	3	3	3	13
Rivers, Trails, and Conservation Assistance Program (NPS)	N/A	Technical Assistance	Federal			https://www.nps.gov/orgs/rzca/index.htm		The Rivers, Trails, and Conservation Assistance program assists communities and public land managers in developing or restoring parks, conservation areas, rivers, and wildlife habitats, as well as creating outdoor recreation opportunities.	3	1	3	3	3	13

Implementation Strategy & Next Steps

- **Contact Program Managers**

- Confirm UBBNRD eligibility
- Discuss and determine project eligibility and requirements

- **Create Funding Implementation Strategy**

- Recheck status
- Priority + Alternative funding options
- Timelines – Consider grants calendars and BMP sequences

- **Setup & Signup**

- Setup accounts and prep work ahead of time – e.g. Grants.gov, SAM.gov
- Signup for notifications

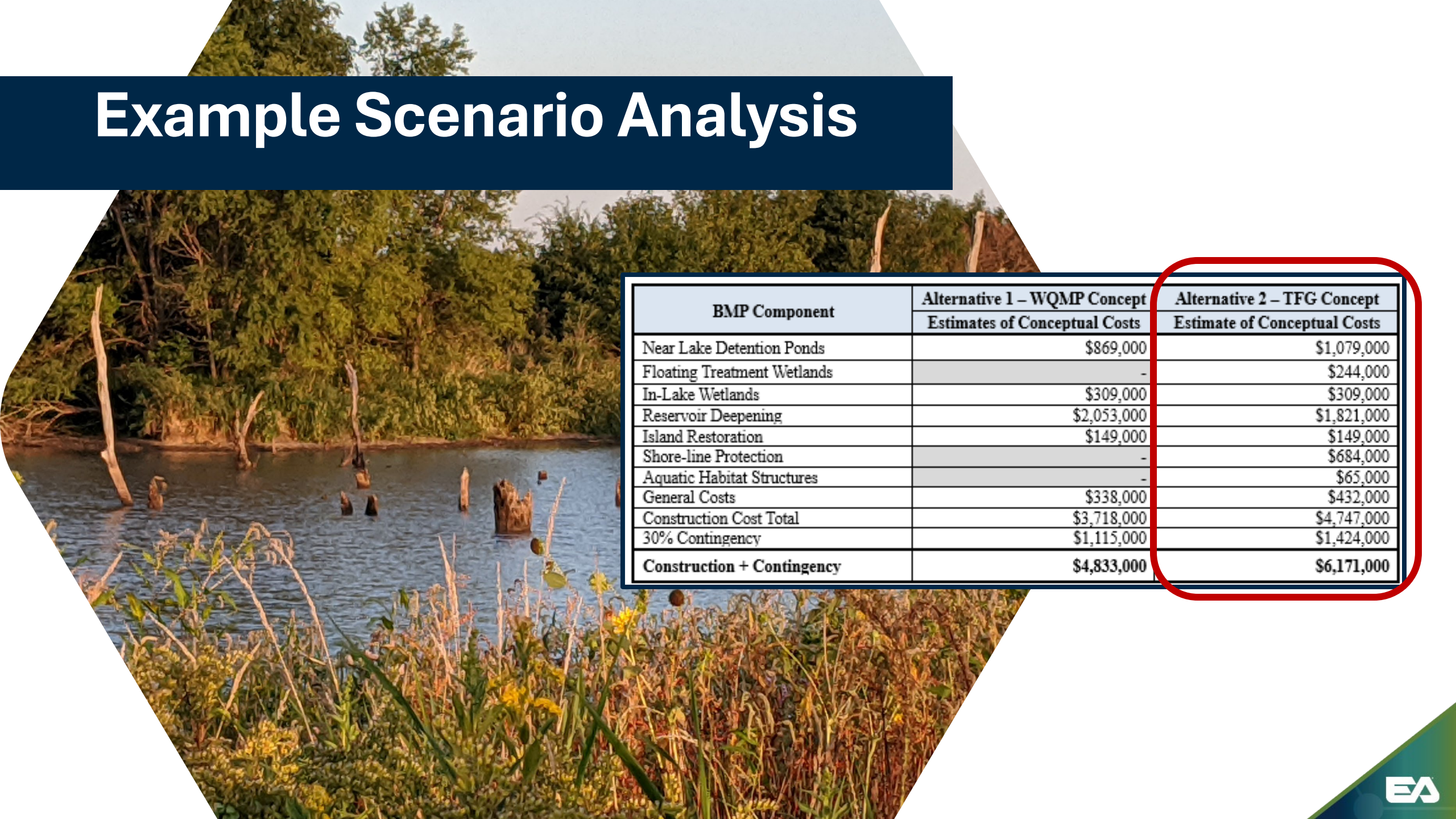
- **Implement**

- May require official resolution / action
- Tracking system / process
- Reporting and compliance

Notice of Funding Released	Month	Application or Pre-proposal Due
• York Community Foundation Grants (Rec)	Jan	• Five Star and Urban Waters (Water Quality, Aquatic Habitat, Watershed BMPs) • BUILD (Rec)
• Regional Source Reduction Assistance Grants (Water Quality, Watershed BMPs)	Feb	
	Mar	• Rivers, Trails, and Conservation Assistance Program (Rec)
	April	• York Community Foundation, Period 1 (Rec) • Regional Source Reduction Assistance Grants (Water Quality, Watershed BMPs)
• U.S. Department of Transportation, Recreational Trails Program (Rec) • Land and Water Conservation Fund (Rec) • York Community Foundation Grants, Period 2 (Rec) • Monarch Butterfly and Pollinators Conservation Fund (Terrestrial Habitats)	May	
• Conservation Partners Program (Terrestrial Habitats, Watershed BMPs)	June	
• Nebraska Environmental Trust (Water Quality, Aquatic Habitat, Terrestrial Habitats)	July	• York Community Foundation Grants (Rec) • Monarch Butterfly and Pollinators Conservation Fund (Terrestrial Habitat)
	Aug	• U.S. Department of Transportation, Recreational Trails Program (Rec) • Land and Water Conservation Fund (Rec) • Conservation Partners Program (Terrestrial Habitats and Watershed BMPs)
	Sept	• Nebraska Environmental Trust (Water Quality, Aquatic Habitat, Terrestrial Habitat)
	Oct	
• Five Star & Urban Waters (Water Quality, Aquatic Habitat, Watershed BMPs) • BUILD (Rec)	Nov	
• WaterSMART Aquatic Restoration Program (Water Quality, Aquatic Habitat)	Dec	
Rolling • Bass Pro - Cabela's Outdoor Fund (Water Quality, Rec)	Other	Contact Funder • 319 - Watershed-Based Projects (Water Quality)



Example Scenario Analysis



BMP Component	Alternative 1 – WQMP Concept	Alternative 2 – TFG Concept
	Estimates of Conceptual Costs	Estimate of Conceptual Costs
Near Lake Detention Ponds	\$869,000	\$1,079,000
Floating Treatment Wetlands	-	\$244,000
In-Lake Wetlands	\$309,000	\$309,000
Reservoir Deepening	\$2,053,000	\$1,821,000
Island Restoration	\$149,000	\$149,000
Shore-line Protection	-	\$684,000
Aquatic Habitat Structures	-	\$65,000
General Costs	\$338,000	\$432,000
Construction Cost Total	\$3,718,000	\$4,747,000
30% Contingency	\$1,115,000	\$1,424,000
Construction + Contingency	\$4,833,000	\$6,171,000

Example Scenario Analysis - Introduction

- **Purpose of Scenario Analysis**

- We developed this analysis as an example to illustrate how **grant funding might be leveraged** versus funds provided by the UBBNRD
- This scenario demonstrates **potential funding approaches**, not a definitive plan or endorsement

- **Key Considerations**

- The Water Quality Improvement Plan (WQIP) Alternative 2 is used **solely as an example** as there are many considerations and complexities
- **Numerous variables** could impact the analysis, including:
 - Future availability and continuity of grant funding
 - Variations in the cost estimates from the WQIP
 - The competitive and uncertain nature of securing grant funding

WQIP Alternative 2 (TFG) - Overview

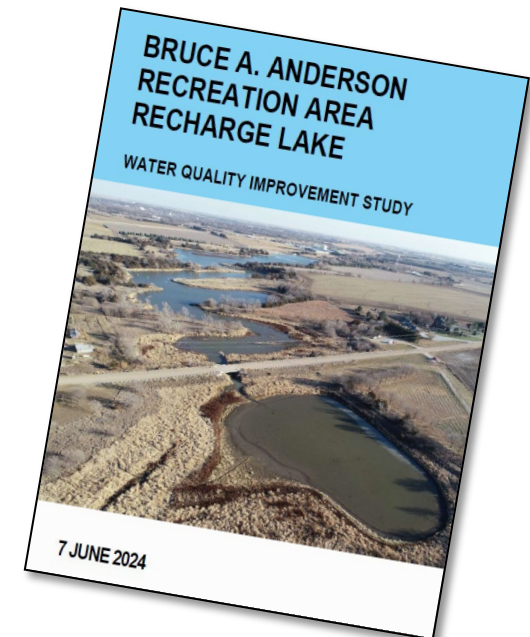
- **Why Use the WQIP Alternative**

- The most current example with an established conceptual cost estimate
- Serves as a template for exploring potential funding scenarios in future projects

- **Phased Design Approach**

- **Phase 1 – \$1.5M:** Near Lake Detention Ponds
- **Phase 2 – \$3.6M:** Shore-line Protection, Aquatic Habitat Structures, and Reservoir Deepening
- **Phase 3 – \$1M:** Floating Treatment Wetlands, In-Lake Wetlands, and Island Restoration

BMP Component	Alternative 2 – TFG Concept
	Estimate of Conceptual Costs
Near Lake Detention Ponds	\$1,079,000
Floating Treatment Wetlands	\$244,000
In-Lake Wetlands	\$309,000
Reservoir Deepening	\$1,821,000
Island Restoration	\$149,000
Shore-line Protection	\$684,000
Aquatic Habitat Structures	\$65,000
General Costs	\$432,000
Construction Cost Total	\$4,747,000
30% Contingency	\$1,424,000
Construction + Contingency	\$6,171,000



Funding Breakdown – Phase 1

- **Grant Sources**

- NDEE 319 Funding
- EPA Regional Source Reduction Assistance Grants: Large
- Friends of Reservoirs
- National Fish and Wildlife Foundation Conservation Partners Program

- **Funding Details**

- Total Grants: \$1.48M
- UBBNRD Cost Share: \$60K

BMP Component	Alternative 2 – TFG Concept
	Estimate of Conceptual Costs
Near Lake Detention Ponds	\$1,079,000
Floating Treatment Wetlands	\$244,000
In-Lake Wetlands	\$309,000
Reservoir Deepening	\$1,821,000
Island Restoration	\$149,000
Shore-line Protection	\$684,000
Aquatic Habitat Structures	\$65,000
General Costs	\$432,000
Construction Cost Total	\$4,747,000
30% Contingency	\$1,424,000
Construction + Contingency	\$6,171,000

Funding Breakdown – Phase 2

- **Grant Sources**

- NDNR Nebraska Water Sustainability Fund
- Five Star and Urban Waters Restoration (National Fish and Wildlife Foundation)
- BNSF Railway Foundation
- Bureau of Reclamation WaterSMART Aquatic Restoration Program

- **Funding Details**

- Total Grants: \$2.15M
- UBBNRD Cost Share: \$1.5M

BMP Component	Alternative 2 – TFG Concept
	Estimate of Conceptual Costs
Near Lake Detention Ponds	\$1,079,000
Floating Treatment Wetlands	\$244,000
In-Lake Wetlands	\$309,000
Reservoir Deepening	\$1,821,000
Island Restoration	\$149,000
Shore-line Protection	\$684,000
Aquatic Habitat Structures	\$65,000
General Costs	\$432,000
Construction Cost Total	\$4,747,000
30% Contingency	\$1,424,000
Construction + Contingency	\$6,171,000

Funding Breakdown – Phase 3

- **Grant Sources**

- Friends of Reservoirs
- Five Star and Urban Waters Restoration (National Fish and Wildlife Foundation)
- Land and Water Conservation Fund NGPC
- EPA Regional Source Reduction Assistance Grants: Small
- Conservation Alliance

- **Funding Details**

- Total Grants: \$690K
- UBBNRD Cost Share: \$310K

BMP Component	Alternative 2 – TFG Concept
	Estimate of Conceptual Costs
Near Lake Detention Ponds	\$1,079,000
Floating Treatment Wetlands	\$244,000
In-Lake Wetlands	\$309,000
Reservoir Deepening	\$1,821,000
Island Restoration	\$149,000
Shore-line Protection	\$684,000
Aquatic Habitat Structures	\$65,000
General Costs	\$432,000
Construction Cost Total	\$4,747,000
30% Contingency	\$1,424,000
Construction + Contingency	\$6,171,000

Funding Breakdown – Total

• Funding Summary

- Alternative 2 Total Cost: \$6.1M
- Total Estimated Grants: **\$4.3M**
- UBBNRD Total Cost Share: **\$1.8M (Remaining)**

BMP Component	Alternative 2 – TFG Concept
	Estimate of Conceptual Costs
Near Lake Detention Ponds	\$1,079,000
Floating Treatment Wetlands	\$244,000
In-Lake Wetlands	\$309,000
Reservoir Deepening	\$1,821,000
Island Restoration	\$149,000
Shore-line Protection	\$684,000
Aquatic Habitat Structures	\$65,000
General Costs	\$432,000
Construction Cost Total	\$4,747,000
30% Contingency	\$1,424,000
Construction + Contingency	\$6,171,000





QUESTIONS



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- **Rodney Verhoeff** rverhoeff@eaest.com