



**Executive Board of the Legislative Council
for the State of Nebraska**

**Statewide Tourism and Recreational Water
Access and Resource Sustainability
(STAR WARS) Special Committee
Final Report**

May 4, 2022

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1.0 Introduction

1.1 Purpose and Drivers

With the passing of Legislative Bill 406 (LB406), the Executive Board of the Legislative Council for the State of Nebraska created the Statewide Tourism and Recreational Water Access and Resource Sustainability (STAR WARS) Special Committee. This committee was tasked with identifying opportunities to enhance and sustain Nebraska's two greatest assets—its people and its resources—through creating a vision for three specific resource areas within the state: the Lake McConaughy Region in Keith County, the Lower Niobrara / Northern Knox County Region, and the Lower Platte River Corridor Region. These three resource areas each offer the possibility to serve as a catalyst, creating regional and state benefits for the citizens of Nebraska for years to come. The purpose of this study was to create a foundation for a shared vision for each area and to provide an understanding of the real, tangible benefits offered by that vision. Figure 1 highlights the resource areas for study identified in LB406.

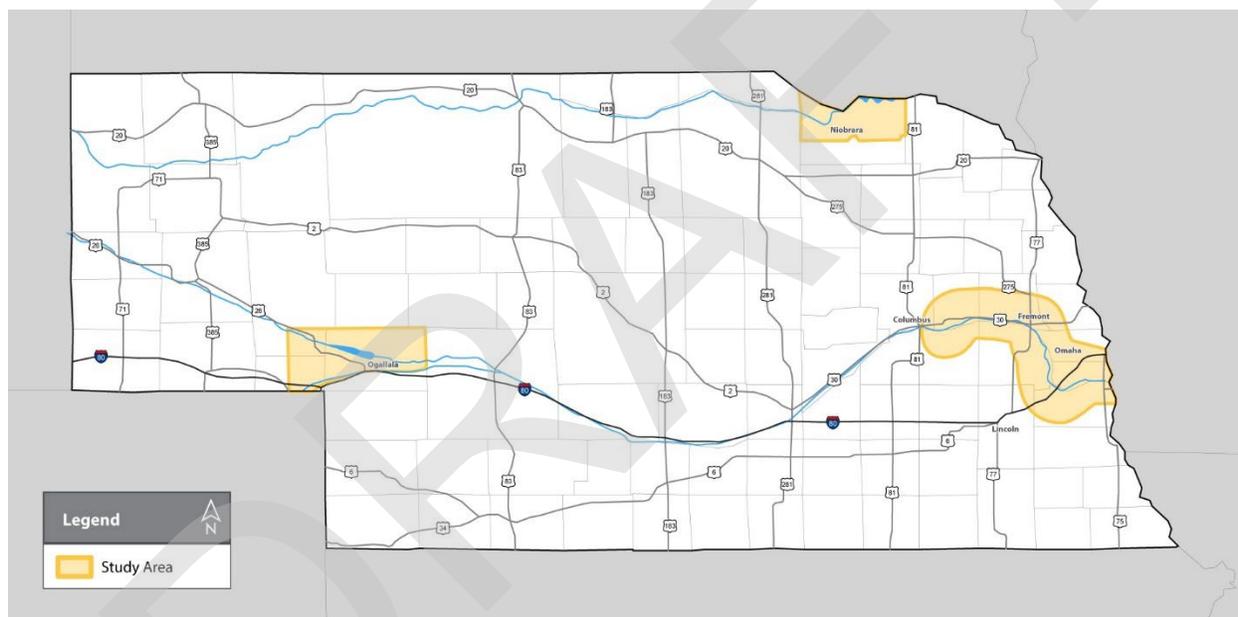


Figure 1. Resource Areas for Study Identified in LB406

The future vibrancy of the people, communities, and businesses of Nebraska depends on the following:

- Reliable sources of water
- Well-planned flood control
- Access to sustainable water resources and outdoor recreational opportunities
- Quality of life to attract and maintain our population base
- Enhanced tourism in Nebraska from surrounding areas to boost local economies

Initiatives identified during this study are intended to increase jobs, promote economic development, grow tax receipts, and provide enhanced quality of life benefits for all Nebraskans.

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1.2 Resource Areas

Three specific resource areas within the state identified in LB 406 are included in this study, as described in the following sections.

1.2.1 Lake McConaughy Region in Keith County

Lake McConaughy is Nebraska’s largest reservoir and consistently is one of the state’s largest recreation and tourist attractions. Kingsley Dam, located on the east side of the reservoir, is among the largest of its type in the world. Located 8 miles north of Ogallala, Lake McConaughy State Recreation Area is known for white sand beaches and clear waters that are a favorite with campers, boaters, wind surfers, swimmers, water skiers, scuba divers, picnickers, hunters, anglers, and others seeking outdoor fun. This planning effort focused on potential recreational and other development improvements to build on what the region currently offers. Figure 2 shows the study area for the Lake McConaughy Region in Keith County.



Figure 2. Study Area for the Lake McConaughy Region in Keith County

1.2.2 Lower Niobrara / Northern Knox County Region

Situated at the confluence of the Niobrara and Missouri Rivers on Nebraska’s northeastern border, Niobrara State Park offers cabins, camping, picnicking, swimming, boat ramps, horseback trails, hiking, fishing, and wildlife watching opportunities. To the east of Niobrara State Park, the Lewis and Clark Lake State Recreation Area, which is located along the south shore of Lewis and Clark Reservoir, offers modern cabins, boating, fishing, and hunting opportunities. This planning effort focused on potential recreational and other development improvement opportunities to build on and complement what these two facilities and the region currently offers. Figure 3 shows the study area for the Lower Niobrara / Northern Knox County Region.

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Figure 3. Study Area for the Lower Niobrara / Northern Knox County Region

1.2.3 Lower Platte River Corridor Region

The study of the Lower Platte River Corridor Region focused on measures to provide flood mitigation to public and private property within this river reach, defined as the reach of the Platte River from Columbus to its confluence with the Missouri River. The study also sought to identify opportunities to maximize recreational opportunities and tourism, provide resilience of available water supply, improve water quality, and provide increased opportunities for habitat preservation—either in conjunction with identified flood mitigation measures or as stand-alone initiatives. Figure 4 shows the study area for the Lower Platte River Corridor Region.



Figure 4. Study Area for the Lower Platte River Corridor Region

1.3 Acknowledgments

The STAR WARS Special Committee is comprised of the following Nebraska State Senators:

- Sen. Mike Hilgers, Speaker, District 21
- Sen. Rob Clements, District 2
- Sen. Mike McDonnell, District 5
- Sen. Mike Flood, District 19
- Sen. John McCollister, District 20
- Sen. Bruce Bostelman, District 23
- Sen. Anna Wishart, District 27
- Sen. Tom Brandt, District 32
- Sen. Tim Gragert, District 40
- Sen. Dan Hughes, District 44

2.0 General Methodology

For each resource area, a similar approach was used to work collaboratively with the STAR WARS Special Committee and stakeholders in the region to develop initiatives to meet project purposes. In addition to extensive coordination with members of the STAR WARS Special

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Committee, the approach included stakeholder and public engagement; data collection, base mapping, and analysis; market assessments; initiative development; economic analyses; and regulatory permitting and environmental compliance review. The methodology for each is described below.

2.1 Stakeholder and Public Engagement

At the onset of the study effort, a comprehensive public engagement plan was developed to address the following four primary engagement goals:

- Manage stakeholder and public expectations by communicating study efforts, schedule, and opportunities to provide input.
- Receive important background information and input on the resource areas—critical to initiative development—from local participants.
- Collaborate with local partners to broadly communicate study efforts and drive public participation.
- Build positive public sentiment through easy-to-access, consistent, and clear communications.

A variety of approaches were used to execute these engagement goals, including in-person workshops, public hearings, and electronic visioning surveys. A project website was developed to provide 24/7 access to information and public engagement opportunities throughout the three study areas, including maps, slides, surveys, and an online comment form. The website can be found at www.planpreserveplayNE.com. The stakeholder and public engagement efforts for each of the three resource areas are detailed in Appendices I, II, and III, respectively.

2.2 Data Collection, Base Mapping, and Analysis

Working with the key stakeholders, available data was assembled, reviewed, and analyzed to create the study area base and analysis maps for each study area. This effort included compilation of available geographic information system (GIS) data, aerial photos, previous applicable planning studies, development proposals, environmental studies, infrastructure studies, and topographic surveys. The data collection and analysis efforts were enhanced by context assessment workshops hosted for each resource area. These workshops provided a focused opportunity to understand existing and planned features, as well as each area's strengths, weaknesses, opportunities, and threats (SWOT) that established the context for developing initiatives.

Specific to the flood mitigation efforts for the Lower Platte River Corridor Region, additional analyses were completed to study the lower Platte River and its tributaries to support development of potential flood mitigation initiatives. These additional analyses included the following:

- **Hydrologic Analysis.** A hydrologic model of the lower Platte River basin was developed and calibrated for use in estimating the magnitude and timing of flood flows throughout the basin. Once calibrated, the hydrologic model was used to assess potential flood mitigation measures, such as potential flood storage reservoirs to reduce flooding in the lower Platte River. The development and calibration of the hydrologic model is described in Appendix III.A.

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- **Hydraulic Analysis.** A two-dimensional, unsteady flow hydraulic model of the lower Platte River reach was developed and calibrated for use in establishing estimates of flood flow hydrographs and corresponding water surface elevations throughout the reach. Once calibrated, the hydraulic model was used to assess potential flood mitigation measures, such as off-channel storage, conveyance improvements, and levees. The development and calibration of the hydraulic model is described in Appendix III.B.

Specific to the recreation and economic development study efforts for the Lower Platte River Corridor Region, additional analyses were completed to evaluate a potential off-channel lake adjacent to the Platte River. The potential lake would be constructed through dredging activities. These additional analyses included the following:

- **Groundwater Analysis.** A numerical groundwater model of the lower Platte River valley was developed and calibrated to simulate groundwater and surface water interactions of the Platte River, as well as to provide estimates of static water levels anticipated for potential dredged lake projects in the area. The development and calibration of the hydraulic model is described in Appendix III.C.
- **Geotechnical Analysis.** Geotechnical evaluations for potential dredge lake projects in the area were conducted to estimate stable geometric and slope configurations, as well as to provide minimum offsets from existing levees, infrastructure, and the Platte River channel. The geotechnical data collection and analysis is described in Appendix III.D.

2.3 Market Assessments

Market assessments of each area were completed to support the planning process. Case study research and a high-level market assessment were conducted to help ascertain the market potential of each project location. To inform the opportunity assessment, existing conditions in each study area were evaluated, including assessing employment trends and researching existing attractions, lodging, support services, and housing. Local economic and market conditions were analyzed, as were comparable and aspirational case studies. Study area conditions were then compared to case study locations using a “presence and absence” approach. Items that were missing or underrepresented in the study area relative to comparable areas became areas of focus for the plan and future investment.

Potential market demand for each location was evaluated. This included an examination of uses such as residential, hospitality, service/retail, recreation/tourism, and wild card uses such as resort and/or other visitor attractions. This data provided an understanding of the development potential, market conditions, and future trends that will influence future markets relative to each location. This understanding also assisted in establishing the development program to be examined for each location. The findings were summarized by outlining the key pillars of a vibrant tourism ecosystem: lodging, attractions, and housing. The detailed market assessment for each study area is included in Appendices I, II, and III.

2.4 Initiatives Development

Using the foundational knowledge garnered through the data collection, context assessment workshops, visioning surveys, and market assessment efforts, potential initiatives for each study

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area were developed in collaboration with the STAR WARS Special Committee and stakeholders. The initiatives developed for each study are described in Section 3.0.

For the Lake McConaughy and Niobrara / North Knox County study areas, which had the benefit of existing amenities and resources, initiatives were developed through week-long design workshops. These workshops were held on-site where participants had the opportunity to review draft concepts and provide feedback and guidance daily, which was then iteratively incorporated into revised concepts. The result of the design workshops at each site was a conceptual master plan that consisted of recommendations relating to design character, recreational opportunities, land use, mobility options, building typologies and placement, future streets and street sections, open space, public facilities, etc. This design workshop process and conceptual master plans for these two study areas are documented in Appendices I and II.

Initiatives for flood mitigation in the Lower Platte River Corridor Region, as well as recreation and economic development within the study area, were identified through collaboration with key stakeholders in the study area with interests in those fields. Specific to flood mitigation, numerous study efforts conducted over the past 50 years by entities such as Natural Resources Districts (NRD), the US Army Corps of Engineers (USACE), and cities and counties within the study area were reviewed and considered for potential initiatives.

2.5 Economic Analysis

Using concept-level cost estimates, an economic impact analysis was completed. Economic impacts capture the myriad of transactions between buyers and sellers that are linked to some types of spending on a good or service. For the STAR WARS initiatives, these expenditures cover the construction of infrastructure as well as the expenses associated with visitors, recreators, and users of the infrastructure. The main objective of an economic impact analysis is to determine the effect of a change in the demand for goods and services on the level of economic activity in a given area.

This economic analysis was completed using concepts and analytic approaches based on standard economic impact methodologies and multipliers from IMPLAN®, as well as literature research. The analysis of total economic impacts builds from data on expenditures and the estimated combined impact of direct, indirect, and induced economic effects. Each of these effects captures a series of related types of spending. The effects used in this analysis are defined as follows:

- **Direct effect:** Refers to the economic activity resulting from direct spending by businesses or agencies located in the study area (e.g., contractor expenditures related to construction equipment and/or materials)
- **Indirect effect:** Refers to the economic activity resulting from purchases by local firms who are the suppliers to the directly affected (first round) and other indirectly affected (secondary round) businesses or agencies (e.g., supplier expenditures resulting from direct-effect sales)
- **Induced effect:** Refers to the increase in economic activity, over and above the direct and indirect effects, associated with increased labor income that accrues to workers in the direct and indirect rounds (e.g., the contractor and all suppliers) and is spent on household goods and services purchased from businesses within the study area (e.g., increase in income from direct or indirect effects)

The economic impact analysis also includes annual operational impacts related to visitor spending on trips for the recreation amenities created by the projects. The economic analysis is included in Appendix IV.

2.6 Regulatory Permitting and Environmental Compliance Review

A regulatory permitting and environmental compliance review was conducted to identify federal, state, and local permitting and environmental compliance constraints, as well as potential requirements associated with proposed initiatives. This review included requirements such as the following:

- Clean Water Act Section 404 permitting
- National Environmental Policy Act (NEPA)
- USACE Section 408 authorization
- National Historic Preservation Act Section 106 for cultural resources
- Migratory Bird Treaty Act
- Federal Aviation Administration
- National Pollutant Discharge Elimination System
- Local floodplain development permitting

The regulatory permitting and environmental compliance review is included in Appendix V.

3.0 Initiatives

Initiatives identified through the processes described in Section 2.4 are summarized in the following sections.

3.1 Lake McConaughy Region in Keith County

The Lake McConaughy Region conceptual master plan included potential recreational and other development and improvement opportunities to enhance one of the state's top tourist attractions. The ultimate goal of these initiatives is to increase population, tourism, job growth, and per capita income, and to enhance the region's economy.

Identified initiatives include the following:

- Improved north/south corridor and gateway experience
- North shore marina and park at Lake McConaughy State Recreation Area
- Observation towers and overlooks at Lake McConaughy State Recreation Area
- Event center at Lake McConaughy State Recreation Area
- Resort and master-planned community with aerial tram at Lake McConaughy State Recreation Area
- Eco-tourism lodge and resort at Lake McConaughy State Recreation Area
- Additional camping and day-use activities at Lake McConaughy State Recreation Area
- Additional camping, day-use activities, and improvements at Lake Ogallala State Recreation Area
- Infill housing in Ogallala

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Appendix I contains details and renderings of the full suite of initiatives identified for the Lake McConaughy Region.

3.2 Lower Niobrara / Northern Knox County Region

The study of the Lower Niobrara / Northern Knox County Region identified initiatives to enhance the opportunities at Niobrara State Park, Lewis and Clark Lake State Recreation Area, and northern Knox County that can drive local, regional, and statewide economic growth.

Identified initiatives include the following:

- Large marina at Weigand area of Lewis and Clark Lake State Recreation Area
- Additional camping and day-use activities at the Weigand/Burbach area of Lewis and Clark Lake State Recreation Area
- Additional cabins at the Weigand/Burbach area of Lewis and Clark Lake State Recreation Area
- Boat ramps at the Weigand, Burbach, Bloomfield, and Miller Creek areas of Lewis and Clark Lake State Recreation Area
- Revitalized Niobrara town center / infill rehab plan
- “Niobrara Landing,” a first-class boat launch near Niobrara
- Pedestrian bridge connecting Niobrara with Niobrara State Park
- Event center and lodge in Niobrara State Park
- Modernized entrance and upgraded amenities at Niobrara State Park

Appendix II contains details and renderings of the full suite of initiatives identified for the Lower Niobrara / Northern Knox County Region.

3.3 Lower Platte River Corridor Region

The study of the Lower Platte River Corridor Region focused on measures to provide flood mitigation to public and private property within this river reach, defined as the reach of the Platte River from Columbus to its confluence with the Missouri River. The study also sought to identify opportunities to maximize recreational opportunities and tourism, provide resilience for available water supply, improve water quality, and provide increased opportunities for habitat preservation—either in conjunction with identified flood mitigation measures or as stand-alone initiatives.

Identified flood mitigation initiatives include the following:

- Flood storage reservoirs on tributaries to the lower Platte River that could provide flood reduction in the lower Platte River – Sites in the Loup River, Elkhorn River, Wahoo Creek, and Salt Creek were included. Approximately 300 locations for flood storage reservoirs to reduce potential flooding on the Platte River between Columbus and the confluence of the Missouri River were identified. In addition to flood mitigation, flood storage reservoirs could also provide permanent storage for recreational, habitat, and water supply needs. After analyzing and screening these 300 locations, 21 potential locations were evaluated in more detail. Flood storage initiatives are described in Appendix III.A.

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- The Lower Platte North Natural Resources District (LPNNRD) provided testimony at the public information hearing regarding current planning and design efforts for a series of flood storage reservoirs in the Upper Wahoo Creek Watershed.
- Several levee concepts along the lower Platte River to protect public and private property from flood flows – These included levee alignments around the Schuyler and Fremont areas identified in past USACE studies, a comprehensive levee system that extends along the entire lower Platte River reach, a levee system that protects incorporated and unincorporated communities throughout the corridor, and a levee system that protects incorporated communities with the Corridor. Descriptions of the levee initiatives are included in Appendix III.B.
 - The Colfax County Board of Commissioners provided design and cost information for the repair of jetty west of Schuyler along the Platte River west of Schuyler damaged during the historic 2019 flood. Without the jetty in place, Platte River flows enter the Lost Creek channel and impact the southern portion of Schuyler at discharges well below flood stage.
- Mitigation concepts for ice jam effects on lower Platte River flood flows for locations identified by the Papio-Missouri River NRD as areas of historic ice jam occurrence – These concepts were based on increased conveyance, either within the channel or increasing overbank conveyance in the floodplain through construction of bypass channels. Descriptions of the ice jam mitigation concepts are included in Appendix III.B.

Identified initiatives focused on recreation and economic development include the following:

- Construction of a lake or lakes in the lower Platte River corridor – Potential lake locations east and west of the Platte River were identified. Potential sites on the east side of the Platte River were prioritized based on access and existing infrastructure considerations.
- Public access and recreation amenities associated with the lake, including incorporation into the Venture Park system of the Nebraska Game and Parks Commission (NGPC) and enhancing the trail networks and park connectivity.

4.0 Preferred Initiatives

Following identification of potential initiatives, several concepts were selected by the STAR WARS Special Committee as “Preferred Initiatives” for each location, as described below.

4.1 Lake McConaughy Region in Keith County

4.1.1 Preferred Initiatives Descriptions

The following three initiatives in the Lake McConaughy Region in Keith County were prioritized by the STAR WARS Special Committee:

1. **A permanent marina at Lake McConaughy, able to withstand water level fluctuations and serve as an amenity to tourists, residents, and small businesses.**

The water level at Lake McConaughy can fluctuate up to 65 feet during the season, making access to the lake extremely difficult during times of low water. A new full-service marina is envisioned that can accommodate these significant water level fluctuations. This new marina, with 100+ slips, would serve as a resilient amenity for residents, tourists, and local businesses. In conjunction with several additional proposed tourist

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amenities, the investment would boost day-use and overnight tourism and help extend the season at Lake McConaughy State Recreation Area.



Figure 5. Lake McConaughy Marina Plan

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Figure 6. Lake McConaughy Marina Perspective

- 2. Roadway improvements at key areas surrounding Lake McConaughy to reduce vehicle wait times, increase mobility, and enhance safety at peak times during the tourism season.** A series of improvements are proposed for the roadway network that provides access to Lake McConaughy, including resurfaced Lakeview Road on the south side of Lake McConaughy, shoulders on Highway 92 on the north side of Lake McConaughy, and turn lanes along Highway 92 at Arthur Bay, Lemoyne, and Belmar. These improvements would improve mobility and access to the lake, reduce waiting times, and enhance safety at peak times during the Lake McConaughy tourism season.

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Figure 7. Lake McConaughy Road Improvement Locations

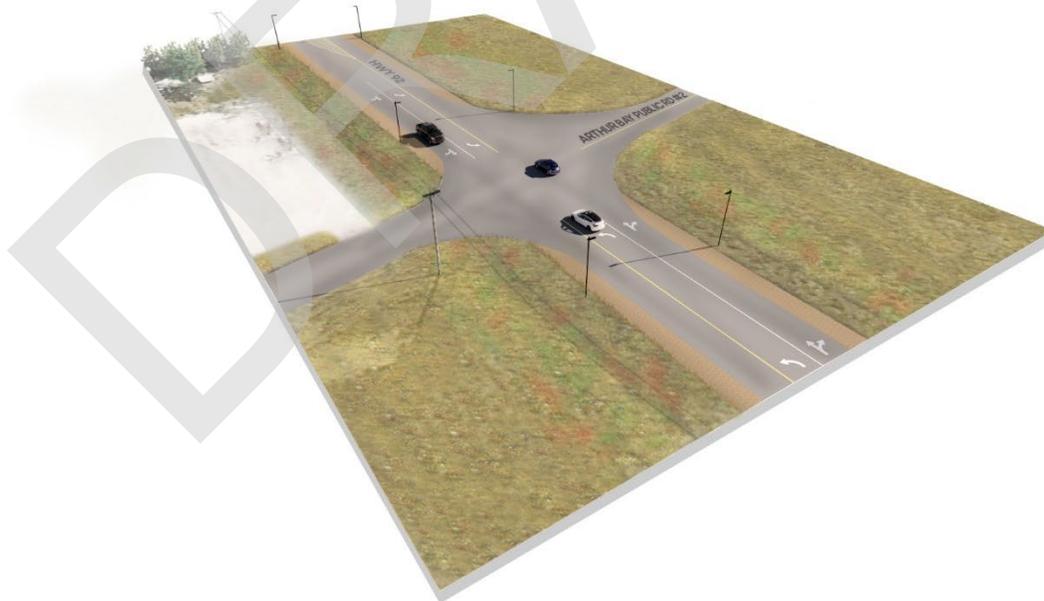


Figure 8. Lake McConaughy Road Improvement – Typical Intersection Improvements

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3. **An iconic, cost-effective entrance feature to cement Lake McConaughy State Recreation Area’s status as a key tourism driver in Nebraska.** An iconic gateway entrance to Lake McConaughy would incorporate the native landscape and celebrate the lake’s stature as one of the premier tourist destinations in the state. This dynamic landform structure, built at a monumental scale, would feature messaging for vehicles traveling in either direction.

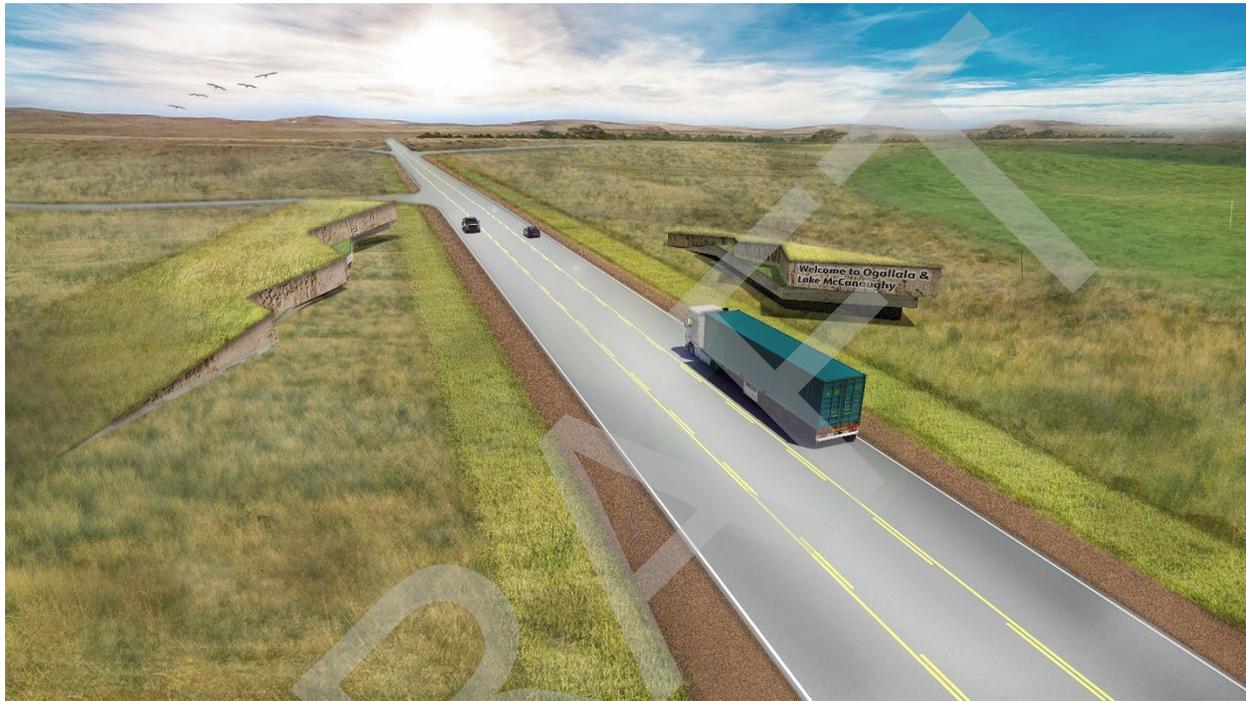


Figure 9. Lake McConaughy Entrance Perspective

4.1.2 Preliminary Cost Estimates

Preliminary costs were calculated for the Preferred Initiatives, as shown in Table 1.

Table 1. Preliminary Cost Estimates for Preferred Initiatives in the Lake McConaughy Region

Preferred Initiative	Preliminary Cost Estimate (\$)
New Marina at Lake McConaughy ¹	\$34.3M
Roadway Improvements ²	\$6.8M
Iconic Gateway Entrance ³	\$1.1M
Total	\$42.2M

¹ Includes marina, parking/paving, and park amenities.

² Includes shoulders, turn lanes, and resurfacing.

³ Includes monument and signage, lighting, and native landscape.

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4.1.3 Economic Impact

Economic impacts were calculated for the Preferred Initiatives, as shown in Table 2.

Table 2. Economic Impacts for Preferred Initiatives in the Lake McConaughy Region

Preferred Initiative	Output (Sales)	Jobs	Income
Construction Impact			
New Marina at Lake McConaughy	\$57.8M–\$68.0M	61–71	\$20.5M–\$24.1M
Marina/Park Amenities	\$15.3M–\$17.8M	16–19	\$5.4M–\$6.3M
Roadway Improvements	\$11.6M–\$12.7M	12–13	\$4.1M–\$4.5M
Iconic Gateway Entrance	N/A	N/A	N/A
Annual Operational Impact			
New Marina at Lake McConaughy ¹	\$1.6M	12	\$0.9M
Marina/Park Amenities ²	\$0.5M	6	\$0.3M
Roadway Improvements	N/A	N/A	N/A
Iconic Gateway Entrance	N/A	N/A	N/A
Total Economic Impact			

¹ Includes spending for boat fuel/oil, boat repair maintenance, new boat sales, boat rentals, other boat expenses, slip rentals, boat storage.

² Includes spending for sporting goods and merchandise, food, lodging, and other miscellaneous expenses.

4.1.4 Funding Opportunities

After discussions with key stakeholders, possible project funding sources and/or project partners include the following:

- Keith County Area Development (KCAD)
- NGPC
- Private investors/partners
- Infrastructure Investment and Jobs Act (IIJA) funding

4.2 Lower Niobrara / Northern Knox County Region

4.2.1 Preferred Initiatives Descriptions

The following three initiatives for the Lower Niobrara / Northern Knox County Region were prioritized by the STAR WARS Special Committee:

1. **A greatly expanded marina at Lewis and Clark Lake State Recreation Area, drawing new revenue streams and a larger share of tourism dollars at Nebraska’s second-largest lake.** The Weigand Marina currently has 100 slips, with a waiting list of more than 400. To accommodate this demand and create additional economic impact, the marina would be expanded to at least 600 slips. This would greatly enhance water access for area residents and tourists, and would create an enhanced revenue stream for NGPC. In addition to the marina expansion, the retrofit could include several new amenities and new administrative office space, all of which would allow Nebraska to compete with South Dakota for tourism dollars and tax revenue.



Figure 10. Weigand Marina Plan



Figure 11. Weigand Marina Perspective

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2. **An event center and lodge in Niobrara State Park to attract tourists, add jobs, and provide one-of-a-kind vistas to visitors from across the country.** The Eagle View Group Lodge at Niobrara State Park overlooks the Missouri River and has one of the premier views in Nebraska. However, the size of the lodge does not accommodate large groups, and the design does not fully take advantage of its special location. To better serve the community and to create a destination that draws visitors year-round and becomes an economic engine for the community, it is proposed that the existing lodge be replaced with a new event center and lodge facility that is designed to fit into its hillside context and provide expansive views of the valley. The event center would accommodate 300-person events, such as weddings, family reunions, birthday parties, business meetings, and small conferences. It would include a restaurant, catering kitchen, and/or food-truck hook-ups for destination food service. The lodge would contain 40 rooms, with the potential for expansion. Additionally, the facility could include a spa, a nature/site history center, a wrap-around viewing deck, and accessible trails leading down to the river. As conceptualized, the event center would be built with State funding, while the lodge would be built and managed by a third-party concessionaire.

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Figure 12. Niobrara State Park Event Center and Lodge Plan



Figure 13. Niobrara State Park Event Center and Lodge Perspective



Figure 14. Niobrara State Park Event Center and Lodge Perspective

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- A first-class boat launch to provide residents, hunters, and anglers access to the Niobrara River.** A new boat launch is envisioned near the Village of Niobrara to provide much-needed access to the Missouri and Niobrara Rivers. Due to sedimentation and the flood of 2019, the previous boat launch is unusable. Recommended to be located in close proximity to the Village of Niobrara, the preferred location would be determined through a feasibility study. Construction of the first-class boat launch would be an economic catalyst for the Village of Niobrara and would enhance the quality of life for residents and tourists who come to northeast Nebraska for world-class hunting and fishing.



Figure 15. Niobrara Landing Perspective

4.2.2 Preliminary Cost Estimates

Preliminary costs were calculated for the Preferred Initiatives, as shown in Table 3.

Table 3. Preliminary Cost Estimates for Preferred Initiatives in the Lower Niobrara / Northern Knox County Region

Preferred Initiative	Preliminary Cost Estimate
Weigand Marina Expansion/Retrofit ¹	\$41.5M
Niobrara Landing Boat Launch ²	\$2.8M
Event Center and Lodge at Niobrara State Park ³	\$42.4M
Total	\$86.7M

¹ Includes marina, utilities, parking, and land-side amenities.

² Includes marina, paving/parking, and land-side amenities.

³ Includes lodge, event center, parking/paving, and cultural entrance.

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4.2.3 Economic Impact

Economic impacts were calculated for the Preferred Initiatives, as shown in Table 4.

Table 4. Economic Impacts for Preferred Initiatives in the Lower Niobrara / Northern Knox County Region

Preferred Initiative	Output (Sales)	Jobs	Income
Construction Impact			
Weigand Marina Expansion/Retrofit	\$67.8M–\$75.9M	69–77	\$24.1M–\$27M
Niobrara Landing Boat Launch	\$5.1M–\$7.6M	5–8	\$1.8M–\$2.7M
Niobrara Event Center and Lodge	\$69.4M–\$81.6M	71–83	\$24.7M–\$29M
Event Center at Niobrara State Park	\$46.5M–\$49M	47–50	\$16.5M–\$17.4M
Lodge at Niobrara State Park	\$24.5M–\$29.4M	25–30	\$8.7M–\$10.4M
Annual Operational Impact			
Weigand Marina Expansion/Retrofit ¹	\$14.5M	120	\$0.7M
Niobrara Landing Boat Launch ²	>\$0.1M	3	>\$0.1M
Event Center at Niobrara State Park ³	\$0.9M	1	\$1.0M
Lodge at Niobrara State Park ⁴	\$4.0M	3	>\$1.5M
Total Economic Impact			

¹ Includes spending for boat fuel/oil, boat repair maintenance, new boat sales, boat rentals, other boat expenses, slip rentals, boat storage, sporting goods and merchandise, food, lodging, and other miscellaneous expenses.

² Includes spending for boat fuel/oil, other boat expenses, sporting goods and merchandise, food, lodging, and other miscellaneous expenses.

³ Includes estimated revenue from facility rental and occupancy.

⁴ Includes estimated revenue from facility rental and occupancy.

4.2.4 Funding Opportunities

After discussions with key stakeholders, possible project funding sources and/or project partners include the following:

- NGPC / Motorboat Access Grants
- Community Development Block Grant (CDBG) Grants
- Lewis and Clark NRD
- Lower Niobrara NRD
- Ducks Unlimited
- Ponca Tribe of Nebraska
- Private donors
- IIJA funding

4.3 Lower Platte River Corridor Region

4.3.1 Preferred Initiatives Descriptions

The following three initiatives for the Lower Platte River Corridor Region were prioritized by the STAR WARS Special Committee:

1. **Flood mitigation efforts within the Upper Wahoo Creek watershed in Saunders County to address the potential for future catastrophic flood events in that region.** LPNNRD is currently completing planning, design, and permitting of flood mitigation measures in the Upper Wahoo Creek watershed through the Natural Resources

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Conservation Service’s (NRCS) Watershed Flood Prevention and Operations (WFPO) program. Flood storage reservoirs were evaluated within the Wahoo Creek watershed as part of this study and are discussed in Appendix III.A. The specific flood mitigation measures included in LPNNRD’s current effort were not evaluated as part of this study; therefore, the reader is referred to the LPNNRD website (www.lpnnrd.org) for further details regarding the Upper Wahoo Creek Watershed Plan content.

2. **Construction of repairs to Platte River jetty system west of Schuyler in Colfax County.** During the historic flooding in 2019, a jetty system along the left (north) bank of the Platte River was severely damaged. Subsequently, multiple occurrences of flows entering Lost Creek adjacent to this reach of the river have occurred, resulting in flooding to the southern extents of Schuyler. The City of Schuyler and Colfax County have hired an engineering consultant to evaluate and design the necessary repairs to the jetty system. The Colfax County Board of Commissioners provided design and cost information for the repair of jetty.

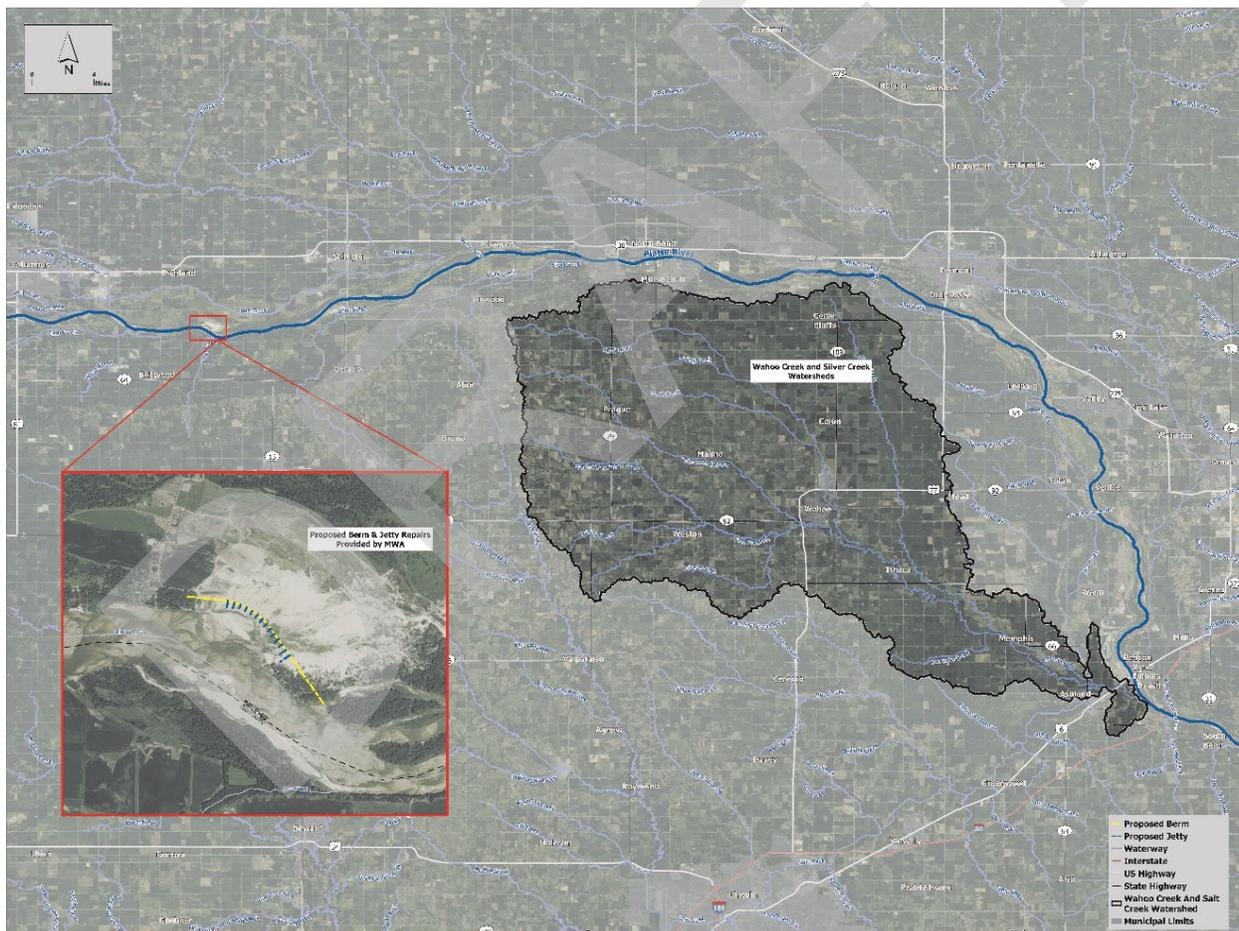


Figure 16. Upper Wahoo Creek Watershed and Platte River Jetties near Schuyler

3. **A 3,500 to 4,000 acre lake constructed adjacent to the Platte River (without damming the Platte River) to provide recreational and economic development opportunities.** This proposed lake would provide public access and ample outdoor recreational activities—including fishing, boating, swimming, sailing, hiking, birding, camping, and glamping—and would improve the quality of life of Nebraskans. The size of the lake, similar to Lake Okoboji in Iowa, would retain tourism dollars currently leaving the state, boosting the economy and providing an increase in state tax revenues. Other opportunities include flood control, drought resiliency, new residential living options, a community town center, a regional recreation complex, and a destination resort. Unlike the other Preferred Initiatives detailed in this report that are well-defined (location, project elements, etc.), the complexity and size of the proposed lake project requires additional evaluation to determine the project location, size, and components, and ultimately the technical and financial feasibility. Therefore, the intent of this Preferred Initiative was to conduct the evaluations necessary to conceptually define the project elements and determine technical and financial feasibility of the project.

Preliminary analyses of the proposed lake were conducted in this effort to assess initial feasibility and potential impacts and benefits as part of this study. A summary of these analyses is as follows:

- Impacts on water surface elevations of the Platte River and flood mitigation benefits of the potential lake were evaluated and included in Appendix III.B. Results of the analysis indicate the following:
 - The proposed lake may have localized impacts in water surface elevations of the Platte River within or immediately adjacent to the project. Any rise in water surface elevations adjacent to the project site would need to be mitigated.
 - The proposed lake may provide up to 30,000 acre-feet of flood water storage; however, the flood mitigation benefits downstream of the lake on the Platte River are minor due to the timing of this storage filling relative to the peak flow occurring downstream and the total volume conveyed in the Platte River during flood events. Optimizing the operational aspects of the lake's outlet works may increase the flood mitigation benefits of the project.
- An initial assessment of potential impacts on adjacent public water supply wellfields were evaluated using the groundwater model described in Section 2.2 and documented in Appendix III.C. Results of the analysis indicate the following:
 - The lake would not have a negative impact on the water supplies to the adjacent public water supply wellfields of the City of Lincoln and the Metropolitan Utilities District.
 - The lake may provide some benefit to the City of Lincoln wellfield during droughts where Platte River flows are severely diminished.
- The potential depletive effects on flows in the lower Platte River of evaporation from a large open water body was evaluated and included in Appendix V, Attachment A. The results of the analysis indicate that evapotranspiration rates from the lake would be equal to or less than evapotranspiration rates of the area under current land uses and therefore would not increase depletions to the lower Platte River.

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- General concepts for the proposed lake and the ultimate amenities and development surrounding the lake were developed to estimate potential economic benefits. The economic analysis is summarized in Section 4.3.3 and detailed in Appendix IV.



Figure 17. Potential Lake



Figure 18. Potential Lake

4.3.2 Preliminary Cost Estimates

Preliminary costs were calculated for the Preferred Initiatives, as shown in Table 5. The complexity and size of the proposed lake project requires additional evaluation to determine the project location, size, and components that would allow development of a preliminary cost estimate.

Table 5. Preliminary Cost Estimates for Preferred Initiatives in Lower Platte River Corridor Region

Preferred Initiative	Preliminary Cost Estimate
Flood Mitigation	\$25M
Lake and Recreation Area ¹	\$46.1M
Total	\$71.1M

¹ Includes planning/permitting and capital account.

4.3.3 Economic Impact

Economic impacts were calculated for the Preferred Initiatives, as shown in Table 6.

Table 6. Economic Impacts for Preferred Initiatives in Lower Platte River Corridor Region

Preferred Initiative	Output (Sales)	Jobs	Income
Construction Impact			
Flood Mitigation			
Lake and Recreation Area	\$5.5B	6,000	\$1.8B
Annual Operational Impact			
Lake and Recreation Area ¹	\$140M	1,100	\$22.7M
Impact of Development ²	\$300.5M	2,674	\$97.5M
Total Economic Impact			

¹ Includes recreation spending by lake visitors on gas, food, lodging, merchandise, and other spending categories.

² Includes economic impacts from household spending by new out-of-state single-family owners near lake.

4.3.4 Funding Opportunities

After discussions with key stakeholders, possible project funding sources and/or project partners include the following:

- USACE
- LPNNRD
- Colfax County
- Schuyler
- Private partners
- NRCS
- Water Sustainability Fund

5.0 Implementation

Implementation of each of the Preferred Initiatives would require numerous and varied actions of varying complexity, including potential feasibility studies, regulatory and environmental compliance, and design and construction.

For some elements, feasibility studies are needed to identify technical considerations of initiative implementation, to determine phasing, or to confirm economic viability. Feasibility studies can take up to 12 months for development and review.

Regulatory permitting and environmental compliance must be addressed prior to or, at a minimum, concurrently with design. Permits are required prior to commencement of construction. Time frames for regulatory permits and environmental compliance can vary depending on the nature of the requirements and the complexity of the initiative. A detailed discussion of the regulatory permitting and environmental compliance requirements of the Preferred Initiatives is provided in Appendix V.

There are various ways for design and construction to occur. Traditional design-bid-build is a step-wise process that allows for separate design, contractor bidding, and then construction phases. This is the most time-consuming process, but it typically has the lowest risk to the owner. Design-build is a method of the design and construction process in which a preliminary design is completed, but then the final design and construction is completed by a design-build contractor who is responsible for developing design and implementing construction as part of

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one collaborative effort. This method can save time but introduces other potential risks as part of the process.

Table 7 identifies the various implementation measures and estimated timelines for each Preferred Initiative. Timelines will vary based on lead agency / owner prioritization of staff and financial resources, as well as the complexity of regulatory permitting, design, and construction efforts associated with the Preferred Initiative.

The Preferred Initiative of a proposed Lower Platte River Corridor Region lake includes an estimated timeline for only the feasibility study due to the specific project elements being undefined until completion of that effort. The feasibility study of the proposed lake will entail evaluation of both the technical and financial feasibility of the project.

Table 7. Implementation Activities and Timelines for Preferred Initiatives

Preferred Initiative	Feasibility Study	Regulatory Permitting / Environmental Compliance	Design and Construction
Lake McConaughy Region in Keith County			
New Marina at Lake McConaughy	12 months	12–18 months	3–5 years
Roadway Improvements		6 months	1–2 years
Iconic Gateway Entrance			6–12 months
Lower Niobrara / Northern Knox County Region			
Weigand Marina Expansion/Retrofit	12 months	6–12 months	3–5 years
Niobrara Landing Boat Launch	12 months	6–12 months	1–2 years
Niobrara Event Center and Lodge	12 months	6–12 months	2–3 years
Lower Platte River Corridor Region			
Upper Wahoo Creek Watershed	1 year	6–12 months	5–7 years
Schuyler Jetty			
Lower Platte River Corridor Region Lake	2–3 years		