

Nebraska Water Sustainability Projects

Example projects considered by the Water Funding Task Force

1. North Platte Surface Water Recharge project will be used to retine flows to the Platte River and to recharge the aquifer.



12. Research is underway to sustainable pumping rates and allow for improved groundwater modeling.



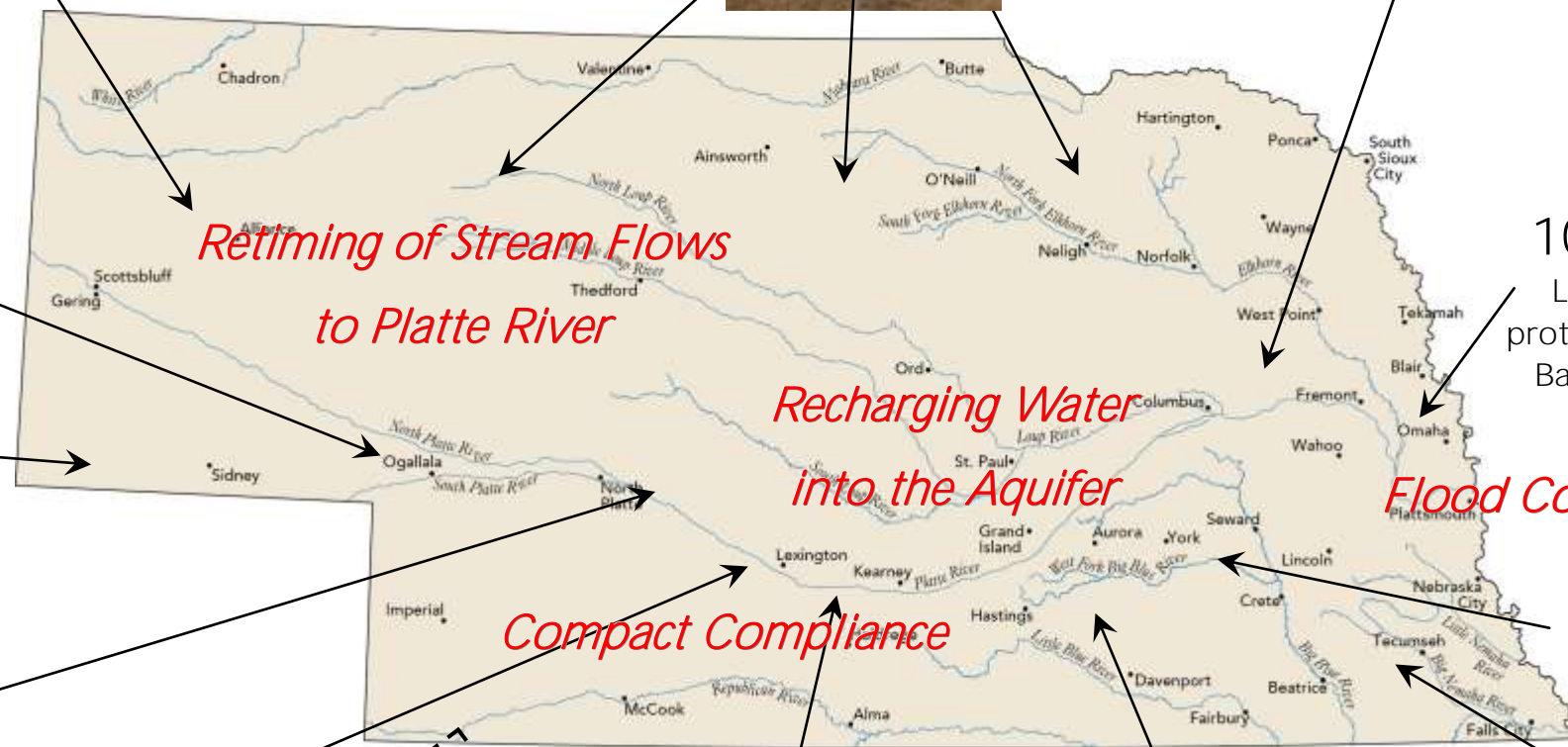
11. New Reservoir on Elkhorn Tributary will retine flows to benefit Omaha and Lincoln well-fields, while providing flood control.



2. South Platte River augmentation project will retine high flow on the South Platte River.



3. Oliver Reservoir Rehabilitation allows for increased storage of excess water during high flows.



10. Missouri River Levee project will protect Offutt Air Force Base from flooding.



\$24 Million

9. New irrigation efficiencies allow for water savings.

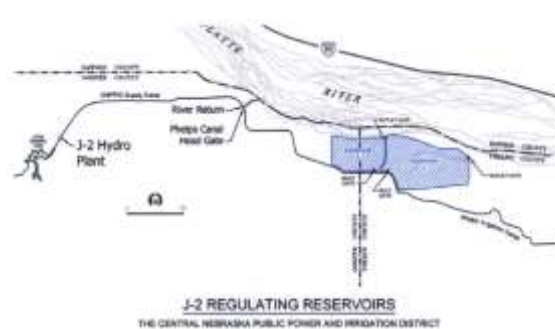


5. Canal rehabilitation project uses existing irrigation system infrastructure to recharge the aquifer.

\$16 Million



6. J2 Reregulating Reservoir will build new infrastructure to store and retine flows on the Platte River.



\$46 Million

7. Projects needed across the state for safe drinking water.



8. Dam rehabilitation to protect lives and property from flooding.



4. Studies analyzing the cost-benefit of utilizing existing infrastructure for conjunctive management.



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Example projects considered by the Water Funding Task Force

1. North Platte Surface Water Recharge

Benefits: The North Platte NRD is working with a local irrigation company on retiming of flows on the North Platte River that allows for aquifer recharge, wildlife benefit and sustainability of local economy.
Estimated Cost: \$800,000- \$1 Million
Partners: North Platte NRD/John Berge

2. South Platte River Recharge/ Augmentation Project

Benefits: Retiming of high flows on the South Platte River allows for aquifer recharge, wildlife benefit and sustainability of local economy.
Estimated Cost: TBD
Partners: South Platte NRD/Rod Horn

3. Oliver Reservoir Rehabilitation

Benefits: Rehab existing structure to allow for more storage for excess water during high flows.
Estimated Cost: TBD
Partners: South Platte NRD/Rod Horn

4. Conjunctive Management Feasibility Study

Benefits: Study analyzing the cost benefits of utilizing existing infrastructure for conjunctive management.
Estimated Cost: TBD
Partners: TPNRD and CPNRD/Kent Miller and Lyndon Vogt

5. Central Platte Canal Rehabilitation

Benefits: Canal rehabilitation project uses existing irrigation system infrastructure to recharge the aquifer.
Estimated Cost: \$16 Million
Partners: Central Platte NRD/Lyndon Vogt

6. J2 Reregulating Reservoir

Benefits: Building new infrastructure to store and retime flows on the Platte River that provides protection for endangered species while allowing sustainability for producers.
Estimated Cost: \$75 Million
Partners: CNPPID/Don Kraus

7. Hastings Water Supply

Benefits: Work with rural communities like the city of Hastings to mitigate and treat drinking water.
Estimated Cost: \$46 Million
Partners: Hastings Utilities/Marty Stange

8. Nemaha Dam Rehabilitation

Benefits: Rehab and improving existing structures to protect lives and property from flooding.
Estimated Cost: \$50,000 to \$500,000/structure
Partners: Nemaha NRD/Bob Hilske

9. Irrigation Efficiency Cost-Share

Benefits: Provided tools to producers through Local cost share programs to increase irrigation efficiency and allow for water savings.
Estimated Cost: \$1000/meter
Partners: Blue Basin NRDs

10. Missouri River Levee to Protect Offutt Air Force Base

Benefits: Levees would provide flood control and reduce potential property damage and protect lives from flooding.
Estimated Cost: \$24 Million
Partners: Papio-Missouri NRD, John Winkler

11. New Reservoir on Elkhorn Tributary

Benefits: Retiming of follows to benefit Omaha and Lincoln wellfields, while providing flood control.
Estimated Cost: \$80 to 100 Million
Partners: Potential partners Lower Elkhorn/Staeb, Papio Missouri River NRD/ Marlin Petermann

12. Groundwater Recharge Monitor Site

Benefits: Quantify groundwater recharge to determine sustainable pumping rates and allow for improved groundwater model.
Estimated Cost: \$20,000 per station
Partners: UNL/Dr. John Gates

Municipality Needs

Lincoln Water Systems

- Lincoln's current water system and facilities: \$413,465,558 (treatment plant, wellfield, reservoir and distribution system) (not replacement value)
- Investments planned for the next 6 years total \$75,600,000
Breakdown: Misc. main replacements – 36%, Distribution main replacement – 24%, Infrastructure rehab – 11.5%, Treatment plant mods – 7.5%, Add reservoir – 6%, The rest – 15%

Papillion Water Systems

- Papillion's current water system and facilities: \$36,000,000 (treatment plant, wellfield, reservoir, towers and distribution system) (Does not include the replacement valve of the system)
- Total investment planned for the next 5 years: \$27,500,000
Breakdown: another reservoir, additional booster station and up grades to present one, additional transmission mains and plant upgrades

- Papillion will also be assuming the water infrastructure of 27 Sanitary Improvement Districts upon annexation to the city

Fremont Water System

- Fremont's Water System: current water system and facilities: \$50,000,000 (treatment plant, wellfield, reservoir and distribution system)

- Investments planned for next 6 years: \$4,680,000

Breakdown: Misc main replacements – 3%, Distribution main replacement – 35%, infrastructure rehab – 10%, Treatment plant mods – 2%, add reservoir – 40%, the rest – 10%

Metro Utility District (MUD)

- Water infrastructure replacement
– 62 year program estimated cost: \$958 million
- Florence water treatment plant – 20 year plan: \$153 million project
- Plant west – outstanding 18 years left on 20 year bond for \$174 million
- Potential treatment of discharge costs due to regulatory changes