

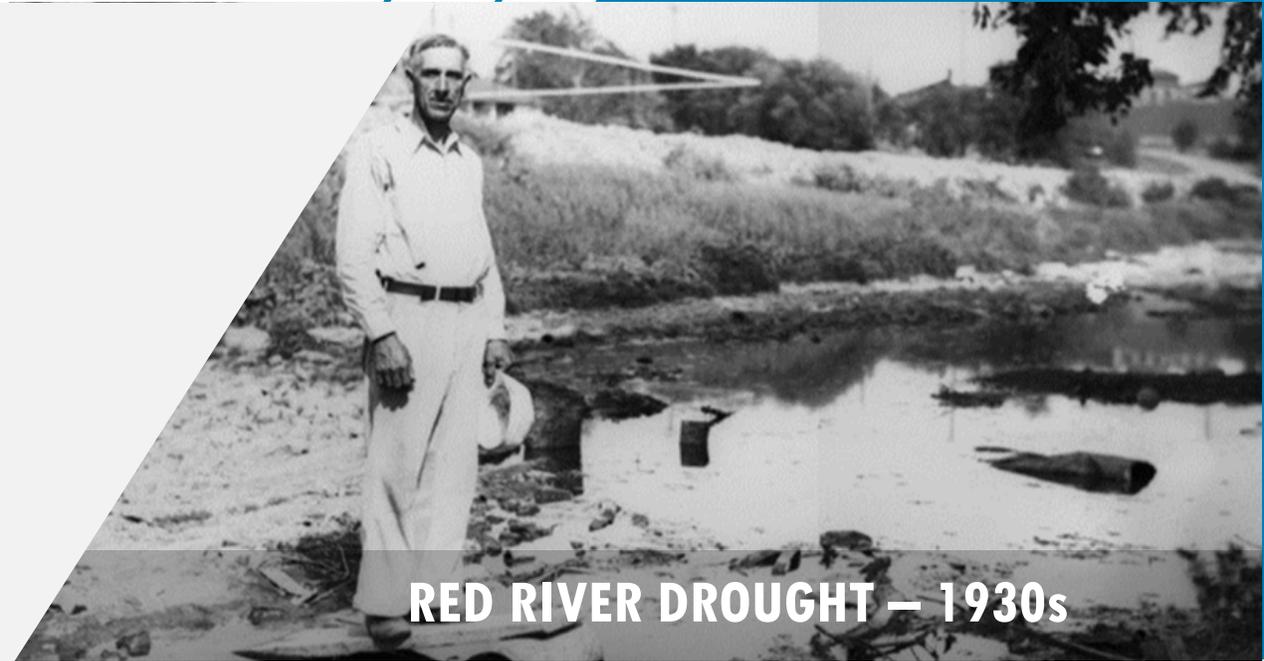


RED RIVER VALLEY WATER SUPPLY PROJECT

Serving the Water Supply Needs of Central North Dakota and the Red River Valley

HOUSE APPROPRIATIONS - EDUCATION AND ENVIRONMENT DIVISION SB2020 HEARING

MARCH 9, 2023



RED RIVER DROUGHT — 1930s



Lake Agassiz
Water Authority



STATE AND LOCAL PARTNERSHIP

GARRISON DIVERSION CONSERVANCY DISTRICT

Represents the State of ND

ND CENTURY CODE CH. 61-24-01

To study and provide for the water needs of eastern North Dakota communities and water districts and western Minnesota communities through a Red River Valley Water Supply Project.



LAKE AGASSIZ WATER AUTHORITY

Represents Local Users

ND CENTURY CODE CH 61-39-04.1

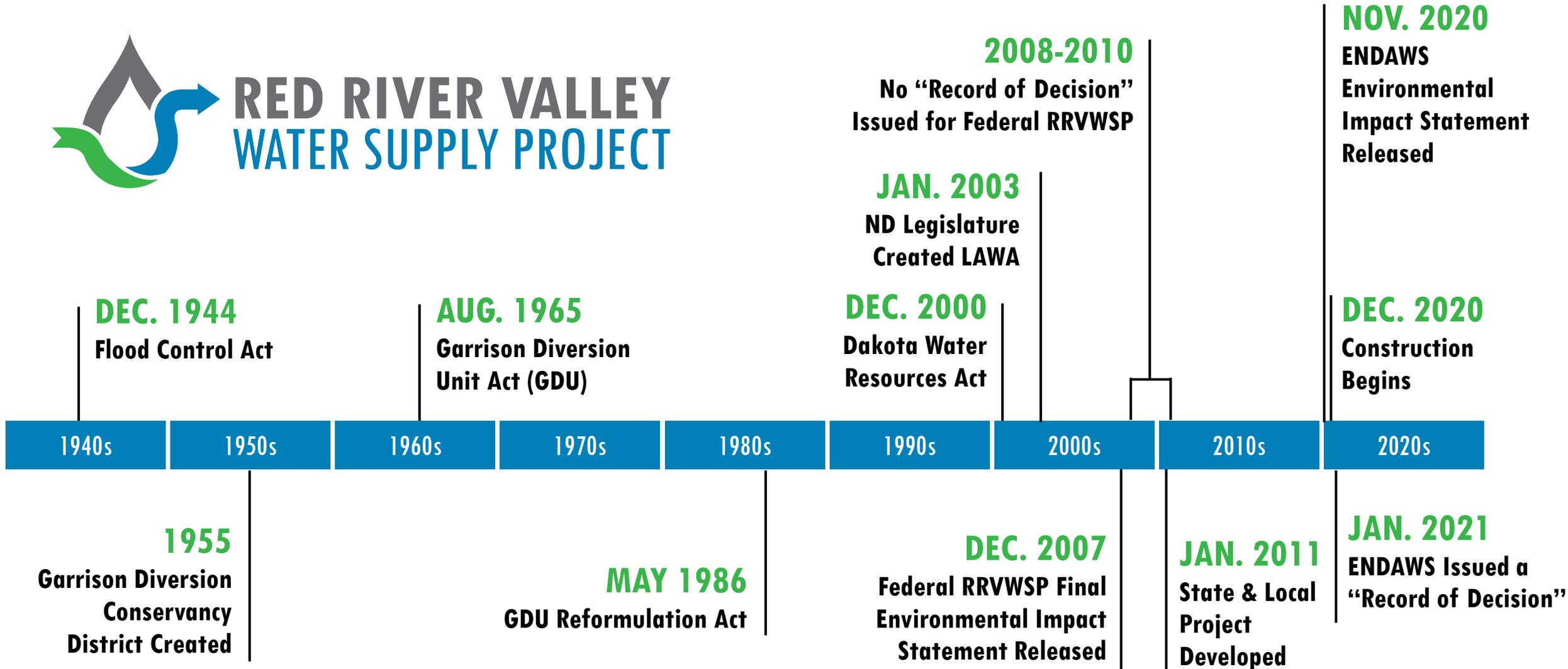
The Lake Agassiz Water Authority and the Garrison Diversion Conservancy District shall continue studying, planning, developing, and constructing a nonfederal project to meet the water supply needs of eastern and central North Dakota.

**ND STATE WATER COMMISSION &
WATER TOPICS OVERVIEW COMMITTEE**

A CENTURY OF PROJECT DEVELOPMENT



RED RIVER VALLEY WATER SUPPLY PROJECT



RRVWSP PREFERRED ALIGNMENT UTILIZING ENDAWS

EASTERN NORTH DAKOTA ALTERNATE WATER SUPPLY (ENDAWS)



STARTED DEVELOPMENT
OF STATE & LOCAL
PROJECT(2011)

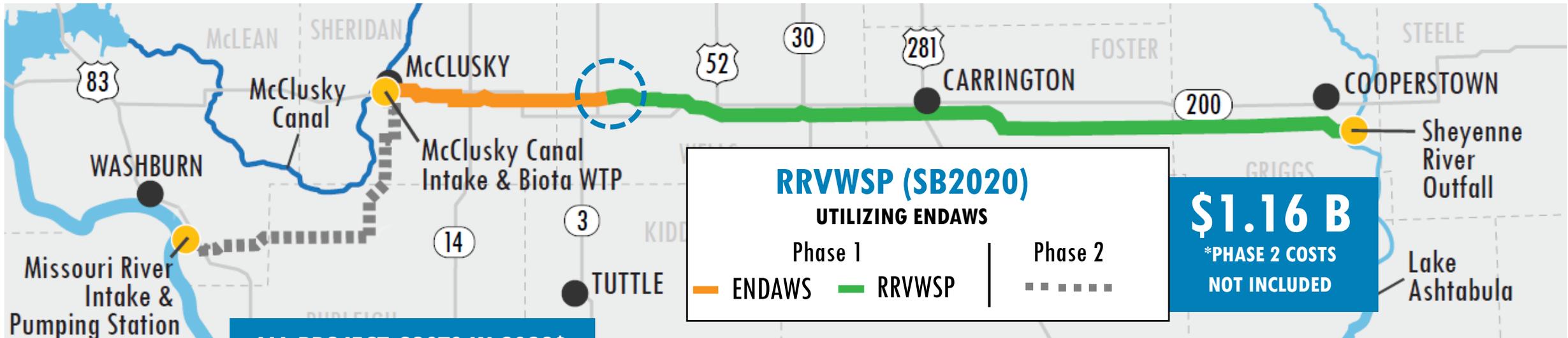
CONTINUED EFFORTS TO
ACCESS GDU FACILITIES
(McCLUSKY CANAL)

ENDAWS ENVIRONMENTAL
IMPACT STATEMENT
(RELEASED 2020)

**ENDAWS RECORD
OF DECISION
(ISSUED 2021)**



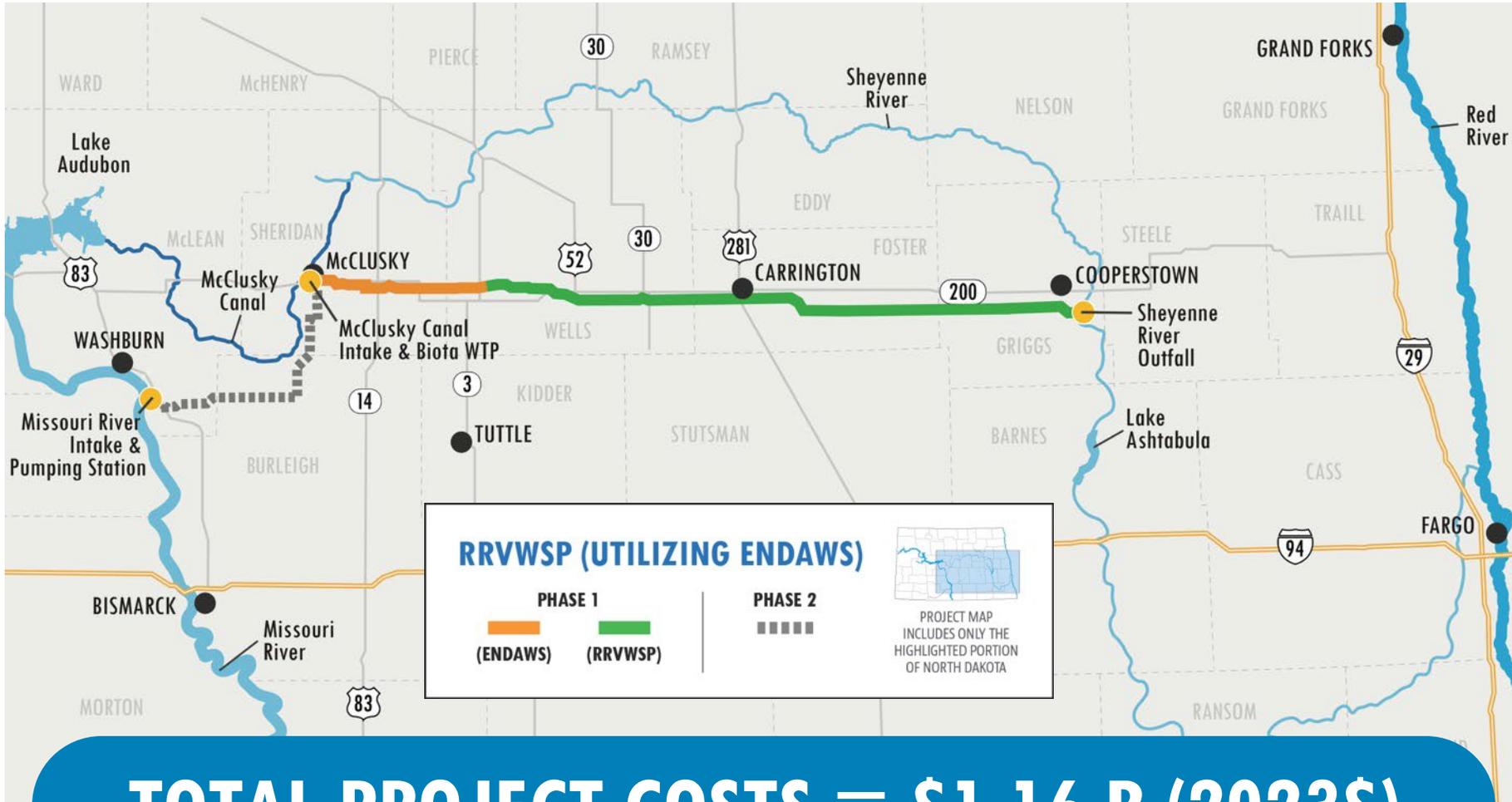
PROJECT MAP
INCLUDES ONLY THE
HIGHLIGHTED PORTION
OF NORTH DAKOTA



ALL PROJECT COSTS IN 2023\$

PROJECT OVERVIEW

THE PROJECT IS AN EMERGENCY WATER SUPPLY FOR NEARLY 50% OF NORTH DAKOTA'S POPULATION



Pipe Diameter
72" (6 foot)



Pipe Length
125 Miles



Pipe Material
Steel



Pipe Flow
165 cfs



Bury Depth
7' Top of Pipe
15' Bottom of Trench

TOTAL PROJECT COSTS = \$1.16 B (2023\$)

RRVWSP CONSTRUCTION IS UNDERWAY!



**MAIN TRANSMISSION
PIPELINE**



**SHEYENNE RIVER
DISCHARGE STRUCTURE**



GROUNDBREAKING CEREMONY

TRANSMISSION PIPELINE



2021 Groundbreaking

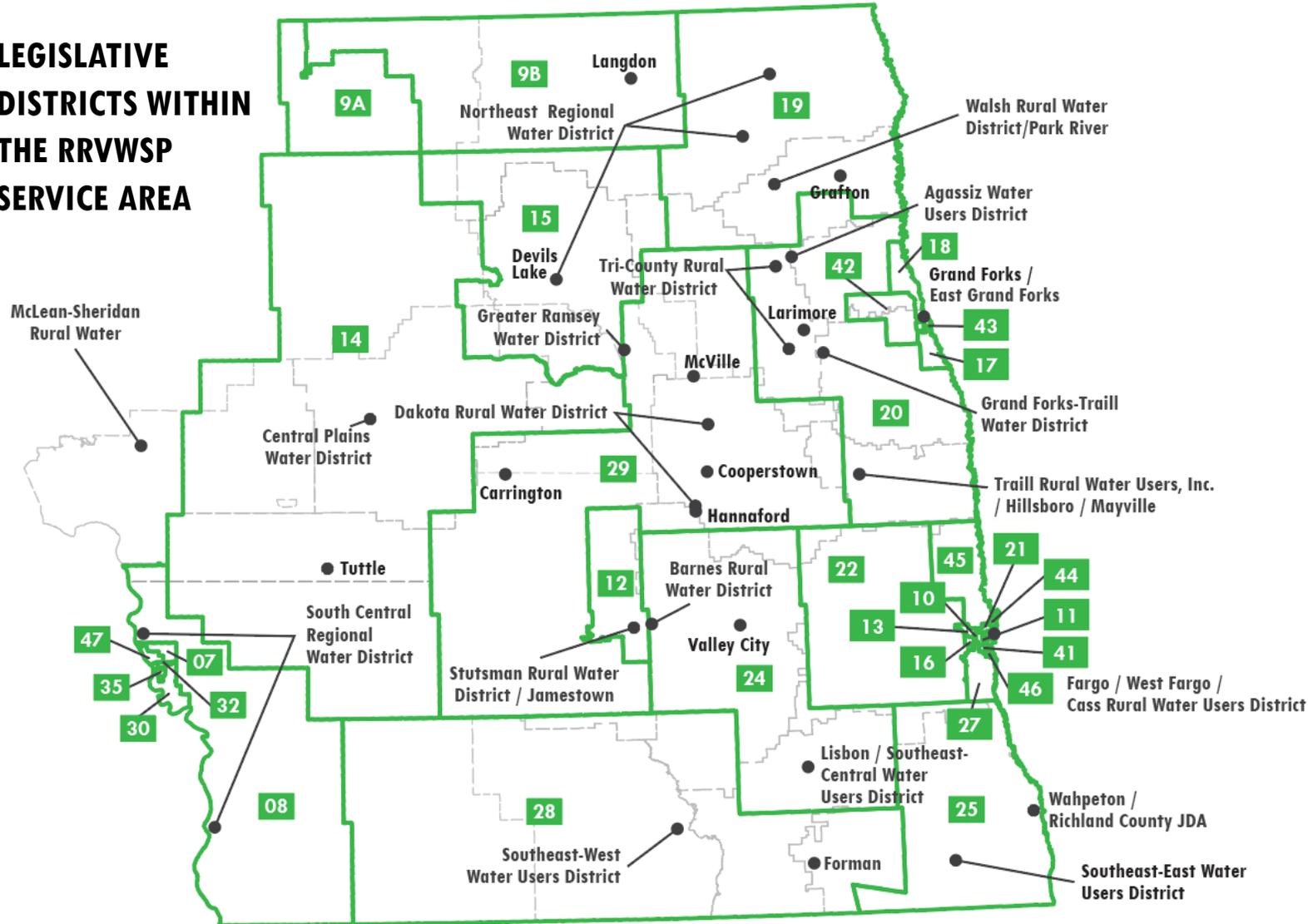
**Awarded Five Construction
Contracts to Date**

FUTURE TOURS PLANNED



POTENTIAL TO SERVE 50% OF NORTH DAKOTANS

LEGISLATIVE DISTRICTS WITHIN THE RRVWSP SERVICE AREA



RRVWSP is a **drought resiliency project** and an **economic development initiative**

NORTH DAKOTA'S ESTIMATED POPULATION = 780,000

ANTICIPATED USERS SERVED = 380,000



PROJECTED ECONOMIC BENEFITS OF RRVWSP DURING DROUGHT

“SAVING OUR ECONOMY” FROM THE IMPACTS OF SIGNIFICANT DROUGHT

**\$33.6
BILLION**

Projected total positive Project impact in a “Dirty Thirties” style drought simulated from mid-2030s through the mid-2040s

AVAILABILITY POTENTIAL FOR ECONOMIC DEVELOPMENT

DEPARTMENT OF WATER RESOURCES

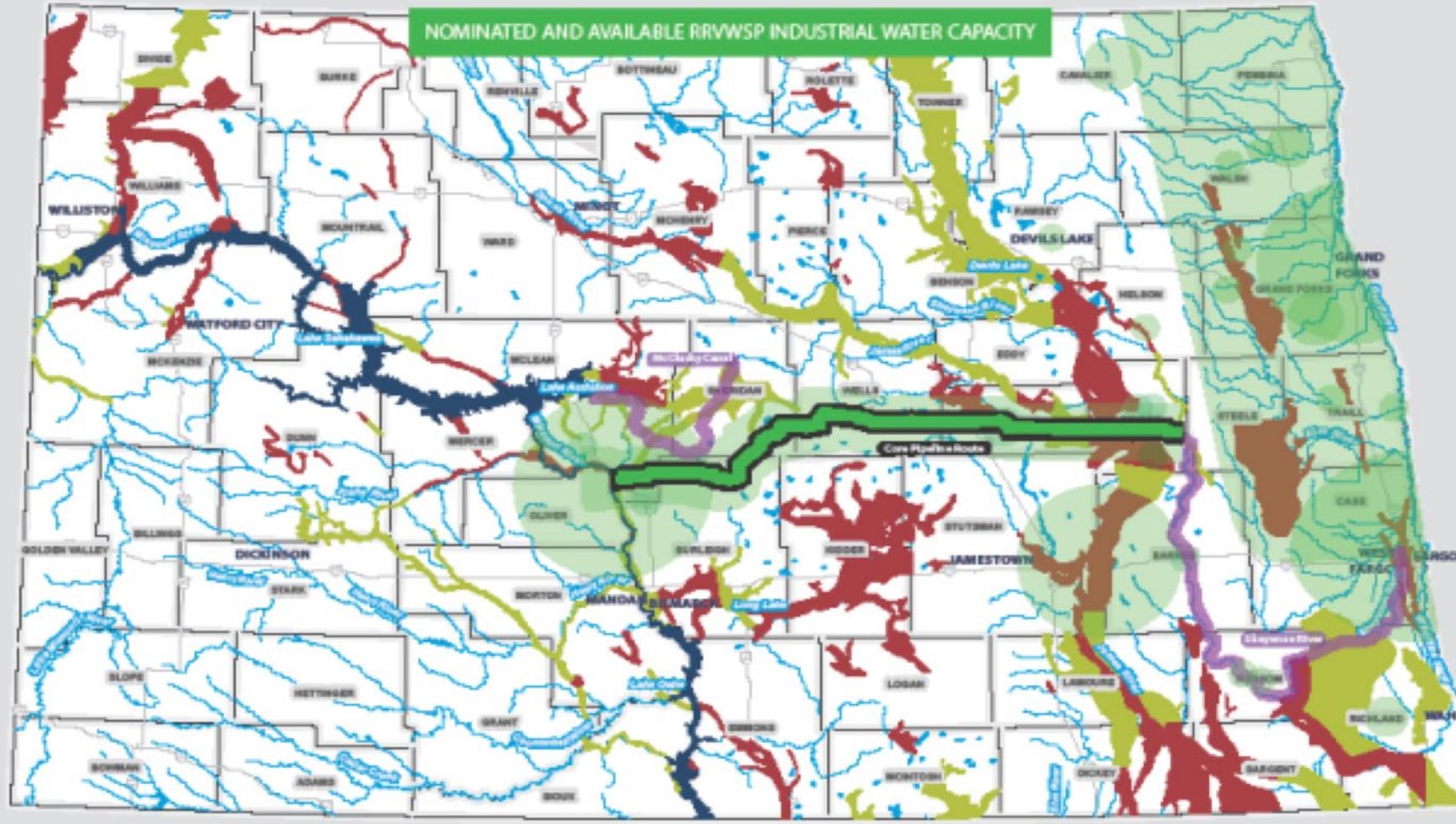
ND WATER AVAILABILITY POTENTIAL FOR ECONOMIC DEVELOPMENT



-  **GOOD WITH LIMITATIONS / SURFACE WATER**
-  **POTENTIAL WITH LIMITATIONS / GROUND WATER**
-  **NEAR FULL APPROPRIATION**

AVAILABILITY POTENTIAL FOR ECONOMIC DEVELOPMENT NOMINATED & AVAILABLE RRVWSP INDUSTRIAL WATER CAPACITY

ND WATER AVAILABILITY POTENTIAL FOR ECONOMIC DEVELOPMENT

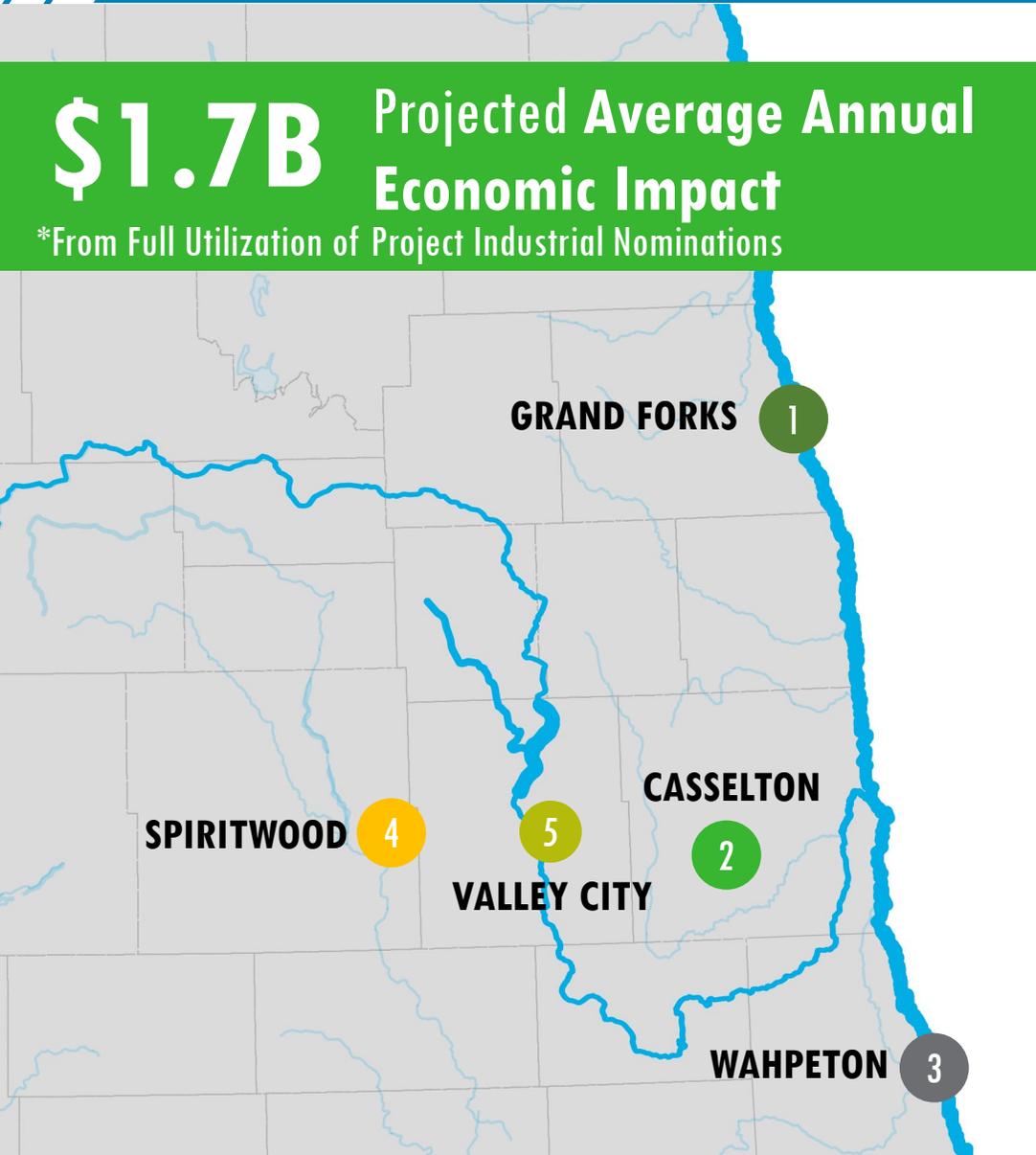


- GOOD WITH LIMITATIONS / SURFACE WATER
- POTENTIAL WITH LIMITATIONS / GROUND WATER
- NEAR FULL APPROPRIATION
- ADDITIONAL INDUSTRIAL WATER CAPACITY AFTER RRVWSP IMPLEMENTED

INDUSTRIAL WATER DEMAND EXCEEDS CURRENT SUPPLY

\$1.7B Projected Average Annual Economic Impact

*From Full Utilization of Project Industrial Nominations



- 1 GRAND FORKS AGRIBUSINESS NEEDS**
Permitted Use of City's Wastewater Effluent Discharge
Significant Current and Proposed Industrial Use
- 2 CASSELTON INDUSTRY**
Fargo Looking to Expand Effluent Reuse Facility
CGB Soybean Plant will Approximately Double Reuse Demand
- 3 AGP SOYBEAN CRUSHING/CRACKING**
Relocated Facility, Missed Opportunity
- 3 CARGILL (PRO GOLD)**
Reliability & Expansion Precluded by Permit Restrictions
- 4 SPIRITWOOD ENERGY PARK**
Water Options Limited
- 5 VALLEY CITY INDUSTRY**
Water Options Limited
- DAIRY/POTATO WASHING/HOG & BEEF, MISC. WATER DISTRICTS**
Water Options Limited



PROJECTED ECONOMIC BENEFITS OF PROJECT DURING DROUGHT



23,800

PEAK ANNUAL
POPULATION LOSS
AVOIDED DURING
SEVERE DROUGHT



15,600

PEAK ANNUAL
EMPLOYMENT LOSS
AVOIDED DURING
SEVERE DROUGHT



MISSOURI RIVER



ONE OF NORTH DAKOTA'S GREATEST NATURAL RESOURCES

- ▶ Accounts for 95% of North Dakota's surface water — we only utilize about 1% of the water flowing through our state
- ▶ Total amount of Missouri River water needed is .5%, leaving 99.5% of Missouri River unaffected



**A DROP IN
THE BUCKET!**

MISSOURI RIVER USE IT OR LOSE IT



**WESTERN SOUTH DAKOTA
REGIONALIZATION PROJECT**

- Up to 67.8 MGD / 105 CFS

COLORADO RIVER

- Reclamation has evaluated portfolios related to importing Missouri River Water into Colorado River Basin

RRVWSP

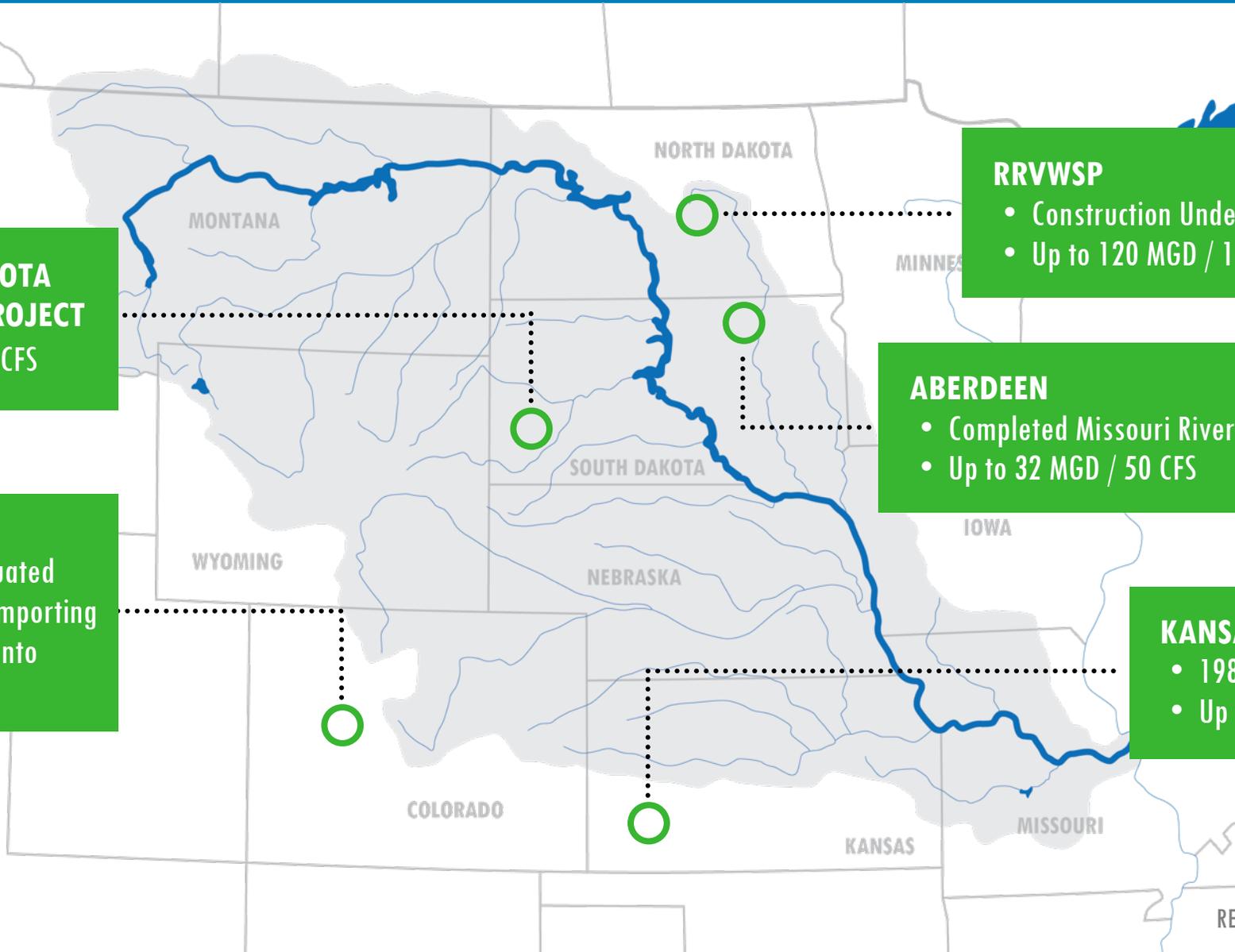
- Construction Underway
- Up to 120 MGD / 165 CFS

ABERDEEN

- Completed Missouri River Feasibility Study
- Up to 32 MGD / 50 CFS

KANSAS OGALLALA AQUIFER

- 1982 Study Revitalized
- Up to 3,546 MGD / 5,540 CFS



2023 LEGISLATIVE REQUEST

STATE COMMITMENT TO THE PROJECT

► Funding Commitment to Implement Project

Not just 23/25 Biennium Work Plan

- The State has been a vital partner in the development of the Project. Now is the time to commit to full implementation of the Project.
- A strong State commitment provides confidence to local water systems deliberating on their level of involvement.
- Cost efficient build schedule to get the project into service sooner, reducing risks and inflationary impacts.

2023-25 BIENNIUM REQUEST

\$255 MILLION

Using State Cost-Share Policy (75/25) leverages in additional **\$85M in Local Funding** for \$340M in total capabilities

Shovel-Ready Construction (43 Miles of Pipeline)

Continued Design (**40 Miles of Pipeline**)

ENDAWS Design (**32 Miles of Pipeline**)



STATE FINANCING OF LOCAL COST-SHARE



**Capitalization of the Water Infrastructure
Revolving Loan Fund**



**Having access to long-term, low interest financing saves
hundreds of millions of dollars in local cost-share**

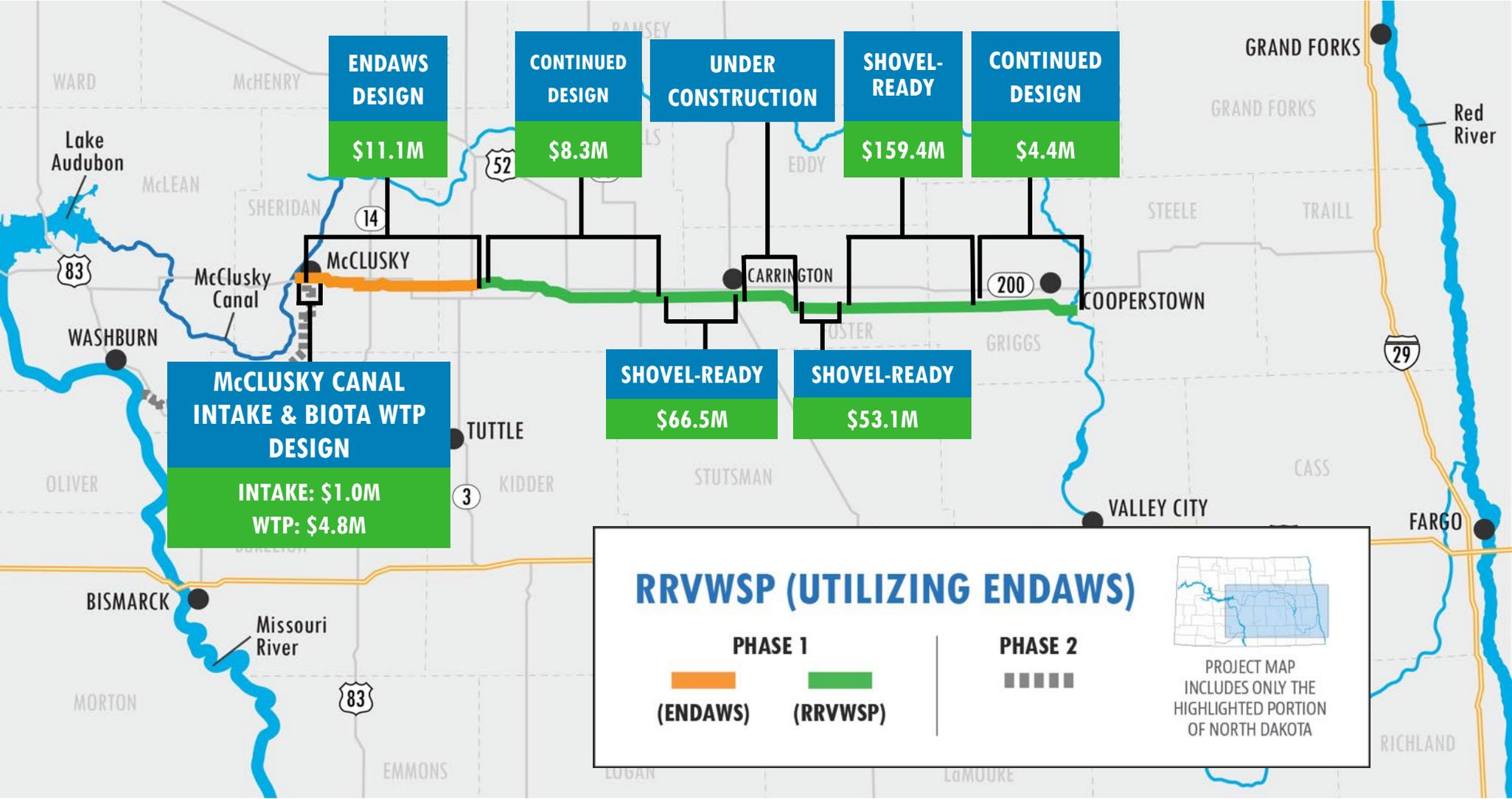
2023-2025 WORK PLAN

TOTAL
\$339M

Shovel-Ready Construction
(43 Miles of Pipeline)

Continued Design
(40 Miles of Pipeline)

ENDAWS Design
(32 Miles of Pipeline)



RRVWSP (UTILIZING ENDAWS)

PHASE 1 (ENDAWS) | **PHASE 2 (RRVWSP)**

PROJECT MAP INCLUDES ONLY THE HIGHLIGHTED PORTION OF NORTH DAKOTA

* OTHER PROGRAM COSTS: \$29.6M

SENATE BILL 2020

23.0274.01000

Sixty-eighth
Legislative Assembly
of North Dakota

SENATE BILL NO. 2020

Introduced by

Appropriations Committee

1 A BILL for an Act to provide an appropriation for defraying the
2 water resources.

3 BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA

4 SECTION 1. APPROPRIATION. The funds provided in this section
5 as may be necessary, are appropriated from special funds derived from
6 income, to the department of water resources for the purpose of defraying the
7 department of water resources, for the biennium beginning July 1, 2023, and ending June 30,
8 2025, as follows:

	Base Level	Governor's Recommendation	Appropriation
11 Salaries and wages	\$20,537,867	\$23,809,878	\$20,537,867
12 Operating expenses	43,366,550	59,479,068	43,366,550
13 Capital assets	98,467,437	172,396,344	98,467,437
14 Water supply - grants	125,000,000	270,000,000	125,000,000
15 Rural water supply - grants	59,600,000	35,000,000	59,600,000
16 Flood control projects	48,000,000	115,000,000	48,000,000
17 Discretionary fund for water projects	0	5,000,000	0
18 General water - grants	14,227,275	14,233,275	14,227,275
19 Total special funds	\$409,199,129	\$694,918,565	\$409,199,129
20 Full-time equivalent positions	90.00	93.00	90.00

21 SECTION 2. ONE-TIME FUNDING. The following amounts reflect one-time funding items
22 approved by the sixty-seventh legislative assembly for the 2021-23 biennium:

One-Time Funding Description	2021-23	2023-25
24 Line of credit - Bank of North Dakota	\$50,000,000	\$0

Page No. 1

23.0274.01000

SENATE
APPROVED
46-1

SECTION 10. RRVWSP

➤ \$175M for 23-25 Biennium

➤ \$953M Total State Commitment
@ 75% Cost-Share

➤ Commitment Based on 10-Year Build
Utilizing ENDAWS



FORECASTED SPEND SCHEDULES

STATE COST-SHARE AND INFLATION MITIGATION

WHAT IF PROJECT IS FUNDED AT A SLOWER PACE THAN IS BEING REQUESTED?

STATE COST-SHARE REQUEST (PER BIENNIUM)	RRVWSP UTILIZING ENDAWS PROJECTED COMPLETION DATE
\$55M	∞ (*Never)
\$70M	50-Years (June 2071)
\$100M	26-Years (Dec 2047)
\$150M	16-Years (June 2037)
\$175M	13-Years (Dec 2034)
\$250M	9-Years (Dec 2030)

* Due to inflation outpacing project spend, project timeline is indefinite.



FORECASTED SPEND SCHEDULES – STARTING FY2023

STATE COST-SHARE – INFLATION ADJUSTED

PROJECTED STATE-COST SHARE BY BIENNIUM (\$M)*

	23-25	25-27	27-29	29-31	31-33	STATE SHARE (Savings)	LOCAL SHARE (Savings)	TOTAL PROJECT (Savings)
10-Year (SB2020)	\$175.0	\$221.1	\$236.9	\$253.8	\$66.2	\$953	\$317	\$1,270
10-Year (Full Request)	\$254.3	\$194.5	\$208.4	\$223.2	\$58.2	\$939 (\$14)	\$313 (\$4)	\$1,252 (\$18)
8-Year	\$254.3	\$280.9	\$301.0	\$78.5	-	\$915 (\$38)	\$305 (\$12)	\$1,220 (\$50)
6.5-Year	\$254.3	\$421.4	\$221.8	-	-	\$897 (\$56)	\$299 (\$18)	\$1,196 (\$74)

*State cost-share of 75% and inflation adjusted to the projected year of expenditure

2023 LEGISLATIVE REQUEST SUMMARY



2023-25 BIENNIUM REQUEST
\$255 Million (75% State Cost-Share)

Senate Passed \$175M for
23-25 Biennium;
\$953M Commitment



STATE FINANCING OF LOCAL COST-SHARE
Capitalization of Water Infrastructure Revolving Loan Fund



STATE COMMITMENT TO IMPLEMENT TOTAL PROJECT
Look Beyond the 23/25 Biennium Work Plan



2023-25 Workplan

Shovel-Ready Construction
(43 Miles of Pipeline)

Continued Design
(40 Miles of Pipeline)

ENDAWS Design
(32 Miles of Pipeline)

THANK YOU!



**RED RIVER VALLEY
WATER SUPPLY PROJECT**

Serving the Water Supply Needs of Central North Dakota and the Red River Valley



www.rrvwsp.com



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