



FM Diversion Plan B Update

Why did the Project change?

- The Richland/Wilkin County JPA filed a lawsuit against the U.S. Army Corps of Engineers in 2013. The lawsuit was later joined by the Fargo-Moorhead Diversion Authority and by the State of Minnesota.
- While the majority of claims were dismissed, an injunction stopping construction was ordered in Sept., 2017

“It is time for all parties to work together to find common ground.”

- Chief Judge John A. Tunheim



Listening & Gathering Input



September 2017

- ▶ Gov. Burgum and Gov. Dayton meet in Moorhead to discuss the flood protection



Governor's Task force assembled

- ▶ Five meetings between Oct. and Dec. 2017
- ▶ Wide geographic representation



Technical Advisory Group

- ▶ Diversion Authority, MDNR, USACE, and R/W JPA engineer
- ▶ Further analysis and iteration of unresolved issues from the Task Force



Policy Group

- ▶ Leadership from the USACE, MDNR, Diversion Authority, and R/W JPA
- ▶ Held four meetings





Governors' Task Force



Governors' Task Force



- **Purpose:** To develop design principles and concept-level engineering solutions to achieve balanced flood risk management
- **Key Parameters for the Task Force**
 1. Find solutions within the parameters established by applicable Minnesota, North Dakota and local law.
 2. Maintain federal authorization and associated funding for permanent flood protection...



Task Force Consensus Items



- ▶ Utilize full Period of Record hydrology
 - ▶ 100-yr flood = 33,000 CFS
- ▶ Allow control of flood water flows through town to 37-feet during a 100-yr flood event
- ▶ New Western Tie-back Levee alignment in North Dakota
- ▶ Add an Eastern Tie-back Levee alignment in Minnesota
- ▶ Distributed storage is valuable for long-term risk management; however, it is not a component of the near-term Project that needs to provide 100-year flood protection for the F-M Metro



Governors' Flood Task Force

Thank you for your service

Front Row (L to R): Bernie Dardis – Greater North Dakota Chamber Board Chair, Tami Norgard – Natural resources attorney, Tim Fox – Former Wilkin County Attorney, Jenny Mongeau – Clay County Commissioner, Del Rae Williams – Mayor of Moorhead, MN, Gov. Mark Dayton – Governor of Minnesota, Gov. Doug Burgum – Governor of North Dakota, Heidi Durand – Moorhead City Council member, Barb Naramore – Minnesota Department of Natural Resources Assistant Commissioner, Mark Anderson – Treasurer of Buffalo-Red Watershed District

Back Row (L to R): Curt Johannsen – Mayor of Hendrum, MN, Ken Vein – Grand Forks City Council member, Craig Hertsgaard – Richland County farmer, John Strand – Fargo City Commissioner, Tom Landwehr – Minnesota Department of Natural Resources Commissioner, Jason Benson – Cass County Engineer, Steve Jacobson – Norman County Commissioner, Nathan Berseth – Richland County Commissioner, Joel Paulsen – Moorhead City Council member, Ron Bergan – Fargo business leader and entrepreneur



“My office will continue to work in partnership with Governor Dayton toward finalizing a permittable project...”

- Governor Burgum (ND)

“The Diversion Authority now has the responsibility to take all of these views and recommendations and combine them into a permittable application to the Minnesota DNR.”

- Governor Dayton (MN)



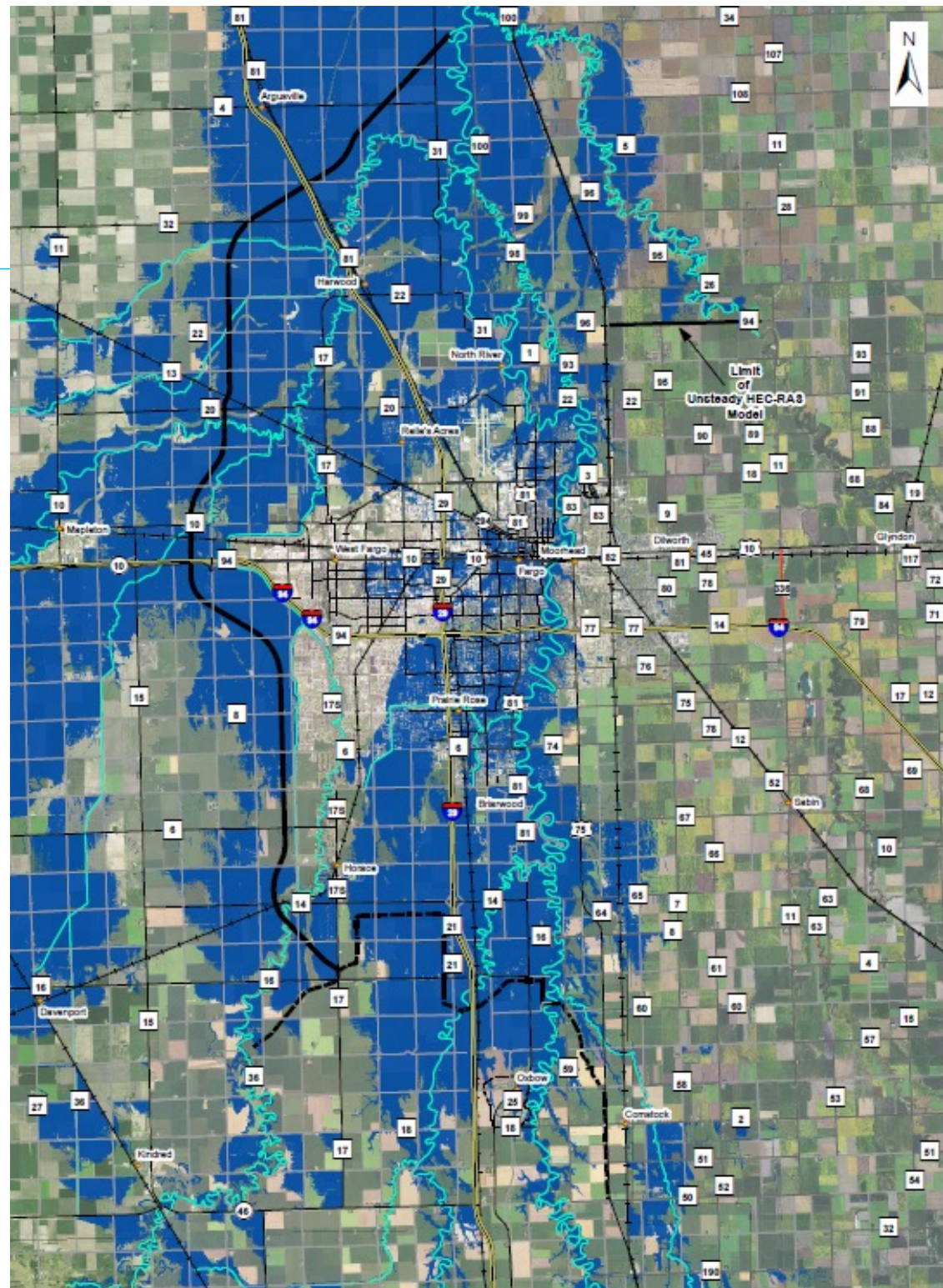
What is Plan B?

- ▶ 100-year Flood Protection Minimum
 - ▶ Some features designed to PMF (Probable Maximum Flood) as required by State and Federal Dam Safety Requirements
- ▶ Diversion Channel
- ▶ Southern Embankment and Control structures
- ▶ Temporary Staging of Flood Waters Upstream to Prevent Downstream Impacts
- ▶ In-town Levees through Fargo-Moorhead



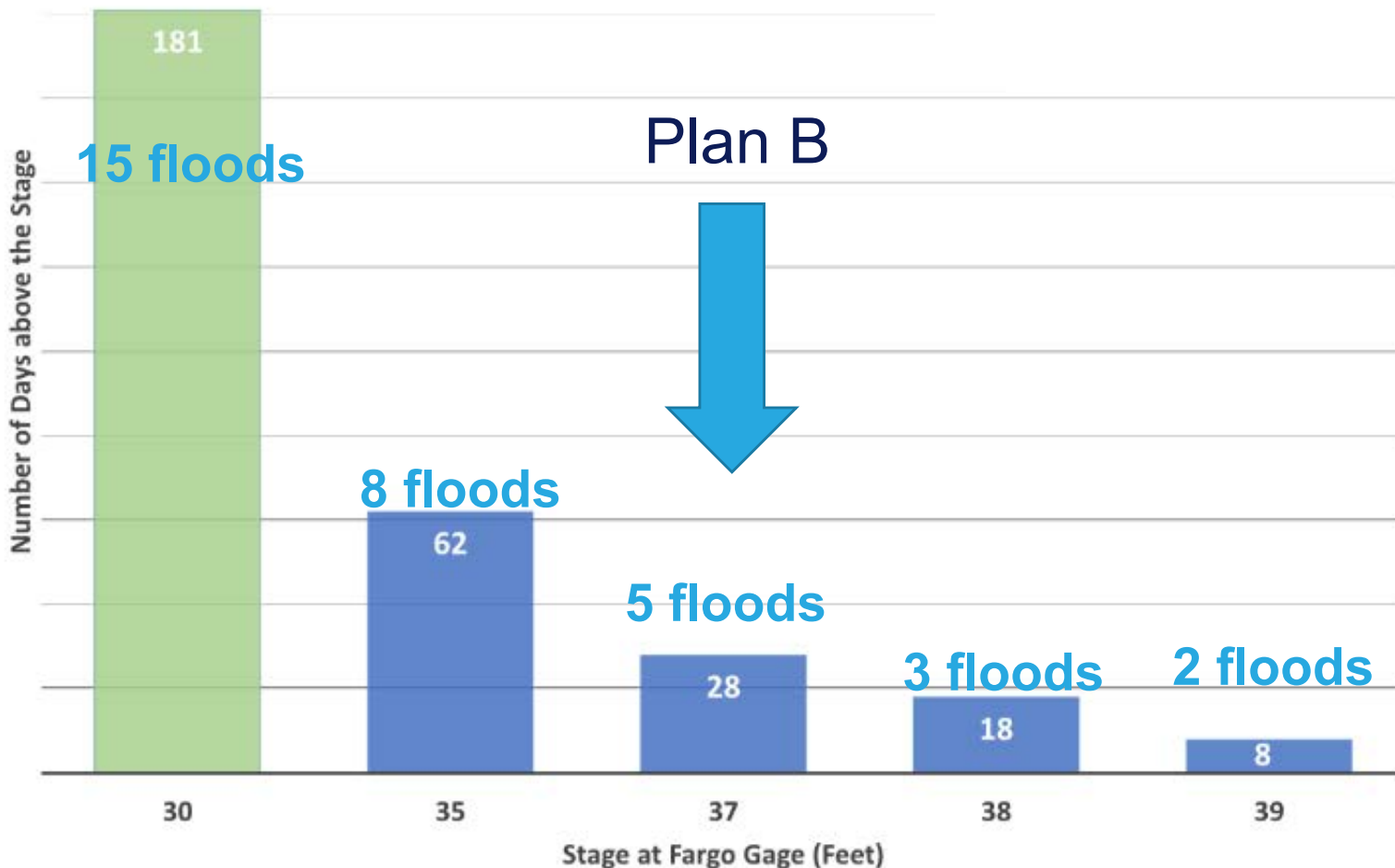
Existing Conditions

- ▶ 100-year floodplain shown in Blue



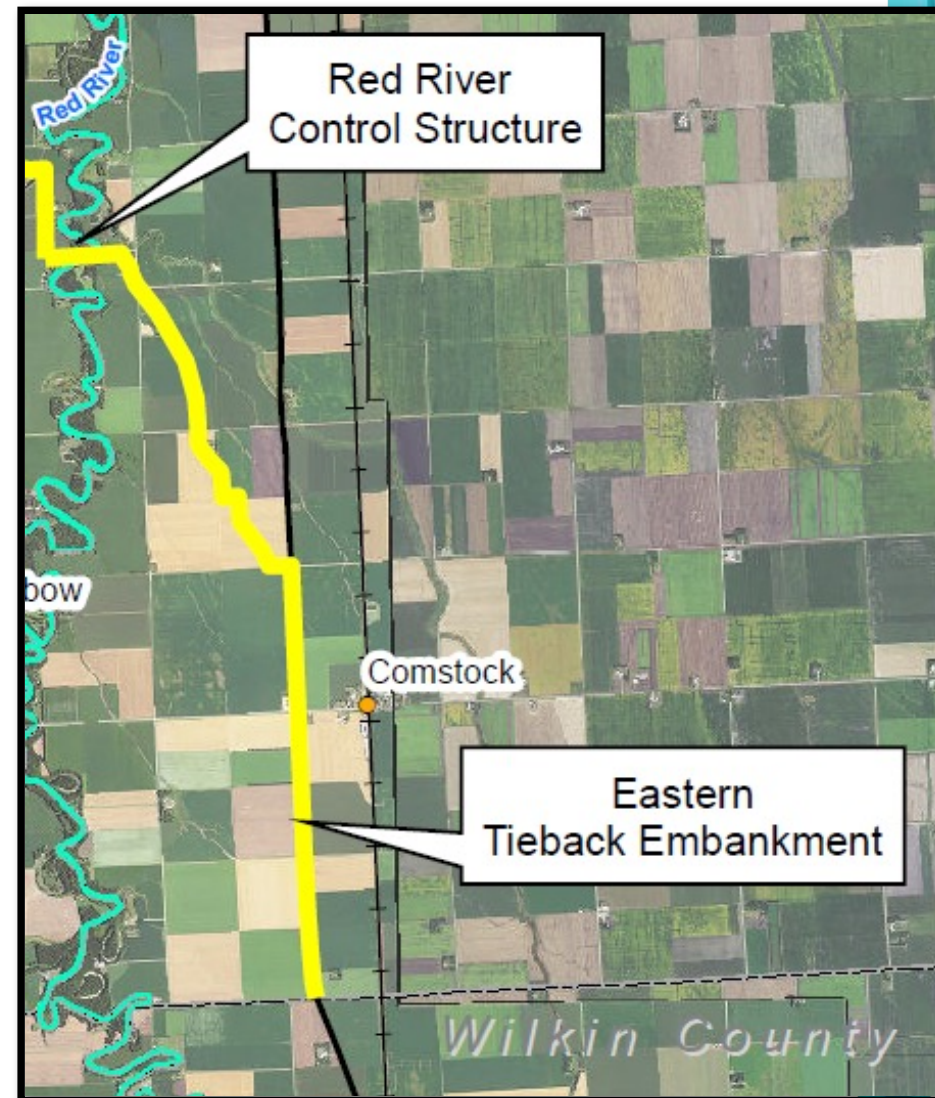
Increased flow through Fargo-Moorhead (37-feet)

- ▶ Design will allow 37-feet through town (up from 35-feet)
- ▶ Project will only operate 1 in 20 years, on average



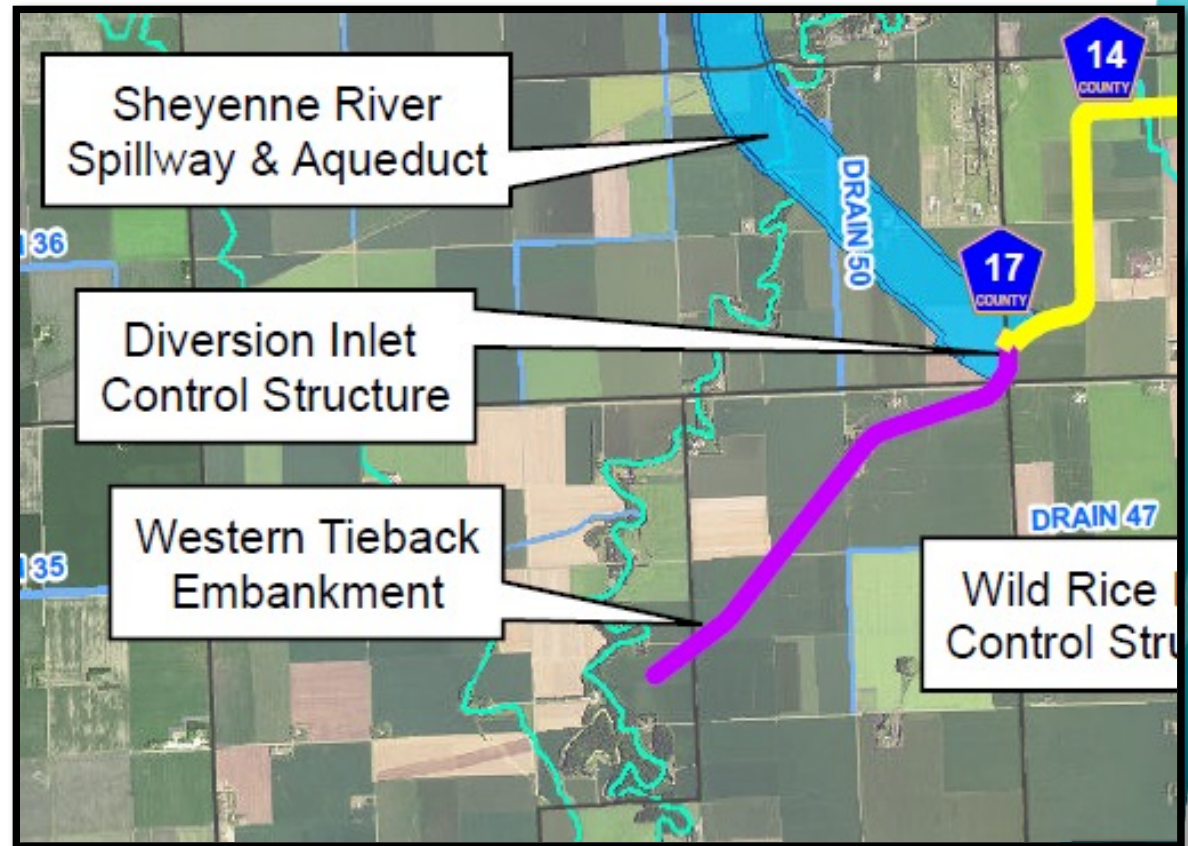
Eastern Tie-Back Levee

- ▶ Limits the extent of impacts in Minnesota
 - ▶ Eliminates any impacts to the City of Comstock, thus eliminating the need for a ring levee
 - ▶ Eliminates the need to raise Hwy 75 or the BNSF railroad
 - ▶ Impact to organic farms has been reduced nearly 90 percent from an estimated 2,900 acres to 300 acres



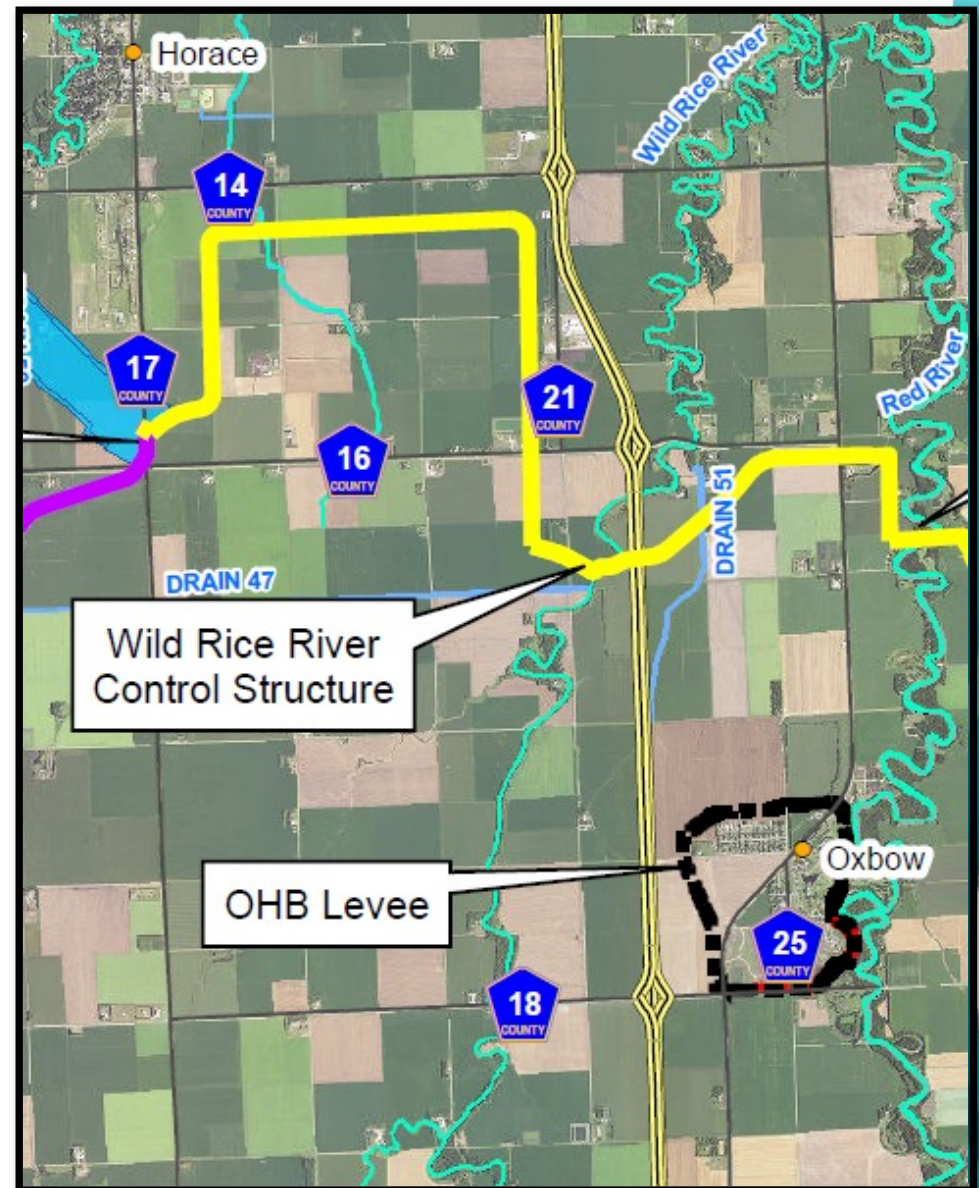
Revised Western Tie-Back Levee

- ▶ Shifts the western tie-back levee south and west from Horace
- ▶ Helps balance the impacts between North Dakota and Minnesota
- ▶ Reduces the impacts to Richland and Wilkin counties



Moving the Southern Embankment North

- ▶ Move the southern embankment north in balances the impacts between ND and MN
- ▶ Reduces the impacts to Richland and Wilkin counties
- ▶ Removes 4 of 11 cemeteries from the impacted area

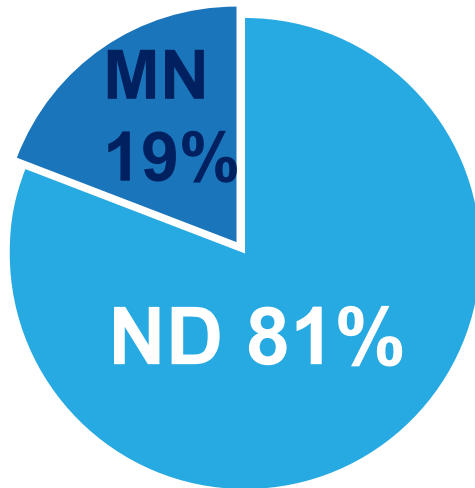


Balanced Impacts between MN and ND

PRE-TASK FORCE

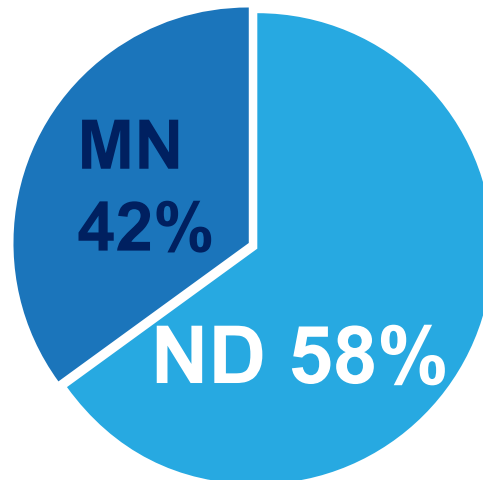
PROTECTED ACRES

- ND = 47,100
- MN = 11,000



STAGING AREA ACRES

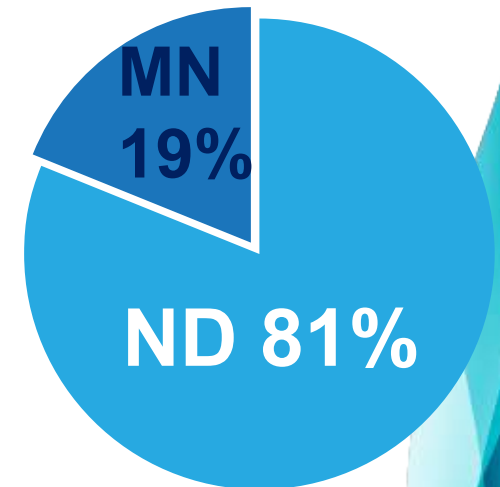
- ND = 20,700
- MN = 14,800



PLAN B

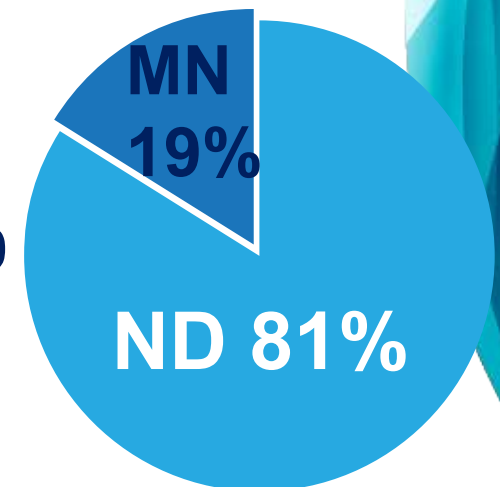
PROTECTED ACRES

- ND = 41,200
- MN = 9,500



STAGING AREA ACRES

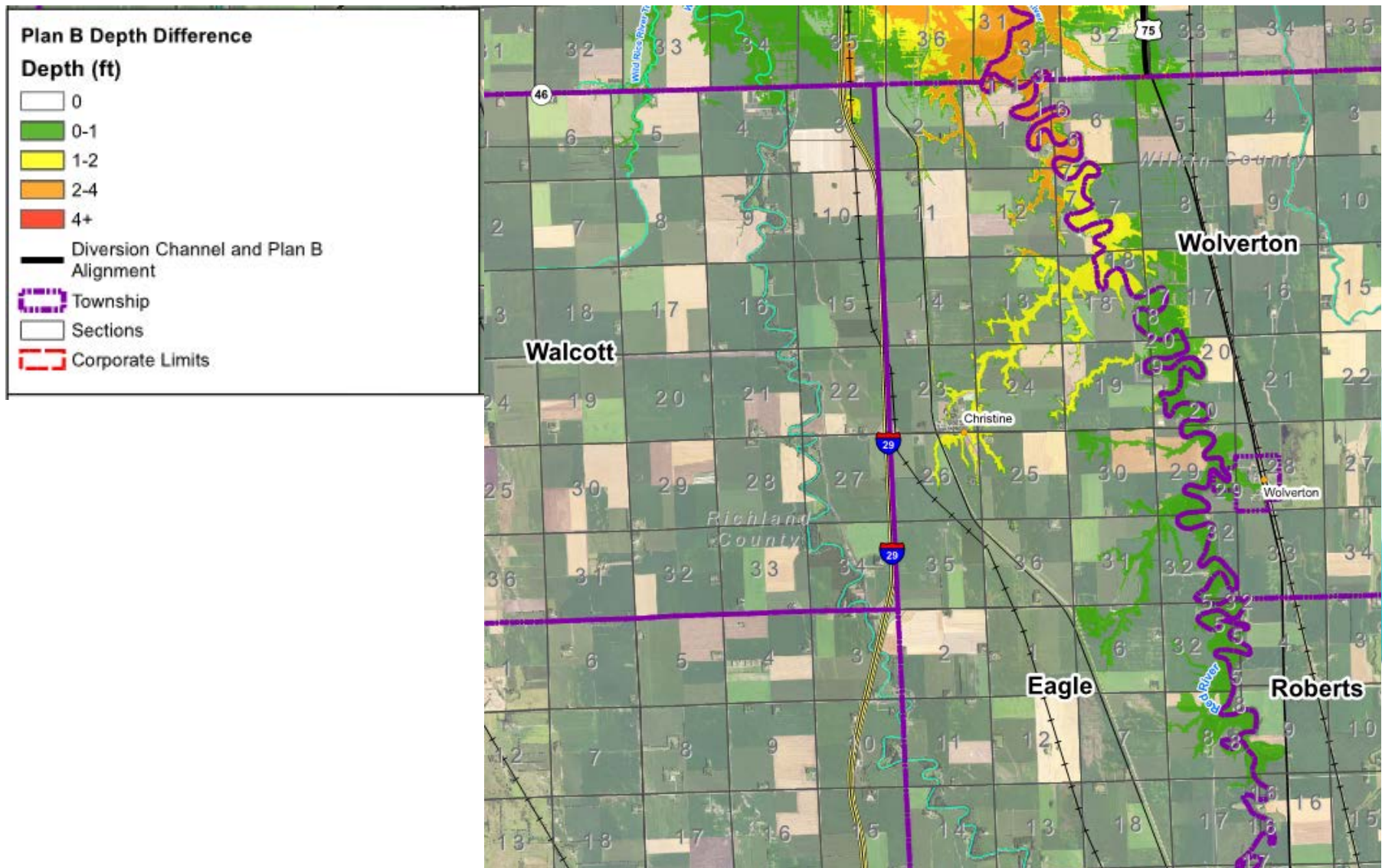
- ND = 22,600
- MN = 5,400



Richland County Impacts (100-yr flood)

	Pre-Task Force Project Impacts	Plan B Impacts	Change
Staging Area Total Area (Acres)	4,387	2,783	(1,604)
Staging Area Additional Area (Acres)	1,124	596	(528)
Total Impacted Residential Structures in Staging Area	3	2	(1)
Newly Impacted Residential Structures in Staging Area	3	2	(1)

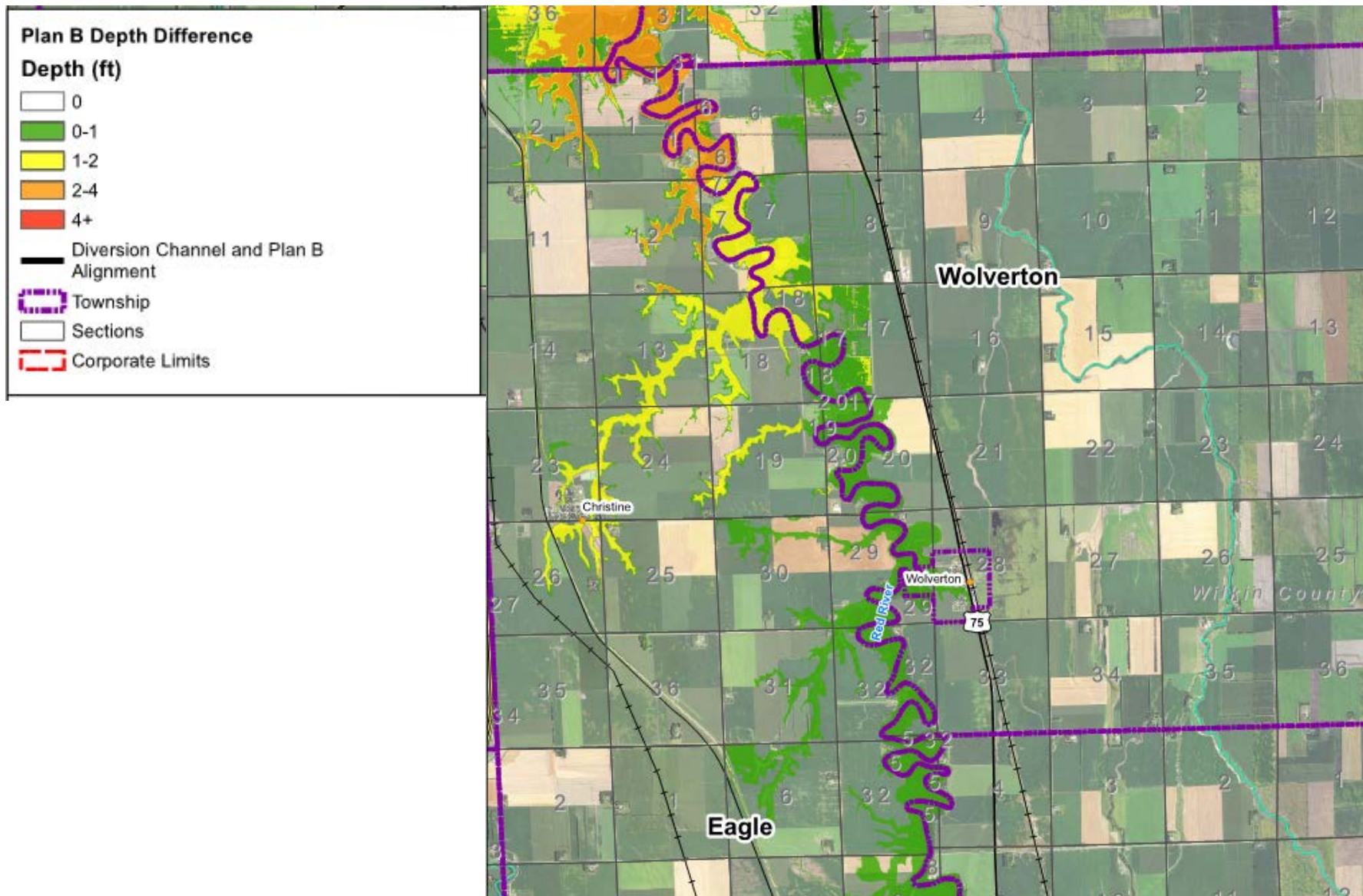
Richland County Impacts (100-yr flood)



Wilkin County Impacts (100-yr flood)

	Pre-Task Force Project Impacts	Plan B Impacts	Change
Staging Area Total Area (Acres)	2,551	1,407	-1,144
Staging Area Additional Area (Acres)	1,391	385	-1,006
Total Impacted Residential Structures in Staging Area	5	2	-3
Newly Impacted Residential Structures in Staging Area	3	0	-3

Wilkin County Impacts (100-yr flood)



Community Outreach

Plan B Presentations and Information Distribution

- ▶ Clay, Cass, Richland, and Wilkin Counties
- ▶ Cities of Fargo, Harwood, Horace, Oxbow, Reiles Acres, and West Fargo in ND
- ▶ Cities of Moorhead, Dilworth, and Comstock in MN
- ▶ Townships:
 - ▶ Barnes, Berlin, Harwood, Mapleton, Pleasant, Raymond, Reed, Stanley, and Wiser in ND
 - ▶ Holy Cross in MN
- ▶ Buffalo Red River Watershed District
- ▶ Cass County Joint Water Resource District



What's Next

Process



September 2017



Task Force assembled



Technical Advisory
Group



Policy Group

Permit Submittal

Community Outreach

Public Comment period
as part of Permit
Review

Technical & Financial

Permit and Mitigation Plan
Review

New Cost Estimate

Funding and Financial
Planning

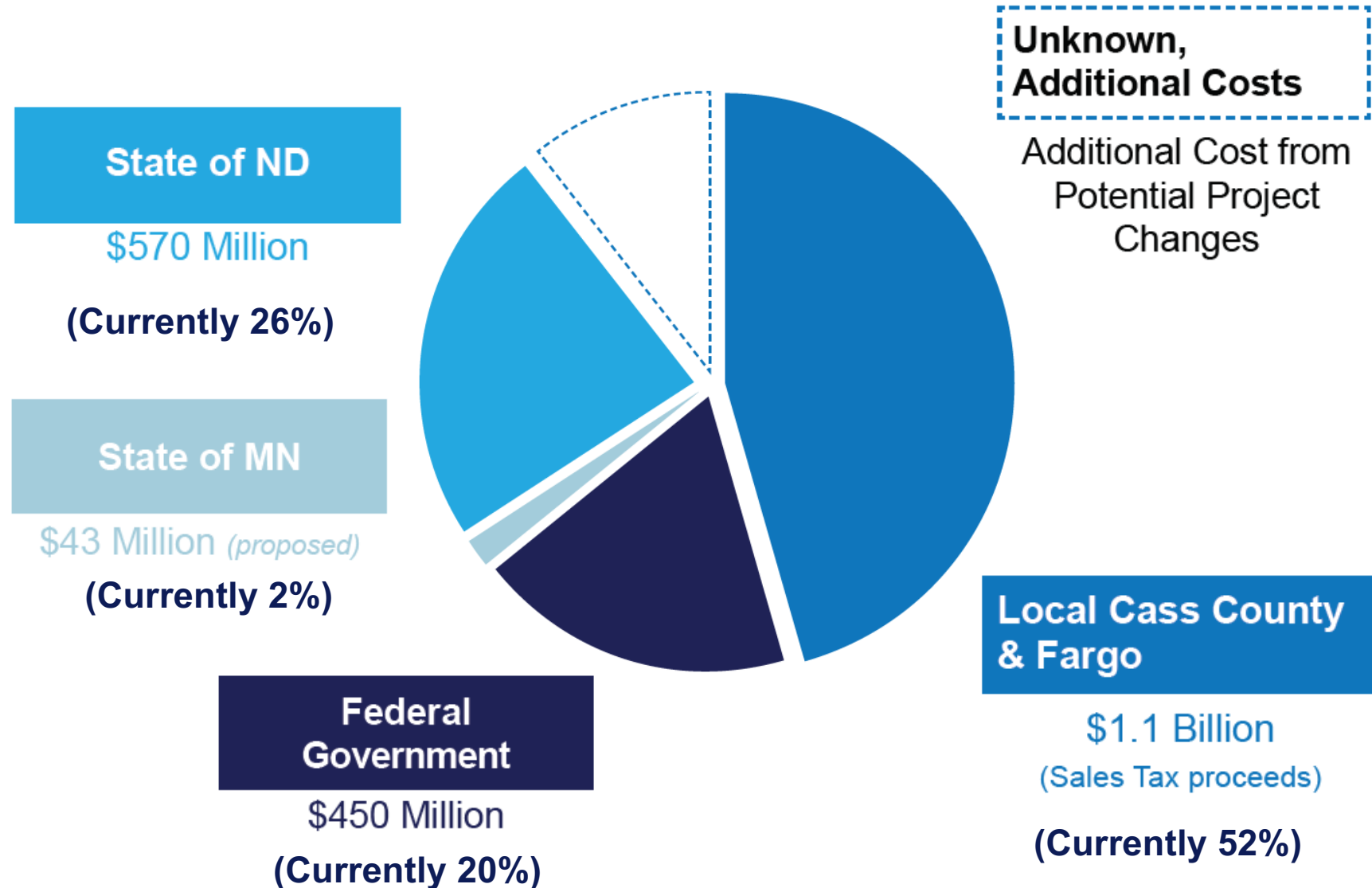
Flowage Easement
Valuation Study

“Micro-siting” of Alignment

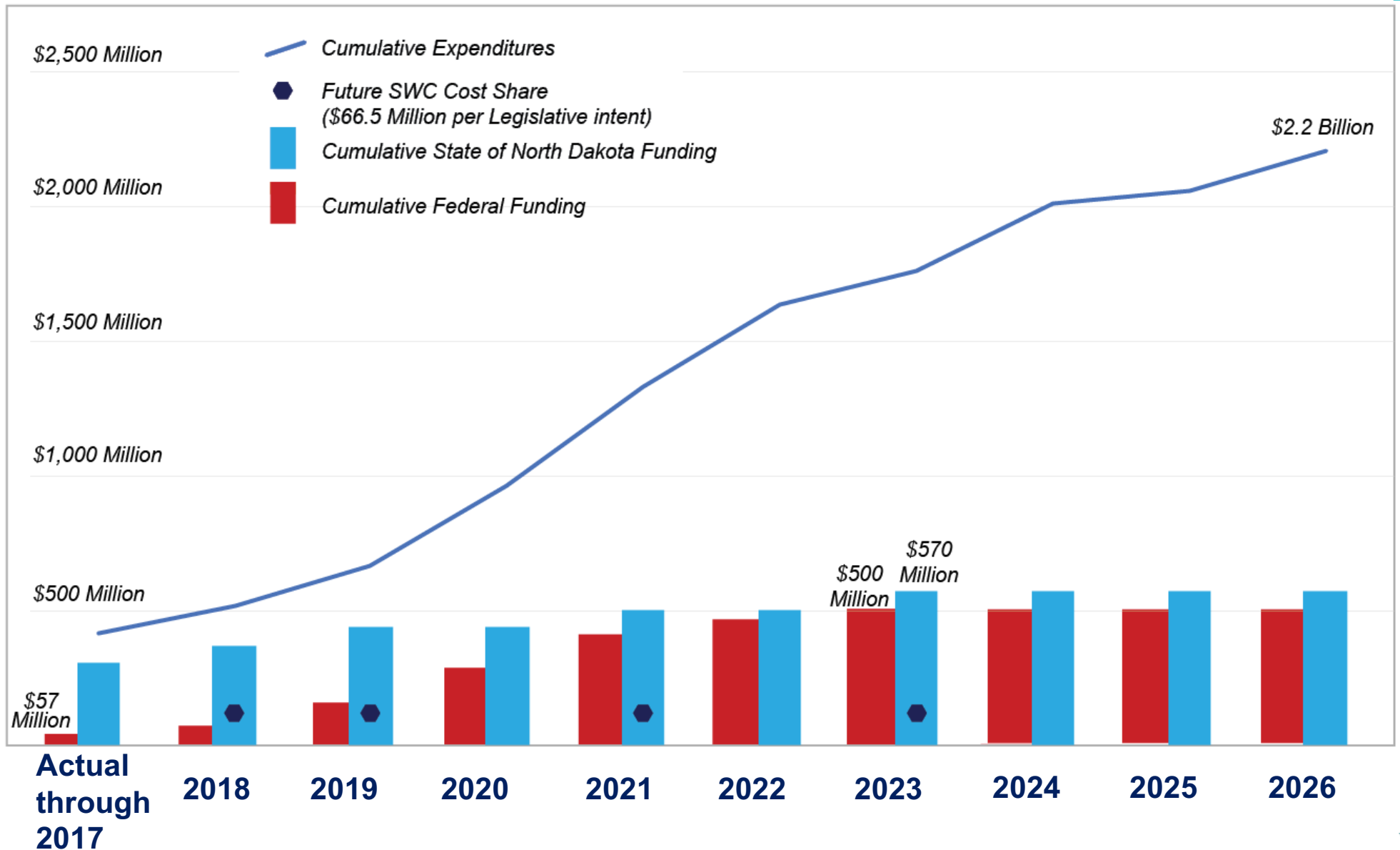


Financial Summary

Financial Overview



Forecasted Cumulative Expenditures and State Funding



2018-2019 Priorities

- ▶ Resolve Litigation
- ▶ Minnesota and North Dakota Permitting
 - ▶ USACE and DNR Environmental Clearances
 - ▶ Resume Land Acquisition
 - ▶ Advance P3 Procurement
- ▶ Develop New Cost Estimate and Financial Plan
- ▶ Flowage Easement Valuation Study (Phase 1)
- ▶ Continue In-town Construction

