

REDPATH IMPOUNDMENT PROJECT SUMMARY

BOIS DE SIOUX WATERSHED DISTRICT

March 20, 2019

Project Summary

- Off-Channel Floodwater Impoundment on the Mustinka River (a tributary to Lake Traverse)
- Located in Redpath Township of Traverse County (6 miles NW of Herman, MN)
- Contributing watershed area of 212 square miles
- Project footprint of approximately 4 square miles (about 50% will continue to be farmed)
- Flood damage reduction, water quality improvements, and natural resource enhancements
- 24,000 Ac-Ft (2.1 inches of runoff) temporary floodwater storage
- Prevents significant Mustinka River breakouts that flow into the Rabbit River
- 5 miles of river habilitation (two stage meandering channel with a natural lands corridor)
- Works in conjunction with North Ottawa to restore the western MN waterfowl migration
- This project is the centerpiece for addressing existing natural resource, erosion, water quality, and most importantly flood risk concerns outlined in the Bois de Sioux Watershed District's Overall Watershed Plan for the Mustinka River and Rabbit River sub-watersheds

Cost Summary

- \$38 million total estimated cost (over 30% of this cost has already been paid)
- \$11.6 million spent to date (a significant investment has already been made)
- MN FDR Committed to date: \$4,707,687 (\$4,479,155 spent & \$228,532 remaining)
- RRWMB Funds Committed: \$5,667,000 (entire amount has been spent)
- FDRWG Funds Committed: \$6,600 (entire amount has been spent)
- LSOHC funds Committed: \$2,440,000 (\$0 spent, to be used for river rehabilitation construction)
- Approximately \$1.5 million in local funds spent to date

Project Status

- The Redpath Project has been under development for over a decade
- The Board of Managers is committed to immediate and full implementation of the project
- The project has strong local support
- Only slightly more than 200 acres of right-of-way remains to be acquired
- Cultural and environmental investigations are complete
- The Environmental Assessment Worksheet is complete
- The MDNR Record of Decision, dated 12-1-2014, has been issued
- The Wetland Mitigation Plan is complete
- The State of Minnesota Wetland Conservation Act (WCA) Notice of Decision was issued 3-2-2016

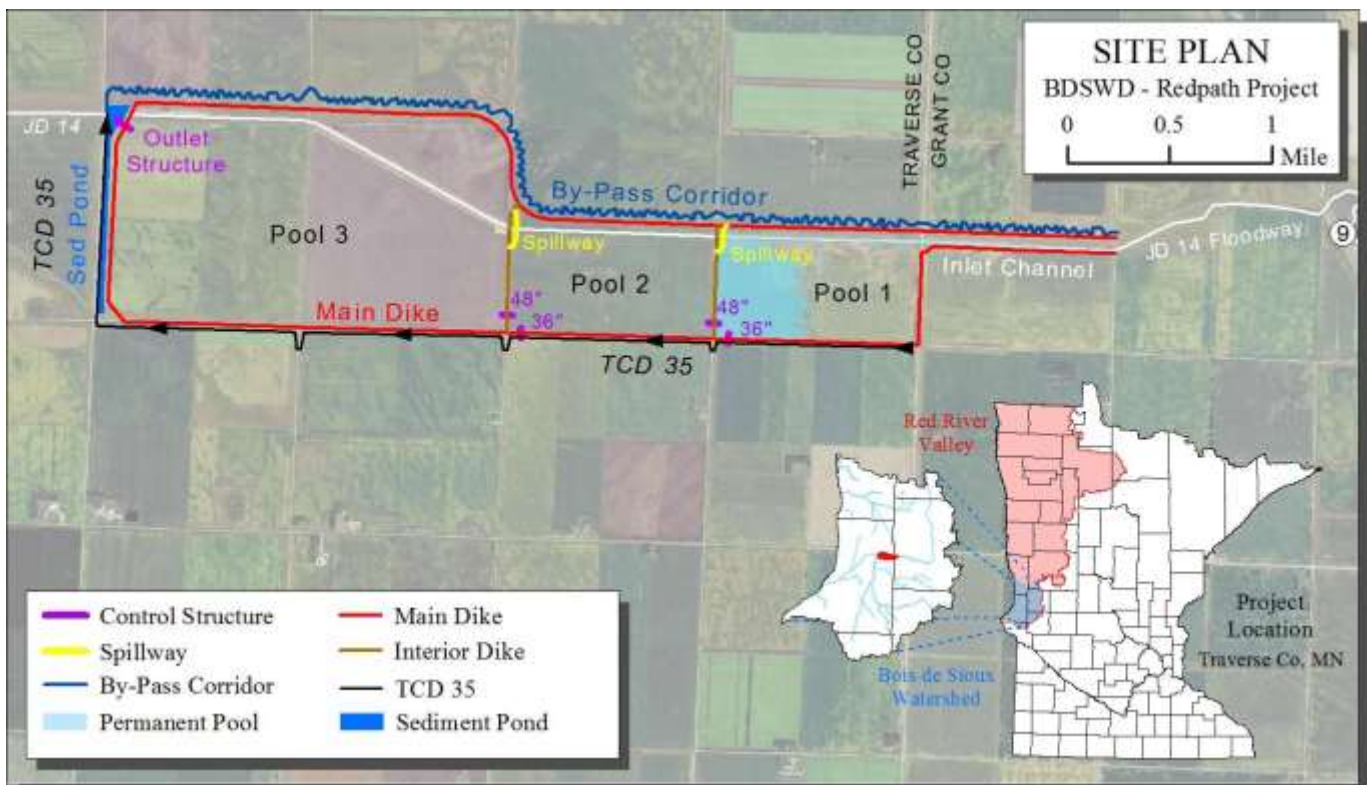
- US Army Corps of Engineers letter dated 4-18-2016 states that the project has met all requirements for the federal 404 permit which will be issued upon completion of the 408 permit
- The federal 408 permit will be received upon completion of the MN Public Waters Permit
- The first phase of construction is scheduled to be bid in 10 months (January of 2020)

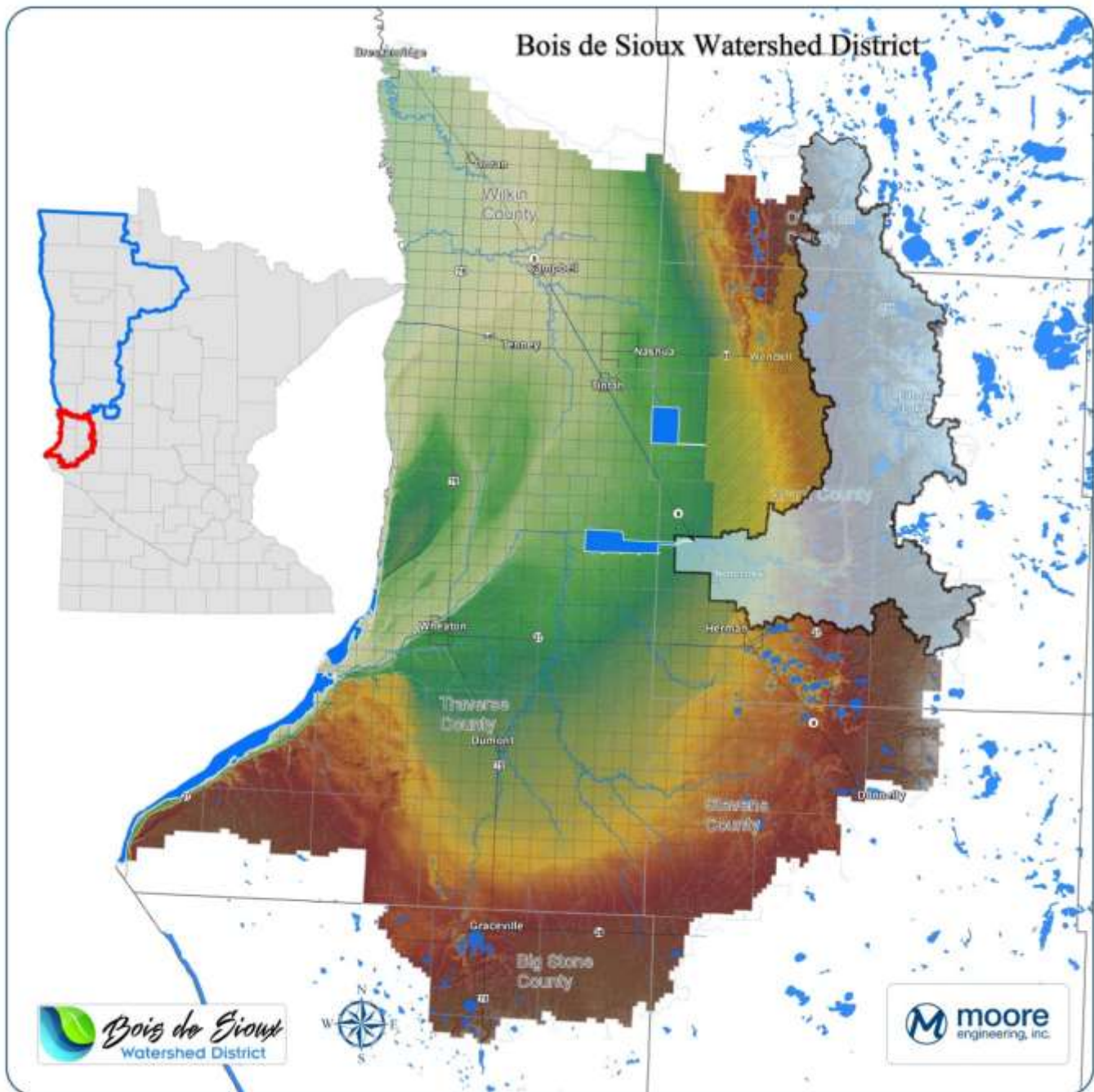
Project Schedule and remaining costs

- All remaining permits are expected to be finalized in 2019, including the MN Public Waters Permit, federal 404 permit, and federal 408 permit
- Existing MN FDR funds will cover the remaining project development and permitting tasks
- Remaining right-of-way of approx. 200 acres will be acquired in 2019 if funding is available
- **\$1.0 million in FDR funds is needed immediately for the 2019 property acquisitions**

REMAINING COSTS	Period	Est. Cost*	FDR Need
Land Acquisitions	2019	\$1 Million	\$1 Million
Approximately 200 acres			
Phase 1 Final Design & Construction	2020-2022	\$12 Million	\$9 Million
River rehabilitation, partial levees, and structures			
Phase 2 Final Design & Construction	2021-2023	\$4 Million	\$4 Million
Cell 1 levees, structures, and inlet channel			
Phase 3 Final Design & Construction	2022-2024	\$3 Million	\$3 Million
Cell 2 levees and structures and cell 3 structures			
Phase 4 Final Design & Construction	2023-2025	\$7 Million	\$7 Million
Cell 3 levees and misc. remaining items			
		\$27 Million	\$24 Million

*Estimated construction costs will be updated in the summer of 2019 upon completion of final plans





The Redpath Impoundment Project is:

- Watershed = 212 sq. mi. (Just under 3 times larger than the North Ottawa Impoundment)
- Project = 4 sq. mi. (30% larger than the North Ottawa Impoundment)
- 24,000 Ac-ft of storage (30% larger than the North Ottawa Impoundment)
- 2 inches of runoff storage
- \$34.5 Million
- Multi-Benefit