

SCOPE OF INFLUENCE

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BW

LOCALIZED INFLUENCE
Projects which impact a local area specific to the location of the project.

BASIN WIDE INFLUENCE
Projects with the potential to benefit water users across the entire NSRB.

ESTIMATED COSTS*

\$	< \$1 MILLION
\$\$	\$1-5 MILLION
\$\$\$	\$5-10 MILLION
\$\$\$\$	>\$10 MILLION

BENEFITS

↑	ECONOMIC GROWTH
🌿	ENVIRONMENTAL OUTCOMES
💧	SUSTAINABLE WATER MANAGEMENT

*Estimated costs are in 2025 dollars



WATER RESILIENCE ROADMAP FOR THE NORTH SASKATCHEWAN RIVER BASIN (NSRB)

Watershed management and climate adaptation are complex and require a collaborative approach to ensure that the resultant projects are considered on both a local and regional scale. This study incorporates testing of potential adaptations against future climate scenarios to develop a new Roadmap for the NSRB.

Indigenous water governance and Treaty Rights are overarching considerations for the Roadmap.

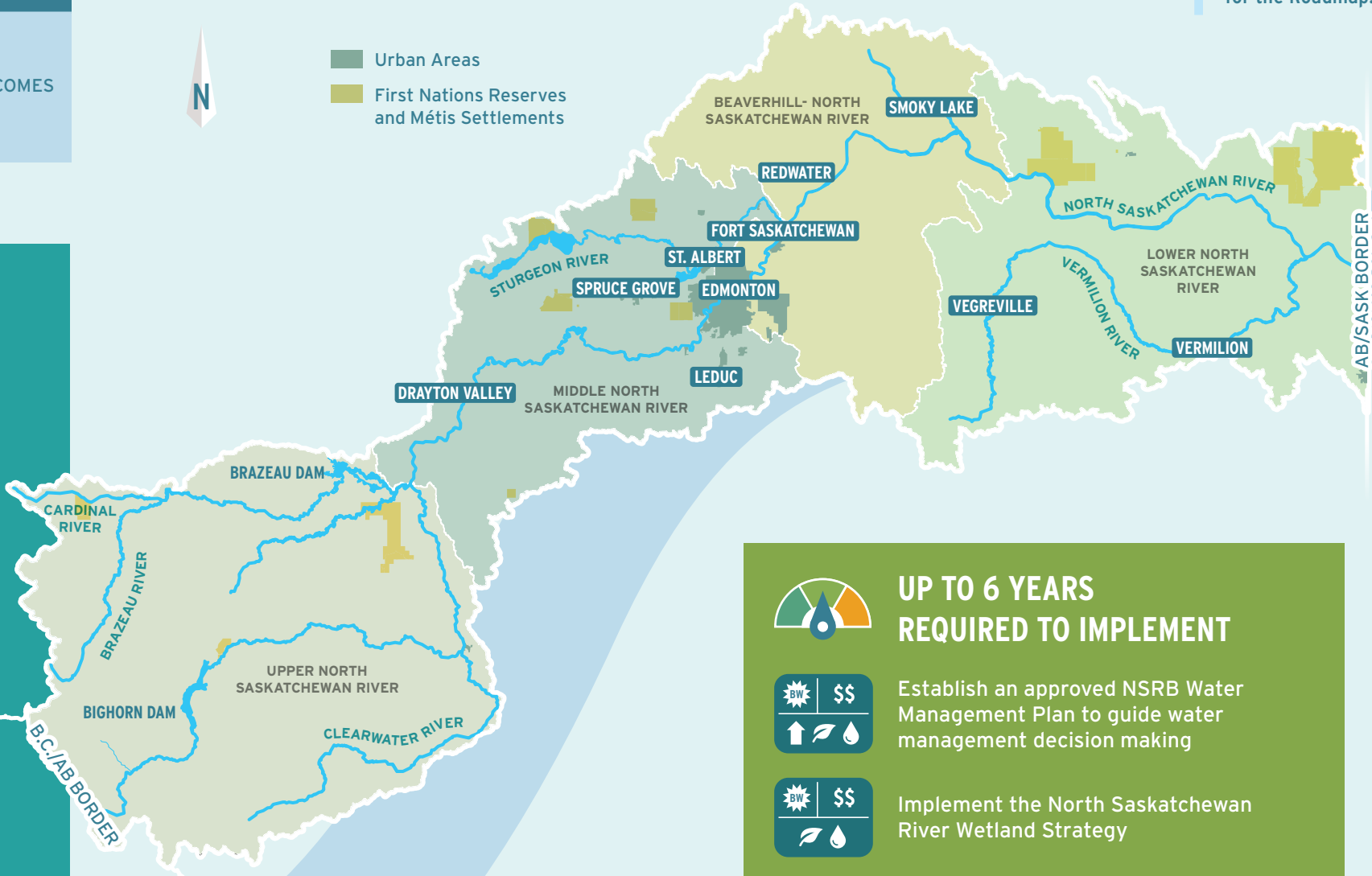
LESS THAN 3 YEARS REQUIRED TO IMPLEMENT

Establish basin-scale Conservation, Efficiency, and Productivity (CEP) targets for municipalities, industry, and the agricultural sector to incentivize sustainable water use

Support the development and implementation of water reuse projects in collaboration with industry and municipalities

Improve access to and use of alternative water sources for consumptive operations, including improved data availability

Create an Indigenous-guided future Roadmap for water in the NSRB



Implement effective stormwater retention plans and erosion control measures



Support flood and drought mitigation planning with municipalities, First Nations, Metis communities, agriculture, the Government of Alberta, and industry

UP TO 6 YEARS REQUIRED TO IMPLEMENT

Establish an approved NSRB Water Management Plan to guide water management decision making

Implement the North Saskatchewan River Wetland Strategy

Improve water quality in non-mainstream drinking water sources, including lakes and tributaries

Improve water security for Indigenous communities, ensuring adequate and safe water is available for drinking, household, community needs, and emergency services

Enhance connection with Alberta's Land-Use Framework and other existing regulatory frameworks

Explore establishing a collaborative relationship with hydro facilities

MORE THAN 6 YEARS REQUIRED TO IMPLEMENT

Develop aquifer management plans informed by Alberta Energy Regulator (AER) and Government of Alberta objectives

Develop natural asset programs and tools to support ecosystem services and fill key information gaps

COMPLEMENTARY ACTIONS

Refine and promote the collaborative decision support tool

Continue to build flood-resilient infrastructure to reduce potential flood impacts



SCAN TO ACCESS THE FULL REPORT

This roadmap was developed in collaboration with the North Saskatchewan Working Group members who provided input on several key strategies which can be implemented throughout the NSRB.

FUTURE CONSIDERATIONS

- L** Re-operationalize Sundance Pond Storage
- L** Initiate intra-basin water transfers from the mainstem to the Vermilion River
- L** Construct off-stream storage upstream of the City of Edmonton
- BW** Design a hydrologic model in collaboration with Indigenous communities