

RED RIVER VALLEY WATER SUPPLY PROJECT

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

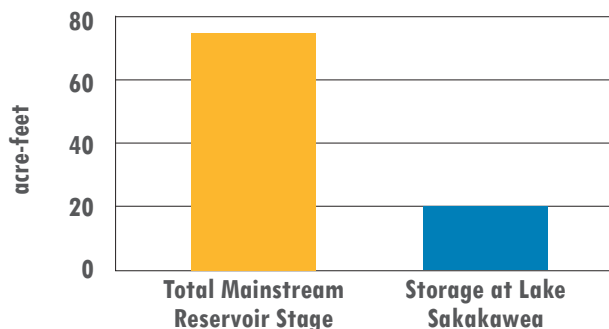


Lake Agassiz Water Authority
December 14, 2017

NORTH DAKOTA USAGE OF THE MISSOURI RIVER

The Missouri River accounts for 95% of North Dakota's surface water. North Dakota currently utilizes slightly over 1% of the Missouri River that flows through the state.

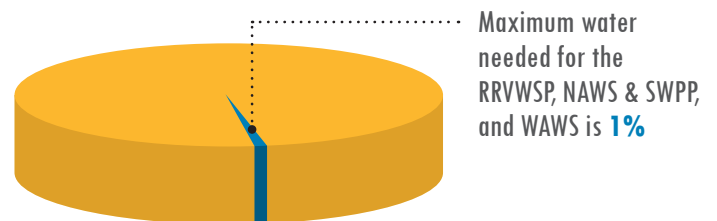
MISSOURI RIVER RESERVOIR STORAGE



The Missouri River System is the largest reservoir system in North America, with the capacity to store 73.4 million acre-feet of water. In North Dakota, Lake Sakakawea (Garrison Dam) has the capacity to store nearly 24 million acre-feet of water, almost 1/3 of the storage capacity of the entire six dam reservoir system.

(Source: RRVWSP Final Environmental Impact Statement)

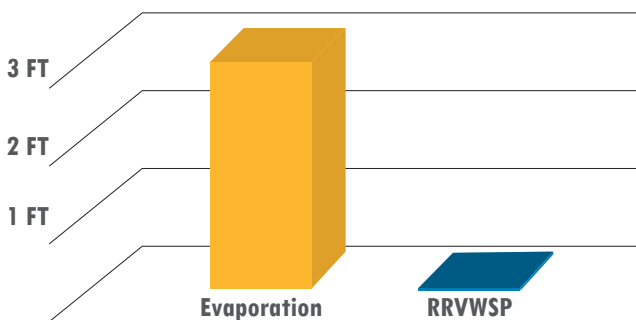
MISSOURI RIVER FLOWS AT BISMARCK



Missouri River Average Annual Flows at Bismarck	16.7 MAF
Max. Water Needed for Regional Water Supply Projects	0.164 MAF
Red River Valley Water Supply Project	0.119 MAF
Northwest Area Water Supply Project	0.015 MAF
Southwest Pipeline Project	0.017 MAF
Western Area Water Supply Project	0.013 MAF

MAF = million acre-feet (Source: North Dakota State Water Commission)

CHANGE IN ELEVATION OF LAKE SAKAKAWEA



Three feet of water is lost on average each year due to evaporation on Lake Sakakawea. Studies show that the change in storage due to the Red River Valley Water Supply Project would lower the level of Lake Sakakawea about **one inch** per year during a severe drought.

(Source: RRVWSP Final Environmental Impact Statement)

MISSOURI RIVER FLOWS



22,500 CFS
Average Annual Discharge from Garrison Dam



12,000 CFS
Lowest Annual Missouri River Flow During Severe 1930s Drought



165 CFS
Maximum Flow Used by the RRVWSP During Peak Operations