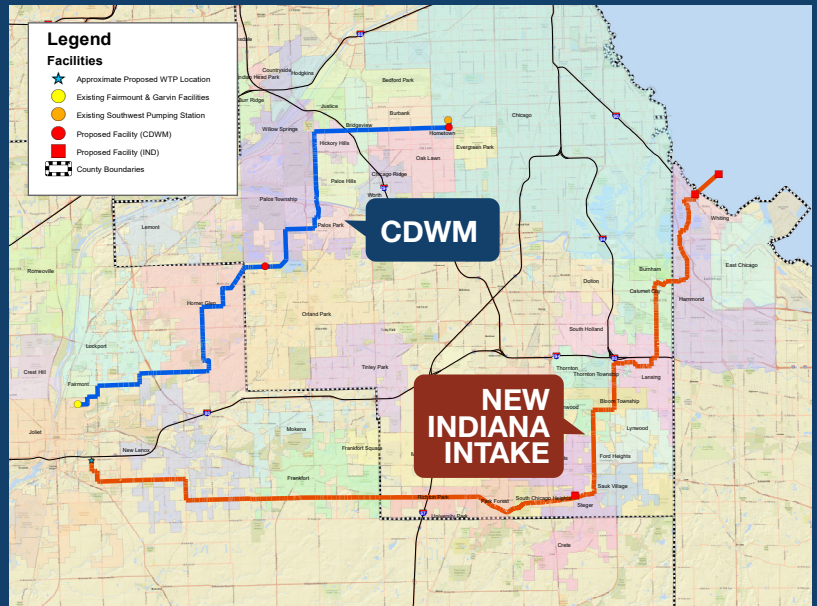


Joliet Alternative Water Source

Program Background

Joliet's main source of drinking water is the deep sandstone aquifer. Over the years, studies have shown the water level in the aquifer declining as more water is being used than is sustainable. Groundwater modeling completed by the Illinois State Water Survey has shown that with current withdrawal rates, the City will not be able to meet its maximum day water demands by 2030.

To address this problem, Mayor O'Dekirk re-established the Environmental Commission in 2017 to evaluate all potential water source alternatives as part of a two phased Alternative Water Source Study. In 2018, Phase I of the study, which evaluated 14 alternatives based on water quantity and quality, was completed. This resulted in 5 options, including three Lake Michigan options, the Kankakee River, and the Illinois River, being recommended by the



Environmental Commission for further evaluation during Phase II. During this time, significant outreach was conducted with the Environmental Commission, City Council and the public to provide information on the study progress and findings. In January 2020, based upon the results of the Phase II Study, the Joliet City Council selected Lake Michigan as the preferred source of water for the City given its ability to be a long term, sustainable and reliable water source.

Upon the 2020 selection of Lake Michigan as the new water source, the City Council instructed staff to further evaluate two options for bringing Lake Michigan water to Joliet. The first option is purchasing treated water from the City of Chicago Department of Water Management (CDWM). The second option includes constructing a new Lake Michigan intake in Hammond, Indiana and a water treatment plant near Joliet to create a new water system. This evaluation

was completed over the past seven months and the results were presented to the City Council in mid-November for their review. The purpose of this outreach is to present the findings of the 2020 evaluation to the public.

This map shows the general route that water would travel to Joliet depending on the source. The Chicago alternative would convey treated water approximately 30 miles and the Indiana intake alternative would convey raw water approximately 46 miles to Joliet for treatment.

The risks for each alternative were identified. Mitigation measures have been established to limit risk through various means including the drafting of preliminary agreements with Chicago and Hammond.

POTENTIAL RISKS:

CDWM Potential Risks	Future Agreement Terms & Conditions	Lack of Control	Age of Supply and Treatment Infrastructure	Land Acquisition
New Indiana Intake Potential Risks	Crossing State Lines	Magnitude of Improvements	Responsibility for Water Treatment Operations	Land Acquisition

REGIONAL WATER COMMISSION

Either of these alternatives allows the City of Joliet to form a Regional Water Commission for participation by those communities who wish to join in a regional water solution. Taking a regional approach would distribute the costs across a larger group of communities, resulting in a lower unit cost of water for all.

ESTIMATED CAPITAL AND OPERATION, MAINTENANCE AND REPLACEMENT COSTS

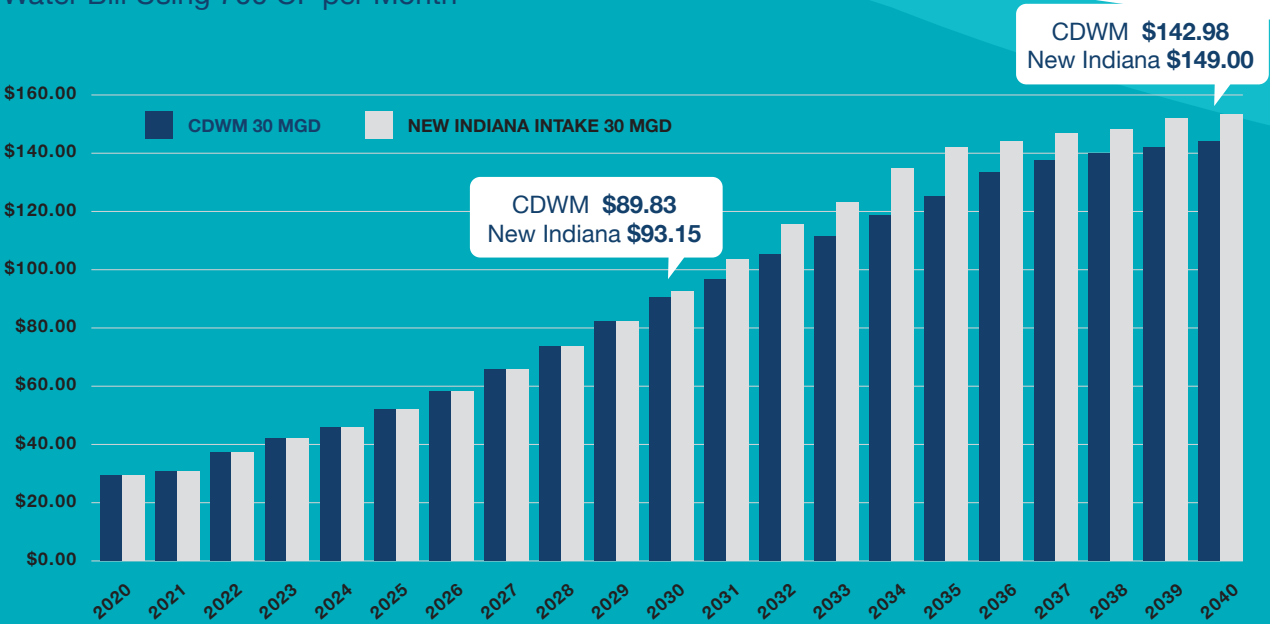
Joliet Independently	TOTAL COST 30 MGD/2020 Dollars	CDWM	New Indiana Intake
	Capital Costs	\$592,000,000	\$1,028,000,000
	Operation, Maintenance & Replacement Costs (dollar per year)	\$4,700,000	\$14,300,000

Regional Option	TOTAL COST 60 MGD/2020 Dollars	CDWM	New Indiana Intake
	Capital Costs	\$810,000,000	\$1,368,000,000
	Operation, Maintenance & Replacement Costs (dollar per year)	\$6,900,000	\$18,200,000

Regional Option	JOLIET'S SHARE 60 MGD/2020 Dollars	CDWM	New Indiana Intake
	Capital Costs	\$430,000,000	\$700,000,000
	Operation, Maintenance & Replacement Costs (dollar per year)	\$4,300,000	\$11,100,000

For a regional option, the total costs would be higher, however, the cost for Joliet would be reduced.

30 MGD COMPARISON:
Average Residential Monthly
Water Bill Using 700 CF per Month



FUNDING STRATEGY

	INTEREST RATE	MATURITY	Required CDWM Financing 30 MGD	Required New Indiana Intake Financing 30 MGD
WIFIA	2.0% - 3.0%	35 years after substantial completion	\$355,000,000	\$616,000,000
IEPA SRF	1.5% - 2.5%	20 years	\$250,000,000	\$250,000,000
REVENUE BONDS	3.0% - 4.0%	30 years	\$120,000,000	\$391,000,000

TOTAL (Costs escalated to time of construction)

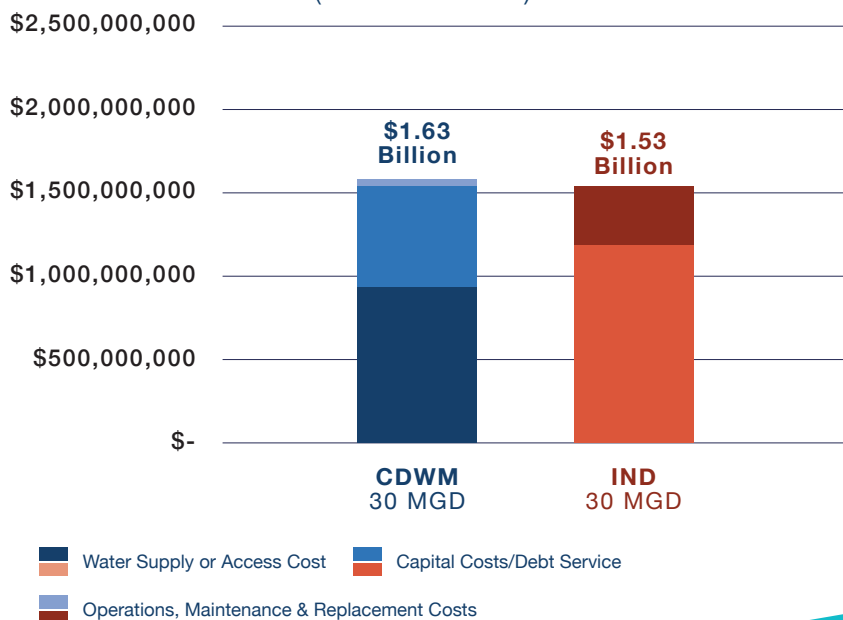
\$725,000,000

\$1,257,000,000

The City has developed a strategy for securing low interest federal and state loans and will issue municipal bonds to pay for this.

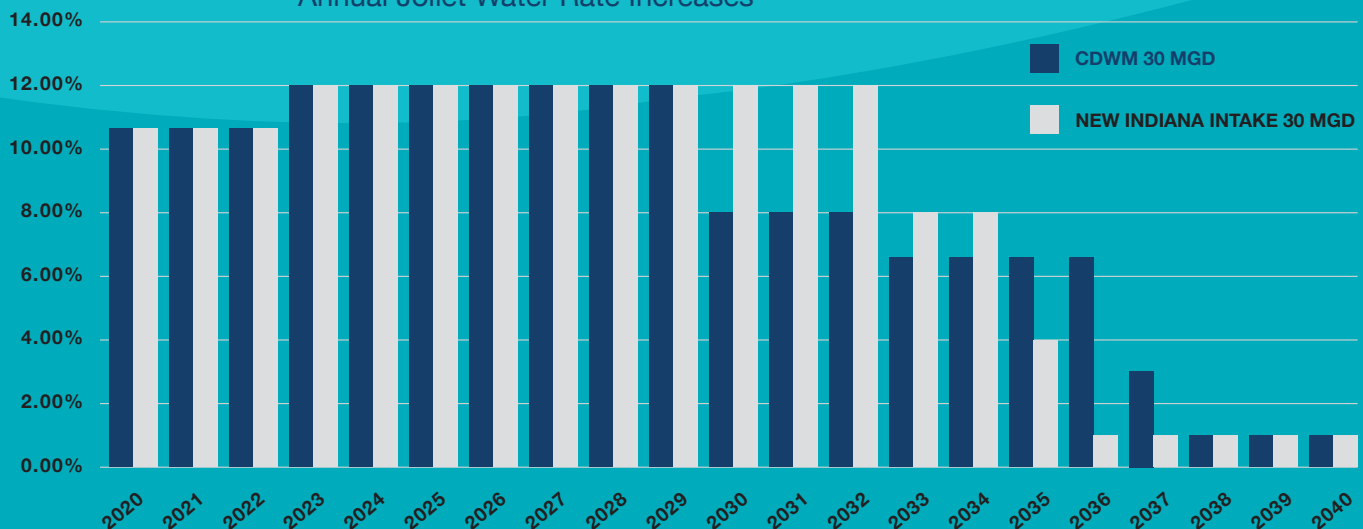
50-YEAR TOTAL COST OF WATER (Present Value)

This chart shows the total cost of water for 50 years (2030-2079).



Both options will increase water rates. The 2021 average monthly water bill is \$34 not including costs for sewer or trash. In order to support the alternative water source program implementation as well as general water system improvements, in 2030 the average monthly water bill is projected to increase to between \$90 and \$93 if Joliet proceeds independently and between \$75 and \$79 under a regional option.

30 MGD COMPARISON: Annual Joliet Water Rate Increases



NEXT STEPS

The Joliet City Council is reviewing and evaluating the two Lake Michigan water supply sources. Staff will conduct a City Council workshop on December 17th with representatives from the Cities of Chicago and Hammond in attendance. This will give the Council the opportunity to ask questions based on their review and the comments and questions you provide.

In January 2021, a decision will be made by the City Council to obtain Lake Michigan water from either the City of Chicago Department of Water Management or a New Indiana intake. Once this decision has been made, the consulting team will begin the preliminary design, permitting and land acquisition tasks.

Project Timeline

While the new water will not be flowing from the tap in your house until 2030, there is a lot to be done over the next 10 years. City staff along with the consulting team and contractors will be working to make this happen.

2021
Preliminary
Design

2022-2024
Final Design

2024 to 2030
Construction

2030
Start-up,
Commissioning,
Monitoring

STAY INVOLVED!

The City has established a dedicated website for the Joliet Alternative Water Source Program, **RethinkWaterJoliet.org**. This site contains all program related information and reports as well as information on water conservation. On this site, you can sign-up to receive electronic updates right to your inbox and you can submit any comments or questions you have. You can also submit comments by emailing **rethinkwater@joliet.gov** or by calling **815-724-4220**.



CONTACT:
RETHINKWATER@JOLIET.GOV