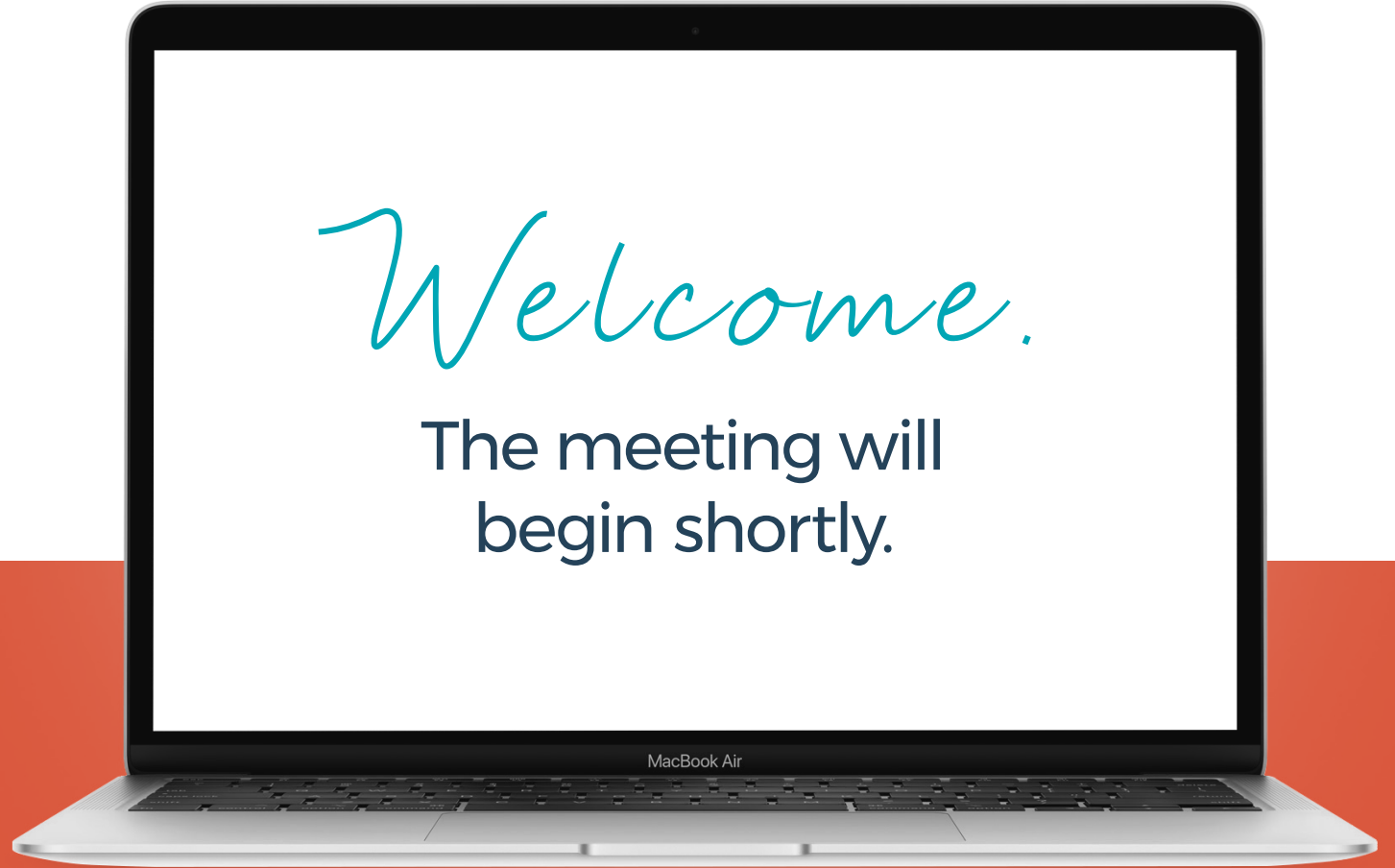


JOLIET



VIRTUAL STAKEHOLDER MEETING

May 28, 2020
1 PM - 2:30 PM



Welcome



TRACY MORSE
Images, Inc.
FACILITATOR



ALLISON SWISHER
City of Joliet
PANELIST



AMY WAGNER
City of Joliet
PANELIST



JOE JOHNSON
Stantec
PANELIST



THERESA O'GRADY
CMT
PANELIST

VIRTUAL STAKEHOLDER MEETING

MAY 28, 2020 | 1 - 2:30 PM

MEETING AGENDA



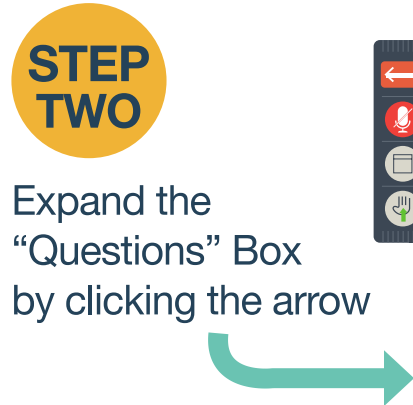
- 1:00 pm to 1:05 pm **Welcome, Meeting Ground Rules – Tracy Morse, Images Inc.**
- 1:05 pm to 1:35 pm **Alternative Water Source Study – Allison Swisher, City of Joliet**
- 1:35 pm to 2:00 pm **Alternative Water Source Program, 2020 Initiatives – Theresa O'Grady, Crawford, Murphy & Tilly**
- 2:00 pm to 2:10 pm **Water Conservation – Amy Wagner, City of Joliet**
- 2:10 pm to 2:30 pm **Questions & Answers Panel – Allison Swisher, City of Joliet; Amy Wagner, City of Joliet; Joe Johnson, Stantec; Theresa O'Grady, CMT**

QUESTION & ANSWER SESSION

How to Ask a Question



Expand your control panel by clicking the **orange arrow**



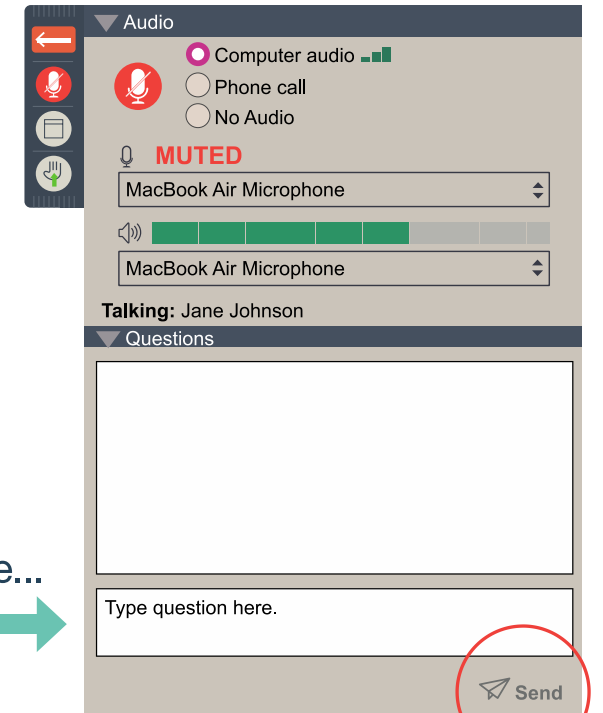
Expand the "Questions" Box by clicking the arrow



Once your question has been submitted, the **facilitator will read your question**, and **a technical expert will respond**.



Type your question here...



...and click send!





Alternative Water Source Study

Allison Swisher
City of Joliet





Where our water comes from

21 deep aquifer groundwater wells
5 shallow aquifer wells
19 million gallons pumped on an average day

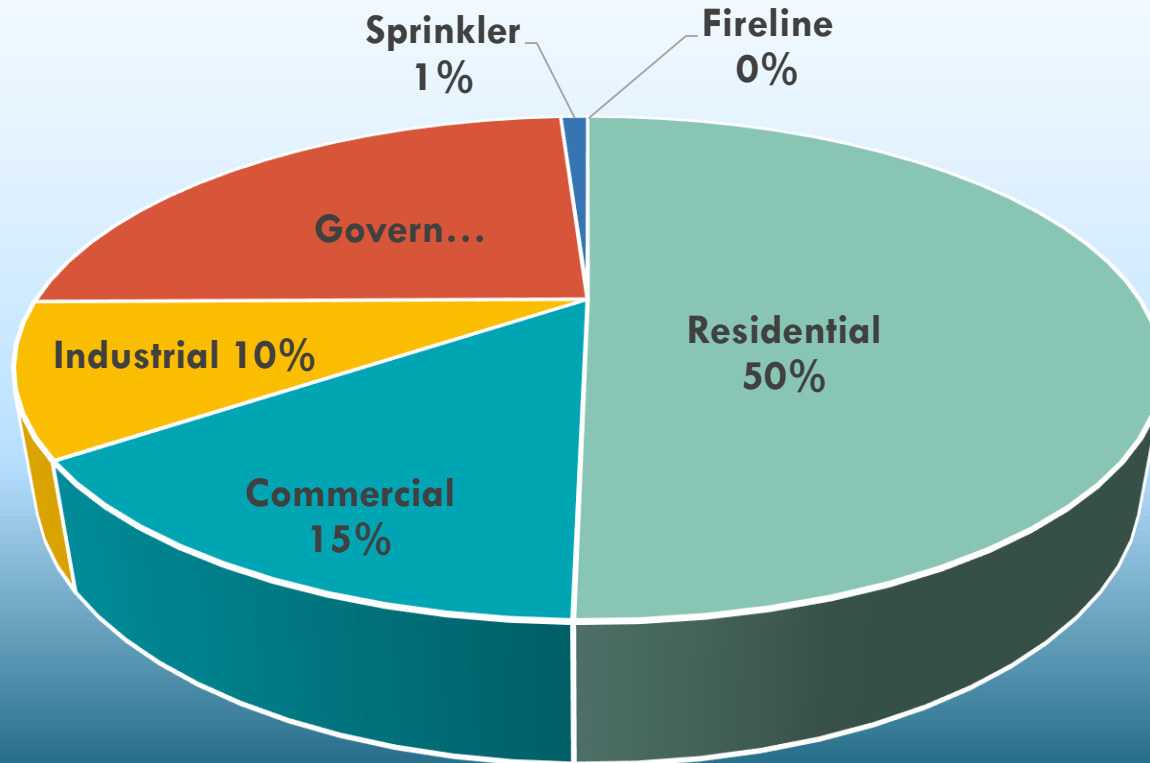
11 water treatment plants for removal of radium
663 miles of water main

Where our water goes



CITY OF JOLIET

2019 Water Consumption by Class



Population Served:

149,386

JOLIET'S WATER HISTORY

1884

The original Joliet Water Works was founded as a private company in 1884

1888

The City of Joliet purchased Joliet Water Works in 1888

1907

First deep well constructed at Ottawa Street



JOLIET'S WATER HISTORY

1960's

Since the 1960's, water levels have been monitored and show a steady decline. The City and region began exploring alternate water sources

2015

Illinois State Water Survey publishes results of groundwater modeling indicating desaturation will occur in 15-30 years

2017

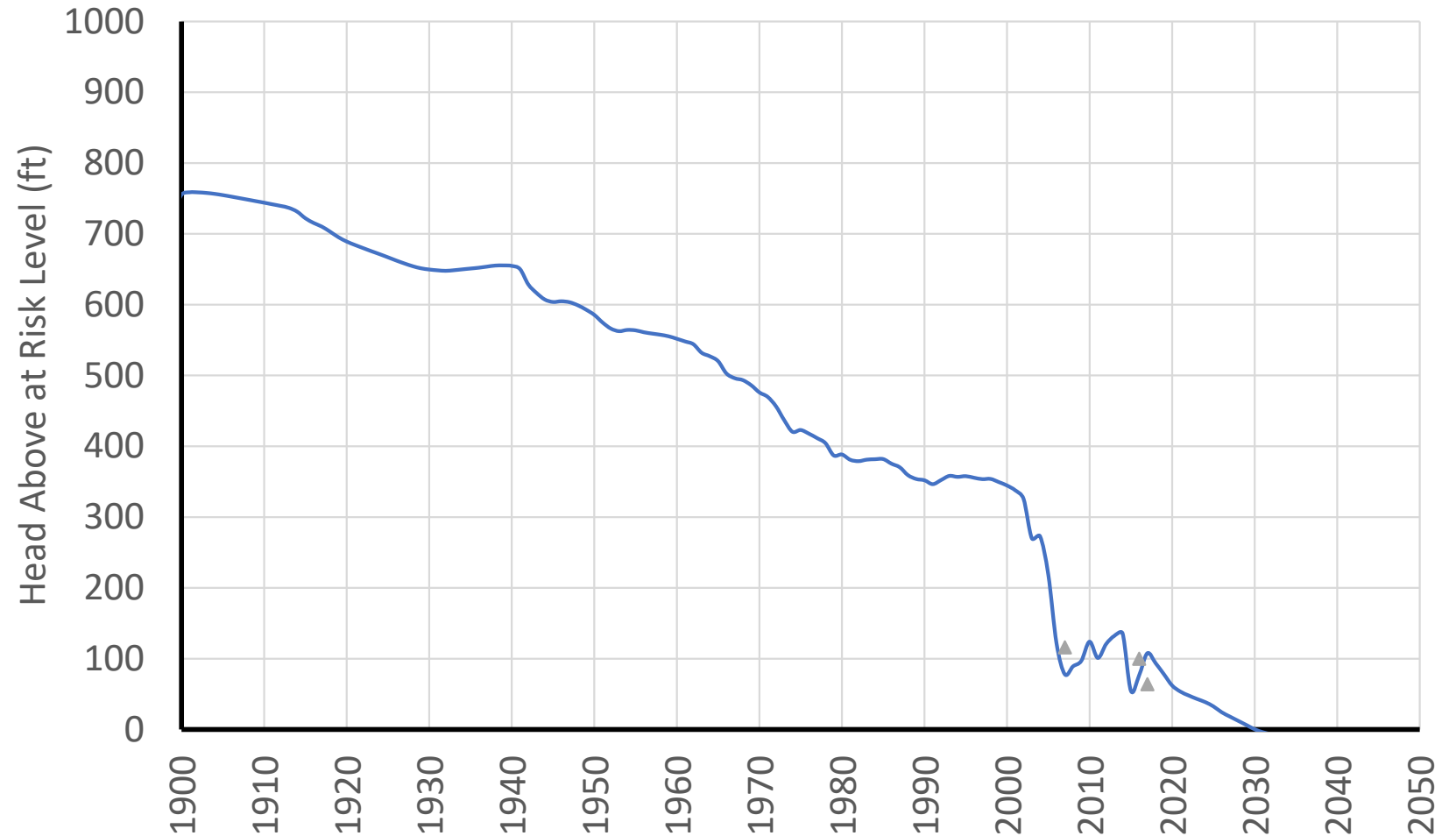
Mayor O'Dekirk re-establishes the Environmental Commission to study water source alternatives



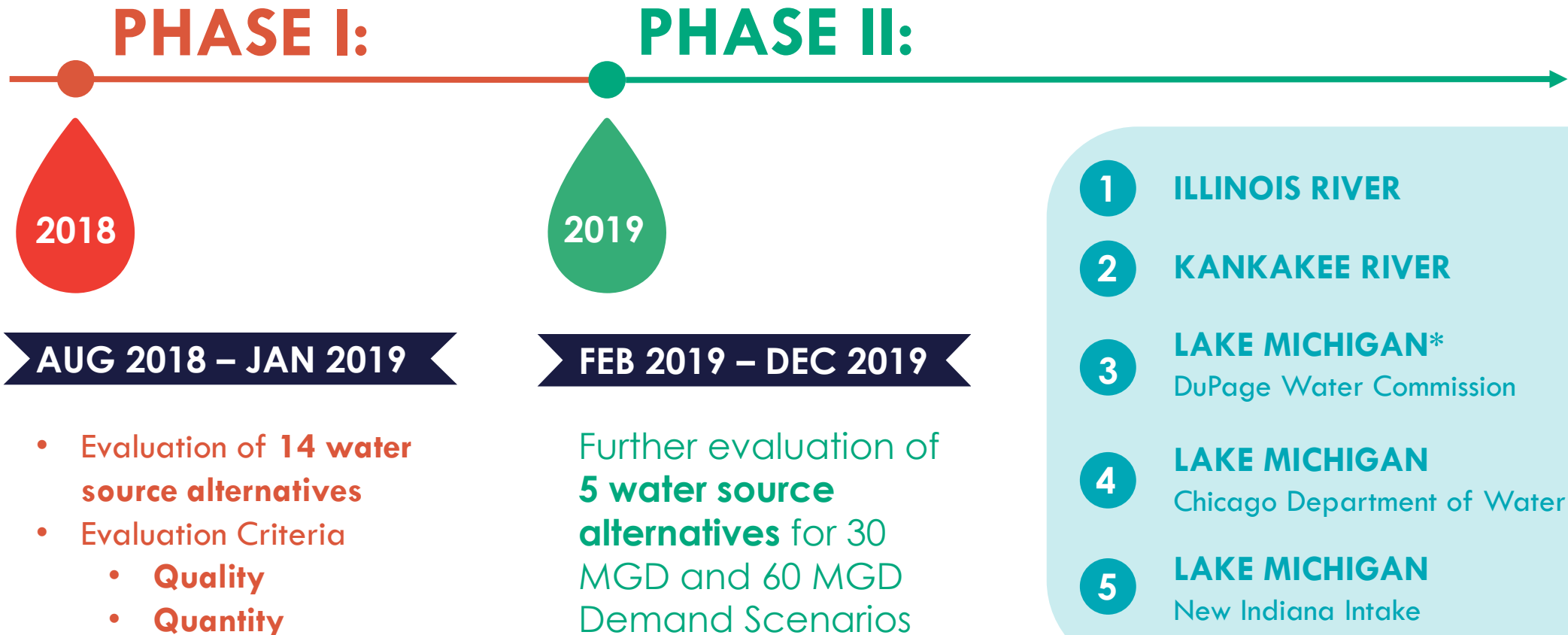
CURRENT PROBLEM

Groundwater modeling completed in Fall 2018 and updated in Spring 2020 found that at current usage rates **the City's existing water source, the deep sandstone aquifer, will not meet maximum day demands by 2030.**

Western Joliet Wells (Wells 15, 17 & 28)



STUDY HISTORY



*Per a letter dated December 4, 2019 from the DuPage Water Commission, they do not want to be considered as an alternative water source supplier for the City of Joliet.

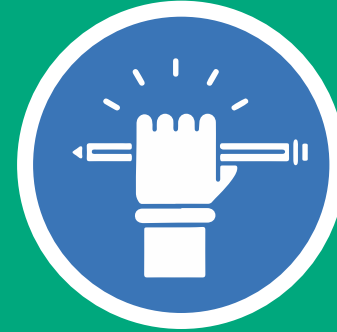
PHASE II STAKEHOLDER ENGAGEMENT



JOINT WORKSHOPS
April 2019, July 2019
& November 2019



MONTHLY ENVIRONMENTAL COMMISSION MEETINGS



MONTHLY EDUCATIONAL TOPICS



LOCAL COMMUNITY EVENTS/MEETINGS



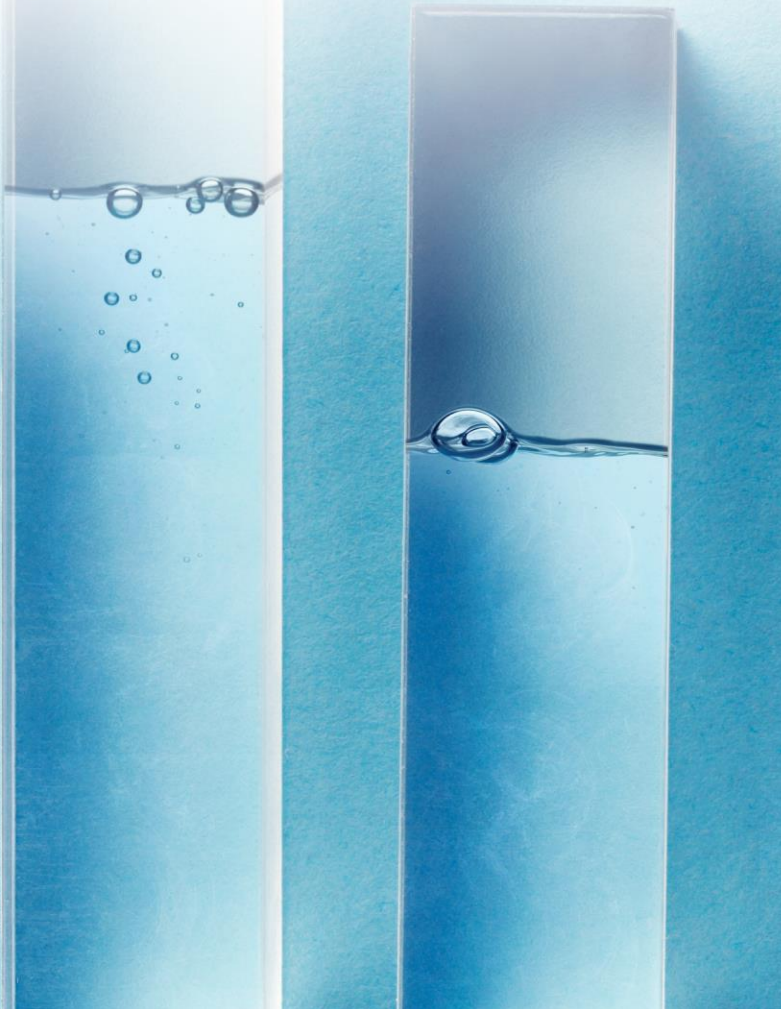
BILLBOARDS, EBLASTS, SOCIAL MEDIA POSTS, NEWSLETTERS, & MAILINGS



COMMUNITY SURVEY



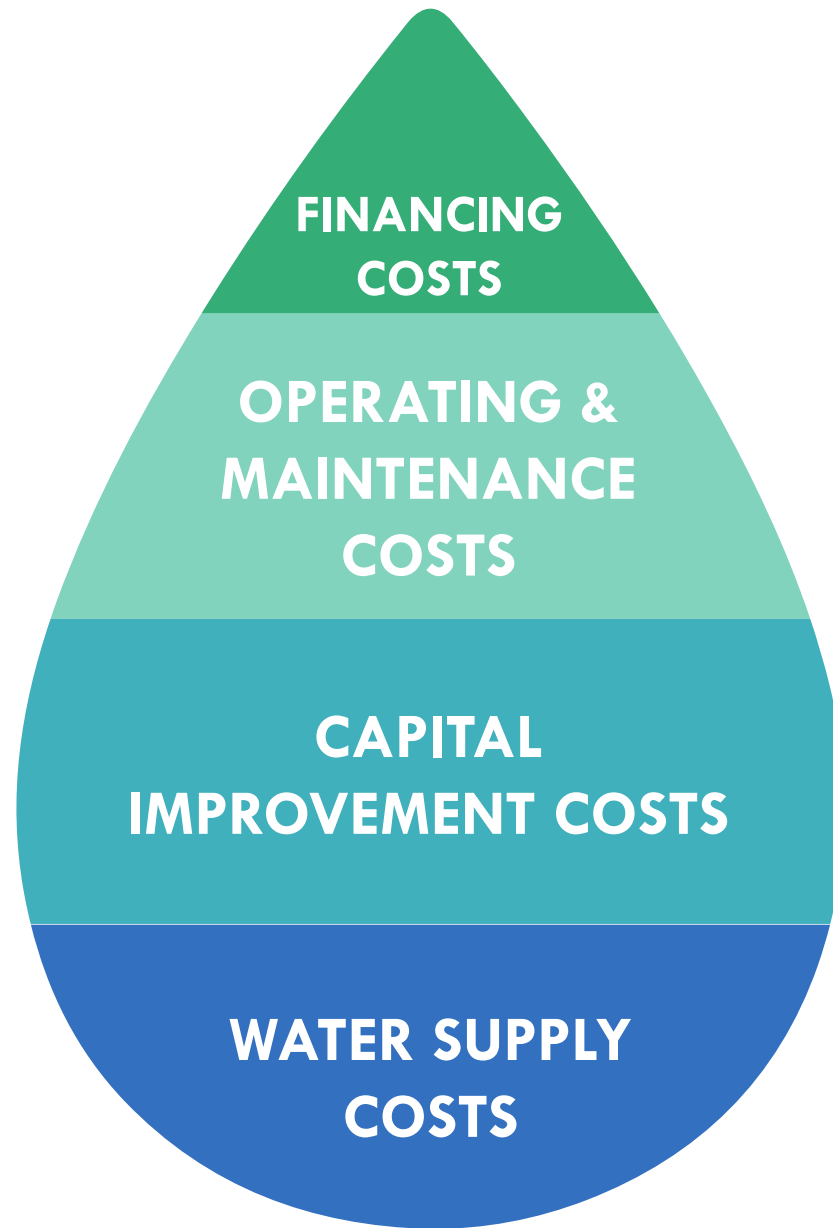
PUBLIC FORUM, PUBLIC COMMENTS, Q&A
DECEMBER 2019



NON-COST DECISION FACTORS

- **RAW WATER QUALITY**
- **SUSTAINABILITY/WATER QUANTITY**
- **IMPLEMENTATION RISK**
- **OPERATIONS & MAINTENANCE**
- **CONTROL**

COST DECISION FACTORS



WEIGHTED DECISION CRITERIA

Total Cost	Raw Water Quality	Sustainability/Water Quantity	Implementation Risk	Operation & Maintenance	Control
What alternative has the least total cost?	What is quality and variability of the raw water source for this alternative?	Does the raw water source have sufficient quantity to supply not only Joliet, but also the region?	Will this alternative be easy to implement (schedule, permitting, magnitude of improvements)?	Does this alternative require significant O&M responsibility or O&M required for improvements outside of the City?	For this alternative, does the City maintain complete control of their water source?
1 - Highest Total Water Cost	1 - Raw water quality is variable and can have upsets, making it more difficult to treat	1 - No, it cannot supply the City of Joliet's demands	1 - This alternative is risky to implement due to schedule, permitting or magnitude of improvements	1 - Yes, there is significant O&M responsibility or O&M for significant improvements outside of the City	1 - No, the City does not maintain control
5 - Lowest Total Water Cost	5 - Raw water quality is more consistent and has less upsets, which makes it easier to treat	5 - Yes, it has more than sufficient quantity to supply the City of Joliet and the region.	5 - While none of the alternatives are easy, this alternative has the least amount of risk to implement	5 - O&M responsibility for this alternative is low and O&M is not required for improvements outside the City	5 - Yes, the City maintains complete control

Alternative	Source	Supply Agency(is)	Value	Value	Value	Value	Value	Value
ILLINOIS RIVER - DRESDEN POOL	Illinois River	--	5	2	4	1	3	5
ILLINOIS RIVER - MARSEILLES POOL	Illinois River	--	4	2	4	1	2	5
KANKAKEE RIVER - TOWPATH LANE	Kankakee River	--	4	3	2	3	3	5
KANKAKEE RIVER - AQUA ILLINOIS	Kankakee River	Aqua Illinois	2	3	3	3	4	1
LAKE MICHIGAN WATER - CHICAGO DEPARTMENT OF WATER MANAGEMENT (City Owned Pipeline)	Lake Michigan	City of Chicago	2	5	5	4	4	2
LAKE MICHIGAN WATER - CHICAGO DEPARTMENT OF WATER MANAGEMENT (CDWM Owned Pipeline)	Lake Michigan	City of Chicago	2	5	5	5	5	2
LAKE MICHIGAN WATER - NEW INDIANA INTAKE	Lake Michigan	--	2	4	5	2	1	5

CITY COUNCIL DECISION



JANUARY 7, 2020

SELECTION OF LAKE MICHIGAN WATER



**SELECTION OF TWO ALTERNATIVES
FOR SIMULTANEOUS INVESTIGATION IN **2020****

LAKE MICHIGAN WATER– New Indiana Intake

LAKE MICHIGAN WATER– Chicago Department of Water Management

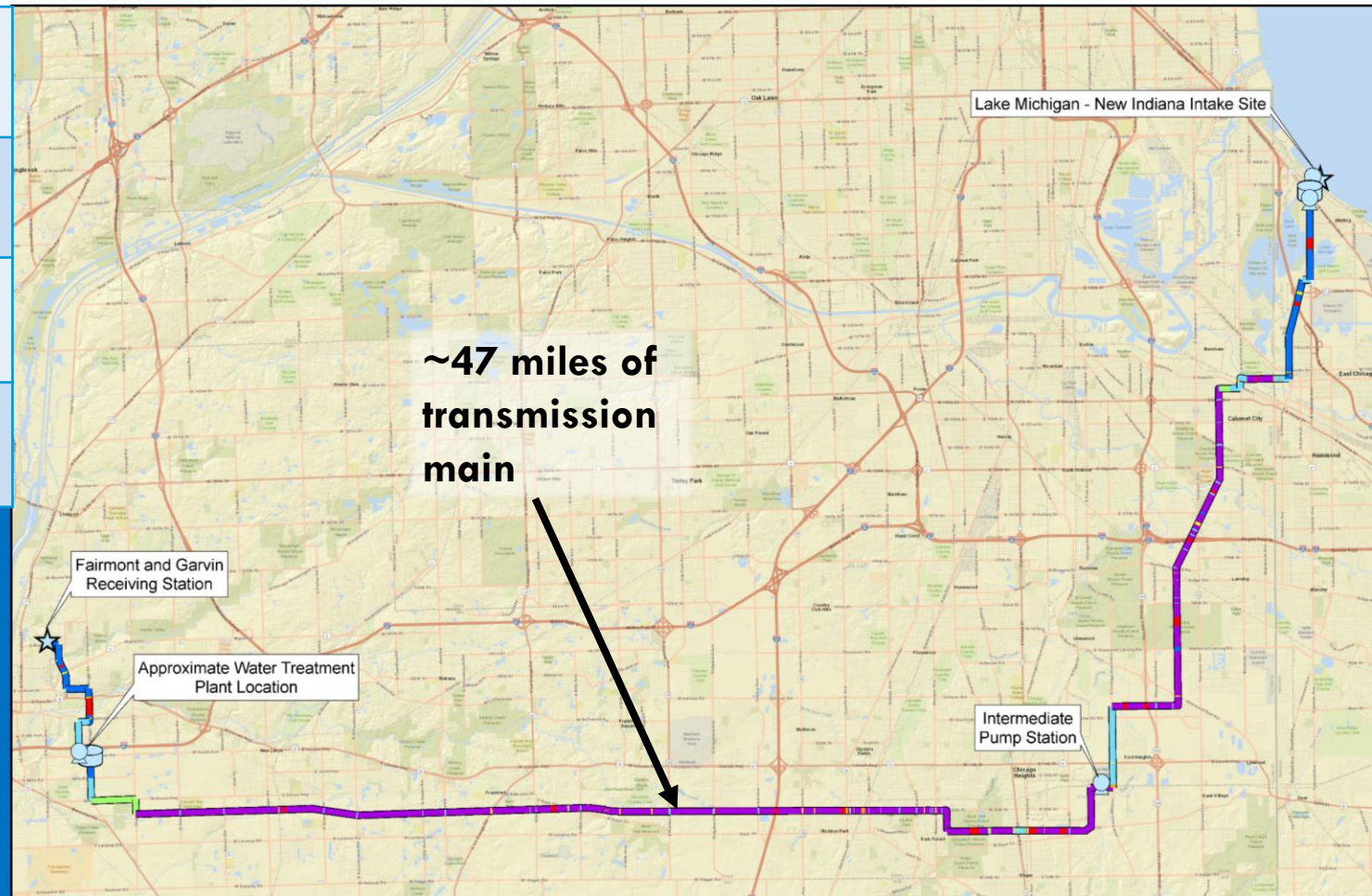
Lake Michigan – New Indiana Intake Alternative



	30 MGD (Joliet)	60 MGD (Joliet & Region)
Capital Cost	\$900 mil	\$1.1 billion
Monthly Typical Water Bill Increase	\$67.66	\$55.67
50-year Total Cost	\$3.9 billion	\$5.4 billion

Major Differentiators:

- ✓ Control over water rates and implementation
- ✓ Greater implementation risk due to project complexity and crossing State lines
- ✓ Lower 50-year total cost



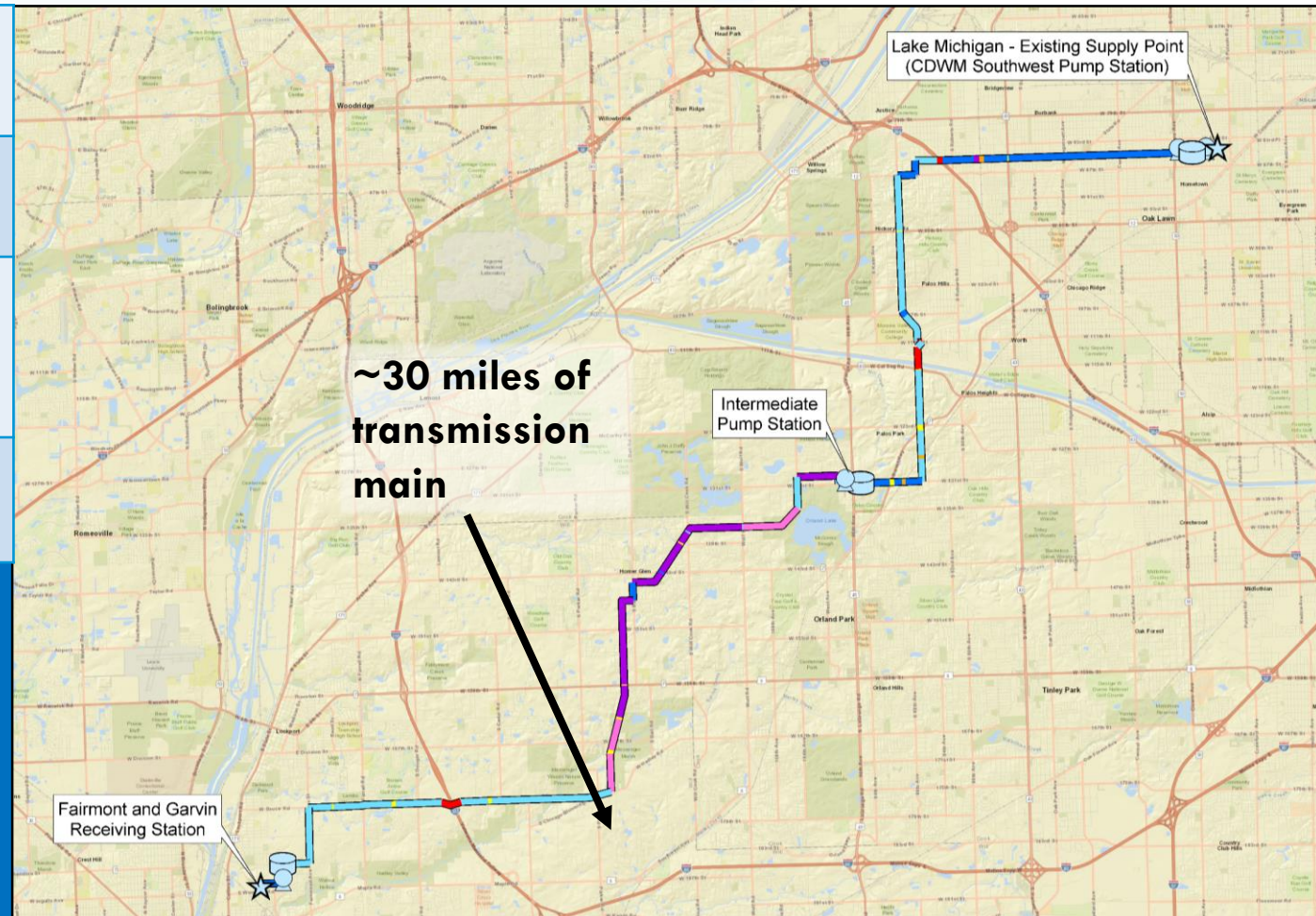
Lake Michigan – CDWM Alternative



	30 MGD (Joliet)	60 MGD (Joliet & Region)
Capital Cost	\$550 mil	\$650 mil
Monthly Typical Water Bill Increase (including purchased water costs)	\$60.54	\$51.77
50-year Total Cost	\$4.6 billion	\$6.9 billion

Major Differentiators:

- ✓ Existing Water Supplier
- ✓ Less implementation risk
- ✓ Less O&M Risk
- ✓ Lower initial monthly bill increase





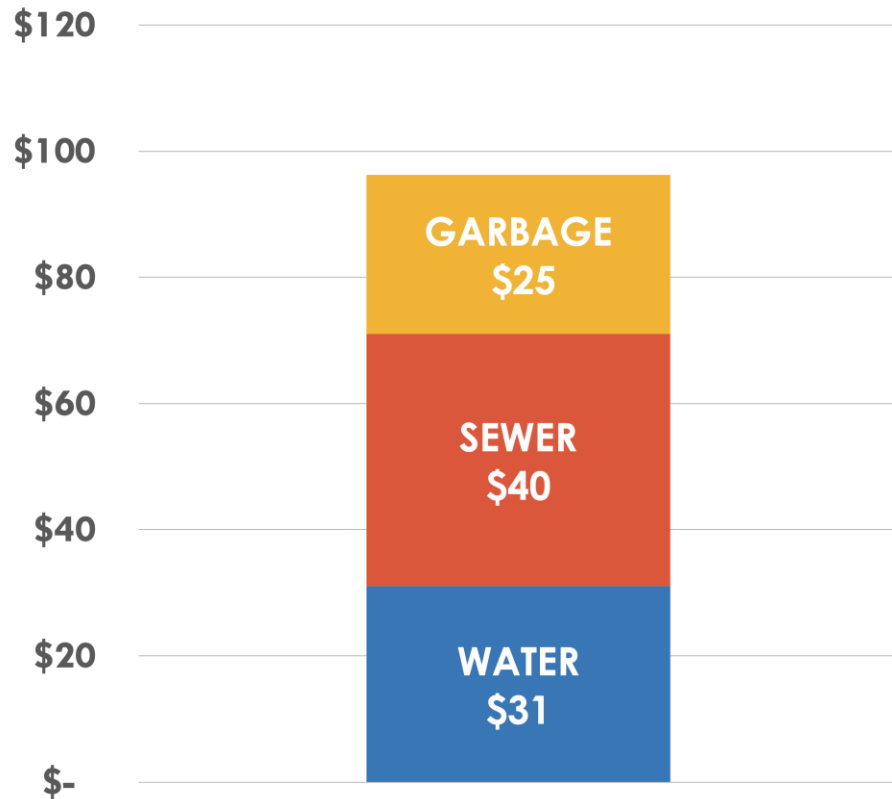
ESTIMATED INCREASE IN AVERAGE WATER BILL (7 HCF)

Current average monthly water bill is \$30.75

**Cost estimates have been compiled and presented by the City of Joliet Staff and its consultant team. All costs are conceptual in nature and should only be used for comparison purposes as related to the Joliet Alternative Water Source Study. See the Phase II Study Report and the corresponding Phase II Questions and Answers as support for cost estimates.*

WHAT DOES YOUR UTILITY BILL INCLUDE?

TYPICAL MONTHLY RESIDENTIAL UTILITY BILL (7 HCF)



- Includes Garbage, Sewer & Water
- At current 2020 rates, typical monthly residential bill (7 HCF):
 - **GARBAGE: ~\$25**
 - **SEWER: ~\$40**
 - **WATER: ~\$31**
 - **TOTAL BILL: ~\$96**

BENEFITS OF LAKE MICHIGAN WATER



- The Great Lakes is the largest source of **fresh water** on the earth
- Lake Michigan is the **second largest Great Lake** and the only one wholly located in the United States
- Lake Michigan Water is used by over **5 million residents** in Illinois for drinking water
- Raw **water quality** in Lake Michigan is fairly consistent throughout the year,
- Treated Lake Michigan Water is seen as the **gold standard** in drinking water
- Lake Michigan Water **tastes great** without the need for home water softeners
- Eliminates need for bottled water/home water delivery

PROGRAM SCHEDULE

2020

**Alternative Evaluation
and Final Selection**

DECEMBER 2020

City Council decision on
alternative water source

2021

Preliminary Design

2022-2024

Final Design

2025-2030

Construction

PROJECT TEAM INTRODUCTION

- City selected and approved Agreement with the **Stantec Team** for Alternative Water Source Program
- **Stantec Team** includes several subconsultants that participated in the Phase I & Phase II Studies, including CMT, EEI, and Images Inc., as well as new subconsultants Strand, Cornwell Engineering Group and V3.
- Project Team is being led by **Projects Managers** – Joe Johnson (Stantec) and Theresa O’Grady (CMT)
- Major **2020** Scope of Services Components:



**PROGRAM OVERSIGHT
AND OUTREACH**



**OUTSIDE/EXTERNAL
COORDINATION**



ENGINEERING



Joliet Alternative Water Source Program, 2020 Initiatives

Theresa O'Grady
Crawford, Murphy & Tilly (CMT)

2020: ALTERNATIVE EVALUATION

2021: PRELIMINARY DESIGN

2022-2024: FINAL DESIGN

2025-2030: CONSTRUCTION



Retain Engineering Consultant

Lake Michigan Allocation

Indiana Intake Siting Study

Water Treatment Evaluation

Corrosion Control Study - Desktop Study

Intake/Raw Water Pumping Station Siting Study

Water Treatment Plant Siting Study

Transmission Main Routing Study

Pumping and Storage Facilities Siting Studies

Develop Funding Strategy

Negotiate Water Supply/ Access Agreement

End of 2020: City Council Selects Water Source Alternative

Approve Water Supply/ Water Access Agreements

Develop and Approve Regional Rates and Governance Structure

Preliminary Design (30%) of Water Facilities, Transmission Mains and Distribution System Modifications

Corrosion Control Study - Pipe Loop Testing

End of 2021: Apply for Federal Loan (WIFIA)

End of 2021: Approve Regional Intergovernmental Agreements

Receive Federal Funding (WIFIA)

Decision on System Capacity

Land Acquisition for Water Facility Sites and Transmission Main Easements

Final Design of Water Facilities, Transmission Mains and Distribution System Modifications

Permitting

Independent Reviews (Value, Cost, Constructibility)

Receive State Funding (SRF)

Construction of Water Facilities, Transmission Mains and Distribution System Modifications

Staff Development and Training

**By the end of 2030:
New Water Supply Starts
Flowing to Residents**



PROGRAM SCHEDULE

2020 SCOPE OF SERVICES:

PROGRAM OVERSIGHT & OUTREACH



Maintain **program transparency** throughout communication with City Officials

✓ *Monthly Newsletter, Presentations at City Meetings, and City Council Workshops*



Engage stakeholders through quarterly **Stakeholder Meetings**



Educate and elevate the value of water through continued **Public Outreach**



Provide **programmatic support** for overall implementation strategy

✓ *Priorities Workshop, Operations Evaluation, Staffing Forecast, Risk Register*



Develop a **Prospectus** for each water source alternative

2020 PUBLIC OUTREACH



CITY COUNCIL WORKSHOPS

June, August & November 2020



MONTHLY CITY MEETINGS

Finance & Public Service Committees



MONTHLY NEWSLETTER



QUARTERLY STAKEHOLDER MEETINGS



BILLBOARDS, EBLASTS, SOCIAL MEDIA POSTS, & OTHER PUBLIC OUTREACH



PUBLIC FORUM DECEMBER 2020



CITY COUNCIL DECISION DECEMBER 2020

Quarterly Stakeholder Meeting **SCHEDULE**

-  **Meeting 1** – May 2020
-  **Meeting 2** – July 2020
-  **Meeting 3** – October 2020



You're Invited!

Virtual
STAKEHOLDER MEETING

The City of Joliet will be conducting a **virtual stakeholder meeting** for the Alternative Water Source Program

DATE:
THURSDAY, MAY 28TH

TIME:
1-2:30 PM

To attend the meeting, [register here!](#)

City Council WORKSHOP SCHEDULE



Workshop 1 – June 23, 2020

✓ *Priorities Analysis and Prospectus Outline*



Workshop 2 – August 2020

✓ *Transmission Main Routing, Regional Governance Structure,
Water Treatment Plant Location, Water Treatment Process*



Workshop 3 – November 2020

✓ *Presentation of Prospectus Documents*

PUBLIC FORUM – DECEMBER 2020

- City Council will decide on **alternative water source** at the end of 2020
- Results of **2020 Alternatives Evaluation** will be presented to City Council at Workshop in November 2020
- Public Forum (similar to 2019) will be held at the **beginning of December 2020** to answer questions and obtain public comment prior to City Council decision



PUBLIC FORUM
DECEMBER 5, 2019

what should Joliet's **NEW WATER SOURCE BE?**

The City of Joliet's existing water source is **unsustainable, and it's time to select a new source.** The City has been studying alternative water sources since August 2018. The study is now complete and an overview of the findings will be presented at the December 5, 2019 Public Forum. The City requests **YOUR INPUT** at the meeting.

DEC.
5th
5-7 PM

 **CANTIGNY VFW**
826 Horseshoe Drive
Joliet, IL 60435

2020 SCOPE OF SERVICES:

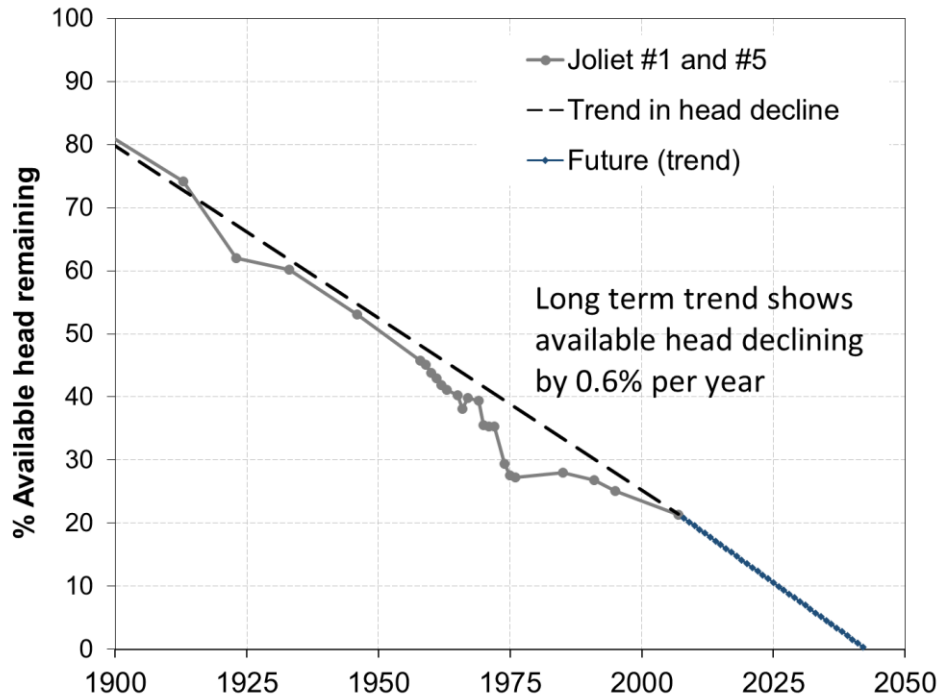
OUTSIDE/EXTERNAL COORDINATION

-  Confirm **water supply/access** terms & conditions
-  Take a leadership role in bringing together **potential regional partners**
-  Develop **permitting plans** and obtain Lake Michigan allocation
-  Refine **funding strategy**
-  Develop a **governmental outreach strategy**

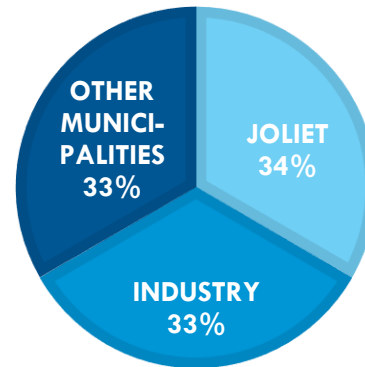
Regional Water Trends

Data trends in the Joliet region

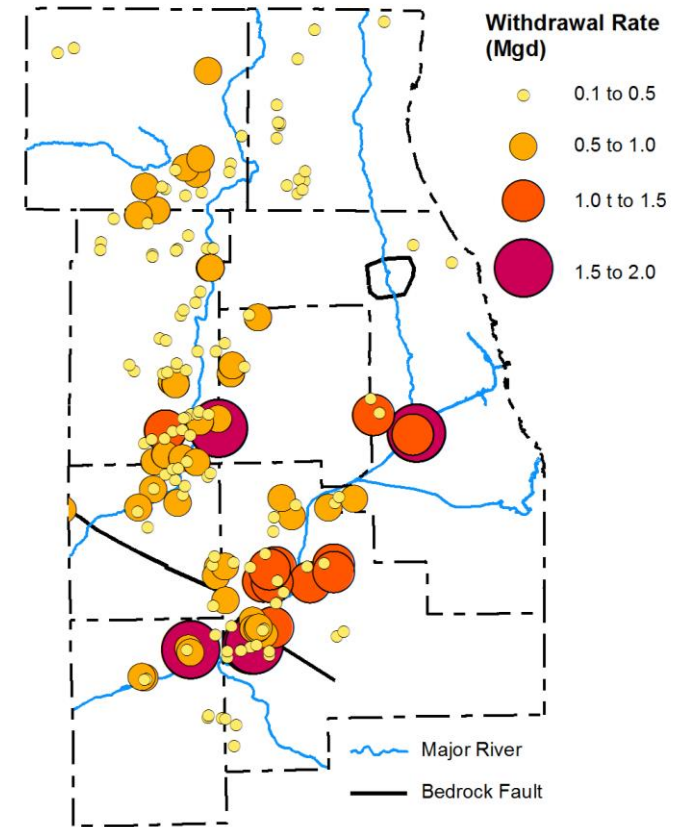
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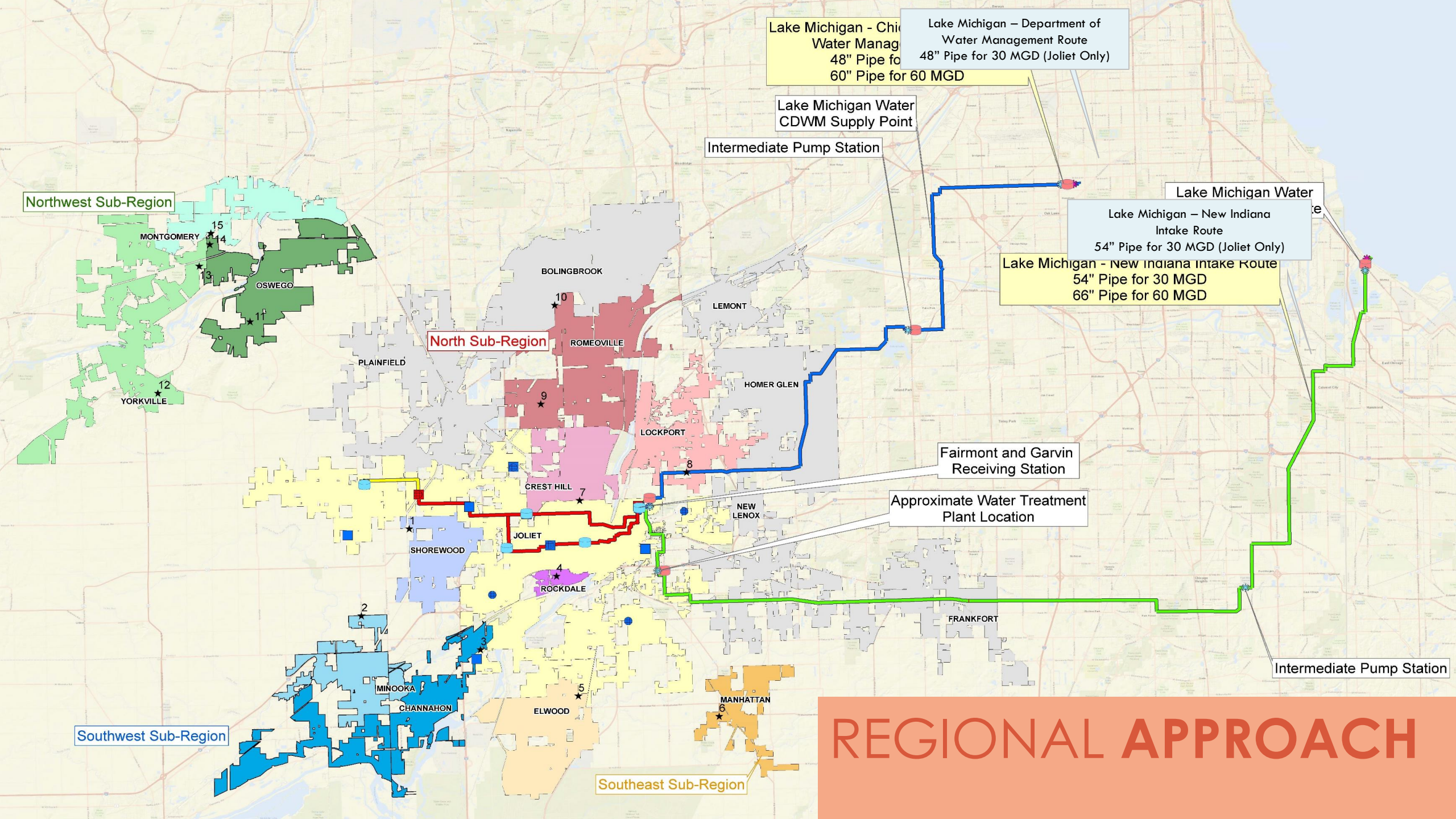
REGIONAL PUMPING FROM IRONTON-GALESVILLE AQUIFER



Sandstone Aquifer



Joliet switching water sources will not solve the problem for the region.



REGIONAL APPROACH

DEVELOP PERMITTING PLANS

- Permitting can be a **major risk** in the implementation of a large improvement program
- Overall permitting agencies: Illinois Environmental Protection Agency (IEPA), Illinois Department of Natural Resources (IDNR), Indiana Department of Environmental Management (IDEM) and Indiana Department of Natural Resources (InDNR)
- **Lake Michigan Intake** permitting agencies: IEPA, IDNR, Army Corps of Engineers
- **Transmission Main** permitting agencies: IEPA, ComEd, Forest Preserves, Illinois Department of Transportation (IDOT), Railroad, etc.

REFINE FUNDING STRATEGY

- **Funding Strategy** developed in Phase II Study
- Funding Components:
 - **WIFIA** – 49% of total program cost
 - **SRF** – assumed at \$50 million/year for 5 years
 - **Bonds** – balance of program cost
- First community in Illinois to receive **invitation to submit** a WIFIA application
- Funding Strategy will be **refined in 2020**
- Looking for **opportunities** for stimulus/grant money



Invest in Water Infrastructure
[Learn about WIFIA's loans](#)

20
LOANS
CLOSED

\$4.2 BILLION
TOTAL FINANCING

19,000
JOBS CREATED

21 MILLION+
POPULATION SERVED

1 2

The infographic features a dark blue background with a white hand icon placing a coin on a stack of blue coins. The text is in white and light blue. At the bottom left, there are two small white boxes with the numbers "1" and "2" inside them.

2020 SCOPE OF SERVICES: ENGINEERING

-  Establish **Basis of Design** for alternative water source improvements, **including refined cost estimates**
-  Evaluate **water facility locations** (intake/source, water treatment plant, pumping stations, storage)
-  Evaluate **water treatment process**
-  Prepare **water source transfer plan**
-  Perform **transmission main** routing studies



Get Involved in 2020



- Sign up for the mailing list
- Visit the website at www.RethinkWaterJoliet.org
- Attend public meetings
- Learn more - monthly educational topics
- Follow progress - monthly newsletters
- Help spread the word



Water Conservation Committee

Amy Wagner
City of Joliet



Water Conservation Subcommittee



2019-2020 Update

2019-20 GOALS:



- **Incentivize** Programs and Policies
- **Empower** Citizens and Business Owners
- **Educate** through Public Interaction
- **Motivate** people to take action



INCENTIVIZE:

Rebate/Subsidy Programs Continue:

- **WaterSense Low Flow Toilet Replacement Rebate**
 - A \$100 rebate will be offered to water customers who replace a high volume toilet (>1.6 gallon/flush) with a WaterSense Certified high efficiency toilet (1.28 gallon/flush)
- **City of Joliet Rain Barrel Subsidy Program**
 - Offered in conjunction with the Conservation Foundation and Upcycle Products, is offering a rain barrel subsidy program to qualified water customers. The City will provide a \$30 subsidy per rain barrel. The cost of the subsidized rain barrel is \$35 plus tax, including the cost of delivery.



EMPOWER:



- The 2020 Goal is to empower local businesses who can have an impact on water conservation. The restaurant initiative was discussed at the 2020 Goals Meeting. This initiative was formed to encourage local restaurant owners to participate in water conservation efforts by:
 - Eliminating bringing water to the table for every guest (unless requested). This will also indirectly reduce water use by reducing the amount of dishwashing needed.
 - Using water efficient dishwashers, faucets and toilets.

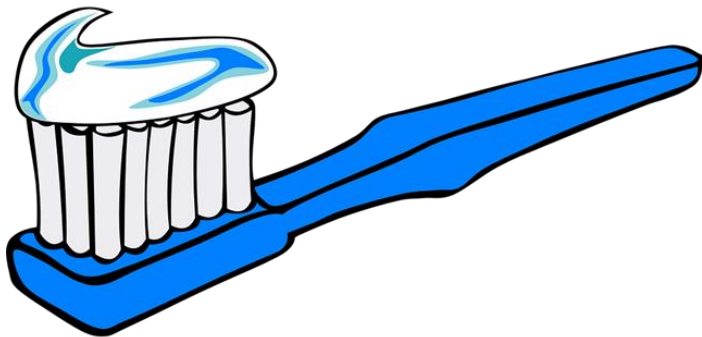
EDUCATE:



The Water Conservation Committee has met with representatives of several local school districts to discuss the development of educational materials that the City will provide as an aid to local educators. The materials will identify the motivation behind the water conservation movement in Joliet, educating about the depletion of the aquifer and the need to change water sources by 2030. The program will also provide water conservation ideas that they can bring home to their families.



MOTIVATE:



Materials such as shower timers and temporary tattoos were a big hit in 2019, used as giveaways at local events to motivate area residents to participate in the conservation efforts.

Window clings for bathroom mirrors, a reminder to shut off the water while brushing, will be added for 2020.



INCENTIVIZE. EMPOWER. EDUCATE. MOTIVATE.

The City is now partnering with several organizations to expand the reach of the water conservation effort.

We have also increased our outreach on social media and also with other advertising campaigns such as the Pace Bus advertising effort.





Questions & Answers Panel

Allison Swisher, Amy Wagner, Theresa O'Grady,
Joe Johnson

QUESTION & ANSWER SESSION

How to Ask a Question



STEP ONE

Expand your control panel by clicking the **orange arrow**

STEP TWO

Expand the "Questions" Box by clicking the arrow

STEP FOUR

Once your question has been submitted, the **facilitator will read your question**, and **a technical expert will respond**.

STEP THREE

Type your question here...

Type question here.

Send

...and click send!



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Thank you.



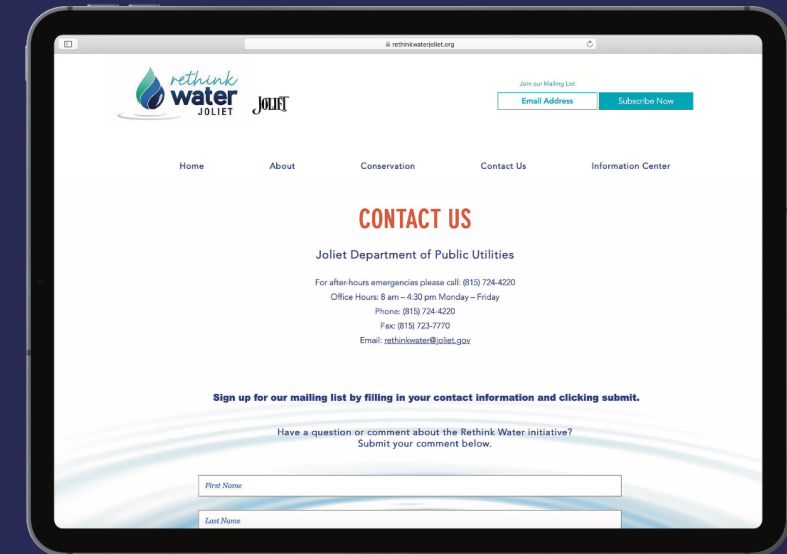
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 twitter.com/TheCityofJoliet

VISIT US ONLINE & SUBMIT YOUR COMMENTS!

 RETHINKWATERJOLIET.ORG





www.RethinkWaterJoliet.org