

# **City of Joliet**

150 West Jefferson Street  
Joliet, IL 60432



## **Meeting Agenda**

**Monday, August 15, 2022**

**4:30 PM**

**City Hall - Council Chambers**

### **Public Service Committee**

*Committee Members*  
*Councilman Larry E. Hug*  
*Councilwoman Bettye Gavin*  
*Councilman Terry Morris*

Citizens who are unable to attend the meeting can email comments in advance of the meeting to [publiccomment@joliet.gov](mailto:publiccomment@joliet.gov).

## ROLL CALL

## APPROVAL OF MINUTES

August 1, 2022 - Public Service Minutes

[ID-851-20](#)

**Attachments:** [PSC Minutes 08012022](#)

## CITIZENS TO BE HEARD ON AGENDA ITEMS

This section is for anyone wanting to speak regarding agenda items and are allowed a maximum of 4 minutes. It is not a question and answer period and staff, and the Committee members do not generally respond to public comments. The City Clerk has a copy of the public speaking procedures; please note, speakers who engage in conduct injurious to the harmony of the meeting shall be called to order by the Presiding Officer and may forfeit the opportunity to speak.

## CONTRACTS

Award of Contract for the 2022 Traffic Signal Materials Purchase Order to Traffic Control Corporation, in the amount of \$178,073.00 [TMP-4244](#)

Award of Contract for the 2022 Electrical Materials Purchase Order to Graybar Services, Inc. in the amount of \$106,586.50. [TMP-4245](#)

Award of Professional Services Agreement for the 2024 Water System Rehabilitation Program to Baxter & Woodman Inc. in the amount of \$742,300.00 [TMP-4246](#)

Award of Professional Services Agreement for the 2023 Lift Station Rehabilitation Program to Donohue & Associates in the amount of \$89,900.00 [TMP-4172](#)

## CHANGE ORDERS/PAY ESTIMATES/FINAL PAYMENTS

Change Order No. 1 for the Eastside Wastewater Treatment Plant No. 2 and No. 3 Sludge Storage Tank Repairs Project to Cady Aquastore in the amount of \$8,700.00 [TMP-4249](#)

Amendment No. 1 to the Phase II Professional Engineering Services for the Theodore Street Widening Improvements Project - Project 1A (Drauden Road - Wesmere Parkway) - MFT Sect. No. 18-00515-00-WR to V3 Companies, in an amount not to exceed \$79,417.00 [TMP-4250](#)

## ORDINANCES AND RESOLUTIONS

Resolution Appropriating Rebuild Illinois Bond Funds for [TMP-4251](#)  
Amendment No. 1 to the Phase II Professional Engineering  
Services for the Theodore Street Widening Improvements Project -  
Project 1A (Drauden Road - Wesmere Parkway) - MFT Sect. No.  
18-00515-00-WR to V3 Companies, in the amount of \$79,417.00

**Attachments:** [Resolution](#)

## VARIOUS

Request for approval for Joliet Community Water Conservation [TMP-4253](#)  
Plan

**Attachments:** [Water Conservaton Plan 2022 08 04](#)

## NEW OR OLD BUSINESS, NOT FOR FINAL ACTION OR RECOMMENDATION

Presentation: Alternative Water Source Program Independent Review Preliminary  
Observations

## PUBLIC COMMENT

This section is for anyone wanting to speak regarding non-agenda items and are allowed a maximum of 4 minutes. It is not a question and answer period and staff, and the Committee members do not generally respond to public comments. The City Clerk has a copy of the public speaking procedures; please note, speakers who engage in conduct injurious to the harmony of the meeting shall be called to order by the Presiding Officer and may forfeit the opportunity to speak.

## ADJOURNMENT

This meeting will be held in an accessible location. If you need a reasonable accommodation, please contact Christa M. Desiderio, City Clerk, 150 West Jefferson Street, Joliet, Illinois 60432 at (815) 724-3780.



# City of Joliet

150 West Jefferson Street  
Joliet, IL 60432

## Memo

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**File #:** ID-851-20

**Agenda Date:** 8/15/2022

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# City of Joliet

150 West Jefferson Street  
Joliet, IL 60432



## Meeting Minutes - Pending Approval

Monday, August 1, 2022

4:30 PM

City Hall - Council Chambers

### Public Service Committee

*Committee Members*

*Councilman Larry E. Hug*

*Councilwoman Bettye Gavin*

*Councilman Terry Morris*

## ROLL CALL

**Present** Councilman Larry E. Hug, Councilwoman Bettye Gavin and Councilman Terry Morris

### ALSO PRESENT:

Allison Swisher - Public Utilities Director, Anthony Anczer - Deputy Director Engineering, Greg Ruddy - Public Works Director, Mike Todorovic - Deputy Director - Engineering, Jayne Bernhard, Bob Okon, Heidi Voirol, Angela Knight, and Briana Moore

## APPROVAL OF MINUTES

A motion was made by Councilman Terry Morris, seconded by Councilman Larry E. Hug, to approve the minutes of the July 18, 2022 Public Service Meeting. The motion carried by the following vote:

**Aye:** Councilman Hug and Councilman Morris

**Abstain:** Councilwoman Gavin

**July 18, 2022 Public Service Minutes**

[ID-838-20](#)

**Attachments:** [JULY 18 2022 public service minutes.pdf](#)

## CITIZENS TO BE HEARD ON AGENDA ITEMS

None at this time.

## CONTRACTS

**Award of Contract for the 2022-2023 Small Meter Replacement Program in the amount of \$993,495.00 to Calumet City Plumbing & Heating Co., Inc.**

[TMP-4168](#)

Anthony Anczer, Deputy Director - Engineering, discussed the 2022-2023 Small Meter Replacement Program contract, in the amount of \$993,495.00, to Calumet City Plumbing & Heating Co., Inc.

**Award of Contract for the Purchase of four (4) Asphalt hotbox / reclaimers to Monroe Truck Equipment, Inc. in the amount of \$124,996.00**

[TMP-4169](#)

Greg Ruddy, Director of Public Works, discussed the purchase of four (4) Asphalt hotbox / reclaimers, in the amount of \$124,996.00, to Monroe Truck Equipment, Inc.

**Award of Contract for the Helen Avenue (Charity Avenue - Mills Road) Roadway Improvement Project - 2022 - MFT Sect. No. 22-00548-00-FP**

[TMP-4171](#)

Mike Todorovic, Deputy Director - Engineering, discussed the Helen Avenue (Charity Ave - Mills Road) Roadway Improvement Project -2022, in the amount of \$261,523.96, to P.T. Ferro Construction Co.

A motion was made by Councilwoman Bettye Gavin, seconded by Councilman

Terry Morris, to recommend for approval by the full Council Contract Item No's TMP-4168, TMP-4169, and TMP-4171. The motion carried by the following vote:

**Aye:** Councilman Hug, Councilwoman Gavin and Councilman Morris

## **CHANGE ORDERS/PAY ESTIMATES/FINAL PAYMENTS**

**Change Order No. 1 for the 2021 Roadways Resurfacing Contract A - MFT Sect. No. 21-00540-00-RS to Austin Tyler Construction Inc. in the amount of \$46,425.42**

[\*\*TMP-4173\*\*](#)

Mike Todorovic and Greg Ruddy discussed Change Order No. 1 to the 2021 Roadways Resurfacing Contract A, in the amount of \$46,425.42, on behalf of Austin Tyler Construction.

**Change Order No. 1 for the Houbolt Road / Hollywood Road (US Route 6 - I-80) Roadway Reconstruction Project - MFT Sect. No. 16-00503-00-PV to D Construction, Inc. in the amount of \$256,444.17**

[\*\*TMP-4174\*\*](#)

Greg Ruddy discussed Change Order No. 1, a net addition in the amount of \$256,444.17, to the Houbolt Road / Hollywood Road (US Route 6 - I80) Roadway Reconstruction Project, on behalf of D Construction, Inc.

A motion was made by Councilwoman Bettye Gavin, seconded by Councilman Terry Morris, to recommend for approval by full Council Change Orders/Pay Estimates / Final Payments Item No's TMP-4173 and TMP-4174. The motion carried by the following vote:

**Aye:** Councilman Hug, Councilwoman Gavin and Councilman Morris

## **ORDINANCES AND RESOLUTIONS**

**Resolution Appropriating Additional Motor Fuel Tax Funds for the 2021 MFT Roadways Resurfacing Contract A - MFT Sect. No. 21-00540-00-RS**

[\*\*TMP-4175\*\*](#)

Attachments: [Resolution](#)

Required for MFT funds to be used.

**Resolution Appropriating Motor Fuel Tax Funding for the Helen Avenue (Charity Avenue - Mills Road) Roadway Improvement Project - 2022 - MFT SECT NO. 22-00548-00-FP**

[\*\*TMP-4176\*\*](#)

Attachments: [Resolution](#)

Required for MFT Funds to be used.

**Resolution Approving a Memorandum of Understanding Between the United States Submarine Veterans Inc. - USS Chicago Base for a Monument at Bicentennial Park**

[\*\*TMP-4188\*\*](#)

Attachments:     [Resolution Approving an MOU -Submarine Monument](#)  
[MOU Submarine Monument](#)  
[Submarine Monument Proposal](#)  
[Bluff-Street-Tour-Map-2015](#)  
[USS Chicago Base](#)

Jayne discussed this Resolution approving a MOU between United States Submarine Veterans Inc. - USS Chicago Base for a Monument at Bicentennial Park.

A motion was made by Councilwoman Bettye Gavin, seconded by Councilman Terry Morris, to recommend for approval to the full Council Item No's TMP-4175, TMP-4176, and TMP-4188. The motion carried by the following vote:

**Aye:**                Councilman Hug, Councilwoman Gavin and Councilman Morris

## **VARIOUS**

### **2023 Roadway Reconstruction Program**

[\*\*TMP-4178\*\*](#)

Greg Ruddy discussed the proposed streets for reconstruction in 2023.

A motion was made by Councilwoman Bettye Gavin, seconded by Councilman Terry Morris, to recommend for approval to the full Council Various item No TMP-4178. The motion carried by the following vote:

**Aye:**                Councilman Hug, Councilwoman Gavin and Councilman Morris

## **NEW OR OLD BUSINESS, NOT FOR FINAL ACTION OR RECOMMENDATION**

### **Report on Hydrant Repairs, Valves, Utilities Contracted Services, and Water Main Breaks**

[\*\*ID-837-20\*\*](#)

Attachments:     [Valve Hydrant Break Report 7-25-2022 \(003\).pdf](#)

Allison Swisher discussed this report.

### **Community Water Conservation Plan**

[\*\*TMP-4207\*\*](#)

Angela Knight, Engineering Intern for the Public Utilities Department, discussed the Community Water Conservation Plan. The goal of the plan is to include the Community into conservation.

## **PUBLIC COMMENT**

None at this time.

## **ADJOURNMENT**

A motion was made by Councilwoman Bettye Gavin, seconded by Councilman Terry Morris, to adjourn. The motion carried by the following vote:

**Aye:**                Councilman Hug, Councilwoman Gavin and Councilman Morris





# City of Joliet

150 West Jefferson Street  
Joliet, IL 60432

## Memo

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**File #:** TMP-4244

**Agenda Date:** 8/15/2022

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**TO:** Mayor and City Council

**FROM:** James V. Capparelli, City Manager

**SUBJECT:**

Award of Contract for the 2022 Traffic Signal Materials Purchase Order to Traffic Control Corporation, in the amount of \$178,073.00

**BACKGROUND:**

The Electric Division needs to purchase materials to maintain the existing traffic signals located within the City. The Public Service Committee will review this matter.

**CONCLUSION:**

The City of Joliet has only one (1) approved manufacturer that supplies the City with traffic signal materials. Traffic Control Corporation is the sole source supplier of the materials. Traffic Control Corporation provided a quote, in the amount of \$178,073.00, for the replacement of traffic signal materials requested by the City.

Section 2-438 of the City of Joliet Code of Ordinance states that purchases over \$25,000.00 may be awarded without written specifications under certain circumstances. Two (2) of these circumstances apply:

- (a) Purchases which may only be practicably made from a single source;
- (f) Purchases when authorized by a concurring vote of two-thirds (2/3) of the Mayor and City Council.

Sufficient funds exist utilizing the General Fund PW Electrical / Supplies - Equip Parts (Org 09028000, Object 536104, \$178,073.00).

**RECOMMENDATION:**

Based on the above, it is recommended that the Mayor and City Council Award a contract for the purchase of traffic signal replacement materials, in the amount of \$178,073.00, on behalf of Traffic Control Corp.



# City of Joliet

150 West Jefferson Street  
Joliet, IL 60432

## Memo

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**File #:** TMP-4245

**Agenda Date:** 8/15/2022

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**TO:** Mayor and City Council

**FROM:** James V. Capparelli, City Manager

**SUBJECT:**

Award of Contract for the 2022 Electrical Materials Purchase Order to Graybar Services, Inc. in the amount of \$106,586.50.

**BACKGROUND:**

Electrical materials need to be purchased to repair streetlight and traffic signal outages throughout the City of Joliet. The Public Service Committee will review this matter.

**CONCLUSION:**

Graybar Services, Inc. is the current contract holder of the OMNIA Partners Purchasing Alliance. The OMNIA Partners Purchasing Alliance is a national leading purchasing cooperative for State and Local agencies. Once the lead public agency awards the contract, this allows other Participating Public Agencies in need of similar products and services to make purchases through the existing contract with the OMNIA Partners Purchasing Alliance. Each of the items included in this purchase utilize pricing in the OMNIA Partners Purchasing Alliance contract.

Section 2-438 of the City of Joliet Code of Ordinance states that purchases over \$25,000.00 may be awarded without written specifications under certain circumstances. Two (2) of these circumstances apply:

- (a) Purchases which may only be practicably made from a single source;
- (f) Purchases when authorized by a concurring vote of two-thirds (2/3) of the Mayor and City Council.

Sufficient funds exist utilizing the Public Works General Fund - Electrical / Supplies - Equip Parts (Org 09028000, Object 536104, \$106,586.50).

**RECOMMENDATION:**

Based on the above, it is recommended that the Mayor and City Council award a contract for the purchase of electrical replacement materials, in the amount of \$106,586.50, on behalf of Graybar Services Inc.



## Memo

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**File #:** TMP-4246

**Agenda Date:** 8/15/2022

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**TO:** Mayor and City Council

**FROM:** James V. Capparelli, City Manager

**SUBJECT:**

Award of Professional Services Agreement for the 2024 Water System Rehabilitation Program to Baxter & Woodman Inc. in the amount of \$742,300.00

**BACKGROUND:**

On January 5, 2021, the Mayor and City Council approved Resolution 7613, committing to water conservation through the reduction of non-revenue water to comply with the allocation requirements of the Level of Lake Michigan Act, 615 ILCS 50, and the corresponding State regulations. A condition of the City's Lake Michigan water allocation permit is completion of the City's Non-Revenue Water Reduction Plan. A major component of this Plan is water main replacement. The water main replacement, estimated at approximately 3% per year, must be sufficient to achieve the reduction of non-revenue water from the City's water system to not more than 10 percent by the year 2030. The previous goal was water main replacement of 1% annually.

The City prepared a plan to increase water main replacement to 3% per year for 2022 - 2030, however the 2024 program is increased in scope to 5% after discussions with the Illinois Department of Natural Resources (IDNR.) The IDNR manages Joliet's Lake Michigan Water Allocation and manages the Lake Michigan allocation for all the other 200+ Illinois communities that receive Lake Michigan water. IDNR requires annual submittal of a Non-Revenue Water Audit which provides an analysis of what percentage of a community's water is not accounted for (essentially a detailed "pumped vs. billed" analysis.) Upon review of the City's water year 2022 it was decided to increase the quantity of water main replacement in 2024 and 2025. Accordingly, the 2024 water main replacement program will be a total length of approximately 32.5 miles.

In order to have contract documents ready to bid in time for the 2024 construction season, plans for the 2024 Water System Rehabilitation Program need to begin preparation at this time. Projects to be included in the 2024 program are identified in the below table. The estimated construction cost for the projects is \$57,600,000.00 and will be funded using state and federal low interest loan programs.

Project Name	Project Limits	Feet	Miles
Black Road Acres Phase 2	Bevan Dr (Douglas to E Bevan Dr end); Ann (Black to Mason, 614 Ann to Douglas); Ann Ct; Donna (Black to Mason); side yard (Madison to Bevan); Arden and Mason (Ann to Donna); Douglas (Madison to east of Bevan); Mayfield (Bevan to Bevan)	8,600	1.63
Bridal Wreath Acres	Cypress Ln; Hollyberry Dr; Brentwood Dr; Pearson Dr; Lilac Ln; Mac Farlane Dr; Orchard Ln; Birchwood Ln; George Ave (Cypress to Lilac)	14,100	2.67
Cathedral Area Phase 1	William, Prairie, and Raynor (Glenwood to Campbell); Whittier (Glenwood to Western); Buell and Western (William to Wilcox)	8,400	1.59
Center and Western	Center (Plainfield to Campbell); Pine and Broadway (Division to Oneida); Western (Center to Bluff)	7,050	1.34
Fairway	Fairlane (Glenwood to Campbell); N Star (Inwood to Fairway); Barney (Glenwood to Jefferson); Caddy Ln; Inwood (Fairway to Barney); Swing Ct; Putter Ct; Glenwood (Infantry to St Joe's); loop for TJ school; White Birch Lane;	14,850	2.81
Forest Park Phase 3	Antram (Woodruff to dead end); Holmes (Woodruff to dead end); Cutter (Woodruff to Fairchild); Gould; Clark (Demmond to Woodruff); Hague (Demmond to Woodruff); Gage (Demmond to Wisconsin); Demmond (Gould to Gage); Demmond Ct; Woodruff (Cutter to McKay); Ada (Cutter to east end); Wisconsin (Cutter to Gage); Fairchild (Cutter to Clark); connection between Antram and Cutter	14,600	2.77
Garnsey Park Phase 5	Raynor (Ingalls to Ruby); Hickory (Russell to Moran); Summit (Ingalls to Moran); Russell (Elizabeth to Broadway); Frank; Hutchinson (Elizabeth to Broadway); Moran (Raynor to Broadway)	13,200	2.50
Idylside	Emery, Morris, and Margaret (Jefferson to McDonough); Stryker (Jefferson to 503 Stryker); Allen (Emery to Stryker)	12,700	2.41

Project Name	Project Limits	Feet	Miles
Krings Acres Phase 2	Winthrop, Westminster and Alann (Ingalls to Black); Krings and Plaza (Clara to Black); Clara (Alann to Krings); Dellmar (Larkin to Westshire)	14,400	2.73
Plainfield Road (Theodore to Black)	Plainfield (Theodore to Black)	9,350	1.77
Spring Creek Phase 1	Garnsey, Landau, and Henderson (Ward to Jackson); Abe (end to Jackson); Ward (Garnsey to Henderson); Elwood (Landau to Abe); Columbia (Garnsey to Abe); Ohio (west of Creek to Landau); Jackson (Garnsey to Soland Ct); dead end on CN driveway	14,600	2.77
Twin Oaks Phase 1	Essington (Oakwood to Glenwood); Meadowwood (north of Indianwood); Oakwood; Wild Oaks Ct; Dogwood Ct; Aspen Ct; Burr Oaks Dr; Burr Oaks Ct; Ponderosa Pl; Indianwood Ln	8,500	1.61
Vernado Park	Water and Des Plaines (McDonough to Lucas); Joliet and Ottawa (McDonough to Shelby); Munroe (dead end to Ottawa); Jasper (Water to Joliet); Shelby (dead end to Water, Des Plaines to Joliet); Sheridan (dead end to Water)	8,465	1.60
West Park	Davis and Central (Kinsey to Lakeview); Betula (Kinsey to dead end); Park Front (Kinsey to Oakley); Oakley (Park Front to Bellevue); Wheeler (Woods to Bellevue); Kinsey (Midland to Park Front); Lakeview (Davis to Betula); Bellevue (Oakley to Wheeler); Croghan (Wheeler to Woods)	9,000	1.70
Woodland Phase 1	Wilson (2nd to 4th); Baker (2nd to Whitley, 3rd to 4th); Hobbs (2nd to 4th); Rowell (2nd to Grant); 2nd (Iowa to Arizona); Whitley, 3rd, Grant (Wilson to Rowell); 4th (Richards to Wilson)	14,100	2.67
Total =		171,915	32.56

A qualifications-based selection is required to insure reimbursement for engineering fees from potential loan funding. In Fall 2021 the City published a Request for Qualifications for water system rehabilitation for the 2023 - 2030 water main replacement program. Ten (10) qualifications were received, four (4) firms were interviewed, and the selection committee consisting of staff from both the public utilities and public works departments identified Baxter & Woodman Inc. as the most qualified firm to complete design and construction engineering services for the program. Baxter & Woodman Inc. successfully completed the City's 2017 - 2022 water main replacement projects. Baxter & Woodman Inc. was requested to provide a proposal for design engineering of the 2024 construction projects. Due to the economy of scale that this large quantity of design work includes, our negotiations with Baxter & Woodman included lowering the standard billing rates to a 3.0 multiplier for design work, and to a further reduced survey rate, which will save the City over 10% compared to standard billing rates. The Public Service Committee will review this matter.

**CONCLUSION:**

Baxter & Woodman Inc. has provided a proposal to complete preliminary design engineering for the 2024 Water System Rehabilitation Program. The Professional Services Agreement for the project, for an amount not to exceed \$742,300.00, represents the cost of surveying, survey breakdown, preparing CAD base sheets, and utility coordination for 15 projects. This fee is approximately 1.3% of the construction costs which is within industry standards for a project of this magnitude. As this preliminary design phase of the project is completed, and the scope of the detailed design is determined, a proposal to complete detailed design and bidding services will be provided as an amendment to this contract.

Section 2-438 of the City of Joliet Code of Ordinance states that purchases over \$25,000.00 may be awarded without written specifications under certain circumstances. Two (2) of these circumstances apply:

- (f) Purchases when authorized by a concurring vote of two-thirds (2/3) of the Mayor and City Council;
- (g) Purchases of professional services.

Funds will be charged to the Water Main Replacement Fund / Professional Services (Org 53880400, Object 557200, \$742,300.00).

**RECOMMENDATION:**

Based on the above, it is recommended that the Mayor and City Council approve the Professional Services Agreement for the 2024 Water System Rehabilitation Program, in the amount of \$742,300.00, on behalf of Baxter & Woodman Inc.



# City of Joliet

150 West Jefferson Street  
Joliet, IL 60432

## Memo

**File #:** TMP-4172

**Agenda Date:** 8/15/2022

**TO:** Mayor and City Council

**FROM:** James V. Capparelli, City Manager

**SUBJECT:**

Award of Professional Services Agreement for the 2023 Lift Station Rehabilitation Program to Donohue & Associates in the amount of \$89,900.00

**BACKGROUND:**

In the spring of 2021, the City prepared a request for qualifications (RFQ) for a multi-phased lift station assessment, evaluation, and design engineering program. Fifteen proposals were received, and staff selected seven engineering firms to interview. Staff ranked Trotter and Associates Inc. as the most qualified engineering firm. Ranked as a close second place firms were Strand Associates, Inc. and Donahue & Associates, Inc. On June 16, 2021, the City Council approved a contract with Trotter and Associates Inc. for the Phase I Lift Station assessment portion of the program. The scope of the Phase I project included completing a detailed inventory and condition assessment of all the City's 50 lift stations. Trotter and Associates ranked 10 lift stations for priority rehabilitation or replacement. The first of the ten priority lift stations, Lawrence Avenue Lift Station, is currently in construction phase. The next two priority lift stations, Greenfield Lift Station, and Benton Lift Station, are planned for replacement in 2023.

Trotter and Associates provided a proposal for detailed design engineering for the Greenfield Lift Station and the Benton Lift Station. Staff reviewed Trotter and Associates' proposal and could not come to an agreement on pricing. Staff then asked the next two top rated firms, Strand Associates, Inc. and Donahue & Associates, Inc. to provide a proposal for design engineering of the Greenfield Lift Station and Benton Lift Station.

The Public Service Committee will review this matter.

**CONCLUSION:**

On August 5<sup>th</sup>, 2022, three proposals were received. The proposal summary is as follows:

**ENGINEER**

Donohue and Associates  
Strand and Associates  
Trotter and Associates

**PROPOSAL AMOUNT**

\$89,900.00  
\$160,000.00  
\$236,400.00

Donohue and Associates has satisfactorily completed similar work for the City.

Section 2-438 of the City of Joliet Code of Ordinance states that purchases over \$25,000.00 may be

awarded without written specifications under certain circumstances. Two of these circumstances apply:

(f) Purchases when authorized by a concurring vote of two-thirds (2/3) of the Mayor and City Council.

(g) Purchases of professional services.

Funds will be charged to the Water & Sewer Improvement Fund / Lift Stations / Professional Services (Org 50180031, Object 557200, \$89,900.00)

**RECOMMENDATION:**

Based on the above, it is recommended that the Mayor and City Council approve the Professional Services Agreement for the 2023 Lift Station Rehabilitation Program, in the amount of \$89,900.00, on behalf of Donohue and Associates.





# City of Joliet

150 West Jefferson Street  
Joliet, IL 60432

## Memo

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**File #:** TMP-4249

**Agenda Date:** 8/15/2022

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**TO:** Mayor and City Council

**FROM:** James V. Capparelli, City Manager

**SUBJECT:**

Change Order No. 1 for the Eastside Wastewater Treatment Plant No. 2 and No. 3 Sludge Storage Tank Repairs Project to Cady Aquastore in the amount of \$8,700.00

**BACKGROUND:**

On Tuesday, January 18, 2022 the Mayor and City Council awarded a contract to Cady Aquastore, in the amount of \$209,738.00, for the repairs to the No. 2 and No. 3 Sludge Storage Tanks at the Eastside Wastewater Treatment Plant. The Public Service Committee will review this matter.

**CONCLUSION:**

During the draining and inspection of the No. 2 storage tank, a hole in the west access hatch was discovered. Change Order No. 1, a net increase in the amount of \$8,700.00, is for replacing the west access hatch on the No. 2 tank.

**RECOMMENDATION:**

Based on the above, it is recommended that the Mayor and City Council approve Change Order No. 1, a net increase in the amount of \$8,700.00, for the No. 2 and No. 3 Sludge Storage Tank repairs at the Eastside Treatment Plant project to Cady Aquastore.

**CHANGE ORDER AUTHORIZATION**

**CITY OF JOLIET**

CONTRACT: **NO. 2 AND 3 SLUDGE STORAGE TANK REPAIRS AT THE EASTSIDE  
WASTEWATER TREATMENT PLANT**

CHANGE ORDER NO: **ONE**

  X   (a) an increase in the cost of the contract by \$8,700.00

       (b) an increase/decrease in the time of completion by 30 days or more:        Days.

The City of Joliet has determined that the circumstances said to necessitate the change in performance, which are as described in the attached Change Order Number One (Check one):

  X   (a) were not reasonably foreseeable at the time the contract was signed.

       (b) were not signed within the contemplation of the contract a signed.

  X   (c) are in the best interest of the City of Joliet and authorized by law.

\_\_\_\_\_  
Prepared by: Nicholas C. Gornick  
Deputy Director Plant Operations

\_\_\_\_\_  
DATE

\_\_\_\_\_  
Authorized by: Allison M. W. Swisher  
Director of Public Utilities

\_\_\_\_\_  
DATE

\_\_\_\_\_  
James V. Capparelli  
City Manager

\_\_\_\_\_  
DATE

A copy of this authorization shall be preserved in a permanent contract file that is open to the public in accordance with P.A. 85-1295, Illinois Compiled Statute Chapter 720, and Section 5/33E-9.



## Memo

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**File #:** TMP-4250

**Agenda Date:** 8/15/2022

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**TO:** Mayor and City Council

**FROM:** James V. Capparelli, City Manager

**SUBJECT:**

Amendment No. 1 to the Phase II Professional Engineering Services for the Theodore Street Widening Improvements Project - Project 1A (Drauden Road - Wesmere Parkway) - MFT Sect. No. 18-00515-00-WR to V3 Companies, in an amount not to exceed \$79,417.00

**BACKGROUND:**

On March 1, 2022 the Mayor and City Council approved a Professional Engineering Services contract for the Theodore Street Widening Improvements Project - Project 1A (Drauden Road - Wesmere Parkway) to V3 Companies, in an amount not to exceed \$383,511.00. The Public Service Committee will review this matter.

**CONCLUSION:**

The City has applied for federal funding through the Surface Transportation Program (STP) and has been successfully approved for approximately \$3.1M in federal funds to be used to improve Theodore Street between Drauden Road and Wesmere Parkway. These funds are in addition to the Rebuild Illinois Funds appropriated for the same limits, in the amount of \$3.37M.

In an effort to utilize the full portion of the approved federal funds, the limits of the project are being expanded to east of River Road. The Phase II Engineering services are being expanded to prepare two separate construction packages for Project 1A (Wesmere Parkway to River Road), and Project 1B (Drauden Road - Wesmere Parkway). It is anticipated that the construction of Project 1A will be funded with Rebuild Illinois funds, and Project 1B will be funded with STP funds. The timing of the projects will likely be offset by one year, with Project 1A starting in 2024 and Project 1B starting in 2025. This is due to the availability of each funding source.

The City has asked V3 Companies, to submit an amendment to the Phase II Engineering Services with a Scope of Services and Cost Estimate to include the project limits for both Projects 1A and 1B. The Scope of Services and Cost Estimate for Consulting Services has been received and reviewed by the Department of Public Works.

The Services will be added to the original contract utilizing the time and material rates submitted at a total cost not to exceed \$79,417.00.

Section 2-438 of the City of Joliet Code of Ordinances states that purchases over \$25,000.00 may be awarded without written specifications or bidding under certain circumstances. Two (2) of these circumstances apply:

(f) Purchases when authorized by a concurring vote of two-thirds (2/3) of the Mayor and City Council;

(g) Purchases of professional services.

Funding will be charged to the Motor Fuel Tax Funds - REBUILD Illinois budget code (Org 20090270, Object- 557200, RBLD, \$79,417.00).

**RECOMMENDATION:**

Based on the above, it is recommended that the Mayor and City Council approve Amendment No. 1 to the Phase II Professional Engineering Services for the Theodore Street Widening Improvements Project - Project 1A (Drauden Road - Wesmere Parkway) on behalf of V3 Companies.



# City of Joliet

150 West Jefferson Street  
Joliet, IL 60432

## Memo

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**File #:** TMP-4251

**Agenda Date:** 8/15/2022

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**TO:** Mayor and City Council

**FROM:** James V. Capparelli, City Manager

**SUBJECT:**

Resolution Appropriating Rebuild Illinois Bond Funds for Amendment No. 1 to the Phase II Professional Engineering Services for the Theodore Street Widening Improvements Project - Project 1A (Drauden Road - Wesmere Parkway) - MFT Sect. No. 18-00515-00-WR to V3 Companies, in the amount of \$79,417.00

**BACKGROUND:**

The Professional Engineering Services contract for the Theodore Street Widening Improvements Project - Project 1A (Drauden Road - Wesmere Parkway) is being funded by REBUILD ILLINOIS bond funds. The project scope is being expanded to include the intersection of Theodore Street and River Road. The Public Service Committee will review this matter.

**CONCLUSION:**

Funding for this project will come from REBUILD ILLINOIS bond funds. The State of Illinois requires the Mayor and City Council to approve a Funding Resolution. Please find attached a Supplemental Funding Resolution appropriating an additional \$79,417.00 for the Theodore Street Widening Improvements Project - Project 1A (Drauden Road - Wesmere Parkway).

**RECOMMENDATION:**

Based on the above, it is recommended that the Mayor and City Council approve the Supplemental Funding Resolution appropriating REBUILD ILLINOIS bond funds.



Resolution for Improvement  
Under the Illinois Highway Code



REBUILD IL BOND FUNDS

Is this project a bondable capital improvement?

☒ Yes ☐ No

Resolution Type

Supplemental

Resolution Number

Section Number

18-00515-00-WR

BE IT RESOLVED, by the Council of the City

Governing Body Type

Local Public Agency Type

of Joliet

Name of Local Public Agency

Illinois that the following described street(s)/road(s)/structure be improved under

the Illinois Highway Code. Work shall be done by Contract

Contract or Day Labor

For Roadway/Street Improvements:

Name of Street(s)/Road(s)	Length (miles)	Route	From	To
THEODORE STREET	0.5		DRAUDEN ROAD	RIVER ROAD

For Structures:

Name of Street(s)/Road(s)	Existing Structure No.	Route	Location	Feature Crossed

BE IT FURTHER RESOLVED,

1. That the proposed improvement shall consist of

Phase II Engineering Services for the Theodore Street Widening Improvements Project - Project 1A (Wesmere Parkway - River Road) and Project 1B (Drauden Road - Wesmere Parkway).

2. That there is hereby appropriated the sum of Seventy Nine Thousand Four Hundred Seventeen

Dollars and 00/100

Dollars ( \$79,417.00 ) for the improvement of

said section from the Local Public Agency's allotment of Motor Fuel Tax funds.

BE IT FURTHER RESOLVED, that the Clerk is hereby directed to transmit four (4) certified originals of this resolution to the district office of the Department of Transportation.

I, Christa M. Desiderio

City

Clerk in and for said City

Name of Clerk

Local Public Agency Type

Local Public Agency Type

of Joliet

Name of Local Public Agency

in the State aforesaid, and keeper of the records and files thereof, as provided by

statute, do hereby certify the foregoing to be a true, perfect and complete original of a resolution adopted by

Council

of Joliet

at a meeting held on September 06, 2022

Governing Body Type

Name of Local Public Agency

Date

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_ .  
Day Month, Year

(SEAL)

Clerk Signature

Date

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Approved

Regional Engineer

Department of Transportation

Date

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# City of Joliet

150 West Jefferson Street  
Joliet, IL 60432

## Memo

**File #:** TMP-4253

**Agenda Date:** 8/15/2022

**TO:** PUBLIC SERVICE COMMITTEE

**FROM:** ALLISON SWISHER, DIRECTOR OF PUBLIC UTILITIES  
ANGELA M. KNIGHT, PUBLIC UTILITIES ENVIRONMENTAL ENGINEERING  
INTERN

**SUBJECT:**  
Request for approval for Joliet Community Water Conservation Plan

### **BACKGROUND:**

The City of Joliet has determined that its current water source, the deep aquifer, will not be able to meet maximum day water demands by 2030. After a comprehensive analysis of possible options, the City concluded that purchasing Lake Michigan water from the City of Chicago was the most sustainable and reliable option. The City recognizes that Lake Michigan is a precious water source that provides water to millions of people and must be protected. Joliet water customers play an important role in the protection of this resource through water conservation. In order to encourage water conservation, a Community Water Conservation Plan has been developed to involve the community in water conservation efforts. Water conservation will demonstrate the City's commitment to responsible use of Lake Michigan water and can reduce customer's utility bills

### **CONCLUSION:**

The Administration evaluated other municipal sustainability and conservation plans and worked with a Water Conservation Stakeholder Group to compile a list of several water conservation initiatives grouped into three categories: municipal, commercial, and residential. After evaluating the list against water saved, impacted community, direct cost, initial labor effort, maintenance labor effort, implementation schedule, coordination effort, implementation difficulty, and possible funding source, certain municipal initiatives are recommended for implementation in 2023. The estimated budget for these initiatives is \$21,000.00 which will be recommended for inclusion in the 2023 Water and Sewer Fund budget. The other municipal initiatives will be reviewed for implementation in future years. All commercial and residential initiatives are recommended for implementation. A summary of the initiatives evaluated, and recommendations are presented in the Joliet Community Water Conservation Plan

### **RECOMMENDATION:**

The Administration recommends the Public Service Committee approve the proposed Joliet Community Water Conservation Plan and support budgeting \$21,000.00 for implementation of the Plan in the 2023 Water & Sewer Fund.



# Joliet Community Water Conservation Plan

City of Joliet, IL  
August 2022

JOLIET



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# 1 Abbreviations and Acronyms

WCSG	Water Conservation Stakeholder Group
HOA	Homeowners' Association
IDPH	Illinois Department of Public Health
ISTC	Illinois Sustainable Technology Commission
EPA	United States Environmental Protection Agency
CMAQ	Chicago Metropolitan Agency for Planning
BMP	Best Management Practices
IDNR	Illinois Department of Natural Resources



## 2 Background

### 2.1 Background

The city of Joliet's (City's) current water source, the deep aquifer, will not be able to meet maximum day water demands by 2030. The City completed a comprehensive analysis of alternatives and selected Lake Michigan water purchased from the City of Chicago as the most sustainable and reliable water source for the City and surrounding region<sup>1</sup>. The City is committed to being a good steward of Lake Michigan water, which is a precious resource relied upon by multiple states and provinces. To this end, the City has implemented multiple water conservation initiatives and recognizes the importance of involving the Joliet community in these efforts.

The City has developed this plan for its community members, including businesses and residents, to use as a tool to help conserve water and in doing so reduce their utility bill. This plan builds upon the past work by predecessor work groups, including the Water Conservation Subcommittee. The Subcommittee created the groundwork for this plan to become a reality<sup>2</sup>. It also produced a list of initiatives to create and develop, as well as conducted a water audit of City Hall via the Illinois Sustainable Technology Center (ISTC). The Subcommittee developed and implemented rain barrel and low-flow toilet rebate programs with the help of CMAP's 2050 Water Conservation Best Management Practices (BMP)<sup>3</sup>. It also recommended adoption of the Greenest Region Compact<sup>4</sup>, a framework for action across all city departments, which was approved unanimously by the City Council in 2019. The Subcommittee's work paved the way for a new Water Conservation Stakeholder Group (WCSG) to advise the creation and implementation of this plan.

### 2.2 Purpose

This plan exists as a tool for Joliet community members to conserve water and decrease their water and sewer utility bill. The City has also outlined several strategies that it will take to spread water conservation awareness and educate its residents (see "3.1 Municipal Water Conservation Initiatives"), as well as demonstrate its own commitment to conserving water. These initiatives do not include the Joliet Public Utilities Department's normal operations for infrastructure management, such as nonrevenue water reduction, which are being addressed outside of this plan<sup>5</sup>.

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<sup>1</sup> For more information about the Alternative Water Source Program, please visit [www.rethinkwaterjoliet.org](http://www.rethinkwaterjoliet.org).

<sup>2</sup> The Water Conservation Subcommittee (WCSC) 2018-2019 Annual Report details all the accomplishments of the group.

<sup>3</sup> The Subcommittee evaluated CMAP's 2050 Water Conservation BMPs. The evaluation is attached at the end of the 2018-2019 WCSC Annual Report.

<sup>4</sup> A comprehensive set of goals for a municipality to work towards, as outlined by the Metropolitan Mayors Caucus. Involved communities have access to collaborative projects to accomplish these goals.

<sup>5</sup> For more information, please see the Non-Revenue Water Reduction Strategies at [https://www.rethinkwaterjoliet.org/\\_files/ugd/3961f7\\_19e23012a555472781f964cb5607755e.pdf](https://www.rethinkwaterjoliet.org/_files/ugd/3961f7_19e23012a555472781f964cb5607755e.pdf)



## 2.3 Process of Development

The City began development of this plan following receipt of its Lake Michigan Water allocation from the Illinois Department of Natural Resources (IDNR) in September 2021. Joliet hired a summer intern dedicated to developing the plan, and a Water Conservation Stakeholder group was created to help advise the City and provide feedback to improve the plan. Initial ideas were compiled from research of other municipal water conservation plans, evaluated for feasibility, and finally included in this plan with a recommended implementation strategy.

## 3 Description of Initiatives

The initiatives described here were evaluated for inclusion in the recommended implementation strategy. Initiatives were compiled based on review of conservation plans from other municipalities, EPA recommendations, and existing Joliet water conservation initiatives. The initiatives are divided into three categories: municipal, commercial, and residential.

### 3.1 Municipal Water Conservation Initiatives

These initiatives are based on the City's pledge to continue educating, informing, and encouraging water conservation. The City will implement and maintain these initiatives.

#### 3.1.1 Update and Maintain Water Conservation Information on City Websites

This initiative allows community members to access the latest information pertaining to their water supply and helpful water conservation practices and resources. The City currently provides information related to water conservation best practices and initiatives on the [www.RethinkWaterJoliet.org](http://www.RethinkWaterJoliet.org) website as well as a page on the City's website, [www.Joliet.gov](http://www.Joliet.gov). The websites would be updated and kept current with the latest featured educational materials, the latest water supply news, the annual water conservation report, and other pertinent information.

#### 3.1.2 Perform an Annual Evaluation of the Water Conservation Plan

Under this initiative, the City, with the help of the Water Conservation Stakeholder Group, would evaluate water conservation actions taken over the past year and provide data on what it has accomplished. Based on this data and its conclusions, this plan would be updated with findings, published as a report, and distributed through a newsletter, online, or released jointly with the annual water quality report.

#### 3.1.3 Continue the Public Education Campaign

Joliet is a richly diverse community with many different racial, ethnic, generational, and economic groups. Already, Joliet releases official information in both Spanish and English. The goal is to cross demographic boundaries to educate these diverse groups about water conservation in a way that is meaningful to them. Explaining why water conservation is important is a helpful way to accomplish this goal. These initiatives would supplement and expand the outreach that is already present. The City currently has a robust public education campaign to inform residents about the City's new water source



project and water conservation. This campaign currently includes press releases, monthly eblasts, social media posts, announcements on City billboards, water bill inserts and attendance at community events. Expanding outreach and featuring different resources with water conservation tips, facts, or ideas would enhance the public education campaign and keep the public informed on important water conservation related news. The City would continue its outreach at events the City attends, hosts, or sponsors. At those events, educational materials would be provided for attendees. Employees and water conservation partners would also make themselves accessible at these events to inform community members and answer questions about different water conservation resources that exist and why they are important. Since Joliet is a WaterSense partner, many of those materials may be utilized and distributed during the outreach. Homeowner Associations (HOAs) and Neighborhood Associations are a straightforward way to connect with residents. Since HOAs have email lists of their residents, they can easily pass information from the City directly to homeowners in their community.

#### 3.1.3.1 *Partner with Schools & Education Professionals*

To enhance the education program, the City would partner with local school districts to make water conservation education available to students. The City would collaborate with the districts to develop and implement a water conservation education program. This curriculum, either in or outside the classroom, would teach students why conservation is important, specific actions that can be taken, and encourage a new generation of people committed to being excellent stewards of water. The City would also partner with educational professionals and develop a water conservation curriculum or workshop for professionals working in Joliet.

#### 3.1.4 Maintain the Rain Barrel Rebate Program and Maintain/Expand the Fixture Rebate Program

Joliet already has a rain barrel and low-flow toilet rebate program but making them more accessible and more widespread would increase those programs' enrollment. The City would streamline the application process without forsaking the integrity of the program to increase accessibility. For fixtures specifically, the program would be expanded to non-single-family facilities, such as apartment complexes, community buildings, business offices, hotels, medical offices, restaurants, retail shops, and schools<sup>6</sup>. The fixtures that offer a rebate would be expanded to urinals, air-cooled ice machines, commercial clothes washers, connectionless food steamers, faucet aerators, pre-rinse spray valves, showerheads, sprinkler nozzles, and smart sprinkler timers<sup>7</sup>. The program would be

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<sup>6</sup> Tempe, Arizona has a water conservation program designed specifically for these kinds of facilities and offers incentives to equip them with water-efficient appliances. Find more information at <https://www.tempe.gov/government/municipal-utilities/water/water-conservation/rebates>.

<sup>7</sup> The Orange County Municipal Water District offers rebates for outdoor water conservation, like drip irrigation and sprinkler nozzles, and indoor rebates for clothes washer and high efficiency toilets. Find more information at <https://www.mwdoc.com/save-water/rebates/residential-rebates/>.



expanded to encompass promotion at retailers that offer these kinds of appliances, such as a brochure at the entrance to the sections of the store that contain these products.

### 3.1.5 Maintain the Customer Water Portal

Joliet has launched a new water bill portal that provides real time water usage information. This portal can be used to set alarms that alert the homeowner when a certain threshold of water usage has been reached. The City would maintain this customer portal to continue to promote water conservation in the community.

### 3.1.6 Benchmark Water Usage Information on Monthly Bills & Develop a Water Calculator

Presenting a property owner's water usage data on their monthly bill in a meaningful way provides the owner the opportunity to evaluate their water consumption and use the tools available to them to improve their water conservation. To accomplish this, the water bill would display the owner's water usage against comparative and relevant data to contextualize the threshold of usage they are in.

### 3.1.7 Update & Enforce Ordinances to Promote Water Conservation

The City would draft ordinances that promote water conservation. Examples include requiring an automatic shut-off hose attachment when using the hose to water landscaping, restricting laying sod during the hottest months of the year, not allowing overfilled swimming pools or spas, or prohibiting a continuous stream of water to run off into gutters or drains<sup>8</sup>. Already in place, the City restricts lawn irrigation with Joliet water to the hours of 6-10am and 6-10pm and limits even-numbered addresses to water on even days and odd-numbered addresses to water on odd days. Any new or replacement sprinkler systems, plumbing fixtures and fittings, and bathroom fixtures must be WaterSense labeled, commercial car washing facilities must have a water recycling system, and any air-conditioner installed must be closed system only. To be effective, these ordinances must also be enforced.

### 3.1.8 Create a Water Conservation Incentive Program

The City would create a program for Joliet community members to sign a pledge to reduce their water consumption in exchange for prize eligibility. The program would be like the one developed by Fort Collins, Colorado: the "*Shift Your Water Program*"<sup>9</sup>. There would be several stages of these pledges, such as reducing indoor water usage, installing a rain barrel, fixing leaks, or landscaping with native plants. The City would set a deadline to sign a pledge, encourage users to send in pictures of their rain barrels or

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<sup>8</sup> The Northwest Water Planning Alliance has a model outdoor water conservation ordinance that mentions some of the ordinances listed, found at <https://www.nwpa.us/reduce-outdoor-water-use.html>. The others are found on the San Diego water conservation website, found at <https://www.sandiego.gov/public-utilities/sustainability/water-conservation/water-use-restrictions>.

<sup>9</sup> Fort Collins, CO, designed a pledge-based water conservation incentive program that steers residents toward tangible and habit-changing actions. View its website here: <https://www.fcgov.com/climateaction/shift/>.



other water conservation ideas, and then close enrollment for the sweepstakes after the deadline and draw for the winners.

### 3.1.9 Conduct a Water Audit for All Municipal Buildings

Joliet has already performed a water audit on City Hall as a demonstration of its commitment to water conservation. Performing a water audit on all municipal buildings would allow Joliet to create and tailor a water conservation plan specifically for each building. The highly individualized feedback from the auditors would be easier to implement than sweeping strategies meant for widespread execution. This method would keep the City accountable for its water usage and shows the public that the City is actively conserving water alongside the community.

### 3.1.10 Develop Water Conservation Recognition Awards Program for Commercial Customers

To encourage businesses to conserve water, the businesses that have excelled in water conservation would be recognized for their efforts. The City would need to develop a set of guidelines or design a program to determine which businesses are succeeding in conservation. The extent of the recognition would be plaques for the business, a mention in the quarterly newsletter, names listed on the Joliet website, or appearing at a City Council meeting for a photo opportunity.

### 3.1.11 Continue the Water Conservation Stakeholder Group

The City has created and currently leads the Water Conservation Stakeholder Group to assist in creating a water conservation plan and to discuss all topics relevant to the community's water conservation efforts. To continue the group, it would meet at a minimum of quarterly to strategize initiatives and give feedback related to the City's water conservation programs. The City would review their feedback and ideas and apply them to the programs.

### 3.1.12 Research Grant Opportunities

To assist with the financial burden that comes with program implementation, the City would continue to research potential avenues for federal or state grants. With funds coming from the outside, this initiative allows for broader, more encompassing, and more in-depth programs.

### 3.1.13 Partner with Other Local Entities

Joliet already works with other organizations, such as Will County, the Joliet Slammers minor league baseball team, Conservation Foundation, Lower Des Plaines Watershed Group, Lower DuPage Watershed Group, and Joliet Junior College, to name several examples. Working with other entities allows the message of water conservation to spread through multiple channels and demographics. A partnership conveys that every involved organization is committed to water conservation and invested in continuing to develop water-saving strategies. To further these partnerships, Joliet would contact the



liaisons for these organizations about their interest in any upcoming or future events and projects and by selectively sponsoring or participating in their events.

#### 3.1.14 Encourage the Use of Graywater

Graywater is wastewater that does not contain fecal contaminants. Such water comes from shower, sink, and clothes washer drains. Functioning graywater systems, to save the amount of potable water used, typically recycle water from these drains and use it to flush toilets and urinals and irrigate lawns and gardens. However, graywater usage is not a widespread practice in Illinois because there is no formal legal definition or regulation of graywater. To encourage the use of graywater, a City employee would first need to lobby for state legislation to modify state plumbing code.

#### 3.1.15 Develop a Water Saver Champion Program

Under this program, invested Joliet residents and community members would volunteer to become a “champion” of their sector and advocate for water conservation activities in partnership with Joliet. These champions would spearhead water conservation awareness in their communities with City-provided materials and tools and encourage their neighborhoods to adopt these conservation actions.

### 3.2 Commercial Water Conservation Initiatives

Joliet recognizes that the commercial sector is an important part of the Joliet community and has analyzed several water conservation initiatives related to businesses.

#### 3.2.1 Display Water Conservation Information

Businesses in Joliet, particularly hospitality and restaurant businesses, would provide water conservation information cards or post water conservation posters that inform the customer of the business’s conservation efforts and explain the adjustment of practices. The cards and displays can be easily designed, but should be visible in the establishment, so that the maximum number of customers receive the message. Even a small mention about why the business chooses a certain practice deepens the customer’s understanding of the business’s operations.

#### 3.2.2 Conduct Water Audits

Interested businesses and organizations would receive a free ISTC water audit<sup>10</sup> to help them understand their water usage and strategize ways to reduce it. Building owners and businesses are encouraged to participate to tailor their water conservation plan specifically to their needs. It is important to note that ISTC provides one free water audit exclusively to businesses, organizations, and governments.

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<sup>10</sup> To learn more or schedule a free on-site visit, go to <https://tap.istc.illinois.edu/work-with-us/free-site-visits/>. The online request form is linked on the webpage.





### 3.2.3 Water Conservation Partners Hotels

A group would be created of interested hotel and hospitality industry professionals that partner with the City to promote and practice water conservation in their establishment. The group would implement a program that encourages washing linens for multi-day stay customers on request. They would also discuss displaying the information comprehensively around the establishment and outreach to other businesses.

### 3.2.4 Water Conservation Partners Restaurants

A group of interested businesses in the restaurant industry would be formed to partner with the City to promote and practice water conservation. The water conservation practices would apply specifically to this industry, and the group would think of new ways to conserve water and decrease water costs. One such idea would be serving water only upon request, a practice that is commonplace at restaurants in California<sup>11</sup> and saves an estimated 730 gallons of water per year<sup>12</sup>.

### 3.2.5 Landscape with Native and Low Maintenance Landscaping

Plants that are native to the climate and environment of Joliet naturally require less water and less maintenance. In total, a switch to native landscaping can save a property owner as much as 47,500 gallons of water per year<sup>13</sup>. It is not only a way to save water, but also a way to beautify gardens, lawns, and landscaping. Creating a lawn full of native plants promotes a biodiverse environment, supports native pollinators, and helps restore the natural ecosystem, along with conserving water.

### 3.2.6 Track Water Usage with Joliet Water Customer Portal

The Joliet Water Customer Portal has built-in features that are free to use for any Joliet water customer. The portal can be used to set water usage alerts and alarms at the customer's desired water usage thresholds, which allow them to observe their habits and begin to formulate a plan to change them. In addition, the portal displays water used in the current billing cycle against the previous billing cycle for comparison and each meter's water usage data by day and time of day. This information can be used to understand water habits, check for leaks, and set goals to lower the amount of water used.

### 3.2.7 Switch to WaterSense Licensed Fixtures and Irrigation Systems

Timer-based irrigation systems are not sensitive to the weather, soil saturation, or other relevant data that affect water absorption in soil. As much as 50 percent of water is

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<sup>11</sup> "Water Use Restrictions." *San Diego Public Utilities*, City of San Diego, 10 June 2022, [www.sandiego.gov/public-utilities/sustainability/water-conservation/water-use-restrictions](http://www.sandiego.gov/public-utilities/sustainability/water-conservation/water-use-restrictions).

<sup>12</sup> "Water Conservation in Restaurants." *Water Matters*, Southwest Florida Water Management District. <https://www.swfwmd.state.fl.us/residents/water-conservation/water-conservation-restaurants>. Number based on the water used per glass.

<sup>13</sup> Darilek, Alice, et al. "Water-Smart Landscapes Start with WaterSense." *WaterSense*, EPA, Oct. 2021. <https://www.epa.gov/sites/default/files/2017-01/documents/ws-outdoor-water-efficient-landscaping.pdf>.



wasted in lawn irrigation because of overwatering<sup>14</sup>. WaterSense, an EPA national voluntary partnership program that offers a way for consumers to identify water-efficient products, provides labels for licensed irrigation controllers that are either weather-based or soil moisture-based. These types of controllers are more sensitive to the absorption of water into the soil. The controllers adjust the irrigation as needed based on more accurate and relevant data.

### 3.2.8 Participate in Water Conservation Stakeholder Group

The Joliet Water Conservation Stakeholder Group is a group of invested community members that work with the City to promote water conservation in the community. The WCSG provides input on water conservation strategies, reviews the water conservation plan, gives feedback on the City's current water conservation initiatives, and voices opinions about proposed plans and initiatives. The City values the input of the WCSG and believes their ideas to be valuable resources. To become involved, email Public Utilities about your interest at [rethinkwater@joliet.gov](mailto:rethinkwater@joliet.gov).

### 3.2.9 Provide Water Conservation Classes

Professionals in the landscape, plumbing, and other water-related fields would partner with the City of Joliet, the Joliet Park District, or the Joliet Public Library to hold classes focused on water conservation. The classes would outline native landscaping techniques, home plumbing classes, and how to diagnose common leaks. The presentations would provide valuable information to residents and provide marketing opportunities for businesses.

## 3.3 Residential Water Conservation Initiatives

### 3.3.1 Participate in Water Conservation Stakeholder Group

The Joliet Water Conservation Stakeholder Group is a group of invested community members that work with the City to promote water conservation in the community. The WCSG provides input on water conservation strategies, reviews the water conservation plan, gives feedback on the City's current water conservation initiatives, and voices opinions about proposed plans and initiatives. The City values the input of the WCSG and believes their ideas to be valuable resources. To become involved, email Public Utilities about your interest at [rethinkwater@joliet.gov](mailto:rethinkwater@joliet.gov).

### 3.3.2 Follow Outdoor Watering Ordinances & Recommendations

Following outdoor watering ordinances such as adjusting lawn watering schedules carries no financial burden on the community other than communications. It is a simple way to save water—according to the EPA, watering in the morning or evening and only

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<sup>14</sup> "WaterSense Outdoor Combined Irrigation Controller Fact Sheet." *WaterSense*, EPA, Feb. 2021. <https://www.epa.gov/sites/default/files/2021-03/documents/ws-outdoor-combined-irrigation-controller-fact-sheet.pdf>



watering when necessary saves 45,000 gallons of water per year for the average family<sup>15</sup>. Some of these practices are required: Joliet has watering ordinances in the summer that restrict the times that lawns may be watered to certain morning and evening times and assigns houses to even or odd numbered watering days based on the address. Others, like watering the lawn only when it needs water, are not. These ordinances are a large step, but they may create the assumption that lawns must be watered every other day, which is not the case. Lawns do not need to be watered every instance watering time is available. By watering only when necessary, the lawn is not overwatered and water is conserved. Irrigation systems that use automation can continue to use water after the season is over if they are still on. Setting a reminder to turn off the irrigation system is another strategy homeowners can use to reduce their water usage and prevent pipe bursts in the winter.

### 3.3.3 Install Rain Barrels

Rain barrels are a fantastic way to save water and keep yards and gardens green. Installing a rain barrel can save a property owner approximately 1,300 gallons of water per year<sup>16</sup>. The water collected by the barrel can be used to water the lawn at no cost to the homeowner beyond the initial rain barrel investment. There is currently a rebate program for Joliet residents that wish to install rain barrels, because the City recognizes the benefits and costs savings to residents. During education and outreach events, the City also raffles off several rain barrels. An outline of the rain barrel rebate program and a rain barrel ordering link can be found on the Joliet website at [www.joliet.gov/rainbarrel](http://www.joliet.gov/rainbarrel).

### 3.3.4 Landscape with Native Plants and Low-Maintenance Landscaping

Plants that are native to the climate and environment of Joliet naturally require less water and less maintenance. In total, a switch to native landscaping where permitted can save a property owner as much as 47,500 gallons of water per year<sup>17</sup>. It is not only a way to save water, but also a way to beautify gardens, lawns, and landscaping. Creating a lawn full of native plants promotes a biodiverse environment, supports native pollinators, and helps restore the natural ecosystem, along with conserving water.

### 3.3.5 Attend Water Conservation Classes held by Joliet

Classes allow residents to learn about their water conservation options, how to apply it to their homes, and the cost and benefits of applying the practices. Attending a class organized by the City of Joliet or local businesses and held jointly with other organizations promotes a better understanding of how to make water conservation-based decisions and habits.

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<sup>15</sup> "Save Water in the Yard this Summer." *WaterSense*, EPA. <https://www.epa.gov/watersense/watersense-summer-infographic>

<sup>16</sup> Fiala, Julia. "Saving Water and Money with Rain Barrels." *World Wildlife Fund*, WWF, 16 Dec. 2013. <https://www.worldwildlife.org/blogs/sustainability-works/posts/saving-water-and-money-with-rain-barrels>.

<sup>17</sup> Darilek, Alice, et al. "Water-Smart Landscapes Start with WaterSense." *WaterSense*, EPA, Oct. 2021.



### 3.3.6 Switch to WaterSense Licensed Fixtures and Irrigation Systems

Timer-based irrigation systems are not sensitive to the weather, soil saturation, and other relevant data that affect water absorption in soil. As much as 50 percent of water is wasted in irrigation because of overwatering<sup>18</sup>. WaterSense, an EPA national voluntary partnership program that offers a way for consumers to identify water-efficient products, provides labels for licensed irrigation controllers that are either weather-based or soil moisture-based. These types of controllers are more sensitive to the absorption of water into the soil. The controllers adjust the irrigation as needed based on more accurate and relevant data. Making this switch can save an average home up to 15,000 gallons of water every year<sup>19</sup>. Joliet is a WaterSense partner and has implemented a low-flow toilet rebate program for older constructions that may still be equipped with older, less efficient water fixtures and appliances. New construction in Joliet requires the use of WaterSense fixtures; however, older homes may still have less efficient fixtures. Replacing these appliances and fixtures with newer, more efficient fixtures reduces the amount of water each uses, saving up to 16,400 gallons of water annually<sup>20</sup>. Nicor Gas offers a free water saving kit to customers<sup>21</sup>. This kit includes 1-2 high efficiency showerheads, 1-2 bathroom faucet aerators, 1 dual-spray kitchen faucet aerator, a shower timer, and plumber's tape. ComEd also offers virtual or in-person energy audits, which include a water section, to single family homes that receive ComEd electricity<sup>22</sup>.

### 3.3.7 Reduce Indoor Water Use

This initiative is a simple habit fix. Turn off the faucet while brushing teeth, when washing dishes, when washing cars, and in other instances where running water is not being used for anything. It costs nothing to the community members but saves water and reduces water costs. Reducing a shower by 2 minutes, a specific way that homeowners can lower their water bills, prevents potable water from being wasted. For an average family, shortening shower times can save up to 2,700 gallons per year<sup>23</sup>, which is 230 gallons per month. The steps for homeowners to take include tracking showers, learning trends, and then devising plans to reduce shower time. Home leaks add up over time. The EPA estimates that household leaks add up to about 10,000 gallons of water over one year per family<sup>24</sup>. By maintaining the integrity of home fixtures, replacing worn or old parts, and remaining vigilant for leaks, water is conserved, and consumer water bills are less expensive and reflect only water use. Several informative resources already exist to assist in troubleshooting and fixing leaks, but one of the most important things about this

<sup>18</sup> "WaterSense Outdoor Combined Irrigation Controller Fact Sheet." *WaterSense*, EPA, Feb. 2021.

<sup>19</sup> "WaterSense Outdoor Combined Irrigation Controller Fact Sheet." *WaterSense*, EPA, Feb. 2021.

<sup>20</sup> "Residential Toilets." *WaterSense*, EPA, 23 May 2022.; "Showerheads." *WaterSense*, EPA, 23 May 2022.; "Bathroom Faucets." *WaterSense*, EPA, 23 May 2022. <https://www.epa.gov/watersense/watersense-products>.

<sup>21</sup> More information can be found on the Nicor Gas website, <https://www.nicorgas.com/residential/ways-to-save/free-products-and-services.html>

<sup>22</sup> To schedule a virtual or on-site visit, go to <https://www.comed.com/WaysToSave/ForYourHome/Pages/SingleFamily.aspx>.

<sup>23</sup> "4 Ways to Measure a 5-Minute Shower." *Green Harvard*, Harvard University. <https://green.harvard.edu/tools-resources/green-tip/4-ways-measure-5-minute-shower>.

<sup>24</sup> "Fix a Leak Week." *WaterSense*, EPA, 13 July 2022. <https://www.epa.gov/watersense/fix-leak-week#:~:text=Mark%20your%20calendars%20for%20EPA's,and%20money%20all%20year%20long>.



initiative is familiarizing property owners with their indoor plumbing system. Many do not know how to diagnose a running toilet or where their water meter and shut-off valve are. Having a basic understanding of the inner workings of a property's plumbing increases confidence in troubleshooting and fixing leaks.

### 3.3.8 Track Water Usage with Joliet Customer Water Portal

The Joliet Water Customer Portal has built-in features that are free to use for any Joliet water customer. The portal can be used to set water usage alerts and alarms at the customer's desired water usage thresholds, which allow them to observe their habits and begin to formulate a plan to change them. In addition, the portal displays water used in the current billing cycle against the previous billing cycle for comparison and each meter's water usage data by day and time of day. This information can be used to understand water habits, check for leaks, and set goals to lower the water used.

## 4 Process of Determination

### 4.1 Feasibility Process & Matrix

The initiatives were evaluated against the following set of criteria as shown in the matrix provided as Appendix B: water saved, community impact, direct cost, initial labor effort, maintenance labor effort, how long to implement, coordination effort (1-5), and implementation difficulty (1-5). Potential funding sources and resources connected to each initiative were also listed. Every proposed initiative was individually evaluated according to each of the criteria. Not all initiatives will be recommended at this time.

- Water saved per year was calculated with data from the EPA<sup>25</sup>, the World Wildlife Fund<sup>26</sup>, Green Harvard<sup>27</sup>, and the Graywater Action Campaign<sup>28</sup>.
- The community impact was determined based on the population that would be impacted by the initiative. Choices included: whole community, active community, property owners, businesses, schools, residents, or professionals. Active community is defined as community members active in promoting water conservation.
- Direct cost was determined based on estimates of each program's materials, labor, and venue.
- Initial labor effort was calculated based on an estimate of the number of hours the initiative would require to implement.

<sup>25</sup> <https://www.epa.gov/watersense/watersense-products>

<sup>26</sup> <https://www.worldwildlife.org/blogs/sustainability-works/posts/saving-water-and-money-with-rain-barrels>

<sup>27</sup> <https://green.harvard.edu/tools-resources/green-tip/4-ways-measure-5-minute-shower>

<sup>28</sup> <https://greywateraction.org/wp-content/uploads/2016/11/Greywater101.pdf>



- Maintenance labor effort was calculated based on an estimate of the number of hours per month the initiative would require to sustain.
- Implementation length is an estimate of when the program would be ready for the community. The possible rollouts were categorized as either short-term, mid-term, or long-term.
- The coordination effort was ranked on a scale of 1 to 5: 1-little effort, 2-a bit of effort, 3-some effort, 4-more effort, 5-lots of effort.
- Implementation difficulty was evaluated based on the following scale: 1-easy 2-simple, not easy, 3-neither simple nor easy, 4-hard, 5-difficult.

## 5 Conclusion & Recommendations

Based on the feasibility of each initiative, the recommended initiatives for 2023 are listed below. Other initiatives will be evaluated in the future for implementation past 2023. Based on the 2022 evaluation, the estimated cost is \$21,000.

### 5.1 Recommended Municipal Initiatives

#### 5.1.1 Update and Maintain Water Conservation Website

5.1.1.1 *Implementation strategy: Work with the public relations contractor to refresh the Rethink Water website and add new resources for water conservation. Gather materials from the current website, readily available resources, and other organizations and present to public in a user-friendly way.*

5.1.1.2 *No cost associations.*

#### 5.1.2 Perform an Annual Evaluation of the Water Conservation Plan

5.1.2.1 *Implementation strategy: Track water conservation activities, accomplishments, and stages of implementation throughout the year. Analyze the data with the help of the WCSG. Compile information into an annual public-facing report.*

5.1.2.2 *No cost associations.*





### 5.1.3 Continue Public Education Campaign

5.1.3.1 Implementation Strategy: Update social media with educational and promotional water conservation information. Include water conservation information and tools in e-blasts, emails, and newsletters. Research and contact individuals in school districts that may be willing to collaborate to add a water conservation lesson to existing curricula or activities.

5.1.3.2 Estimated Cost: \$2,000

### 5.1.4 Maintain the Rain Barrel Rebate Program and Maintain/Expand the Fixture Rebate Program

5.1.4.1 Implementation strategy: Continue promotion of both programs by highlighting them at Public Outreach Events, features on the website, and mentions in the e-blasts. Swiftly and accurately process rebate requests. Evaluate the possibility of adding fixture rebate program promotions in fixture retailers by finding a contact, asking questions, and reviewing business guidelines.

5.1.4.2 Estimated Cost: \$10,000

### 5.1.5 Maintain the Customer Water Portal

5.1.5.1 Implementation strategy: Perform frequent maintenance on the platform. Promote it as a useful tool for understanding water usage habits and planning to change those habits.

5.1.5.2 Estimated Cost: \$8,000

### 5.1.6 Create a Water Conservation Incentive Program

5.1.6.1 Implementation strategy: Research example programs. Ask the developers of those programs about their development process. Design a Joliet program and decide the desired water conservation practices, prizes, and promotion campaign. Aggressively promote the program by e-blasts, mailouts, mentions at events, and featuring winners on the website.

5.1.6.2 Estimated Cost: \$500

### 5.1.7 Continue the Water Conservation Stakeholder Group

5.1.7.1 Implementation strategy: Advertise the group to interested parties. Schedule regular meetings. Develop an agenda and a long-term plan. Continue to engage stakeholders in Joliet water conservation.

5.1.7.2 No cost associations.



### 5.1.8 Research Grant Opportunities

5.1.8.1 Implementation strategy: *Designate an individual or group of individuals to investigate available state and national grants. Check in frequently with their progress.*

5.1.8.2 *No cost associations.*

### 5.1.9 Partner with Other Local Entities

5.1.9.1 Implementation strategy: *Maintain relationships with current partners by contacting frequently and collaborating on events and campaigns. Research other partners in the community and contact them for interest.*

5.1.9.2 *No cost associations.*

### 5.1.10 Develop a Water Saver Champion Program

5.1.10.1 Implementation strategy: *Advertise the program to relevant demographics. Reach out to potential “champions” to know their level of interest. Encourage them to volunteer. Once found, provide them with the materials, tools, and backing that will prepare them for success in their advocacy.*

5.1.10.2 Estimated Cost: \$500

## 5.2 Recommended Commercial & Residential Initiatives

The City recommends that its businesses, residents, and community members adopt all their respective water conservation initiatives listed in this plan. Water is a valuable resource and implementing these actions will ensure water is available not only for the people of today, but those of tomorrow as well.





## 6 Acknowledgements

This report was penned in July of 2022 by Angela Knight, City of Joliet Environmental Engineering Intern.

Edited by Allison M.W. Swisher, P.E., Director of Public Utilities; Heidi Voirol, P.E., V3 Companies; and Stuart Dykstra, Hydrogeologist, V3 Companies.

Feedback from the City of Joliet Water Conservation Stakeholder Group was incorporated into this report.

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## 7 Appendices

### Appendix A: Referenced Plans

- Elmhurst, IL: Sustainable Elmhurst, found at [https://www.boarddocs.com/il/coe/Board.nsf/files/AWGRVT6398EF/\\$file/Elmhurst%20Sustainability%20Action%20Plan%20Proposed%20Final%20Draft%20March%202018.pdf](https://www.boarddocs.com/il/coe/Board.nsf/files/AWGRVT6398EF/$file/Elmhurst%20Sustainability%20Action%20Plan%20Proposed%20Final%20Draft%20March%202018.pdf)
- Naperville, IL: Environmental Sustainability Plan, found at <https://www.naperville.il.us/globalassets/media/sustainability/2010-sustainability-plan.pdf>
- Fort Collins, CO: Water Efficiency Plan, found at <https://watercenter.colostate.edu/wp-content/uploads/sites/91/2019/04/City-of-Fort-Collins-Water-Efficiency-Plan-City-of-Fort-Collins.pdf>; Water Conservation Annual Report, found at [https://www.fcgov.com/utilities/img/site\\_specific/uploads/21-23060-water-conservation-annual-report-v5.pdf?1649440657](https://www.fcgov.com/utilities/img/site_specific/uploads/21-23060-water-conservation-annual-report-v5.pdf?1649440657)
- Bloomington, IN: Sustainability Action Plan—Chapter 6, Water, found at <https://bloomington.in.gov/sites/default/files/2018-10/Ch6-Water-BtnSAP-18-FINAL.pdf>
- Oak Park, IL: PlanItGreen: Oak Park River Forest Sustainability Plan, found at <https://www.oak-park.us/sites/default/files/environment-related/planit-green-plan-2011.pdf>
- McHenry County, IL: Water Resources and Action Plan, Section 2, Chapter 7, Water Conservation and Efficiency, found at <https://www.mchenrycountyil.gov/home/showpublisheddocument/101365/637413880900100000> from pages 130-on.
- Will County, IL: Will County Green Energy and Conservation Plan, found at <https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:46c2078b-b9ac-3534-b7fd-dec7e540840e>



## Appendix B: Feasibility Matrix



# Water Conservation Plan Feasibility Matrix

	Initiative	water saved	community impacted	Direct Cost	Initial Labor Effort	Maintenance Labor Effort	Implementation Schedule	Coordination Effort (1-5)	Implementation Difficulty (1-5)	Possible Funding Source	Resources
	Municipal										
3.1.1	Update and Maintain Joliet Water Conservation Information on City Websites		active community	\$ -	8 hrs	2 hrs/month	short-term	3	2	water and sewer fund	<a href="https://www.joliet.gov/government/departments/public-utilities/water-conservation/water-conservation-tips">https://www.joliet.gov/government/departments/public-utilities/water-conservation/water-conservation-tips</a>
3.1.2	Perform an Annual Evaluation of the Water Conservation Plan		active community	\$ -		60 hrs/year	mid-term	5	4	water and sewer fund	
3.1.3	Continue the Public Education Campaign		whole community	\$ 2,000.00	36 hrs	16 hrs/month	mid-term	4	4	water and sewer fund, council grant	
3.1.4	Maintain the Rain Barrel Rebate Program and Maintain/Expand the Fixture Rebate Program		property owners	\$ 10,000.00	8 hrs	4 hrs/month	short-term	2	2	water and sewer fund	<a href="https://www.joliet.gov/government/departments/public-utilities/customer-programs/rain-barrel-program">https://www.joliet.gov/government/departments/public-utilities/customer-programs/rain-barrel-program</a>
3.1.5	Maintain the Customer Water Portal		property owners	\$ 8,000.00		4 hrs/month	short-term	3	3	water and sewer fund	<a href="#">Customer Water Portal Information   City of Joliet, IL</a>
3.1.6	Benchmark Water Usage Information on Monthly Bills & Develop a Water Calculator		property owners	\$ 1,500.00	16 hrs		short-term	2	2	water and sewer fund	
3.1.7	Update & Enforce Ordinances to Promote Water Conservation		whole community	\$ -	16 hrs	2 hrs/month	long-term	5	5	water and sewer fund	
3.1.8	Create a Water Conservation Incentive Program		active community	\$ 500.00	16 hrs	2 hrs/month	long-term	4	4	council grant	<a href="#">Shift - City of Fort Collins (fcgov.com)</a>
3.1.9	Conduct a Water Audit for All Municipal Buildings		active community	\$ 12,276.00	16 hrs	2 hrs/month	mid-term	3	2	council grant	
3.1.10	Develop Water Conservation Recognition Awards Program for Commercial Customers		businesses	\$ 500.00	20 hrs	4 hrs/month	long-term	4	3	council grant	
3.1.11	Continue the Water Conservation Stakeholder Group		whole community	\$ -		16 hrs/month	mid-term	2	2	water and sewer fund	
3.1.12	Research Grant Opportunities		whole community	\$ -	20 hrs	2 hrs/month	long-term	1	2	water and sewer fund	
3.1.13	Partner with Other Local Entities		whole community	\$ -	20	4 hrs/month	long-term	5	4	water and sewer fund, council grant	<a href="#">Will County Green   Home Page</a> , <a href="https://www.iic.edu/node/5076">https://www.iic.edu/node/5076</a> , <a href="https://www.theconservationfoundation.org/">https://www.theconservationfoundation.org/</a>
3.1.14	Encourage the Use of Graywater	15000 gal/yr	property owners	\$ -	40 hrs	2 hrs/month	long-term	5	5	water and sewer fund	
3.1.15	Develop a Water Saver Champion Program		homeowners	\$ 500.00	20 hrs	10 hrs/month	long-term	4	4	volunteer	
	Commercial										
3.2.1	Display Water Conservation Information		businesses		8 hrs	1 hr/month	mid-term	3	2	business budget	
3.2.2	Conduct Water Audits		businesses		10 hrs	2 hrs/month	mid-term	3	3	business budget	
3.2.3	Water Conservation Partners Hotels		businesses	cost savings	8 hrs	2 hr/month	short-term	1	1	business budget	
3.2.4	Water Conservation Partners Restaurants	730 gal/yr	businesses	cost savings	4 hrs		short-term	4	2	business budget	
3.2.5	Landscape with Native and Low Maintenance Landscaping	47450 gal/yr	property owners	varies, then cost savings	8 hrs	2 hrs/month	short-term	3	2	homeowner budget	
3.2.6	Track Water Usage with Joliet Water Customer Portal		property owners		N/A	5 hrs/month	short-term	1	2		<a href="#">Customer Water Portal Information   City of Joliet, IL</a>
3.2.7	Switch to WaterSense Licensed Fixtures and Irrigation Systems	15000 gal/yr + 16400 gal/yr	property owners		16 hrs		mid-term	2	3	business budget	<a href="https://www.epa.gov/watersense">https://www.epa.gov/watersense</a>
3.2.8	Participate in Water Conservation Stakeholder Group		active community			2 hrs/month	mid-term	2	3	Volunteer	
3.2.9	Provide Water Conservation Classes		businesses, homeowners		20 hrs	2 hrs/month	mid-term	3	4	volunteer, park district, library, business	
	Residential										
3.3.1	Participate in Water Conservation Stakeholder Group		active community			2 hrs/month	mid-term	2	3	Volunteer	
	Conduct Water Audits		property owners		10 hrs		mid-term	3	3		<a href="https://www.comed.com/WaysToSave/ForYourHome/Pages/HomeEnergySavings.aspx">https://www.comed.com/WaysToSave/ForYourHome/Pages/HomeEnergySavings.aspx</a>
3.3.2	Follow Outdoor Watering Ordinances & Recommendations	45000 gal/yr	property owners				short-term	3	1	part of education	
3.3.3	Install Rain Barrels	1300 gal/yr	property owners	\$40, then cost savings	2 hrs		short-term	1	2	homeowner budget, city rebate	
3.3.4	Landscape with Native and Low Maintenance Landscaping	47450 gal/yr	property owners	varies, then cost savings	8 hrs	2 hrs/month	short-term	3	2	homeowner budget	
3.3.6	Switch to WaterSense Licensed Fixtures and Irrigation Systems	15000 gal/yr + 16400 gal/yr	property owners		10 hrs	4 hrs/month	mid-term	2	3	homeowner budget	<a href="https://www.epa.gov/watersense">https://www.epa.gov/watersense</a>
3.3.7	Reduce Indoor Water Usage	12740 gal/yr	property owners				short-term	2	1	homeowner budget	
3.3.8	Track water usage with Joliet Water Customer Portal		property owners				short-term	1	2		<a href="#">Customer Water Portal Information   City of Joliet, IL</a>
3.3.5	Attend Water Conservation Classes held by Joliet		whole community								

Total Direct Costs: \$ 21,000.00

implementation	1	2	3	4	5
difficulty	easy	simple, not easy	not simple nor easy	hard	difficult
coordination	1	2	3	4	5
effort	little	a bit	some	more	lots

Recommended for 2023

Not Recommended for 2023