

# 2018 Return Flow Utility Rates

5/15/2018



Dan Duchniak, General Mgr., Waukesha Water

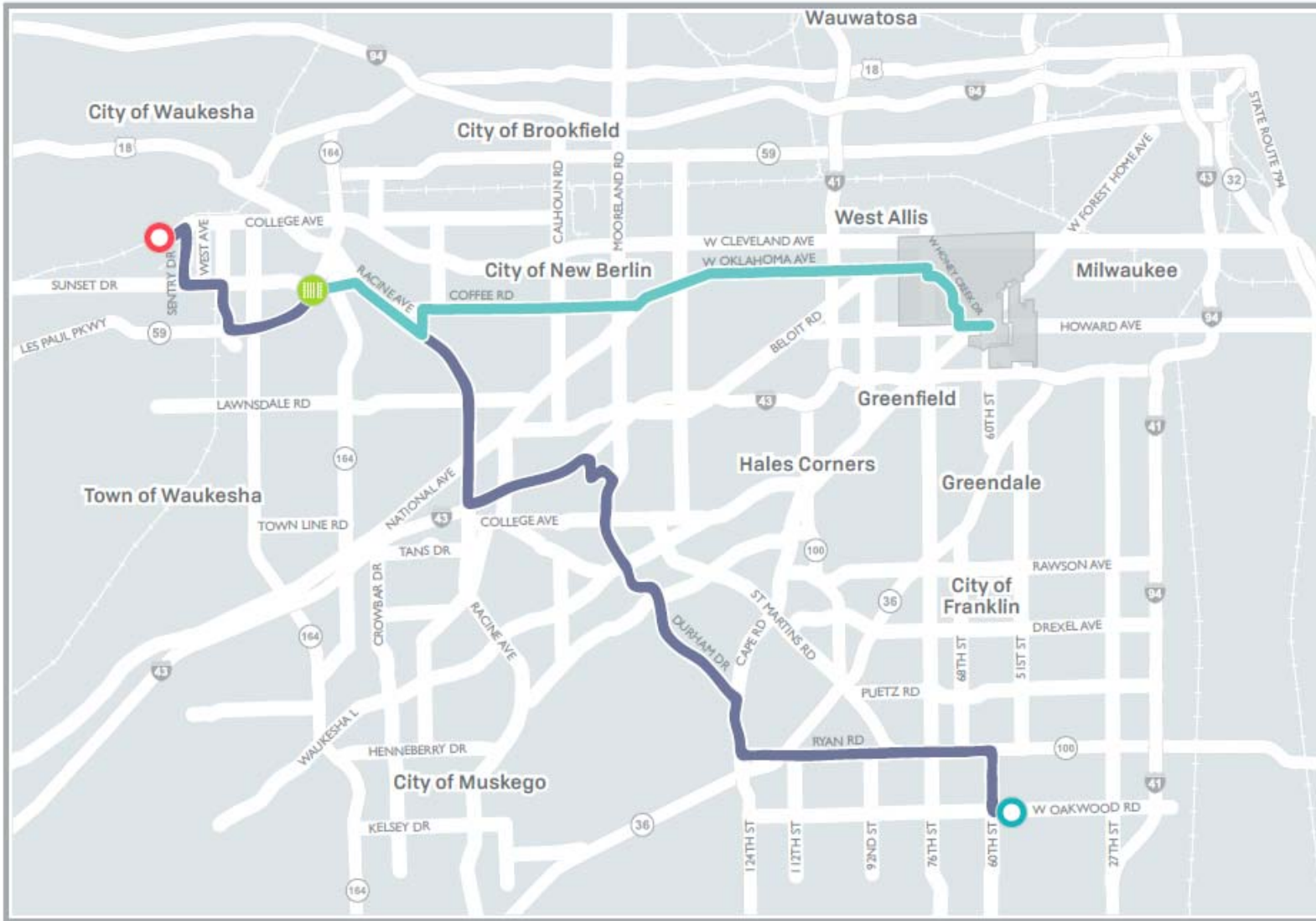
Bill Stannard, Chairman, Raftelis









# Great Lakes Water Application

- Status Update
  - Routing Study is nearing completion
    - Field work ongoing
- Looking forward
  - Preliminary Design Reports to Regulatory Agencies
  - Permitting
    - Diversion Permit
    - Facility Plan Amendment
      - Discharge Permit for Root River
  - Construction – 2020

# Preferred Water Supply and Return Flow Routes



-  ROUTE ALTERNATIVE 1
-  RETURN FLOW
-  RETURN FLOW PUMPING STATION
-  OUTFALL
-  WAUKESHA DISTRIBUTION SYSTEM
-  NEW WATER SUPPLY PUMPING STATION EVALUATION AREA

1" = 10,000'

0 5,000 10,000 20,000

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

**ROUTE OVERVIEW**  
Great Lakes Water Supply Program  
Waukesha, Wisconsin




# Return Flow

*Current Financial Needs*

## Calculation of 2018 Return Flow Utility Rate

|                                          |                   |
|------------------------------------------|-------------------|
| Debt service for 2018                    | \$ 159,621        |
| Return Flow operations for 2018          | -                 |
| Deposit to Reserve Fund (cash flow)      | 543,079           |
| Less: Non-rate revenue                   | <u>(2,700)</u>    |
| <b>Revenue required by utility rates</b> | <b>\$ 700,000</b> |

## Calculation of 2018 Return Flow Utility Rate

|                                                  |                                                                                      |
|--------------------------------------------------|--------------------------------------------------------------------------------------|
| Debt service for 2018                            | \$ 159,621                                                                           |
| Return Flow operations for 2018                  | -                                                                                    |
| Deposit to Reserve Fund (cash flow)              | 543,079                                                                              |
| Less: Non-rate revenue                           | <u>(2,700)</u>                                                                       |
| <b>Revenue required by utility rates</b>         | <b>\$ 700,000</b>                                                                    |
|                                                  |  |
| Rate Revenue Projected for 7 months              | \$ 700,000                                                                           |
| Projected Water Usage for 7 months (1,000 Gal.)  | 1,135,576                                                                            |
| <b>Return Flow Volume Charge (\$/1,000 Gal.)</b> | <b>\$ 0.62</b>                                                                       |

That's the current need...  
What's the long-term plan?

# Return Flow CIP 2018-2023

## Capital Uses of Funds

|                         | 2018                 | 2019                | 2020                 | 2021                 | 2022                 | 2023             | Total                 |
|-------------------------|----------------------|---------------------|----------------------|----------------------|----------------------|------------------|-----------------------|
| <u>Project/Activity</u> |                      |                     |                      |                      |                      |                  |                       |
| Proj Mgmt/WWU Admin     | \$ 10,641,400        | \$ 5,737,000        | \$ 1,993,000         | \$ 195,200           | \$ 195,200           | \$ 97,600        | \$ 18,859,400         |
| Return Flow Construct.  | -                    | -                   | 45,523,500           | 43,378,100           | 17,852,600           | -                | 106,754,200           |
| Total Capital Uses      | <u>\$ 10,641,400</u> | <u>\$ 5,737,000</u> | <u>\$ 47,516,500</u> | <u>\$ 43,573,300</u> | <u>\$ 18,047,800</u> | <u>\$ 97,600</u> | <u>\$ 125,613,600</u> |



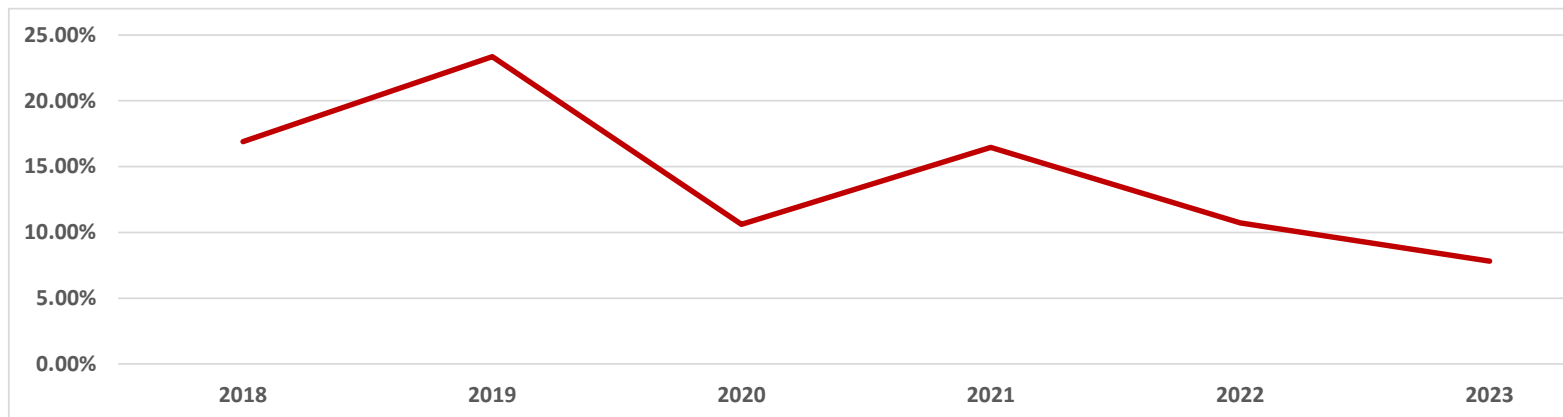
# Return Flow Rate Projection 2018-2023

| Return Flow Rate Calculation by Year      |                   |                     |                     |                     |                     |                     |
|-------------------------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                                           | 2018              | 2019                | 2020                | 2021                | 2022                | 2023                |
| Revenues generated by rates               | \$ 700,000        | \$ 3,542,729        | \$ 4,095,814        | \$ 5,987,713        | \$ 6,959,109        | \$ 7,253,539        |
| Investment income                         | 2,700             | 21,100              | 52,400              | 81,300              | 101,500             | 112,900             |
| Less: Operating Expenses                  | -                 | -                   | -                   | -                   | (219,600)           | (452,300)           |
| <b>Net Revenues</b>                       | <b>\$ 702,700</b> | <b>\$ 3,563,829</b> | <b>\$ 4,148,214</b> | <b>\$ 6,069,013</b> | <b>\$ 6,841,009</b> | <b>\$ 6,914,139</b> |
| <b>Debt Service (Subsequent Year)</b>     | <b>\$ 405,297</b> | <b>\$ 1,028,288</b> | <b>\$ 3,181,120</b> | <b>\$ 5,273,356</b> | <b>\$ 5,903,684</b> | <b>\$ 5,902,796</b> |
| <b>Total Debt Service Coverage</b>        | <b>1.73</b>       | <b>3.47</b>         | <b>1.30</b>         | <b>1.15</b>         | <b>1.16</b>         | <b>1.17</b>         |
| Projected Usage (1,000 Gal.)              | 1,135,576         | 1,915,732           | 1,893,002           | 1,876,203           | 1,863,746           | 1,854,509           |
| <b>Return Flow Charge (\$/1,000 Gal.)</b> | <b>0.62</b>       | <b>1.85</b>         | <b>2.16</b>         | <b>3.19</b>         | <b>3.73</b>         | <b>3.91</b>         |
| <b>Return Flow Rate Increase</b>          | <b>100.00%</b>    | <b>200.00%</b>      | <b>17.00%</b>       | <b>47.50%</b>       | <b>17.00%</b>       | <b>4.75%</b>        |

# Rate Revenue Projection

## Rate Revenue Increase Projections - Return Flow/Sewer View

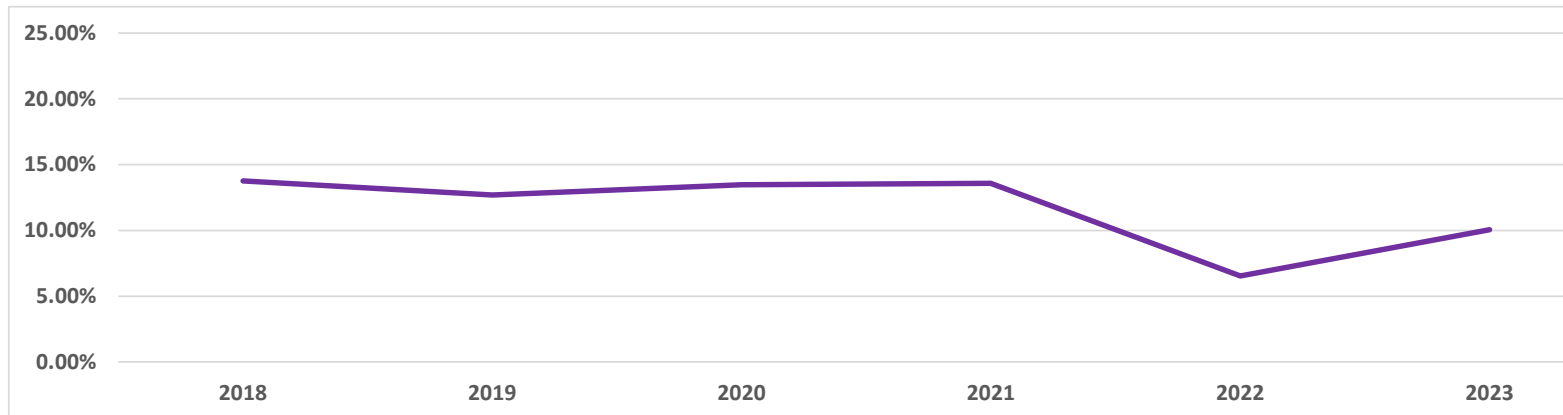
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|--------------------------------------|----------------|----------------|---------------|---------------|---------------|---------------|
| <b>Return Flow Rate Increase</b>     | <b>100.00%</b> | <b>200.00%</b> | <b>17.00%</b> | <b>47.50%</b> | <b>17.00%</b> | <b>4.75%</b>  |
| Return Flow Rate Rev. (annualized)   | \$ 1,200,000   | \$ 3,542,729   | \$ 4,095,814  | \$ 5,987,713  | \$ 6,959,109  | \$ 7,253,539  |
| <i>Sewer Rate Increase</i>           | <i>9.61%</i>   | <i>9.25%</i>   | <i>9.50%</i>  | <i>9.50%</i>  | <i>9.00%</i>  | <i>9.00%</i>  |
| Sewer Rate Revenues                  | \$ 14,631,887  | \$ 15,985,336  | \$ 17,503,943 | \$ 19,166,817 | \$ 20,891,831 | \$ 22,772,096 |
| Combined RF/Swr Rate Revenues        | \$ 15,831,887  | \$ 19,528,065  | \$ 21,599,757 | \$ 25,154,530 | \$ 27,850,940 | \$ 30,025,635 |
| <b>Combined RF/Swr Rate Increase</b> | <b>16.89%</b>  | <b>23.35%</b>  | <b>10.61%</b> | <b>16.46%</b> | <b>10.72%</b> | <b>7.81%</b>  |



# Rate Revenue Projection

## Rate Revenue Increase Projections - Global View

|                                          | 2018           | 2019           | 2020          | 2021          | 2022          | 2023          |
|------------------------------------------|----------------|----------------|---------------|---------------|---------------|---------------|
| <b>Return Flow Rate Increase</b>         | <b>100.00%</b> | <b>200.00%</b> | <b>17.00%</b> | <b>47.50%</b> | <b>17.00%</b> | <b>4.75%</b>  |
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| <i>Water Rate Increase</i>               | <i>9.69%</i>   | <i>0.00%</i>   | <i>20.00%</i> | <i>10.00%</i> | <i>0.00%</i>  | <i>15.00%</i> |
| Water Rate Revenues                      | \$ 11,493,700  | \$ 11,264,800  | \$ 13,344,600 | \$ 14,539,200 | \$ 14,435,900 | \$ 16,513,200 |
| Combined RF/Swr/Wtr Rate Revenues        | \$ 27,325,587  | \$ 30,792,865  | \$ 34,944,357 | \$ 39,693,730 | \$ 42,286,840 | \$ 46,538,835 |
| <b>Combined RF/Swr/Wtr Rate Increase</b> | <b>13.75%</b>  | <b>12.69%</b>  | <b>13.48%</b> | <b>13.59%</b> | <b>6.53%</b>  | <b>10.06%</b> |



# Rate Revenue Projection

## Rate Revenue Increase Projections - Global View

|                                          | 2018           | 2019           | 2020          | 2021          | 2022          | 2023          |
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| <i>Sewer Rate Increase</i>               | 9.61%          | 9.25%          | 9.50%         | 9.50%         | 9.00%         | 9.00%         |
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| <i>Water Rate Increase</i>               | 9.69%          | 0.00%          | 20.00%        | 10.00%        | 0.00%         | 15.00%        |
| Water Rate Revenues                      | \$ 11,493,700  | \$ 11,264,800  | \$ 13,344,600 | \$ 14,539,200 | \$ 14,435,900 | \$ 16,513,200 |
| Combined RF/Swr/Wtr Rate Revenues        | \$ 27,325,587  | \$ 30,792,865  | \$ 34,944,357 | \$ 39,693,730 | \$ 42,286,840 | \$ 46,538,835 |
| <b>Combined RF/Swr/Wtr Rate Increase</b> | <b>13.75%</b>  | <b>12.69%</b>  | <b>13.48%</b> | <b>13.59%</b> | <b>6.53%</b>  | <b>10.06%</b> |

## Utility Billing Impact - Global View - Single Residential

|                   | 2018             | 2019             | 2020             | 2021               | 2022               | 2023               |
|-------------------|------------------|------------------|------------------|--------------------|--------------------|--------------------|
|                   | \$/Yr            | \$/Yr            | \$/Yr            | \$/Yr              | \$/Yr              | \$/Yr              |
| Return Flow       | \$ 29.59         | \$ 88.77         | \$ 103.86        | \$ 153.19          | \$ 179.23          | \$ 187.74          |
| Sewer             | 377.20           | 412.09           | 451.24           | 494.11             | 538.58             | 587.05             |
| <b>RF/Swr</b>     | <b>\$ 406.79</b> | <b>\$ 500.86</b> | <b>\$ 555.10</b> | <b>\$ 647.29</b>   | <b>\$ 717.81</b>   | <b>\$ 774.79</b>   |
| Water             | 344.40           | 344.40           | 413.28           | 454.61             | 454.61             | 522.80             |
| <b>RF/Swr/Wtr</b> | <b>\$ 751.19</b> | <b>\$ 845.26</b> | <b>\$ 968.38</b> | <b>\$ 1,101.90</b> | <b>\$ 1,172.41</b> | <b>\$ 1,297.59</b> |

\*\*Assumes 48,000 gallons used annually.

# How do we compare to our neighbors?

2018

- Average Waukesha County Water and Sewer Bill \$ 774.60  
(Brookfield, Hartland, Menomonee Falls, Mukwonago, Muskego, New Berlin, Oconomowoc, Pewaukee, Sussex, Waukesha)
- Average Milwaukee County Water and Sewer Bill \$ 963.11  
(Cudahy, Fox Point, Franklin, Greendale, Greenfield, Hales Corners, Milwaukee, Oak Creek, St. Francis, Shorewood, Wauwatosa, West Allis)
- Projected City of Waukesha Water and Sewer Bill \$ 751.19

**City of Waukesha**  
**Department of Public Works**  
**2018 Return Flow Sewer Service Charge Schedule**  
**Effective June 1, 2018**

Published pursuant to Waukesha Municipal Code §29.12

| <b>Inside Users</b>                                           | <b>Rate</b> | <b>Notes</b>     |
|---------------------------------------------------------------|-------------|------------------|
| Return Flow Base Volumetric Rate – §29.12(c)(2) .....         | \$0.62      | per 1000 gallons |
| Unmetered quarterly Return Flow flat charge – §29.12(b) ..... | \$18.60     | per quarter      |
| <br>                                                          |             |                  |
| <b>Outside Users</b>                                          | <b>Rate</b> | <b>Notes</b>     |
| Return Flow Base Volumetric Rate – §29.12(c)(2) .....         | \$0.62      | per 1000 gallons |
| Unmetered quarterly Return Flow flat charge – §29.12(b) ..... | \$18.60     | per quarter      |
| <br>                                                          |             |                  |
| <b>Hauled Waste Return Flow Rates</b>                         | <b>Rate</b> | <b>Notes</b>     |
| Septic Return Flow rate .....                                 | \$0.62      | per 1000 gallons |
| Chemical toilet Return Flow rate .....                        | \$0.62      | per 1000 gallons |
| Holding tank Return Flow rate .....                           | \$0.62      | per 1000 gallons |