MDC Committee on Government Public Hearing
February 24, 2020
$0.47 cents increase breakdown

- $0.25 cents of the water rate increase is due to the reduction in consumption estimate from 18,400,000 to 17,727,959 ccf’s, accounting for 7% (or half) of water rate increase.
- $0.08 cents is due to the increase in debt service of which $0.045 cents is attributable to the accelerated water main replacement program, which will increase the amount of water mains replaced to 10 miles in 2020.
- $0.05 cents increase is attributable to employee benefits specifically medical, pension and OPEB.
- $0.09 cent increase is the result of proposed increases in operating expenses.
- Approximately every $1 million in revenue equates to $.06 decrease in Sale of Water Rate.
2020 Budget Drivers

- DEEP approval of Long Term Control Plan (LTCP)
- Incremental Capital Cost as a result of a migration to CIP from CWP
- Proactive maintenance of infrastructure
- OPEB Trust funding options and long term implications
- Continue to do more with less
- Deployment of solutions/strategic investments
  - Healthier workforce
- Resolve impasse with DEEP re: Hartford Landfill
- Increase water main replacement from 1-2 miles per year to 8-10 miles per year (capital spend will go from $6 M to $26M per year)
- Phase 2 of the Raftelis Study – Ad Valorem Study
- Funding for the litigation settlements
- Riverfront Transition Plan
- Master Plan for Water Infrastructure ($750M)
### Average Customer Water Bill

#### Member Charges

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Water Use Charge</td>
<td>100</td>
<td>$3.50</td>
<td>$350.00</td>
<td>$3.97</td>
<td>$397.00</td>
<td>13.43%</td>
</tr>
<tr>
<td>CWP</td>
<td>100</td>
<td>$4.10</td>
<td>$410.00</td>
<td>$4.10</td>
<td>$410.00</td>
<td>0.00%</td>
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<tr>
<td>Water CSC</td>
<td></td>
<td>$14.98</td>
<td>$179.76</td>
<td>$14.98</td>
<td>$179.76</td>
<td>0.00%</td>
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<tr>
<td>Sewer CSC</td>
<td></td>
<td>$6.00</td>
<td>$72.00</td>
<td>$7.00</td>
<td>$84.00</td>
<td>16.67%</td>
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<tr>
<td><strong>Total Bill</strong></td>
<td></td>
<td></td>
<td>$1,011.76</td>
<td></td>
<td>$1,070.76</td>
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</tr>
<tr>
<td><strong>Annual Change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$59.00</td>
<td>5.83%   $4.92</td>
</tr>
</tbody>
</table>

#### Non-Member Charges

<table>
<thead>
<tr>
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</tr>
<tr>
<td>CSC</td>
<td></td>
<td>$14.98</td>
<td>$179.76</td>
<td>$14.98</td>
<td>$179.76</td>
<td>0.00%</td>
</tr>
<tr>
<td>GS</td>
<td></td>
<td>$14.98</td>
<td>$179.76</td>
<td>$14.98</td>
<td>$179.76</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Total Bill</strong></td>
<td></td>
<td></td>
<td>$709.52</td>
<td></td>
<td>$756.52</td>
<td></td>
</tr>
<tr>
<td><strong>Annual Change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$47.00</td>
<td>6.62%   $3.92</td>
</tr>
</tbody>
</table>

*CSC = Customer Service Charge
GS = General Surcharge Outside of District*
Potential Rate Offset with Increased Consumption

<table>
<thead>
<tr>
<th>2020 Sale of Water Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue Requirement</td>
</tr>
<tr>
<td>Adopted Rate</td>
</tr>
<tr>
<td>Consumption (ccf) Assumption</td>
</tr>
<tr>
<td>Potential Increase in Revenue</td>
</tr>
<tr>
<td>Potential Revenue Requirement</td>
</tr>
<tr>
<td>Potential New Rate</td>
</tr>
</tbody>
</table>

Total Rate Reduction = $0.11/ccf
MDC Water Production and Water Rate History (1990-2019)

MDC approved safe yield 77.1 mgd
MDC SAFE YIELD

• The CT DPH approved “SAFE YIELD” for the Barkhamsted/Nepaug Reservoir System is 77.1 MGD.

• The MDC uses a more conservative approach (1960s drought) than the 1-in-100 year drought analysis required of all water companies by the CT DPH.

• Safe Yield using the CT DPH guidelines would be 83.9 MGD for Barkhamsted and Nepaug reservoirs.

• Safe yield calculation was developed and approved in 1996. DPH, DEEP, OPM and PURA reviewed and approved the water supply plan in 2003 and 2012.

• MDC’s next Water Supply Plan Update is due in 2021.
DROUGHT CONTINGENCY PLANNING

MDC’s Drought Contingency Plan is approved by CT DPH and is based on “Connecticut Preparedness and Response Plan” created by CT DEEP, CT DPH, CT DPUC, CT OPM, and CT Office of Emergency Management and Referred to as the MDC’s Water Supply Plan.

DROUGHT TRIGGERS:
• Days of Water Supply Remaining in reservoirs.
• Percent of Reservoir Capacity.
DROUGHT STAGES

• **Drought Advisory** (500 days of supply / 75% of capacity)
  Request municipal officials to cut back on non-essential operations

• **Drought Watch** (350 days of supply / 53% of capacity)
  Ban lawn sprinkling between 7AM and 8PM, Adopt standby ordinances

• **Drought Warning A** (265 days of supply / 40% of capacity)
  Activate standby ordinances, Ban all non-essential domestic and municipal use (lawns, pools, etc.)
  Monitor large and unusual user consumption through special meter readings

• **Drought Warning B** (180 days of supply / 27% of capacity)
  Plan for cutback of industrial users, Adopt surcharge ordinance, establish elected officials task force

• **Drought Emergency** (65 days of supply / 10% of capacity)
  Cutback of designated industrial users

All measures at each stage are coordinated with CT DPH, MDC towns and involve extensive public notification.
DROUGHT

Why aren’t residents given priority over businesses in a drought?

A mandatory restriction on public water for commercial entities so residential customers can wash their cars and water their lawns would effectively halt all commercial activity in the state, closing restaurants, manufacturing facilities, hospitals and alike.

CT DPH already has the discretion to prioritize water customers in the event of an emergency under existing law.

As to residential use, the MDC’s drought contingency plan does not include ANY restrictions on the use of water for drinking and sanitary purposes under any circumstances.

Historically, any time the MDC has requested a water use restriction in the last 50 years, it has been voluntary, including the severe drought of the 1960s.

In fact, actual data recorded at the MDC’s Nepaug Reservoir over the last 100 years has shown that the annual precipitation has *increased* by almost 10% over that time period.
Large Water User Rate Overview

• Reduced water rate is open to any customer which uses more than 600,000 gallons per day from a single meter, averaged over billing period
• All customers pay the current rate of $3.97 per CCF for the first 600,000 gallons per day
• After 600,000 gallons per day, a reduced rate of $3.18 per CCF applies
• 600,000 gallon per day limit designated to incentivize development of large customers
## Comparison of Reduced Water Rates

Every other large water system in CT (30,000 or more services) has a reduced water rate

### Other Water Utilities with Reduced Rates
- New Britain Water Dept.
- Groton Utilities
- Jewett City Water Co.
- Southington Water Dept.
- Torrington Water Co.
- Watertown Fire District
- Winsted Water Works
- Cromwell Fire District

### Standard Residential Rate and Reduced Rates

<table>
<thead>
<tr>
<th></th>
<th>Standard Residential Rate</th>
<th>Reduced Rate</th>
<th>Reduction at 600,000 GPD</th>
<th>Reduction at 900,000 GPD</th>
<th>Reduction at 1,350,000 GPD</th>
<th>Reduction at 1,800,000 GPD</th>
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</thead>
<tbody>
<tr>
<td>Metropolitan District</td>
<td>$3.97</td>
<td>$3.18</td>
<td>$154,187.55</td>
<td>$308,375.11</td>
<td>$462,562.66</td>
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<tr>
<td>Aquarion - Eastern Div.</td>
<td>$4.23</td>
<td>$2.08</td>
<td>$468,682.06</td>
<td>$940,977.80</td>
<td>$1,146,679.06</td>
<td>$1,885,569.29</td>
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<tr>
<td>CT Water Co.</td>
<td>$6.76</td>
<td>$5.03</td>
<td>$506,476.84</td>
<td>$844,128.07</td>
<td>$1,181,779.29</td>
<td>$1,519,430.52</td>
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<tr>
<td>Regional Water Auth.</td>
<td>$4.40</td>
<td>$3.46</td>
<td>$275,195.51</td>
<td>$458,659.18</td>
<td>$642,122.85</td>
<td>$825,586.52</td>
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</tbody>
</table>

### Additional Regional Water Economic Development Rate
- New customers using over 500,000 gallons per year charged 80% of rate for first year
- Increases to full rate over 5 years
### Reduced Water Rates in Other Regions

#### Springfield
- **Residential**: $3.403 per HCF
- **Commercial**: $3.223 per HCF
- **Industrial**: $3.169 per HCF

#### Providence Water
- **Monthly Water Usage Charges**
  - **First 2 Mcf (0 to 2 Mcf)**
    - Base Charge: $44.80
  - **Next 98 Mcf (2.1 to 100 Mcf)**
    - Base Charge: 38.56
  - **Next 1,900 Mcf (100.1 to 2,000 Mcf)**
    - Base Charge: 29.88
  - **Over 2,000 Mcf**
    - Base Charge: 29.06

#### Portland Water District

#### Bangor Water District
- **Monthly Consumption Rates**
  - **First 1,000 CCF**
    - Rate per CCF: $1.6290
  - **Next 4,000 CCF**
    - Rate per CCF: 1.3555
  - **Over 5,000 CCF**
    - Rate per CCF: 1.2939

#### Indianapolis

#### City of St. Louis Water Division
- For the first 26,000 cubic feet per billing, $1.77 per 100 cubic feet of water
- For the next 1,075,000 cubic feet per billing, $1.30 per 100 cubic feet of water
- Over 2,000,000 cubic feet per billing, $1.04 per 100 cubic feet of water

#### Milwaukee Water Works
- **Water Usage in Ccf**
- **Milwaukee Non-residential Monthly Billing**
  - **First 34 Ccf**
    - Rate: $2.17
  - **Next 1,635 Ccf**
    - Rate: $2.17
  - **Next 5,000 Ccf**
    - Rate: $1.40
  - **Over 6,667 Ccf**
    - Rate: $1.26
Revenue & Cost of Service

Large User at 600,000 gpd

Water Usage
• 219 Million Gallons per year
• 292,761 CCF per year

Water Revenue
• $1,171,515.80 per year (Service & Consumption)
• 2,355 Single Family Residences for Similar Income

Single Family Residence

Water Usage
• 164 gallons/day average
• 59,844 gallons per year
• 80 CCF per year

Water Revenue
• $497.36 per Year (Service & Consumption)
Revenue & Cost of Service

Large User at 1,200,000 gpd
Water Usage
• 438 Million Gallons per year
• 585,522 CCF per year
Water Revenue
• $2,102,495.78 per year (Service & Consumption)
• 4,227 Single Family Residences for Similar Income

Large User at 1,800,000 gpd
Water Usage
• 657 Million Gallons per year
• 878,283 CCF per year
Water Revenue
• $3,033,475.76 per year (Service & Consumption)
• 6,099 Single Family Residences for Similar Income