## Rate Scenarios for Sewer Project

### Central Street Pump Station

- **Option 1:** Upgrade Only (funded by current users) Pump station project needs to move forward at a minimum.
- **Funded by Current User Base**

<table>
<thead>
<tr>
<th>Sewer Project</th>
<th>Estimated Loan</th>
<th>Loan Interest</th>
<th>Estimated Revenue</th>
<th>Estimated Interest</th>
<th>Percentage of Annual Revenue to the Village</th>
<th>Annual Village Allowance in Cubic Ft.</th>
<th>New system-wide Betterment and User Fees</th>
<th>Lake District Portion</th>
<th>Village District Portion</th>
</tr>
</thead>
<tbody>
<tr>
<td>$8,999,975</td>
<td>$747,314</td>
<td>$18,643</td>
<td>$10,033,305</td>
<td>$33.76</td>
<td>$7.66</td>
<td>$7.66</td>
<td>$7.66</td>
<td>$7.66</td>
<td>$7.66</td>
</tr>
</tbody>
</table>

### Lake Extension and Village Improvements

- **Option 2:** This would create two districts recommended
- **Option 3:** Funding Shared Equally Between Lake and Village (not recommended)

### Rate Calculations

- **Residential**
  - Current Minimum: $54.64
  - New Minimum: $54.61
  - Current Overage: $8.72
  - New Overage: $18.19
- **Commercial**
  - Current Minimum: $54.64
  - New Minimum: $54.61
  - Current Overage: $8.72
  - New Overage: $18.19

### Adjustments

- The calculator to the right shows the impact to Residential, Commercial, and Industrial rates based on usage by implementing some form of Option 2 (The creation of two districts).
- Only cells that is highlighted in yellow can be changed, see notes in cells for guidance.
- The adjustments to all rate categories increases are equal for minimum and overage charges if applicable.
- The rates are based on the higher loan amount for each district.
- Loan calculations create estimated loan payments for proposed rate setting only.
- 2018/19 FNOK discharge per quarter average was 8,000,000 gallons.
- 2018/19 Annual cubic feet billed including FNOK was 8,600,000 cu ft.
### Rate Scenarios for Sewer Project

**6/9/2020**

#### Central Street Pump Station

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Sewer Project Credit</th>
<th>Estimated Loan</th>
<th>Estimated Interest</th>
<th>Estimated Loan To Village</th>
<th>Per User</th>
<th>Percentage of Annual Revenue</th>
<th>Increase</th>
<th>Village to the Annual Minimum</th>
<th>Rate in Effect to the</th>
<th>Offset</th>
<th>Total</th>
<th>Surplus to Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Upgrade Only (Final to current area)</td>
<td>$2,963,065</td>
<td>$1,926,130</td>
<td>$798</td>
<td>$345,691</td>
<td>$31.19</td>
<td>$5.90</td>
<td>$26.63</td>
<td>$135,807</td>
<td>$5.34</td>
<td>$407,421</td>
<td>$543,229</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>This would create two districts recommended</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Lake District Portion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Lake District Portion

<table>
<thead>
<tr>
<th>Lake District</th>
<th>Retirement</th>
<th>New system-wide</th>
<th>Lake District</th>
<th>Annual Per Unit</th>
<th>New system-wide</th>
<th>Lake District</th>
<th>Annual Per Unit</th>
<th>New system-wide</th>
<th>Lake District</th>
<th>Annual Per Unit</th>
<th>New system-wide</th>
<th>Lake District</th>
<th>Annual Per Unit</th>
<th>New system-wide</th>
<th>Lake District</th>
<th>Annual Per Unit</th>
<th>New system-wide</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New</td>
<td>$57.82</td>
<td></td>
<td></td>
<td>$60.31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Additional Information

- The calculator to the right shows the impact to Residential, Commercial and Industrial rates based on usage by implementing some form of Option 2 (The creation of two districts).
- Only cells that are highlighted in yellow can be changed, use notes in cells for guidance.
- The adjustments at all rate categories are equal for minimum and overage charges if applicable.
- The rates are based on the higher loan amount for each district.
- Loan calculations create estimated loan payments for proposed rate setting only.
- 2018/19 FNOK discharge per quarter average was 1,000,000 gallons.
- 2018/19 Annual cubic feet billed including FNOK was 8,600,000 cu ft.
### Rate Scenarios for Sewer Project

**Central Street Pump Station**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Funded by Current User Base</th>
<th>Loan Estimated</th>
<th>Per 1000 Gallons</th>
<th>Total</th>
<th>Surplus to Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Upgrade Only (funded by current users)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>This would create two districts recommended</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Funding Shared Equally Between Lake and Village (not recommended)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Lake District Portion

<table>
<thead>
<tr>
<th>New system rates</th>
<th>Increase</th>
<th>Annual</th>
<th>to the Minimum</th>
<th>Overage</th>
<th>per 1000 feet</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake District Retirement</td>
<td>$3.64</td>
<td>$33.85</td>
<td>$37.49</td>
<td>$443,499</td>
<td>$13,533,498</td>
<td></td>
</tr>
<tr>
<td>Lake District Betterment</td>
<td>$3.87</td>
<td>$33.85</td>
<td>$37.72</td>
<td>$443,499</td>
<td>$13,533,498</td>
<td></td>
</tr>
</tbody>
</table>

### Village District Portion

<table>
<thead>
<tr>
<th>New system rates</th>
<th>Increase</th>
<th>Annual</th>
<th>to the Minimum</th>
<th>Overage</th>
<th>per 1000 feet</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village Retirement</td>
<td>$4.05</td>
<td>$33.85</td>
<td>$37.90</td>
<td>$443,499</td>
<td>$13,533,498</td>
<td></td>
</tr>
<tr>
<td>Village Betterment</td>
<td>$4.28</td>
<td>$33.85</td>
<td>$38.13</td>
<td>$443,499</td>
<td>$13,533,498</td>
<td></td>
</tr>
</tbody>
</table>

### Adjusted for average changes

<table>
<thead>
<tr>
<th>New system rates</th>
<th>Increase</th>
<th>Annual</th>
<th>to the Minimum</th>
<th>Overage</th>
<th>per 1000 feet</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>$7,46</td>
<td>$67.72</td>
<td>$75.18</td>
<td>$443,499</td>
<td>$13,533,498</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### New system wide

<table>
<thead>
<tr>
<th>New system rates</th>
<th>Increase</th>
<th>Annual</th>
<th>to the Minimum</th>
<th>Overage</th>
<th>per 1000 feet</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>$12,055,479</td>
<td>$111,453</td>
<td>$13,646,226</td>
<td>$443,499</td>
<td>$13,533,498</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Lake District Portion

- New system rates: Lake District Retirement + Lake District Betterment
- Increase: $3.64 + $3.87 = $7.51
- Annual: $33.85 + $33.85 = $67.72
- Overage: $443,499 + $443,499 = $887,998
- Surplus to Operations: $13,533,498

### Village District Portion

- New system rates: Village Retirement + Village Betterment
- Increase: $4.05 + $4.28 = $8.33
- Annual: $33.85 + $33.85 = $67.72
- Overage: $443,499 + $443,499 = $887,998
- Surplus to Operations: $13,533,498

### Adjusted for average changes

- New system rates: $7.46
- Annual: $67.72
- Overage: $443,499
- Surplus to Operations: $13,533,498

### New system wide

- New system rates: $12,055,479
- Annual: $111,453
- Overage: $887,998
- Surplus to Operations: $13,533,498

### Adjusted for average changes

- New system rates: $7,46
- Annual: $67.72
- Overage: $443,499
- Surplus to Operations: $13,533,498

### New system wide

- New system rates: $12,055,479
- Annual: $111,453
- Overage: $887,998
- Surplus to Operations: $13,533,498

### Project Cost

- **Option 1:** $10,000,000
- **Option 2:** $8,000,000
- **Option 3:** Funding Shared Equally Between Lake and Village (not recommended)

### Project Impact

- **Surplus generated for operational cost.**
- **No Betterment charge.**
- **No surplus generated for operational cost.**
- **Betterment charge. Annually or included as a flat fee in billing cycles.**

### Adjusted for overage charges

- **Residential:** Overage per 1000 Gallons = $133,950
- **Commercial:** Overage per 1000 Gallons = $491,149
- **Industrial:** Overage per 1000 Gallons = $91,453

### Calculator

- The calculator to the right shows the impact to residential, commercial and industrial rates based on usage by implementing some form of Option 2 (The creation of two districts).
- Any cell that is highlighted in yellow can be changed, use notes in cells for guidance.
- The adjustments to all rate categories increases are equal for minimum and average charges if applicable.
- The rates are based on the higher loan amount for each district.
- Loan calculations create estimated loan payments for proposed rate setting only.

### Notes

- 2018/19 FNOK discharge per quarter average was 8,000,000 cu ft.
- 2019/20 Annual cubic feet billed including FNOK was 8,600,000 cu ft.
### Rate Scenarios for Sewer Project

**6/9/2020**

<table>
<thead>
<tr>
<th>Sewer Project local cost Loan Amount</th>
<th>Estimated Annual Payment</th>
<th>Estimated Total</th>
<th>Estimated Interest</th>
<th>Sewer Project Per Quarter 2.8%</th>
<th>Estimated Units in Village 780 100%</th>
<th>Percentage of Annual Payment to the Village 7,840,000</th>
<th>Increase to the Village Minimum Allowance 1,560,000</th>
<th>Adjusted for overage charges 8,600,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,600,000</td>
<td>1,560,000</td>
<td>6,040,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Option 2: This would create two districts recommended

<table>
<thead>
<tr>
<th>Lake Extension and Village Improvements</th>
<th>$2,500,000</th>
<th>$111,625</th>
<th>$3,348,744</th>
<th>$848,744</th>
<th>$143</th>
<th>780</th>
<th>$35.78</th>
<th>$8.94</th>
<th>$27,906</th>
<th>$1.1892</th>
<th>$83,719</th>
<th>$111,625</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Extension and Village Improvements</td>
<td>$4,000,000</td>
<td>$178,600</td>
<td>$5,357,991</td>
<td>$1,357,991</td>
<td>$223</td>
<td>800</td>
<td>$55.81</td>
<td>Lake District Surplus to New system wide Betterment $5,000,000 $223,250 $6,697,488 $1,697,488 $279</td>
<td>$800</td>
<td>$69.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake District Betterment</td>
<td>$6,000,000</td>
<td>$267,900</td>
<td>$8,036,986</td>
<td>$2,036,986</td>
<td>$335</td>
<td>800</td>
<td>$83.72</td>
<td>Betterment and User Fees $7,500,000 $334,874</td>
<td>$10,046,233</td>
<td>$2,546,233</td>
<td>$677</td>
<td>$40.13</td>
</tr>
<tr>
<td>Lake District Betterment</td>
<td>$7,500,000</td>
<td>$334,874</td>
<td>$10,046,233</td>
<td>$2,546,233</td>
<td>$677</td>
<td>$169.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Section:

- **Residential**
  - **Usage**: 2,400
  - **Avg State**: $31.19
  - **New Avg**: $40.13
  - **Per cubic ft**: $0.050295
  - **Increase**: $8.94
  - **Per cubic ft**: $0.062187
  - **Billing**: $21.46

- **Commercial**
  - **Usage**: 2,400
  - **Avg State**: $33.76
  - **New Avg**: $42.70
  - **Per cubic ft**: $0.05607
  - **Increase**: $8.94
  - **Per cubic ft**: $0.06796
  - **Billing**: $21.46

- **Industrial**
  - **Usage**: 17,952
  - **Avg State**: N/A
  - **New Avg**: N/A
  - **Per 1000 Gallons**: $7.8800
  - **Increase**: $0.59
  - **Per 1000 Gallons**: $8.4698
  - **Billing**: $170.00

#### Notes:
- The calculator to the right shows the impact to Residential, Commercial and Industrial rates based on usage.
- Only cells that are highlighted in yellow can be changed, see notes in cells for guidance.
- The adjustments to all rate categories increases are equal for minimum and overage charges if applicable.
- The rates are based on loan amount for each district, 25% Village and 75% Lake.
- Loan calculations create estimated loan payments for proposed rate setting only.
- 2018/19 FNOK discharge per quarter average was 8,000,000 gallons.
- 2018/19 Annual cubic feet billed including FNOK was 8,600,000 cu ft.
Summary of Scenario IV when changes are made.

Loan Amount $10,000,000
Percentage Rate 2.00%
Term in years 30
Number of current units 780
Number of new units 495
Annual Betterment Fee (Properties within the proposed area.) $677

<table>
<thead>
<tr>
<th>Rate impacts</th>
<th>Proposed</th>
<th>Current</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Residential Rate</td>
<td>$40.13</td>
<td>$31.19</td>
<td>$8.94</td>
</tr>
<tr>
<td>Residential Overage Rate per 100 cubic feet/750 Gallons</td>
<td>$6.22</td>
<td>$5.03</td>
<td>$1.19</td>
</tr>
<tr>
<td>Minimum Commercial Rate</td>
<td>$42.70</td>
<td>$33.76</td>
<td>$8.94</td>
</tr>
<tr>
<td>Commercial Overage Rate per 100 cubic feet/750 Gallons</td>
<td>$6.80</td>
<td>$5.61</td>
<td>$1.19</td>
</tr>
<tr>
<td>Industrial cost per 1000 gallons</td>
<td>$9.47</td>
<td>$7.88</td>
<td>$1.59</td>
</tr>
</tbody>
</table>

How we compare to the State's 2018 average sewer bill.
Averages are calculated on 2,400 cubic feet/18,000 gallons per quarter

<table>
<thead>
<tr>
<th></th>
<th>Monthly</th>
<th>Quarterly</th>
<th>Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>State average sewer bill</td>
<td>$56.54</td>
<td>$169.61</td>
<td>$678.44</td>
</tr>
<tr>
<td>Bristol's current average sewer bill</td>
<td>$40.66</td>
<td>$121.97</td>
<td>$487.89</td>
</tr>
<tr>
<td>Bristol's proposed average sewer bill</td>
<td>$50.79</td>
<td>$152.38</td>
<td>$609.53</td>
</tr>
</tbody>
</table>

Increase is based on usage typical of what we see in a family of 4. $10.14 $30.41 $121.64