

# Helendale Community Services District



## Water Rate Study

*April 24, 2017*



**BARTLE WELLS ASSOCIATES**  
INDEPENDENT PUBLIC FINANCE ADVISORS

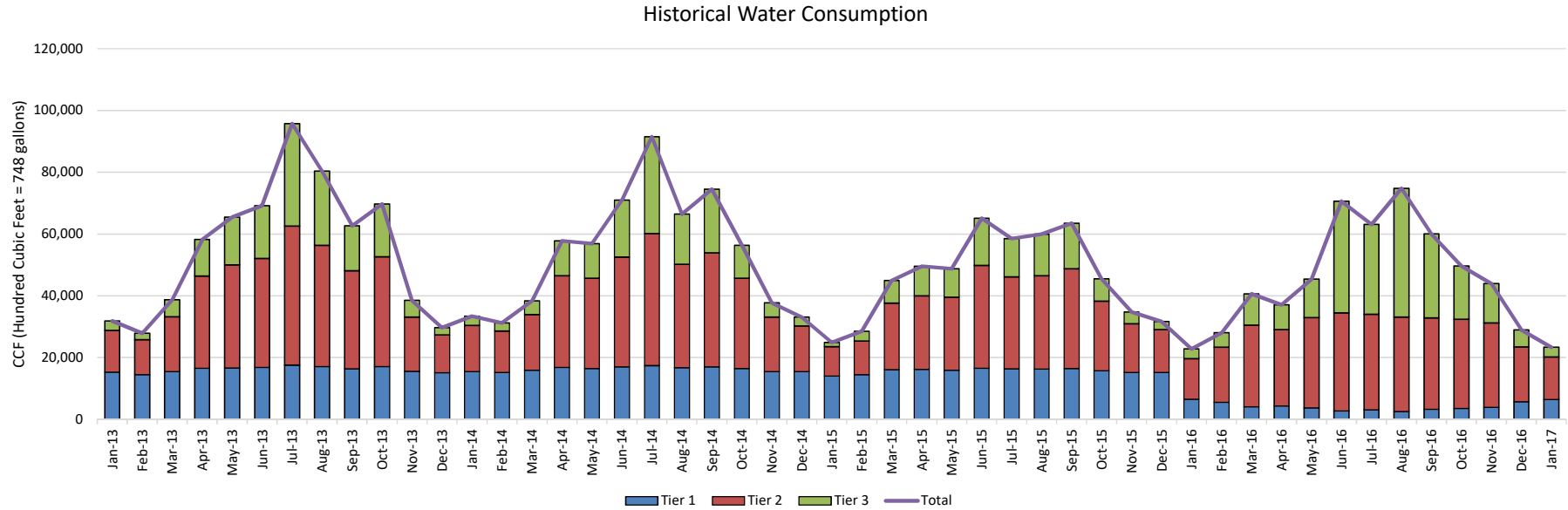
**Table ES-1**

| <b>FIXED CHARGES (\$ / MONTH)</b> |                |             |             |                 |           |           |
|-----------------------------------|----------------|-------------|-------------|-----------------|-----------|-----------|
|                                   | <u>Current</u> |             |             | <u>Proposed</u> |           |           |
|                                   | FY2017         | 1.Jul 17/18 | 1.Jan 17/18 | FY2018/19       | FY2019/20 | FY2020/21 |
| 1" Meter                          | \$26.25        | \$31.25     | \$36.25     | \$39.87         | \$43.86   | \$46.05   |
| % Change 1" Meter                 |                | 19%         | 16%         | 10%             | 10%       | 5%        |
| 2" Meter                          | \$82.07        | 82.07       | \$82.07     | \$82.07         | \$92.10   | \$96.71   |
| % Change 2" Meter                 |                | 0%          | 0%          | 0%              | 12%       | 5%        |
| 3" Meter                          | \$154.43       | \$246.88    | \$286.38    | \$314.99        | \$346.49  | \$363.81  |
| % Change 3" Meter                 |                | 60%         | 16%         | 10%             | 10%       | 5%        |
| 4" Meter & SLRV                   | \$257.90       | \$312.50    | \$362.50    | \$398.72        | \$438.59  | \$460.52  |
| % Change 4" Meter \$ SLRV         |                | 21%         | 16%         | 10%             | 10%       | 5%        |
| 6" Meter                          | \$393.80       | \$468.75    | \$543.75    | \$598.08        | \$657.89  | \$690.79  |
| % Change 6" Meter                 |                | 19%         | 16%         | 10%             | 10%       | 5%        |

| <b>VOLUMETRIC CHARGES (\$ / HCF)</b> |                |         |               |                 |           |           |           |
|--------------------------------------|----------------|---------|---------------|-----------------|-----------|-----------|-----------|
|                                      | <u>Current</u> |         |               | <u>Proposed</u> |           |           |           |
|                                      | Usage (hcf)    | FY2017  |               | FY2017/18       |           |           |           |
| Tier 1                               | 0 - 7          | \$0.85  |               |                 |           |           |           |
| Tier 2                               | 7 - 40         | \$0.94  |               |                 |           |           |           |
| Tier 3                               | 40+            | \$1.05  |               |                 |           |           |           |
| Uniform Rate                         |                |         |               | \$1.50          |           |           |           |
|                                      |                |         | Jul 1 - 17/18 | Jan 1- 17/18    | FY2018/19 | FY2019/20 | FY2020/21 |
| Typical Residential Bill [1]         | \$38.78        | \$44.75 | \$49.75       | \$53.37         | \$57.36   | \$59.55   |           |
|                                      |                | 15%     | 11%           | 7%              | 7%        | 4%        |           |

[1] Typical Residentail Bill = 1" Meter charge + 14 HCF

**Figure 1: Water Consumption**  
 Helendale Community Services District  
 Water Rate Study



| 2013   |         | 2014   |         | 2015   |         | 2016   |         |
|--|---------|--|---------|--|---------|--|---------|
| Tier 1                                       | 194,468 | Tier 1                                       | 195,923 | Tier 1                                       | 188,961 | Tier 1                                       | 49,415  |
| Tier 2                                       | 322,203 | Tier 2                                       | 314,995 | Tier 2                                       | 266,590 | Tier 2                                       | 307,852 |
| Tier 3                                       | 151,486 | Tier 3                                       | 137,463 | Tier 3                                       | 100,162 | Tier 3                                       | 207,968 |
| Grand Total                                  | 668,157 | Grand Total                                  | 648,381 | Grand Total                                  | 555,713 | Grand Total                                  | 565,235 |
| Single Family Residential<br>Monthly Average | 16.21   | Single Family Residential<br>Monthly Average | 16.02   | Single Family Residential<br>Monthly Average | 13.75   | Single Family Residential<br>Monthly Average | 14.00   |

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**Table 1: Current Rates**

Helendale Community Services District  
Water Rate Study

| <b>Fixed Meter Rates</b> |                   | <b>Volumetric Rates</b> |                    |                 |
|--------------------------|-------------------|-------------------------|--------------------|-----------------|
| <u>Meter Size</u>        | <u>\$ / Month</u> | <u>Meter Size</u>       | <u>Usage (ccf)</u> | <u>\$ / ccf</u> |
| 1" and Below             | \$26.25           | Tier 1                  | 0 - 7              | \$0.85          |
| 2" Meter                 | \$82.07           | Tier 2                  | 7 - 40             | \$0.94          |
| 3" Meter                 | \$154.43          | Tier 3                  | 40+                | \$1.05          |
| 4" Meter                 | \$257.90          |                         |                    |                 |
| SL RV                    | \$257.90          |                         |                    |                 |
| 6" Meter                 | \$393.80          |                         |                    |                 |

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Rates as of July 1, 2016

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**Table 2: Estimated Revenue FY2017 and FY2018**

Helendale Community Services District  
Water Rate Study

| <b>FY2017 Estimated Fixed Revenue</b>                |                   |               |                         | <b>FY 2018 Proposed Rates</b>                |                         |                |                    |
|--|-------------------|---------------|-------------------------|--|-------------------------|----------------|--------------------|
| Meter Size   | No. of meters     | Monthly Rate  | Annual Revenue          | Jan 1 2017 Monthly rate                      | Jan 1 2018 Monthly Rate | Annual Revenue |                    |
| 1" and Below   | 2,782             | \$26.25       | \$876,330               | \$31.25                                      | \$36.25                 | \$1,126,710    |                    |
| 2" Meter   | 35                | \$82.07       | \$34,469                | \$82.07                                      | \$82.07                 | \$34,469       |                    |
| 3" Meter   | 3                 | \$154.43      | \$5,559                 | \$246.88                                     | \$286.38                | \$9,599        |                    |
| 4" Meter   | 1                 | \$257.90      | \$3,095                 | \$312.50                                     | \$362.50                | \$4,050        |                    |
| 6" Meter   | 1                 | \$257.90      | <u>\$3,095</u>          | \$468.75                                     | \$543.75                | \$6,075        |                    |
| <b>Estimated Fixed Service Charges</b>               |                   |               | <b>\$922,548</b>        | <b>Estimated Fixed Service Charges</b>       |                         |                | <b>\$1,180,903</b> |
| <b>FY2017 Estimated Volumetric Revenue</b>           |                   |               |                         | <b>FY 2018 Estimated Volumetric Revenues</b> |                         |                |                    |
| Tier   | Consumption (hcf) | Rate (\$/hcf) | Annual Revenue          | Consumption                                  | Rate (\$/hcf)           | Annual Revenue |                    |
| Tier 1   | 188,961           | \$0.85        | \$160,617               | 527,927                                      | \$1.50                  | \$791,891      |                    |
| Tier 2   | 266,590           | \$0.94        | \$250,595               | <b>Estimated Volumetric Revenue</b>          |                         |                | <b>\$791,891</b>   |
| Tier 3   | 100,162           | \$1.05        | \$105,170               |  |                         |                |                    |
| <b>Estimated Volumetric Revenue</b>                  |                   |               | <b>\$516,382</b>        | <b>Estimated Fixed Service Charges</b>       |                         |                | <b>\$1,180,903</b> |
| <b>Total FY2017 Fixed Charge Service Revenue</b>     |                   |               | <b>\$922,548</b>        | <b>Estimated Volumetric Revenue</b>          |                         |                | <b>\$791,891</b>   |
| <b>Total FY2017 Volumetric Revenue</b>               |                   |               | <b><u>\$516,382</u></b> | <b>Total FY2018 Service Charge Revenue</b>   |                         |                | <b>\$1,972,794</b> |
| <b>Total FY2017 Estimated Service Charge Revenue</b> |                   |               | <b>\$1,438,930</b>      |  |                         |                |                    |

**Table 3: Operating Fund Expenses**  
Helendale Community Services District  
Water Rate Study

|                                       | FY2016/17               | FY2017/18               | FY2018/19               | FY2019/20               | FY2020/21               | Allocation  |            |
|---------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------|------------|
| <u>SALARIES &amp; FRINGE BENEFITS</u> | Budget                  | Projected               |                         |                         |                         | Fixed       | Volumetric |
| Salaries, Full Time                   | 283,837                 | 307,632                 | 316,861                 | 326,367                 | 336,158                 | 70%         | 30%        |
| Salaries, Overtime                    | 10,000                  | 14,000                  | 14,420                  | 14,853                  | 15,298                  | 70%         | 30%        |
| On-Call Pay                           | 10,500                  | 11,525                  | 11,871                  | 12,227                  | 12,594                  | 70%         | 30%        |
| Wages - Part-Time                     | 30,518                  | 27,820                  | 28,655                  | 29,514                  | 30,400                  | 70%         | 30%        |
| Retirement                            | 39,895                  | 40,549                  | 41,765                  | 43,018                  | 44,309                  | 70%         | 30%        |
| Employee Group Insurance              | 42,888                  | 42,750                  | 44,033                  | 45,353                  | 46,714                  | 70%         | 30%        |
| Workers Compensation                  | 27,843                  | 19,188                  | 19,764                  | 20,357                  | 20,967                  | 70%         | 30%        |
| Payroll Taxes                         | <u>7,850</u>            | <u>6,589</u>            | <u>6,787</u>            | <u>6,990</u>            | <u>7,200</u>            | 70%         | 30%        |
| Subtotal Salaries and Fringe Benefits | 453,331                 | 470,053                 | 484,155                 | 498,679                 | 513,640                 |             |            |
| <b>ADMINISTRATION</b>                 | <b><u>337,300</u></b>   | <b><u>307,784</u></b>   | <b><u>310,862</u></b>   | <b><u>313,970</u></b>   | <b><u>317,110</u></b>   | <b>70%</b>  | <b>30%</b> |
| <b>MAINTENANCE AND OPERATIONS</b>     |                         |                         |                         |                         |                         |             |            |
| Laboratory Analysis                   | 12,000                  | 10,500                  | 10,815                  | 11,139                  | 11,474                  | 75%         | 25%        |
| Contractual Services                  | 7,500                   | 11,000                  | 11,330                  | 11,670                  | 12,020                  | 75%         | 25%        |
| Engineering Services                  | 10,000                  | 4,000                   | 4,120                   | 4,244                   | 4,371                   | 75%         | 25%        |
| Software Support                      | 5,300                   | 5,280                   | 5,438                   | 5,602                   | 5,770                   | 75%         | 25%        |
| Permits & Inspection                  | 22,500                  | 14,500                  | 14,935                  | 15,383                  | 15,845                  | 75%         | 25%        |
| Equipment Rental                      | 3,000                   | 0                       | 0                       | 0                       | 0                       | 75%         | 25%        |
| Education and Training                | 5,000                   | 6,560                   | 6,757                   | 6,960                   | 7,168                   | 75%         | 25%        |
| Rent & Leases                         | 9,600                   | 9,600                   | 9,600                   | 9,600                   | 9,600                   | 75%         | 25%        |
| Rent - BLM Tank Site                  | 1,400                   | 1,260                   | 1,298                   | 1,337                   | 1,377                   | 75%         | 25%        |
| Utilities - Pumping Electrical        | 130,000                 | 111,204                 | 114,540                 | 117,976                 | 121,516                 | 10%         | 90%        |
| Utilities - Other                     | 2,500                   | 480                     | 494                     | 509                     | 525                     | 75%         | 25%        |
| Utilities - Telephone                 | 7,000                   | 4,808                   | 4,952                   | 5,101                   | 5,254                   | 75%         | 25%        |
| Repairs and Maintenance               | 80,000                  | 90,000                  | 92,700                  | 95,481                  | 98,345                  | 70%         | 30%        |
| Vehicle Maintenance                   | 14,000                  | 15,500                  | 15,965                  | 16,444                  | 16,937                  | 75%         | 25%        |
| Vehicle Fuel                          | 13,000                  | 13,000                  | 13,390                  | 13,792                  | 14,205                  | 75%         | 25%        |
| Watermaster Fee                       | 3,500                   | 8,000                   | 8,240                   | 8,487                   | 8,742                   | 75%         | 25%        |
| Operating Supplies                    | 55,000                  | 30,750                  | 31,673                  | 32,623                  | 33,601                  | 75%         | 25%        |
| Office Supplies                       | 1,500                   | 0                       | 1,000                   | 0                       | 1,000                   | 75%         | 25%        |
| Water Conservation Program            | 7,500                   | 1,495                   | 1,540                   | 1,586                   | 1,634                   | 0%          | 100%       |
| Uniforms                              | 3,000                   | 3,022                   | 3,113                   | 3,206                   | 3,302                   | 75%         | 25%        |
| Small Tools                           | 7,000                   | 5,500                   | 5,665                   | 5,835                   | 6,010                   | 75%         | 25%        |
| Dues and Subscriptions                | 3,300                   | 1,160                   | 1,195                   | 1,231                   | 1,268                   | 75%         | 25%        |
| Leased Water                          | 0                       | 0                       | 0                       | 0                       | 0                       | 0%          | 100%       |
| Groundwater Replenishment             | <u>3,500</u>            | <u>0</u>                | <u>0</u>                | <u>0</u>                | <u>0</u>                | 0%          | 100%       |
| Subtotal Maintenance and Operations   | 407,100                 | 347,619                 | 358,760                 | 368,204                 | 379,962                 |             |            |
| <b>Grand Total Operating Expenses</b> | <b><u>1,197,731</u></b> | <b><u>1,125,456</u></b> | <b><u>1,153,776</u></b> | <b><u>1,180,854</u></b> | <b><u>1,210,712</u></b> |             |            |
| Total Fixed Expenses                  | 762,017                 | 727,296                 | 745,340                 | 762,360                 | 781,369                 | <b>64%</b>  |            |
| Total Volumetric Expenses             | 435,714                 | 398,160                 | 408,436                 | 418,494                 | 429,343                 | <b>36%</b>  |            |
|                                       | 1,197,731               | 1,125,456               | 1,153,776               | 1,180,854               | 1,210,712               | <b>100%</b> |            |

**Table 4: Capital Improvement Project List**  
 Helendale Community Services District  
 Water Rate Study

| Capital Projects                                 | Budget        | Proposed / Planned |                  |                |               |                | Totals           |
|--|---------------|--------------------|------------------|----------------|---------------|----------------|------------------|
|  | FY2017        | FY2018             | FY2019           | FY2020         | FY2021        | FY2022         |                  |
| Corporate Yard - 40x100 Metal Building/Enclosure |               |                    |                  |                |               | 200,000        | 200,000          |
| Generator  |               | 90,000             |                  |                |               |                | 90,000           |
| New Well (Location TBD)                          |               |                    | 851,000          |                |               |                | 851,000          |
| Well 1A Improvements Building                    |               |                    |                  | 40,000         |               |                | 40,000           |
| Abandon Wells 5 & 6                              |               |                    |                  |                |               | 30,000         | 30,000           |
| New Well Pipeline (to Well 6)[1]                 |               |                    | 210,000          | 210,000        |               |                | 420,000          |
| North & South Tank - Interior Re-Coating         |               | 250,000            |                  |                |               |                | 250,000          |
| North & South Tank - Valves & Manifold           |               | 80,000             |                  |                |               |                | 80,000           |
| New Turbine Pump                                 |               |                    |                  | 85,000         |               | 85,000         | 170,000          |
| New Well Testing                                 |               | 70,000             |                  |                |               |                | 70,000           |
| Well Rehab                                       |               |                    |                  | 110,000        |               | 110,000        | 220,000          |
| New Truck  |               | 25,000             |                  |                |               |                | 25,000           |
| Smart Meters                                     |               |                    |                  |                |               |                | 0                |
| Misc. Projects                                   |               |                    |                  |                |               |                | 0                |
| <b>Total</b>                                     | <b>0</b>      | <b>515,000</b>     | <b>1,061,000</b> | <b>445,000</b> | <b>0</b>      | <b>425,000</b> | <b>2,446,000</b> |
| <b>Funding Sources</b>                           | <b>FY2017</b> | <b>FY2018</b>      | <b>FY2019</b>    | <b>FY2020</b>  | <b>FY2021</b> | <b>FY2022</b>  | <b>Totals</b>    |
| Capital Fund                                     | -             | -                  | 210,000          | 335,000        | -             | 285,000        | 830,000          |
| Loan   | -             | 515,000            | 851,000          | 110,000        | -             | 140,000        | 1,616,000        |
| <b>Total</b>                                     | <b>0</b>      | <b>515,000</b>     | <b>1,061,000</b> | <b>445,000</b> | <b>0</b>      | <b>425,000</b> | <b>2,446,000</b> |

Source: Capital Budget sent from Kimberly Cox 3-21-16

[1] Well Pipeline or Well Manifold Pipeline

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**Table 5: Current Debt Service Schedule**

Helendale Community Services District

Water Rate Study

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|                                       |               | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 | FY2020/21 |
|---------------------------------------|---------------|-----------|-----------|-----------|-----------|-----------|
|                                       | Interest Rate | Budget    | Projected |           |           |           |
| Debt Service                          |               |           |           |           |           |           |
| 2008 (2014) Installment Agreement [1] | 3.90%         | 49,160    | 49,160    | 49,160    | 49,160    | 49,160    |
| 2012 Installment Agreement [2]        | 5.25%         | 40,679    | 40,679    | 40,679    | 40,679    | 40,679    |
| 2014 Installment Agreement [3]        | 4.25%         | 298,895   | 298,895   | 298,895   | 298,895   | 298,895   |
| 2017 Proposed Well Rehab [4]          | 4.00%         | 0         | 0         | 0         | 4,021     | 8,042     |
| 2017 Proposed Wastewater Loan [5]     | 2.00%         | 0         | 0         | 57,078    | 57,078    | 57,078    |
| 2017 Proposed Loan for New Well [6]   | 4.00%         | 0         | 0         | 0         | 31,109    | 62,218    |
|                                       |               | 388,734   | 388,734   | 445,812   | 480,942   | 516,072   |

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[1] Water Rights acquisition, improvements to water system, development of well #10, well improvements, purchase of additional water rights

[2] Acquisition and construction of a water well and other projects, purchase of administrative facility

[3] Acquisition of water rights

[4] Financing for \$110,000 well rehab project (4% 20 year debt)

[5] \$515,000 Loan from Wastewater (2% 10 year debt)

[6] Financing for \$851,000 New Well ( 4% 20 year debt)

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**Table 6: Other Revenue Projection**Helendale Community Services District  
Water Rate Study

|                             | Budget        | Projected     |               |               |               |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|
|                             | FY2016/17     | FY 2017/18    | FY 2018/19    | FY 2019/20    | FY 2020/21    |
| Meter Installation          | 500           | 0             | 0             | 0             | 0             |
| Connection Fees             | 0             | 0             | 0             | 0             | 0             |
| Permits & Inspections       | 500           | 500           | 500           | 500           | 500           |
| Sale/Lease of Water Rights  | 0             | 0             | 0             | 0             | 0             |
| Other Services              | 750           | 27,000        | 27,000        | 27,000        | 27,000        |
| Mechanic Service Charges    | 14,500        | 13,910        | 13,910        | 13,910        | 13,910        |
| Other Revenue               | 2,500         | 0             | 0             | 0             | 0             |
| Water Conservation Income   | 4,200         | 4,200         | 4,200         | 4,200         | 4,200         |
| Enernoc Capacity Payment    | 0             | 5,000         | 5,000         | 5,000         | 5,000         |
| Property Tax Assessments[1] | 23,000        | 22,800        | 22,800        | 22,800        | 22,800        |
| Delinquent Penalties & Fees | <u>68,000</u> | <u>43,610</u> | <u>43,610</u> | <u>43,610</u> | <u>43,610</u> |
|                             | 113,950       | 117,020       | 117,020       | 117,020       | 117,020       |

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[1] Standby Fees

**Table 7: Operating Cash Flow**  
Helendale Community Services District  
Water Rate Study

|                               | Budget           |                    | Projected      |                  |                  |                    |                    |
|-------------------------------|------------------|--------------------|----------------|------------------|------------------|--------------------|--------------------|
|                               | FY2016/17        |                    | FY2017/18      | FY2018/19        | FY2019/20        | FY2020/21          |                    |
|                               |                  | FY2017/18 Increase |                |                  |                  |                    |                    |
| <b>Fixed Charges</b>          |                  | <b>1-Jul</b>       | <b>1-Jan</b>   |                  |                  |                    |                    |
| SFR Typical Bill [2]          | \$38.78          | \$44.75            | \$49.75        | \$53.37          | \$57.36          | \$59.55            |                    |
| % increase                    |                  | 15%                | 11%            | 7%               | 7%               | 4%                 |                    |
| 1" Meter Fixed Charge         | \$26.25          | \$31.25            | \$36.25        | \$39.87          | \$43.86          | \$46.05            |                    |
| % increase                    |                  | 19%                | 16%            | 10%              | 10%              | 5%                 |                    |
| <b>Volumetric</b>             |                  |                    |                |                  |                  |                    |                    |
| Uniform Rate (2018 onwards)   | -                |                    |                | \$1.50           |                  |                    |                    |
| T1 (0-7 HCF) \$/HCF           | 0.85             |                    |                |                  |                  |                    |                    |
| T2 (7-40 HCF) \$/HCF          | 0.94             |                    |                |                  |                  |                    |                    |
| T3 (40+ HCF) \$/HCF           | 1.05             |                    |                |                  |                  |                    |                    |
| <b>Beginning Balance [3]</b>  | <b>\$0</b>       |                    |                | <b>\$0</b>       | <b>\$568,816</b> | <b>\$998,233</b>   | <b>\$1,436,237</b> |
| <b>Operating Revenue</b>      |                  |                    |                |                  |                  |                    |                    |
| Fixed                         | 922,548          | <b>543,563</b>     | <b>630,533</b> | 1,174,095        | 1,387,172        | 1,525,889          | 1,602,183          |
| Volumetric                    | 516,382          |                    |                | 791,891          | 791,891          | 791,891            | 791,891            |
| Other Operating Revenue       | <u>113,950</u>   |                    |                | <u>117,020</u>   | <u>117,020</u>   | <u>117,020</u>     | <u>117,020</u>     |
| Total Operating Revenue       | 1,552,880        |                    |                | 2,083,006        | 2,296,083        | 2,434,800          | 2,511,094          |
| <b>Non-Operating Revenue</b>  |                  |                    |                |                  |                  |                    |                    |
| Proposed Loan Proceeds        | 0                |                    |                | 515,000          | 851,000          | 110,000            | 0                  |
| Other Non Operating Revenues  | <u>0</u>         |                    |                | <u>0</u>         | <u>0</u>         | <u>0</u>           | <u>0</u>           |
| Total Non-Operating Revenue   | 0                |                    |                | 515,000          | 851,000          | 110,000            | 0                  |
| <b>Total Revenue</b>          | <b>1,552,880</b> |                    |                | <b>2,598,006</b> | <b>3,147,083</b> | <b>2,544,800</b>   | <b>2,511,094</b>   |
| <b>Operating Expenditures</b> |                  |                    |                |                  |                  |                    |                    |
| Salaries and Fringe Benefits  | 453,331          |                    |                | 470,053          | 484,155          | 498,679            | 513,640            |
| Administrative Charges        | 337,300          |                    |                | 307,784          | 310,862          | 313,970            | 317,110            |
| Maintenance and Operations    | <u>407,100</u>   |                    |                | <u>347,619</u>   | <u>358,760</u>   | <u>368,204</u>     | <u>379,962</u>     |
| Total Operating Expenses      | 1,197,731        |                    |                | 1,125,456        | 1,153,776        | 1,180,854          | 1,210,712          |
| <b>Capital Projects</b>       |                  |                    |                |                  |                  |                    |                    |
| Pay-As-You-Go                 | 0                |                    |                | 0                | 210,000          | 335,000            | 0                  |
| Loan Funded Projects          | 0                |                    |                | 515,000          | 851,000          | 110,000            | 0                  |
| Equipment Reserve Fund        | <u>0</u>         |                    |                | <u>0</u>         | <u>0</u>         | <u>0</u>           | <u>0</u>           |
| Total Capital Projects        | 0                |                    |                | 515,000          | 1,061,000        | 445,000            | 0                  |
| <b>Debt Service</b>           |                  |                    |                |                  |                  |                    |                    |
| Current                       | 388,734          |                    |                | 388,734          | 445,812          | 388,734            | 388,734            |
| Proposed Loan                 | <u>0</u>         |                    |                | <u>0</u>         | <u>57,078</u>    | <u>92,208</u>      | <u>127,338</u>     |
| Total Debt Service            | 388,734          |                    |                | 388,734          | 502,890          | 480,942            | 516,072            |
| <b>Total Expenditure</b>      | <b>1,586,465</b> |                    |                | <b>2,029,190</b> | <b>2,717,666</b> | <b>2,106,796</b>   | <b>1,726,784</b>   |
| Net                           | (33,585)         |                    |                | 568,816          | 429,417          | 438,004            | 784,310            |
| <b>Ending Balance</b>         | <b>\$0</b>       |                    |                | <b>\$568,816</b> | <b>\$998,233</b> | <b>\$1,436,237</b> | <b>\$2,220,547</b> |
| Minimum Reserve Target [4]    | 987,600          |                    |                | 951,462          | 1,079,778        | 1,071,369          | 1,121,428          |
| Minimum Reserve Met           | No               |                    |                | No               | No               | Yes                | Yes                |
| Debt Service Coverage [5]     | 0.91             |                    |                | 2.46             | 2.27             | 2.61               | 2.52               |

[1] SFR fixed charge rate increases, Volumetric increases differ due to change in tier structure

[2] 1" meter and 14 ccf of monthly water use

[3] Balance as of June 30, 2016

[4] 50% of operating expenses plus one year of debt service

[5] Net operating revenue divided by Annual Debt Service. 1.25x minimum

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**Table 8: Meter Equivalents**

Helendale Community Services District  
Water Rate Study

| Meter Size                                  | Number of Meters | Ratio [1] | Equivalent   |
|---|------------------|-----------|--------------|
| 1" and Below                                | 2,782            | 1.0       | 2,782        |
| 2" Meter                                    | 35               | 2.1       | 74           |
| 3" Meter                                    | 3                | 7.9       | 24           |
| 4" Meter                                    | 1                | 10.0      | 10           |
| SL RV                                       | 1                | 10.0      | 10           |
| 6" Meter                                    | 0                | 15.0      | 0            |
| <b>Total 1" meter and below equivalents</b> |                  |           | <b>2,899</b> |

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[1] Source: AWWA Manual M22, 2nd Edition, 2004, page 67

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**Table 9a: Fixed Rate Projection**Helendale Community Services District  
Water Rate Study

|                                  |                 | 1-Jul           | 1-Jan           | Annual Growth Rate |                 |                 |
|----------------------------------|-----------------|-----------------|-----------------|--------------------|-----------------|-----------------|
|                                  | FY2016/17       | FY2017/18       | FY2017/18       | FY2018/19          | FY2019/20       | FY2020/21       |
| Percentage Rate Increase         |                 |                 |                 | 10%                | 10%             | 5%              |
| Annual Fixed Charge Revenue (\$) | 922,548         | 543,563         | 630,533         | 1,387,172          | 1,525,889       | 1,602,183       |
| Meter Equivalents                |                 | 2,899           | 2,899           | 2,899              | 2,899           | 2,899           |
| Meter Equivalent Fixed Charge    | \$26.25         | \$31.25         | \$36.25         | \$39.87            | \$43.86         | \$46.05         |
| <b>1" and Below Fixed Rate</b>   |                 |                 |                 |                    |                 |                 |
| 1" Equivalentent                 |                 | \$31.25         | \$36.25         | \$39.87            | \$43.86         | \$46.05         |
| 1" and Below Fixed Rate          | <b>\$26.25</b>  | <b>\$31.25</b>  | <b>\$36.25</b>  | <b>\$39.87</b>     | <b>\$43.86</b>  | <b>\$46.05</b>  |
| <b>2" Fixed Rate</b>             |                 |                 |                 |                    |                 |                 |
| 2" Equivalentent                 |                 | \$65.63         | \$76.13         | \$83.73            | \$92.10         | \$96.71         |
| 2" Fixed Rate                    | <b>\$82.07</b>  | <b>\$82.07</b>  | <b>\$82.07</b>  | <b>\$83.73</b>     | <b>\$92.10</b>  | <b>\$96.71</b>  |
| <b>3" Fixed Rate</b>             |                 |                 |                 |                    |                 |                 |
| 3" Equivalentent                 |                 | \$246.88        | \$286.38        | \$314.99           | \$346.49        | \$363.81        |
| 3" Fixed Rate                    | <b>\$154.43</b> | <b>\$246.88</b> | <b>\$286.38</b> | <b>\$314.99</b>    | <b>\$346.49</b> | <b>\$363.81</b> |
| <b>4" Fixed Rate</b>             |                 |                 |                 |                    |                 |                 |
| 4" Equivalentent                 |                 | \$312.50        | \$362.50        | \$398.72           | \$438.59        | \$460.52        |
| 4" Fixed Rate                    | <b>\$257.90</b> | <b>\$312.50</b> | <b>\$362.50</b> | <b>\$398.72</b>    | <b>\$438.59</b> | <b>\$460.52</b> |
| <b>SL RV Fixed Rate</b>          |                 |                 |                 |                    |                 |                 |
| SL RV Equivalentent              |                 | \$312.50        | \$362.50        | \$398.72           | \$438.59        | \$460.52        |
| SL RV Fixed Rate                 | <b>\$257.90</b> | <b>\$312.50</b> | <b>\$362.50</b> | <b>\$398.72</b>    | <b>\$438.59</b> | <b>\$460.52</b> |
| <b>6" Fixed Rate</b>             |                 |                 |                 |                    |                 |                 |
| 6" Equivalentent                 |                 | \$468.75        | \$543.75        | \$598.08           | \$657.89        | \$690.79        |
| 6" Fixed Rate                    | <b>\$393.80</b> | <b>\$468.75</b> | <b>\$543.75</b> | <b>\$598.08</b>    | <b>\$657.89</b> | <b>\$690.79</b> |

**Table 10: Volumetric Rate Projection**  
 Helendale Community Services District  
 Water Rate Study

|                       |       |
|-----------------------|-------|
| Annual Growth Rate[1] | 0.00% |
|-----------------------|-------|

|                             | FY2016/17 | FY2017/18     | FY2018/19     | FY2019/20     | FY2020/21     |
|-----------------------------|-----------|---------------|---------------|---------------|---------------|
| Volumetric Revenue (\$)     | \$516,382 | \$791,891     | \$791,891     | \$791,891     | \$791,891     |
| Projected Consumption (hcf) |           | 527,927       | 527,927       | 527,927       | 527,927       |
| Rate (\$ / hcf)             |           | <b>\$1.50</b> | <b>\$1.50</b> | <b>\$1.50</b> | <b>\$1.50</b> |

[1] Growth rate of consumption based on 95% of 2015 consumption levels.