Background:
In July and August 2014, researchers from Utah State University and the University of Utah conducted a survey about water issues with residents in one neighborhood in West Valley City (see map below). We received responses from 60% of the households selected to participate (103 total respondents).

Characteristics of survey respondents were similar to the neighborhood and city as a whole based on Census information, though adults responding to the survey underrepresented those in the 18-35 age group and households with income less over $75,000, and over-represented those over age 65.

Household Water & Lawns
People know how much they spend, but not how much they use
- Over three-fourths of respondents (81%) reported a high degree of familiarity with how much they spend on water each month, but fewer (40%) were familiar with the volume of water they use.

Lawns mainly watered by household residents
- West Valley City respondents overwhelmingly indicated that they water their own lawns (97%).

Few water during the day
- Most residents (93%) reported watering their lawn mainly in the morning, evening, or at night.
- West Valley City respondents watered their lawns an average of 3.5 times per week in July.

Weather plays a key factor in watering decisions...
- Nearly all of households (88%) said they try to adjust their lawn watering to the weather.

...but property value, time, and conservation are also considerations.
- The second most important consideration was conserving the amount of water used (listed by 80% of respondents).
- Most indicated they water to try to maintain property value (66%) and prevent brown spots (62%).
- Majorities said keeping a regular schedule (61%) and minimizing time spent watering (64%) were important considerations.

Map of West Valley City Study Neighborhood

Dr. Douglas Jackson-Smith, Dr. Courtney Flint, Andrea Armstrong and Taya Carothers, Utah State University.
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Water Conservation

Many residents think that they can do more to conserve water...

- Half of West Valley City respondents felt they could do more to reduce their indoor water use (50%). Slightly fewer (42%) thought they could reduce outdoor water use.

...but only a small percentage report have actually decreased their water use

- A small minority of West Valley City respondents reported that they decreased either indoor (23%) or outdoor (16%) water use over the last five years.

People were most willing to conserve water if it:

- Reduces their water bills (77%),
- Ensures future supply for their home (77%), and
- Improves fish & wildlife habitat (64%).

People were least willing to conserve if savings are used to increase development in this area. (33%).

Water Quality

Local water quality is generally seen as good.

- Over two-thirds of West Valley City respondents (70%) rated their drinking water quality as “good” or “very good”. Only 12% see it as “bad.”
- By contrast 37% rated water in rivers and lakes upstream as good/very good, with 13% rating it as bad.
- A minority of respondents (13%) indicated nearby irrigation canal or ditch water was of good quality, compared to 25% who felt downstream waters in rivers and lakes were good quality.
- Many were ambivalent; 27-43% of respondents rated different types of water as neither good nor bad.

<table>
<thead>
<tr>
<th></th>
<th>Very Bad</th>
<th>Bad</th>
<th>Neither Good Nor Bad</th>
<th>Good</th>
<th>Very Good</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservoirs or lakes downstream</td>
<td>4%</td>
<td>11%</td>
<td>35%</td>
<td>16%</td>
<td>9%</td>
<td>25%</td>
</tr>
<tr>
<td>Streams or rivers downstream</td>
<td>4%</td>
<td>14%</td>
<td>32%</td>
<td>17%</td>
<td>7%</td>
<td>25%</td>
</tr>
<tr>
<td>Rivers and lakes upstream</td>
<td>4%</td>
<td>9%</td>
<td>27%</td>
<td>24%</td>
<td>13%</td>
<td>23%</td>
</tr>
<tr>
<td>Groundwater beneath my neighborhood</td>
<td>4%</td>
<td>7%</td>
<td>43%</td>
<td>8%</td>
<td>3%</td>
<td>34%</td>
</tr>
<tr>
<td>Nearby irrigation canals and ditches</td>
<td>12%</td>
<td>26%</td>
<td>35%</td>
<td>8%</td>
<td>5%</td>
<td>13%</td>
</tr>
<tr>
<td>Streams and creeks in neighborhood</td>
<td>5%</td>
<td>14%</td>
<td>41%</td>
<td>12%</td>
<td>6%</td>
<td>21%</td>
</tr>
<tr>
<td>My current drinking water supply</td>
<td>4%</td>
<td>11%</td>
<td>11%</td>
<td>28%</td>
<td>42%</td>
<td>5%</td>
</tr>
</tbody>
</table>
Concerns about Water and Other Issues

Respondents believed current water supplies are more adequate than future water supplies

- Just over a third of West Valley City respondents (34%) thought there was enough water to meet current needs in the city; 19% disagreed.
- Only 14% were confident in West Valley City’s future supply, and 39% of respondents were concerned about the city’s future water supply.

Farm water use was not a big concern.

- While 49% of respondents believed that residential lawns use too much water,
- Only 12% felt that agriculture was currently using too much water.

Water related issues take a back seat to growth concerns, except for cost.

- The top concern of respondents in West Valley City was the high cost of water (listed by 84%).
- Traffic congestion (83%), air pollution (81%), population growth (73%), and loss of open space (72%), were the next four issues of greatest concern to respondents.
- Among the other water issues, over half were concerned about water shortages (69%), water quality (66%), and deteriorating infrastructure (62%).
- By far the lowest level of concern was expressed about flooding (32%).

How Should West Valley City Respond to Short-Term Shortages?

Voluntary approaches most popular

- West Valley City respondents indicated a very high level of support for educational efforts (89%) and voluntary water restrictions (82%).

Majority support mandatory limits

- Most respondents supported watering restrictions in parks, golf courses, and public properties (69%) and mandatory restrictions on watering lawns (58%)
Support for Long Term Water Policy in West Valley City

Most supported having development pay for itself or expanding supply

- Two policies: Limiting future housing development unless water supplies are secured, and Development of a system to reuse treated wastewater were supported by 65% of respondents.
- Over 60% supported building new water storage facilities.

Many supported storm-water management

- Over half supported local funding to build structures to reduce storm-water runoff (51%) and 39% supported increasing budgets for city stormwater management.

There was mixed support for incentivizing conservation

- Just under half supported encouraging housing development that uses less water (43%), subsidizing purchases of water efficient irrigation systems or appliances (40%), charging more per gallon for large water users (40%), and implementing ordinances to require low water landscaping (39%).
- Significant numbers (19%-33%) of respondents opposed these policies.
- There is little support to buy water rights from farms for city use (19%).

Residents said state should ensure supply while protecting water quality and agriculture

- Nearly all supported state goals to ensure a supply of drinking water (97%) protect water quality (96%), and ensure water supplies for agriculture (81%).
- There was moderate support for state goals to protect wetlands and wildlife habitat (73%), save taxpayer money (71%), and ensure the supply of water for economic development (50%).

There was support for wide range of state policies

- The highest support was for the use of state funds to replace aging city water infrastructure (72%) or build new reservoirs or storage (60%). There was significant support also for state policies to set minimum standards for new residential construction to reduce water use (57%), establish minimum stream flows to protect fish habitat (55%), and invest in research on conservation (54%).
- Fewer supported transfers of water from farms to urban users (31%).

If you would like more information about the survey results, full reports are posted on our website:
www.iutahepscor.org/hhsurvey