Utah's Water Future

Local Perspectives on Water Issues In the Salt Lake City & Beyond

Summary Report of the 2014 Household Survey Findings

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Overview

In the summer of 2014, researchers from Utah State University, the University of Utah and the iUTAH Project (innovative Urban Transitions and Aridregion Hydro-sustainability) undertook a large survey of households on water issues across 23 neighborhoods in Cache Valley, Salt Lake Valley, and Heber Valley. Our goal was to assess household water use and resident perspectives on water issues within their city, valley, and state.

We used a "Drop-off/Pick-up" method where 16-page surveys were dropped off with willing, eligible participants at randomly selected households in the study neighborhoods and picked up from their front door within a day or two. When we were unable to reach residents at their door, surveys were sent by mail. Participants had the option to request results, and those reports will be sent in summer 2015.

The following topics that were included in the survey are presented in this report:

I. Household Water Uses & Perspectives
- A. Familiarity with Water Use
- B. Lawn and Outdoor Watering
- C. Use of Water Conservation Practices
- D. Motivations to Conserve
- E. Secondary Water Systems

II. Water Perspectives & Experiences
- A. Perceptions of Water Supply
- B. Risk Perceptions
- C. Perceptions about Water Use and Water Quality
- D. Experience with Flooding
- E. Climate Change Perspectives

III. Water Policy & Management Perspectives
- A. Support for Local Water Management Strategies and Policies
- B. Support for State Water Strategies

IV. Additional Information
- A. Water Information Sources
- B. Satisfaction with Neighborhood and Community

This report highlights findings from the survey data for **six neighborhoods in Salt Lake City, Utah.** For comparison, we also include results from neighborhoods in other parts of the Salt Lake Valley and the Cache and Heber Valleys[1]. Additional reports from the study can be found at www.iutahepsecor.org/hhsurvey.

[1] More detailed information is available upon request from the project coordinator, Dr. Douglas Jackson-Smith who can be reached at (435) 797-0582 or doug.jackson-smith@usu.edu.

METHODS

In the Salt Lake Valley, the survey was conducted between June and early August 2014.

Sampling

We randomly sampled 180 households in each of six neighborhoods located in Salt Lake City. The selected neighborhoods were defined using census block group (CBG) boundaries, a geographic area used by the U.S. Census Bureau to organize collection of population and housing data as part of recurring decadal national census efforts. The boundaries of CBGs usually follow logical physical and political boundaries within urban landscapes, and often (but not always) reflect socially-identifiable neighborhoods.

The six neighborhoods were selected to represent a diversity of land use, land cover, housing mix, and demographic attributes that reflect different areas of Salt Lake City. These neighborhoods included two east side neighborhoods (Yalecrest and 9th and 9th), two downtown areas with residents living among commercial and industrial land uses (People's Freeway and Liberty Wells), and two west side neighborhoods (West High and Poplar Grove). See the map on next page for location of our selected study neighborhoods.

Response Rates

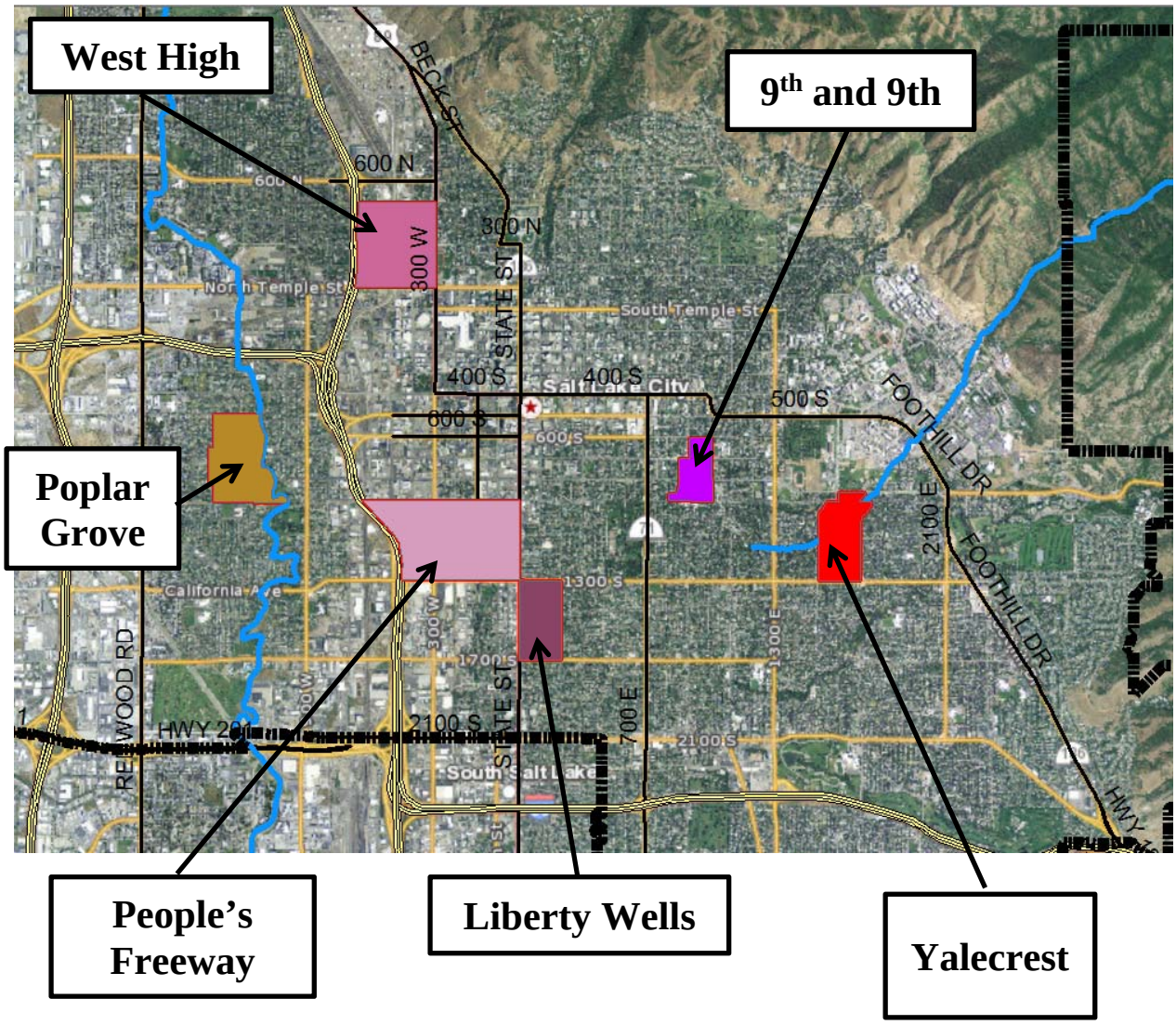
After accounting for vacant homes, our final response rates[2] were:

- 9th and 9th = 51% (85 respondents)
- West High = 58% (95 respondents)
- People's Freeway = 33% (53 respondents)
- Liberty Wells = 45% (73 respondents)
- Poplar Grove = 59% (111 respondents)
- Yalecrest = 67% (116 respondents)

The response rates varied by neighborhood – with the two downtown neighborhoods having the fewest respondents, and the Yalecrest area having a much higher response rate. Samples of this size can estimate the characteristics of the neighborhood residents with an accuracy of within +/- 8.1 to 12.8%, with the greatest accuracy in places with the highest response rate.

[2] Across the entire three-county study area, we received 2,413 useable surveys, with an overall response rate of 62%. Response rates exclude randomly selected parcels that were determined to be vacant (7-11% of addresses we tried to contact across these neighborhoods).

Map of Study Neighborhoods in Salt Lake City



Who Did We Hear From in the Salt Lake City neighborhoods?

The characteristics of the respondents from the six Salt Lake City neighborhoods that were included in the survey are summarized in Table 1 below.

As was true in most of our other study areas, respondents from the six Salt Lake City were predominantly non-Hispanic whites and most owned their home. Three neighborhoods had at least a third of respondents who were Hispanic or non-white. Only the two east side neighborhoods had more than 80 percent nonwhite Hispanic respondents.

Unlike most of our other study areas in the Salt Lake, Cache, and Heber Valley, a relatively small minority of Salt Lake City respondents reported being members of the Church of Jesus Christ and Latter Day Saints (LDS) faith.

The income levels of survey respondents was much higher in the Yalecrest neighborhood than any of the other Salt Lake City neighborhoods (with nearly 80% of respondents reporting over $75,000 in household income per year). On the other hand, a majority of respondents in one neighborhood (People's Freeway) reported household incomes below $25,000). Respondents of Poplar Grove had the fewest households in the top income category, but relatively average proportions in the lowest income group (suggesting a predominance of moderate-income households). Meanwhile, respondent education levels were highest in the Yalecrest and 9th and 9th neighborhoods (where 63-84% of respondents had a 4-year college degree), and lowest among respondents in the Poplar Grove and People's Freeway neighborhoods.

Roughly 90% of Yalecrest respondents owned their homes, compared to 20% and 35% in People's Freeway and the 9th and 9th neighborhoods. Homeownership was also high (83%) in Poplar Grove. Between 15-25% respondents belong to homeowner or condominium owner associations (HOA or COAs) in the People's Freeway, 9th and 9th, and West High Neighborhoods. This number is considerably lower for the other three neighborhoods.

Respondents in our Poplar Grove neighborhood were most likely to have children under 18 living at home (43%), and they also had the largest average household size with 3.2 persons per household. By contrast, only 18% of respondents in the 9th and 9th neighborhood had children living in their home.

A minority of respondents in Liberty Wells and Yalecrest reported being Utah Natives, and smaller proportions (30-36%) were originally from the Salt Lake Valley. Respondents in two neighborhoods (Poplar Grove and Yalecrest) were relatively stable, with over 70% living in their current home for more than 5 years. However, there is significant turnover in the other four SLC neighborhoods, with 80% and 74% of respondents living in their home less than 5 years in 9th and 9th and People's Freeway.

The average age of respondents varied by neighborhood – with the youngest respondents in 9th and 9th and the oldest respondents in Poplar Grove and Yalecrest.

Table 1. Characteristics of Salt Lake City Survey Respondents

	SALT LAKE CITY NEIGHBORHOODS						*Comparison Areas*		
Characteristic of Respondent	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
					Percent of Respondents				
Female	**51**	**50**	**53**	**50**	**50**	***50***	*50*	*55*	*58*
Non-Hispanic White	**84**	**66**	**66**	**73**	**61**	**96**	*85*	*87*	*93*
LDS Religion	**13**	**24**	**24**	**23**	**39**	**27**	*50*	*66*	*57*
Has 4-year college degree	**63**	**55**	**31**	**48**	**31**	**84**	*41*	*50*	*48*
Has household income >$75,000	**27**	**22**	**12**	**19**	**8**	**79**	*50*	*29*	*42*
Has household income <$25,000	**21**	**25**	**57**	**27**	**27**	**3**	*8*	*20*	*11*
Rents their home	**65**	**45**	**80**	**45**	**17**	**10**	*12*	*29*	*21*
Is a member of HOA or COA	**15**	**18**	**25**	**5**	**9**	**3**	*16*	*22*	*30*
Is a seasonal resident	**4**	**1**	**2**	**6**	**2**	**0**	*2*	*2*	*6*
Has children under 18 in home	**18**	**34**	**31**	**31**	**43**	**39**	*53*	*48*	*53*
Has lived in this home < 5 years	**74**	**61**	**80**	**65**	**28**	**30**	*33*	*50*	*48*
Is originally from this valley	**39**	**42**	**44**	**30**	**42**	**36**	*51*	*32*	*22*
Is originally from Utah	**53**	**52**	**52**	**39**	**60**	**48**	*64*	*56*	*55*
Grew up in rural place or farm	**29**	**32**	**34**	**38**	**48**	**26**	*34*	*56*	*57*
					Average for Respondents				
Age of respondent	**36**	**45**	**43**	**45**	**52**	**54**	*49*	*47*	*51*
Number of people living in household	**2.2**	**2.5**	**2.0**	**2.7**	**3.2**	**2.7**	*3.5*	*3.2*	*3.4*

Representativeness of Respondents

Because the six Salt Lake City neighborhoods were defined using boundaries of census block groups (CBGs), we can use official estimates from the U.S. Census to assess how representative our sample is of the actual population (Table 2).

Taken as a whole, the profile of our survey respondents demonstrates that our sample captured differences across most measures that parallel the things that make each neighborhood distinctive in the census data. The average size of households, proportion of high- and low-income households, and racial or ethnic composition were reasonably close to the estimated population characteristics in each of the six neighborhoods.

In general, however, adults within sampled households who completed the survey tended to be older, slightly more likely to be female, and have higher levels of formal education than the background adult population in each neighborhood. Younger adults were notably underrepresented in all six neighborhoods, partly because the adult with most responsibility for making water management decisions was encouraged to complete the survey. Households with incomes over $75,000 are over -represented in five neighborhoods, but underrepresented in Poplar Grove. Households with incomes below $25,000 were over represented in 9th and 9th and West High, but under-represented in the other four neighborhoods. In each neighborhood people who rent their homes are slightly under-represented in the sample, but this is most notable in Liberty Wells, Poplar Grove and West High.

Table 2: Characteristics of 2014 Salt Lake City Neighborhood Respondents Compared with the 2010 Census and the American Community Survey (2008-2012)

	Neighborhood Respondents / Census Block Groups / Cities												
	9th and 9th		**West High**		**People's Freeway**		**Liberty Wells**		**Poplar Grove**		**Yalecrest**		
	Survey Respondents	Census CBG*	Survey Respondents	Census CBG*	Survey Respondents	Census CBG*	Survey Respondents	Census CBG*	Survey Respondents	Census CBG*	Survey Respondents	Census CBG*	Census - SALT LAKE CITY**
	percent of adults or households												
Percent 18-35	**68**	**63**	**37**	**44**	**47**	**45**	**39**	**47**	**19**	**42**	**9**	**29**	*45*
Percent over 65	**22**	**3**	**15**	**7**	**12**	**5**	**20**	**7**	**27**	**10**	**24**	**12**	*12*
Female Adults	**51**	**43**	**50**	**48**	**53**	**41**	**50**	**46**	**50**	**48**	**50**	**52**	*49*
Non-Hispanic White Adults	**84**	**82**	**66**	**55**	**66**	**61**	**73**	**60**	**61**	**37**	**96**	**94**	*71*
Adults w/ College Degree	**63**	**30**	**55**	**30**	**31**	**18**	**48**	**35**	**31**	**19**	**84**	**70**	*36*
Households with Income >$75,000	**27**	**12**	**22**	**20**	**12**	**7**	**19**	**17**	**8**	**24**	**79**	**65**	*29*
Households with Income < $25,000	**21**	**15**	**25**	**18**	**57**	**60**	**27**	**38**	**27**	**28**	**3**	**12**	*28*
Households that Rent their Home	**65**	**70**	**45**	**56**	**80**	**86**	**45**	**63**	**17**	**32**	**10**	**20**	*50*
Mean Household Size (#)	**2.2**	**1.9**	**2.5**	**2.7**	**2.0**	**2.0**	**2.7**	**2.4**	**3.2**	**3.6**	**2.7**	**2.8**	*2.4*

* = Reflects estimate for same geographic area from which survey sample was drawn.

** = Reflects city-wide totals (larger than study neighborhoods)

RESULTS

I. Household Water Uses & Perspectives

The survey included questions about how households currently use water, and their perspectives about a range of water issues.

A. Familiarity with Water Use

The survey asked how 'familiar' respondents are with the amount of water they use and the cost of their water bill each month. In general, respondents were more familiar with how much they *spend* on water each month, than with the volume of water they *use* (Table 3).

Respondents in Poplar Grove and Yalecrest were the most familiar with both cost and volume. Those in People's Freeway and 9th and 9th had less familiarity with how much they spend on water, most likely because they are more likely to rent or live in a condominium or other multi-family housing structure where landlords or housing associations may be primarily responsible for paying the water bills. Respondents in 9th and 9th and West High neighborhoods were least familiar with how much water they use each month, with 23% of respondents familiar or very familiar.

Aside from Poplar Grove and Yalecrest, the other four SLC neighborhoods were notably less familiar with the cost and amount of water they used than respondents in our other study neighborhoods including those in the other parts of the Salt Lake Valley and the Cache and Heber Valleys.

Table 3: Familiarity with water use and cost by neighborhood.

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
	9th and 9th	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Rest of Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent of respondents familiar or very familiar								
Respondent familiar with amount of water their household uses	**22**	**23**	**28**	**28**	**48**	**38**	*33*	*26*	*30*
Respondent familiar with how much household spends on water each month	**39**	**40**	**33**	**52**	**78**	**72**	*75*	*59*	*67*

B. Lawn & Outdoor Watering

Nearly all (96%) of Yalecrest respondents say they have a lawn on their property, compared to 86% of West High and Poplar Grove respondents, and 79% in Liberty Wells. A notably smaller fraction (68% and 74%) of respondents in People's Freeway and 9th and 9th neighborhoods reported having a lawn on the property where they live.

The survey asked people with lawns to indicate who is responsible for watering the lawn on their property. Results are shown in Table 4. Over 90% of respondents in Yalecrest and 83% in Poplar Grove water their own lawns. This drops to 35% in People's Freeway where landlords appear to make most lawn watering decisions. Landlords also water over a third of lawns in the 9th and 9th neighborhood. Homeowner or condominium associations water 7-8% of lawns in West High and People's Freeway. A sizeable group (11-13%) in 9th and 9th, West High, and Poplar Grove report that they do not water their lawn at all in the summer.

Table 4: Responsibility for Lawn Watering

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
Who is responsible for watering the lawn?	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent of Respondents								
Lawn is Not Watered	**11**	**13**	**3**	**6**	**11**	**0**	*1*	*3*	*1*
Household	**51**	**63**	**35**	**69**	**83**	**98**	*94*	*83*	*84*
Landlord	**34**	**15**	**55**	**22**	**3**	**0**	*1*	*8*	*2*
Homeowner or Condo Association or other entity	**3**	**8**	**7**	**4**	**3**	**2**	*4*	*5*	*13*

Lawn Watering Practices

To get a sense of the rules of thumb used by respondents who water their own lawns, we asked them to think about a typical July week. On average, people reported watering their lawns 3-4 days per week. Lawn watering was most frequent in People's Freeway (3.8 times a week) and least frequent in Liberty Wells and Poplar Grove (2.9 times).

Salt Lake City respondents were also asked what time of day they typically water their lawns. Responses suggest between 96-100% of respondents in the six study neighborhoods report they usually water their lawns in the morning, evening, or at night.

The proportion of households with underground sprinklers was highest in Yalecrest (88% of households), and underground systems were also used in a majority of households in Liberty Wells, West High, and 9th and 9th neighborhoods (Table 5). By contrast, less than a third of households who water their own lawn in People's Freeway and Poplar Grove had underground sprinkler systems.

Automatic timers for sprinklers were used by over 80% of Yalecrest respondents, 63% of those in 9th and 9th, and 53% in West High. Again, the lowest use of automatic timers was in People's Freeway (30%) and Poplar Grove (25%).

Table 5: Irrigation Systems Used to Water Lawns

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
	9th and 9th	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent of Households Watering Own Lawn								
Uses underground sprinkler system to water lawn	**64**	**56**	*	**54**	**32**	**88**	*83*	*74*	*66*
Has automatic timer for lawn watering	**63**	**53**	*	**49**	**25**	**83**	*80*	*68*	*67*

** = too few observations to make a reliable estimate.*

Lawn Watering Considerations

To get a better feel for the factors that influence when and how much respondents water their lawns, we asked respondents to indicate how important each of several common reasons are to their lawn watering decisions. The results, shown in Table 6 below, suggest that the most common reason considered by most (78-94%) households was to vary their lawn watering behaviors based on weather. Conversely, relatively small proportions (23-37% said their decisions were influenced by perceptions of what neighbors might want.

Water conservation was a particularly important consideration among respondents in the West High, Liberty Wells, and Yalecrest neighborhoods, and least important to respondents in the 9th and 9th area.

Logistical considerations were also important to many respondents. Over 60% of respondents in West High and Liberty Wells say they prefer to keep a regular watering schedule, while 73% in West High, and 61% in Poplar Grove sought to minimize time they spent watering. Both kinds of logistical considerations were least likely to be reported by respondents in the 9th and 9th neighborhood. Aesthetic considerations (avoiding brown spots) were most frequently reported by respondents in Poplar Grove and Yalecrest, while those in 9th and 9th and West High were most likely to be concerned about watering in a manner that maintained their property value.

Table 6: Factors that Shape Lawn Watering Decisions

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
How important is each reason to your decisions about when and how much to water your lawn?	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent indicating important (4 or 5)								
Varying based on weather	**83**	**82**	*	**94**	**78**	**90**	*90*	*86*	*86*
Conserve amount of water used	**64**	**82**	*	**82**	**70**	**81**	*69*	*68*	*72*
Keep regular water schedule	**43**	**60**	*	**68**	**55**	**51**	*67*	*61*	*63*
Minimize time spent watering	**55**	**73**	*	**52**	**61**	**57**	*60*	*57*	*56*
Prevent brown spots on lawn	**43**	**47**	*	**43**	**55**	**58**	*63*	*73*	*65*
Maintain property value	**67**	**63**	*	**51**	**59**	**58**	*60*	*71*	*69*
Keep neighbors happy	**37**	**23**	*	**24**	**27**	**28**	*33*	*32*	*33*

** = too few observations to make a reliable estimate.*

C. Use of Water Conservation Practices

Indoor Water Use

Several questions in the survey explored the use of practices that are designed to reduce water consumption (Table 7). Respondents were asked how often people in their household do each of five types of conservation behaviors. An 'indoor conservation index' score was computed for each household. Interestingly, the scores on this index do not vary much across neighborhoods (or across the three valleys in the study), though respondents in the 9th and 9th neighborhood reported slightly more, and Poplar Grove slightly fewer indoor conservation behaviors.

When asked how their household indoor water use has changed over the last 5 years, 27-29% of east side neighborhood respondents (Yalecrest and 9th and 9th) indicated that they had decreased their indoor water consumption, which is higher than typically found elsewhere in our study. Respondents from People's Freeway were least likely (12%) to report a recent decrease in indoor water consumption.

A little over half of respondents from four of these six Salt Lake City neighborhoods indicated a belief they could do more to reduce indoor water use, with the 9th and 9th and Liberty Wells respondents the most likely to see room for improvement, and those in Poplar Grove least likely to see potential for reducing indoor use.

Outdoor water use

A similar set of questions explored the use of selected conservation practices in outdoor irrigation behaviors (Table 7). Specifically, we asked if they used any of three recommended strategies to reduce lawn watering: sprinkler testing, irrigation planning, and installation of more efficient irrigation systems. Over 70% of respondents from Yalecrest and People's Freeway reported use of at least one of these practices; this number drops to 46 percent in Poplar Grove and 51% in the West High neighborhood.

Relatively few households (18-29%) in these neighborhoods reported a decrease in outdoor water use over the last five years, though reductions were notably more likely in the Liberty Wells and the two east-side neighborhoods (9th and 9th and Yalecrest). Forty percent or less of respondents in five Salt Lake City neighborhoods felt they could do more to conserve outdoor water (though 58% of Yalecrest respondents saw potential for gains in outdoor water conservation). It is clear that respondents feel a greater ability to reduce indoor than outdoor water use. Finally, nearly half of respondents in three neighborhoods (9th and 9th, West High, and People' Freeway) believe they use less water than their neighbors.

An illustration of how these Salt Lake City neighborhood respondents compare to those in our other study valleys on beliefs about their ability to reduce indoor and outdoor water use is shown on Figure 1. There is considerable variation within SLC neighborhoods, with about half more likely to see potential for improvements in indoor or outdoor use than in our other study areas.

Table 7: Water Conservation Behaviors and Perceptions

How willing would you be to reduce your own water use if you knew the water you conserved would…	**SALT LAKE CITY NEIGHBORHOODS**						*Comparisons*		
	9th and 9th	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
Use of Conservation Practices									
Mean score on indoor water conservation practice index*	**19**	**18**	**18**	**18**	**17**	**20**	*19*	*18*	*19*
Percent using ANY of three outdoor water conservation practices**	**60**	**51**	**70**	**54**	**46**	**74**	*62*	*54*	*54*
Changes in Water Use last 5 Years									
Percent who decreased household indoor water use	**29**	**19**	**12**	**23**	**20**	**27**	*20*	*21*	*22*
Percent who decreased household outdoor water use	**27**	**18**	**22**	**29**	**20**	**27**	*18*	*17*	*16*
Percent who believe they can do more to conserve water INDOORS	**67**	**50**	**46**	**63**	**43**	**59**	*54*	*55*	*53*
Percent who believe they can do more to conserve water OUTDOORS	**31**	**36**	**22**	**40**	**40**	**58**	*45*	*34*	*31*
Believes they use LESS than average households in neighborhood	**48**	**45**	**48**	**36**	**38**	**39**	*28*	*37*	*35*

** = taking fewer or shorter showers, running dishwasher only when full, turning off water when brushing teeth, buying low water use appliances & fixtures, fixing leaky toilets and faucets (all measured on 5 point scale from never to always, minimum score = 5, maximum = 25)*

*** = Testing sprinklers to gauge amount of water applied; developing a plan to estimate amount of water needed by lawn, installation of a more efficient law watering system*

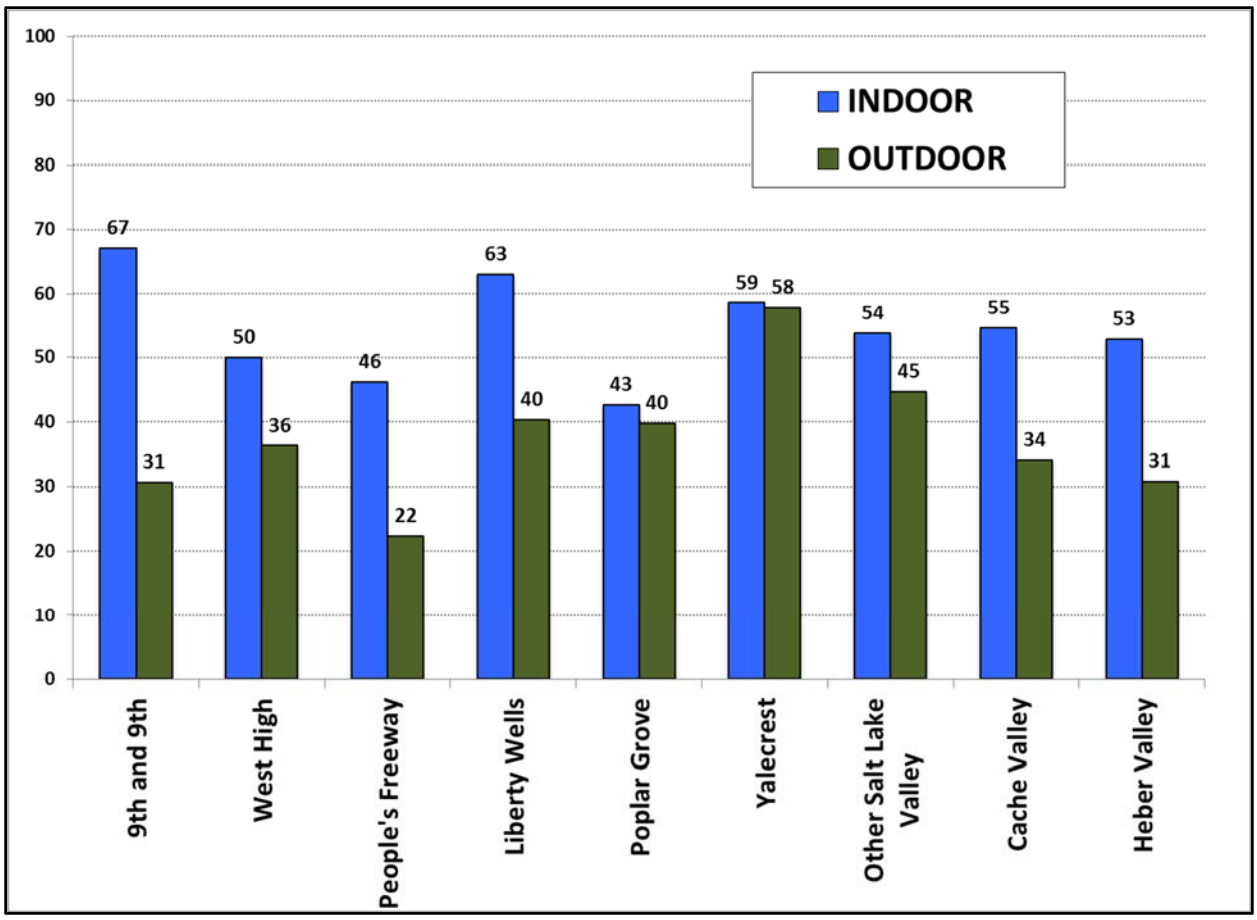


Figure 1: Percent of respondents who believe they can do more to reduce water use.

D. Motivations to Conserve

The households in the study were asked how willing they would be to reduce their water use if they knew the water they conserved would be used for different purposes. The results are shown in Table 8.

Overall, people were most willing to reduce current water use if the savings were used to secure future local water supplies (73-95%). Conversely, people were least willing to conserve if the water they save is used to encourage new development in the area (12-42% in all but one neighborhood).

For most respondents in Salt Lake City neighborhoods (67-81%), conserving water was attractive if they knew it would reduce their water bill. Using conserved water to improve fish and wildlife habitat was also supported by 63-94% - levels that were notably higher than found in our other three study areas. Clear majorities also supported using conserved water to improve urban parks and open space, while smaller proportions would be motivated to conserve to improve outdoor recreation opportunities.

Though all six neighborhoods were quite urban in character, conserving water to ensure a future supply of water for agriculture was also supported by a majority of respondents in everywhere, but particularly in the 9th and 9th and People's Freeway neighborhoods.

In general, respondents in 9th and 9th and People's Freeway were most supportive of conserving water, while those in Poplar Grove were least willing to conserve for any of the seven listed reasons. Yalecrest respondents are notable for having relatively low levels of support for water conservation if it is used for agriculture, outdoor recreation, or increased development.

Table 8: Willingness to Conserve Water Based on How Water Savings are Used.

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
How willing would you be to reduce your own water use if you knew the water you conserved would…	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent indicating willing or very willing to conserve if...								
Ensure future supplies for your home	**95**	**87**	**85**	**86**	**73**	**84**	*77*	*79*	*81*
Improve fish & wildlife habitat	**94**	**79**	**82**	**76**	**63**	**79**	*62*	*64*	*68*
Reduce your water bill	**81**	**77**	**67**	**79**	**71**	**74**	*74*	*73*	*66*
Improve urban parks & open spaces	**90**	**69**	**77**	**75**	**58**	**67**	*55*	*58*	*55*
Ensure future supply for agriculture	**83**	**74**	**80**	**69**	**58**	**56**	*64*	*66*	*65*
Improve opportunities for outdoor rec	**71**	**50**	**67**	**51**	**43**	**35**	*44*	*45*	*51*
Allow increased development in this area	**42**	**41**	**60**	**39**	**42**	**12**	*26*	*27*	*24*

E. Secondary Water Systems

Access to and Use of Secondary Water

Secondary water is non-drinkable water that is usually provided by an irrigation or canal company and is often outside of the control of the city public water utility. Secondary water systems were used for outdoor irrigation by very few respondents in our Salt Lake City study neighborhoods (between 0-3%). By contrast, between 21-53% of respondents have access to a secondary water supply.in the study neighborhoods across the rest of the Salt Lake Valley, and the Cache and Heber Valleys.

Table 9: Use of Secondary Water Systems

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
	9th and 9th	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent of Respondents								
Has Access to Secondary Water	**0**	**2**	**0**	**2**	**0**	**3**	*23*	*21*	*53*

II. Water Perceptions & Experiences

A. Perceptions of Water Supply

Since planning for future water challenges is a major focus for local and state government officials, the survey included a block of questions that asked whether the respondent agreed with a set of statements that 'there is enough water to meet the needs of all people and businesses' in their city, valley and the state as a whole (Table 10).

Overall, the findings suggest that less than half (34-46%) of Salt Lake City respondents were confident about the current sufficiency of their city's water supply to meet the needs of people and businesses in the city. Confidence dropped significantly when asked about sufficiency of future city water supplies (7-15%).

Concern about the adequacy of city water supplies was highest among respondents in the Liberty Wells neighborhood. Interestingly, respondents in Yalecrest most likely to think the current city water supply is adequate, but they were much more pessimistic about future city supplies.

Respondent levels of confidence in current and future water supplies was generally lower when they were thinking about the supply in the Salt Lake Valley or state as a whole. Very few (3-16%) of respondents from these six neighborhoods believed that there is a sufficient future supply of water to meet needs at the state level. Respondents in People's Freeway were least concerned about future state supplies, while those in Liberty Wells, Yalecrest, and 9th and 9th were less likely to see future state water supplies as sufficient.

More detailed information demonstrates significant ambivalence about the sufficiency of local water supplies (Figure 2 below). Between 35-48% of respondents indicated they neither agree nor disagree with the statements about overall water sufficiency for their city. This ambivalence was highest among Poplar Grove, Liberty Wells and People's Freeway respondents, and lowest among Yalecrest respondents.

Table 10: Percent of Respondents Agreeing that Water Supply is Sufficient

There is enough water to meet the needs of all people and businesses in…	SALT LAKE CITY NEIGHBORHOODS: 9th and 9th	West High	People's Freeway	Liberty Wells	Poplar Grove	Yalecrest	Comparisons: Other Salt Lake Valley	Cache Valley	Heber Valley
	Percent Indicating AGREEMENT with Statement								
CURRENTLY									
This City	**30**	**32**	**35**	**21**	**32**	**44**	*37*	*46*	*47*
This Valley	**24**	**27**	**34**	**17**	**25**	**34**	*28*	*29*	*42*
Utah	**17**	**19**	**22**	**13**	**22**	**20**	*17*	*19*	*14*
IN THE FUTURE									
This City	**10**	**13**	**15**	**7**	**11**	**12**	*15*	*23*	*21*
This Valley	**6**	**9**	**16**	**6**	**8**	**6**	*11*	*18*	*18*
Utah	**6**	**9**	**16**	**6**	**8**	**3**	*7*	*11*	*7*

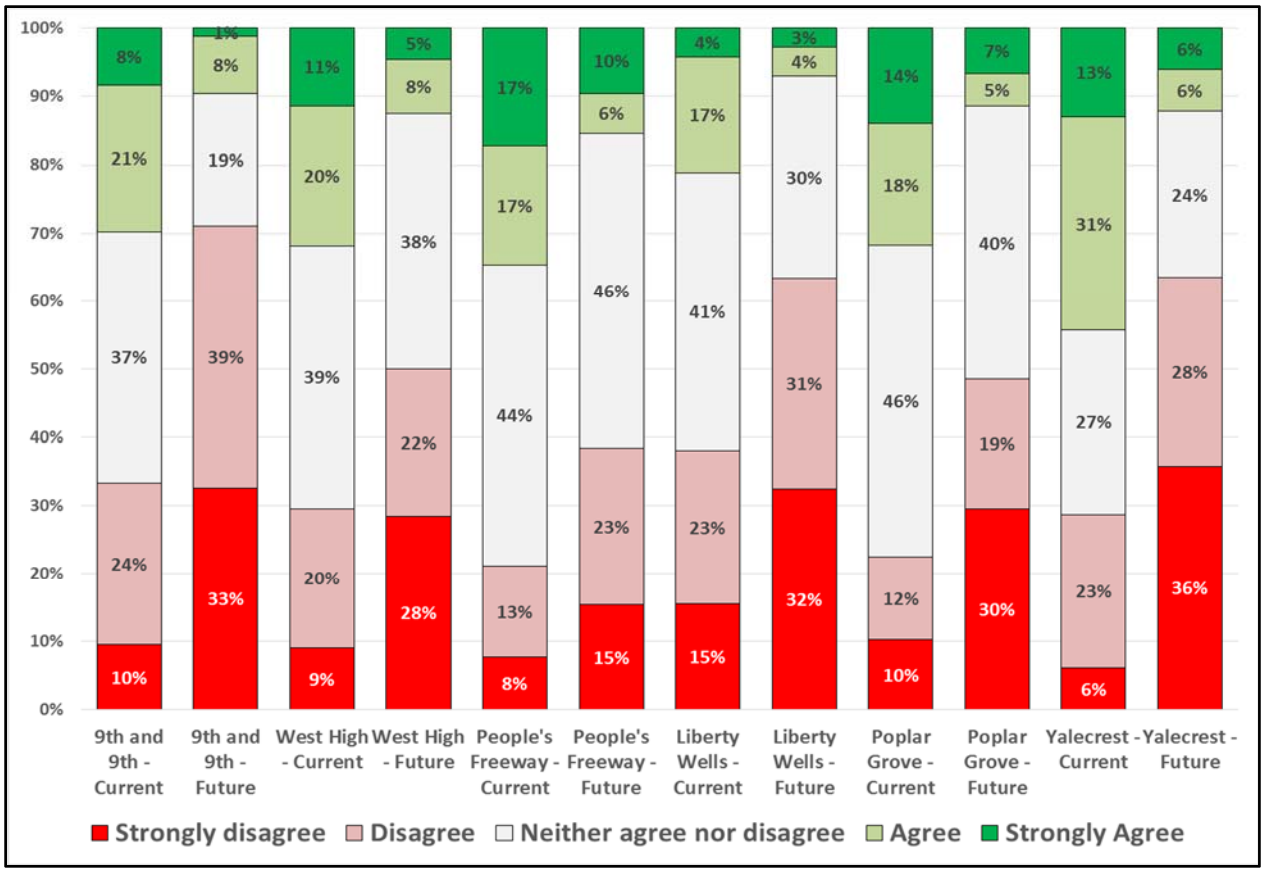


Figure 2: Agreement or Disagreement with Statement that City Water Supply is Sufficient to Meet the Current or Future Needs of All People and Businesses, By City.

B. Risk Perceptions

While water issues are likely to be important policy challenges for local and state governments in the coming years, there are a host of other important issues that compete for the attention of the public. To compare water issues to other topics, we asked respondents to indicate 'how concerned' they were about each of ten issues (Table 11).

Generally speaking, respondents from most neighborhoods in Salt Lake City were more concerned about air pollution, traffic congestion, and loss of open space than about water related issues. Air pollution was the top overall concern in five of the six neighborhoods, with 76-96% of respondents citing it as a concern, followed by traffic congestion (76-88%). Respondents in the east-side neighborhoods of Yalecrest and 9th and 9th expressed the highest level of concern about these growth-related issues.

Interestingly, climate change was the third or fourth ranked concern in most Salt Lake neighborhoods (excluding Poplar Grove), and concern about climate change among Salt Lake City respondents was much higher than we observed in other parts of the county or in the Cache or Heber Valley.

The top water-related concern for most respondents was water shortages (with between 66-78% listing this as a concern), also higher than we found in most study areas outside of Salt Lake City. In Poplar Grove and Liberty Wells, concerns about the high cost of water was the most important water-related issue, and in Poplar Grove, water costs was actually the most important concern listed overall (higher than air pollution and traffic congestion).

Roughly 70% of respondents in all but one of the Salt Lake City study neighborhoods expressed concern about deteriorating water infrastructure in their city (this was listed by just 55% of those in the 9th and 9th area). Infrastructure concerns were most prevalent in Liberty Wells.

Concerns about poor water quality were listed by 60-73% of respondents, and was a much more important concern in People's Freeway than in the 9th and 9th neighborhood.

Finally, concerns about flooding were the least commonly cited concerns among Salt Lake City respondents (24%). However flooding concerns were notably higher among respondents in the lowest-elevation neighborhoods (Poplar Grove, Liberty Wells, and People's Freeway).

Table 11: Percent of Respondents Concerned about Various Issues

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
Issue	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent Indicating Concern (4-5)								
Air pollution	**96**	**89**	**86**	**89**	**76**	**92**	*84*	*77*	*69*
Traffic congestion	**87**	**79**	**80**	**83**	**76**	**88**	*81*	*80*	*75*
Loss of open space	**81**	**76**	**75**	**82**	**74**	**85**	*76*	*72*	*78*
Climate change	**85**	**72**	**79**	**78**	**66**	**81**	*52*	*48*	*51*
Water Shortages	**74**	**75**	**69**	**73**	**66**	**78**	*67*	*56*	*60*
Population growth	**78**	**66**	**62**	**72**	**68**	**81**	*72*	*64*	*76*
High cost of water	**55**	**71**	**69**	**76**	**79**	**61**	*80*	*65*	*69*
Deteriorating water infrastructure	**55**	**70**	**69**	**75**	**70**	**70**	*59*	*52*	*58*
Poor Water Quality	**60**	**66**	**73**	**69**	**69**	**64**	*61*	*45*	*52*
Flooding	**15**	**22**	**31**	**32**	**36**	**12**	*24*	*28*	*20*

Water issues listed in bold font.

C. Perceptions about Water Use and Water Quality

Perceived Excessive Water Use

Given the concerns about water supply and water shortages discussed above, the survey included a block of questions designed to capture public perceptions about which, if any, sectors are responsible for using 'too much' water (Table 12).

The results suggest that water use for residential lawns, parks, and golf courses is seen as excessive by a majority of respondents in all six Salt Lake City neighborhoods. By contrast, very few people (between 11-24 percent) had the impression that agriculture is using too much water.

There was significant variation in perceptions about excessive water use across these six study neighborhoods. Respondents in Poplar Grove and People's Freeway tended to report the lowest level of agreement that water was being used excessively. Conversely, those in the 9th and 9th neighborhood were the most likely to rate water use as excessive overall, followed by respondents in Liberty Wells. Yalecrest respondents were somewhat more likely to see residential lawns as excessive users, but had relatively low proportions agreeing that industry used too much water.

Compared to respondents from our study areas outside of Salt Lake City, the City respondents were notably more likely to think water is used excessively for all four purposes listed in our survey.

Table 12: Perceived 'Excessive' Water Use by Sector

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
Too much water is used for…	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent Indicating Agreement (4 or 5)								
Residential lawns	**83**	**70**	**59**	**81**	**54**	**76**	*57*	*51*	*44*
Parks and golf courses	**69**	**60**	**47**	**66**	**56**	**58**	45	*44*	*43*
Industry	**61**	**52**	**49**	**52**	**38**	**41**	33	*22*	*19*
Agriculture	**14**	**12**	**24**	**11**	**11**	**13**	*6*	*10*	*13*

Water Quality

We also assessed public perceptions of the water quality of different types of water bodies (Table 13 and Figure 3). Overall, people were much more likely to assess all types of water in their area as 'good quality' than 'bad quality'. Water quality ratings were highest for drinking water supplies, upstream rivers and lakes, and streams and creeks nearest the respondent's neighborhood. Water in nearby irrigation canals and ditches, and in streams, rivers, reservoirs, and lakes downstream from the neighborhood, was more likely to be rated as poor, particularly in People's Freeway and Poplar Grove. Notably, for many types of water bodies, a majority of respondents in many neighborhoods indicated that they were either 'not sure' or thought local water quality was 'neither good nor bad'.

With respect to their drinking water supply, between 55-80% of respondents in these six neighborhoods rated water quality as good, though this number is notably higher in Yalecrest, and lower in the West High neighborhood.

Respondents throughout Salt Lake City tended to rate water quality of all types lower than those from the Heber and Cache Valley study areas.

Table 13: Perceived Water Quality of Different Types of Water Resources.

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
How would you rate the water quality of the following types of water in your area?	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent Rating Quality Good or Very Good								
Drinking water	**68**	**55**	**61**	**66**	**63**	**80**	*59*	*79*	*73*
Water in rivers and lakes upstream	**55**	**36**	**16**	**42**	**38**	**53**	*41*	*56*	*58*
Water in streams and creeks in neighborhood	**39**	**30**	**26**	**33**	**16**	**37**	*27*	*54*	*56*
Water in streams or rivers downstream	**26**	**21**	**10**	**23**	**20**	**17**	*24*	*38*	*48*
Water in reservoirs and lakes downstream	**24**	**21**	**10**	**20**	**24**	**16**	*26*	*36*	*43*
Water in nearby irrigation canals or ditches	**17**	**13**	**8**	**20**	**11**	**13**	*16*	*41*	*41*
Groundwater in neighborhood	**21**	**11**	**10**	**16**	**14**	**17**	*13*	*27*	*29*

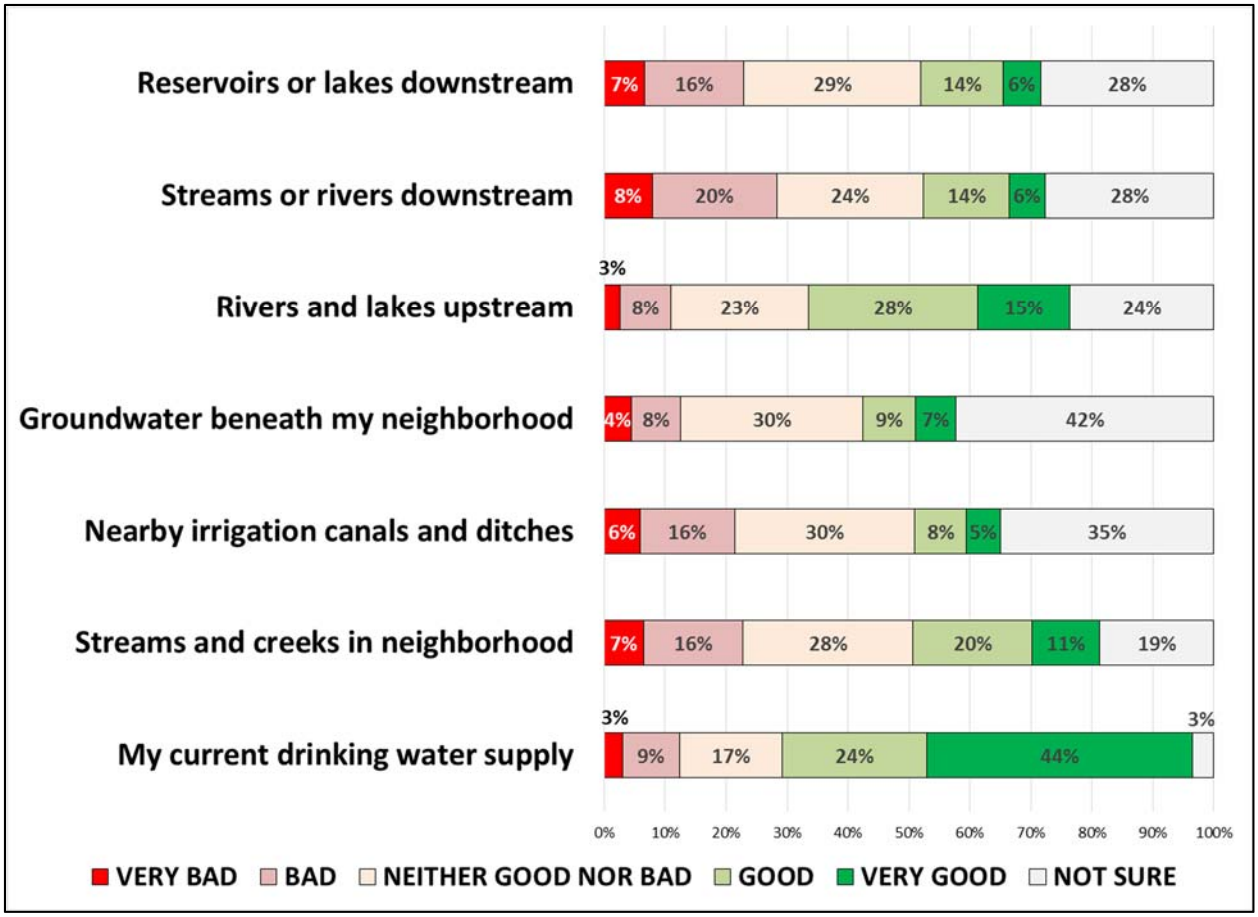


Figure 3: Perceived water quality for different types of water among combined Salt Lake City neighborhood respondents.

D. Experience with Flooding

When asked if they or members of their household have personally experienced property damage over the last 10 years, over a third of households (23-35%) indicated impacts such as flooded basements or other property damage (Table 14). Between 31-53% indicated having experienced any type of flooding impacts to their own household. It should be noted that the survey only asked about impacts from flooding and/or stormwater and did not differentiate between flooding originating inside the home from external flooding sources.

Personal household experience with flooding was most commonly reported among respondents in the People's Freeway, Liberty Wells, and Poplar Grove neighborhoods, and least common in 9th and 9th and West High. A majority of respondents in each neighborhood were aware of impacts from flooding to their community over the last 10 years, with the highest level of awareness of community impacts found in Yalecrest and 9th and 9th neighborhoods.

Table 14: Percent of Respondents indicating Impacts from Flooding on Household or Community.

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
Self-reported impacts from flooding or stormwater over last 10 years	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent of Respondents Listing Impacts								
Household suffered property damage	**24**	**23**	**35**	**34**	**35**	**26**	*36*	*38*	*31*
Household impacted in any way*	**38**	**31**	**53**	**53**	**53**	**45**	*47*	*43*	*40*
Community impacted in any way*	**80**	**63**	**72**	**68**	**75**	**79**	*70*	*80*	*51*

** = Combines all types of impacts, including flooded basement or other property damage, injury or loss of life, damage to public roads or infrastructure, contamination of drinking water or area streams. Listed if at least one type of impact was reported.*

E. Climate Change Perceptions

Climate change has received significant media attention and political debate. Respondents in these Salt Lake City neighborhoods were asked their views on climate change, and whether they were worried that climate change will significantly impact the water supplies in this valley. Results demonstrate a wide diversity of views on this topic, though climate change concerns were much higher in the Salt Lake City area than in our other study areas. Generally speaking, most Salt Lake City respondents (73-89%) said they believe climate change is happening, but they were split as to whether they see climate change as human-caused or part of a natural process (Table 15). A majority of respondents from five of the six neighborhoods believed that climate change is happening and is caused by humans, while respondents in Poplar Grove had a larger group believing it is at least in part caused by a natural process. Significant minorities of respondents (13-20%) from four of these neighborhoods said they 'do not know enough' to say if climate change is happening. Between 55-78% of respondents across these six Salt Lake City neighborhoods saw climate change as a possible threat to water supplies in the valley, with worry about water supply impacts highest in the areas where people attribute climate change to humans.

Table 15: Respondent Views on Climate Change Issues

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
How would you characterize your views on climate change?	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent of Respondents								
Climate change is happening, and is caused mainly by human activities	**83**	**65**	**67**	**65**	**46**	**69**	*44*	*41*	*40*
Climate change is happening, and is caused both by human and natural causes	**0**	**1**	**0**	**1**	**5**	**3**	*3*	*5*	*6*
Climate change is happening and is caused mainly by natural processes	**6**	**13**	**12**	**7**	**25**	**16**	*30*	*29*	*32*
Climate change is not happening	**2**	**9**	**2**	**7**	**5**	**7**	*5*	*3*	*5*
I do not know enough to say if climate change is happening	**8**	**13**	**20**	**20**	**19**	**6**	*17*	*21*	*18*
I am worried that climate change will significantly impact water supplies in this valley	**68**	**67**	**55**	**68**	**56**	**78**	*43*	*39*	*39*

III. Water Policy and Management Perspectives

A. Support for Local Water Management Strategies and Policies

Many survey questions assessed the levels of support or opposition to a wide range of potential local city water management policies and programs.

Addressing Short Term Water Shortages

First, respondents were asked, "If your city faced a short-term water shortage, how much would you oppose or support each of the following possible local policies or strategies?" (Table 16). Levels of support for these different strategies generally did not vary dramatically across the six neighborhoods.

There was strong support (82-97%) for educational and voluntary conservation programs across all six Salt Lake City neighborhoods. Support for restrictions on watering in parks, golf courses, and public properties was lower, but still ranged from 74-84% of respondents.

Mandatory restrictions on watering in order to respond to short-term shortages were least popular, but still received support from 63-81 percent of respondents, with just 5-10 percent indicating that they would oppose or strongly oppose mandatory measures.

Table 16: Percent of Respondents Supporting Various Local Policy Options

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
To deal with a short-term water shortage, I would support or strongly support the following strategies…	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent Indicating Support or Strong Support								
Educate public on water conservation	**95**	**95**	**84**	**87**	**84**	**97**	*89*	*89*	*92*
Encourage voluntary reductions in outdoor water use	**92**	**87**	**82**	**82**	**83**	**93**	*84*	*84*	*85*
Restrict watering in parks, golf courses, and other public properties	**84**	**79**	**75**	**75**	**74**	**81**	*75*	*76*	*72*
Mandatory watering restrictions	**81**	**69**	**65**	**71**	**63**	**75**	*62*	*69*	*64*

Long Term City Water Management Strategies.

Respondents were also asked about the extent to which they supported a range of potential long-term approaches to water policy and management in their city (detailed results shown in Table 17 and Figure 4).

The most popular policies across each of the six Salt Lake City study neighborhoods were to:

- 'Develop systems to reuse treated wastewater for residential irrigation,' the most popular policy option in 9th and 9th (84%), West High (82%), Poplar Grove (80%) and Liberty Wells (74%), and the #2 option in Yalecrest and People's Freeway (82% and 65%, respectively).
- 'Limit future housing development unless water supplies are secured,' supported by 83% of respondents in Yalecrest, and 59-76% in the other neighborhoods, and

A majority of respondents (59-76%) in all the neighborhoods supported building structures to reduce stormwater runoff, with support highest in the 9th and 9th and West High neighborhoods.

Building new water storage facilities was supported by over two-thirds (56-67%) of respondents from the six neighborhoods, with support highest in People's Freeway (where it was their top overall choice) and West High.

There was generally strong, but more varied, support for several other local water policy options designed to incentivize conservation. For example, between 55-78% of respondents in these neighborhoods supported city programs to encourage forms of housing development that use less water, or to subsidize the purchase of low water use irrigation systems and appliances, compared to roughly 10% that opposed such programs. Support was highest in the two eastside and the West High neighborhoods, and lowest in Poplar Grove. Policies to charge more per gallon for large water users had support from 83% of respondents in the 9th and 9th neighborhood (their top choice) and 74% in Yalecrest. This drops to 51-61% in the other neighborhoods. Substantial majorities (54-76%) supported ordinances that require low water landscaping, and support was highest among respondents in the 9th and 9th and West High neighborhoods.

A minority of respondents supported reducing environmental protections to facilitate new water projects (25-45%), though more people supported than opposed this approach in three neighborhoods (Poplar Grove, People's Freeway and Liberty Wells).

The least supported policy option in every neighborhood was 'buying water rights from farms to use in the city' (supported by just 18-32% of respondents), and opposition exceeded support everywhere but in the West High area.

Table 17: Percent of Respondents Supporting Various Local Policy Options

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
Long Term Local Policy Options	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent Indicating Support or Strong Support								
Develop a system to reuse treated wastewater for residential irrigation	**84**	**82**	**65**	**74**	**80**	**82**	*71*	*71*	*69*
Limit future housing development unless water supplies are secured	**76**	**73**	**59**	**69**	**64**	**83**	*73*	*67*	*77*
Build structures to reduce storm water runoff	**76**	**77**	**59**	**65**	**70**	**68**	*57*	*54*	*45*
Subsidize purchase of low water use irrigation systems and appliances	**77**	**72**	**58**	**66**	**55**	**67**	*51*	*50*	*43*
Encourage housing development that uses less water per person	**78**	**67**	**62**	**59**	**59**	**67**	*42*	*37*	*38*
Implement ordinances to require low-water landscaping	**76**	**70**	**65**	**59**	**54**	**54**	*38*	*40*	*41*
Charge more per gallon for large water users	**83**	**61**	**52**	**58**	**51**	**74**	*43*	*43*	*45*
Build new water storage facilities	**58**	**67**	**67**	**59**	**61**	**56**	*67*	*61*	*57*
Increase budgets for storm water management	**63**	**59**	**55**	**51**	**61**	**57**	*49*	*48*	*35*
Reduce requirements for environmental protection to facilitate new water projects	**32**	**33**	**45**	**40**	**40**	**25**	*35*	*31*	*27*
Buy water rights from farms to use in the city	**22**	**32**	**22**	**22**	**31**	**18**	*23*	*24*	*27*

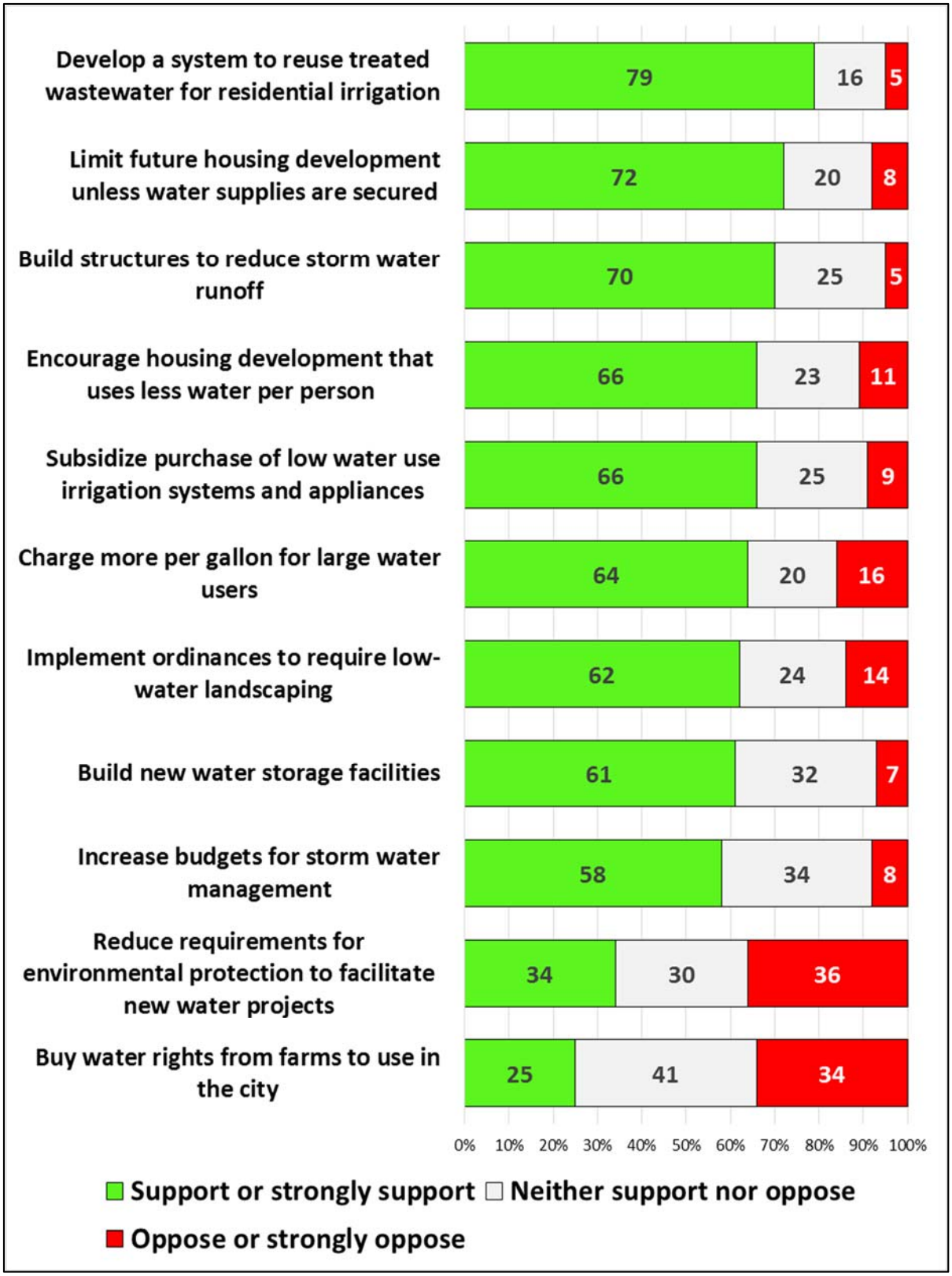


Figure 4: Combined Salt Lake City Respondents' Support for Various Long-Term City Water Management Strategies.

B. Support for State Water Policies

State Water Policy Goals

The survey also asked respondents to indicate their level of support for a variety of possible goals to guide state-level water policies and programs (Table 18). Protecting water quality and ensuring a supply of drinking water were overwhelmingly supported across all six study neighborhoods in Salt Lake City (with support from 93-100%). Protecting wetlands and wildlife habitat and ensuring a supply of water for agriculture were the third and fourth ranked goals in all six neighborhoods (supported by 74-92%). Levels of support for wetlands and wildlife were notably higher than found among respondents from neighborhoods and communities outside of Salt Lake City. Saving taxpayer money was a goal shared by a majority of respondents in three neighborhoods (Poplar Grove, West High and People's Freeway), but was not listed as an important goal by many respondents in Yalecrest. As was found in Cache and Heber Valley, ensuring a supply of water for economic development received support from less than half of respondents.

Table 18: Percent of Respondents Supporting Different Goals for State Water Policies

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
	9th and 9th	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent Indicating Support or Strong Support								
Protecting water quality	**100**	**94**	**98**	**96**	**94**	**99**	*94*	*94*	*95*
Ensure supply of drinking water	**97**	**97**	**96**	**93**	**95**	**99**	*96*	*97*	*96*
Protecting the wetlands and wildlife habitat	**92**	**80**	**88**	**83**	**76**	**83**	*67*	*68*	*76*
Ensure the supply of water for agriculture	**79**	**76**	**84**	**82**	**75**	**74**	*82*	*86*	*86*
Saving taxpayer money	**33**	**50**	**55**	**44**	**69**	**19**	*60*	*56*	*59*
Ensure the supply of water for economic development	**39**	**40**	**49**	**45**	**44**	**30**	*43*	*47*	*48*

State Water Policy Strategies

The survey also assessed support among respondents of these neighborhoods for a variety of statewide policies and programs that are currently being considered by state water planners and policy makers (Table 19 and Figure 5).

Among all six neighborhoods, there was support from a strong majority of respondents (and relatively little opposition) for the use of state funds to help replace aging city water infrastructure (76-88% support). This was the top state policy in all six areas, though support was strongest in the two eastside neighborhoods.

There was also support from two thirds or more of respondents in these neighborhoods for three other state policies:

- Invest in research on new water conservation technologies and practices (69-84% - excluding Poplar Grove where this received support from 62%),
- Establish minimum flows for streams to protect fish habitat (68-78%), and
- Set minimum state standards for new residential construction to reduce water use (68-84%)

Opposition to these three policies was reported by less than 10 percent of respondents across the six neighborhoods.

A majority of respondents in all six neighborhoods supported two types of policies to use state funds to improve water infrastructure:

- 56-81% supported using state funds to pay for efficiency improvements in agricultural irrigation systems, and
- 54-60% supported state spending to build new reservoirs or water storage projects.

A majority of respondents in all six neighborhoods (52-62%) supported changes in state law to allow people with water rights to sell water saved from using conservation practices.

Less than half of Salt Lake City respondents were supportive of efforts by the state to construct pipelines to bring water to urban areas from other regions (34-44%) or to facilitate transfers of water from agriculture to urban users (28-38%).

Table 19: Percent of Respondents Supporting State Water Policy Strategies

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
	9th and 9th	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent Indicating Support or Strong Support								
Use state funds to help replace aging water system infrastructure in cities	**88**	**78**	**78**	**81**	**76**	**87**	73	69	66
Invest in research on new water conservation technologies and practices	**84**	**69**	**77**	**78**	**62**	**86**	60	59	58
Establish minimum flow requirements for streams to protect fish habitat	**78**	**75**	**78**	**69**	**68**	**75**	56	53	59
Set minimum state standards for new private residential construction to reduce water use	**71**	**69**	**69**	**74**	**68**	**84**	61	55	61
Use state funds to pay for efficiency improvements in agricultural irrigation systems	**81**	**58**	**63**	**66**	**56**	**65**	56	57	58
Ensure state policy prioritizes the efficient use of water over protecting existing water rights	**68**	**49**	**56**	**57**	**55**	**63**	41	42	39
Use state funds to build new reservoirs or storage projects	**56**	**54**	**60**	**59**	**57**	**60**	66	60	63
Allow people with water rights to sell water saved from using conservation practices	**61**	**52**	**59**	**52**	**59**	**62**	53	55	55
Use state funds to construct pipelines to bring water to urban areas from other regions	**34**	**37**	**44**	**38**	**39**	**34**	42	34	31
Facilitate transfers of water from agriculture to urban users	**38**	**31**	**35**	**35**	**28**	**28**	27	26	25

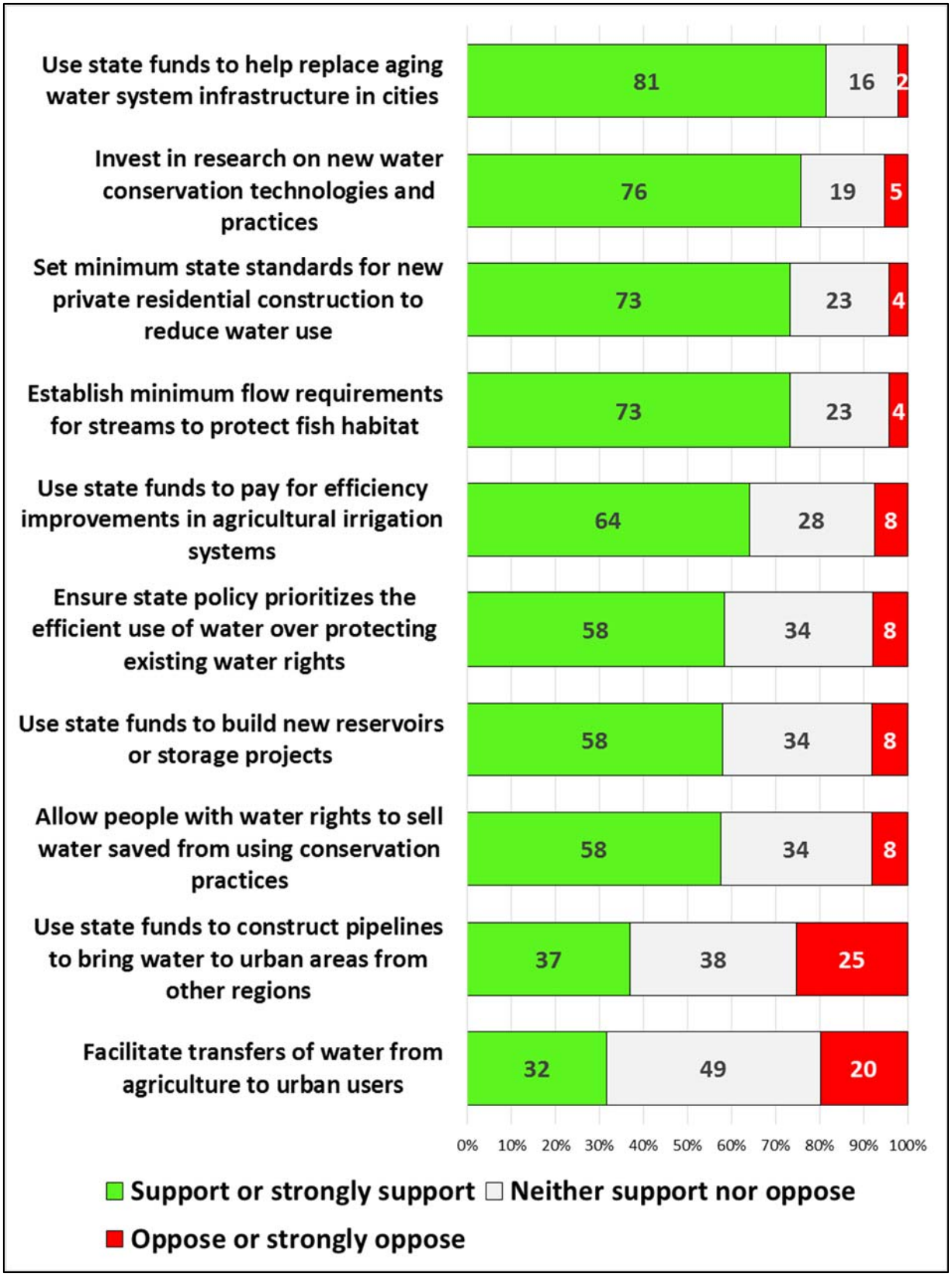


Figure 5: Percent of Combined Salt Lake City respondents supporting/opposing various state water policy strategies.

IV. Additional Information

A. Water Information Sources

Respondents were asked to indicate where they find information about water issues (Table 20). TV and radio were the most common information sources across all six Salt Lake City study neighborhoods. The internet and social media were also cited by a majority of respondents in all six neighborhoods, but were particularly important in to respondents in the 9th and 9th (where it is their top source) and Yalecrest neighborhoods. Other significant sources of information included: friends and neighbors (43-61%), newspapers (37-75%) and mailings from providers (33-61%).

The Salt Lake Tribune was the most widely read paper everywhere, but newspapers were read by more than half of respondents only in Yalecrest. Mailings from providers were most often used in Poplar Grove and Yalecrest.

Table 20: Sources of Information about Water Issues

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
Sources of Information about Water Issues	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent indicating use of source								
TV/Radio	**71**	**69**	**65**	**68**	**77**	**83**	*72*	*65*	*67*
Internet/social media	**79**	**63**	**55**	**58**	**57**	**71**	*57*	*54*	*55*
Friends and neighbors	**55**	**43**	**49**	**54**	**50**	**61**	*49*	*58*	*62*
Any newspaper	**46**	**39**	**37**	**40**	**41**	**75**	*41*	*50*	*56*
Mailings from providers	**33**	**44**	**37**	**40**	**52**	**61**	*58*	*47*	*48*
Salt Lake Tribune	**46**	**39**	**31**	**38**	**36**	**70**	*32*	*13*	*22*
Deseret News	**8**	**11**	**14**	**13**	**20**	**19**	*19*	*11*	*18*
HOA/COA	**4**	**12**	**10**	**3**	**8**	**12**	*10*	*12*	*21*

B. Satisfaction with Neighborhood and Community

Finally, survey respondents were asked to assess their level of satisfaction with various aspects of their neighborhood and community (Table 21). A majority of respondents in all six Salt Lake City neighborhoods were satisfied or very satisfied with their overall quality of life (52-95%). However, self-reported overall quality of life was notably higher in the two east side neighborhoods (91-95% in 9th and 9th and Yalecrest) than in the Poplar Grove or People's Freeway neighborhoods (where just over half said they were satisfied).

A similar pattern was seen for satisfaction with specific aspects of these neighborhoods, where respondents in Yalecrest were consistently the most satisfied. Less than half of respondents in West High, People's Freeway and Poplar Grove were satisfied with the number of shade trees, and less than 30% were satisfied with opportunities to interact with neighbors and the appearance of homes and yards in Liberty Wells and Poplar Grove.

Table 21: Percent of Respondents Satisfied with Aspects of their Neighborhood

	SALT LAKE CITY NEIGHBORHOODS						*Comparisons*		
Aspect of Neighborhood…	**9th and 9th**	**West High**	**People's Freeway**	**Liberty Wells**	**Poplar Grove**	**Yalecrest**	*Other Salt Lake Valley*	*Cache Valley*	*Heber Valley*
	Percent Satisfied or Very Satisfied								
Overall quality of life	**91**	**61**	**52**	**66**	**54**	**95**	*80*	*85*	*88*
Quality of parks and common spaces	**83**	**50**	**40**	**69**	**55**	**90**	*61*	*73*	*70*
Number of shade trees	**66**	**46**	**44**	**53**	**43**	**81**	*57*	*63*	*59*
Opportunities to interact with neighbors	**55**	**36**	**35**	**25**	**29**	**76**	*63*	*65*	*67*
Appearance of homes and yards	**61**	**36**	**25**	**24**	**26**	**84**	*65*	*65*	*68*

V. Summary

This concludes our preliminary reporting of findings from the 2014 iUTAH Household Water Survey for these six Salt Lake City neighborhoods. We anticipate continued analysis of data from the survey and we will post additional findings as they become available at www.iutahepsecor.org/hhsurvey. Please contact us if you have any questions. Dr. Douglas Jackson-Smith can be reached at (435) 797-0582 or doug.jackson-smith@usu.edu.