





King County Department of Natural Resources Water Quality Survey October 2015

FINAL

Methodology

- ▶ Live telephone survey of 402 registered voters in King County, WA
- Conducted September 28 October 4, 2015
- ▶ Margin of Error: <u>+</u>4.9 points at the 95% confidence interval
- Weighted to reflect all registered voter population using key demographics
- Where applicable, results compared to previous surveys conducted:

June 10-13, 2013	October 2-5, 2011	August 2-5, 2009	December 18-20, 2007
n=400; MoE <u>+</u> 4.9 pts	n=400, MoE <u>+</u> 4.9 pts	N=401, MoE <u>+</u> 4.9 pts	n=400; MoE <u>+</u> 4.9
EMC #13-4895	EMC #11-4503	EMC #09-4111	EMC #07-3789
December 3-5, 2006	December 14-18, 2005	December 19-21, 2004	
n=400; MoE <u>+</u> 4.9	n=400; MoE <u>+</u> 4.9	n=401; MoE +4.9	
EMC #06-3621	EMC #05-3389	EMC #04-3111	

Please note that due to rounding, some percentages may not add up to exactly 100%.

Key Findings

A strong majority of residents give King County positive ratings for the job it is doing providing wastewater treatment services.

- A strong majority (55%) of respondents give a positive rating and this rating improves by more than 14 points (to 69% positive) when residents hear about King County Wastewater Treatment Division's service area and mission. Since 2013 there has been a slight decrease of 3 points in respondents giving a negative rating (from 56% Positive/30% Negative to 55% Positive/27% Negative).
- Is Just over three quarters (78%) of respondents do not recall seeing or hearing anything about wastewater services. Of those saying they have seen or heard something, "New treatment plant/facility" and "Run-off/Sewage overflows/System failures" continue to be the top mentions.
- Close to a third (32%) of respondents say the fees they pay for sewage collection and wastewater treatment services are a good value. Over half (52%) say they are not sure about the value and about a fifth (16%) say the fees they pay are not a good value. Since 2013 respondents saying "not sure" has increase by 13 points and those saying "good value" has decreased by 9 points

Climate change/Global Warming has moved to the top mention over water quality as the most important environmental issue facing our region today.

- Respondents give the highest importance to "working with business to monitor and regulate industrial wastewater and other activities for pollution prevention (52%; Extremely Important) and "controlling untreated wastewater overflowing into Puget Sound" (50%; Extremely Important) when asked about things King County could do to help protect water quality.
- When asked about agencies working to improve water quality in the region, the Environmental Protection Agency (EPA), Government (generic) and City Utility/Water agency get the top overall mentions.

Please note that due to rounding, some percentages may not add up to exactly 100%.

Key Findings

The overwhelming majorities favor using recycled biosolids and recycled/reclaimed water.

- When informed about the use of recycled biosolids, most (84%) respondents say they favor the recycling of biosolids. Only 10% oppose recycling biosolids.
- Uses tested for recycled biosolids are supported by the majority of respondents, but opposition is highest for uses in growing vegetables and in general agriculture.
- Similarly, 88% of respondents support King County using as much reclaimed water as possible with only 10% saying King County should not make an effort to reuse. Top concerns about using reclaimed water are growing vegetables for sale, use in ground water to feed streams and rivers, and watering recreation fields at schools.
- A strong majority 62% of respondents say they have used a compost or soil amendment product. Of the respondents having used a product, Cedar Grove and Zoo Doo were the products with the highest overall awareness.
- Almost half (46%) of respondents say would be more likely to patronize a business or purchase a product if reclaimed water had been used. A plurality (42%) say it would not make a difference, and 7% say it would make them less likely.

The majority of residents support funding King County efforts to reduce its environmental impact.

- The majority of respondents say they are willing to pay an extra dollar each month on their sewer bill to help King County fund efforts to reduce its impact on the environment.
- All efforts tested receive a majority of residents support with efforts to "reduce the number of untreated wastewater overflows" receiving the highest level of support at 72% willing/23% not willing. The County using recycled biosolids to create a residential compost product was the least popular with 55% willing.

Please note that due to rounding, some percentages may not add up to exactly 100%.



Environmental Issues

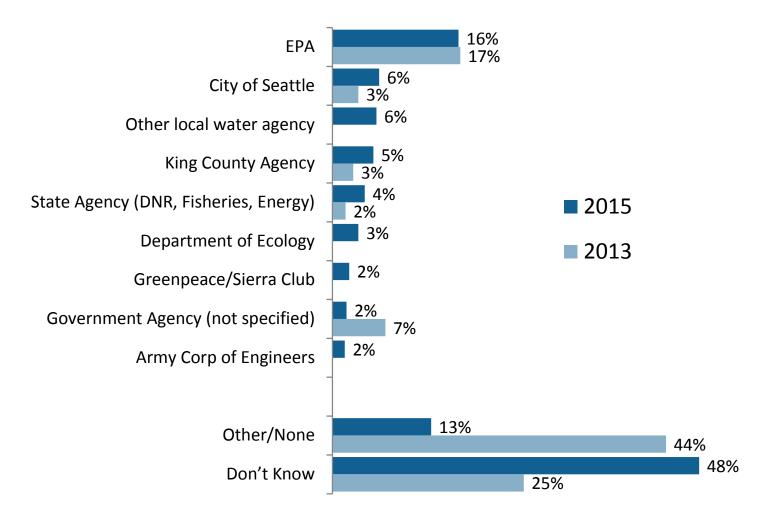
Most Important Environmental Issue

Climate change/Global warming has moved to the top mention as the most important environmental issue facing our region today.

Most Important Environmental Issue	2013	2015	+/- Change
Climate Change/Global Warming	11%	22%	+11%
Traffic/Mass Transit	7%	13%	+6%
Water pollution/quality	19%	11%	-8%
Air pollution	12%	5%	-7%
Drought		5%	-
Pollution General	1%	5%	+4%
Growth/population growth	6%	3%	-3%
Infrastructure/Roads		2%	-
Carbon emissions		2%	-
None	6%	1%	-5%
Other	23%	15%	-8%
Don't Know/Refused	16%	16%	-

Agencies Working to Improve Water Quality

The majority of residents cannot mention an agency or organization working to improve water quality in our region. Environmental Protection Agency (EPA) is the top overall mention.

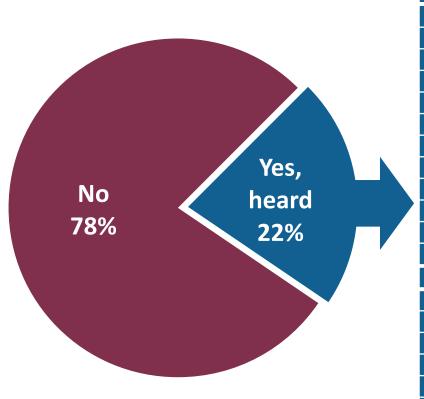




Wastewater Services

Awareness of Wastewater Services

1-in-5 (22%) of respondents say they have heard something about the topic of wastewater services lately. When asked the follow-up about what they had heard, general news, new treatment plant/facility, and run-off/overflows/system failures were the top mentions.



ures were the top mentions.	
What did you see or hear? (n=102; MoE ±9.7%)	%
Received a flyer with information/Saw news story (general)	16%
New waste water plant being built/Brightwater	16%
Run-off/Sewage Overflows/System Failures	13%
Concern about waste water getting into the sound	11%
Habitat Damage/Salmon	8%
Recycling waste water	7%
It cleans our water	4%
Contaminated Water General	4%
It's a good thing/General positive responses	4%
None/Other	24%
Don't know	9%
Where did you see or hear? (n=110; MoE ±9.3%)	%
Newspaper	25%
News (General)	25%
Television	17%
Mail/Signs	14%
Radio	10%
Internet/Online	7%
None/Other	21%
Don't know	7%

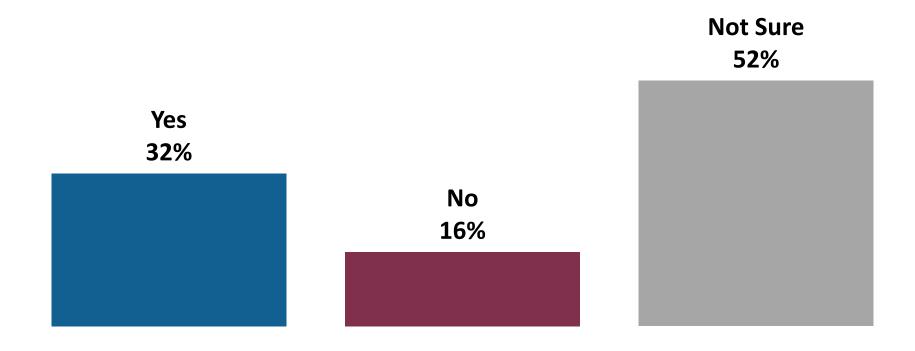
Q5. Do you recall seeing or hearing anything about the topic of wastewater services lately?

Q6. What did you see or hear? (Multiple-Response)

Q7. Where did you see or hear that? (Multiple-Response)

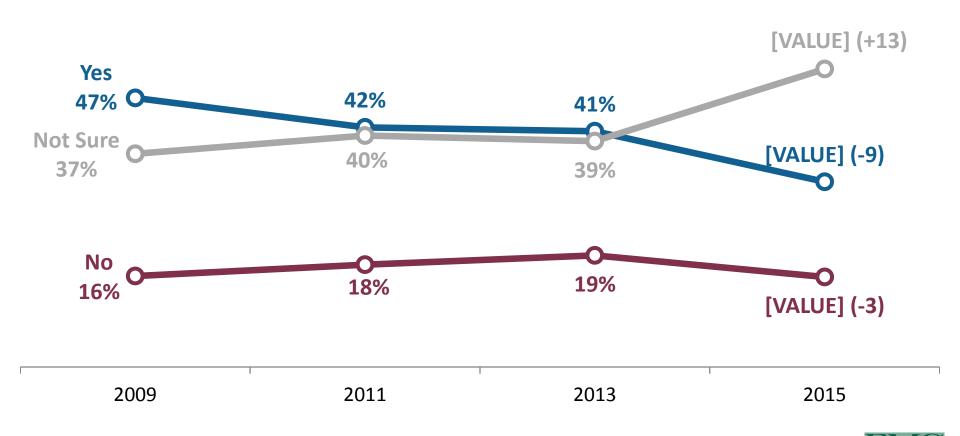
Value of Wastewater Services

A third (32%) of respondents say the fees they pay for sewage collection and wastewater treatment are a good value. Over half (52%) say they are not sure about the value and about a fifth (16%) say the fees they pay are not good value.



Value of Wastewater Services – Trend

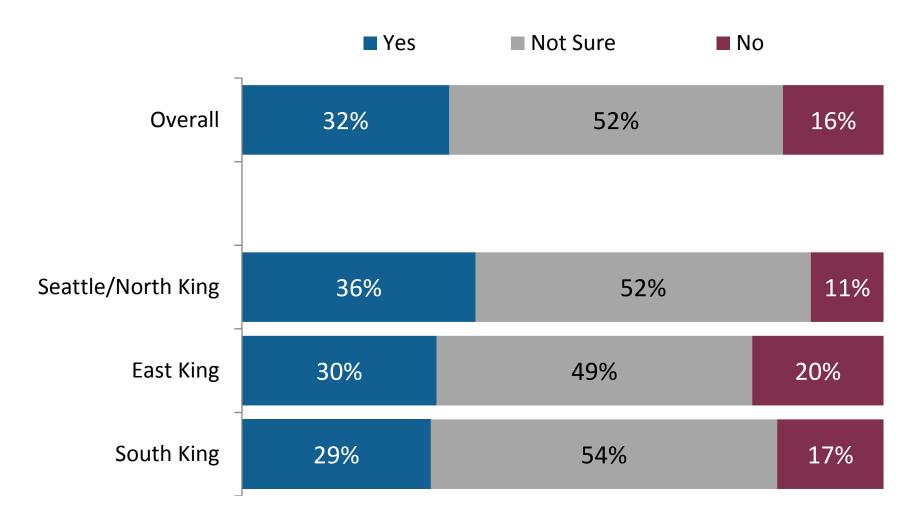
Respondents saying they are "not sure" of the value has increased by 13 points and those saying the fee's they pay are a "good value" has decreased by 9 points.



Q8. Do you think the fees you pay for sewage collection and wastewater treatment are a good value, not a good value, or are you not sure?

Value of Wastewater Services - Region

Respondents saying the fees they pay are a good value is higher in Seattle/North King County region.

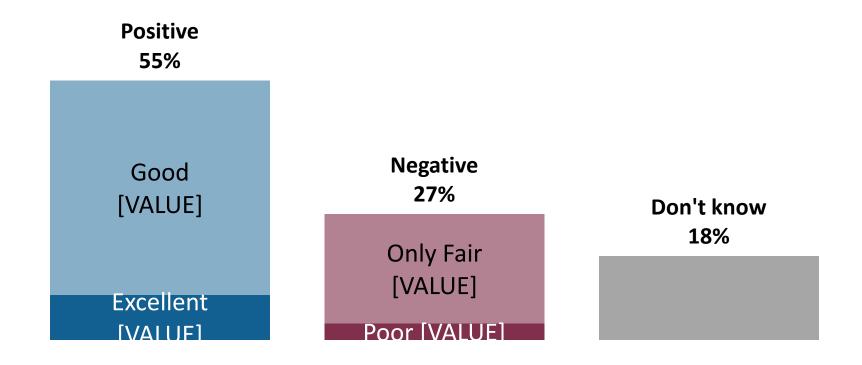




Job Ratings

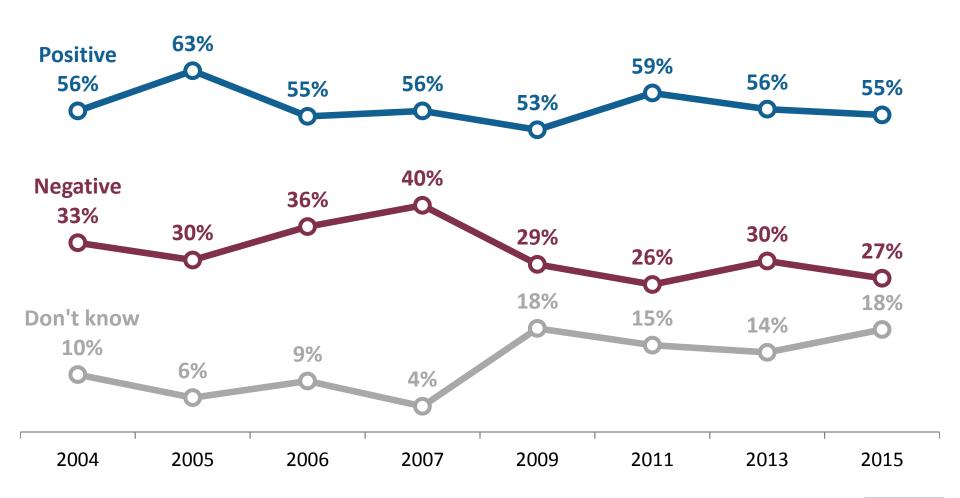
Job Rating

A strong majority of residents give King County positive ratings for the job it is doing providing wastewater treatment services.



Job Rating-Trend

King County's job rating for providing wastewater treatment services has had a consistent positive trend over time.

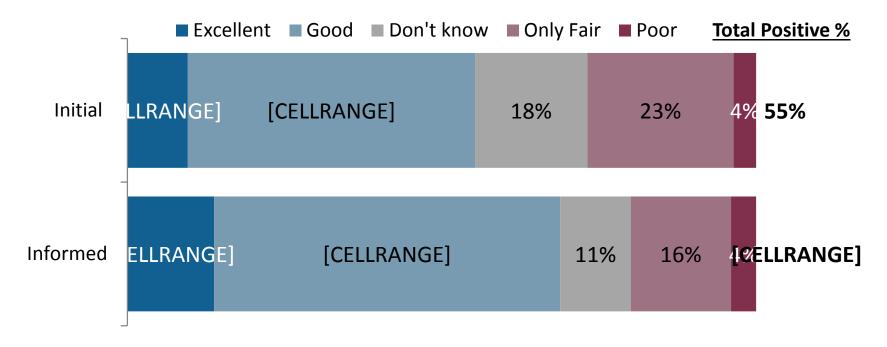


Q9. Using a scale of excellent, good, only fair, and poor, how would you rate the job King County is doing providing wastewater treatment services?

Informed Job Rating

The job rating for Wastewater Treatment Division improves by more than 14 points (to 69%; total positive) when residents hear basic information about WTD's service area and mission.

Full Statement: King County's Wastewater Treatment Division serves 1.6 million residents in 17 cities and 17 local sewer utilities. Their mission is to protect public health and enhance the environment by collecting and treating wastewater while recycling valuable resources for the Puget Sound region. Knowing this, how would you rate the job King County is doing providing wastewater treatment services?



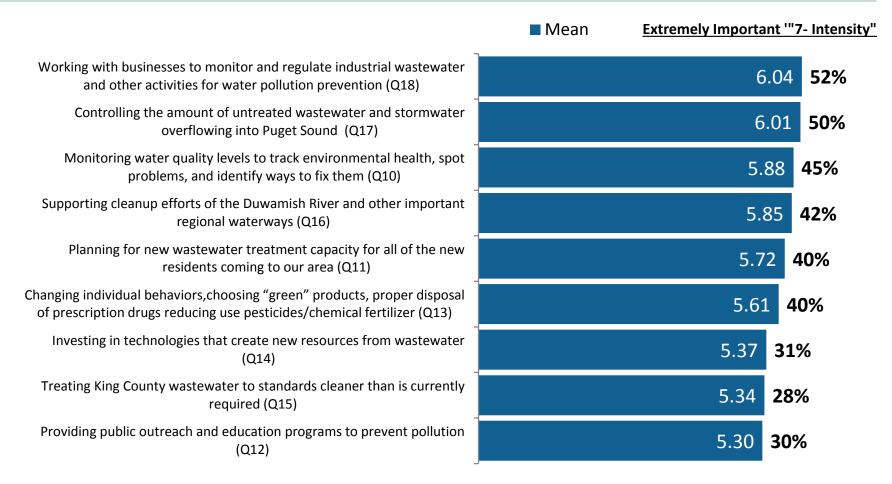
Q19. King County's Wastewater Treatment Division serves 1.6 million residents in 17 cities and 17 local sewer utilities. Their mission is... Knowing this, how would you rate the job King County is doing providing wastewater treatment services?



Water Quality Priorities

Protecting Water Quality Importance

All of the things King County could do to protect water quality is important to the majorities of respondents, but the items with highest importance are about "working with businesses to monitor and regulate industrial wastewater and other activities for water pollution prevention" and "controlling the amount of untreated wastewater and stormwater overflowing into Puget Sound."



Q10-18. I'm going to read you some things King County could do to help protect water quality in our rivers and Puget Sound. I'd like you to tell me how important each item is. Use a scale of one to seven, where one is not at all important and seven is extremely important. You can use any number on the scale.



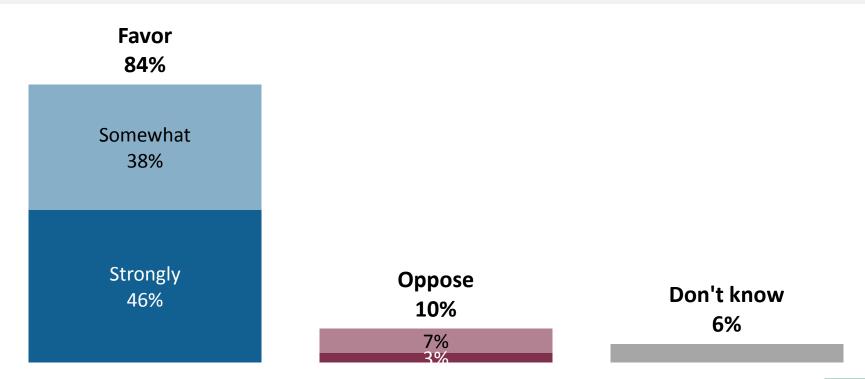


Biosolids

Support for Biosolids

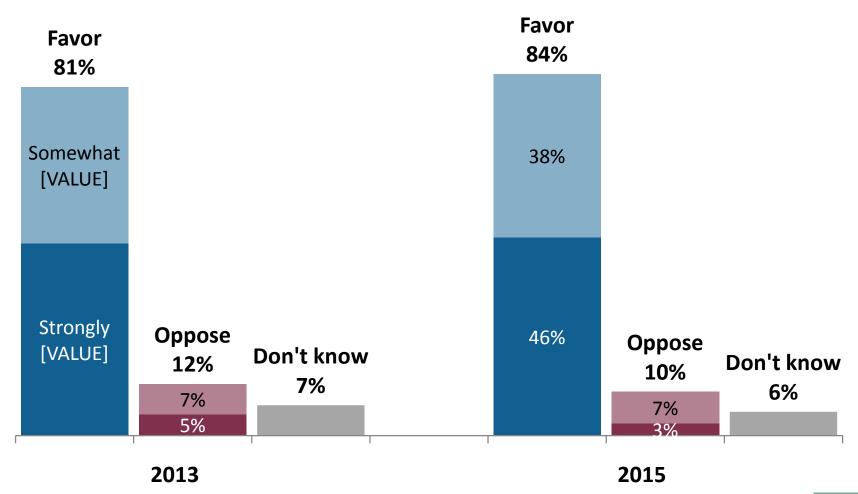
An overwhelming majority (84%) of respondents favor the recycling of biosolids with almost half (46%) saying they "strongly favor" the recycling of biosolids.

In our area, stormwater and wastewater from homes are cleaned at regional wastewater treatment plants. During the process, nutrient-rich, organic solids are recovered and treated to make a product called biosolids. The State Department of Ecology encourages recycling of biosolids for use as a natural soil amendment that enriches soil and boosts plant growth.



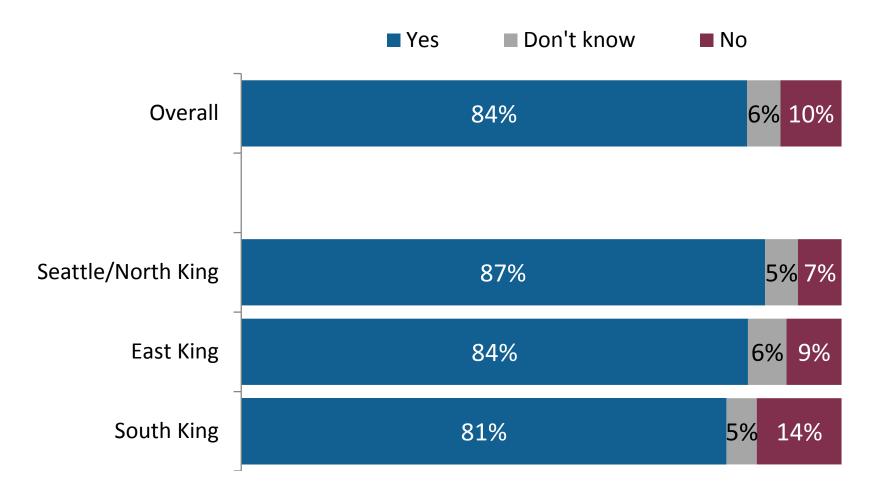
Support for Biosolids - Trend

Support for the recycling of biosolids is consistent since 2013.



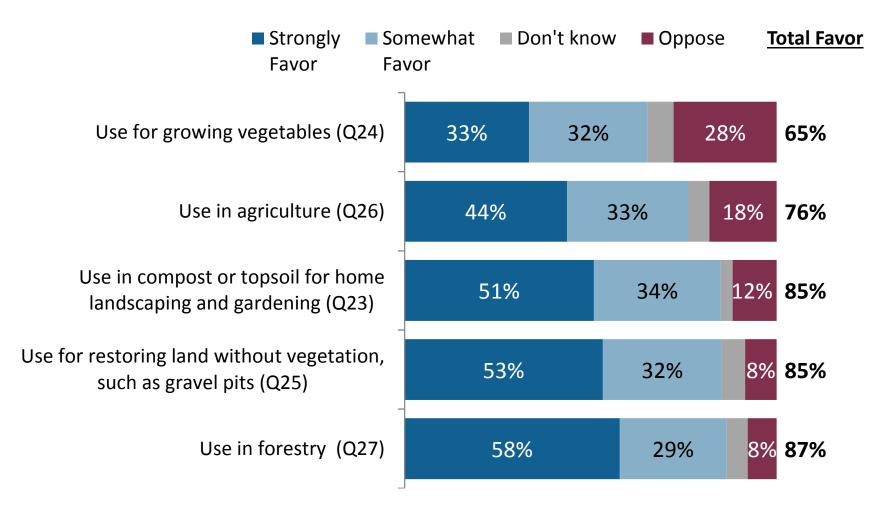
Support for Biosolids - Region

There is strong support for recycling of biosolids across all areas, but support is highest in the Seattle/North King area.



Support For Uses of Biosolids

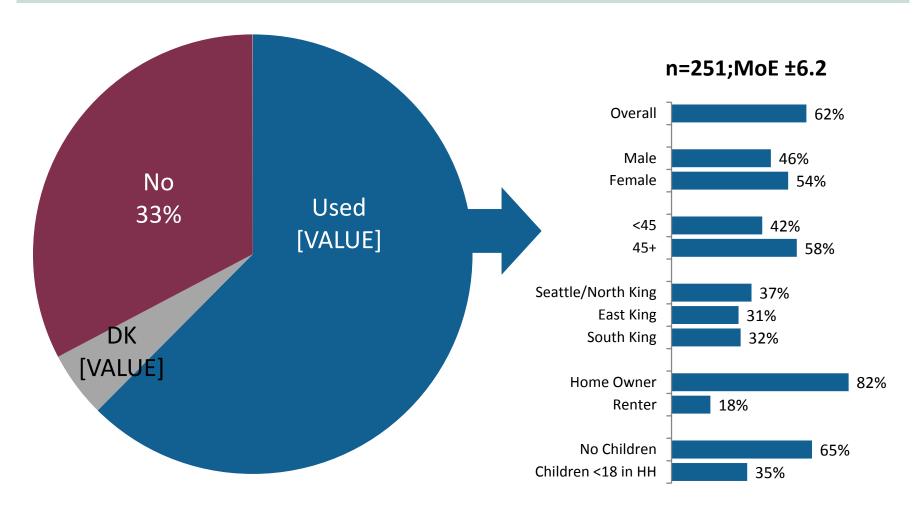
All uses for recycled biosolids are supported by the majority of respondents. Opposition is highest for uses in "growing vegetables" and "in agriculture".



Q23-27. I'm going to read you a list of possible uses for recycled biosolids. Please tell me if you would strongly favor, somewhat favor, somewhat oppose or strongly oppose the use of recycled biosolids for each of the following purposes...

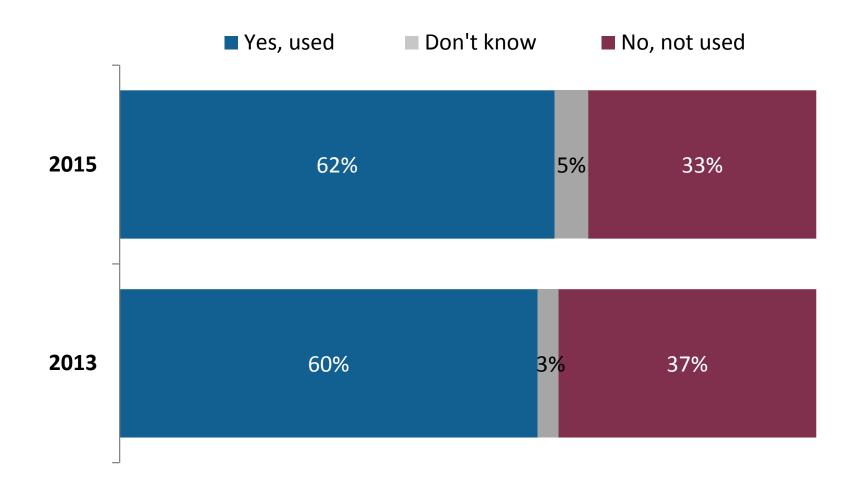
Use of Soil Amendment Products

Six-in-ten (62%) respondents say they have used a compost or soil amendment product. Product users tend to be 45+ years old, female, home owners, and without children <18 in the household.



Use of Soil Amendment Products - Trend

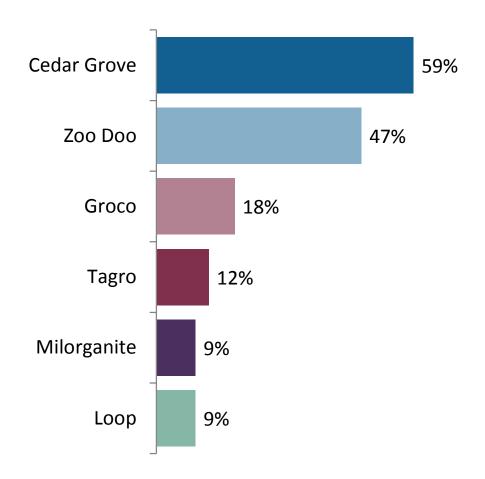
Soil amendment product use is similar to 2013.



Use or Heard of Specific Products

Awareness is highest for "Cedar Grove" and "Zoo Doo" among those respondents who say they have used a soil amendment product.

% of Total Aware



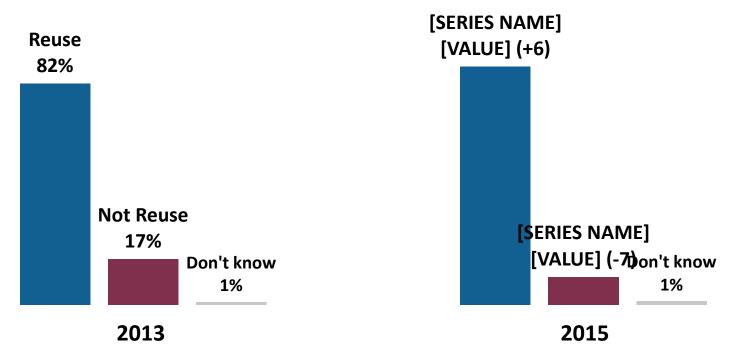


Recycled Water

Use of Recycled Water

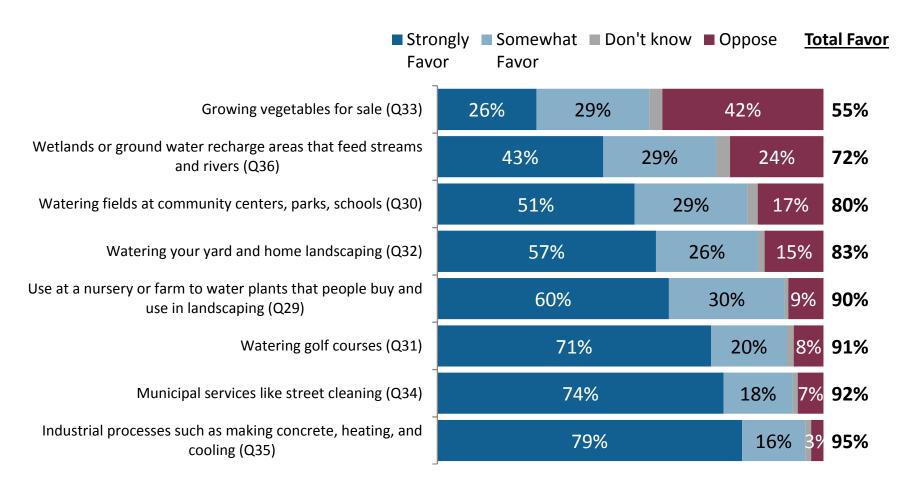
Most all (88%) of respondents say they would like to see King County use as much recycled water as possible. There has been a positive shift from 2013, respondents saying make an effort to "reuse" water has increased by 6 points and those saying not to reuse has decreased 7 points.

Now I'd like to ask you about recycled water, also known as reclaimed water. King County collects wastewater from sewers. Some of this water will be sent to a treatment plant that can treat this water to strict and highly regulated standards. This water is called recycled water. Although it is not suitable for drinking, recycled water can be used for a variety of purposes such as irrigation and industry.



Support For Uses of Recycled Water

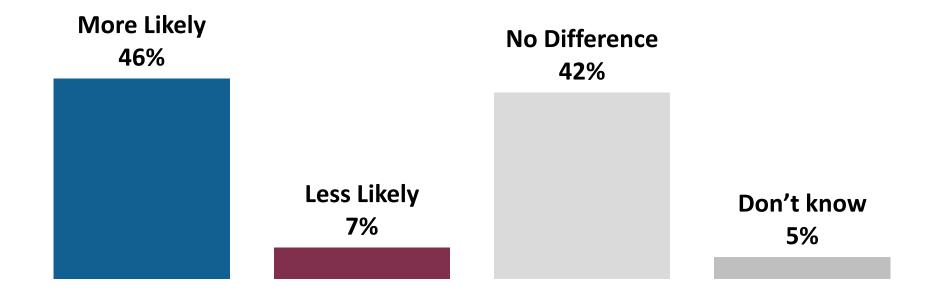
There is majority support for all uses of recycled water tested in the survey, however a plurality (42%) still say they are opposed to using recycled water for growing vegetables and a quarter (24%) say they are opposed to using water for wetlands or ground water recharge areas that feed streams and rivers.



Q29-36. I'm going to read you a list of possible uses for recycled water. Please tell me if you would strongly favor, somewhat favor, somewhat oppose or strongly oppose the use of recycled water for each of the following purposes...?

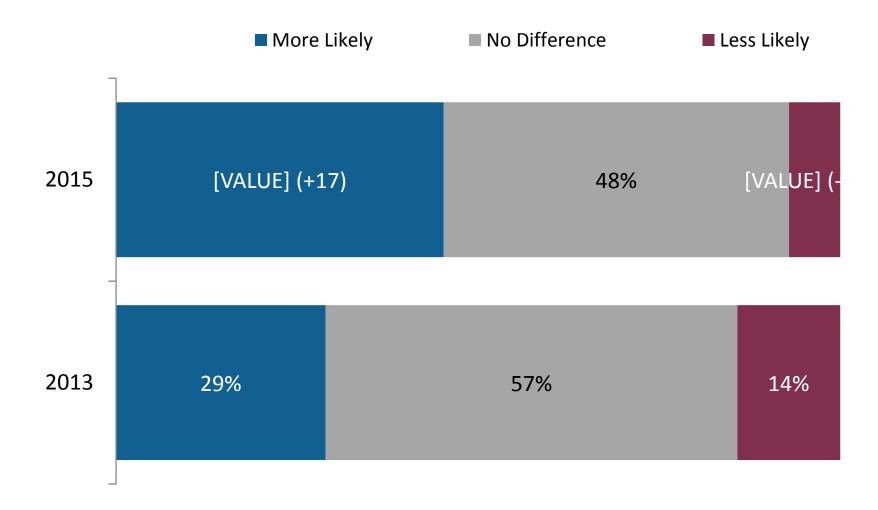
Patronage of Businesses Using Recycled Water

Almost half (46%) of respondents say if they knew a business was using recycled water they would be more likely to conduct business with them or buy their products. Only 7% say they would be less likely. A plurality (42%) say it would not make a difference.



Patronage of Businesses Using Recycled Water - Trend

Respondents saying they are more likely to conduct business or buy products from businesses using recycled water has increase by 17 points and those saying less likely has decreased by 7 points since 2013.

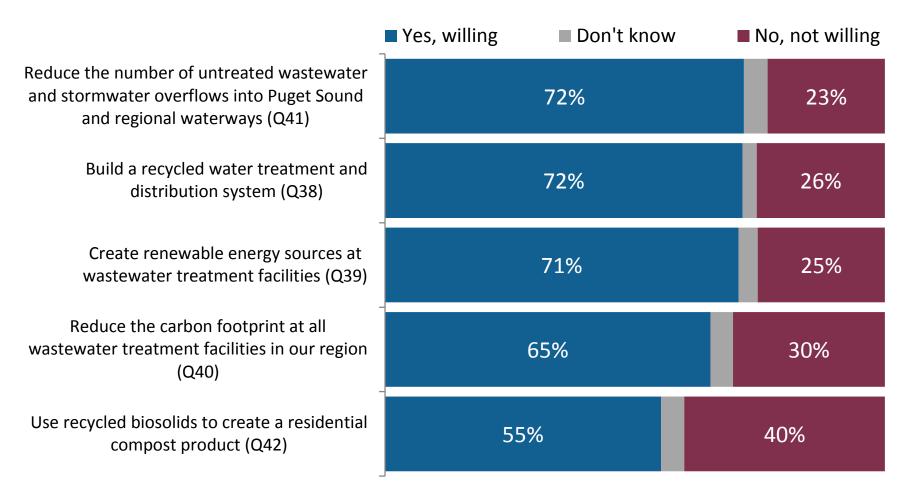




Support for Increased Funding

\$1 More Per Month for Increased Services

The majority of respondents say they would be willing to spend one dollar more per month for all efforts tested. However, using "recycled biosolids to create a residential compost product" is the least popular effort.



Q38-42. There are a number of things King County Waste Water can do to reduce its impact on the environment. For each of the following, please tell me if you would be willing to pay one dollar more per month on your sewer bill to help fund that effort. Would you be willing or not willing to pay one dollar more per month for this effort?



Demographics

Demographics

