



Oakland Township

Water Systems Survey Report

Submitted by: Project Innovations, Inc.

September 27, 2017

Overview

Project Innovations was retained in June 2017 by the Oakland County Water Resources Commissioner's Office to distribute a water systems survey to Oakland Township businesses/residents in the Southeast and Southwest Water System Districts.

On August 14, 2017, letters of invitation with separate surveys for the Southeast and Southwest Districts were mailed to 2,958 residents. There was a total of 2,204 mailed to Southwest District and 754 mailed to Southeast District.

Survey Method

- The Southeast and Southwest Survey questions were identical except for references to cost in Question #1 (Construction of Water System Storage) and Question #2 (Construction of Iron Removal Treatment for Water Supply).
- All surveys and invitation letters were mailed to business/residents with the option of completing the paper survey and returning in a stamped, self-addressed envelope or completing the survey online via Survey Monkey.
- The surveys were completely anonymous. The paper surveys were numbered to track duplicate responses but were not identified with addressee information.
- Responders could provide additional comments in Questions 1, 6, 11, and 12.

Survey Data

The survey population, total responses and method of completion are shown below. Overall results are included in the Survey Results Detail..

- Southeast Oakland Township
 - Population Surveyed: 754
 - Responses Received: 284 (38%)
 - Received by mail: 227 responses (80%)
 - Received online in Survey Monkey: 57 responses (20%)
 - Respondents provided their address: 135 (48%)
- Southwest Oakland Township
 - Population Surveyed: 2,204
 - Responses Received: 710 (32%)
 - Received by mail: 584 (82%)
 - Received online in Survey Monkey: 126 (18%)
 - Respondents provided their address: 326 (46%)

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Executive Summary

Southeast Oakland Township – 284 Responses Received (38%)

1. Question #1 – “Please indicate your suggestions and/or comments regarding the location for system ground storage”.
 - 119 responses (42%) were received providing general, specific, and cost related comments.
2. Question #2 – “Construction of Iron Removal Treatment for Water Supply”
Please Indicate whether you are in favor of, not in favor of, or prefer to handle treatment at your own expense.
 - 271 responses (95%) were received:
 - i. 36% were not in favor of having iron removal treatment constructed.
 - ii. 32% were in favor of having iron removal treatment constructed at an approximate cost of \$98.00 per quarter.
 - iii. 32% prefer to handle iron removal treatment at their own expense.
3. Question #3 – “Do you have a separate in-home iron removal system?”
 - 278 responses (98%) were received:
 - i. 53.2% do not have separate in-home iron removal systems.
 - ii. 41.4% do have separate in-home iron removal systems.
 - iii. 5.4% don’t know.
4. Question #4 – “Do you have in-home water softener equipment?”
 - 281 responses (99%) were received:
 - i. 98.2% have in-home water softener equipment.
 - ii. 1.1% do not have in-home water softener equipment.
 - iii. .7% don’t know.
5. Question #5 – “Do you have any other water filtration system?”
 - 278 responses (98%) were received:
 - i. 55% do not have other water filtration systems.
 - ii. 44% do have other water filtration systems.
 - iii. 1% don’t know.
 - 91 responses (33%) offered the type of system:
 - i. 49% have Reverse Osmosis systems.
 - ii. 33% have Refrigerator and other filters.
 - iii. 18% have Other types of systems.

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6. Question #6 – “Rate your overall satisfaction with each feature of your drinking water quality on a scale of Very Satisfied to Very Dissatisfied”. Features included Taste, Color, Smell, Laundry, Disruptions, Pressure, and Quality.

- 275 responses (97%) were received:
 - i. 77% to 89% were Very Satisfied, Satisfied or Neutral regarding all features.
 - ii. 5% to 22% were Dissatisfied or Very Dissatisfied regarding all features.
- Various comments were voiced regarding Quality, Taste & Odor, Filters/Softeners, and Other topics.

	Very Satisfied / Satisfied / Neutral	Dissatisfied	Very Dissatisfied	Don't Know
Taste	86.18%	8.73%	3.64%	1.45%
Color	80.07%	11.96%	7.61%	0.36%
Smell	87.64%	8.36%	3.64%	0.36%
Laundry	76.82%	15.58%	6.88%	0.72%
Disruptions	87.63%	3.64%	1.09%	7.64%
Pressure	87.63%	8.73%	2.91%	0.73%
Quality	89.09%	5.45%	2.18%	3.28%

7. Question # 7 – “Which TWO of the features discussed above are most important to you?”

- 261 responses (92%) were received:
 - i. 63% responded that Taste was the Most Important feature.
 - ii. 32% responded that Color was the 2nd Most Important feature.

	Taste	Color	Smell	Laundry	Disruptions	Pressure	Quality
Most Important	63%	9%	5%	4%	1%	6%	12%
2nd Most Important	17%	32%	23%	7%	4%	11%	6%

8. Question #8 – “On a scale of Very Satisfied to Very Dissatisfied, how satisfied are you with the overall quality of your drinking water?”

- 275 responses (97%) were received:
 - i. 67% are Very Satisfied or Satisfied.
 - ii. 21% are Neutral or Don't Know.
 - iii. 12% are Dissatisfied or Very Dissatisfied.

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9. Question #9 – “On a scale of Very Important to Not Very Important, how important is the quality of your drinking water to you and member of your household?”
- 273 responses (96%) were received:
 - i. 96% rated Quality Very Important or Important.
 - ii. 4% are Neutral or Don’t Know.
10. Question #10 – “If you have in-home water softener equipment, how often do you have discolored water issues?”
- 264 responses (93%) were received:
 - i. 52% have discolored water once per year or never.
 - ii. 26% have discolored water monthly or more often.
 - iii. 22% have discolored water quarterly.
11. Question #11 – “Do you use bottled water at home?”
- 278 responses (98%) were received:
 - i. 50.4% do not use bottled water at home.
 - ii. 49.6% use bottled water at home.
 - iii. 88 responses indicate it is used for daily drinking and 33 responses indicated that it is used for guests, travel, entertaining and appliances.
12. Question #12 – “Do you have additional comments?”
- 117 responses (41%) were received:
 - i. Responses have been categorized by General, Quality, Cost, and Provider. The comments have not been edited nor have duplicates been eliminated.
 - ii. The words used most often in the responses are the largest in size in the Word Cloud below:



Southwest Oakland Township – 710 Responses Received (32%)

1. Question #1 – “Please indicate your suggestions and/or comments regarding the location for system ground storage”.
 - 267 responses (38%) were received providing general, specific, cost related, and provider related comments.
2. Question #2 – “Construction of Iron Removal Treatment for Water Supply”
Please Indicate whether you are in favor of, not in favor of, or prefer to handle treatment at your own expense.
 - 676 responses (95%) were received:
 - i. 41% were in favor of having iron removal treatment constructed.
 - ii. 32% were not in favor of having iron removal treatment constructed at an approximate cost of \$98.00 per quarter.
 - iii. 27% prefer to handle iron removal treatment at their own expense.
3. Question #3 – “Do you have a separate in-home iron removal system?”
 - 693 responses (98%) were received:
 - i. 51% do have separate in-home iron removal systems.
 - ii. 42% do not have separate in-home iron removal systems.
 - iii. 7% don’t know.
4. Question #4 – “Do you have in-home water softener equipment?”
 - 698 responses (98%) were received:
 - i. 92.6% have in-home water softener equipment.
 - ii. 6.6% do not have in-home water softener equipment.
 - iii. .8% don’t know.
5. Question #5 – “Do you have any other water filtration system?”
 - 684 responses (96%) were received:
 - i. 53.8% do not have other water filtration systems.
 - ii. 42.4% do have other water filtration systems.
 - iii. 3.8% don’t know.
 - 233 responses (34%) offered the type of system:
 - i. 63% have Reverse Osmosis systems.
 - ii. 26% have Refrigerator and other filters.
 - iii. 11% have Other types of systems.
6. Question #6 – “Rate your overall satisfaction with each feature of your drinking water quality on a scale of Very Satisfied to Very Dissatisfied”. Features included Taste, Color, Smell, Laundry, Disruptions, Pressure, and Quality.
 - 691 responses (97%) were received:
 - i. 72% to 89% were Very Satisfied, Satisfied or Neutral regarding all features.

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- ii. 10% to 27% were Dissatisfied or Very Dissatisfied regarding all features.
- Various comments were voiced regarding Quality, Taste & Odor, Filters/Softeners, Provider, and Other topics.

	Very Satisfied / Satisfied / Neutral	Dissatisfied	Very Dissatisfied	Don't Know
Taste	81.02%	10.87%	6.09%	6.09%
Color	74.53%	16.06%	8.97%	8.97%
Smell	84.65%	9.99%	4.78%	4.78%
Laundry	72.32%	16.09%	11.16%	11.16%
Disruptions	83.11%	6.84%	3.20%	3.20%
Pressure	88.81%	7.85%	3.20%	3.20%
Quality	82.46%	10.09%	4.39%	4.39%

7. Question # 7 – “Which TWO of the features discussed above are most important to you?”
- 675 responses (95%) were received:
 - i. 63% responded that Taste was the Most Important feature.
 - ii. 30% responded that Color was the 2nd Most Important feature.

	Taste	Color	Smell	Laundry	Disruptions	Pressure	Quality
Most Important	63%	12%	5%	5%	1%	4%	10%
2nd Most Important	15%	30%	24%	14%	2%	9%	6%

8. Question #8 – “On a scale of Very Satisfied to Very Dissatisfied, how satisfied are you with the overall quality of your drinking water?”
- 693 responses (98%) were received:
 - i. 61.6% are Very Satisfied or Satisfied.
 - ii. 24.5% are Dissatisfied or Very Dissatisfied.
 - iii. 13.9% are Neutral or Don’t Know.
9. Question #9 – “On a scale of Very Important to Not Very Important, how important is the quality of your drinking water to you and member of your household?”
- 689 responses (97%) were received:
 - i. 96% rated Quality Very Important or Important.
 - ii. 3% are Neutral or Don’t Know.
10. Question #10 – “If you have in-home water softener equipment, how often do you have discolored water issues?”
- 623 responses (88%) were received:

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- i. 47% have discolored water once per year or never.
- ii. 27% have discolored water quarterly.
- iii. 26% have discolored water monthly or more often.

11. Question #11 – “Do you use bottled water at home?”

- 691 responses (97%) were received:
 - i. 56.6% use bottled water at home.
 - ii. 43.4% do not use bottled water at home.
 - iii. 302 responses indicate it is used for daily drinking and 53 responses indicated that it is used for guests, travel, entertaining, exercise, sporting events and appliances.

12. Question #12 – “Do you have additional comments?”

- 278 responses (39%) were received:
 - i. Responses have been categorized by General, Quality, Cost, and Provider. The comments have not been edited nor have duplicates been eliminated.
 - ii. The words used most often in the responses are the largest in size in the Word Cloud below:



Southeast Survey Results Detail

Southeast Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southeast Oakland Township – 284 Responses Received

1. Construction of Water System Storage

- Please indicate your suggestions and/or comments regarding the location for system ground storage: **119 Responses**

General Comments:

- I think as obscure of a location as possible would be preferable.
- Post likely areas meeting criteria for useful feedback.
- Aesthetics should be top priority. Don't interfere with the Township's rural beauty.
- Away from residential areas. If that cost more so be it.
- Ground storage sounds great - not sure where the township has land to use.
- No opinion on locations.
- Ground storage whatever the board decides.T
- Consolidate with other areas?? Compare (or future) "needs" with southwestern, northeastern, and northwestern Oakland Township?
- Agree with ground storage system - pictures provided look good.
- I would prefer elevated storage if that's a less expensive option. Water towers look fine to me.
- Costco Brown Rd has the lowest price on iron-out salt. I use a bag every 90 days or so.
- Prefer ground storage - keep the township beautiful and as natural looking as possible.
- Happy with current system
- Ground storage is a good option. Keep it simple.
- Can it be quieter than our pump house air relief?
- What are our options?
- You have the right ideas! Thank you!
- It is difficult to respond thoughtfully to this question without knowing the sites available that meet the necessary criteria. We would suggest it be thoughtfully placed: not at the entrance to an existing subdivision, or in view from someone's "backyard." Currently, the pump house for Oakland Farm subdivision on Oakbridge Dr. is visible from our home and is an eyesore. The roof is worn, and the light brick rust stained. When we moved in, our view of it was blocked by trees which have since died.
- More information on potential sites would be helpful. In our established parks would be more aesthetically pleasing than in/near residential neighborhoods.
- If properly sited, an elevated storage system would more adequately supply sufficient water pressure at a reduced cost yet still be aesthetically acceptable. With so much undeveloped, township-owned property, a suitable site should be readily available to accomplish this.
- Not near major roadway; need secluded, secure area.
- I prefer above ground storage instead of ground storage because of any in ground contamination happening to the storage water.
- Your existing criteria as noted above seems appropriate.
- Please consider placement away from residential areas.
- Water storage needs to be built well like picture shown and low to the ground as possible. Novi system but lower.
- Ground Storage.
- I am fine with the sample systems provided in the mailing.
- Residents can drill their own well and opt out.
- I have no problem with the construction or location of storage systems. It seems like it makes sense to locate them at or near where existing pumping stations are.
- Sorry, I'm 80 years of age and have no ideas or opinions regarding above.
- A secluded location.
- Away from residential areas. Out of sight.
- Near a park so that trees and flowers may be planted to beautify the area.
- I am not qualified to understand the options - better said not enough information - to provide good commentary. However, preference to ensure that these facilities be located where there is least impact for noise and environment.
- I like the Commerce Twp. location, the storage tank located near municipal building/complex.
- On vacant or farm land - off main roads as invisible as possible.
- Place storage tank adjacent to well.
- Make use of existing Parkland where possible for ground storage tanks.
- Flooding? If broken exploded etc.! Should be near a major drainage.

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- Storage systems in Commerce Township and Novi, both look good!
- City of Novi
- Not familiar enough with requirements to provide specific suggestions.
- Placed in an area that is out of view so as not to detract from the beauty of our area.
- Ensure ground storage vs. elevated due to aesthetics; limit any need to cut down trees or impact to wildlife.
- Existing wells.
- I think that the required treatment project is sufficient.
- A location that is not normally readily visible.
- Locate it in my ex-wife's backyard.
- Ground storage would be better.
- In a low-density area.
- I think since the township has had people objecting to water towers in the backyard, ground storage would maybe be accepted better.
- Due to the terrain/area cost effective above - ground solutions such as the examples provided could be easily hidden for general view.
- This will be very welcome.
- I am in agreement to have the storage site to the above ground in a location that will not interfere with traffic.
- What's the current time frame for the construction of the water tower?
- Would not want storage tank near community well, as it is on the street into subdivision.
- I am not opposed to the aesthetics of the ground storage tank as pictured of Commerce Twp. and City of Novi.
- Keep the tanks as low profile as possible. Plant tall shrubs and tree around it. If possible, bury the tanks below ground.
- It is inevitable that values of homes within line of site of large ground storage containers will be negatively impacted. Please make every attempt to locate ground storage away from any existing homes (line of sight).
- As near to pumping station as possible.
- Hook up to city water.
- In a wooded area far from main roads.
- Within a township park?
- I don't have any specific suggestions for locations and aesthetics isn't a big concern of mine. Placement and construction should be considered with cost in mind!
- Anywhere "common sense" prevails and no "favors" to contractors, cronies, etc.
- Need more info on potential sites.
- Somewhere out of sight.
- Exiting township property would be preferred over residential areas. Bear Creek, Township facilities or other owned property.
- Additional natural barriers such as trees near adjacent properties.
- I do NOT want any new water system to be visible from my home. The pump house is right behind my property.
- I'm not sure I am sufficiently qualified to express an opinion since I suspect the choices of location will be driven by water system integration requirements, proximity to access roads for servicing, proximity to neighboring dwellings for appearance/intrusion reasons, etc. I would encourage the choice include the highest possible elevation point to assist with gravity assisted pressure and the lowest possible cost since water charges have become a major factor in living expenses in the Township.
- First off why is it only ground water storage the Board of Trustees is looking at, isn't a water tower a more efficient use of energy, and space for a project like this? Second: Why is the Board of Trustees only looking at new land and not looking at land the township already owns? Third: What is the overall plan for water? Is the Board of Trustees even looking at tying together the other smaller systems that exist in our area?

Specific Locations:

- Sheldon Rd between Oakland Valley and Coach Lamp subdivisions. Existing well already located/pump house.
- County park; county land outside of residence view.
- Do not locate in Bear Creek Nature Preserve.
- In the Township Hall, P.D. area campus.
- Gunn & Sheldon Rd.
- I've seen a sign for "10 acres for sale" on Gallagher Road (North side, west of Orion) for about 8 years when we moved here. If it connects to Paint Creek Trail, then use 5 acres for water storage and 5 acres for nature park with access off trail.

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- West side of Rochester Road, between Gunn & Buell, township owns a large parcel for heron rookery. If it needs to be located further south, NE corner of Rochester & Mead roads.
- Our well is on Sheldon - good site.
- Sheldon Road near well; Snell Road adjacent to cemetery like a mausoleum.
- Do not locate ground storage tank in Bear Creek Park.
- Deer Creek at the school or Living Word Church on Rochester Rd.
- Please do not place in Bear Creek Park or in another township park.
- On a portion of the proposed Old Saybrook development as it would be in close proximity to the community well location. Yes, I understand you would need to purchase sufficient land to do this.
- Place on Sheldon near pumps.
- Not in Bear Creek or other parks; place it on property where a future sub may be built.
- Bear Creek Park.
- Prefer location other than Oakland Farm subdivision entrance road pump house lot. No problem with paying a little more for an unobtrusive location.
- Adjacent to the pumping station on Oakbridge Dr. (NW of Rochester/Snell)

Cost Related Comments:

- It would be helpful in future communication to provide information on 1) the cost difference between ground storage and elevated storage, and 2) the days of supply in the storage system. (e.g. the served area uses 100 gallons per day and the storage system holds 25 gallons = 4 days' supply.)
- Very concerned about price.
- Too expensive!
- For over 25 years, I have been complaining about the rust in the water. Last month I paid \$1,800 for a rust filter system. My vote is NO!
- Don't need ground storage - not worth the cost.
- Why do we need this? I've been on the current system for over 40 years with no issues. If this is to allow for the increased housing - let them pay!!
- Where is the initial money slated towards this? Too late now!! Most of us have added individual rust removal in our homes. (By the pump house if required).
- Sounds very expensive! \$107/qtr. = \$668 more per year and I still have a water softener/salt bills - why the number - way to check out who replies and how? Terrible!
- I favor whichever option costs the least.
- I prefer that the location for water storage does not incur additional costs. Our sub paid money for ten years to hold spots for us to tie into city sewer/water and I am not happy that the lines have never been brought to our location. Our home values are decreased due to this. This plan sounds like the township never intends to bring us city water and sewers as we were led to believe many years ago.
- Per quarter for how long? Forever? Who wrote this, a second grader?
- If this system is required, there is really nothing is consider. How long will the \$89 per quarter last? 1 year? 5 years? 10 years?
- Depending on the ambient noise level of the system, there are many places in Oakland Township where this system could be adequately located. However, I do believe the cost of the system is rather high. What this survey does not indicate is if the monetary increase is every quarter or just the first four quarters.
- We don't need it! The cost is too great. The cost per quarter in addition to regular water bill is ridiculous. And for how long the additional cost? Forever? No way; we can't afford that. The letter never stated this.
- Cost is too high!
- Since peak demand (which occurs in summer) drives storage/pump size consideration, have actual flow readings been taken? The use of billing data is not sufficient for this phase of the project.
- I would prefer no tank. The cost seems excessive. Location - somewhere not visible.
- The least expensive alternative.
- Need better water quality so we can drink it. Currently we use bottled water for drinking. Need to lower the cost also.
- \$89 seems very high per quarter per household.
- No preference - but the township should find a way to pay this without increase to homeowners!
- How long does the \$89 per quarter last? 5 years? 10 years? Forever?
- Costs for both systems will increase quarterly water bills - out of sight!
- What would be the cost if the storage system was elevated? Do you have any pictures of that?

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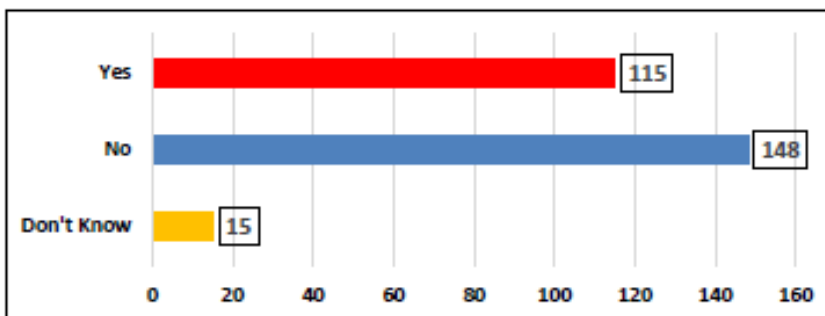
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- Whichever is more cost effective to me.
- Another burden for homeowners, especially retired ones. Should find cheapest way to fulfill government requirements.
- If it costs more - NO. We don't need to pay any more than we already pay.
- Why is this needed? Have plenty of water pressure. Just another unneeded add on expense like the water cost recovery charges. I only get charged more, no benefit received.
- I have lived here 25 years and love my water. NEVER had a problem. Sounds like more wasteful spending of my money by the MDEQ. Also, is this \$89 a permanent addition to my bill? Total waste of money.

2. Construction of Iron Removal Treatment for Water Supply: 271 Responses

- 36% / 97 responses: I **am not in favor** of having iron removal treatment constructed for my source water supply.
- 32% / 87 responses: I **am in favor** of having iron removal treatment constructed for my source water supply at an approximate cost of \$98.00 per quarter.
- 32% / 87 responses: I prefer to handle iron removal treatment in my home, at my own expense.

3. Do you have a separate in-home iron removal system? 278 Responses

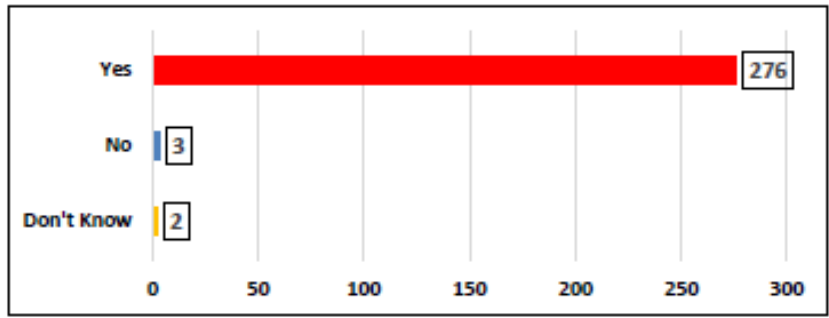


- Yes = 41.4%
- No = 53.2%
- Don't Know = 5.4%

Approximate Age of System	# of Responses
Less than a year	7
1 – 5 years	28
6 – 10 years	17
11 - 15 years	11
16 - 27 years	15
Total Responses:	78

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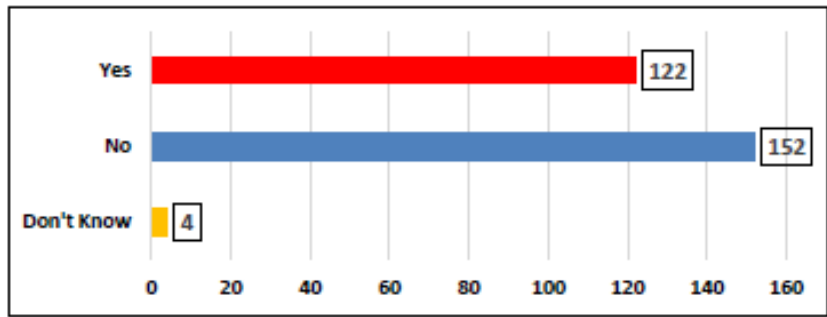
4. Do you have in-home water softener equipment? 281 Responses



- Yes = 98.2%
- No = 1.1%
- Don't Know = .7%

Approximate Age of System	# of Responses
Less than a year	8
1 – 5 years	67
6 – 10 years	52
11 - 15 years	27
16 - 40 years	38
Total Responses:	192

5. Do you have any other water filtration system? 278 Responses

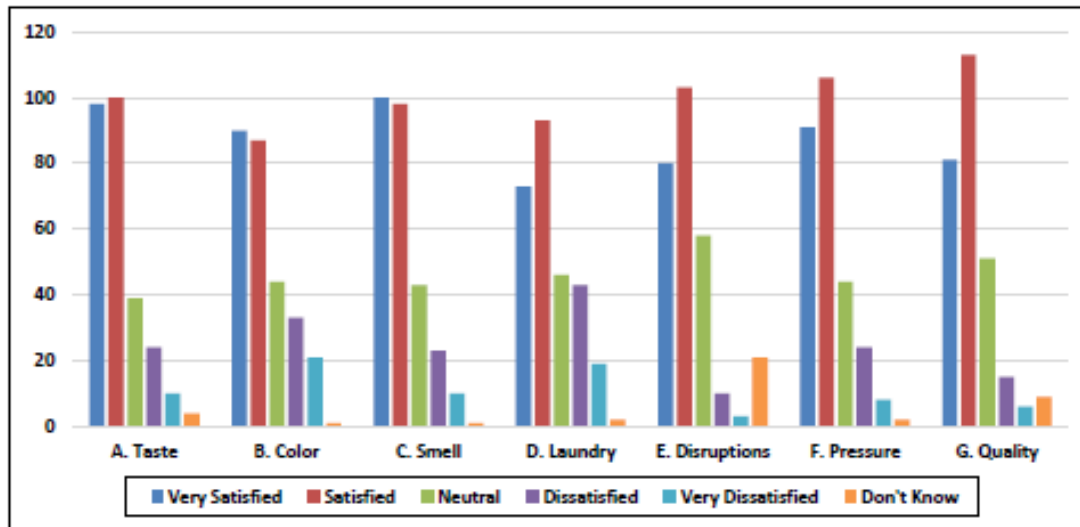


- Yes = 44%
- No = 55%
- Don't Know = 1%

Type of Filtration	# of Responses
Alkalizer	1
Aqua Classic II	1
Brita	2
Carbon	2
Cartridge	4
Culligan	2
Fridge and other filters	30
Passive in-line	1
Pure Blue H2O	1
"Purified Water to Go" delivered	1
Reverse Osmosis	45
Whirlpool	1
Total Responses:	91

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Quality of Drinking Water - Southeast Oakland Township – 284 Responses Received

6. Rate your overall satisfaction with each feature of your drinking water quality on a scale of “Very Satisfied” to “Very Dissatisfied”. **275 Responses**



	Very Satisfied / Satisfied / Neutral	Dissatisfied	Very Dissatisfied	Don't Know
Taste	86.18%	8.73%	3.64%	1.45%
Color	80.07%	11.96%	7.61%	0.36%
Smell	87.64%	8.36%	3.64%	0.36%
Laundry	76.82%	15.58%	6.88%	0.72%
Disruptions	87.63%	3.64%	1.09%	7.64%
Pressure	87.63%	8.73%	2.91%	0.73%
Quality	89.09%	5.45%	2.18%	3.28%

Quality Comments:

- Great water quality.
- Don't drink the water.
- We get a postcard when the system is flushed. We get an annual brochure about quality.
- Our #1 water quality concern is safety. Even though the water quality reports we receive do not show "violations," there are no safe levels for some naturally occurring elements such as arsenic which is present in our water. Also, when we observe the quality of water coming into our home, the amount of rust and sediment we witness monthly when we change our pre-filter and also the corrosion/staining/etching we observe of our appliances, plumbing, and plumbing fixtures...we do not feel it safe to ingest the water coming into our home through the current well system.
- Twice we have found boil notices laying on our front porch. They probably were stuck on the door but blew off and we found them days later.
- When I boil water from sink it has a scum on top and white particles. Also, very rusty. What am I putting in my body?
- My drinking water taste has improved from when we first moved in 1999. The filter in-house for water still has some smelly water. I have to let it run. I am never quite very satisfied.
- I don't drink the water!
- Lead above EPA limit 16 ppts.
- Noticed iron in toilet bowls this past 6 months. I feel the quality has been decreased.
- Is there lead in our water??
- Concern about the amount of sodium in softened water. Plus, many other issues caused by softened water.

Southeast Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southeast Oakland Township – 284 Responses Received

Taste & Odor Comments:

- Just smells like a pool coming from the tap. I use a zero-water filter.
- I am satisfied with the taste and smell of my water because of my equipment. Even though I have a whole house softener, my whites are yellow in the laundry. The water I drink is only RO, the laundry water is not RO, it is only softened. My water pressure is absolutely terrible and it is not caused by the water softener. I can bypass the water softener and it is still terrible pressure. I get rust stains in my toilets, tubs, showers and sinks even after the water softener. The softener is working fine, I do not have any calcium or lime deposits but if I did not have the softener, the deposits are terrible.

Filters / Softener Comments:

- My drinking water is filtered through an RO system. Responses above are based on filtered drinking water.
- I use a "rid rust" chemical injection system to treat irrigation system to reduce red coloration stains on landscape stones and residence.
- RO & softener with iron filter - my water is very good.
- Prior to installation of softener/RO/filters, water looked and smelled bad, stained whites.
- Item "D" is through filters. Drinking water is not.
- ABCDF - all improved after we added extra pumps and generators to the pumps.
- Satisfied due to in-house system. Before in-house system, dissatisfied with A-D.
- I have all the systems i need in house for drinking water
- We have a Brita pitcher that is used for drinking, cooking, etc. Bathing, brushing teeth, etc. is another matter.
- Only reason its ok is that we have so many filters.
- We soften and remove iron so we don't have issues other than pressure.

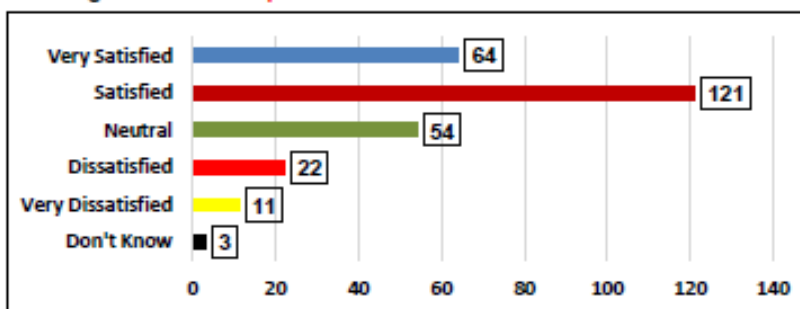
Other Comments:

- I have been here 32 years - there's no cheap way to remove outside.
- Safety first.
- Without the removal of the phosphate the township puts in the water, is it even possible to put an iron removal system on our community well?
- Use bottled water for drinking.
- I would prefer city water.
- The most important thing to us about water is its cleanliness. We want to drink and bathe in water with the least amount of chemicals. Purity is #1.
- I don't even know if there's fluoride in it so if my kids need supplement.
- Water pressure when sprinklers are on is horrible.

7. Which TWO of the features discussed above are most important to you? 261 Responses

	Taste	Color	Smell	Laundry	Disruptions	Pressure	Quality
Most Important	63%	9%	5%	4%	1%	6%	12%
2 nd Most Important	17%	32%	23%	7%	4%	11%	6%

8. On a scale of "Very Satisfied" to "Very Dissatisfied", how satisfied are you with the overall quality of your drinking water? 275 Responses

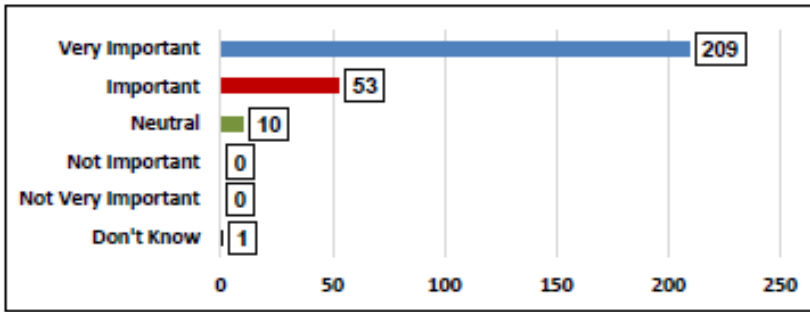


- 67% are Very Satisfied / Satisfied
- 21% are Neutral / Don't Know
- 12% are Dissatisfied / Very Dissatisfied

Southeast Oakland Township Water System Improvement Survey Results – Sept. 2017

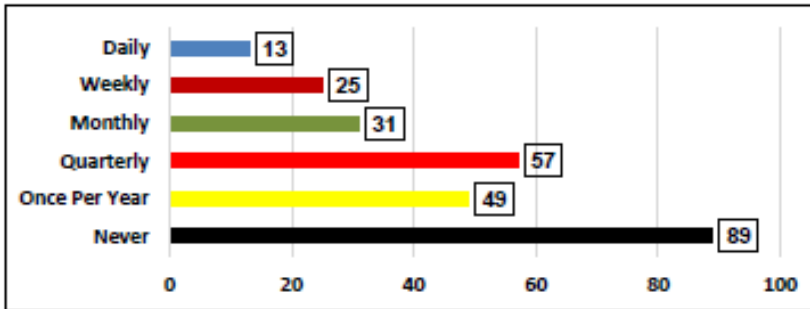
Quality of Drinking Water - Southeast Oakland Township – 284 Responses Received

9. On a scale of "Very Important" to "Not Very Important", how important is the quality of your drinking water to you and members of your household? **273 Responses**



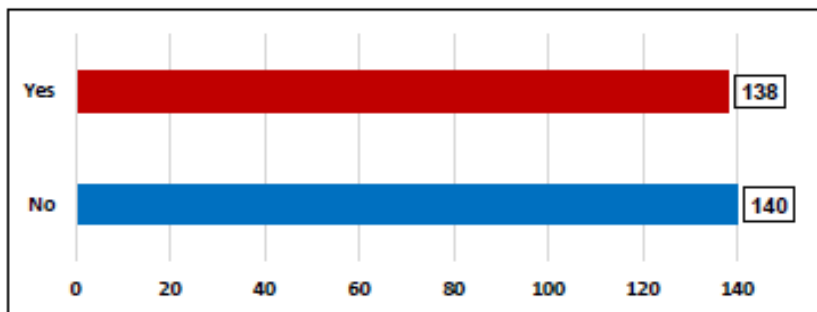
- 96% say Quality is Very Important / Important
- 4% are Neutral or Don't Know

10. If you have in-home water softener equipment, how often do you have discolored water issues? **264 Responses**



- 52% have discolored water once per year or never
- 26% have discolored water monthly or more often
- 22% have discolored water quarterly

11. Do you use bottled water at home? **278 Responses**



- 50.4% do not use bottled water at home
- 49.6% use bottled water at home

How often and for what use:

88 – Daily drinking

33 – Guests, travel, outdoors, parties/entertaining, and home appliances

Southeast Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southeast Oakland Township – 284 Responses Received

12. Do you have any additional comments? 115 Responses

➤ The words used most often in the responses are the largest in size in the Word Cloud below:



General Comments:

- Areas like Oakland Hunt shouldn't have certain equipment that is not available in the rest of the township.
- Could the township provide testing of resident's water? I would be willing to pay to have the safety of my drinking water tested.
- Could we have multiple choice for ground storage locations?
- Having moved into the neighborhood a year ago I have honestly not thought much at all about the water. It has been satisfactory. While the periodic flushing is a slight inconvenience, it is not a major issue.
- I have an in-house system for iron and for drinking water which I have already paid for and I'm very happy with.
- I see no need for it.
- Like the idea of a storage facility. Not in favor of iron removal as I have my own in hose system.
- Like the look of the Novi system better than other.
- Question 9 is silly. The township board was elected to make tough decisions. I urge you to make the best decision in this matter based on the entire service area and not just the handful of people that will no doubt show up opposed to anything/everything.
- The Oakland Twp. water treatment with bi-annual flushes does a fine job. The water here is better than in Flint and other communities. Don't need to change it now.
- There are varied opinions within our family.
- Water pressure is important as well.
- We are not in favor of the implementation of an iron removal system provided by the township.

Southeast Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southeast Oakland Township – 284 Responses Received

- We have never seen any evidence of rust stains or rust impact in our water in our dozen years living here.
- We have the main water line "flushed" by Oakland County water department due to iron build up and occasional low water pressure approximately 2 times/year.
- My house is directly in front of the current well and pump. I'm extremely concerned about the visual impact to my backyard.
- 1) Please publish data on how many of the "complaints received" annually noted in paragraph 2 are from unique households, as opposed to the same homeowner complaining multiple times each year. Also, please address/define whether "water quality complaints" are of the type that would be fixed by an iron treatment solution. 2) The iron treatment option seems fairly expensive if it will not eliminate the use of home water softening systems.
- Stop allowing all these building permits to developers unless they are going to pay for water wells, pumps to be fixed. Longtime residents shouldn't be asked to fix problems if nothing is going to be done to prevent these problems.
- Two day flushing twice per year is inconvenient.
- I have great filters and have no need for assistance.

Comments Regarding Quality:

- Difficult to trust water coming through faucets for drinking. Looking into reverse osmosis.
- Do not like water staining in commode & sink - even with water softener, what we bathe, drink, & wash with is of utmost importance. Please have same fervor for "parks, dogs, etc." for OUR water! Retaxes are way too high in Oakland Cty. NOT to have the BEST water in state!
- I will probably continue to purchase bottled water.
- I believe the quality of our water is excellent. Adding an additional \$400 a year to treat iron is economically unreasonable and unnecessary when a 2X cost to upgrade a water softener will have the same results and outcomes as iron treatment. Please do not force homeowners who do not need/want this yearly cost to carry the burden for the township when there are cheaper and better options available to individual consumers.
- I built my home in 1999 and when I moved in, the water pressure was great. My sprinkler and everything in the home had acceptable water pressure. Over the past 10 years, my water pressure is absolutely terrible and I have complained but nothing happens. I have had low water pressure flushes two times a year and that does not help. I have paid companies to come out and look at my sprinklers because they are not working but these companies tell me my water pressure is terrible. When I first moved in, my sprinklers were set to come on at 5:30am in the morning but that is no longer possible because no one can take a shower when the sprinklers are on. This was not a problem before. Something has changed in the distribution system or at the well house and no one is doing anything about it. I am not making this up. I am tired of complaining about water pressure. We have better water pressure in our homes in Sri Lanka than our home in Oakland Township, this is ridiculous. I am going to have a third party test my water pressure before and after these improvements that are coming with additional charges, if my pressure stays the same or gets worse, I am going to have a serious issue. I don't mind paying more quarterly but I better have a big improvement in water pressure. I should not have this water pressure problem in the first place.
- I would love the iron and particles to be removed from the water. I also get a high amount of calcium buildup in dishwasher, around sink faucets, and on glassware.
- If iron content is hard and damaging to plumbing in the house (corrosion, etc.), I would be more in favor of removing iron from water at the source, prior to entering the distribution system.
- Iron removal!!!!!!
- Lack of iron removal results in badly stained bathroom fixtures.
- Lead in water is a concern.

Southeast Oakland Township Water System Improvement Survey Results – Sept. 2017

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- Living here for 41 years, never drank the water. Always used bottled water for drinking. It is a pain to have the lines flusher over a two-day period. It used to be done in one day.
- Minerals in the water have negatively impacted my hair and skin.
- My water tastes much better than Rochester Hills water but washing whites can be a little risky.
- No real concerns about the water storage issue. BUT major concerns about Iron Removal Treatments!!! Like most in my area, I have paid to have iron removal equipment installed to remedy the lack of capability we have through WRC. Iron filtration should have been installed at the community well ages ago - to prevent the build-up's we ALL get. My home system has rectified the problem in my home and is cost effective. However, we STILL have the issue of water coming from the well TO the homes. Yes, I am in favor of Iron Filtration at the source/well/pump, but can't see paying for it now after 21 years!!! There's no telling how bad the buildup is between the well and our homes after all this time. So, I can't see paying that additional money.
- Object to occasional chlorine smell in tap water.
- Often, I lose water pressure while in the shower, and our toilet bowls often look orange due to the water. The flushing twice a year is also very inconvenient. Thanks for listening.
- Other concerns: I hate the way the way has left a ring in my toilets, red stains on grout, and bad water spots on granite. And I clean everything very often.
- The current water quality is very very poor given the price we pay.
- The discolored water is usually when the system gets flushed.
- The only time we have rust issues is after you have flushed the lines until the sediment is through.
- The reduction of iron and dissolved solids would be greatly desired.
- This is my first experience with community well water. Always had city water in previous homes. I was not at all happy with the water before installation of in-home system. As for removing iron at the source, I voted yes because of iron discoloration to brick and other outdoor surfaces. I think it would be a good community investment. Thank you for requesting community input.
- We are dissatisfied with the quality of water coming into our home from our well system. It has been a frustrating, time consuming, and expensive to manage the rust and sediment which enters our plumbing from the well. We do not feel that the water system should dump rust and sediment into our home plumbing for us to manage as individuals. We have the county do a low-pressure flush twice a year. We have a double tank softener, and an iron pre-filter which we change monthly, costing \$28.00 per month. It is thickly coated each month with rust, and sometimes black sediment. Our "stainless" dishwasher and sink are stained from the water minerals. Our porcelain and chrome fixtures were etched within one year of replacing them with high end products. We have replaced our hot water heater 3 times in 10 years because corrosion cause the bottom leak. We switched to a tankless hot water heater which was expensive to install, and is expensive to maintain. Flushing is required to remove the mineral buildup. We also get bluish crystals deposited on our pipes, and corroding our chrome fixtures. We have our water softener periodically checked, and it is in good working order. We are concerned about the arsenic reported on our water quality report. Even though it its naturally occurring, there is no safe established level. Because of all these things, we do not consider our water safe to drink. It makes sense to us, to have the water treated at the pump house, before it enters our home. We are wondering whether the developers of the many new subdivisions are assuming any responsibility for financing the water storage tanks. These new developments are increasing the demand on our water system. They did not have assume the cost of the initial well development, but it seems they should assume some of the cost of the new mandated storage tanks.
- We do not have a problem with discolored pavement due to sprinkler system. Our refrigerator filter handles whatever the softener whole-house filter misses. Main concern is home value - when will billing start? Pre or post completion?
- We do use a Brita water pitcher for drinking water. We would probably use it even with proposed upgrades.

Southeast Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southeast Oakland Township – 284 Responses Received

- We drink water filtered from our fridge on a regular basis and are very satisfied with the quality. We have no issues with our unfiltered tap water as well.
- We have been satisfied with the quality of our water for a very long time. It has actually improved over the years! It's rarely discolored or disrupted. The cost is very reasonable now!
- We have many machines that are used to improve our water quality and protect our property. They are very necessary.
- We hope the good quality continues.
- Wife drinks bottled water because she tastes chlorine. I do not.
- You're a little too late with this iron removal treatment. I had to put in an iron removal system a while back for the color and smell. When we built our home, we put in a water softener and reverse osmosis. I just recently replace the water softener.
- Water quality (taste & purity) is critical. Note also wise distribution and restraint from over-expansion of system - water pressure is very important and not mentioned in this survey. Thank you!
- There is a lot of sediment and iron in the drinking water. I had the system flushed and it still is discolored. It stains the sinks, tubs, toilets, driveway, sidewalk, and such.
- There is a lot of filterable iron as wells as dissolved iron.
- Water quality is most important. It is way too expensive to ask us to pay for water storage PLUS iron removal. We are seniors on limited budget.
- Have NO issues with sprinkler discoloration of patio or driveway except once after a flush - no in-home issues.
- We use iron reducing salt and it does NOT seem to work well. So, treatment is probably the best option.
- Run discolored raw water till it clears - (storage system will not stop discolored water when comes from the old water lines) Digging more wells would justify additional costs more than storage systems that will create more system residue. Increasing the number of wells will best handle increased usage.
- The iron in this area is the highest I've ever seen. I can't keep up with it. I change my filters every 2 weeks, my clothes are yellowing, my toilets and sinks are stained yellow. I'm 100% all for removing the iron!
- I do have reverse osmosis that covers all my drinking water. That is why I have no issues with taste, color, etc. since I have spent thousands on water softener, iron removal, RO, filtration, etc., I DON'T need ANYTHING!!

Comments Regarding Cost:

- \$69 storage estimate is not worth the cost!! \$98 iron removal is not necessary. No need for either treatment! Don't do it! Current water quality is good! Have homeowners install reverse osmosis system - have had for 19yrs. - works great!
- Both proposals provide no benefits for me, just added costs. I already footed the bill for a high-volume softener. The proposed costs dwarf what I spend on softener salt and would not eliminate the iron or the ridiculous amounts of calcium and magnesium in the water. Finally, the sewer charges are high relative to the cost of the water. They should be based upon water usage in the winter, not year-round as they include summer lawn watering which has no impact on sewage.
- Cost on any project starts at a base price but it increases constantly for maintenance, labor, supplies, etc.
- Cost too high.
- How long does the \$98 per quarter last? $98 \times 4 = \$392$ for 1 year, \$784 for 2 yrs. \$1176 for 3 yrs.; \$4920 for 10 yrs., \$9840 for 20 yrs. Where is the end? Seems cheaper to take care of iron individually.
- How long will each assessment be charged to homeowners?
- I am NOT in favor of higher taxes to our water system.
- I am surprised at the estimated quarterly costs. This should not be a "cash cow". I am assuming labor cost and white-collar costs are excessive.

Southeast Oakland Township Water System Improvement Survey Results – Sept. 2017

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- I am suspicious of the estimated construction costs and, therefore, the household assessments; it always seems to be higher than the quotes!! In addition, I do not believe that affected residents have been sufficiently informed of the 1992-2001 assessments for proposed water system improvements. Where did all that money go??
- I am very concerned with the suggested cost of the storage and cost associated with iron removal. From how I read the packet you are suggesting a total of \$170/quarter/customer. And this will be in top of water usage. Your suggesting an approx. \$370 (min)-500 (max) of water level is unacceptable. I hope that you can communicate better the overall impact not just by item.
- I do not want a facility built that will help in the removal of rust in our water. In home removal is sufficient; cost of such a facility is way too much and should be left to the individual homeowners! This goes for the "water system storage" facility; we don't need that either.
- I don't want to spend more money due to a recalculation I had no input with.
- I have no need for water storage or treatment of my water of any kind. Again, it sounds just more wasteful spending.
- I have not had any water complaints while living in Oakland Township. I could not be more opposed to the construction of an iron removal treatment center. Not only because of the nearly \$400 per year cost but because I have never had an issue with elevated levels of iron in my water. There will always be complaints. I don't know what percentage of customers the 106 complaints represent but I don't believe it even rises to 10%. Between those two factors, I am adamantly opposed to the iron removal system. If it is that large of a problem for those 106 people, they can independently pay for an iron removal system for their residence with the \$400 they save per year.
- I have to admit I am not happy about a \$600-\$700 increase yearly water bill. I am mostly satisfied with our water at this time.
- I think it would be beneficial to have our iron removal process in place that is properly overseen. \$400 for a year does seem steep but if results can be guaranteed this would be acceptable. Nothing is mentioned on how stable this price stays per year. I really don't want a rate of increase on this.
- I understand the cost of the storage system would not be completed for nearly 20years. I am "sorta OK" with that. However, it would take only 4 to 7 years of paying an assessment for the iron removal system before I'd spent what it would cost me to install my own in my home. That is the reason I am not in favor of a community based system.
- I wonder how many "quarters" the cost increase will last. My water is already too expensive. Should we hook up to the city water system?
- I would be very interested in a high-quality water product, but not at the cost projected. I'd suggest growing your customer base by adding other townships with same issue.
- I would like to try to understand why the cost would be so high for iron removal - would it be a continuous/permanent cost?
- If the projected cost of the storage facility is \$69, what is the length of time to pay for this facility? The same question regarding iron removal.
- I'm a senior citizen, 80 years of age and could not afford those quarterly amounts you mentioned for storage, etc.
- It is unfair to have to pay for iron removal for everybody else. Let the individual homeowners provide their own iron removal, if they choose.
- It's very unfortunate that this system is the only solution for solving the hard water issues for this area. Many people, like myself, are retired and on a fixed income, and the additional expense for installing this new updated system is going to be another burden to bear.
- NO INCREASE IN EXPENSES.
- Not in favor of more than doubling the cost of water bill!
- Over five years our water cost has averaged \$56.79 / quarter. When you add water storage it will cost us \$156.79 / quarter, and if you add water treatment it will rise to \$254.79 / quarter. It seems to us that you need to go back and look for the best solution to this problem and not the easiest way out of it. We understand the Michigan EPA has

Southeast Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southeast Oakland Township – 284 Responses Received

mandated water storage and you're not willing to fight them on it. How you store the water tower vs ground has not been fully explored and neither has water treatment options. Perhaps you should have asked residents to come to a meeting to discuss this issue prior to sending them this survey.

- Please explain the pricing structure a little bit more clearly. I don't know if these are consistent quarterly increases or just until we pay off the systems installed.
- Secondary meters should be installed for irrigation to avoid sewer charges. This would help offset the cost to the consumer for these projects. Also, we would like to know how long the additional charges will be in place to pay for the projects. There should be an estimated end point or reduction in charges. Maintaining water storage and iron removal should not require the same estimated charges.
- The additional costs of the two projects will equal approximately \$668 per year per household. This is a very steep increase to our residential water bill, nearly double the cost of the utility. No mention was made to the duration of payments for the storage system. At this cost for residents, was there any consideration for connection to the Detroit water system?
- The levels of iron in the water are little to none with my water softener. I have already paid to have a softener and could not disagree more with the installation of community iron removal treatment center at the cost of approximately \$98 per quarter. The people that do want it, can personally save that \$400 per year and use it toward the installation of their own system for their residence.
- Most vocal of the comments that I have heard at various township hall meetings I have attended regarding type of structure and land placement, come from people representing the parks, anti-growth contingents, and others who are not on community wells and therefore do not have to pay for this project. I am glad that finally the people who have to pay for this have been surveyed but am concerned that the choices have been narrowed by the township to the "aesthetical". I prefer city water purchased from Rochester to the south or from Orion Township which has storage capacity to the northwest of us. Also, I am not averse to a water tower because I believe it will be less expensive to operate and should be located on land that the township already owns. I do not share these aesthetical concerns. I do not think a water tower is incompatible with park land given the cost to connect these various wells and that the park land is in the middle on high ground. I would prefer the township not be in the water management business and leave it to the county. I have more confidence in their experience, resources and management ability. The history of the township dealing with this issue is less than stellar including having to give back by court order \$3,000,000 of tap fees collected from developers when these subdivisions were built. In a sense, we are paying for this twice. These fees were in the price of the homes purchased. As to arsenic, our older water drinking reports up to 2011 by the OCDC, included arsenic and for some reason it was discontinued after that year. I would like that to resume since this is a problem to the west and north of the township. I am not interested in iron treatment at this cost. I'd rather have city water. I would like to see a comparison of the cost of equal products with city water and the township alternative. I think more complete disclosure would be prudent regarding the cost of alternatives. What would the cost of city water be?
- Water is currently from a community well maintainer and billed through WRC. Not real sure why Oakland Township is involved, they have never contacted me about water in the 25 years I have lived here. If there is no relationship to my current system I would not want to be billed for this.
- We have lived here 18 years. We have spent thousands over the years to make our water better. I am satisfied with the quality of my water, only because I have it tested annually and because we have a lot of equipment in our basement to help make the water drinkable/usable. Without that equipment, I would not drink it.
- We pay highest taxes around and have nasty water and crumbling roads, we had to pay an assessment of thousands (\$12K) out of pocket for repaved roadways which is insane at our tax rate. Additional costs are a burden and unfair!
- We use a water softener and reverse osmosis. This is fine most of the time, but is \$25-\$30 per month in salt, and \$75 every 4-6 months in RO filters. If I can cut way back on salt (flush 1xweek i.e. every 2 days) and get 9-12 months out

Southeast Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southeast Oakland Township – 284 Responses Received

of the RO filters, then I confirm my answer to \$98/quarter for iron removal. If I still have to run both systems \$150/quarter (est.) then I would be happy with the storage option only.

- Who will be doing this? Will bidding be performed?
- With storage and treatment, it will require major plumbing cost to bypass filters and removal.
- Very concerned with price! If \$69 for storage and \$98 for iron reduction plus August bill already \$150+ = \$317+. Water will be \$100 per month for the most abundant resource in Michigan. Can't wait until they add sewage - will have to move!!
- Get it done. You collected \$600 sometime ago for sanitary sewers. Where are the sewers? Or where is my \$600 (plus interest)?
- It would be nice to not have iron issues but we do not want our water bill to go up that much in cost.
- While it would be highly desirable to reduce iron levels in the water supply, I cannot justify the added cost at this point. Doing both of these improvements appears to double our quarterly water/sewer charges and this makes the cost a major factor to be considered in our living expenses, which more then offsets the benefit in our minds.
- I do not want my water cost to increase by \$69/quarter. It is totally unnecessary and waste of money. Perfectly happy with existing system. Don't screw with existing water supply.
- Not interested in any additional expense. Households already invested and treat for iron with household equipment. Doing this at a county level is redundant and a waste. Investment cost is already sunk and fixed by homeowners. Don't need additional government expense!
- With the new equipment, we just installed we are very happy. I don't know how the water department in good conscience can distribute the quality of water we have been getting for the last 30 years. Shame on you! If you would like to discuss this feel free to call me, 248-408-3639.
- Keep fire suppression separate and keep cost low. Thanks.
- \$98 per quarter is very expensive, almost \$400 per year for iron removal only. Would be interested in an objective recommendation for a cost effective, in home iron removal and softener system. My softener is 25 years old, I'm sure tech improvements have resulted in much better systems. P.S. Water pressure at our home has always been inadequately low - top priority for me.
- Please, please, please . . . Great idea!!! We all need this and will save a lot of money in the long and short run.
- I will NOT pay an extra \$98/quarter!!!
- DO NOT increase our COST! Our water is just fine as is! Your questions are a bit bias toward these proposals. I vote NO for both proposals 1 & 2.

Comments Regarding Provider:

- I'd rather be on Detroit city water and not have the mineral / iron issues.
- If you cared about the water in Oakland Township - you would have gotten water from Detroit years ago!!! Looks like people will make money off this project - so you don't care about the people either!
- Instead of spending this money on the existing system, why not bore into Detroit water?
- Our only concern is: is there any chance of Detroit city water coming here? If so, do we still use the storage and treatment facilities? mc.norstrom@sbcglobal.net
- Why would I pay \$221 a quarter for well water? City water would be less than half! Those who want city water quality should move.

Southwest Survey Results Detail

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

1. Construction of Water System Storage:

- Please indicate your suggestions and/or comments regarding the location for system ground storage:
267 Responses

General Comments:

- We agree with ground storage but are unaware of possible locations. Is there more info regarding potential locations?
- If we must do this I believe the system should be well hidden away from roads. The township has much vacant land and the facility could be well hidden from sight. I do not believe any current parks should be used.
- Would prefer underground storage, as long as that's a safe option (i.e. no leaching of herbicides/pesticides, etc.)
- No ability to answer this question.
- Not visible from road/street.
- No specific suggestions. If done similar to Novi and Commerce Township, these are visually acceptable.
- Find a location in the woods, out of sight/out of mind.
- If it would be much cheaper, a raised system would be preferable.
- Not in my neighborhood. What locations are being considered?
- We trust your judgement.
- I feel it is not needed.
- Anywhere without disrupting home views/values.
- You could have supplied a map indicating possible areas since most residents are not aware of areas that meet the specifications. Prefer ground storage.
- In a remote area, away from houses.
- I am not familiar with the choices available.
- Adjacent to the high voltage power lines.
- The ground storage tanks included are attractive.
- How can residents give feedback without seeing a map of where all options are? Isn't the standard answer going to be...I don't care, just not by my house? Please send a map to review.
- Nice proposal, but if we are to spend this much money, why no conditioning?
- Near wells or distribution centers.
- If the structure around the storage tank isn't round, it may blend in better with surrounding structures. Consider over insulating for noise containment/reduction. No comment on location - not sure where wells/main are to agree or disagree.
- In order to maintain home values, I feel that neither ground or tower storage should be located in the vicinity (i.e. within 1/2 mile) of an existing neighborhood.
- Regarding aesthetics: is this really an issue or "to be determined" based on eventual placement?
- Should have a reasonable distance from any residences.
- How much more does it cost/person to have a water "ground storage" being built than an "elevated" storage???
- Prefer ground storage - aesthetically pleasing outer.
- Not immediately visible from major roads.
- Tank should be in an area away from homes. Would not care to see tanks when I look out the window.
- You did not suggest the site locations - why not? Map of areas affected in SW Oakland Twp.
- I support and prefer ground storage similar to Novi.
- Like the look of Commerce better.
- No concerns about location provided the system ground storage is adequately screened from view and the rural nature of the township is preserved.
- I'll leave it up to the experts. Just make it aesthetically pleasing if viewable from the street.
- Please be sure to keep residents aware of the potential sites and the decision process. I suggest researching the failed effort to do a similar project in Rochester Hills about 5-10 years ago.
- I do not support a ground storage system.
- My only comment has to do with storage construction. Rather than basing the decision on aesthetics, I feel as a taxpayer it should be based on cost comparison of the two options.
- It's important that you choose a site that has the least amount of aesthetic impact on Oakland Twp. Choose an area away from main roads and subdivisions.
- Aesthetics is important. However, I prefer elevated storage.
- DON'T SUPPORT!
- No comment as potential location of above ground tank was not revealed.

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

- Not a lot of choices in location. Hidden is better.
- Surround storage tanks with white pines to conceal them; 2) use a larger site (10-20 acres) and hide the tanks behind natural cover; 3) choose a current Oakland Twp. Park and integrate the tanks there.
- Don't change anything.
- Away from the roads in a secluded township owned spot.
- I cannot offer a suggestion.
- Would a storage site of 5 acres impact negatively homes around it? Would it decrease their value?
- We are not the best at suggesting this.
- Central Oakland Township
- Some place where it will have minimal effect on home prices i.e. away from neighborhood entries. There appears to be many rural locations??
- Location should be away from residential areas. Location should not be visible from streets around high traffic areas.
- Location should be a balance of proximity to water mains (low cost), ideally on site with other municipal buildings (reduce visual impact)
- Commerce Township system looks nice. Seems smaller in scale, along with matching booster/service buildings.
- Not worried about aesthetics, ground storage in Novi and Commerce Twp. look fine
- I would opt in for construction of distribution system and removing iron from water.
- As long as it's far from residential areas.
- Northern Oakland Township
- Existing public land.
- Not in a township park; ground level storage.
- Preference would be a location that does not interfere with a residential area/neighborhood.
- Seems like no choice in the matter.
- I am okay with either above or below ground storage.
- Would help to know location of wells/mains; but thought: either by Musson and plant a bunch of trees around; or area heavily wooded to disguise from road/neighborhood homes/property.
- Agree. Hope for a pleasing presence in the community. I do not know what land is available for the project.
- Locations as far away from residential as possible. Minimum environmental impact.
- Someplace in an area that isn't near existing homes. Those residents already here should NOT be subjected to seeking this in their backyard.
- The ground storage style like the photo shows in Commerce Township is beautiful, I vote to build that style here. The storage tank in Novi looks horrible.
- Locate near Township offices; implement a "low profile" design that fits the "Oakland Township" style.
- Don't want to disrupt wetlands, etc.; any extra land in "Bald Mountain Development"?
- No storage tank; water tastes great; I have a water softener and reverse osmosis and a pool. No issues.
- No locations are proposed?!
- I understand the need for the water storage system. I don't think it should be placed in a residential area.
- Send out a few areas you are considering and ask for opinions. I have no idea where you're even considering.
- Just want any improvement. Been here 12 years, always an issue to the whole family.
- Adjacent to existing wells
- Out of sight of homes - expensive neighborhoods. NO water tower - prefer "Novi type" storage.
- Consider aesthetics and overall impact to the community.
- SHOULD be placed close to government property NOT near or adjacent to residential communities.
- Use your best judgement. No matter where you build it, someone won't like it.
- Locate system storage in lower populated area preferred.
- Have no comments so far, I'm satisfied. I live in a condo (Silvercreek).
- Anywhere is fine.
- It should have minimum visibility to any subdivisions.
- As long as the in-ground system for storage includes the right water quality checks, in both storage and output steps, that would be fine. Steps/processes and execution of corrective actions should be included in the overall water quality management process and design steps.
- Either underground or out of sight; matching aesthetics of township.
- On currently township owned land. As out of sight as possible.
- Anywhere as to not detract from individual property site lines and/or value.
- I'm for the Commerce Township location.

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- Can't provide a specific location but it should be surrounded by trees and vegetation so it can't be seen
- Anywhere that is hidden from public eye and blends into surrounding environment.
- A cute water tower is not so bad.
- Don't want.
- Should be close to existing wells. Ground storage is optimal, but elevated storage can be made to look ok.
- Since you have selected ground storage, I think it will aesthetically be fine. Cheapest location possible!
- I would like it placed in a non-residential area.
- Place the tank at the township site; consider a sub-surface tank.
- Decorative, so it appears to be an office building or a statue.
- Don't nowhere but agree in an aesthetically pleasing area.
- Not in favor
- They should be as "non-intrusive" as possible. Well away from residential areas.
- I'm not aware of the locations options, but I would prefer it not be anywhere close to the Adams/D___?___ or Adams/Silverbell area.
- Safe and clean
- Location near the existing water mains that is near or owned by Bureau of Land Management.
- Out of sight but secure from people who would seek to contaminate supply.
- I want the elevated storage.
- I prefer ground storage over elevated. A must.
- Needs to be hidden in the middle of a field. Oakland Township has a lot of property to valuate. Need some specific locations to make a decision.
- Away from land fill areas.
- Unable to evaluate without knowing where current tanks exist for Oakland Township.
- We are for the ground storage tanks in the photos. NO elevated nor water tower.
- Support ground storage; would not want in my backyard; would support surrounding storage tank with trees.
- Ground storage
- Ground storage in an area not near homes/shopping. Plenty of rural land in Oakland Township to use. Don't let Mr. Mocerri buy it. LOL
- I prefer ground storage but also concerned about security of the storage from contaminants or terrorism. Is security part of this planning?
- PLEASE do what you can to make it blend into the existing surroundings. Hire a landscape architect to help. Make sure the exterior of the storage tank is not ugly. Don't go cheap on this. Hire an architect/interior designer to help design the tank exterior so that it does not end up as an eyesore.
- I'm sure wherever you decide to put it will be fine with us.
- We have not noticed any lack of pressure.
- Prefer City of Novi example.
- We favor the above ground storage system as proposed. Sites should (if possible) be near/adjacent to commercial or industrial zoned areas. Effort should be made to avoid storage tanks that are in view of or adjacent to residential property.
- Agree with ground storage preference.
- We would like the underground system but are curious as to where this system will be located. Also, if the underground is too expensive then we are for the above round storage.
- I prefer Oakland Twp. pursues the original plan to tap into Detroit city water.
- Prefer Novi Ground Storage Tank.
- More tree and landscape. Berm's to hide tanks.
- Please maintain township aesthetics when placing these storage tanks, as inconspicuous as possible.
- Not near residential, no place to spoil our beautiful views.
- Information on the locations of existing water mains/wells would have been helpful in responding to this question. Having said that, placement of the required storage tank adjacent to existing residential communities would severely impact property values and defeat the purpose for locating in Oakland Township - rural unspoiled atmosphere.
- Out of sight. Put beautiful palm trees all around the tank.
- As far away from residential as possible.
- I don't want it and didn't ask for it. Sounds a little bit like Flint water disaster. No thank you!
- Should have included map of possible areas, then let me decide from there.
- Agree with ground storage and like the decorative effect in the Commerce site.

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- In one of the parks, central location
- Need water main for all Oakland Twp. residents in subs (Granbrook-Orion Adams) before filtering existing city main - then iron removal.
- On an easement where power lines are located already.
- I recommend water tower, gravity provides pressure, low flow pumps fill tank in off peak hours.
- Prefer ground storage adjacent to or in close proximity.
- Commerce Township looks best!
- I am sure you will pick a good spot!
- Near a commercial area or built near a "new" subdivision so it can be designed blend in the scenery.
- I agree underground storage is best.
- Since we have no idea where wells and mains are located, we have no suggestions to offer. That informative would have been helpful.
- This letter and notification does not clearly communicate a MDEQ requirements. The OTBT must consider growth and expenses to existing residents and not provide economic value to builders. These projects may not address future needs anyway and plans for water distributed by Detroit or Flint.
- No suggestion; okay with \$35 per quarter charge.
- Wherever it can function properly and can be fenced and properly screened.
- Use masonry for facade, not metal tank or siding.
- Hidden storage, namely not visible from residences!
- The pictures included look nice, we would not be opposed to that type of storage tanks.
- Make it look good, certainly, depending on location.
- We are fully on board with a project for system ground storage.
- I like water towers. Good visual representation of the town, like a landmark.
- I strongly am against to build any storage. I suggest changing our water system to lake water system.
- Ground level storage seems much more attractive vs. large/tall towers (ugly).
- Without a location, you can't expect me to make an informed decision. Is it hidden? Is it out in the open? Need more info. Landscaping?
- Not near neighborhood, near a public facility.
- This should be out of view of major developments/neighborhoods.
- Agree with ground storage as preferred method.
- Prefer an area that can provide visual coverage (tree's, etc.), and is far off main roads as possible.
- Not sure where are possible locations for consideration?
- Underground preferable over a water tower.
- Preference would be to spend money on Iron Removal as opposed to ground storage.
- Nowhere near my house.
- It's a good idea. The pictures of Novi and Commerce Township ground storage systems look good, Nicely done.
- I am fine with elevated storage if it is a significant cost savings.
- Storage location should be in the location that is the least expensive.
- If we don't have a Planning Committee we could hire a consultant familiar with these systems to provide a proposal with a couple of location options.
- Wherever is most beneficial to the county.
- I am not against elevated storage. There are a number of areas where it could be constructed with minimal impact.
- I don't know locations to even suggest.
- Ground storage referable to elevated storage. Prefer placement where it is, not visible from homes or roads, should be covered by trees/landscaping.
- We do not need this.
- I would want to know where the ground storage locations are planned to fully understand the impact on property values around it.
- Needs to be in an area far away from residences or businesses in case of flooding and for aesthetic appearance reasons
- Preferably land that already owned by Oakland Township to save on any additional expense; 2.) Not in my back yard or sight line from my property.
- Wherever is least expensive in the long run to build and maintain. Given the choice, being hidden from roads is better than having it easily visible.
- It's required, so get it done.

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- Above ground storage tank looks good.
- We don't have much of a choice. My solution is to get the most value by doing it at the lowest cost. We are okay with above ground tanks.
- Please hide them and make them invisible from the roads. Plant tall growing trees around them. Do not leave them in an open field. Are parking lots needed around them? Please no parking lots. Don't waste our green space!
- Need to make us aware of how many quarters this cost will incur. Most of us have already paid the expense to have softeners, rust removers, sprinkler injection systems, and reverse osmosis. So why should I be paying the TWP for this? If a onetime assessment then state that and I can vote sensibly.
- It would have been extremely helpful if you would have included information on the identified potential sites. I have no reference.
- You are not providing residents with enough information of the location of existing wells and water mains. Comments can only be provided and useful when all the facts are given to those residents affected.
- Ok with ground storage approach
- What sites are available?
- Prefer ground storage vs. elevated storage Min. cost; make it look good.
- We are fully onboard with any project to improve water quality (perceived and/or real). Please execute this project!
- I have no opinion on where the location of the storage system should be, however, I would recommend that a location be selected based on its ability to optimize the system performance and minimize the cost of construction and maintenance.
- Centrally located to distribution area.
- The most remote area able to secure.
- Go for it.

Specific Comments:

- If the storage system is located within the SE region of the township, it should be located off Silverbell and Adams roads. It would be ideal if it could be located in wooded areas in the area, but unfortunately, it is very limited in space. Trees and berms need to be added to mask the sight line.
- On Township property (owned/not a new purchase)
- Place on Township owned property; not on new property purchased for this specific item.
- Do NOT put it in Gallagher Park off Silver Bell or anywhere in sight distance to the "Million Dollar Mile".
- Perhaps you could ask Mocerri or Pulte to sell you some land. Or, East side of Squirrel at Silverbell.
- NOT in the Silverbell and Adams area. With new home construction and whatnot, we are tired of losing land!
- Put it in the old Bald Mountain golf course subdivision. I'm sure they'll love seeing it as much as we love the new sub.
- In an area not visible from my home in Clairmont.
- Off Dutton Road, between Squirrel and Lapeer Roads.
- Please do not select Gallagher Creek Park. I live directly across Silverbell from the park. A ground storage tank and security fencing will be very conspicuous there, and transform the area to an industrial appearance. I hope there are other, less prominent parcels that would be good candidates for the new tank.
- Any area that is not visible. Behind City Hall.
- Place near well head.
- Close to existing wells.
- Absolutely NOT Gallagher Creek Park.
- Stoney Creek and Clarkston; Silverbell and Squirrel; Adams and Orion Road
- In the middle of Blossom Ridge at intersection of Silverbell and Brewster
- Any available area near Delta Kelly school? (NW corner area of Adams and Gunn)?
- Near Township offices.
- Locate near Kerns Road where existing sports field exists.
- At corner of Silverbell and Baldwin or at corner of Adams and Orion Road.
- Please locate it in the most inconspicuous place possible. Note that I attended a couple of planning meetings and was assured that any water storage facility would NOT be located in any Oakland Township Park, including Gallagher Park on Silver Bell Road.
- Mr. Mocerri Sr. lives nearby and has a lot of property, locate the tank on his property with shrubs to shield it. Alternate - the former Detroit water system is in Oakland Township, less than a mile from Silver Bell. Put up a

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provision to extend this system to all of the developments South of Silver Bell including Blossom Ridge and the development on SW corner of Adams and Silver Bell. It might cost \$15,000 per single unit but it solves all of the problems.

- Not Gallagher Creek Park.
- Across Kroger parking lot behind Sherwood Forest
- At Adams and Silverbell - Silver Creek
- Central location to Oakland Township. Orion Road and Collins Road Area?
- Use currently owned Oakland Township property if possible located on highest elevation possible to minimize pumping need. Locate near police complex and city offices for protection from mischief.
- The only location that is safe and will be supportive of one large storage tank has already been researched and approved previously by the Water Resource Commission. It is East Gunn Road/Trout Creek in close proximity to the North Pressure District. Previously this is the only site that shows it can accommodate three smaller tanks hence it will support the one large tank. It is the only logical choice.
- Off Kern Road by power lines.
- Rochester Road - South of Gunn
- Build it where Sherwood Forest is - that eyesore needs to be removed!!!
- Not in vicinity of Adams & Silverbell Roads
- Not around Adams and Silverbell; there are enough projects in the area.
- The tank must be completely hidden from site, perhaps in the woods. Possible locations near the town hall/Paint Creek Cider Mill or in the area of Gunn and Adam or Gunn and Orion.
- Not in the Silverbell/Adams corridor. There is too much going on there already that is unsightly or going to be unsightly thanks to Morceri and an ambivalent board.
- The corner of Gunn Rd & Adams (or anywhere along Gunn); somewhere along Kern Rd.; Silver Bell, east of Brewster
- Lake George Rd. and Clarkston; SE corner Brewster and Silverbell; Buhl and Adams; Twins Lake; Kern Road south of Briarbrooke
- Behind township offices.
- Near Delta Kelly Elementary?
- Away from residential property. Part of wooded area around the Bald Mountain area near shooting range.
- DO NOT LOCATE IN TOWNSHIP PARKS LIKE GALLAGER PARK. OR AREAS NEAR RESIDENTIAL COMMUNITIES. THESE WATER TANKS ARE AN EYE SORE AND EFFORTS SHOULD BE MADE TO LOCATE IN UNDEVELOPED PROPERTY AWAY FROM COMMUNITY DEVELOPMENTS.
- No homeowner is going to want it within view! How about behind the fire station on Rochester Road?
- Five proposed locations in no particular order: 1) north of Gunn, east of Adams 42 deg 44' 31.17"N 83 deg 11' 39.39" W; 2) north of Silverbell, west of Adams 42 deg 44' 01.68" N 83 deg 12' 03.04" W; 3) north of Silverbell, east of Adams; 42 deg 43' 34.23" N 83 deg 11' 32.35" W; 4) north of Silverbell, east of Adams; 42 deg 43' 58.47" N 83 deg 10' 47.4" W; 5) south of Silverbell, east of Squirrel 42 deg 43' 08.41" N 83 deg 12' 51.50" W
- If possible, why not place it on property that occupy other utility type use, i.e. Power and/or gas line areas. Kern Rd. Near Gunn Rd.
- Near Power Line Towers.

Cost Related Comments:

- I prefer the most economical solution.
- Storage site should be selected only on cost basis if we can save \$2M. We should take that route.
- Location? Costs? In ground best, if not cost prohibitive.
- I would prefer not to spend the money for a ground storage system based on the sole reason it is the "aesthetically pleasing choice". What an absurd reason to spend millions of dollars. I want to know the cost of a non-ground system compared to the pretty one. Rosemont, IL has a "Rose" water tower that is gorgeous. More information regarding BOTH options should be available to residents. I also want to know if this new system includes the cost of the Blossom Ridge development on Adams and Dutton, which will include thousands of residents. The cost of such a development will greatly impact water usage and cost. Why wasn't something like this implemented before?
- Get price/cost for water softener - I already spend \$10/week buying pellets.
- This is fine if you are YOUNG! When you are in your 80's - it is frightening. Increase of \$100 per quarter???
- You did not specify a time frame. Is this \$35 per quarter forever or for a finite amount of time? Where are you planning on putting the storage? You did not specify potential locations. We would like to know specific options as to where the storage is being considered. We don't necessarily know where existing wells are. We should

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have input on this.

- Would the elevated storage be less expensive than ground storage?
- The funds need to be appropriated from other sources. The Township's pockets were lined with money for the senior living home (Mooeri). Use that money for this storage facility. Do not tax the residents.
- We've never had any service disruptions (loss of reduced pressure) so what is the justification for this project? 2) \$35/quarter increase is too much. Water bills are already excessive. Figure out/reduce construction costs ("value engineering" study).
- Do whatever you need to do to make our water clean and safe to use that will not add another \$100+ to my bills.
- Please delay construction of the distribution storage until enough money could be saved from the businesses and new housing construction. Please do not raise our water bills anymore. It has been raised more than we can pay.
- Make it less expensive. Did you quote multiple sources? \$35 per quarter increase equates to my bill going up 33% which is unacceptable to anyone's standard. If it is cheaper to build it above ground do so and find a location concealed by nature to avoid more cost in making it aesthetically pleasing.
- Prefer more affordable option, even if above ground.
- Keep the cost down. We are taxed already.
- No need to construct the water system storage; more residents are NOT able to afford this!!
- I don't want to pay \$35 quarterly for this. Can this come out of another budget/taxes?
- \$540/year is too much.
- I do not want to pay more money for water!
- How long does this extra charge last?
- FYI: Intuitively the \$140/yr. estimate seems high for a \$4.0M project. "Assuming" 4000 homes in 07, this would be paid for in 6-7 yrs. Tank maintenance should not be a significant cost, therefore rates should drop significantly after the construction is paid for.
- Don't care!! You are going to do what you want anyway!! City water!! Traffic light at Adams and Gun. We pay \$5,000 a year in taxes to Oakland Township; use that and stop asking for more money!!
- No preference as long as water pressure improves.

Provider Related Comments:

- Would prefer they are away from sight. Would recommend at looking at connecting to Great Lakes Water Authority.
- Suggest NOT installing - connect to Detroit City Water.
- Prefer to connect to Detroit water otherwise in a non-public place for the location of system ground storage.
- Ground storage is preferred over a tower. Have we looked into the Detroit water system being moved into Southwest Oakland vs. expansion of OCWRC?
- Ground is better than elevated. I think we should consider tapping into Detroit city water, this was discussed years ago and never acted on.
- I would prefer city water to be brought to my house if that is any consideration by the township. I honestly didn't have a preference where potentially the new location for the ground storage.
- Why are we not tapping into the Detroit water system? What are the detriments to ground storage? Are the wells near any of the local landfills?
- I prefer hooking us up to Lake Huron water thru Detroit or Port Huron and therefore using lake water instead of contaminated ground water and therefore not require storage facility and/or treatment facility. It may cost more now, but solves non/unsolvable problems with current source.
- Connect to Detroit water system.
- We will be better served if you arrange to supply us with city water from another source.
- No need to increase water bills with increased equipment or projects. We might as well tap into the Regional Water Authority Oakland, Macomb, and Wayne.
- We are already paying so much for water service. If we don't need to add extra storage tank, please don't, this will help your consumers control the water bills. Rates have always been going up for last 24 years. Also, we don't want you to add removal technology. We can do ourselves like we had been doing for last 24 years. This will save us and help us in our current retired life. There was discussion about replacing Oakland water service with Detroit/Rochester water services? Is this workable? Not sure what happened to that program?

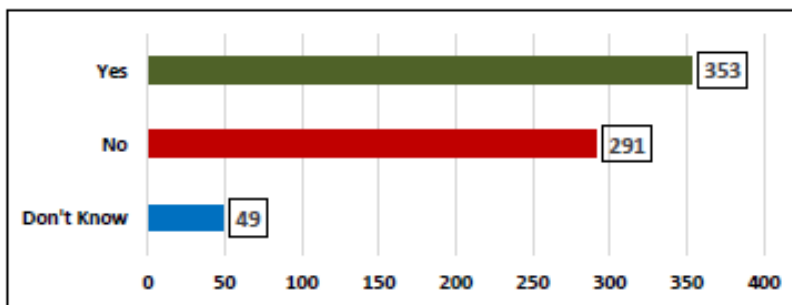
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2. Construction of Iron Removal Treatment for Water Supply: 676 Responses

- 41% / 278 responses: I am in favor of having iron removal treatment constructed for my source water supply at an approximate cost of \$100.00 per quarter.
- 32% / 218 responses: I am not in favor of having iron removal treatment constructed for my source water supply.
- 27% / 180 responses: I prefer to handle iron removal treatment in my home, at my own expense.

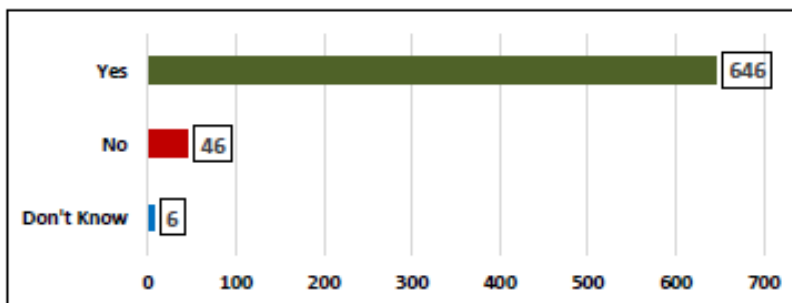
3. Do you have a separate in-home iron removal system? 693 Responses



- Yes = 51%
- No = 42%
- Don't Know = 7%

Approximate Age of System	# of Responses
Less than a year	7
1 – 5 years	87
6 – 10 years	40
11 - 15 years	64
16 - 25 years	45
Total Responses:	243

4. Do you have in-home water softener equipment? 698 Responses



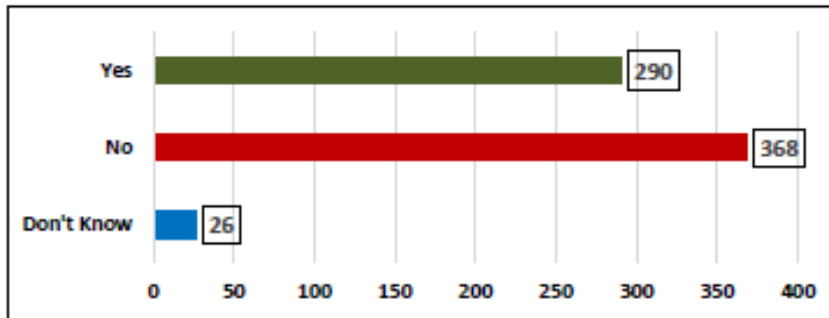
- Yes = 92.6%
- No = 6.6%
- Don't Know = .8%

Approximate Age of System	# of Responses
Less than a year	10
1 – 5 years	142
6 – 10 years	73
11 - 15 years	133
16 - 27 years	80
Total Responses:	438

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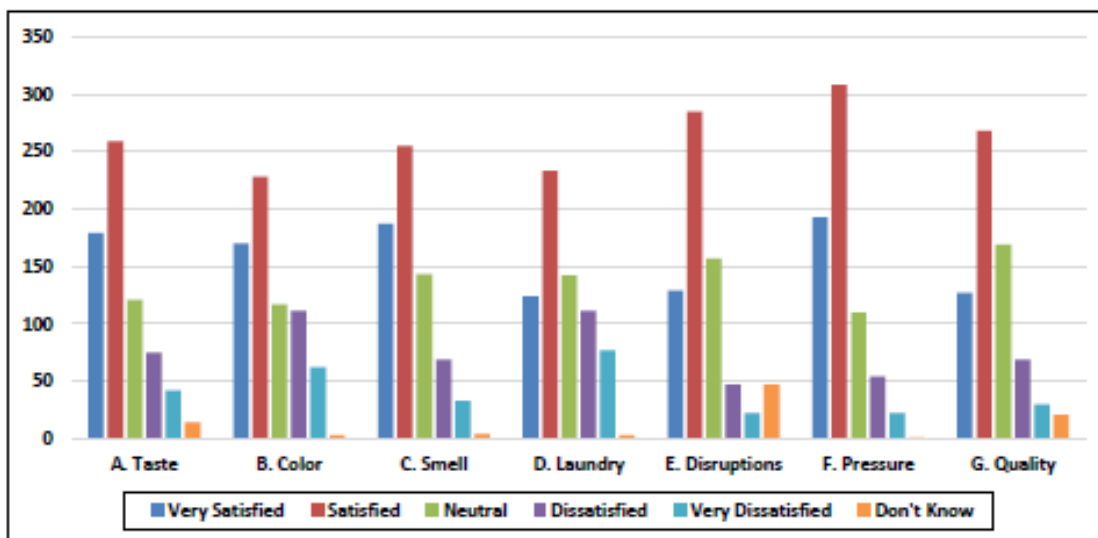
5. Do you have any other water filtration system, for example, reverse osmosis? **684 Responses**



- No = 53.8%
- Yes = 42.4%
- Don't Know = 3.8%

Type of Filtration	# of Responses
Brita	3
Carbon	1
Cartridge	1
Culligan	11
Fridge and other filters	60
G.E.	2
Kinetico	5
Minerals	1
Particulate	2
Reverse osmosis / RO / Reynolds	147
Total Responses:	233

6. Rate your overall satisfaction with each feature of your drinking water quality on a scale of "Very Satisfied" to "Very Dissatisfied". **691 Responses**



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	Very Satisfied / Satisfied / Neutral	Dissatisfied	Very Dissatisfied	Don't Know
Taste	81.02%	10.87%	6.09%	6.09%
Color	74.53%	16.06%	8.97%	8.97%
Smell	84.65%	9.99%	4.78%	4.78%
Laundry	72.32%	16.09%	11.16%	11.16%
Disruptions	83.11%	6.84%	3.20%	3.20%
Pressure	88.81%	7.85%	3.20%	3.20%
Quality	82.46%	10.09%	4.39%	4.39%

Quality Comments:

- I hate that my drinking glasses are all covered with lime? Chlorine?
- I have black pieces floating in my master bathroom water from the faucet, mostly since the last flushing.
- Very dissatisfied before iron tank install; after iron tank - still have staining and slight smell
- I do not treat water for sprinkler system so the iron is a problem. I would like to see go away.
- Color and taste varies
- Staining of shower floor grout and concrete curb & driveway.
- I do not know what else is in the drinking water besides iron.
- I replaced my toilet at my expenses due to brown rust ring.
- I don't drink the water.
- Answered above based on my home system after filtering. If we remove iron, will water smell and taste ok?
- Very dissatisfied - we bought an expensive filtration system and the water is so bad even IT can't fully filter.
- All appliances and toilets are ruined. I buy a coffeepot every two years.
- Overall quality of drinking water - very dissatisfied. Get rid of impurities!
- Don't remove rust from my outside faucet so don't like the discoloration on my brick. I don't understand why occasionally the water gets highly discolored and rust during a flushing time.
- Staining of clothing, toilets, house (sprinkler) is a big nuisance.
- Our water cannot be treated to our standards ever. We had Detroit water in Rochester Hills for 20 years and it required no softener or treatment and was satisfactory albeit expensive but at least it was satisfactory.
- Annual water samples aren't adequate; should be quarterly.
- I HATE our orange water. It is embarrassing for guests to see our toilets.
- Orange hair!
- My neighbors that have issues with color on their homes typically over water their lawns.
- Never use for drinking.
- Our water is consistently orange/yellow. It has stained many white articles of clothing.
- Toilet staining is a major problem also.
- Calcium build-up occurs on glasses from the dishwasher.

Taste / Odor Comments:

- Sometimes it has a taste of chlorine.
- Hot water has sulphur smell.
- I don't mind the taste of the water. My wife and daughters do not like it at all.
- Note - answers above are from pre-iron filter - since then we have crystal clear water but sometimes I still notice a 'smell' to the water.

Filter / Softeners Comments:

- Very satisfied due to having reverse osmosis system for drinking water.
- This assumes the use of our water softener and iron filter.
- We use RO for all drinking.
- Above answers DO NOT apply to drinking water that comes from RO system.

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- Answers above with regards to my drinking water are without RO system. Even with my softener and iron removal system, my drinking/tap water is yellow.
- I have system for odor and iron so above I have answered for my treated water.
- The above answers are in relation to the water that does not come out of our 2 reverse osmosis faucets. That water is perfect.
- Satisfied because of reverse osmosis.
- After all treatments are used (softener, iron filter, etc.) water is good as expected.
- F. water pressure for drinking water isn't as much of a concern as the lower pressure for showers and running water for kitchen use. A, B, C, & D are all adequately handled by my water softener system.
- My above responses are based upon my water with the filtration devices I have installed. Our water was not useable (in my opinion) without the filtration system.
- Answers to (A) through (D) take into consideration my house has a whole house pre-filter, iron filter, and water softener. Answers to (B) through (D) would be very dissatisfied without these measures.

Provider Comments:

- Look into using CITY water again!!!!!!
- I want city water please.
- Would prefer we link in with Detroit city water system.
- We don't drink the water that comes into our house, we drink only bottled water. If we had city water it would be much better.
- I would prefer Detroit city water. Over the past 5 years I have developed face and scalp irritation due to our in-home water softener. Never had this problem while living in Rochester Hills. Didn't have or need a water softener.

Other Comments:

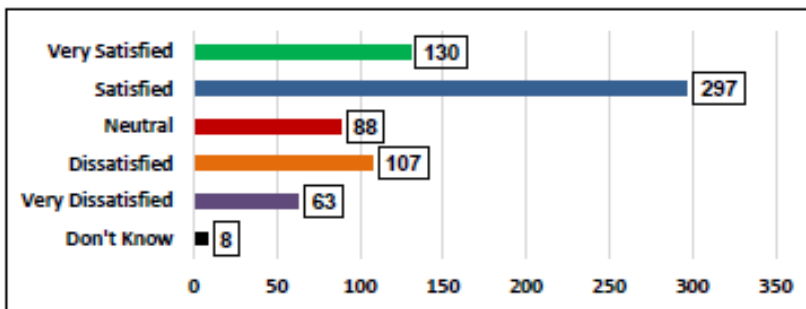
- We have an Absopure delivery for our drinking water.
- Why is this a problem? There was a period of time this was not an issue. What happened here and why is this not more important than the storage system???
- I have a pool and have never had any problems with high iron.
- We pay a lot of taxes for 90s technology. Get it together.
- Iron in my water has never been an issue.
- The white laundry becomes a problem only at the startup of the sprinklers each spring and the flushing of the hydrants once or twice per year.
- I have bottled water delivered.
- We buy our own water from Kroger.
- Back flushing the water supply line from the street has to be done yearly.
- The times that the system is flushed is exceedingly inconvenient, regardless if working or stay-in-home.
- I have lived with well water for several years and am satisfied with the water treatment of the Oakland County system.
- General quality of water should not require flushing and softener.
- It is odd but now we do not see brown water after/during the flushing, however, it does show up at odd times.
- I read and monitor water resource reports.
- Iron excess and hardness are both burdensome!
- Estimate of \$400/yr. is a lot and the HomeAdvisor statistic is "not applicable" since it is including water softening. WRC has already added an additive to wll pumps (3-5yrs. ago) to precipitate the iron so the staining on driveways is greatly reduced.
- N/A: I buy water to drink.
- I can't vote until I know for how long these quarterly increases remain in effect. They should be a special ONE-TIME assessment to provide the initial new infrastructure. Then maybe a small incremental cost to keep things running, like most of us are already doing today.

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017
 Quality of Drinking Water - Southwest Oakland Township – 710 Responses

7. Which TWO of the features are most important? **675 Responses**

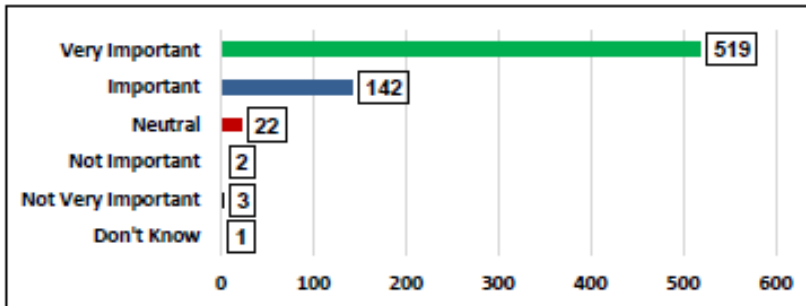
	Taste	Color	Smell	Laundry	Disruptions	Pressure	Quality
Most Important	63%	12%	5%	5%	1%	4%	10%
2 nd Most Important	15%	30%	24%	14%	2%	9%	6%

8. On a scale of "Very Satisfied" to "Very Dissatisfied", how satisfied are you with the overall quality of your drinking water? **693 Responses**



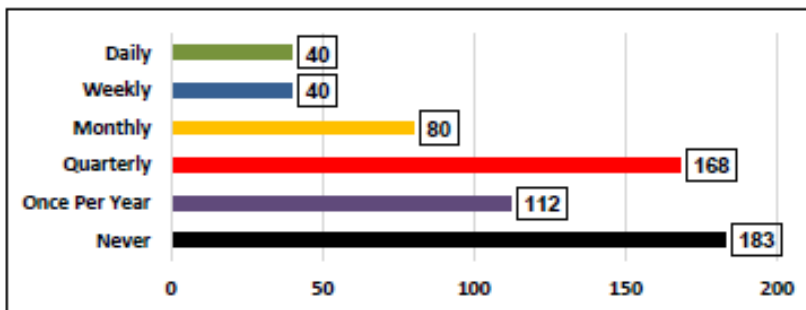
- 61.6% are Very Satisfied / Satisfied
- 24.5% are Dissatisfied / Very Dissatisfied
- 13.9% are Neutral / Don't Know

9. On a scale of "Very Important" to "Not Very Important", how important is the quality of your drinking water to you and members of your household? **689 Responses**



- 96% say Quality is Very Important / Important
- 3% are Neutral or Don't Know

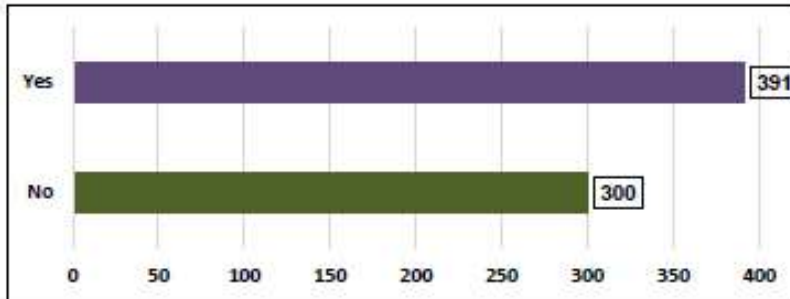
10. If you have in-home water softener equipment, how often do you have discolored water issues? **623 Responses**



- 47% have discolored water once per year or never
- 27% have discolored water quarterly
- 26% have discolored water monthly or more often

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11. Do you use bottled water at home? **691 Responses**



- 56.6% use bottled water at home
- 43.4% do not use bottled water at home

How often and for what use:

302 – Daily drinking

53 – Guests, travel, outdoors, parties/entertaining, exercise, sporting events, and home appliances

12. Do you have any additional comments? **278 Responses**

➤ The words used most often in this question are the largest in size in the Word Cloud below:



Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

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General Comments:

- 177 complaints seem extremely small for this many homes. Also, complaint overheard was by person who only had 1 filter.
- A central iron removal system is not needed if iron removing softener salt is used by homeowners.
- Appreciate using data for decisions. But 171 out of population of 16K plus in only 1%.
- DON'T SUPPORT THIS!
- Fix our water please!
- I already paid for my water systems. I don't want the township getting into building another system.
- I am very pleased that you have taken into consideration the complaints regarding water discoloration and staining. We hope something is done to remedy the issue.
- I'm not interested in your iron removal system! I have own system and I'm very happy with it!
- Just moved from City of Rochester - water quality here excellent by comparison.
- Need changes ASAP.
- Need water main 3080 Arns Ct.
- Oakland water service business respectfully can increase their business by adding more customers by marketing and other stuff. On a personal note, I am retired now and don't have extra income. Cancelling project and remaining status quo will help many consumers, otherwise I have to consider moving to another community such as Lake Orion or Rochester Hills, etc. Also, these cities do have city water. Also, to recap, we can easily remove iron from water by using "iron removing salt" like we had been doing for last 24 years. Let's see what happens otherwise I have to start packing boxes and leave this township.
- People who take the time to fill out surveys are more likely to be passionate about not increasing taxes/fees more than spending money to improve the quality of a service. The board is elected and should do what's best for the community as a whole. If passed (iron) people will complain but will forget shortly.
- Reminder: NOT to be located in any Oakland Township park.
- System back flush should be automatically scheduled for all the homes in the subdivision. I have no idea of how often my water pipes should be back flushed. I am sure I am not alone concerning this maintenance matter.
- Thank you for moving forward on the needed storage and possible iron removal.
- Thank you for pursuing this issue and asking our opinion.
- The tank will be an eyesore and will also be a safety issue. It needs to be placed where the soil conditions will support the weight. I have spoken with a geologist and there have been many lawsuits and environmental ramifications when a poor location was selected. You also need to make sure there is a large budget for landscaping and safety measures to protect the people living by the tank. By placing it in close proximity to the North Pressure District, resources can be shared. Above ground storage is the only option since this will impact the quality of life for residents. The township has spent large amounts of money on pet projects and needs to make sure this project that will have a lifelong impact is done right even if the budget must be increased. No other locations on the map support such a large tank and if the township choose to go with one large storage tank the East Gunn/Trout Creek location is the only one that will support it based on the Water Resource Commission own map.
- We appreciate the work of the trustees in maintaining and improving quality of life in Oakland Township.
- What makes the township board think that the residents of Oakland Township will go along with this project?!?!
- When we built our house (year 2000), one of the "promises" was that we would have a source-treated water supply in the next few years. This would eliminate the need for a water softener in our home. Otherwise, our water is fine. I would love to not have a water softener and the hassles of solar salt loading. Thank you!
- Yes, I appreciate the service call and employee (Bill) who was on call on July 4 about 4 years ago when he came out and located my water shut-off which allowed me to replace the inside shut-off valve. The job required major digging in my front yard to find the shut-off valve outside (which had been damaged & burned) It was a very big job!
- You have my support.

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

- I like our water.
- Happy with the service so far. My opinion of our water quality would be different if we didn't have a softener and filters.
- Insufficient time to fill out this form.
- Regarding the "177 annual water quality complaints": what percentage of township is this representation of? This is fewer than the number of homes in our subdivision.
- Living in such a beautiful community and having to shut the water off for 2 days for water purge is unacceptable. We are in the U.S. not an undeveloped country. And it's 2017, not 1800!!! We need to keep up!
- Thanks for your hard work!

Comments Regarding Quality:

- All of the above answers are based on having iron removal filters, a softener & reverse osmosis installed. It is not a true reflection of the quality of water delivered to the house. Based on the unfiltered water of our sprinklers, the above systems are removing substantial discoloration & sediment from the city water.
- Color of water and iron content is a detriment to property value in Township.
- Generally satisfied but support improvements including iron removal.
- Had iron removal system disconnected years ago as it didn't work - no major "orange" issues.
- Hate what the water does to our hair.
- Have you considered/evaluated access to Great Lakes Water eliminating the need for softening and iron removal? Have you considered centralized water softening? Is it more economical than all of the homeowners owning and maintaining their own systems?
- I am a dentist. Please consider adding fluoride to the drinking water to match the levels of "city water". The positive health benefits of lowering cavities in a population is priceless and costs a household pennies compared to having dental work.
- I believe those households who have an iron issue probably have their own well system vs. a community well system that I am on. Those people should be responsible for their own iron problems.
- I don't understand why the iron in the water is such an issue lately. I have lived in Oakland Twp. for 14 years. During the first 12 years, the water was acceptable. The last 2 years I wouldn't give this water to an animal.
- I flush water after Township cleaning twice a year, some discoloration but less now than when first moved in 12 years ago.
- I get so much coming into the line that my sediment filter when replaced, goes completely dark brown in just 24 hours. I am planning on moving due to this water problem.
- I had system from Environmental Water Systems (builder installed) from 2005-2012; however, never did work properly at removing iron/had discolored water frequently. Went with replacement system in 2012 from Reynolds, and haven't had any problem since. Quality and effectiveness of in-home system is key to homeowner satisfaction.
- I hate the iron! So tired of it. I have been waiting for 15 years for something to be done about the water. Apparently only the expensive subdivisions next to me get city water.
- I hate the rust rings in bathtub, toilets, sinks, etc.
- I have discussed the hot water Sulphur smell with Bradford/White (tank manufacturer) and the thing they suggested HAVE NOT fixed the problem. What happens with well water when it gets heated is a concern.
- I have installed a water treatment system on top of the community well water softener because of water quality issues.
- I have to treat my water with a salt with rust prevention features. I'd much rather not put a chemical in the water, but have little choice as the water otherwise stains plumbing fixtures. Also, it is not practical the water used for the outdoor sprinklers so there is the iron staining issue. The iron water is one of the only things I don't like about living in the township

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

- I only notice a problem with the color of our water around late May and early June. If I treat my water softener with Iron-Out, the water is far less discolored and my white laundry is less affected.
- I would prefer to add filters to the current community systems to take out/remove impurities like iron than to add chemicals to counteract certain impurities. I understand that a chemical (cannot recall which one) was added to the water supply a few years back in an attempt to stop the corrosion of pipes. I would rather filter out what is causing the corrosion.
- In 2013, we replaced our whole house water system, iron filter, and RO system. We generally have good water color. The taste is excellent, but we do notice every now and again the water is discolored which we have heard is because of the new construction on the old Bald Mountain golf course.
- In favor of anything that improves overall health of water and improves quality!
- Iron & hardness are the biggest issues that the township should consider addressing for the water supply system for the community. It is inefficient to have every household in the community have to deal with water softening and iron removal at their own expense, in their own homes.
- Iron content is a problem and should be addressed.
- Iron is a constant problem I fight. Having improved iron removal, if done safely, would be a big plus.
- Iron is naturally occurring, I am more concerned with chemicals e.g. fertilizer, BPA's, etc. than iron. We pay enough for water (even though it's a well) and even more for sewer. I have lived with this for 30 years and never had a problem. Leave it alone.
- Iron leaves circles in toilet change or tried everything.
- Iron residue in toilet bowl and shower area definitely needs more iron removal; maybe using more effective salt in the softener.
- It is important to improve our utilities and water is the most important. Removing iron will help the quality of the water and avoid the staining of buildings, sidewalks, streets, and other areas. It will also help property values.
- It would be good to have less iron. Better for the sinks and tub and for use with coffee and cooking.
- It would be preferable to have the iron removed (plus arsenic). It is not essential since we use bottled water to drink. We would have liked cost information on above ground tanks if that option would make the cost less. we would have liked input into the above vs. ground water decision.
- Just do not like it when the water comes out of the faucet brown! Of course, we won't drink, bathe, cook, etc. with that.
- Just wondered if the iron removal method will affect the white residue spots/etc. on dishes/faucets/countertops/shower/etc.? I am in favor of iron removal proposal if it would take care of this issue, I am waiting to hear back from the water quality office to receive more information regarding water. Thank you for your time!
- Laundry turns yellow
- Live in condo complex. There was a time several years ago when dark rusty water was the norm on an almost daily basis. After many calls and even supervisory personnel from Culligan coming out to check the water and a new unit being set-up (installed), things got much better and as of this point in time water is acceptable and only rarely do we get rusty water.
- Low water pressure and a lot of rust.
- Must remove iron from water. Iron stains everything inside and outside.
- My answers are based upon having iron removal, softening and dual filters in my house for 20 years. Have taken a proactive approach to mitigate any water quality unknowns.
- My bathroom fixtures have iron stains. My shower water is very hard water.
- My iron filter much improved my system.
- My system has been effective however I feel my hair is significantly more frail than when I lived in Kingspointe with city water. It feels thinner and not responsive to styling like before.

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

- My water softener works great.
- Needs to be addressed right away. summertime pressure is really low and preferably border line on being good. Color and smell is terrible not all the time but a lot of the time. Very hard on running a restaurant with this water.
- Not only high iron (yellow) but soot/dirt is constant.
- Oakland County does add chemicals which suspends iron particles - works well, unless I'm on vacation. I am very willing to continue monitoring my own iron issues which I am very successful.
- Our in-home filtration systems are adequate.
- Our system is flushed several times a year - this could be the reason why rust and odor are not prevalent.
- Our water is a yellow color and iron filter is required. We are on our 2nd iron filter and softener. Home purchased in 2003. Current iron filter does a great job and no discolored water in house. Basically, our in-house equipment makes water drinkable and ok.
- Our water is amazing. It does not have the chlorine taste that city water has. We have had our iron filter for several years and it works fine. Besides the initial install it costs nothing per year. Much cheaper than \$400!!!! Only minor inconvenience is flushing but that is very minor.
- Please do all you can to give us more control over the quality of our water for drinking, bathing, and household use. Thank you!
- Quickly please . . . improvement is needed!
- Removal of iron is a great idea!!
- Reverse osmosis system completely handles iron issue and keeps water scent free and drinkable.
- Safe drinking water, zero contaminants
- The discolor of our water has been extremely frustrating. It occurs frequently, but without notice so washing clothes is always a risk. It has ruined the toilets in the house and who knows what else!! We are fully in favor of getting the iron removal system in please ASAP!!!
- The main issue should be quality and more frequent testing by independent third-party tests.
- The only reason for the rated satisfaction is that I am very diligent when maintaining my water. I encounter orange water each time I clean (or replace filters) my water softener and two filters. I always backwash behind the filters, use Duracube salt, a bed cleaner, etc. After cleaning my water runs clear, tastes and smells fine. I constantly monitor my softener and water quality.
- The only thing I don't like about living in Oakland Township is the water. If I knew how bad it was, I probably would have stayed in Rochester Hills.
- The quality of home water is very important.
- The water has a very strong chemical smell and taste.
- The water quality has been very satisfactory and I drink our water daily. I do not support an initiative adding additional value to builders. Home and property values are just fine without this added expense. Do not fix what is not broken.
- The water-iron issue has been going on way too long. Let's get it fixed.
- There does seem to have been an improvement in the past few years. How would you improve the quality of water, by what process would you accomplish this? Why would this proposed process cost so much?
- This is the best tasting drinking water I've ever used; mostly, this is due to the lack of oppressive chlorine levels - whatever changes are made, PLEASE keep this aspect of our water.
- This new system is necessary to keep up home values, and interest in the subdivision. Although we have a decent iron filter our toilets are constantly discolored. Laundry is still a problem. Our reverse osmosis system is excellent for drinking water, and I would use that regardless of what system is put in place. The bath water is often yellow. Our faucets take a toll with the hard water and often have to replace them. Our yellow water is a deterrent to people selling their houses in our sub. Oakland township is a beautiful, safe area, it must have better quality water with this ground storage to maintain its desirability to future home owners.

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

- Toilets and sinks are totally discolored and nothing I use will clean them. My neighbors had to move due to the discoloration and odor of the water. I won't drink the water in the house.
- Water discoloration is extremely bad in the summer when in ground sprinklers are in heavy use.
- Water quality extremely important to use. New construction, installed large filter system (\$5k) after move in. Builder did not inform of the issues during construction. Only issue left is poor water pressure at times.
- Water quality is most important followed equally by taste, smell, and look (appearance)
- Water quality is too poor without softener and RO system at home.
- We are the end of one of the loops in the system and always have issues with high levels of iron, etc. For a while, the water flow was reversed and the water was much better, but then it was switched back and the problems came back. We live next to a pump house and the generator is loud and creates nasty, smelly smoke. We are very dissatisfied with the water system and it has continued to go downhill. If you can assist us please call at 248-821-6129.
- We are very pleased with the quality of the well water in our home. We do however, use bottled water for drinking. We would use that regardless of what is or isn't done system wide. We used it when living in an area served by Detroit water.
- We don't use bottled water but we have a second filtration system for drinking water which is downstream of the filter / softener on the water main as it enters the house
- We drink a lot of water that has been filtered through our refrigerator - never from the tap.
- We feel extremely disappointed in the quality of our water. I grew up on private well water and was used to the occasional smells and discoloration well water has. However, what we've experienced living here has been frustrating beyond words. We often don't feel comfortable using our bath tubs because the water has a Mountain Dew color. We'll often brush our teeth and all of a sudden out of the faucet comes brown water. We installed R.O. for drinking, but we are so unhappy with all of the other issues with our water. The issues seem to have even gotten worse with the construction along Kern. We also hate hearing second-hand from other neighbors who have called the WRC that "maybe the issue stemmed from moving to a back-up well system" while maintenance was being conducted. We had heard that no notice was given because it didn't affect that many people. It affected us and we would have liked to have known about it. I am very worried about any attempt to sell our home.
- We generally only get discoloration in the summer once we turn on the sprinkler system. I have been repeatedly assured by sprinkler contractors that there is no backflow from my sprinklers. This leads me to believe that it may be caused using accessory wells in the summer.
- We get brown water for a full day when hydrant is serviced.
- We hate the orange water on the curbs and streets.
- We have a water softener (Culligan) and have to change the filters every 3 weeks. If we wait longer than 3 weeks water has an odor and is discolored.
- We love good water so we took our own steps to control it, the only thing that burdens us is the flushing of lines.
- We moved from Bloomfield Twp., MI where we had excellent water. Test results sent to residents always showed excellent water quality. My suggestion would be to contact the office as to what they do since Oakland Twp. and Bloomfield Twp. are very similar.
- We use RO System.
- We're very excited to have iron removal at the source.
- When the water is yellow or when they drain system - later next day - they never drain our hydrant because they say we're close to main system. Water is yellow-rusty. Have to run bathtub water until it almost turns cold because it's always rusty, hair suffers from rusty water and we are concerned about any cuts or sores with our water. It seems unsanitary. Million-dollar house and awful embarrassing water. Toilets are all stained and we scrub them always.
- Need to be realistic. This is a rural township. It is not the city. We need to be responsible for any and all water treatment. Even with iron removal, we will still need to treat the water.

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

- With 2 small children, quality and safety is THE most important issue for us. Would love to see/learn how often our water is tested, what we test for, how that compares to other water (i.e. city), and better understand the effects of herbicide/pesticides use.
- 1) I tried to get a new iron removal system for my house. However, since the iron is currently sequestered with polyphosphate, none of the water conditioning companies seemed to have an adequate solution available. They rather try to sell their standard solution that does not address our situation. 2) \$400 per year for iron removal is really expensive compared to a home solution for about \$1,000-\$2,000 that will last for years.
- Water pressure is a very significant concern. This has steadily degraded in the 16 years living in Century Oaks Sub. Incremental costs of new planned systems should be somewhat offset by improved property values! We support the changes and improvements planned - thank you.
- Great water - much prefer well over "city water" for coffee and drinking. Do not like the swimming pool chlorine smell of bathtub full of city water - rust colored water from flushes is only problem we have.
- The stains in the toilets and sinks - highly annoying. Lugging the bags of salt down the basement very irritating as well. The dingy whites are aggravating. The residue on our skin and hair is blech!
- I use it to bottle water to boil pasta, veggies, etc. My whites could definitely be whiter, but I am not totally dissatisfied. I have an excellent Reynolds softening system. I have lived in Oakland Township for 42 years. When we previous had our own well, we still drank bottled water.
- Surprised how bad water is, we lived in Oxford 2005-2015 on a community well and never had such bad pressure and color issues.
- We should do whatever is needed to have clean, clear water in Oakland Township.
- I think it is a real shame that we have had to put up with this "red" water for so many years. We don't live in Flint!
- Taking a bath is not a pleasant experience, water is very discolored.
- We really dislike the discolored water, the stains in our pool and deck. Not being able to drink the water, washing our kids and clothes in tinted water. We would LOVE the new improvements.
- Unhappy with discoloration on driveway concrete and in brand new showers, ruining tiles. Not sure your water system will remove ALL iron; if so, would be willing to pay \$100 a quarter, how do we know it will work? What about maintenance?
- Concerned about discoloration to sidewalk and brick work.
- I am satisfied with my water at this time. I hope that any changes will not disrupt the current quality of our water.
- I can't use my sink because of the black pieces floating in it.
- Why no softening? NO FLUORIDE PLEASE!!
- Our drinking water is fine because we only drink filter water thru fridge dispenser. We randomly will have orange water. And I don't mean a 'hint' of color, it's the color of a pumpkin and it's not transparent. Sometimes the toilet on the main floor of our house will have solids precipitate out and sink to the bottom of the bowl. This has been followed by several flushes of orange water. The only way we've been successful to end this is to regenerate the water softener and run water until clear. Cooking with water straight from the tap sometimes leaves residue in pan.
- The township continues to refer to water with high iron as safe. It neglects to add the disclaimer that is unsafe with certain medical conditions (i.e. hemochromatosis), of which some people may be unaware they have.
- Our WATER QUALITY is poor and should NOT be!!
- Need improved water quality.
- Water color is usually worse when there is construction nearby. It seems as if the bulldozers create vibration that loosen the sediment in the pipes.

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

Comments Regarding Cost:

- \$100/qr./residence for iron removal seems very high.
- \$100/quarter, \$400/yr., is excessive for rust removal. If the cost were greatly reduced I am sure many more residents would consider this a viable option.
- \$400 a year? Who's paying? How long? Look forward to improvements in water. Too much left unsaid about cost.
- \$400/yr. x number of residences is exorbitant!
- \$540 is too much to add to my budget.
- 177 complaints/year doesn't sound like an overwhelming number of households - how many of these have a remediation system in the home? The cost of our systems - R/O, iron filters, etc. amortizes significantly lower than the estimate of \$400/yr. provided - which will only increase!! Individuals/homeowners should be responsible for their iron remediation; not taxpayers who have already borne such costs.
- We do not need to take on additional expenses as our water is fine.
- Between buying drinking water, filtering all household water, putting up with periodic system flushes, and having to treat water for gress, there is considerable additional cost not borne by neighbors as close as the south side of Dutton.
- Charging the tax payers for essential drinking water is just pitiful on your part.
- Community well water is too expensive and cost a lot to treat the water in home when I lived in Orion Township, the water bills were a lot cheaper than Oakland Township and water quality there is much better than Oakland Twp.
- Cost is a very important issue. $\$135 + \$400 = \$535$ Would increase my water bill by approximately 65 per month which means I would pay \$100 per month for water.
- Cost of removing water in system is too high.
- Get qualified contractor only and keep the cost down.
- Home values are climbing, tax revenue is increasing again, use some of those funds to offset cost! Thank you!
- How many quarters is the increases for either options. I cannot say I want either not knowing if the quarterly increases are perpetual or just for a calendar year. Since most of us living here have already invested in Softener, Rust Removal, Sprinkler Injection systems, Reverse Osmosis, it would be INSANE for me to pay you forever to do what we do today. My incremental cost is approx. \$200 a year at this point.
- I am a single woman so an increase in water bills could be a concern for me. However, if it could eliminate the need for individual home salt, that would be a savings I could apply to water bills.
- I am all for removing iron from our water, the cost is just too expensive, and living in a condo, the increased cost for one person does not seem justified. It's just too much all at once. Maybe if the iron removal improvement was revisited after the storage tank was completed, I would feel differently.
- I am not in favor of increasing costs for water in the township. The township is already becoming overcrowded and the cost could be incurred by all the additional developments and homes. I think the water is fine, not great, but not bad.
- I am not in favor of this additional project as I already spent thousands of dollars to install a system in my home. I would think many residents who also have systems would agree.
- I feel the iron is a problem and should be removed, but I do not feel the cost should fall on the residents.
- I feel we have adequate quality of water and don't support the expense of installing iron removal equipment. We are currently paying an absorptive amount for our water. I can't justify the extra cost associated with installation of iron removal equipment.
- I fully support rust removal and feel \$400 a year is well worth the cost.
- I like the idea of iron removal treatment for water supply. But continuous \$100/quarter is excessive. Is a cost breakdown available? (e.g. construction, running, finance interest of ROI, etc.) As alternative, what's the cost of going directly to city water?

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

- I now pay \$140/per quarter and I only use about \$35 and the rest is for draining into Detroit sewer. I'm on person and now you want to possibly add \$100 then \$35 a quarter? Are you crazy? A single person would be paying \$230 & \$35 a quarter? Way too much and I'm in a condo.
- I think treating my irrigation water may be a waste of money. By treating rust myself I can limit treatment to only water on sidewalks, against my house and water used inside the house. My costs for treatment of rust are currently approximately \$40 per quarter so I don't see value in paying \$100 per quarter to treat 100% of my water (I currently don't treat the water that sprays on my grass).
- I would be willing to get rid of my in-home system and pay the \$100 for iron treatment if I get the same result.
- I would like to have some iron removed but not at such a cost.
- I would like to have treatment for our water supply but I feel the cost would be too much to bear. I, a single person, would have to pay as much as a family of 6, I don't think that would be fair. Why can't the amount individuals pay be based on water usage?
- I would not mind the \$400 if it was in the tax bills. It would be better if not in water bill. Same goes for storage.
- I would support the iron removal system but \$100/qtr. is ridiculous.
- If any "new" charges to water bills - please do "NOT" add on any new taxes or fees.
- If we are spending money for minor improvements, why not investigate and let us know how much extra it would cost to connect to the best water system in the country; the Detroit metro water system. Like they have in Rochester Hills and Auburn Hills?
- I'm in favor of the iron treatment system, but for \$400/yr., I expect there be zero iron/orange coloration.
- I'm not in favor of any increase in cost of water supply. If repairs are required by MDEQ, the cost should not be absorbed by the customer but be at the expense of the township. I cannot afford a 300% increase in water costs.
- I'm one of those 177 complainers - I finally caved in last month (tired of the brown water) and spent \$2,700 for an iron out system + 2 massive big blue filters (sediment) for the entire house. Ever since we have done this, our water has never been more clear. If the people/township votes to install the iron out, I won't complain since I know that will take a few years. I'll have wasted a bit on getting the iron out system myself but I just won't have to replace the cartridge in 5 years from now.
- Iron removal is a significant expense. Please allow the users to address this on their own. Cost is significantly less to install a whole house iron filter.
- Is that just the cost of iron filtration because there is no way we pay that and you should still have to soften and filter drinking water.
- It is unclear whether the \$100 per quarter is a 'forever' cost, or is this one that will decrease after an initial capital investment.
- Let everyone pay for it at own expense. I shouldn't have to pay for others!!
- Live on fixed income. Paying over \$5,779 per month for husband in nursing home. Plus, doctors and prescriptions, etc. for both of us. I have a statement from my insurance company. It is enclosed, you are welcome to call Troy Beaumont with my permission (cancer patient). I am not a happy camper.
- My iron filtering system was \$2,500. Assuming a 25-year life and media replacement every 8.3 years at \$1,000 then my 25-year cost is \$5,500; or \$220/yr. Your cost to me for a central system is \$100 per quarter or \$400/year plus storage costs. This is twice the annual cost for my own system. I would expect a central system would be much more efficient and less costly.
- Not interested in paying an additional \$500 - \$700 per year for iron removal. This will need to be on the ballot
- Not looking forward to additional water costs.
- Overall, we are happy with our water quality. We spent good money putting in our own system and do not wish to pay additional costs.
- Personally, the water at our house is fine. I don't have a problem and I don't want to subsidize the cost for someone who won't take care of a problem at their home.

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

- Please execute this project, will be happy to espouse a higher cost.
- Please keep water costs down as I am retired and on fixed income. Thank you for your service.
- Please use tax payer money intelligently. Is there potential the DEQ may reverse this decision? If so, I would vote to leave things the way they are.
- Recently the rust was eliminated (reduced) from the water. That was a great improvement, \$100 more is not needed.
- Should there be some consideration to having separate water meter to help curb costs for sprinkler water costs . . . to help eliminate sewage costs for the sprinkler.
- Still needing water softener is a burden and expense. Not willing at the moment to pay \$100 per quarter for iron removal but still have hard water.
- Thank you for conducting this survey. I strongly prefer to handle any water issues at our own preferred expense.
- The cost of our water is too high. Adding more cost is not acceptable.
- The survey fails to tell me how long would I pay the quarterly charges so I have no idea of my total cost for each project. Fortunately, I went to Township board meetings where I received information that my Southwest water system has 1957 connections. From that I could back-calculate that you expect me to pay for 15 years. I would pay \$2,044 for water storage and \$6,000 for iron filtration. My whole house iron filter cost me \$500 in comparison to the \$6,000 you projected. I have NO INTEREST in such a poor value. Lastly, this survey provides no indication if the \$384 already paid to Oakland County W&S as a water cost recovery charge covers a portion of the water storage costs. I would like an accounting of the money I've already paid into this project.
- The cost seems high. Please clarify the cost. Savings from elimination of flushing pipes should be included.
- This is a beautiful way to increase our bills. It seems like there is more focus on raising the cost than improving the quality of water. We have used this water for the last 20 years and cost has gone up and up. Is there any way the job could be done for less? Thanks.
- The money should be spent to eliminate the need for in-house water softener systems.
- Water prices are too high.
- We already pay for water softener salt/maintenance. We do not need to pay an additional \$100/qtr. for iron removal as well. How about getting public water so we can get rid of the wells??
- We are seniors, the water system we have now has served us well. The next generation will have to take care and pay for the water.
- We do not need a central filtration system, please do not waste our money.
- We have already invested in our water solution and don't want to subsidize with higher water payments.
- We have lived here for 10 years and every year the water color is WORSE!! We have spent extra money on ruined clothes, hair treatments, fridge filters, buying a new water softener, the best-most expensive salt, new washing machine, all new toilets, special detergents, and cleaning supplies that don't help. Showers and toilets that are continually yellow!
- We live in Oakmonte Condo. Our water bill is grouped with 12 condos in building. Our cost should be considered as one residence for all 12 units not 12 residents. What happened to our condos being hooked up to Detroit water? I thought the Mocerri family was to pay for that!!!
- We think that \$100 per quarter is way overboard to charge for water softener and iron removal because our system in-house is already doing this for us. I also favor the below ground storage system and my wife does too. If it is not more expensive for taxpayers!
- We would be happy to pay for iron treatment, but more like \$100/year if possible. \$100 per quarter is too much when we have our own system.
- What caused the changes to the water and the current issues? I do not feel citizens should pay for errors made by the township and plan to investigate this situation further. Additionally, paying \$4 million for a "pretty" water system is absolutely ludicrous. The cost of water is becoming affordable in a community that is already at the brink

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

of affordability. Adding thousands of dollars a year to the water bills is not an option for us. We will leave the community that is already incredibly expensive. This issue is very disturbing. I would also like to know if the new development around the neighborhood is taken into account for these water numbers and costs. Two developments around Silverbell will add thousands of more homes and people using water. Has this been addressed??

- What is the cost of flushing? What is the cost of iron removal in the home? Would it be less expensive for us to get our own system installed? Possibly getting a discount en masse? I am a 75-year-old retired woman on a fixed income. Is there any help available in regard to payment? Will everyone pay the same irregardless of income or water usage?
- Would love to have iron removal treatment but don't think we can afford \$100 additional expense every quarter.
- Would prefer not to have my own water softener, should give us water based on taxes we already pay.
- You didn't address how much it will save to no longer have flushing. Does this amount include this savings? Love the city well. We always have water when there are power outages. I would be very interested in rust removal if you can get the costs down. Maybe \$200-\$250/yr. Does the cost vary by size of home or property?
- You failed to note how long the \$35/quarter and \$100/quarter fees would last. Also, why is this survey coming from the township and not the OCWRC? More information is needed to fill out this survey. \$400/year per household is ridiculous for iron treatment.
- Funds are very tight I simply would do what I have been doing rather than see an increase. I drink bottled water all the time, would never drink tap water.
- We've spent a lot of money to have the systems we need. We do not want to spend our money to finance other people's issues, especially not in Oakland Township. People should be able (to afford) to take care of their own iron removal issues themselves. As an aside, \$400/year is equal to 3-4 years of filters we already use and would likely continue to use to ensure our own water quality. That amount is absolutely crazy!
- Removal of iron is a waste of taxpayer money.
- For how long would the cost be approx. \$100 per quarter? Indefinitely?
- A home iron removal system is \$1,000-\$2,000 and goal for 10+ years. The cost of \$100 per quarter for iron removal is high. \$50 a quarter may be okay.
- Please don't increase per month expense or keep the increase as low as possible.
- Water rates for our sub are a disgrace. We have to pay to treat water and have the highest rates in Metro Detroit!
- Please come to a conclusion quickly. For storage and iron removal, make sure the contractors are not fleecing us. Watch every penny carefully. Have multiple bids, etc. Companies must not think that this is an opportunity to make easy money.
- Once city recovers the cost, they should give timeframe when they would stop collecting money. If we agree to pay now, city should be able to calculate when they should be able to collect cost.
- I think we have to balance the quality vs. the cost. If the cost of water becomes outrageous, our condos become unsellable. Personal treatment is always an option.
- Looks like the cost of in-home water treatment is less expensive! Concentrate on our neighborhood roads . . . our water is fine!
- Removal of iron at source is too costly.
- I am not in favor of paying \$400/year for iron removal (on top of what seems a very high water bill already for water that we don't drink or cook with as it is sometimes disturbingly orange.) Thank you for soliciting feedback. FYI - w/ summer travel and getting ready for kids to return to school Aug 21, I did not have enough time to (A) review the drafts & give feedback or (B) complete/return the survey. Perhaps giving longer or waiting until October when families are in a fall rhythm might be better in the future for timing of this sort of thing. Also - residents need more information to respond . . . a map of possible storage locations, what are pros/cons of elevated vs ground storage, what would bills increase just for storage & not iron, etc. Only when I called Mike Bailey was I able to get enough information to respond. I had called the Township office twice to get information and was told someone would call

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

me. A woman from the office left two voicemail messages saying the Township Manager would call to discuss. Nobody every called. When I called to ask for the Township Manager or anyone who could provide information on this, I was told -- in short -- nobody really knows who to direct you to in the office...maybe you should e-mail the Board.

- We are already very expensive with no break for watering our yards such as other communities. (Rochester Hills) Now this would add \$135 a quarter. This would continue to have fluoride and chemicals.
- We already pay considerably more for water than what we have paid in other communities. Rust and corrosive elements are bad.
- I would pay the \$400 annual cost for iron removal in our community well water. Softeners are a huge pain- they need service; neither my husband nor I can handle the 40lb. bags of salt - we need delivery and service emptying them into the tank. And softeners don't always give optimum water - it can be yellow at times.
- I am a satisfied customer and I am not interested in paying any higher costs if not necessary.
- How much are current flushings?

Comments Regarding Provider:

- Can you tap into the Detroit water system? Will this be a cost savings to the homeowners?
- Connect to Detroit water system, WRC is inadequate!!! WRC is failing Oakland Township residents miserably. We are looking to less WRC water area by selling house as this problem has not been already addressed at this time!
- First, Board Members should disclose to residents how many have their own well or use Detroit Water. In other words, these decisions do not affect them. Second, an outline of the various water softeners used in our District would be helpful to disclose what works well and what does not. Third, a cost benefit analysis should be provided to all residents as well as a thorough one-page sheet of advantages vs. disadvantages of especially proposal #2 should be provided to all residents affected.
- Get Detroit water. We'll already have the storage tank. Other estimates from OCWRC engineers is a lot less than \$32 million.
- I bought the condo and was advised city water would be installed within 5 years.
- I have knowledge from an "engineering" perspective related to both Detroit water and well water and treatment. I think/believe continuing the pursuit and investing money in "well water and related treatment" as opposed to connecting to Detroit water is a HORRIBLE DECISION! P.S. Current water service is terrible.
- I support solving the iron problem. This has been a significant issue in this development for decades. Can we just get onto the Detroit Water supply system and eliminate our well?
- I think the quality of the water is really bad. Not sure why we can't have Detroit water when Mocerri has it across Adams; if I don't turn on the tub for a week or two - coal black water comes out - disgusting!!
- Iron rich and hard water at this day and age, in such a large and affluent community is quite frustrating. We moved in this community from a nearby community which had Detroit water without any of the issues described, and at a lower rate! Why should we pay more for what others have as a normal or standard basic offering? Are we considering Detroit water? What is the cost difference?
- Is it possible to get on city water and get off the well system completely?
- Is the proposed ground storage tank water come from Detroit water or from underground water? If it is approved do we still keep our water softener? Is it guaranteed that iron removal from the underground storage?
- Is the township ever going to reconsider hooking into the Detroit water system?
- Live in Oakmonte Condominiums and we thought we are to be hooked up to Detroit Water system at some point in the future. Why should we be charged if we don't benefit?
- Need to make changes or switch to Detroit water.
- PLEASE consider hooking up with Detroit or new Port Huron system and see my answer to #1. Please contact us directly at rgmcgarry@gmail.com and/or 248652-7360

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

- Please follow-up on the idea of hooking up to the former Detroit water system (GLWA). It may cost each household \$15,000+ but is it permanent and solves all of our problems.
- Please get us city water. "Well Water" is a sticking point for some buyers and is holding down our home values.
- Please give us info on getting city water hooked up to our homes.
- Please look at connecting our water to city water. It is a pain and never-ending battle to keep our water free of iron and hardness all the time.
- Please look into using city water again. Many of us live in \$300k+ homes and should not have issues with our water. It's an embarrassment to settle for well water.
- Shocked that The Kirklands doesn't have Detroit City Water. I just moved from Hawthorn in December where my house was built in 1984 and had City Water. No reason \$1M homes should have this well water.
- Someday I'm hoping my residence eventually switches over to city water so I can finally be done with the water softener process.
- The choices listed in the second question are insufficient. Personally, I would like for us to be connected with the Detroit water supply, so that we wouldn't have to worry about any of this nor would I have to incur the expense of softening salt and system maintenance. I would like for there to be a system wide iron filtration; however, it is not worth \$400 per year. I pay about \$100 to maintain my current iron filter and it does just fine. It is not worth it to spend \$400 per year to have my grass watered with iron free water. In regard to the water storage tanks, if it is required by the MDEQ, then are they paying for any of the project? Also, does the township accrue reserve funds for such projects? I feel as if the cost of this project is being sprung on the residents.
- This is my third iron removal system and salt/soft water system. It was expensive and I don't want to incur a further additional quarterly cost. We were promised city water when we bought the house 18 years ago. What happened to that promise?
- Very concerned about our water. Would prefer to pay to plug into City water.
- Was any study/cost done to connect to Detroit water system?
- We did at first have problems with iron but that is resolved. Maybe once a year we have problems with pressure. Neither bothers us now. We have severe calcium build-up. We just had our water softener changed and our shower door changed twice, it is etching into our fixtures now. I want city water, not a band-aid on these problems.
- We should connect to Detroit water, or another source.
- We should follow Rochester Hills and use the same water supplier as they do.
- What about plans to connect to city water rather than wells?
- What happened to getting city water?? What happens to all our city taxes?? We all pay too much already, stop asking for more money!!
- What happened to hooking up to Detroit water system coming off Sliverbell - Kern - Gunn & repaving Gunn Rd.? What are the options and costs for that route? Let the experts handle our water.
- What happened to promise of city water hook-up when we moved here 20 years ago?
- When are you going to connect us to the Detroit water system?
- Why are we not tapping contingent areas into Detroit? Can we do this on a subdivision or adjacent area?
- Why can't we get hooked up to Detroit water?
- With the cost being 11.8 million for this equipment, will it be better to connect a city water system from another source? We moved here in 2002, at that time we were informed by Oakland Twp. that we will have city water system in 2 years (2004) and collected \$2500 from us.
- Would prefer Detroit water.
- Wouldn't it be cheaper and more effective to hook up to Detroit city water? Seems like that is the most efficient and cost-effective solution to both issues.

Southwest Oakland Township Water System Improvement Survey Results – Sept. 2017

Quality of Drinking Water - Southwest Oakland Township – 710 Responses

- WRC water is economical and outside of the requirements for safety - do not mess with it! I recall 5-6 years ago, Jim Creech was pushing to tie Oakland Township in with the "northern connector", but it never went to fruition due to Flint dropping out of the consortium. This was fortunate for OT, Flint lead aside, this was not a good plan.
- Nothing has been mentioned regarding the option of tapping into the Detroit water system. As a former resident of Shelby Township, I much preferred the water there. To me it was worth the cost. I would much prefer to not have to deal with a softener and the transport of salt to the basement. The maintenance of the proposed systems over time would make the consideration of Detroit water viable.
- Look at connecting to the Great Lakes Water Authority system. This would alleviate many concerns and issues. Would be cheaper than proposed options.
- I was told 20+ years ago that we would be connected to Detroit Water - why hasn't this been pursued??
- I was told when I purchased my property that we would be hooked up to Detroit Water System. Hasn't happened in 20 years!
- I would strongly prefer to pay for my own iron removal or consider City water hook-up.
- Why not tap in to the same water supply as neighboring communities which don't share the problems we have with our water system?
- Please show direct comparisons to connection to the Detroit System. Overall property values would increase with City water.
- Please help rid the IRON!! City water would be best. Location, I'm not the best suited for that, ask DNR or educated water personnel. We spent a small fortune trying to remove the iron, still not a great but much improved from before.
- I'd like to ask the Board to consider connecting the Township to Detroit Water System.

Southeast Invitation and Survey Form

Charter Township of Oakland

4393 Collins Road, Rochester, Michigan 48306-1670
Telephone: (248) 651-4440
Fax Number: (248) 651-1510
www.oaklandtownship.org

August 14, 2017

Dear Southeast Oakland Township Water System Customer:

As you may be aware, the Oakland Township Board of Trustees (Township) has been working with the Oakland County Water Resources Commissioners office (WRC) regarding water system improvements in the Southeast Oakland Township Water System. This system provides water service to your business or residence.

There are two major projects being evaluated. The first is water storage and the second is water treatment to remove iron.

The first project is Water system storage consisting of a storage tank within the water system distribution system. This improvement is required by the MDEQ and thus is not an optional project. The township Board of Trustees believes that ground storage is the most aesthetically pleasing choice. Photos of ground storage tanks recently constructed in adjacent communities are included with this package to give you a general idea of what ground storage tanks look like.

The second project under consideration is treatment of the water supply for iron removal. This improvement is not required by the MDEQ and is strictly at the discretion of the Township. This option will add substantially to the cost of the improvements. Therefore, your input on this question is critical. A decision on whether to construct water system treatment improvements has not been made. It should be noted that treatment to remove iron does not eliminate the need for individual residential water softeners.

To help make important decisions regarding these projects, a survey has been prepared and is being distributed to all water system customers within the system. As a customer of the system, we hope you will complete the survey online at https://www.surveymonkey.com/r/SE_Water or complete the enclosed survey and return it in the enclosed self-addressed envelope.

Your feedback is important.

These projects will have a significant impact on your future water rates, so please take the time to complete the survey by August 28, 2017.

Sincerely,

Oakland Township Board of Trustees

Attachments

Southeast Oakland Township Water System Improvement Survey

Quality of Drinking Water - Southeast Oakland Township

1. Construction of Water System Storage:

The municipal well water system that supplies drinking water to your residence or business currently does not include distribution system storage. This is a requirement of the Michigan Department of Environmental Quality, who has requested a schedule for construction of distribution system storage from Oakland Township. While this is still in the planning stages, the anticipated additional cost for storage only is approximately \$3.1M (depending on storage location), which equates to approximately \$89.00 per quarter for the typical residential customer. Due to concerns related to the aesthetics, the Township prefers to construct ground storage instead of elevated storage.

Some of the benefits of system storage include improved ability to supply water during peak demand and emergency conditions (i.e. fire protection); can improve local water pressure; can decrease the size of treatment equipment.

Potential storage sites are under evaluation. The preferences for potential sites include: a minimum of five (5) acres and adjacent to existing wells or close to existing water mains.

Please indicate your suggestions and/or comments regarding the location for system ground storage:

2. Construction of Iron Removal Treatment for Water Supply:

As you are likely aware, the water supply for your residence or business contains high levels of iron, which is currently not removed at the source. While there are no health concerns with the level of iron, it is aesthetically unpleasing when it is visibly noticeable in your water supply. It appears that this is a significant issue for the customers of the water system, as demonstrated by the average of 108 annual water quality complaints received from customers. As a result, Oakland Township is evaluating the merits of constructing iron removal treatment for your source water supply.

In addition to providing a higher level of service by eliminating iron related water quality complaints, other benefits include: 1) treatment of all water at the source, prior to entering the distribution system; 2) eliminates staining of sidewalks and structures due to lawn sprinkling; 3) significantly reduces the need for distribution system and service line flushing; 4) iron removal system is operated and maintained by licensed operator; 5) testing is periodically performed to ensure the system is operating as designed, and 6) iron removal systems provide an ancillary benefit of arsenic removal. Construction of iron removal treatment for your source water supply will result in a cost increase of approximately \$98 per quarter (this is in addition to the costs for storage) for the typical residential customer, based on an overall project cost of \$4.4M. By way of comparison, HomeAdvisor.com estimates the average cost of in-home water treatment at \$850-\$2,650, depending on multiple factors.

Without construction of iron removal treatment there is not much that can be done by the operators of the system about discolored water due to the high iron levels, other than periodically flushing the distribution system.

To assist with this evaluation please check the appropriate box below to indicate your opinion:

- I am in favor of having iron removal treatment constructed for my source water supply at an approximate cost of \$98.00 per quarter.
- I am not in favor of having iron removal treatment constructed for my source water supply.
- I prefer to handle iron removal treatment in my home, at my own expense.

Southeast Oakland Township Water System Improvement Survey

Quality of Drinking Water - Southeast Oakland Township

3. Do you have a separate in-home iron removal system? (please circle your answer)

Yes	No	Don't Know
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If yes, approximate age of system _____

4. Do you have in-home water softener equipment? (please circle your answer)

Yes	No	Don't Know
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If yes, approximate age of equipment _____

5. Do you have any other water filtration system, for example, reverse osmosis? (please circle your answer)

Yes	No	Don't Know
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If yes, type of filtration _____

6. Listed below are some features of drinking water that may impact your satisfaction with the quality of your drinking water. Please rate your overall satisfaction with each feature of your drinking water quality on a scale of "Very Satisfied" to "Very Dissatisfied".

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Don't Know
A. The taste of your drinking water						
B. The color of your drinking water						
C. The smell of your drinking water						
D. The appearance / color of white laundry						
E. How well you are informed regarding any disruptions in your drinking water services						
F. Water pressure for your drinking water						
G. How well you are informed about the quality and safety of your drinking water						

Other: (please specify)

7. Which TWO of the features discussed above are most important to you? (please circle your answer)

1 st Most Important	A	B	C	D	E	F	G
2 nd Most Important	A	B	C	D	E	F	G

8. On a scale of "Very Satisfied" to "Very Dissatisfied", how satisfied are you with the overall quality of your drinking water? (please circle your answer)

Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Don't Know
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Southeast Oakland Township Water System Improvement Survey

Quality of Drinking Water - Southeast Oakland Township

9. On a scale of "Very Important" to "Not Very Important", how important is the quality of your drinking water to you and members of your household? (please circle your answer)

Very Important	Important	Neutral	Not Important	Not Very Important	Don't Know
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10. If you have in-home water softener equipment, how often do you have discolored water issues? (please circle your answer)

Daily	Weekly	Monthly	Quarterly	Once per Year	Never
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11. Do you use bottled water at home? (please circle your answer)

Yes	No
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If yes, please describe how often and for what use:

12. Do you have any additional comments?

Your address (optional):

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The first project is Water system storage consisting of a storage tank within the water system distribution system. This improvement is **required** by the MDEQ and thus is **not** an optional project. The township Board of Trustees believes that ground storage is the most aesthetically pleasing choice. Photos of ground storage tanks recently constructed in adjacent communities are included with this package to give you a general idea of what ground storage tanks look like.

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To help make important decisions regarding these projects, a survey has been prepared and is being distributed to all water system customers within the system. As a customer of the system, we hope you will complete the survey online at https://www.surveymonkey.com/r/SW_Water OR complete the enclosed survey and return it in the enclosed self-addressed envelope.

Your feedback is important.

These projects will have a significant impact on your future water rates, so please take the time to complete the survey by August 28, 2017.

Sincerely,

Oakland Township Board of Trustees

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Southwest Oakland Township Water System Improvement Survey

Quality of Drinking Water - Southwest Oakland Township

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Some of the benefits of system storage include improved ability to supply water during peak demand and emergency conditions (i.e. fire protection); can improve local water pressure; can decrease the size of treatment equipment.

Potential storage sites are under evaluation. The preferences for potential sites include: a minimum of five (5) acres and adjacent to existing wells or close to existing water mains.

Please indicate your suggestions and/or comments regarding the location for system ground storage:

2. Construction of Iron Removal Treatment for Water Supply:

As you are likely aware, the water supply for your residence or business contains high levels of iron, which is currently not removed at the source. While there are no health concerns with the level of iron, it is aesthetically unpleasing when it is visibly noticeable in your water supply. It appears that this is a significant issue for the customers of the water system, as demonstrated by the average of 177 annual water quality complaints received from customers. As a result, Oakland Township is evaluating the merits of constructing iron removal treatment for your source water supply.

In addition to providing a higher level of service by eliminating iron related water quality complaints, other benefits include: 1) treatment of all water at the source, prior to entering the distribution system; 2) eliminates staining of sidewalks and structures due to lawn sprinkling; 3) significantly reduces the need for distribution system and service line flushing; 4) iron removal system is operated and maintained by licensed operator; 5) testing is periodically performed to ensure the system is operating as designed, and 6) iron removal systems provide an ancillary benefit of arsenic removal. Construction of iron removal treatment for your source water supply will result in a cost increase of approximately \$100 per quarter (this is in addition to the costs for storage) for the typical residential customer, based on an overall project cost of \$11.8M. By way of comparison, HomeAdvisor.com estimates the average cost of in-home water treatment at \$850-\$2,650, depending on multiple factors.

Without construction of iron removal treatment there is not much that can be done by the operators of the system about discolored water due to the high iron levels, other than periodically flushing the distribution system.

To assist with this evaluation please check the appropriate box below to indicate your opinion:

- I am in favor of having iron removal treatment constructed for my source water supply at an approximate cost of \$100.00 per quarter.
- I am not in favor of having iron removal treatment constructed for my source water supply.
- I prefer to handle iron removal treatment in my home, at my own expense.

Southwest Oakland Township Water System Improvement Survey

Quality of Drinking Water - Southwest Oakland Township

3. Do you have a separate in-home iron removal system? (please circle your answer)

Yes	No	Don't Know
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If yes, approximate age of system _____

4. Do you have in-home water softener equipment? (please circle your answer)

Yes	No	Don't Know
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If yes, approximate age of equipment _____

5. Do you have any other water filtration system, for example, reverse osmosis? (please circle your answer)

Yes	No	Don't Know
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If yes, type of filtration _____

6. Listed below are some features of drinking water that may impact your satisfaction with the quality of your drinking water. Please rate your overall satisfaction with each feature of your drinking water quality on a scale of "Very Satisfied" to "Very Dissatisfied".

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Don't Know
A. The taste of your drinking water						
B. The color of your drinking water						
C. The smell of your drinking water						
D. The appearance / color of white laundry						
E. How well you are informed regarding any disruptions in your drinking water services						
F. Water pressure for your drinking water						
G. How well you are informed about the quality and safety of your drinking water						

Other: (please specify)

7. Which TWO of the features discussed above are most important to you? (please circle your answer)

1 st Most Important	A	B	C	D	E	F	G
2 nd Most Important	A	B	C	D	E	F	G

8. On a scale of "Very Satisfied" to "Very Dissatisfied", how satisfied are you with the overall quality of your drinking water? (please circle your answer)

Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Don't Know
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9. On a scale of "Very Important" to "Not Very Important", how important is the quality of your drinking water to you and members of your household? (please circle your answer)

Very Important	Important	Neutral	Not Important	Not Very Important	Don't Know
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10. If you have in-home water softener equipment, how often do you have discolored water issues? (please circle your answer)

Daily	Weekly	Monthly	Quarterly	Once per Year	Never
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11. Do you use bottled water at home? (please circle your answer)

Yes	No
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If yes, please describe how often and for what use:

12. Do you have any additional comments?

Your address (optional):
