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# Annual Water Quality Reports

These federally mandated reports contain important information about the source and quality of your drinking water. The reports include test results from water quality analyses conducted throughout 2021.

CENTRAL



#TRUST  
TOHO  
CARES

**PARA ESPAÑOL:** Este informe anual sobre la calidad del agua potable está disponible en español en [tohowaterqualityreports.com](https://tohowaterqualityreports.com).

**TOHO WATER AUTHORITY (TOHO)** delivers to you water that is constantly tested for compliance with federal and state standards and regulations. During the period of January 1st to December 31st 2021, covered by this Consumer Confidence Report, highly trained scientists and technicians performed analyses on samples taken throughout your water system. The results of these analyses showed that the substances for which Toho is required to test, most were found to be at levels in the water substantially lower than the minimum acceptable levels. This brochure is a summary of the water quality provided to our customers. It is a record reflecting the hard work of our employees to bring you high quality water.

## AN EXPLANATION OF THE WATER-QUALITY DATA TABLE

The table shows the results of our water-quality analyses. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement.

As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, is more than one year old.

## KEY TO TABLES

**AL = Action Level**

**ND = Not Detected**

**N/A = Not Applicable**

**RAA = Running Annual Average**

**LRAA = Locational Running Annual Average**



## WATER SOURCE

Underneath Osceola County lies one of the largest pristine reservoirs of fresh groundwater in the country, the Floridan Aquifer. Water from this aquifer is of consistently high quality and is used as the source of potable water for Toho's water system. The aquifer is recharged by rainfall on the Lake Wales Ridge (US 27) in Osceola, Polk and Lake counties that is filtered through hundreds of feet of sand and rock in a natural cleansing process. Because of its high quality, the water we use needs little or no treatment other than aeration to remove hydrogen sulfide (rotten egg odor) and disinfection.

## WESTERN

**A - Hidden Glen**

**B - Western**

## SOUTHERN

**C - Poinciana**

## CENTRAL

**D - Eastern\***

**E - Buenaventura  
Lakes**

## EASTERN

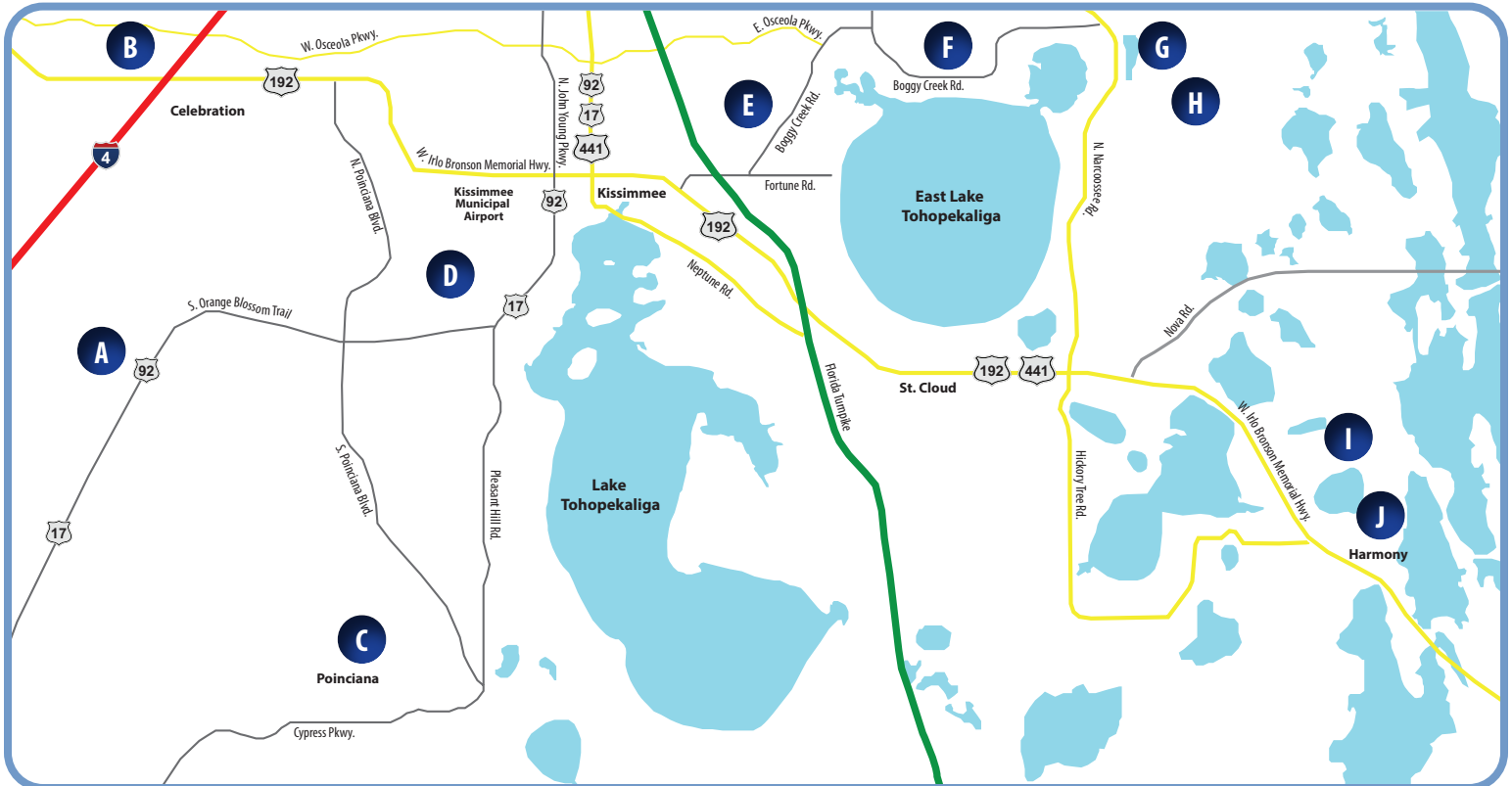
**F - Springlake Village**

**G - Lake Ajay Estates**

**H - Northeast**

**I - Bay Lake Estates**

**J - Harmony**



## INORGANIC CONTAMINANTS

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	4/20	N	0.00055	ND - 0.00055	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	4/20	N	0.018	0.012 - 0.018	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	4/20	N	0.68	0.19 - 0.68	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Sodium (ppm)	4/20	N	12.0	6.2 - 12.0	N/A	160	Salt water intrusion, leaching from soil

## STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Chlorine (ppm)	1/21-12/21	N	1.9 (LRAA)	0.3 - 2.6	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) [HAA5] (ppb)	1/21-12/21	N	48.7 (LRAA)	23.4 - 47.4	N/A	MCL = 60	By-product of drinking water disinfection
Total Trihalomethanes [TTHM] (ppb)	1/21-12/21	N	76.4 (LRAA)	34.5 - 96.9	N/A	MCL = 80	By-product of drinking water disinfection

One sample during April 2021 (3200 Seralago Blvd.) had a Total Trihalomethanes result of 87.4 parts per billion (ppb), which exceeds the Maximum Contaminant Level (MCL) of 80 ppb. A second sample during April 2021 (120 Simpson Rd.) had a Total Trihalomethanes result of 96.9 parts per billion (ppb), which exceeds the Maximum Contaminant Level (MCL) of 80 ppb. However, the system did not incur an MCL violation, because all annual average results at all sites were at or below the MCL. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

In 2021 our system exceeded the MCL for Odor. Secondary contaminants are considered to be aesthetic violations, and they are not considered to have major health effects.

## LEAD AND COPPER (TAP WATER)

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	7/20-12/20	N	0.18	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	7/20-12/20	N	0.5	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

## SOURCE WATER ASSESSMENT INFORMATION

In 2021 the Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There were 12 potential sources of contamination identified for this system with low to moderate susceptibility levels. The potential sources identified are petroleum storage tanks, hazardous waste at local businesses, and a brownfield site. A “brownfield site” is a site that is generally abandoned, idled, or under-used industrial and commercial property where expansion or redevelopment is complicated by actual or perceived environmental contamination. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp).

# KEEP YOUR LAWN HEALTHY

Visit our **Ways To Conserve** section at [www.tohowater.com](http://www.tohowater.com) for your **Watering Days and Times**

**By this we mean:**

- ☑ watered only 2 times a week
- ☑ on the correct days
- ☑ and at the right times



## RADIOACTIVE CONTAMINANTS

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	5/20	N	2.39	N/A	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	5/20	N	2.42	N/A	0	5	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

## INORGANIC CONTAMINANTS

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	5/20	N	0.011	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	5/20	N	0.16	N/A	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Sodium (ppm)	5/20	N	21.9	N/A	N/A	160	Salt water intrusion, leaching from soil

## SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Dalapon (ppb)	3/20	N	0.93	NA	200	200	Runoff from herbicide used on rights of way

**SHOWER TEST** - If your shower fills a gallon bucket in less than 20 seconds, replace the showerhead with a water-efficient model.

**LEAD AND COPPER (TAP WATER)**

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	4/21	N	0.14	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	4/21	N	0.6	1	0	15	Corrosion of household plumbing systems, erosion of natural deposits

**STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS**

Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	1/21 - 12/21	N	1.6 (LRAA)	0.5 - 3.1	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) [HAA5] (ppb)	5/21, 8/21	N	25.4	25.0 - 25.4	N/A	MCL = 60	By-product of drinking water disinfection
Total Trihalomethanes [TTHM] (ppb)	5/21, 8/21	N	48.6	43.4 - 48.6	N/A	MCL = 80	By-product of drinking water disinfection

We cannot make it rain  
water, use it wisely



bringing you life's  
most precious resource

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water  
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SECONDARY CONTAMINANTS

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
Odor (threshold odor number)	5/20	Y*	12	N/A		3	Naturally occurring organics

\*In 2020 our system exceeded the MCL for Odor. Secondary contaminants are considered to be aesthetic violations, and they are not considered to have major health effects.

SOURCE WATER ASSESSMENT INFORMATION

In 2021 the Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There were 2 potential sources of contamination identified for this system with low susceptibility level, which are petroleum storage tanks. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp).

SYSTEM AND ORGANIZATION CONTROLS REPORT

Due to administrative oversight during a busy part of the year, our office failed to submit a report required under the Safe Drinking Water Act. This violation has no impact on the quality of the water our customers received, and it posed no risk to public health. We have established a report tracking file to ensure that all reporting requirements are met in the future.

TOILET LEAK TEST

Place a few drops of food coloring in the toilet tank. Wait 25 minutes without flushing. If the color spreads into the toilet bowl, there’s a leak. Cleaning the flapper may fix the leak, if not, they are inexpensive to replace.





## Required additional health information

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

Toho is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water

for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

## NATIONAL PRIMARY DRINKING WATER REGULATION COMPLIANCE

Water Quality Data for community water systems throughout the United States is available at [www.epa.gov/safewater](http://www.epa.gov/safewater).



## Trash blocks sewer systems.

This can cause sewer backups in your neighborhood and home.

**Please don't flush trash or food down your toilets and drains.**

### PLEASE DON'T FLUSH:

- wet wipes (even the 'flushable' ones) ● feminine products ●
- hygiene products ● kitchen towels ● tissues ● diapers ● cloths ●
- dental floss ● whitening strips ● condoms ● medicines ● vitamins
- hair ● bandages ● cotton swabs ● kitty litter ● dairy products
- food scraps ● baking goods ● sauces ● oils ● fats ● grease

## Required additional health information continued

### Contaminants that may be present in source water include:

**(A)** Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**(B)** Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**(C)** Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.

**(D)** Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

**(E)** Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**DRINKING WATER**, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

**SOME PEOPLE** may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### Drop Savers Calendar Contest Winner

**KATHERINE** - Grade 5  
**East Lake Elementary**

Pick up a calendar at our  
**Administration Office** (951 MLK  
Blvd., Kissimmee)



## Water-Quality Table Footnotes

**MAXIMUM CONTAMINANT LEVEL (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MAXIMUM CONTAMINANT LEVEL GOAL (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**LOCATIONAL RUNNING ANNUAL AVERAGE (LRAA):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**PARTS PER MILLION (PPM) OR MILLIGRAMS PER LITER (MG/L)** – one part per million corresponds to one minute in two years or a single penny in \$10,000.

**PARTS PER BILLION (PPB) OR MICROGRAMS PER LITER (UG/L)** – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**PICOCURIES PER LITER (PCI/L)** – picocuries per liter is a measure of the radioactivity in water.

**ACTION LEVEL** – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**“ND”** means not detected and indicates that the substance was not found by laboratory analysis.

**MCLs** are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

## JANUARY

- Irrigate established plants / lawns once every 7-14 days.
- Clean and repair irrigation components.

- Start the New Year by planting a new tree for Florida Arbor Day. Keep recently planted trees and shrubs moist (not soggy) for several months as roots grow in.

## FEBRUARY

- As plants put out new growth, water about once a week.
- Convert to drip irrigation for landscape plant beds; try starter kits from retailers.

- If you use a pre-emergent herbicide to prevent weeds from germinating, apply now.

Check that your irrigation system is applying the appropriate amount of water:

## MARCH

- Place several straight-sided containers or a range gauge within an irrigation zone.
- Time to see how long it takes for most of the cans or rain gauge to fill with  $\frac{3}{4}$ " of water.

- Set each irrigation zone the appropriate amount of time to apply  $\frac{3}{4}$ ". Never change these settings.
- Apply a complete, slow-release fertilizer to lawn.

## APRIL

- Mow a minimum of 3" tall for St. Augustine and Bahia.
- Check irrigation system for broken spray heads and leaks.

- Do not irrigate more than 2x per week.
- Replenish mulch with 3" of non-cypress mulch.

## MAY

- Check rain sensor functionality: Turn on irrigation systems; Spray water directly onto rain sensor.
- Make a rain barrel to collect water for irrigating plants and for hurricane preparedness.

- Change the battery in your irrigation control box to prevent it from resetting in the event of a power failure

## JUNE

- With the onset of the rainy season, adjust irrigation frequency based on rainfall received.
- Direct downspouts onto lawn areas rather than pavement.

- Never apply fertilizer or pesticides if rain is expected within 24 hours.

## JULY

- Check irrigation system for leaks and broken spray heads.
- Apply liquid iron sulfate to green up your lawn.

- Eliminate nematodes, diseases, and weed seeds in plant beds; moisten soil; secure clear plastic over area for a month.

## AUGUST

- Check rain sensor functionality by turning on your irrigation system. Spray water directly on your rain sensor.

- Plan your fall vegetable garden; request a Planting Calendar from the Extension Plant Clinic.

## SEPTEMBER

- Fertilize lawn with a complete, slow-release fertilizer.

- Start planting your fall vegetable garden.

## OCTOBER

- Reduce irrigation frequency to only once per week.

- Troubleshoot entire irrigation system and clean, adjust and replace malfunctioning components.

## NOVEMBER

- Plan for landscape upgrades in the spring by working on your design ideas and plant lists now.
- Sharpen mower blades.

- Winter is a good time to plant trees and shrubs in Florida; visit Extension Services for suggestions.

## DECEMBER

- Adjust irrigation system to water once every 7-14 days.

## CUSTOMER VIEWS WELCOME

If you are interested in learning more about Toho and water quality or participating in the decision-making process, there are a number of opportunities available. Toho's Board of Supervisors meets on the second Wednesday of each month at 5 p.m., at the Toho Administration Building, Board Room, 951 Martin Luther King Blvd., Kissimmee. The public is welcome.

**More information is available at [www.tohowater.com](http://www.tohowater.com)**

## CONTACT US

### Customer Service/Emergencies

**TEL: 407-944-5000**

### Main Menu

**Press 1** for Water/Sewer related emergencies

**Press 2** for customer service and all other inquiries

**Press \*** for the company directory

### Customer Service Menu

**Press 1** to pay your bill

**Press 2** to register your online account

**Press 3** if you are an existing customer and have a bill inquiry

**Press 4** to start, stop or move your service

**Press 5** for all other inquiries

**Press 0** to hear this menu again

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Visit our **customer service** section on [www.tohowater.com](http://www.tohowater.com) to find out how.



**Toho  
Water  
Authority**



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951 Martin Luther King Blvd.,  
Kissimmee, FL 34741



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