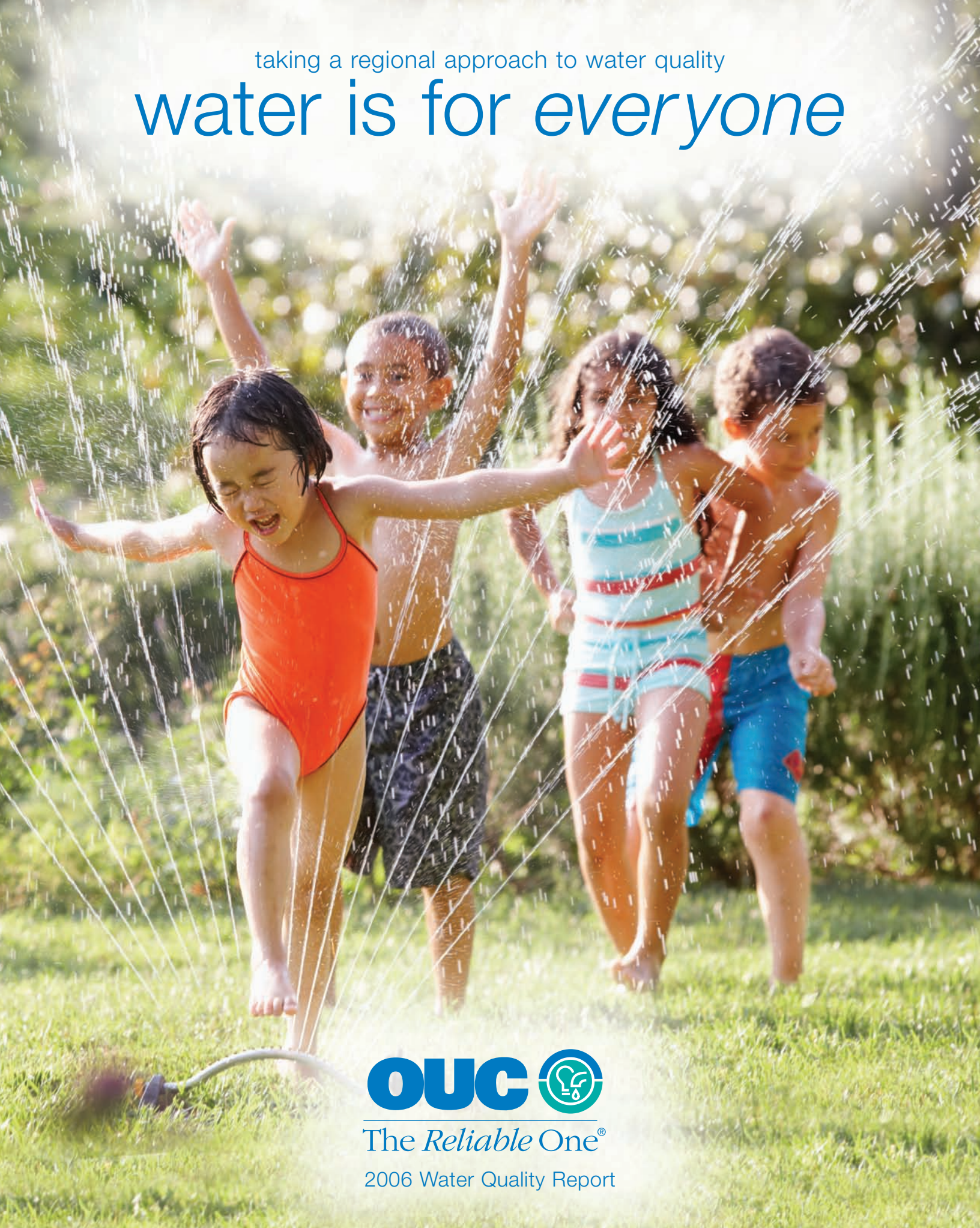
taking a regional approach to water quality

water is for *everyone*



OUC

The *Reliable* One®

2006 Water Quality Report

Este informe contiene informacion muy importante sobre su agua potable. Comuniquese con OUC para obtener una copia en Espanol.

working together. . . *to ensure* **safe, rel**

Going *above and beyond* to provide our customers with safe, reliable, great-tasting water has *always* been a priority at OUC — The *Reliable* One. Through stringent safety standards and rigorous water-quality testing, our water again has exceeded all federal and state drinking water requirements. But, as Central Florida grows, the demand for water will rise as well — and that will bring new challenges. So, we are committed to ensuring water supply *and* water quality through *regional cooperation* — working closely with other utilities to tap into alternative resources and share existing ones, as well.

This report includes information about the source of your drinking water . . . the measures we take to ensure its safety . . . the results of the 20,000-plus chemical and bacteriological water-quality tests we perform annually . . . and guidelines for water conservation. All of us at OUC understand how vital this precious resource is, and we remain dedicated to delivering a safe, reliable supply of water — not only to our current customers, but to our future customers as well.

Kenneth P. Ksionek
OUC General Manager/CEO

About OUC — The *Reliable* One

OUC is a municipal utility owned by the citizens of Orlando and governed by a board of commissioners. The utility provides electric and water services to more than 196,000 customers in Orlando, St. Cloud and parts of unincorporated Orange and Osceola counties. OUC is one of the largest water utilities in the state.

Using ozone to produce great tasting water

OUC uses ozone treatment at its eight water treatment plants to produce high quality, great tasting tap water, proudly dubbed H_2OUC. Ozone is the strongest disinfectant available and reduces the amount of chlorine that must be added. The result is clean, fresh-tasting water with a sparkling appearance. Since 1995, OUC has converted five of its water plants to ozone treatment and built three new ozone plants.

As required by law, we still add chlorine to our water to maintain the high quality as it flows through pipes to customer taps. Fluoride is added to promote healthy teeth. We also add sodium hydroxide to prevent copper and lead from leaching into the drinking water from customers' own plumbing, the primary source of these elements in our area.

iable drinking water

A naturally clean water source

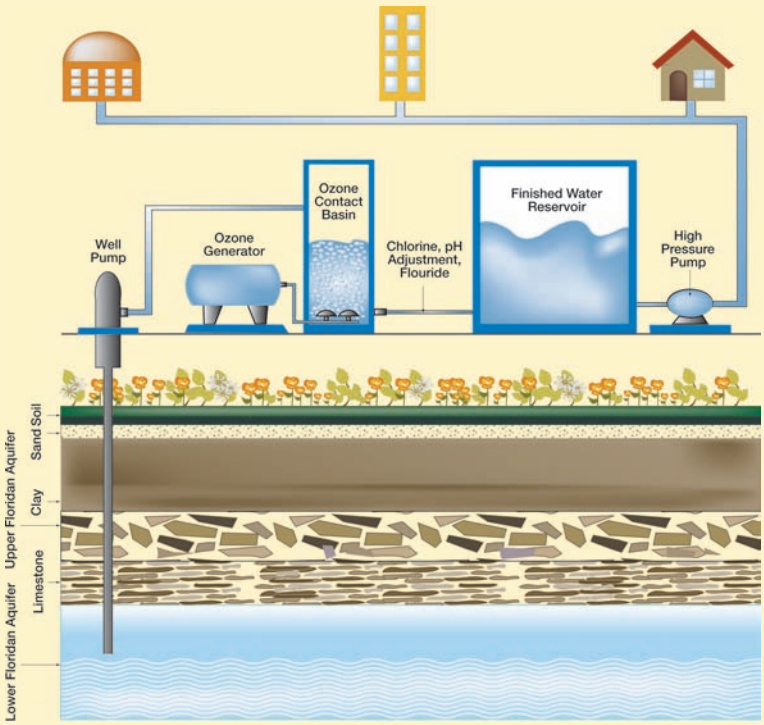
OUC's water comes from the Lower Floridan Aquifer, an underground reservoir that in many places is a quarter of a mile below the earth's surface. The Aquifer is fed by rainwater that is filtered through hundreds of feet of rock, undergoing a natural cleansing process. After pumping water from the Aquifer to our water plants, OUC carefully treats the water to ensure its safety and enhance its quality.

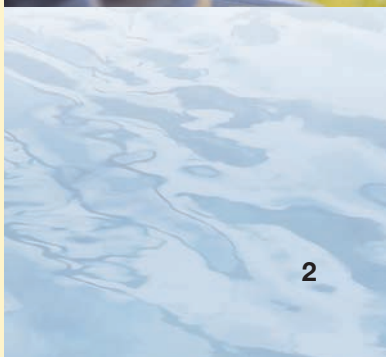
Securing our water facilities

All OUC water plants are equipped with state-of-the-art security systems that include intrusion-detection systems, alarms, cameras and security fences around the perimeter of the properties. Armed security guards and law enforcement officers regularly patrol the facilities. You can be assured that OUC remains vigilant in monitoring and protecting our water facilities. The safety of your water is our highest priority.

where your **water** *comes from*

Well pumps at OUC's water treatment plants draw water from a natural underground reservoir called the Lower Floridan Aquifer. After being sent through ozone treatment basins, the water is treated with chlorine and fluoride. The water is then pumped to a finished water reservoir, where it waits for distribution to residential, commercial and industrial customers. Each year OUC delivers nearly 30 billion gallons of water to customers across a 200-square-mile territory.



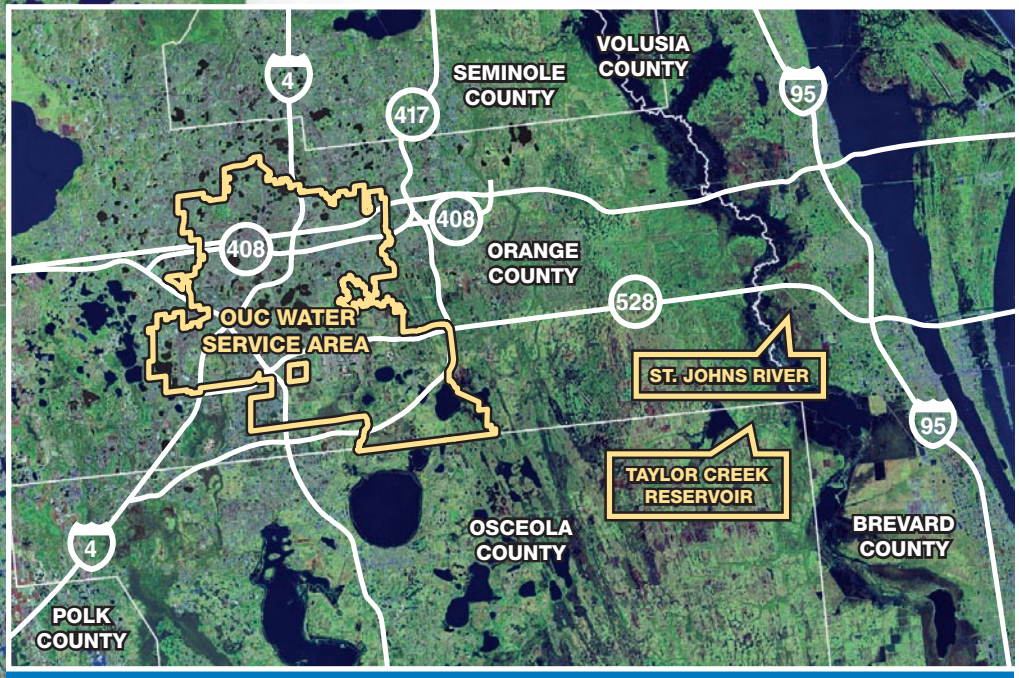


preparing for the future regional partne

alternative water supply

With the burgeoning growth of the area, groundwater, the traditional water source relied upon by OUC for the past 50 years, cannot reliably and safely supply all the future water demands in the Central Florida region. Alternative water supply sources, such as surface water from the St. Johns River and Taylor Creek Reservoir located in east Orange County, will have to be relied upon in addition to groundwater to meet future drinking water needs.

OUC will utilize reclaimed water, highly treated wastewater safe for human contact, to supply OUC's future landscape and lawn irrigation water demands. Because water supply is such a critical issue, OUC believes it is important to manage this precious resource wisely.

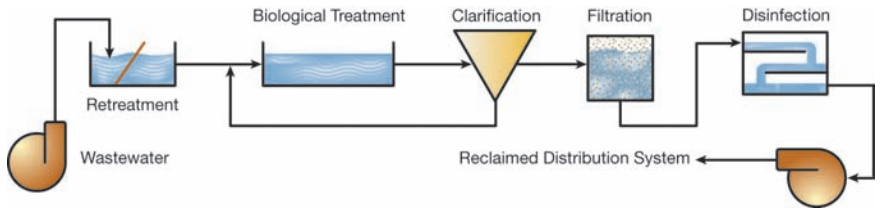


OUC is working with surrounding counties and forming regional partnerships in the pursuit of alternative water supply sources.

That is why OUC is working cooperatively with the City of Orlando and other Central Florida water utilities to develop these alternative water supply sources, and have them online in the 2011-2013 time frame.

Our goal is to make sure that there is an adequate, reliable supply of good quality water to meet all of our customers' needs for generations to come.

reclaimed water treatment process



How is reclaimed water produced? Wastewater first undergoes pretreatment screening and grit removal, then undergoes biological treatment to remove organic material. The water is then clarified, filtered, disinfected and pumped into the reclaimed distribution system.

OUC hires new water vice president

As part of OUC's dedication to regional solutions, we've expanded our management team to include new Vice President of Water Rob Teegarden, who has extensive experience with alternative water supply. Teegarden previously worked for the City of Tampa, which operates the most technologically advanced water system in the state and is at the forefront of alternative water supply development. He specializes in water resources and water facilities capital planning and construction.

through

rships *and* conservation

Good stewards of the environment

At OUC, our goal is to continue serving as a good steward of the environment while meeting the water needs of our vibrant, growing community. We're proud to have received approval from the St. Johns River Water Management District for a 20-year groundwater withdrawal permit. This unique long-term agreement details our plans for increased use of reclaimed water, enhanced conservation measures and development of alternative water supplies with regional partners.

Central Florida is growing quickly as more people make the Sunshine State home. OUC — The *Reliable* One, the region's largest water supplier, must accommodate today's ever-increasing demands for water while also conserving for the future.

To identify solutions for the short- and long-term protection of our vital water resources, OUC is working closely with water management districts, federal and state regulatory agencies, and other utilities.

encouraging conservation

By encouraging conservation, OUC helps its customers lower their bills while preserving the water supply. For example, did you know that irrigation accounts for more than half of Central Florida's total water consumption?

Practicing water conservation in your yard is the best place to start to save money and protect our water resources. Remember: Over-watering is not only wasteful, it also promotes shallow root growth and makes your lawn more susceptible to insects and disease.

Here are some more steps you can take to use water more efficiently at your home. Visit OUC's Web site, **www.ouc.com,** for more conservation tips:

- Water only before 10 a.m. or after 4 p.m. to minimize the amount of water lost to evaporation.
- Water just once a week in the cooler months and twice a week in the warmer months to maintain a healthy, green grass with a strong root system.
- Water for just 30-45 minutes per session.
- Install water-saver shower heads.
- Repair leaking faucets and toilets and install water-saver flush valves in toilets.
- Recycle water rather than pouring it down the drain. (For instance, used water from a fish tank is good for watering plants.)
- To detect a leak, make sure no water is running in your house and observe your water meter (If you see the meter's dial or triangle moving, you may have a leak somewhere).
- Regularly check for leaks — a leak the size of a pinhead can waste 360,000 gallons a year, enough to fill 12,000 bathtubs to the overflow mark.

water quality test

all test results **well below** *allowable levels*

As shown in the following tables, the water that OUC delivers to your tap surpasses all federal and state requirements for safe drinking water. Of the more than 135 regulated and unregulated substances for which we test annually, only several have been detected, and the detection levels were well below allowable levels.

Except where otherwise noted, the following results are from tests conducted between January 1 and December 31, 2005 (the most recent available in accordance with DEP regulations).

Primary Regulated Substances	Date of Sampling	MCL/AL Violation	Range Detected	Highest Detected	MCL	MCLG	Possible Sources
Barium (ppm)	7/05	No	0.018-0.055	0.055	2	2	Erosion of natural deposits
Fluoride (ppm)	7/05	No	0.61-0.93	0.93	4	4	Erosion of natural deposits; water additive that promotes strong teeth
Lead (ppb)	7/05	No	ND-1	1	Al (15)	0	Erosion of natural deposits
Nitrate (ppm)	7/05	No	0.034-0.123	0.123	10	10	Runoff from fertilizer; erosion of natural deposits
Sodium (ppm)	7/05	No	8.03-13.0	13	160	N/A	Salt water intrusion; leaching from soil
Radiological Contaminants	**Date of Sampling**	**MCL/AL Violation**	**Range Detected**	**Highest Detected**	**MCL**	**MCLG**	**Possible Sources**
Radiological Gross Alpha (pCi/L)(2002)	10/02	No	ND-1.1	1.1	15	0	Erosion of natural deposits

TTHMs and Stage I Disinfectant/Disinfection By-Product (D/DBP) Parameters							
Disinfection By-products	Date of Sampling	MCL/AL Violation	Range Detected	Highest Detected	MCL	MCLG	Possible Sources
Bromate (ppb)	Monthly 2005	No	ND-14	14* (annual average 3)	10	0	By-product of drinking water disinfection
HAA5 (ppb) Haloacetic Acids	Quarterly 2005	No	8-38	38* (annual average 21)	60	N/A	By-product of drinking water chlorination
TTHMs (ppb) Trihalomethanes	Quarterly 2005	No	23-71	71* (annual average 49)	80	N/A	By-product of drinking water chlorination
Chlorine (ppm)	1/05 - 12/05	No	0.2 - 2.3	2.3* (annual average 1.2)	(MRDLG=4)	(MRDL=4)	Water additive used to control microbes

* Compliance levels are based on running annual averages.

results

Microbiological contaminants. The following results are from tests conducted between January 1 and December 31, 2005 (the most recent available in accordance with DEP regulations).

Contaminant	MCLG	MCL	Level Detected	Violation	Likely Sources
Total Coliform Bacteria	0	Presence of Coliform Bacteria in more than 5 percent of monthly samples	OUC's highest monthly percentage of positive samples was 1.10%, in June 2005	No	Naturally present in the environment

During 2005, a minimum of 198 water samples per month were collected throughout OUC's water distribution system and analyzed for Total Coliform Bacteria.

Key to Abbreviations

MCL: ***Maximum Contaminant Level.*** 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.

MCLG: ***Maximum Contaminant Level Goal.*** 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.

AL: ***Action Level.*** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

ppm: ***Parts per million.*** One part per million corresponds to 1 cent in $10,000.

ppb: ***Parts per billion.*** One part per billion corresponds to 1 cent in $10 million.

pCi/L ***Picocuries per liter.*** A measure of the radioactivity in water.

N/A: Not applicable.

ND: Not detected. Indicates that the substance was not found by laboratory analysis.

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.

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.

Constantly testing your water. After an on-site assessment by the Florida Department of Health and successful completion of the latest round of profiency testing, chemists at OUC's state-of-the-art Water Quality Laboratory perform more than 20,000 chemical and bacteriological tests annually to ensure the quality and safety of OUC's drinking water. With the latest accreditation, customers can continue to enjoy OUC's award-winning water with confidence, knowing that the water is tested regularly and surpasses the highest quality standards. For more information about OUC's drinking water, call our Water Quality Laboratory at **407-244-8779** to talk to a water quality professional. Information also is available online at **www.ouc.com.**

Source Water Assessment and Protection Program (SWAPP)
A Source water assessment has been completed, and the report is available to the public at the following Web site: **http://www.dep.state.fl.us/swapp/DisplayPWS.asp?pws_id=3480962&county=48**.

results of copper and lead **sampli**

The following results are from tests conducted between June 1 and September 2005 (the most recent available in accordance with DEP regulations). **The tests confirm that the levels of lead and copper in tap water sampled in homes were below the Action Level (AL) except where noted.**

Contaminant and Unit of Measure	Copper (tap water) (ppm)	Lead (tap water) (ppb)
MCL/Violation	No	No
Level Detected	0.77 (90th percentile*)	2 (90th percentile*)
MCL	AL = 1.3 (one site exceeded AL)	AL = 15 (one site exceeded AL)
MCLG	1.3	0 (Zero ppb)
Likely Source of Contamination	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	Corrosion of household plumbing systems; erosion of natural deposits

* In 90 percent of the homes sampled, the level of copper was 0.77 ppm or less and the level of lead was 2 ppb or less.

ng at customer taps

More about lead and copper

The primary source of lead and copper in tap water is customers' plumbing. These elements can possibly leach into the water from a building's plumbing through corrosion if the water has been standing in the pipes for several hours. To prevent corrosion from occurring, OUC has effectively implemented systemwide corrosion-control treatment. At the treatment plants, sodium hydroxide is added to the water to increase the water's pH and thus prevent corrosion of water pipes.

Buildings at risk for lead or copper in the water are those that have lead services or that have lead solder in copper pipes. If you are unsure whether your plumbing contains lead or copper, run tap water for 30 seconds before using it. This will ensure that you draw fresh water from the tap, not water that has been standing in your plumbing for several hours or overnight.

Copper is an essential nutrient but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress.

Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

no **detectable levels** *found*

What's not in your water. In 2005, OUC also tested its drinking water for the substances listed below.

Metals	Volatile Organic Chemicals (VOCs)	Synthetic Organic Chemicals (SOCs)	
Antimony	1,1,1-Trichloroethane	2,4,5-TP (Silvex)	Hexachlorobenzene
Arsenic	1,1,2-Trichlorobenzene	2,4-D	Hexachlorocyclopentadiene
Beryllium	1,1-Dichloroethylene	Alachlor	Lindane
Cadmium	1,2,4-Trichlorobenzene	Atrazine	Methoxychlor
Chromium	1,2-Dichloroethane	Benzo (A) Pyrene	Oxamyl
Cyanide	1,2-Dichloropropane	Carbofuran	PCB
Mercury	Benzene	Chlordane	Pentachlorophenol
Silver	Carbon Tetrachloride	Dalapon	Picloram
Thallium	Cis-1,2-Dichloroethylene	Di(2-Ethylhexyl) Adipate	Simazine
	Dichloromethane	Di(2-Ethylhexyl) Phthalate	Toxaphene
	Ethylbenzene	Dibromochloropropane	
	O-Dichlorobenzene	Dinoseb	
	Para-Dichlorobenzene	Diquat	
	Styrene	Endothall	
	Toluene	Endrin	
	Trans-1,2-Dichloroethylene	Ethylene Dibromide	
	Trichloroethylene	Glyphosate	
	Vinyl Chloride	Heptachlor	
	Xylenes (total)	Heptachlor Epoxide	

The Consumer Confidence Report (CCR) was submitted to The Florida Department of Environmental Protection later than the required date in 2005, resulting in a reporting violation. This violation had no impact on the quality of the water delivered to our customers.

EPA statement about water

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. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **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.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and also can come from gas stations, urban stormwater runoff and septic systems.
- **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, the EPA prescribes regulations that 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.

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at **1.800.426.4791**.

What the EPA says about MCLs and health effects

The Maximum Contaminant Levels (MCLs) set by the EPA 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people and infants can be particularly at risk for 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 microbial contaminants are available from the EPA Safe Drinking Water Hotline, **1.800.426.4791**.

sources, *contaminants*

glossary of terms

Alternative water supply. Non-traditional water resources such as reclaimed water, stormwater, saltwater, brackish water and surface water captured predominately during wet-weather flows and sources made available through the addition of new storage capacity.

Aquifer. Underground water-bearing geologic formation or structure.

Aquifer storage and recovery. Water that is treated to drinking quality and injected into a well. The underground rock keeps the water in place so it can be retrieved later through the same well.

Artificial recharge. The intentional addition of water to an aquifer.

Consumptive use. The difference between the total quantity of water withdrawn from a source for any use and the quantity of water returned to the source; e.g., the release of water into the atmosphere; the consumption of water by humans, animals, and plants; and the incorporation of water into the products of industrial or food processing.

Demand management. The practice of systematically reducing water use for a broad spectrum of utility customers through efficiency measures and conservation, often as an alternative to purchasing new water or expanding water treatment facilities.

Demand scheduling. Method of irrigation scheduling whereby water is delivered to users as needed and which may vary in flow rate, frequency and duration. Considered a flexible form of scheduling.

Desalination. An artificial process by which saline water or brackish water is converted to fresh water. The most common desalinization processes are distillation and reverse osmosis.

Grey water. Non-drinkable water that can be reused for irrigation, flushing toilets and other purposes.

Groundwater. Fresh water located below the surface, sub-surface, in the pore space of soil and rocks. It is also water that is flowing within aquifers below the water table. Sometimes it is useful to make a distinction between sub-surface water that is closely associated with surface water and deep sub-surface water in an aquifer (sometimes called “fossil water”).

Hydrologic cycle. The constant circulation of water from the sea, through the atmosphere, to the land, and back to the sea by over-land, underground, and atmospheric routes.

Potable water. Water that is safe and palatable for human consumption.

Rainwater harvesting. The capture and use of runoff from rainfall.

Reclaimed water. Highly treated domestic wastewater that can be used for a new, beneficial purpose such as irrigation, wetlands creation and restoration, recharging ground water, augmentation of surface waters, industrial uses and urban uses such as toilet flushing, car washing, dust control and aesthetic purposes (i.e. fountains). Extensive treatment and disinfection ensure that public health and environmental quality are protected.

Runoff. Rainfall or other precipitation that is not absorbed by the soil but drains off the land into streams, rivers and other receiving waters.

Stormwater. Water that is generated by rainfall and is often routed into drain systems in urban areas to prevent flooding.

Surface water. Water in a river, lake or fresh water wetland. Surface water is naturally replenished by precipitation and naturally lost through discharge to the oceans, evaporation and sub-surface seepage.

Wastewater. Water that carries wastes from homes, businesses and industries; a mixture of water and dissolved or suspended solids.

Water Hardness. Water described as “hard” is high in dissolved minerals — most often calcium and magnesium. By contrast, water that has few minerals is considered soft. OUC's water supply wells tap into the Floridan Aquifer, a limestone formation underlying most of the State of Florida. When limestone dissolves in the water, the water becomes hard due to the presence of calcium. OUC's water ranges in hardness from “moderately hard” at 133 parts per million (ppm) in the downtown area to “hard” at 179 ppm in the Southeast or Lake Nona area.

Water Management. The study, planning, monitoring and application of quantitative and qualitative control and development techniques for long-term, multiple use of water resources.

Xeriscape™. Landscaping that involves the selection, placement and care of low-water-use and native ground cover, turf, plants, shrubs and trees. Xeriscape is based on seven principles: proper planning and design, soil analysis and improvement, practical turf areas, appropriate plant selection, efficient irrigation, mulching and appropriate maintenance.

OUC
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Orlando Utilities Commission
500 South Orange Avenue
Orlando, Florida 32801
www.ouc.com

Visit www.ouc.com this fall for details on an exciting new Central Florida water conservation project.

2006 *water quality* **report**