

# Annual Water Quality Report

2005 REPORT

PLACID UTILITIES

VOLUME 8

## Highlands Co. Proud of Utility

Placid Utilities, an Enterprise Co. of Highlands County Board of County Commissioners, scored high again this year. Testing results are in, and the results show that the utility is providing the quality water the residents expect to find in Florida. Results appear in the table on the back page. Placid Utilities regularly submitted water samples from January 1<sup>st</sup> to December 31<sup>st</sup>, 2005 to an independent lab for testing. The results were reported to the Florida Department of Environmental Protection (FDEP) where the results of all the utilities in Florida are recorded. The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table are the only contaminants detected in your drinking water. This report reflects the same results that are listed with the FDEP. We are proud that Placid Utilities drinking water meets or exceeds the requirements set by the FDEP.

## Highlands County Engineering Dept.

Placid Utilities is part of the Highlands County Engineering Department; open Monday thru Friday from 7:00 AM to 6:00 PM. We are governed by the Board of County Commissioners. You are welcome to attend their meetings on Tuesdays of each month at 600 S. Commerce Ave., Sebring. Sessions begin at 9:00 AM. Your Commissioners are:

Andrew Jackson      Bob Bullard  
Edgar Stokes        C. Guy Maxcy  
Barbara Stewart

## Placid Utilities Advisory Committee

The Board of County Commissioners established an Advisory Committee for Placid Utilities which meets randomly throughout the year. If you have any questions you'd like to ask, or have the committee discuss, please contact Placid Utilities. Membership is open, call for an application for consideration.

Committee Members for 2005:  
Harold Owen ..... William Ruge  
Spence Lloyd.....John Delany  
Lois Krebs .....Ralph Miner



**Storage Tank repairs and repainting completed  
May 19, 2006**

## SWAPP

### SOURCE WATER ASSESSMENT & PROTECTION PROGRAM

The Florida Department of Environmental Protection (FDEP) has begun a baseline program to assess any threats to drinking water supplies. These assessments are conducted to provide information about any potential source of contamination in the vicinity of permitted wells. The FDEP will draw an imaginary 1000 foot radius circle around the well and look at the significant potential sources of contamination in the well source area.

The FDEP water source assessment of Placid Utilities was not completed in 2004. DEP is in the process of conducting a Source Water Assessment (SWA) on this system. An SWA report for this system will be available at the DEP SWAPP website by December 31, 2006 <http://www.dep.state.fl.us/swapp>

Utility customers can protect their water source with these simple steps.

1. *Take used motor oil to the land fill*
2. *Household chemicals do not belong in the septic system or on the ground.*
3. *Use only the recommended amount of fertilizer on your grass or flowers.*
4. *Pump and inspect the septic tank regularly.*
5. *Plant vegetation on bare spots and slopes to prevent erosion or runoff.*

## Sources of Drinking Water

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Placid Utilities has two (2) groundwater wells reaching approximately 1500' deep into the Floridan Aquifer in Central Florida. The water is chlorinated for disinfection purposes and then treated with sodium hydroxide for corrosion control. As water travels over the surface of the land and 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. 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. The Food & Drug Administration (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 the 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. 1-800-426-4791**

### Water Valve Maintenance

Placid Utilities, in accordance with FDEP requirements has developed a valve exercising and maintenance program for the water system and is in the process of collecting data to create a master water system map. During the process of developing the program and creating the map a great deal of field information needed to be obtained and is still in the process of being collected. The utility has spent many hours locating, cleaning, marking, adjusting and gathering information on valves and valve boxes throughout the system to comply with our valve exercising. Being able to easily locate a valve is critical during an emergency in order to isolate a section of water main to perform repairs. Most of the water system valves are located in the yards and have a cast iron valve box that is spray painted blue and may or may not be surrounded by a concrete pad. The utility, with over 225 valves on the system, typically performs annual maintenance on the valves; but would like to ask all property owners with valves in their yards to please assist the utility with maintaining the visibility and ease in locating valves by keeping the grass cut around the valve boxes and not burying or allowing grass to grow over the top of the valve box.

**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 storm water 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 can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants* – which can be naturally-occurring or be a result of oil and gas production and mining activities.

Definitions:

“NA” means not applicable

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

**Picocurie per liter ( pCi/L )** - measure of the radioactivity in water.

**Parts per million (ppm)** or Milligrams per liter (mg/l) -one part by weight of analyte to 1 million part by weight of the water sample.

**Parts per billion (ppb)** or Micrograms per liter (µg/l) - one part by weight of analyte to 1 billion parts by weight of the water sample.

**Maximum residual disinfectant level or 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 or 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.

**Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology. MCL's 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.

**Maximum Contaminant Level Goal or MCLG:** The level of a contaminant in drinking water below which there is no known or expected risk of health. MCLG's allow for a margin of safety.

**Placid Utilities Water Quality Test Results:**

Contaminant & Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
<b>Radiological Contaminants</b>							
6. Radium 226 + 228 or Combined Radium (pCi/L)	7/03	N	1.1		NA	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
11. Barium (ppm)	7/03	N	0.03		2	2	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.
16. Fluoride (ppm)	7/03	N	0.08		4	4	Erosion of natural deposits; a water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. Placid Utilities does not use fluoride as an additive.
20. Nitrate (ppm)	8/05	N	0.07		10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural dep.
23. Sodium (ppm)	7/03	N	11.0		NA	160	Salt water intrusion, leaching from the soil.
<b>TTHMs and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters</b>							
Contaminant & Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
78. Chlorine (ppm)	Monthly, 2005	N	0.6	0.5 – 0.8	MRDLG=4	MRDL = 4.0	Water additive used to control microbes
79. Haloacetic Acids (five) (HAA5) (ppb)	7/2005	N	42.3		NA	MCL = 60	By-product of drinking water disinfection
80. TTHM [Total Trihalomethanes] (ppb)	7/2005	N	65.83		NA	MCL = 80	By-product of drinking water disinfection
<b>Lead &amp; Copper (Tap Water)</b>							
Contaminant & Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90 <sup>th</sup> Percentile Result	# of Sample sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
84. Copper (ppm) (tap water)	7/05	N	0.61	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
85. Lead (ppb) (tap water)	7/05	N	3.00	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits.

As authorized and approved by the EPA, the State has reduced monitoring requirements for certain contaminants to less 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.

**Nitrates:** As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

**Lead:** 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.

**SPECIAL HEALTH CONCERNS**

Some people may be more vulnerable to contaminants in drinking water than 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 their drinking water from their health care provider. 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  
1-800-426-4791**

**Placid Utilities**

**505 S. Commerce Ave.  
Sebring, Florida 33870  
863-402-6786 or 863-699-3617  
Mon – Fri 7:00 – 6:00**

Ramon D. Gavarrete, P.E. 863-402-6877  
County Engineer/Utilities Director  
Robert Diefendorf, E.I. 863-402-6877  
Utilities/Transportation Project Manager  
Nancy Zurcher Utilities Specialist II  
David Jones Utility Technician II  
Ronnie Walker Utility Technician I  
Lake Placid Direct Line  
699-3716

**What the DEP Wants You To Know**

*We at Placid Utilities work around the clock to provide top quality water to every tap. We ask that our customers help us protect our water sources, which are the heart of your community, your way of life, and your children's future. Thank you*