

WASTEWATER AND STORM WATER PROJECTS-- TRUTHS AND MYTHS 5-15-08

The State of Florida has mandated that all wastewater treatment systems in Monroe County must be upgraded to meet strict nutrient removal requirements by July 2010. This mandate applies to all property owners. If local governments do not provide compliant wastewater treatment, individual property owners will be required to upgrade their own systems. The estimated cost of doing that for each owner exceeds \$20,000. The City of Marathon has plans in place to construct a wastewater system that will cost citizens substantially less than that amount. The work has already begun and will move through the city on a schedule that may be viewed elsewhere on this web site.

Choosing the type of collection and treatment processes most suitable for Marathon's situation required extensive analysis by specialized personnel. Marathon hired Weiler Engineering to conduct the studies, and to handle the design and engineering for the entire system. Their analysis included both initial construction cost and operating costs projected over 20 years. All alternatives were sent to various state agencies for review, including Dept. of Environmental Protection, and the state agreed that the recommended design was reasonable and well thought out. That recommendation was a vacuum collection system for the larger service areas in Marathon, and less expensive systems for the sparsely populated areas of the City.

There are several types of central wastewater collection systems. City engineers seriously considered both gravity and vacuum methodologies. It was determined that a properly designed, constructed and operated vacuum system is cost effective, and can have a lower operation and maintenance cost than a gravity system. Additionally, it was found that the operation and maintenance cost of five properly sized and located treatment plants compared favorably to a single central treatment plant. Vacuum systems have been in use for many years all across the country and have been proven to be an efficient and reliable means of wastewater collection.

One of the most important considerations in selecting the vacuum system was the provision for emergency power. There are six pump stations planned to serve the bulk of the city needs, and each of these, along with each plant, will have a standby generator with automatic transfer whenever power is lost. A gravity system would have an estimated 200 pump stations, which present a much more difficult power situation during outages.

While trenches are open for the wastewater pipes, it seemed a good idea to lay the storm water pipes as well. It is well understood that storm water runoff from roads and fields contribute a great deal of chemical waste to our near shore waters. Handling these pollutants is part of the 2010 mandate, and we are doing it all together. And when it is completed, all of our roads will receive a fresh surface. That is something we all look forward to.

All of Marathon's property owners are covered in the plans, and will pay the same. None will be left out, except for Little Venice, whose owners paid their share some time ago. Costs are the same for all the rest, and may be found elsewhere on this site. Operation and Maintenance rates will also appear on the web site when Council has determined what they will be.