

PRESENTATION: NATIONAL RESEARCH COUNCIL, July 25 & 26 2011

Delivered by: Andrea Samson, President
TRI-County Association H.E.L.P. Inc.

TRI-County Association, Inc. represents Orange, Seminole, and Lake County homeowners with septic systems. Our mission is to make sure that (1) a measurable and justifiable environmental benefit can be identified and achieved as a result of nitrogen reduction efforts, and (2) protect the financial well-being, property rights, and quality of life of our members. We believe nitrogen reduction solutions must be affordable and proven - and solutions should not adversely impact the value of our homes, or impose undue hardships or discriminatory restrictions on families. Many of our members have been embroiled in this conversation for more than six years.

We are concerned that agenda-driven interests have negatively influenced assumptions and perceptions about septic systems when the reality is, even according to EPA literature, septic systems are quite efficient, when properly located, designed, installed and maintained. In fact, the majority of septic systems in Florida do not pollute groundwater or inject raw waste into the aquifer as one local paper asserted.

Accusations are easy and science costs money, so examples of misplaced blame abound. In South Carolina's coastal wetlands, septic systems were blamed for the nitrogen levels that were destroying the oyster beds. Septic systems were exonerated, and the push to convert to performance based systems shelved, when an independent study proved an exploding raccoon population was fouling the water. The excess raccoons were relocated and the oyster beds recovered.

Closer to home, we have been following the Wekiva Basin Total Maximum Daily Load process very closely because a TMDL identifies nitrogen contributors by segment and percentage of contribution. Percentages convert to reduction targets, and rules follow. Our research reveals that the Wekiva Basin TMDL assumes that ALL waste-related nitrogen that is not attributed to municipal waste treatment plants is attributed to septic systems.

What is not accounted for in the pie charts?

1. Wildlife. Wekiva Springs State Park and our surrounding residential area is a playground for a huge and roaming wildlife population, all of which contribute waste to the Wekiva River.
2. Storm water drains. Animal and human waste are either discharged directly into water bodies, or dispatched into deep injection wells.
3. Exfiltration. Municipal waste water plants measure and treat only what reaches them. Estimates of untreated leakage from sewer pipes range from 10-40 % depending on the age of the sewer system. A simple calculation using the minimal 10% figure shows sewer leakage could account for at least twenty times more waste-related nutrients reaching groundwater, springs, and streams than septic systems.
4. Lift station failures and infiltration that results in outfalls are also not accounted for.

In Santa Rosa County, 750,000 gallons of raw sewage was dumped into the wetlands from a lift station failure. All 85,000 septic systems in the County would have had to explode simultaneously to cause that kind of environmental damage.

Nutrient limits and TMDL's, new or otherwise, must reflect and account for all these other sources, so that the real nitrogen contribution of septic systems is accurately portrayed. If we force solutions based on inaccurate assumptions, we will get deficient results. Nutrient levels will not be improved, and there will be no environmental return on the huge investment of homeowner dollars into "Advanced Treatment" systems.

Moreover, if the underlying assumptions and target reductions are wrong, the resulting mandated cure may be every bit as damaging as the disease. If energy conservation is a national priority, it seems counter-productive to mandate an energy-driven solution for septic systems. That "solution" could dump 8 pounds of nitrogen into the atmosphere for every 10 pounds it removes. Net removal two pounds. Net removal from planting a single tree at the perimeter of the drainfield – ten pounds – plus shade and cleaner air.

Several years ago, EPA awarded a significant grant to a professor at the University of Central Florida to develop an alternative for conventional septic systems that does not involve power consumption or burden the homeowner with costly and complex components. This research was referred to by Mr.

Buhot, yesterday. The results are extremely promising and affordable. The technology is proving to be more consistently effective than the advanced treatment systems. Yet it has been largely ignored, except by our legislature. That technology and other passive technologies are part of a state-wide Nitrogen Reduction Strategies Study designed to test technologies that complement conventional, non-powered systems. The UCF research, in particular, represents the ultimate in "green" technologies. It is in fact an "advanced" treatment option that offers an actual return on taxpayer investment in research. That is to be celebrated!

Imagine the cost of thousands and thousands of "advanced" systems needing service calls to restart them after a hurricane. During 2004-5, some were without power for two weeks. Now add another two weeks or more to get service to them. Imagine the environmental and human hazard of no sewage treatment during the same time frame.

There is one final cost of great concern to us – a cost that does not appear on anyone's spread sheet. That is the human cost. Florida is filled with fixed and low income, economically-challenged families who simply cannot afford to absorb the high cost of installing and maintaining the "preferred" advanced, performance based treatment system. Here is a reality check – in spite of all our federally funded food programs, many teachers I know now stockpile nutrition bars to feed children coming to school hungry. We must weigh cost/benefit carefully, and not allow the drive to create a pristine environment for red-bellied turtles cause anguish to God's other creatures, humans.

I have provided you with income and unemployment data for all the counties in FL. The bell curve says 50% of FL households make less than \$40,000, and in some counties unemployment is as high as 15%. Given that, and the fact that all segment costs, private or public, ultimately impact the budgets of residents, there is no economic wiggle room for assumed guilt, inappropriate solutions, or guesstimates of benefit.