

The Impact of BMAP on Florida's Homeowners

FACT SHEET

A requirement to have a BMAP (Basin Management Action Plan) for water quality restoration is required by Florida Law Section 403.067(7) to be effective July 2018 with a 20-year implementation plan. It means that over the next 20 years, the amount of nitrogen emanating from spring vents across the state must consistently drop to a level of .286 mg/l (drinking water is 10 mg/L).

Primary sources of nitrogen are identified as fertilizer and septic systems. According to the Wekiva BMAP, 71% of nitrogen comes from various sources other than septic systems. Fertilizer from golf courses, agriculture and residences contributes far more nitrogen to groundwater that reaches the spring. 55,000 septic systems in the Wekiva BMAP are said to be responsible for 29% and are targeted for "remediation" and must be replaced with an approved sewage treatment method.

- The law allows fertilizer contributions of nitrogen to be governed by voluntary reductions known as Best Management Practices.
- Septic systems are to be governed by mandates that reduce the nitrogen contribution to zero.

BMAP, as it is presently written, allows only three "remediation" alternatives to passive conventional septic systems. **Choice #1 and Choice #2 require electricity to operate and will negatively impact homeowners.**

1. Advanced Onsite Wastewater Treatment Systems (AOWTS)

- Most AOWTS are based on pre-set periodic dosing. They require lifestyle changes to operate. Example: Limiting daily laundry, no large parties, may require restarts after vacations, designed for specific family size. Some variations do not function when certain medications enter the waste stream.
- Depend on homeowner providing constant electricity.
- Require annual fees and maintenance contracts due to multiple mechanical pumps, circuitry, filters, etc. with a limited life span far less than present passive septic systems.
- On average, the repairs will equal 50% of the capital cost of the original installation.

2. Low Pressure Sewers (grinders or "STEP")

- Typically, have only a one-day capacity
- Depend on homeowner providing constant electricity
- Have a mechanical pump with a 3-5 year life expectancy and may require service contracts.
- May require homeowner to grant property easement to county to provide service.
- Power or mechanical failures can mean evacuation, exposure to raw sewage, and property damage.

3. Gravity Fed Sewers

- Is a preferred solution since they do not require individual homeowners to provide the source of electricity and contribute fully to the goals of the State's BMAP program – No nitrogen contribution is assigned to spring vent readings if sewers replace septic system.

ISSUE: Any solution that requires electricity, whether electrically powered grinder sewers or advanced septic systems, lowers property values, does not function in severe weather events, impacts how families must live, and is subject to frequent mechanical failure. Homeowners' health, finances, property, and property values are at risk. Traditional gravity sewers are the only acceptable solution.

WHY IS THIS HAPPENING: Florida's Department of Health (FDOH) has systematically ignored the need for accurate science, responding only to the interests of lobbyists from the septic system industry, agriculture, fertilizer companies and the environmental protection groups seeking to prevent growth or buy conservation land. As a result, homeowners are being mandated to comply with nitrogen reduction standards, while all other groups remain under voluntary program requirements. In fact, a three-year study from Univ. of Florida and St. Johns Water Management District, and from the Odom Springs Institute says that nitrogen reduction is unlikely to restore water quality. It is probable that when BMAP's twenty years of mandates on septic system remediation plans are complete, there will be no significant benefit to Florida's environment. When credible scientific evidence has been either ignored or avoided, the 29% contribution is a guess and the State will only know if FDOH was correct after taking billions of dollars out of homeowners and taxpayers' pockets and waiting 20 years.

IMPACTS ON FLORIDA'S ENVIRONMENT: History and science show that nitrogen is primarily impacted, not by septic systems, but by drought and reduced volume caused by permitted withdrawals from the Florida Aquifer of billions of gallons of water for industrial and municipal uses. After raw waste is treated in a septic tank, processed through the drain field, and filtered through soil, a significant amount of the nitrogen is attenuated (eliminated) by microbial action. That is why the 29% contribution is not correct and why eliminating septic systems will not return springs to pristine conditions. Statistics and research prove the health of Florida's springs and waterways is improved most by rainfall and water conservation.

FACTS AND INFORMATION

- After Irma, Governor Scott said all lift stations and wastewater treatment plants, the sewage source, must have backup power to avoid massive sewage spills experienced during the hurricane. If the homeowner is responsible for providing power to their sewage treatment operation, Is the county prepared to provide homeowners with generators for grinder systems or the advanced onsite systems? Is the county prepared to deal with the life risks posed by thousands of homeowners storing gasoline and operating generators on their property?
- Everglades City was entirely on grinder systems. When power failed during Irma, raw sewage backed up into homes and yards. Two people died, and several people lost limbs from infections caused by exposure to raw sewage. The property damage was catastrophic. When proposed, grinders were touted to be "safer" than septic systems.
- A two-year study of occupied homes on septic systems sponsored by FDEP showed that in the Priority Focus Area, a nitrogen reading at 13 feet below one homeowner's drainfield showed nitrogen levels at or near 5 mg/liter – half the level acceptable for drinking water. Ground water was estimated to be 35 ft. below and was on a trajectory to be zero by the time it reached ground water. It's probably safe to assume that when adequate soil is available under drainfield, no remediation is necessary.
- James Madison Institute, Center for Property Rights, has just published an editorial on environmental priorities that states emphatically that electrically-powered "solutions" should not be implemented in a state subject to hurricanes and frequent power outages.

- How many additional municipal workers or certified septic contractors will be needed to provide services to homeowners on grinders or advanced septic systems in the event of a power failure? Is this a cost the county is prepared to assume? Is it a practical expectation of the septic system industry?
- St. Johns Water Management District and the University of Florida have published the results of a three-year study that says water velocity (volume) has more influence on spring health and nuisance algae than any other single factor. Residential water usage has been declining for the past 10 years due to water conservation efforts. Yet, the district continues to permit multi-million-gallon withdrawals for industrial, commercial, and municipal uses citing it represents only a fraction of the available aquifer water.
- Injection wells to dispose of partially treated, high nitrogen wastewater directly into the Florida Aquifer are being considered by many municipalities. Since they do not remove pharmaceuticals or reduce nitrogen to zero as homeowners are expected to do, are we to believe these are less a threat to the springs than septic systems?
- Total Maximum Daily Loads, and the resulting mandated reductions for septic systems relied on a report that has been thoroughly repudiated. Yet, the reduction mandates still stand. Reliance on a faulty calculation will lead to the expenditure of billions of dollars with little or no hope of reaching the target nitrogen numbers. A member of the SJWMD Board of Governors assured me that no one relied on that report anymore. Yet the nitrogen reduction numbers cited in the Sweetwater West grant proposal from OUC were based on that report. These are unacceptable conflicts that will bring unacceptable results.
- Capital costs of a “solution” that relies on pumps and homeowner provided electricity is only one factor. As with all mechanical solutions, on-going mechanical failures can realistically add 50% of the capital cost over the life of a system. Advanced septic systems also require maintenance contracts and annual permitting fees. Residents on fixed and moderate incomes may well be forced out of their homes due to the high costs.
- The FL Dept. of Health, Bureau of Onsite Sewage was provided with \$5 million dollars of taxpayer money to develop a passive, nitrogen reducing alternative to conventional septic systems. They failed to provide that. The list of DOH “approved” systems that FDEP must rely on does not contain a passive alternative.
- More facts are available on www.thesludgereport.org

Respectfully submitted by:

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