HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 975 Onsite Sewage Treatment and Disposal Systems
SPONSOR(S): Nelson
TIED BILLS: **IDEN./SIM. BILLS:**

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR
1) Committee on Environmental Protection	8 Y, 0 N	Deslatte	Kliner
2) Environment & Natural Resources Council		Deslatte / Perkins	Dixon / Hamby
3) Policy & Budget Council			
4)			
5)			

SUMMARY ANALYSIS

The bill directs the Department of Health (DOH) to conduct or contract with the Stormwater Management Academy at the University of Central Florida to conduct a study to develop and evaluate passive onsite wastewater nitrogen reduction systems, consisting of technologies and strategies for nitrogen reduction that complement or can be added to conventional onsite wastewater treatment systems.

Starting on February 1, 2009, through February 1, 2011, interim progress reports must be submitted to the Speaker of the House of Representatives, the President of the Senate, and the Governor. The study must be completed by December 1, 2011. A final report summarizing the study, including options, findings, and recommendations, must be approved and presented to the Speaker of the House of Representatives, the President of the Senate, and the Governor within 60 days after completion of the study.

The bill directs owners of onsite sewage treatment and disposal systems installed prior to 1983 to have the system pumped out and inspected on a 5-year cycle pursuant to the DOH rules.

The bill creates the Wekiva Onsite Sewage Treatment and Disposal System Compliance Grant Program, which is to be established and administered by the DOH. The program would provide grants to low-income property owners with onsite treatment and disposal systems in the Wekiva Study Area or the Wekiva River Protection Area to assist in complying with rules for onsite sewage treatment and disposal systems developed by the DOH, DEP, or the St. Johns River Water Management District (SJRWMD). The bill allows any property owners in the identified areas with incomes less than or equal to 200 percent of the federal poverty guidelines to qualify for the grant to offset the cost of altering, repairing, or modifying any existing onsite disposal system on such property to a nitrogen-reducing, performance-based treatment system. The amount of the grant is limited to the cost differential between the replacement of a comparable existing onsite sewage treatment and disposal system and that of an upgraded nitrogen-reducing, performance-based treatment system, but may not exceed $10,000 per property.

The bill appropriates $5 million to the DOH from the Water Protection Sustainability Program Trust Fund for the study. The bill creates the Wekiva Onsite Sewage Treatment and Disposal System Compliance Grant Program within the DOH for the purpose of providing grants to low-income property owners to assist them in complying with rules for onsite sewage treatment and disposal systems. The DOH estimates that a budget of $10 million would be required for each of the next five years. The bill does not provide a funding source for the grant program. The DOH estimates total expenditures associated with this bill to be $72.7 million and total revenues to be $38.5 million.

There is an amendment traveling with the bill. The amendment is described in "Section IV. Amendment/Council Substitute Changes" of the analysis.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. HOUSE PRINCIPLES ANALYSIS:

Provide limited government—The bill creates a grant program in DOH and requires it to adopt rules requiring inspections and maintenance of specified septic systems. These requirements will increase workload and costs for DOH. The bill directs DEP to conduct a study to determine the various sources of nitrogen in the specified area. In addition, the DOH is required to conduct or contract with a specified entity for a study to determine the effect of onsite systems on the Wekiva.

The bill allows property owners in the identified areas with an income less than or equal to 200 percent of the federal poverty guidelines to apply for a grant to offset the cost of altering, repairing, or modifying any new or existing onsite disposal system.

Promote personal responsibility—The grant program is to assist certain property owners in defraying costs associated with consistency onsite waste disposal system requirements in the Wekiva River Protection Area.

B. EFFECT OF PROPOSED CHANGES:

Current Situation

Central Wastewater Collection and Treatment[1]

The most common form of pollution control in the United States consists of a system of sewers and wastewater treatment plants. The sewers collect municipal wastewater from homes, businesses, and industries and deliver it to facilities for treatment before it is discharged to water bodies or land, or reused. Conventional wastewater collection systems transport sewage from homes or other sources by gravity flow through buried piping systems to a central treatment facility. These systems are usually reliable and consume no power. However, the slope requirements to maintain adequate flow by gravity may require deep excavations in hilly or flat terrain, as well as the addition of sewage pump stations, which can significantly increase the cost of conventional collection systems. Manholes and other sewer appurtenances also add substantial costs to conventional collection systems.

On-site Systems

Generally, septic systems are used to treat and dispose of relatively small volumes of wastewater, usually from houses and businesses. Septic systems are also called onsite wastewater treatment systems, decentralized wastewater treatment systems, on-lot systems, individual sewage disposal systems, cluster systems, package plants, and private sewage systems. Systems are considered "decentralized" because they do not involve central wastewater collection and treatment.

According to the EPA, the typical septic treatment system includes a septic tank, which digests organic matter and separates matter that floats (e.g., oils and grease) and settling solids from the wastewater. Soil-based systems discharge the liquid (effluent) from the septic tank into a series of perforated pipes buried in a leach field, leaching chambers, or other special units designed to slowly release the effluent into the soil or surface water, sometimes referred to as a drainage field.

Alternative systems use pumps or gravity to help septic tank effluent trickle through sand, organic matter (e.g., peat, sawdust), constructed wetlands, or other media to remove or neutralize pollutants like disease-causing pathogens, nitrogen, phosphorus, and other contaminants. Some alternative systems are designed to evaporate wastewater or disinfect it before it is discharged to the soil or surface waters.[2] The EPA developed guidelines to assist communities in establishing comprehensive

[1] Id.
[2] http://cfpub2.epa.gov/owm/septic/home.cfm - Frequently Asked Questions

management programs for onsite/decentralized wastewater systems to improve water quality and protect public health. The voluntary guidelines address the sensitivity of the environment in the community and the complexity of the system used. The five model management programs include:

- System inventory and awareness of maintenance needs
- Management through maintenance contracts
- Management through operating permits
- Utility operation and maintenance
- Utility ownership and management[3]

According to the U.S. Census Bureau, approximately 26 million homes (one-fourth of all homes) in America are served by decentralized wastewater treatment systems. The Census Bureau reports that the distribution and density of septic systems vary widely by region and state, from a high of about 55 percent in Vermont to a low of around 10 percent in California. The New England states have the highest proportion of homes served by septic systems: New Hampshire and Maine both report that about one-half of all homes are served by individual systems. More than one-third of the homes in the southeastern states depend on these systems, including approximately 48 percent in North Carolina and about 40 percent in both Kentucky and South Carolina. More than 60 million people in the nation are served by septic systems. About one-third of all new development is served by septic or other decentralized treatment systems.[4] According to the Florida Department of Health, 31 percent of the Florida population is served by an estimated 2.3 million onsite sewage treatment and disposal systems (OSTDS). These systems discharge over 426 million gallons of treated effluent per day into the subsurface soil environment.[5]

In Florida, the effect of waste disposal, whether through an on-site system or a centralized system, will implicate laws relating to the Total Maximum Daily Load Program (TMDL), which describes the amount of each pollutant a water body can receive without violating state water quality standards.

The Federal Clean Water Act and Wastewater Discharge

The federal Water Pollution control Act of 1972, commonly referred to as the Clean Water Act (CWA)[6], established the basic framework for pollution control in the nation's water bodies. Its primary goal was to have the nation's water bodies clean and useful. By setting national standards and regulations for the discharge of pollution, the CWA was intended to restore and protect the health of the nation's water bodies.

The CWA established the foundation for wastewater discharge control in the United States. According to the Environmental Protection Agency (EPA), the CWA's primary objective is to "restore and maintain the chemical, physical and biological integrity of the nation's waters."[7] The CWA established a control program for ensuring that communities have clean water by regulating the release of contaminants into our country's waterways. Permits that limit the amount of pollutants discharged are required of all municipal and industrial wastewater dischargers under the National Pollutant Discharge Elimination System (NPDES) permit program. In addition, a construction grants program was set up to assist publicly owned wastewater treatment works build the improvements required to meet these new limits.

TMDL Program

Section 305(b) of the CWA requires states to submit to Congress a biennial report on the water quality of their lakes, streams, and rivers. A partial list of water bodies that qualify as "impaired" (i.e., do not meet specific pollutant limits for their designated uses) must be submitted to the U.S. EPA under section 303(d) of the CWA. States are required to develop TMDLs for each pollutant that exceeds the

[3] http://www.epa.gov/owm/septic/pubs/septic_guidelines_factsheet.pdf
[4] http://cfpub2.epa.gov/owm/septic/faqs.cfm?program_id=70#358
[5] http://www.doh.state.fl.us/environment/ostds/intro.htm
[6] Public Law 92-500
[7] http://www.epa.gov/owm/primer.pdf

legal limits for that water body. Section 303(d) and the development of TMDLs were generally ignored by the states until numerous lawsuits were filed by environmental groups.[8]

Currently, DEP develops and implements TMDLs through a watershed-based management approach that addresses the state's 52 major hydrologic basins into five groups. Each basin group is subject to a five phase TMDL cycle on a rotating basis. Phase 1 is a preliminary evaluation of the quality of a water body, phase two is monitoring and assessing to verify water quality impairments, phase 3 is the development and adoption of TMDLs for waters verified as impaired, phase 4 is the development of basin management action plans to achieve the TMDL, and phase 5 is the implementation of the plan and monitoring of results.

Basin Management Action Plan

DEP develops Basin Management Action Plans (BMAPs) as part of the development and implementation of a TMDL for a water body. First the BMAP establishes a pollution allocation. Then the BMAP establishes the schedule for implementing projects and activities to meet the pollution reduction allocations and the basis for evaluating the plan's effectiveness and making adaptive changes, and funding strategies. DEP works with stakeholders to develop effective BMAPs, which then must be adopted by Secretarial order pursuant to s. 403.067(7), F.S.

BMAPs must include milestones for implementation and water quality improvement, and an associated water quality monitoring component sufficient to evaluate whether reasonable progress in pollutant load reductions is being achieved over time. An assessment of progress toward these milestones must be conducted every five years, and revisions to the plan must be made as appropriate.

The Wekiva River Basin

The Wekiva Basin, consisting of the Wekiva River, the St. Johns River, and their tributaries, along with associated lands in central Florida, is part of a wildlife corridor that connects northwest Orange County with the Ocala National Forest. The Wekiva River and its tributaries have been designated an Outstanding Florida Water, a National and Scenic River, a Florida Wild and Scenic River, and a Florida Aquatic Preserve. The river is a spring-fed system associated with 19 springs that are connected to the Florida Aquifer. Eleven of these springs are second and third magnitude springs, meaning those springs discharge 10 to 100 cubic feet of water per second or 1 to 10 cubic feet of water per second, respectively.

The Wekiva Basin Area Task Force

On September 26, 2002, Governor Bush established the "Wekiva Basin Area Task Force" to balance the transportation needs associated with projected growth and protection of the Wekiva Basin.[9] The task force was charged with evaluating and providing recommendations for appropriate highway routes connecting State Road 429 to Interstate 4 (while providing the greatest protection to the Wekiva Basin), in addition to evaluating and providing recommendations for the potential expansion of roads and corridors within the Wekiva Basin. The task force was charged with considering, among other issues, land acquisition, springshed protection, innovative road design, protection of rural character, protection of habitat, utilization of financial resources, and the adequacy of local governments relating to transportation corridors. [10] The task force completed its work in 2003, and provided over a dozen recommendations in its final report.

The Wekiva Parkway and Protection Act of 2004 (Ch. 2004-384, L.O.F.)

On July 1, 2003, Governor Bush issued Executive Order No. 03-112, creating a 28-member Wekiva River Basin Coordinating Committee. Membership of the committee included the Commissioner of Agriculture, the Secretaries of the Department of Community Affairs, the Department of Environmental Protection, and the Department of Transportation, the Executive Directors of the St. Johns River

[8] Florida implements the TMDL program in s. 403.067, F.S.

[9] See Executive Order No. 2002-259

[10] Wekiva Basin Area Task Force, Final Report: Recommendations for Planning and Locating the Wekiva Parkway While Preserving the Wekiva River Basin Ecosystem, January 15, 2003. See links at http://www.dca.state.fl.us/fdcp/dcp/wekiva/wekivatf/index.cfm

Water Management District (SJRWMD), the Executive Director of the Florida Fish and Wildlife Conservation Commission, and the East Central Florida Regional Planning Council. The committee also included eight appointed individuals with balanced representation from citizen groups, the agricultural community, property owners, and environmental or conservation organizations.

The committee was charged with considering the recommendations of the Wekiva Basin Area Task Force, and was directed to consider the use of innovative planning and development strategies, such as rural land stewardship and other mechanisms for concentrating development in appropriate areas, and the use of the latest science-based information and methods, performance-based-planning strategies, and development standards. In addition, the committee was to address issues of compatibility with the existing comprehensive plans and land development regulations of those local governments with jurisdiction over lands located within the Wekiva River Protection Area.[11]

The Wekiva River Basin Coordinating Committee issued its final report on March 16, 2004. The Committee's recommendations were adopted and passed into law (chapter 2004-384, Laws of Florida). The law created part III of chapter 369, F.S., consisting of s. 369.314-369.324, F.S., known as the Wekiva Parkway and Protection Act. Some of the major provisions of the law include:

- Statements of legislative findings and intent.
- A legal description of the Wekiva Study Area, including the majority of the land within the Wekiva Study Area which contributes groundwater recharge to the Wekiva River and springs (counties and municipalities located within the Wekiva Study Area include: Lake County and the municipalities of Eustis and Mount Dora; Orange County and the municipalities of Apopka, Eatonville, Maitland, Oakland, Ocoee, Orlando and Winter Garden; and Seminole County and the municipalities of Lake Mary, Longwood and Altamonte Springs).
- Guiding principles for the Wekiva Parkway Design Features and Construction.
- A requirement that the Department of Transportation (DOT), the Department of Environmental Protection (DEP), the St. Johns River Water Management District, the Orlando-Orange County Expressway Authority, and other land acquisition entities cooperate and establish funding responsibilities and partnerships by agreement, to the extent funds are available to the various entities, to develop the Wekiva Study Area.
- A requirement that DOT, subject to an appropriation by the Legislature, purchase lands in the Wekiva Study Area necessary for the construction of the Wekiva Parkway and the preservation of environmentally sensitive lands.
- Requirements for several studies and rule making related to the development and protection of the Wekiva Study Area, including looking at methods to reduce nitrates from leeching into the watershed from onsite sewage treatment and disposal systems.

Wekiva Basin Onsite Sewage Treatment and Disposal System Study

Within the Wekiva Parkway and Protection Act, several studies are listed. One of the studies required DOH, in consultation with DEP, to study the efficacy and applicability of onsite disposal system standards needed to achieve nitrogen reductions protective of groundwater quality within the Wekiva Study Area, including publicly owned lands, and report to the Governor and the Department of Community Affairs. The DOH published the Wekiva Basin Onsite Sewage Treatment and Disposal System Study report on December 1, 2004.[12]

The study found that the Wekiva Study Area is underlaid by a karst geology characterized by limestone or dolostone bedrock with caves and springs. The report states that onsite sewage treatment and disposal systems have been used for many years as a relatively low maintenance, low cost method of safely treating and disposing of human waste, and that there are an estimated 87,000 septic tanks used for onsite sewage disposal by property owners in the Wekiva Study Area. The typical, conventional onsite sewage treatment and disposal system consists of a septic tank, distribution piping,

[11] Executive Order Number 03-112, July 1, 2003, may be found at http://www.dep.state.fl.us/secretary/news/2003/july/0701_eo.htm
[12] http://www.doh.state.fl.us/environment/ostds/wekiva/wekivastudyrtp.pdf

and drainfield.[13] The treatment process begins in the septic tank. The septic tank is designed to skim off fats, oils, and greases; settle out the larger solids; and partially treat the sewage through breakdown by anaerobic bacteria. The waste then leaves the tank through the distribution piping and is distributed into the soil by the drainfield. Unsaturated soil surrounding the drainfield is extremely effective at removing disease-causing viruses, bacteria, and parasites.

The study concluded that in areas where development densities are low, the overall costs of onsite sewage treatment and disposal systems are less than a central sewer system and that onsite sewage treatment and disposal systems can provide protection of the environment and the public health that is comparable to a central sewer system.[14]

Based on these findings, DOH provided the following recommendations:

- Set a discharge limit of 10 milligrams per liter of total nitrogen for new systems, systems being modified, and for existing systems in the primary and secondary Wekiva Study Area protection zones.
- Prohibit the land spreading of septage (raw, untreated solids and liquids) and grease trap waste in the Wekiva Study Area. Septage waste would be required to be disposed of at wastewater treatment plants.
- Evaluate the economic feasibility of sewering versus nutrient removal upgrades to existing onsite sewage treatment and disposal systems. A phased-in approach to replacing the remaining existing systems should be developed with a target completion date of 2010.
- Establish new regional wastewater management entities or modify existing ones to oversee the maintenance of all wastewater discharged from onsite sewage treatment and disposal systems in the study area. These programs should take the privatization approach and contract with existing licensed septic tank contractors.

Proposed Rule 64E-6.001

In June 2005, based on the recommendations of the Wekiva Basin Onsite Sewage Treatment and Disposal System Study, DOH proposed a rule to limit nitrogen input from onsite sewage treatment and disposal systems within the Wekiva Study Area to 10 mg/L. The rule language was modified and republished in November 2005. The proposed rule came under considerable opposition from those who questioned the findings and recommendations in the study, including property owners and builders. Specifically, stakeholders raised concerns regarding whether sufficient data exists on the extent to which onsite sewage treatment and disposal systems directly contribute to increased nitrogen levels in the Wekiva watershed. Based on the lack of a causal link between the systems and nitrogen levels, they argued that the cost of upgrading or replacing conventional systems is not justified.

Further, in a letter dated March 1, 2006, the chair of DOH's Technical Review and Advisory Panel (TRAP)[15] reported that the proposed rule could affect up to 55,000 existing homes and any new construction in the Wekiva Study Area. TRAP estimates that the cost of installing a nitrogen reduction system could be up to $15,000 per household, and a capital/operating/maintenance cost of $189 a month. In the letter, the TRAP panel made the following comments and recommendations regarding the Wekiva and OSTDS:

- The Legislature should appropriate the necessary monies to fund a study to be conducted by the state to identify and quantify the various sources of nitrogen within the Wekiva Study Area (as it is typically done in determining appropriate solutions) and to identify cost-effective options for reducing source impacts. In this regard, the TRAP voted to support legislation during the

[13] According to the report, a family of four will discharge approximately 25 pounds of nitrogen per year into the drainfield of a conventional onsite sewage treatment and disposal system. A conventional system costs from $5,500 to $7,500. A comparable system that also reduces nitrates costs from $7,500 to $9,000.

[14] The report considered utilizing a more stringent level of wastewater treatment, including, but not limited to, the use of multiple tanks to combine aerobic and anaerobic treatment to reduce the level of nitrates.

[15] The Technical Review and Advisory Panel (TRAP) is established in s. 381.0068, F.S., for the purpose of assisting DOH in rulemaking and decision making that affects the regulation, location, and technology of onsite sewage treatment and disposal systems in Florida.

2006 legislative session to achieve funding for such outcomes.

- Suggested to the Department of Health to bring back a model proposal for a statewide operation and maintenance program for OSTDS.
- Expressed support for a mandatory once every 5-years pump out of all OSTDS within the Wekiva Study Area and upgrading of all failing systems to present standards if state monies were made available for such upgrades.
- Agreed to assemble a work group to come up with other recommendations or alternatives for improvements in OSTDS that could result in overall reduction of nitrogen from these systems.

Federal Poverty Threshold

There are two slightly different versions of the federal poverty measure:

- The poverty thresholds, and
- The poverty guidelines.

The poverty thresholds are the original version of the federal poverty measure. They are updated each year by the Census Bureau. The thresholds are used mainly for statistical purposes — for instance, preparing estimates of the number of Americans in poverty each year. (In other words, all official poverty population figures are calculated using the poverty thresholds, not the guidelines.) Poverty thresholds since 1980 and weighted average poverty thresholds since 1959 are available on the

Census Bureau's Web site. The poverty guidelines are the other version of the federal poverty measure. They are issued each year in the Federal Register by the Department of Health and Human Services (HHS). The guidelines are a simplification of the poverty thresholds for use for administrative purposes — for instance, determining financial eligibility for certain federal programs.[16]

2007 HHS Poverty Guidelines

Persons in Family or Household	48 Contiguous States and D.C.	Alaska	Hawaii
1	$10,210	$12,770	$11,750
2	13,690	17,120	15,750
3	17,170	21,470	19,750
4	20,650	25,820	23,750
5	24,130	30,170	27,750
6	27,610	34,520	31,750
7	31,090	38,870	35,750
8	34,570	43,220	39,750
For each additional person, add	3,480	4,350	4,000

SOURCE: *Federal Register*, Vol. 72, No. 15, January 24, 2007, pp. 3147–3148

Effect of Proposed Changes

Passive onsite wastewater nitrogen study

The bill directs the DOH to conduct or contract with the Stomrwater Management Academy at the University of Central Florida to conduct a study to develop and evaluate passive onsite wastewater nitrogen reduction systems, consisting of technologies and strategies for nitrogen reduction that complement or can be added to conventional onsite wastewater treatment systems. The study shall be approved by the DOH's research review and advisory committee and shall include the following:

[16] http://aspe.hhs.gov/poverty/07poverty.shtml The poverty guidelines are sometimes loosely referred to as the "federal poverty level" (FPL), but that phrase is ambiguous and should be avoided, especially in situations (e.g., legislative or administrative) where precision is important.

- The identification and evaluation of passive onsite wastewater nitrogen reduction systems that have a significantly lower life-cycle cost and higher benefit-to-cost ratio than the available performance-based treatment systems currently identified by the DOH for nitrogen reductions of 70 percent of effluent less than 10 mg/L. The life-cycle cost is based on total system costs, including installation, operation, and maintenance costs, while benefit-to-cost ratio is based on the life-cycle cost per unit mass of nitrogen reduction.
- A comprehensive review of passive onsite wastewater nitrogen reduction system methods, strategies, and costs reported for passive nitrogen reduction, as well as field evaluations of selected systems.
- The evaluation of technologies which includes, but is not limited to, the addition of organic carbon material and other alternative media through conventional components such as tanks or drainfields, effluent recirculation, alterations such as the addition of low-pressure dosing or drip irrigation, various plant material over the drainfield and other technologies.
- A nitrogen reduction performance measurement, including the analysis of numerous effluent samples from various process streams for each system evaluated, and a determination of the mean as well as measures of process variance for each system. Nitrogen reduction will be measured in both wet and dry seasons.
- The evaluation of the fate and transport of nitrogen species from onsite wastewater treatment systems, passive onsite wastewater nitrogen reduction systems, and performance-based treatment systems which will include a determination of denitrification rates in unsaturated soil and groundwater below and downgrdient of the systems. The data collected will be analyzed to develop credits for soil and groundwater based treatment.
- The documentation and comparison of the costs and the performance of onsite wastewater treatment systems, passive onsite wastewater nitrogen reduction systems, and performance-based treatment systems, including descriptions of installation requirements, maintenance needs, operational requirements, and all costs related to the systems.

The study will be periodically peer-reviewed by a five-person technical advisory panel which will consist of two members designated by the DOH, one member designated by the Florida Onsite Wastewater Association, one member designated by the Florida Home Builders Association, and one member designated by the Florida Association of Realtors.

Starting on February 1, 2009 through February 1, 2011, interim progress reports must be submitted to the Speaker of the House of Representatives, the President of the Senate, and the Governor. The study must be completed by December 1, 2011. A final report summarizing the study, including options, findings, and recommendations, must be approved and presented by the committee to the Speaker of the House of Representatives, the President of the Senate, and the Governor within 60 days after completion of the study.

The DOH, at the direction of the research review and advisory committee, will provide support with respect to the study including the drafting of reports, the preparation of outlines for the study, and the issuing of requests for proposal if the study is to be contracted. The DOH will also be responsible for administering and providing quality control for any contracts approved by the committee.

For fiscal year 2008-2009, $5 million in nonrecurring funds is appropriated to the DOH from the Water Protection and Sustainability Program Trust Fund in the DEP for the purposes of conducting the study.

Inspections

The bill directs owners of onsite sewage treatment and disposal systems installed prior to 1983 to have the system pumped out and inspected pursuant to the DOH rules. The DOH shall adopt rules to implement the following:

- A schedule for inspections every five years with priority given to spring protection areas, outstanding Florida waters, and water bodies on the 303 (d) list that the CWA requires states to develop for waters not meeting water quality standards or not supporting their designated uses;
- The qualifications of inspectors, including conflict of interest provisions to prevent an inspector from conducting repairs associated with any deficiencies found;

- Timely reporting of inspection results to the DOH and the homeowner;
- Minimum inspection and pumpout practices necessary to prolong system function and to identify and correct public health nuisances; and
- The repair permitting requirements to correct a sanitary nuisance pursuant to the requirements of s. 386.03, F.S.

Wekiva Onsite Sewage Treatment and Disposal System Compliance Grant Program

The bill creates the Wekiva Onsite Sewage Treatment and Disposal System Compliance Grant Program, which is established and administered by the DOH. The program would provide grants to low-income property owners in the Wekiva Study Area or the Wekiva River Protection Area using onsite disposal systems. It would assist the property owners in complying with rules for onsite sewage treatment and disposal systems developed by the DOH, DEP, or the St. Johns River Water Management District (SJRWMD). The program is effective upon final adoption of rules by DOH and may be applied to costs incurred by property owners on or after such date.

The bill allows any property owner in the identified areas with an income less than or equal to 200 percent of the federal poverty guidelines to apply to DOH for a grant to offset the cost of altering, repairing, or modifying any existing onsite disposal system on such property to a nitrogen-reducing, performance-based treatment system. The amount of the grant is limited to the cost differential between the replacement of a comparable existing onsite sewage treatment and disposal system and that of an upgraded nitrogen-reducing, performance-based treatment system, but may not exceed $10,000 per property.

The DOH, in coordination with the DEP and the SJRWMD is required to continue to evaluate the level of nitrogen deposited in the Wekiva Study Area by onsite sewage treatment and disposal systems.

C. SECTION DIRECTORY:

Section 1: Directs DOH to conduct or contract for a study to develop and evaluate passive onsite wastewater nitrogen reduction systems, consisting of technologies and strategies for nitrogen reduction that complement or can be added to conventional onsite wastewater treatment systems; requires the study to be periodically peer reviewed by a five-person technical advisory panel; requires interim progress reports approved by the research review and advisory committee from February 1, 2009 through February 1, 2011 be submitted to the President of the Senate, the Speaker of the House of Representatives, and the Governor within 60 days after completion of the study; directs DOH to provide administrative support to the committee; appropriates $5 million in nonrecurring funds to the DOH from the Water Protection and Sustainability Program Trust Fund in the DEP to conduct the study.

Section 2: Creates subsection (5) of s. 381.0065, F.S., to require onsite sewage treatment and disposal systems installed prior to 1983 to be pumped out and inspected pursuant to rules adopted by DOH; requires an implementation schedule for inspections on a 5-year cycle; specifies criteria for rules pursuant to s. 386.03, F.S.

Section 3: Creates s. 381.00656, F.S., to create the Wekiva Onsite Disposal System Compliance Grant Program in DOH; specifies eligibility and grant amounts; directs DEP, DOH, and St. John's River Water Management District to conduct specified evaluations.

Section 4: The bill shall take effect July 1, 2008.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

   See Fiscal Comments

2. Expenditures:

   See Fiscal Comments

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

   See Fiscal Comments

2. Expenditures:

   See Fiscal Comments

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill requires the owner of any onsite sewage treatment and disposal system installed prior to 1983 to have the system pumped out and inspected by the DOH. According to DOH, the cost for a pump out ranges from $250 to $500. The septic service industry would likely see an increase in business and the owner may see a reduction of septic system failures and longer system life, along with reduction in pollution of ground and surface waters..

D. FISCAL COMMENTS:

State

The DOH estimates total revenue to be $38.5 million based on the following:

- $5 million—Water Protection and Sustainability Trust Fund appropriation
- $33.5 million—Sewage inspection repair permits and inspection fees

The DOH estimates total expenditures to be $72.7 million based on the following:

- $5 million—Nitrogen reduction study (Note: DEP reports that they are currently funding a similar study for significantly less money ($973,888) that requires no additional appropriation of state funds)
- $1.9 million—4 FTE's salary/expense/travel/operating capital outlay, rule development, etc.
- $55.8 million—County Health Department staff/travel
- $10 million for each of the next five years—Administration of the Wekiva Onsite Sewage Treatment and Disposal System Compliance Grant Program

Local

The DEP reports that a redirection of $5 million from the Water Protection and Sustainability Trust Fund would directly reduce the amount of money going to local governments for water quality protection and water supply development projects by approximately $15 million or more inclusive of local government matching requirements.

The following comments were provided by the DOH:

The bill provides a $5 million appropriation from the Water Protection and Sustainability Program Trust Fund in FY 2008-2009 to DOH to fund a three-year nitrogen reduction study through a contract with the Stormwater Management Academy of the University of Central Florida. DOH is required to administer and provide quality control for the contract. DOH is also required to establish and staff an advisory panel specifically for this project. An Environmental Health Program Consultant PG 425 FTE will be required to administer the contract and provide staff support to the new advisory panel.

DOH is required to adopt rules requiring that onsite systems installed before 1983 be inspected on a five year cycle, with priority being given to specified springs and water bodies. A Professional Engineer Administrator PG 430 and PE III SES PG 429 will be required at the program office level to support this workload. Additional professional and staff positions will also be required at the county health departments to implement and enforce the mandatory inspection requirements. There are 1.5 million onsite sewage systems that were installed prior to 1983. It is estimated that 1/3 of these systems, or 500,000 systems, would need repairs permitted and inspected. This equates to 100,000 repair permits per year. The county health department program expenditures (staff and travel) are based on current estimates that fees cover 60% of programmatic costs.

The anticipated amount needed for the grant program is based on the number of pre-1983 onsite systems in the Wekiva Study Area and the percentage of Orange County residents at 200% poverty level from the 2000 census (31.1%). During the five year inspection program it is estimated that 2000 low income property owners would qualify for assistance each year. The cost difference could range from $1750 to $8400. Using an average of $5000 a grant, a budget of $10 million would be required for each of the next five years.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

This bill does not appear to require counties or municipalities to take an action requiring the expenditure of funds, reduce the authority that counties or municipalities have to raise revenue in the aggregate, nor reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None

B. RULE-MAKING AUTHORITY:

The bill grants the DOH rulemaking authority to adopt and implement rules for inspections and pumpout schedules for onsite sewage treatment and disposal systems.

C. DRAFTING ISSUES OR OTHER COMMENTS:

The following comments were provided by the DEP:

While continued research into treatment technologies is potentially beneficial, there are a number of problems associated with the proposed legislation.

As indicated above, the study required by this legislation includes a significant appropriation for a study that is already being performed by the University of Central Florida and funded by DEP. The study proposed in this legislation has a limited objective, focuses on finding lower cost alternatives instead of focusing on systems that reduce nutrients and improve water resources. Most significantly, removing money from the Water Protection and Sustainability Trust Fund would

directly damage existing programs that fund on-the-ground construction of local government water quality protection and water supply infrastructure.

Due to the short length of the study (18 months) it is unlikely that the results would provide sufficient information on the ability of the alternatives studied to sustain the treatment levels for the life of a system, which is usually 20 years or more. The scope of the study does not take into consideration how onsite systems will perform with and without maintenance, how long each system is expected to last, and the effect of the operation on nutrient loading in the septage generated as compared to currently available systems.

In addition to the study that DEP is currently funding with the University of Central Florida mentioned above, the Department of Health, DEP, the Water Management Districts, and the US Geological Survey have already done a significant amount of research on this subject.

While additional studies may advance knowledge of the nutrient problems associated with septic tanks and other onsite systems, a significant body of information already exists—including information gathered and reported on in the Wekiva Study Area—establishing the need to improve onsite system treatment and management. In spite of the weight of the evidence, DOH has yet to be able to adopt more stringent rules for these systems in the Wekiva area. The longer it takes to do so, the more difficult it will be to restore the deteriorating conditions of area surface and ground waters, which precipitated passage of the Wekiva Parkway and Protection Act in the first place. The demonstrable immediate need to act on existing water quality problems should not be delayed while waiting for the outcome of another study.

Section 391.0065(3)(k), F.S., allowed for collection of a $5 fee for every septic system between 1996-2002 to be used for funding research. Renewing this requirement could provide a funding source independent of the Water Protection Sustainability Program Trust Fund to fund additional research on septic systems or a low income grant program that targets septic systems. This would eliminate the impact on the water protection programs currently funded by the Water Protection Sustainability Program Trust Fund.

D. STATEMENT OF THE SPONSOR

HB 975 provides for needed research on passive onsite sewage treatment and disposal systems to examine cost effective methods to reduce excess nutrients moving from onsite systems to groundwater and springs systems. Additionally, the bill would require pumpouts and inspections of systems installed prior to 1983 aimed at ensuring proper function and extending system life. HB 975 would also establish the Wekiva Onsite Sewage Treatment and Disposal System Compliance Grant to help low-income residents comply with potentially costly requirements of DOH rulemaking.

IV. AMENDMENTS/COUNCIL SUBSTITUTE CHANGES

On March 19, 2008, the Committee on Environmental Protection passed HB 975 favorably with one amendment.

The amendment requires the DOH to contract a study to develop and evaluate passive onsite wastewater nitrogen reduction systems. The contract must be initiated by requests for proposal.

The amendment provides that the study will be performed over the course of three state budget cycles at a cost not to exceed $5 million. For fiscal year 2008-2009, the sum of $1.7 million in nonrecurring funds is appropriated to the DOH from the Water Protection and Sustainability Program Trust Fund in the DEP.

The amendment provides legislative intent that the DOH establish a minimum onsite sewage treatment system inspection program that focuses on identifying and repairing failing systems and establishing a

minimum 5-year tank pump out program in order to prolong the life of systems. The program will not require upgrades to systems that are not deemed to be in failure, or to provide information to demonstrate that the system will adequately serve the use to be placed upon it by this or any subsequent owner. The owner must have the system pumped out and inspected once every five years pursuant to the following requirements:

- Rulemaking Authority and Schedule for Implementation—The DOH shall implement, by rule, a schedule for a 5-year cycle for periodic inspections and pump-outs of onsite sewage treatment and disposal systems. The rule shall go into effect no sooner than August 1, 2009. The schedule shall include a county by county implementation plan phased in over a 10-year period and shall give first priority to those areas within an identified springshed protection area, as defined by the DEP. The rule must also address an enforcement procedure for those who fail to inspect, the timely reporting of inspection results to the DOH and the system owner, and conflict of interest provisions to prevent an inspector from conducting repairs associated with any deficiencies found.
- Inspection Procedures and Parameters—The DOH's Procedure for Voluntary Inspection and Assessment of Existing Systems (Procedure) shall not allow owners to request partial inspections or request the omission of portions of the inspection. All inspection procedures used by an inspector shall be documented and nothing shall be construed to limit the amount of detail an inspector may provide at their professional discretion. The inspection shall include a tank inspection, a drainfield inspection, and a written assessment of the condition of the system, and if necessary, a disclosure statement pursuant to the DOH's Procedure. Where proof of a tank pumping, permitted new installation or permitted repair or permitted modification can be documented within the previous three years, and where the document states the capacity of the tank and indicates that the condition of the tank does not constitute a sanitary or public health nuisance, the DOH and inspector shall waive the pumping requirements. Owners shall be responsible for paying the cost of the inspection and pump-out pursuant to the DOH's rule.
- Qualifications of Inspectors—Persons allowed to perform work shall be master septic tank contractors, registered septic tank contractors, state licensed plumbers, and persons certified under s. 381.0101, F.S.
- Notice—Prior to any inspection, the DOH shall provide a minimum 60-day notice to owners that their system will be required to be inspected and pumped out. The notice must include a provision which states that the inspection is designed to assess the fundamental operational condition of a system at a particular moment in time to identify failing systems, and that the inspection is not designed to determine precise code compliance, require a complete upgrade or overhaul of a system to current code requirements, nor provide information to demonstrate that the system will adequately serve the use to be placed upon it by this or any subsequent owner. The DOH shall also provide the owner of the system, along with the notice, a copy of its Procedure which delineates the inspection procedures that will be applied under this subsection.
- The amendment defines the terms "failure" and "repairs".