

SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: Environmental Preservation Committee

BILL: SB 1794

INTRODUCER: Senator Baker

SUBJECT: The Wekiva Onsite Disposal System Compliance Grant Program

DATE: March 13, 2006

REVISED: 03/16/06

| | ANALYST | STAFF DIRECTOR | REFERENCE | ACTION |
|----|----------|----------------|-----------|-------------------------|
| 1. | Garner | Wilson | HE | Fav/4 amendments |
| 2. | Branning | Kiger | EP | Premeeting |
| 3. | | | HA | |
| 4. | | | | |
| 5. | | | | |
| 6. | | | | |

Please see last section for Summary of Amendments

- Technical amendments were recommended
- Amendments were recommended
- Significant amendments were recommended

I. Summary:

This bill creates the Wekiva Onsite Disposal System Compliance Grant Program in the Department of Health (DOH). The program would provide grants of up to \$10,000 per property to low-income property owners who are using onsite sewage treatment disposal systems in the Wekiva Study Area or the Wekiva River Protection Area. The purpose of the grants is to assist the property owners in complying with rules developed by DOH, the Department of Environmental Protection (DEP), or the St. Johns River Water Management District to enforce compliance with onsite disposal system standards.

The bill allows any property owner in the identified areas with an income less than or equal to 200 percent of the federal poverty level (FPL) to qualify for the grant to offset the cost of constructing, reconstructing, altering, repairing, or modifying any new or existing onsite disposal system to comply with adopted rules. The bill specifies that the grant is in the form of a rebate to the property owner for documented costs associated with complying with the adopted rules.

The bill also requires DOH to adopt rules for the forms, procedures, and requirements for applying for and disbursing grants under this bill and for documenting compliance costs incurred by the property owner.

The bill appropriates an unspecified amount of General Revenue funds to DOH to provide grants to applicants under the program.

This bill creates two undesignated sections of law.

II. Present Situation:

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. In recent years, the state has acquired more than 60,000 acres of conservation lands in this area at a cost of \$139 million. These conservation lands provide habitat for the Florida black bear, burrowing owl, sandhill crane, Florida scrub jay, gopher tortoise, and the limpkin.

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 Floridan 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

The central Florida region has experienced significant growth in the last 20 years, resulting in increased transportation demands and development pressure on lands within the Wekiva Basin. During the period between 1980 and 1990, the growth rate in Lake, Seminole, and Orange Counties exceeded 30 percent. The growth rate for this three-county area is expected to exceed 20 percent through the year 2010. While projected growth for the state between 2010 and 2020 is 13 percent, the growth rate for central Florida is expected to be 17 percent.

The desire to balance the transportation needs associated with this projected growth and protection of the Wekiva Basin prompted Governor Bush to create the “Wekiva Basin Area Task Force” on September 26, 2002.¹ The task force was charged with evaluating and making recommendations on the most appropriate location for a highway route connecting State Road 429 to Interstate 4 while providing the greatest protection to the Wekiva Basin. Also, the Task Force was asked to evaluate and recommend a transportation plan that considered the potential expansion of roads and corridors within the Wekiva Basin to address, 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.²

¹ See Executive Order No. 2002-259.

² 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.

The Task Force completed its work in 2003, and provided over a dozen recommendations in its final report. Legislation to implement the Task Force's recommendations was considered during the 2003 Legislative Session, but did not pass.

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, chaired by Senator Lee Constantine. The Committee was to be a forum to identify enhanced land use planning strategies and development standards that are consistent with protected property rights and which improve and assure protection of surface and groundwater resources, including the recharge potential of the Wekiva Study Area. The Committee was charged with considering the recommendations of the Wekiva Basin Area Task Force; the most current and new information being developed regarding quantity, quality, distribution and timing of groundwater recharge in the Wekiva Study Area; and wildlife in the Wekiva Study Area.³

The Committee was also 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.⁴

The Wekiva River Basin Coordinating Committee issued its final report on March 16, 2004. The Committee's recommendations were adopted and passed into law (ch. 2004-384, L.O.F.). The law created part III of ch. 369, F.S., consisting of ss. 369.314-369.324, F.S., 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 and, a requirement that, if any improvements are considered to SR 44 through the Wekiva River Protection Area, then the guiding principles apply;

³ Executive Order Number 03-112, July 1, 2003, page 3.

⁴ Ibid.

- 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; and,
- Requirements for several studies and rulemaking 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.

Effects of Onsite Sewage Treatment and Disposal Systems on Public Health and the Environment

Human sewage waste contains disease-causing viruses, bacteria, and parasites. Preventing sewage contamination of drinking water has been the primary way that public health officials have prevented the epidemics that occurred in early United States history. Sewage also contains nutrients, such as nitrogen and phosphorous, that can adversely affect the ground and surface water quality. Nitrogen levels in the environment as low as one milligram per liter (mg/L) have been shown to degrade the aquatic environment in Florida's springs. Nitrogen levels of 10 mg/L or more have been found to cause blue baby syndrome (methemoglobinemia) in infants.

Wekiva Basin Onsite Sewage Treatment and Disposal System Study

One of the studies required by the Wekiva Parkway and Protection Act requires 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 no later than December 1, 2004. Based on the December 2004 report, DOH shall, if appropriate, by March 1, 2005, initiate rulemaking to achieve nitrogen reductions protective of water quality or recommend legislation for any additional statutory authority needed to implement the report recommendations. The study shall consider:

(a) For new developments within the Wekiva Study Area and any existing development within the Wekiva River Protection Area using onsite disposal systems, 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.

(b) The implementation of a septic tank maintenance and inspection program which includes upgrading certain onsite disposal systems permitted prior to 1982 to meet minimum DOH standards; replacement of failing systems and systems not meeting

current standards; and providing funding mechanisms for supporting a septic tank inspection and maintenance program.”⁵

The Department of Health completed its report, which was published on December 1, 2004.⁶ 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, and drainfield. 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. In 1983, the department adopted a requirement that there be two feet of unsaturated soil beneath the drainfield to achieve effective removal of these disease-causing agents.

The study goes on to find that the conventional septic system is generally less effective at removing nutrients, particularly nitrogen, than disease-causing viruses, bacteria, and parasites. Onsite sewage system treatment and disposal system research has shown that certain environments have a higher capability of naturally removing the nitrogen once it leaves the drainfield. However, in the karst environment, such as the Wekiva Study Area, nitrogen responds differently. The Department of Health concluded a study designed to measure the influence of a conventional onsite sewage treatment and disposal system on the groundwater in karst areas. In this study, nitrogen levels were found as high as 60 mg/L in the groundwater adjacent to the drainfield, indicating that there was little or no removal.

Using existing Florida research data, it is estimated that a family of four will discharge 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.

The study concluded that in areas where development densities are low, the overall costs of onsite sewage treatment and disposal systems are less than sewerage, 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. Based on these findings, DOH provided the following recommendations:

⁵ S. 369.318(2), F.S.

⁶ *Wekiva Basin Onsite Sewage Treatment and Disposal System Study*, Bureau of Onsite Sewage Programs, Division of Environmental Health, Florida Department of Health. December 1, 2004.

- 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 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 sewerage 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 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 argue that the cost of upgrading or replacing conventional systems is not justified.

Further, the chair of DOH's Technical Review and Advisory Panel (TRAP)⁷ recently wrote 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. While TRAP has not taken an official position on the proposed rule, the panel recommends that the issue be studied in more detail.

⁷ 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.

III. Effect of Proposed Changes:

Section 1. Establishes the Wekiva Onsite Disposal System Compliance Grant Program in DOH and specifies that:

- The purpose of the program is to provide grants to low-income property owners in the Wekiva Study Area or the Wekiva River Protection Area using onsite disposal systems to comply with regulatory rules for onsite disposal systems;
- The grants may go to any property owner in this area with an income less than or equal to 200 percent of the FPL for the purpose of constructing, reconstructing, altering, repairing, or modifying any new or existing onsite disposal system in order to comply with regulatory rules;
- The amount of the grant is limited to \$10,000 per property and the amount will be adjusted for inflation each calendar year;
- The grant shall be in the form of a rebate to the property owner for costs incurred in complying with requirements for such systems; and,
- The Department of Health shall adopt rules providing forms, procedures, and requirements for applying for and disbursing grants under the program.

Section 2. Appropriates an unspecified amount of General Revenue funds to DOH to administer the program and provide grants to applicants under the program.

Section 3. Provides an effective date of July 1, 2006.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

The provisions of this bill have no impact on municipalities and the counties under the requirements of Art. VII, s. 18 of the Florida Constitution.

B. Public Records/Open Meetings Issues:

The provisions of this bill have no impact on public records or open meetings issues under the requirements of Art. I, s. 24(a) and (b) of the Florida Constitution.

C. Trust Funds Restrictions:

The provisions of this bill have no impact on the trust fund restrictions under the requirements of Art. III, Subsection 19(f) of the Florida Constitution.

V. Economic Impact and Fiscal Note:**A. Tax/Fee Issues:**

None.

B. Private Sector Impact:

Low-income private property owners' costs associated with installing new or modifying existing onsite sewage treatment and disposal systems would be offset by the grant award.

C. Government Sector Impact:**Department of Health**

The bill requires DOH to promulgate a rule and administer a grant program. For DOH to administer the program, it would need an additional Environmental Health Program Consultant (SES Pay Grade 425). The base bi-weekly salary for this position would be \$1,640.55 (or a base of \$42,654.30 annually), with benefits of 29 percent. To administer the grant program there would be recurring costs including application reviews, grant disbursements, mailing, and travel.

The anticipated amount needed for the grant program is based on the current number of repair permits annually in the Wekiva Study Area (583) and percentage of Orange County residents at 200 percent of the federal poverty level from the 2000 census (31.1 percent) for a total of 182 grants per year at \$10,000 per grant.

VI. Technical Deficiencies:

The bill references "onsite disposal system(s)" throughout its text. The statutory language (s. 381.0065, F.S.) uses the phrase "onsite sewage treatment and disposal system(s)." It is recommended that the bill be amended to reflect the current statutory terminology.

VII. Related Issues:

None.

VIII. Summary of Amendments:

Barcode 115460 by Health Care:

Clarifies that the bill addresses onsite sewage treatment and disposal systems.

Barcode 121128 by Health Care:

Clarifies that the bill addresses onsite sewage treatment and disposal systems.

Barcode 413416 by Health Care:

Clarifies that the bill addresses onsite sewage treatment and disposal systems.

Barcode 810146 by Health Care:

Requires the Department of Environmental Protection to conduct a study of all sources of nitrogen going into the Wekiva, and requires the study to recommend actions to be taken by DEP, DOH, and the St. Johns River Water Management District to reduce nitrogen inputs. Requires DEP to contract for an independent study of nitrogen sources specifically from onsite sewage treatment and disposal systems. Requires DOH to develop rules applying to the operation and maintenance of these systems in the Wekiva Study Area and the Wekiva River Protection Area, and at a minimum, requires each onsite sewage disposal and treatment system to be pumped out at least once every five years. The amendment includes appropriations for the provision and administration of grants under the program and appropriations for the studies required under this amendment.