

By Senator Geller

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1 A bill to be entitled

2 An act relating to onsite sewage treatment and disposal
3 systems; providing legislative intent to research and find
4 cost-effective methods for reducing nitrogen levels in the
5 state's springs and to expand research in the Wekiva
6 Springs Basin; requiring the Department of Health to
7 conduct a study that develops and evaluates passive onsite
8 wastewater nitrogen reduction systems to complement or add
9 to conventional onsite wastewater treatment systems;
10 requiring that the department's research review and
11 advisory committee and technical review and advisory panel
12 approve the study; requiring the department to provide
13 administrative support to the committee; requiring the
14 department to administer and provide quality control for
15 contracts; requiring the department to establish an
16 advisory panel comprised of experts in wastewater
17 treatment process design and performance assessment to
18 periodically review the study; providing for the
19 membership of the panel; providing requirements for the
20 study; requiring that the study be completed by a
21 specified date; requiring that the research review and
22 advisory committee approve interim progress reports and a
23 final report and submit such reports to the Governor and
24 the Legislature; amending s. 381.0065, F.S.; requiring an
25 owner of an onsite sewage treatment and disposal system
26 installed before 1983 to have the system pumped out and
27 inspected, with the exception of a system requiring an
28 operating permit; requiring the department to adopt rules

31-02539A-08

20081482__

29 relating to such inspection; providing an appropriation;
30 providing an effective date.

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32 Be It Enacted by the Legislature of the State of Florida:

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34 Section 1. (1) It is the intent of the Legislature to
35 research and find cost-effective methods to reduce nitrogen
36 levels in the state's springs and to expand the research
37 performed in the Wekiva Springs Basin. In order to fulfill the
38 intent of this section, the Department of Health shall conduct a
39 study, or contract with the Stormwater Management Academy of the
40 University of Central Florida, to develop and evaluate passive
41 onsite wastewater nitrogen reduction systems that consist of
42 technologies and strategies for reducing nitrogen and that
43 complement or can be added to conventional onsite wastewater
44 treatment systems. The department's research review and advisory
45 committee and technical review and advisory panel shall approve
46 the study. The committee shall oversee the project's performance
47 and initially approve the study. The department shall provide
48 administrative support to the committee, including, but not
49 limited to, drafting reports, preparing outlines, and making
50 requests for a proposal if the department contracts with the
51 University of Central Florida to conduct the study. The
52 department shall administer and provide quality control for
53 contracts approved by the committee. The study must comply with
54 the requirements in this section.

55 (2) The department shall establish a five-person advisory
56 panel to periodically review the study which shall be comprised
57 of engineers and scientists having expertise in the design and

31-02539A-08

20081482__

58 assessment of wastewater treatment, including nitrogen-removal
59 processes and the fate and transport of nitrogen in the
60 environment. The Florida Onsite Wastewater Association, the
61 Florida Home Builders Association, and the Florida Association of
62 Realtors shall recommend three members to serve on the advisory
63 panel.

64 (3) The study must identify and evaluate passive onsite
65 wastewater nitrogen reduction systems that have a significantly
66 lower life-cycle cost and a higher benefit-to-cost ratio compared
67 to the available performance-based treatment systems currently
68 identified by the department for nitrogen reductions of 70
69 percent of effluent less than 10 mg/L. The life-cycle cost must
70 be based on total system costs, including installation,
71 operation, and maintenance costs and the benefit-to-cost ratio
72 must be based on the life-cycle cost per unit mass of nitrogen
73 reduction. The study must include a comprehensive literature
74 review of passive onsite wastewater nitrogen reduction systems,
75 methods, strategies, and costs reported for reducing passive
76 nitrogen and the field evaluations of selected systems from a
77 demonstration site determined by the research review and advisory
78 committee.

79 (a) The study must evaluate the addition of organic carbon
80 material and other alternative media through conventional
81 components such as tanks or drainfields, effluent recirculation,
82 alterations such as the addition of low-pressure dosing or drip
83 irrigation, various plant material over the drainfield, and other
84 technologies, combinations, or process configurations identified
85 by the department, the contractor, or the literature review.

86 (b) The measurement of nitrogen-reduction performance must

31-02539A-08

20081482__

87 include the analyses of numerous effluent samples from various
88 process streams for each system evaluated, a determination of the
89 mean, and measurements of process variance for each system.
90 Nitrogen reduction must be measured during the wet and dry
91 seasons.

92 (4) The study must evaluate the fate and transport of
93 nitrogen species from conventional onsite wastewater treatment
94 systems, passive onsite wastewater nitrogen reduction systems,
95 and performance-based treatment systems and include a
96 determination of denitrification rates in unsaturated soil and
97 groundwater below and downgradient of the systems. The data must
98 be analyzed to develop credits for soil and groundwater-based
99 treatment.

100 (5) The cost and performance of the conventional onsite
101 wastewater treatment systems, passive onsite wastewater nitrogen
102 reduction systems, and performance-based treatment systems must
103 be documented and compared in regard to installation
104 requirements, maintenance needs, operational requirements, and
105 all related costs.

106 (6) The study must be completed by December 1, 2011. The
107 research review and advisory committee shall approve interim
108 progress reports and submit such reports to the Governor, the
109 President of the Senate, and the Speaker of the House of
110 Representatives by February 1 of each year beginning in 2009 and
111 ending in 2011. The committee shall approve a final report
112 summarizing the study, which must include options, findings, and
113 recommendations, and shall present the report to the Governor,
114 the President of the Senate, and the Speaker of the House of
115 Representatives within 60 days after the study is completed.

31-02539A-08

20081482__

116 Section 2. Present subsection (5) of section 381.0065,
117 Florida Statutes, is redesignated as subsection (6), and a new
118 subsection (5) is added to that section, to read:

119 381.0065 Onsite sewage treatment and disposal systems;
120 regulation.--

121 (5) PERIODIC INSPECTIONS.--The owner of an onsite sewage
122 treatment and disposal system installed before 1983 must have the
123 system pumped out and inspected pursuant to rules adopted by the
124 department, except for a system that is required to obtain an
125 operating permit. In consultation with the technical review and
126 advisory panel, the department shall adopt rules to administer:

127 (a) An implementation schedule for inspections on a five-
128 year cycle with priority given to spring protection areas,
129 outstanding Florida waters, and water bodies listed under s.
130 303(d) of the Clean Water Act.

131 (b) The qualifications of an inspector and conflict of
132 interest standards to prevent an inspector from conducting
133 repairs associated with any deficiency found.

134 (c) The timely reporting of inspection results to the
135 department and the homeowner.

136 (d) Minimum inspection and pumpout practices necessary to
137 prolong system function and to identify and correct public health
138 nuisances.

139 (e) The repair permitting requirements to correct a
140 sanitary nuisance pursuant to s. 386.03.

141 Section 3. The sum of \$5 million is appropriated to the
142 Department of Health from the Water Protection and Sustainability
143 Program Trust Fund for the 2008-2009 fiscal year for the purpose
144 of conducting the study required under section 1 of this act.

31-02539A-08

20081482__

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Section 4. This act shall take effect July 1, 2008.