

By Senators Pruitt, Bronson, Garcia, Villalobos, Campbell, Klein, King, Horne, Smith, Latvala and Clary

27-359C-01

1 A bill to be entitled
2 An act relating to aquifer storage and recovery
3 wells; creating s. 403.065, F.S.; providing
4 findings; providing for classifications and
5 permitting of aquifer storage and recovery
6 wells; providing a zone of discharge for
7 aquifer storage and recovery wells meeting
8 specific criteria; providing monitoring
9 requirements for aquifer storage and recovery
10 wells; requiring an aquifer exemption for an
11 aquifer storage and recovery well that does not
12 meet primary drinking water standards other
13 than those relating to total coliform bacteria
14 or sodium; requiring the Department of
15 Environmental Protection to make a reasonable
16 effort to issue or deny permits within a
17 specified period; providing rulemaking
18 authority; creating s. 373.222, F.S.; providing
19 requirements for certain domestic wells;
20 providing an effective date.

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22 Be It Enacted by the Legislature of the State of Florida:
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24 Section 1. Section 403.065, Florida Statutes, is
25 created to read:

26 403.065 Aquifer storage and recovery wells.--

27 (1) The Legislature finds that it is in the public
28 interest to conserve and protect water resources, provide
29 adequate water supplies, provide for natural systems, and
30 promote quality aquifer storage and recovery projects by
31 removing inappropriate institutional barriers.

1 (2) The storage of water through the use of aquifer
2 storage and recovery wells must not endanger drinking water
3 sources, as established in the federal Safe Drinking Water
4 Act, 42 U.S.C., s. 300h., and the regulations adopted
5 thereunder.

6 (3) Aquifer storage and recovery wells must be
7 classified and permitted according to department rules,
8 consistent with the federal Safe Drinking Water Act, and must
9 be constructed to prevent violation of state groundwater
10 quality standards at the point of discharge, except as
11 specifically provided in this section.

12 (4) Aquifer storage and recovery wells must be allowed
13 a zone of discharge for sodium and secondary drinking water
14 standards, if the requirements of paragraphs (5)(b), (c), and
15 (d) and subsection (7) are met.

16 (5) Aquifer storage and recovery wells used to inject
17 water from a surface water or groundwater source must be
18 allowed a zone of discharge for total coliform bacteria and
19 other biological contaminants demonstrated to die off within
20 the zone of discharge when the applicant for the aquifer
21 storage and recovery well permit demonstrates through a
22 risk-based analysis:

23 (a) That the native ground water within the proposed
24 zone of discharge contains no less than 1,500 milligrams per
25 liter total dissolved solids;

26 (b) That the native ground water within the proposed
27 zone of discharge is not currently being used as a public or
28 private drinking water supply, nor can any person other than
29 the permit applicant reasonably be expected to withdraw water
30 from the zone of discharge in the future for such use;

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1 (c) That the presence of the stored water will not
2 cause any person other than the permit applicant to treat
3 water withdrawn from the aquifer in any way that would not
4 have been required in the absence of the aquifer storage and
5 recovery well;

6 (d) That the department has approved a monitoring plan
7 that specifies the number and location of monitor wells,
8 monitoring parameters, and frequency of monitoring;

9 (e) That total coliform bacteria is the only primary
10 drinking water standard other than the standard for sodium
11 that will not be met before injection;

12 (f) Directly or through the use of indicator organisms
13 approved by the department, that biological contaminants will
14 experience die-off such that primary drinking water standards
15 will be met at the edge of the zone of discharge and that
16 those contaminants will not pose an adverse risk to human
17 health; and

18 (g) That the environmental benefits to be derived from
19 the storage, recovery, and future use of the injected water
20 and the use of the recovered water is consistent with its
21 intended primary purpose.

22 (6) The department may allow a zone of discharge for
23 sodium, total coliform bacteria and other biological
24 contaminants demonstrated to die off within the zone of
25 discharge, and secondary drinking water standards if the total
26 dissolved solids concentration of the native ground water
27 within the proposed zone of discharge is less than 1,500
28 milligrams per liter and if the requirements of paragraphs
29 (5)(b)-(5)(g) are satisfied and:

30 (a) The applicant for the aquifer storage and recovery
31 well permit demonstrates that no person, other than the permit

1 applicant, may in the future withdraw water from the zone of
2 discharge for use as a public or private drinking water supply
3 because of legal restrictions imposed by a water management
4 district, state agency, local government, or other
5 governmental entity having jurisdiction over water supply or
6 well construction; and

7 (b) The permit applicant provides written notice,
8 including specific information concerning the proposed aquifer
9 storage and recovery project, to each land owner whose
10 property overlies the zone of discharge.

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12 The department shall revoke the zone of discharge and require
13 the withdrawal of injected water upon a demonstration by any
14 party that the legal restrictions required under paragraph (a)
15 are no longer in effect.

16 (7) The zone of discharge for an aquifer storage and
17 recovery well may not intersect or include any part of a
18 500-foot radius surrounding any well that uses the injection
19 zone to supply drinking water.

20 (8) The permit applicant must demonstrate, based on
21 hydrogeological conditions, the vertical and lateral limits of
22 the zone of discharge by providing the department with
23 calculations or the results of modeling that include, but are
24 not limited to, reasonable assumptions concerning the expected
25 volume of water to be stored and recovered and reasonable
26 assumptions regarding aquifer thickness and porosity.

27 Compliance with the primary drinking water standards for total
28 coliform bacteria and sodium and the secondary drinking water
29 standards is required at the edge of the zone of discharge.
30 The department shall specify the vertical and lateral limits
31 of the approved zone of discharge in the permit.

1 (9) After the aquifer storage and recovery well is in
2 operation, groundwater monitoring must demonstrate that
3 biological die-off is occurring, that no exceedances of the
4 primary drinking water standards have occurred outside the
5 zone of discharge, and that there is no adverse risk to human
6 health from the injection activity. If the applicant fails to
7 make this demonstration, the department shall require
8 operational modifications, reduction or cessation of
9 injection, partial or full recovery of water, remediation, or
10 other actions necessary to assure compliance at the edge of
11 the zone of discharge and to protect public health.

12 (10) If drinking water supply wells are present in the
13 injection zone within 2.5 miles of the edge of the zone of
14 discharge, additional monitor wells may be required to detect
15 the possible movement of injected fluids in the direction of
16 the drinking water wells.

17 (11) Monitor wells must be sampled at least monthly
18 for the parameters specified in the permit for the aquifer
19 storage and recovery well. The department may modify the
20 monitoring requirements if necessary to provide reasonable
21 assurance that underground sources of drinking water are
22 adequately protected.

23 (12) The department shall make a reasonable effort to
24 issue or deny a permit within 90 days after determining that
25 the permit application is complete. In accordance with s.
26 403.0876(2)(b), the failure of the department to issue or deny
27 an underground injection control permit for an aquifer storage
28 and recovery well within the 90-day time period will not
29 result in the automatic issuance or denial of the permit and
30 will not prevent the inclusion of specific permit conditions

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1 that are necessary to ensure compliance with applicable
2 statutes and rules.

3 (13) The department may adopt rules for the regulation
4 of aquifer storage and recovery wells necessary to administer
5 this section.

6 Section 2. Section 373.222, Florida Statutes, is
7 created to read:

8 373.222 Regulation of domestic use from ground water
9 affected by aquifer storage and recovery wells.--

10 (1) Notwithstanding s. 373.219(1), the governing board
11 or the department shall require a permit for the domestic use
12 of ground water from a well that overlies or may influence or
13 be influenced by a zone of discharge for an aquifer storage
14 and recovery well approved by the department under s. 403.065.
15 The governing board or the department may impose such
16 reasonable conditions as are necessary to assure that such use
17 is consistent with the overall objectives of the district or
18 department and is not harmful to the water resources of the
19 area.

20 (2) The governing board and the department may adopt
21 rules necessary to administer this section.

22 Section 3. This act shall take effect upon becoming a
23 law.

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26 SENATE SUMMARY

27 Authorizes the Department of Environmental Protection to
28 classify and permit aquifer storage and recovery wells
29 consistent with the Federal Safe Drinking Act. Provides
 standards for construction and operation of wells.
 Provides requirements for certain domestic wells.

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