

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.

21

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

23

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;

31

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.

11  
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  
31

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.