
HOUSE BILL 1116

State of Washington

55th Legislature

1997 Regular Session

By Representatives Mastin, Chandler, McMorris, Delvin and Honeyford

Read first time 01/14/97. Referred to Committee on Agriculture & Ecology.

1 AN ACT Relating to the hydraulic continuity of ground and surface
2 waters; and adding new sections to chapter 90.44 RCW.

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

4 NEW SECTION. **Sec. 1.** A new section is added to chapter 90.44 RCW
5 to read as follows:

6 For the purposes of this section and section 2 of this act:

7 (1) "Confined aquifer" means an aquifer in which ground water is
8 under sufficient hydrostatic head to rise above the bottom of the
9 overlying confining bed.

10 (2) "Confining bed" means a layer of low permeability material
11 immediately overlying a confined aquifer.

12 (3) "Department" means the department of ecology or its successor.

13 (4) "Director" means the director of ecology.

14 (5) "Hydraulic continuity" means a connection between the water in
15 a body of water located on the surface of land and water located in a
16 subsurface aquifer as determined under section 2 of this act.

17 (6) "Unconfined aquifer" means an aquifer in which the hydrostatic
18 head at the upper surface of the ground water is atmospheric.

1 NEW SECTION. **Sec. 2.** A new section is added to chapter 90.44 RCW
2 to read as follows:

3 (1) The hydraulic continuity of ground water with a particular body
4 of surface water shall be determined as provided by this section.

5 (a) If the ground water is in a confined aquifer, it shall be
6 presumed that the ground water is not hydraulically continuous with the
7 surface water body. The burden of proof in overcoming this presumption
8 lies with a party, including but not limited to the department,
9 asserting that the water in the aquifer is hydraulically continuous
10 with the surface water body. A determination that water in a confined
11 aquifer is hydraulically continuous with a surface water body must be
12 based on a clear and direct connection between the surface water body
13 and the ground water in the aquifer. The connection must be
14 demonstrable through a reasonable and repeatable test or tests that can
15 be applied in the field and that apply generally accepted methods of
16 hydrogeologic science. With regard to water in a particular well, the
17 information from the field tests shall be provided in water well
18 reports for the well. If there is no water well report available for
19 the well or if the information provided in such a report is inadequate
20 for such a purpose, an assertion that the connection is demonstrable
21 may be based on other information.

22 (b) It shall be presumed that water from an unconfined aquifer at
23 a well or proposed well site that is located a horizontal distance of
24 less than one-fourth mile from the nearest edge of a surface water body
25 is hydraulically continuous with the surface water body. The burden of
26 proof in overcoming this presumption is on a party, including but not
27 limited to the department, asserting otherwise.

28 (2) All wells that produce water from an aquifer that is determined
29 by field evidence to be hydraulically continuous to a surface water
30 body shall be presumed to have the potential to cause substantial
31 interference with the surface water body if the existing or proposed
32 ground water appropriation is within one of the following categories:

33 (a) The point of appropriation is a horizontal distance less than
34 one-fourth mile from the surface water source;

35 (b) The point of appropriation is a horizontal distance less than
36 one mile from the surface water body and the rate of appropriation is
37 greater than five cubic feet per second;

38 (c) The point of appropriation is a horizontal distance less than
39 one mile from the surface water body and the rate of appropriation is

1 greater than one percent of the pertinent adopted minimum instream flow
2 or instream water right with a senior priority date, if one is
3 applicable; or

4 (d) The point of appropriation is a horizontal distance less than
5 one mile from the surface water body and the ground water
6 appropriation, if continued for a period of thirty days, would result
7 in stream depletion greater than twenty-five percent of the rate of
8 appropriation. Using the best available information, stream depletion
9 shall be determined or estimated employing at least one of the
10 following methods:

11 (i) Suitable equations and graphical techniques that are described
12 in pertinent publications, such as "Computation of Rate and Volume of
13 Stream Depletion by Wells," by C.T. Jenkins, in: "Techniques of Water-
14 Resources Investigations of the United States Geological Survey: Book
15 4, Chapter D1"; or

16 (ii) A computer program or ground water model that is based on such
17 or similar equations or techniques.

18 The burden of proof in overcoming the presumption provided by this
19 subsection (2) is on a party, including but not limited to the
20 department, asserting otherwise.

21 (3) Any wells, other than those covered in subsection (2) of this
22 section, that produce water from an aquifer that is determined to be
23 hydraulically continuous to the surface water body may be determined to
24 cause substantial interference with the surface water body. In making
25 this determination, at least the following factors shall be considered:

26 (a) A demonstrable reduction in stream flow or surface water
27 supply;

28 (b) A demonstrable impairment or detrimental effect on a surface
29 water appropriation, adopted minimum instream flow, or instream water
30 right with a senior priority date;

31 (c) The percentage of the ground water appropriation that was, or
32 would have become, surface water;

33 (d) There is interference and such interference would be immediate
34 or delayed; and

35 (e) Demonstrable cumulative adverse impacts on stream flow or
36 surface water supply.

37 (4) It shall be presumed that a well that produces water from an
38 aquifer that is not hydraulically continuous to a surface water body
39 does not interfere with the surface water body. The burden of proof in

1 overcoming this presumption lies with a party, including but not
2 limited to the department, asserting otherwise.

3 (5) The department shall provide reasonable assistance to an
4 applicant or appropriator in securing available information pertinent
5 to making a determination regarding hydraulic continuity and
6 interference with a surface water body.

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