

By: Callegari, Lucio III, Larson, et al.

H.B. No. 2334

Substitute the following for H.B. No. 2334:

By: Keffer

C.S.H.B. No. 2334

A BILL TO BE ENTITLED

AN ACT

1
2 relating to the regulation, development, and treatment of brackish
3 and marine water.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

5 SECTION 1. (a) With this state facing an ongoing drought,
6 continuing population growth, and the need to remain economically
7 competitive, this state must secure and develop plentiful and
8 cost-effective water supplies to meet the ever-increasing demand
9 for water. The purpose of this Act is not to hinder conservation
10 efforts, because such efforts help reduce the need for new sources
11 of water, or to hinder current development of fresh groundwater,
12 fresh surface water, water reclamation, or aquifer storage and
13 recovery. However, this state must explore every water resource in
14 order to balance the supply and demand for water, one of the most
15 precious resources of this state.

16 (b) Brackish groundwater and marine seawater are
17 potentially new sources of public drinking water for this state.
18 This state has an estimated 880 trillion gallons of brackish
19 groundwater and access to over 600 quadrillion gallons of marine
20 seawater from the Gulf of Mexico. The purpose of this Act is to
21 streamline the process and reduce the cost and regulation of
22 desalination.

23 SECTION 2. Section 11.085, Water Code, is amended by adding
24 Subsection (w) to read as follows:

1 (w) This section does not apply to a transfer of water that
2 has been diverted from the Gulf of Mexico to a location in a river
3 basin or coastal basin.

4 SECTION 3. Section 11.121, Water Code, is amended to read as
5 follows:

6 Sec. 11.121. PERMIT REQUIRED. Except as provided in
7 Sections 11.142, 11.1421, ~~[and]~~ 11.1422, and 11.1423 ~~[of this~~
8 ~~code]~~, no person may appropriate any state water or begin
9 construction of any work designed for the storage, taking, or
10 diversion of water without first obtaining a permit from the
11 commission to make the appropriation.

12 SECTION 4. Section 11.1311, Water Code, is amended by
13 amending Subsection (b) and adding Subsection (b-1) to read as
14 follows:

15 (b) The board may transfer interests in a permit issued
16 under Subsection (a) ~~[this section]~~ to a municipality, river
17 authority, other political subdivision, or water supply
18 corporation organized under Chapter 67 as otherwise provided by
19 law.

20 (b-1) In this subsection, "marine seawater" has the meaning
21 assigned by Section 11.1423, and "brackish water" means water that
22 contains a total dissolved solids concentration of more than 1,000
23 milligrams per liter and is not marine seawater. On submission of an
24 application to the commission, the commission shall issue without a
25 hearing a permit to use the bed and banks of any flowing natural
26 stream in the state to convey marine seawater or brackish water.
27 The commission shall adopt rules to implement a procedure for

1 application for a permit to convey marine seawater or brackish
2 water consistent with this subsection. A flowing natural stream
3 does not include impounded water. The commission shall provide
4 notice and an opportunity for hearing for an application for a
5 permit to convey marine seawater or brackish water into or through a
6 lake, reservoir, or other impoundment.

7 SECTION 5. Subchapter D, Chapter 11, Water Code, is amended
8 by adding Section 11.1423 to read as follows:

9 Sec. 11.1423. PERMIT EXEMPTION FOR USE BY WATER SUPPLY
10 ENTITY OF MARINE SEAWATER. (a) In this section:

11 (1) "Marine seawater" means water that contains a
12 total dissolved solids concentration based on a yearly average of
13 samples taken at the water source of more than 10,000 milligrams per
14 liter that is derived from the Gulf of Mexico or an adjacent bay,
15 estuary, or arm of the Gulf of Mexico.

16 (2) "Water supply entity" includes:

17 (A) a retail public utility as defined by Section
18 13.002;

19 (B) a wholesale water supplier; or

20 (C) an irrigation district operating under
21 Chapter 58.

22 (b) Without obtaining a permit, a water supply entity may
23 use for any beneficial purpose state water that consists of marine
24 seawater.

25 (c) A water supply entity must treat marine seawater so that
26 it meets the water quality level of the receiving stream before the
27 entity may put the water into a stream under an authorization

1 granted under Section 11.042.

2 (d) This section does not prohibit a water supply entity
3 from conveying water under this section in any other manner
4 authorized by law, including through the use of facilities owned or
5 operated by the state if authorized by the state.

6 SECTION 6. Section 16.060, Water Code, is amended to read as
7 follows:

8 Sec. 16.060. DESALINATION STUDIES AND RESEARCH. (a) In
9 this section, "inland desalination project" means a desalination
10 project the primary purpose of which is the development of new
11 drinking water. The term does not include the reuse, recycling, or
12 disposal of wastewater.

13 (b) The board shall undertake or participate in research,
14 feasibility and facility planning studies, investigations, and
15 surveys [~~as it considers~~] necessary to further the development of
16 cost-effective water supplies from inland and seawater
17 desalination in the state.

18 (c) [~~(b)~~] The board shall prepare an annual [~~a biennial~~]
19 progress report on the implementation of inland and seawater
20 desalination activities in the state and shall submit it to the
21 governor, lieutenant governor, and speaker of the house of
22 representatives not later than December 1 of each [~~even-numbered~~]
23 year. The report shall include:

24 (1) results of the board's studies and activities
25 relative to inland and seawater desalination during the preceding
26 year [~~biennium~~];

27 (2) identification and evaluation of research,

1 regulatory, technical, and financial impediments to the
2 implementation of inland and seawater desalination projects;

3 (3) evaluation of the role the state should play in
4 furthering the development of inland and [~~large-scale~~] seawater
5 desalination projects in the state; [~~and~~]

6 (4) the anticipated appropriation from general
7 revenues necessary to continue investigating water desalination
8 activities in the state during the next biennium; and

9 (5) information regarding state participation in
10 public-private partnerships to advance research efforts, implement
11 pilot projects, and develop new technologies related to:

12 (A) water transport;

13 (B) brine disposal;

14 (C) pretreatment of brackish water and marine
15 seawater; and

16 (D) innovative concentrate management
17 strategies.

18 (d) [~~(c)~~] The board shall actively pursue federal sources
19 of funding for inland and seawater desalination projects in the
20 state.

21 (e) In preparing the report described by Subsection (c), the
22 board shall incorporate input from water utilities, water
23 providers, municipalities, and other public or private entities
24 that have an interest in developing and implementing inland or
25 seawater desalination projects.

26 (f) The board shall coordinate with the Texas Center for
27 Innovative Desalination Technology and any other entity created by

1 the state to study, promote, facilitate, or improve the
2 development, financing, implementation, or enhancement of inland
3 or seawater desalination technology or projects.

4 (g) The board shall coordinate with each agency identified
5 in the report to provide assistance with applicable regulatory
6 requirements to improve implementation of inland or seawater
7 desalination technology or projects.

8 SECTION 7. Section 341.001, Health and Safety Code, is
9 amended by adding Subdivisions (1-a), (2-a), and (4-a) to read as
10 follows:

11 (1-a) "Brackish water" means water that contains a
12 total dissolved solids concentration of more than 1,000 milligrams
13 per liter. The term does not include marine seawater.

14 (2-a) "Desalination facility" means a facility used
15 for the treatment of brackish water or marine seawater to remove
16 dissolved mineral salts and other dissolved solids.

17 (4-a) "Marine seawater" means water that contains a
18 total dissolved solids concentration based on a yearly average of
19 samples taken at the water source of more than 10,000 milligrams per
20 liter that is derived from the Gulf of Mexico or an adjacent bay,
21 estuary, or arm of the Gulf of Mexico.

22 SECTION 8. Subchapter C, Chapter 341, Health and Safety
23 Code, is amended by adding Section 341.0359 to read as follows:

24 Sec. 341.0359. DESALINATION OF WATER FOR DRINKING WATER.

25 (a) This section applies only to a desalination facility that is
26 intended to produce water for the public drinking water supply.

27 This section does not apply to a desalination facility used to

1 produce nonpotable water.

2 (b) The commission shall adopt rules to:

3 (1) allow water treated by a desalination facility to
4 be used as public drinking water; and

5 (2) ensure that water treated by a desalination
6 facility meets the requirements of Section 341.031 and rules
7 adopted under that section.

8 (c) A person may not begin construction of a desalination
9 facility unless the commission approves in writing the plans and
10 specifications for the facility.

11 (d) A person may not begin construction of a desalination
12 facility that treats brackish water for the purpose of removing
13 secondary drinking water contaminants unless the commission
14 approves in writing a report containing:

15 (1) a computer model acceptable to the commission;

16 (2) a pilot study with a minimum 40-day run duration
17 without treatment intervention to meet federal and state safe
18 drinking water standards;

19 (3) data from a similar system installed at another
20 brackish water desalination facility that treats source water of a
21 similar or lower quality; or

22 (4) a full-scale verification study with a minimum
23 40-day run duration without treatment intervention to meet federal
24 and state safe drinking water standards.

25 (e) A person may not begin construction of a desalination
26 facility that treats brackish water for the purpose of removing
27 primary drinking water contaminants unless the commission approves

1 in writing a report containing:

2 (1) a computer model acceptable to the commission;

3 (2) a pilot study with a minimum 40-day run duration
4 without treatment intervention to meet federal and state safe
5 drinking water standards;

6 (3) data from a similar system installed at another
7 brackish water desalination facility that treats source water of a
8 similar or lower quality; or

9 (4) a full-scale verification study with a minimum
10 40-day run duration without treatment intervention to meet federal
11 and state safe drinking water standards.

12 (f) A person may not begin construction of a desalination
13 facility that treats marine seawater unless the commission approves
14 in writing a report containing:

15 (1) a computer model acceptable to the commission;

16 (2) a pilot study with a minimum 40-day run duration
17 without treatment intervention to meet federal and state safe
18 drinking water standards;

19 (3) data from a similar system installed at another
20 marine seawater desalination facility that treats source water of a
21 similar or lower quality; or

22 (4) a full-scale verification study with a minimum
23 40-day run duration without treatment intervention to meet federal
24 and state safe drinking water standards.

25 (g) Not later than the 100th day after the date the
26 commission receives the report for a proposed desalination
27 facility, the commission shall review the report and issue an

1 exception response letter that may contain conditions for approval.

2 (h) Not later than the 60th day after the date the
3 commission receives the plans and specifications for a proposed
4 desalination facility, the commission shall review the plans and
5 specifications and issue a response letter that may contain
6 conditions for approval.

7 (i) A person violates this section if the person fails to
8 meet a condition for approval in a letter issued to the person under
9 Subsection (g) or (h).

10 SECTION 9. Chapter 111, Education Code, is amended by
11 adding Subchapter J to read as follows:

12 SUBCHAPTER J. TEXAS CENTER FOR INNOVATIVE
13 DESALINATION TECHNOLOGY

14 Sec. 111.131. DEFINITIONS. In this subchapter:

15 (1) "Boards" means the board of regents of the
16 University of Houston System and the board of regents of The
17 University of Texas System.

18 (2) "Center" means the Texas Center for Innovative
19 Desalination Technology established under this subchapter.

20 Sec. 111.132. ESTABLISHMENT. (a) The Texas Center for
21 Innovative Desalination Technology is established as a partnership
22 between the University of Houston, The University of Texas at
23 Brownsville, and The University of Texas at El Paso.

24 (b) The organization, control, and management of the center
25 are vested in the boards, and the respective institutions shall
26 execute a memorandum of understanding for that purpose.

27 (c) The center shall be hosted by the University of

1 Houston's Cullen College of Engineering, The University of Texas at
2 Brownsville's College of Science, Mathematics, and Technology, and
3 The University of Texas at El Paso's Center for Inland Desalination
4 Systems. Participation in the center's activities shall be open to
5 any faculty or staff member of each host university who is an active
6 researcher in the field of water desalination, engineering,
7 hydrology, biology, water supply development, or energy
8 efficiency, or in another relevant field as determined by the
9 boards.

10 Sec. 111.133. PURPOSE. The center is created to:

11 (1) promote interdisciplinary research, education,
12 and training for the development of state-of-the-art products,
13 materials, systems, and technologies designed for the desalination
14 of seawater from the Gulf of Mexico and brackish water within
15 surface and groundwater resources throughout the state; and

16 (2) develop cost-effective, energy-efficient, and
17 environmentally sound water desalination, brine disposal, and
18 water conveyance technologies that can enhance the potential for
19 desalinated water to contribute toward the state's long-term water
20 portfolio.

21 Sec. 111.134. POWERS AND DUTIES. The center shall:

22 (1) collaborate with appropriate international,
23 federal, state, and local agencies and private business or
24 nonprofit entities as necessary to develop innovative desalination
25 technologies;

26 (2) research and develop innovative seawater and
27 brackish water desalination technologies, including pretreatment

1 technologies and improvements, that are energy efficient and cost
2 effective, minimize environmental impacts, and offer long-term
3 water supply solutions for the state;

4 (3) research and develop brine disposal and reuse
5 methods and technologies;

6 (4) research and develop water conveyance systems and
7 technologies that may be used to transport desalinated water to
8 target use populations;

9 (5) develop test facilities for evaluating the
10 performance of new products, materials, or techniques;

11 (6) develop specifications and standards for products
12 used for desalinating water, conveying water, and disposing of
13 brine;

14 (7) provide public information, education, and
15 outreach regarding desalination technologies and appropriate uses
16 and conservation methods for desalinated water; and

17 (8) provide data, recommendations, and any other
18 information necessary relating to desalination for local,
19 regional, or statewide water planning programs and processes.

20 Sec. 111.135. COLLABORATION WITH OTHER ENTITIES. The
21 University of Houston, The University of Texas at Brownsville, and
22 The University of Texas at El Paso shall encourage public and
23 private entities to participate in or support the operation of the
24 center and may enter into an agreement with any public or private
25 entity for that purpose. An agreement may allow the center to
26 provide information, services, or other assistance to an entity in
27 exchange for the entity's participation or support.

1 Sec. 111.136. GIFTS AND GRANTS. The boards may solicit,
2 accept, and administer gifts and grants from any public or private
3 source for the purposes of the center.

4 Sec. 111.137. PERSONNEL. The boards may employ personnel
5 for the center as necessary.

6 Sec. 111.138. EXPIRATION. This subchapter expires
7 September 1, 2023.

8 SECTION 10. This Act takes effect immediately if it
9 receives a vote of two-thirds of all the members elected to each
10 house, as provided by Section 39, Article III, Texas Constitution.
11 If this Act does not receive the vote necessary for immediate
12 effect, this Act takes effect September 1, 2013.