Amend **CSHB 2578** (house committee report) as follows:

(1) On page 3, line 19, strike "16.060(b)(5)" and substitute "16.060(c)(5)".

(2) Strike page 4, line 9, through page 6, line 5, and substitute the following appropriately numbered SECTION:

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

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

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

(c) [~~(b)~~] The board shall prepare a biennial progress report on the implementation of seawater or brackish water desalination activities in the state and shall submit it to the governor, lieutenant governor, and speaker of the house of representatives not later than December 1 of each even-numbered year. The report shall include:

(1) results of the board's studies and activities relative to seawater or brackish water desalination during the preceding biennium;

(2) identification and evaluation of research, regulatory, technical, and financial impediments to the implementation of seawater or brackish water desalination projects;

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

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

(5) identification and designation of local or

regional brackish water production zones in areas of the state with moderate to high availability and productivity of brackish water that can be used to reduce the use of fresh groundwater and that:

(A) are separated by hydrogeologic barriers sufficient to prevent significant impacts to water availability or water quality in other aquifers, subdivisions of aquifers, or geologic strata;

(B) are not, at the time of designation as a brackish water production zone, serving as a primary water supply for any purpose other than supplying a desalination project; and

(C) are not located:

(i) in areas determined to be susceptible to subsidence; or

(ii) in the Edwards Aquifer and within the boundaries of the Edwards Aquifer Authority; and

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

(A) water transport;

(B) brine disposal;

(C) pretreatment of seawater and brackish water; and

(D) innovative concentrate management strategies.

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

(e) The board shall work together with groundwater conservation districts and stakeholders and shall consider the Brackish Groundwater Manual for Texas Regional Water Planning Groups, and any updates to the manual, and other relevant scientific data or findings when identifying and designating brackish water production zones under Subsection (c)(5).

(f) In preparing the report described by Subsection (c), the board shall incorporate input from water utilities, water providers, municipalities, and other public or private entities that have an interest in developing and implementing seawater or

brackish water desalination projects.

(g) The board shall coordinate with the Texas Center for Innovative Desalination Technology and any other entity created by the state to study, promote, facilitate, or improve the development, financing, implementation, or enhancement of seawater or brackish water desalination technology or projects.

(h) The board shall coordinate with each agency identified in the report to provide assistance with applicable regulatory requirements to improve implementation of seawater or brackish water desalination technology or projects.

(3) On page 6, line 12, strike "16.060(b)(5)" and substitute "16.060(c)(5)".

(4) Add the following appropriately numbered SECTIONS to the bill:

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

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

SECTION ____. Section 11.121, Water Code, is amended to read as follows:

Sec. 11.121. PERMIT REQUIRED. Except as provided in Sections 11.142, 11.1421, [~~and~~] 11.1422, and 11.1423 [~~of this code~~], no person may appropriate any state water or begin

construction of any work designed for the storage, taking, or diversion of water without first obtaining a permit from the commission to make the appropriation.

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

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

(b-1) In this subsection, "marine seawater" has the meaning assigned by Section 11.1423, and "brackish water" means water that contains a total dissolved solids concentration of more than 1,000 milligrams per liter and is not marine seawater. On submission of an application to the commission, the commission shall issue without a hearing a permit to use the bed and banks of any flowing natural stream in the state to convey marine seawater or brackish water. The commission shall adopt rules to implement a procedure for application for a permit to convey marine seawater or brackish water consistent with this subsection. A flowing natural stream does not include impounded water. The commission shall provide notice and an opportunity for hearing for an application for a permit to convey marine seawater or brackish water into or through a lake, reservoir, or other impoundment.

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

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

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

(2) "Water supply entity" includes:

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

(B) a wholesale water supplier; or

(C) an irrigation district operating under Chapter 58.

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

(c) A water supply entity must treat marine seawater and brackish water so that it meets the water quality level of the receiving stream before the entity may put the water into a stream under an authorization granted under Section 11.042.

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

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

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

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

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

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

Sec. 341.0359. DESALINATION OF WATER FOR DRINKING WATER. (a) This section applies only to a desalination facility that is intended to produce water for the public drinking water supply. This section does not apply to a desalination facility used to produce nonpotable water.

(b) The commission shall adopt rules to:

(1) allow water treated by a desalination facility to

be used as public drinking water; and

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

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

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

(1) a computer model acceptable to the commission;

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

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

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

(e) If a full-scale verification protocol report is approved, a person may not send water to a public water distribution system without a full-scale verification study:

(1) completed after construction; and

(2) approved by the commission.

(f) Not later than the 100th day after the date the commission receives the report for a proposed desalination facility, the commission shall review the report and issue an exception response letter that may contain conditions for approval.

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

(h) A person violates this section if the person fails to

meet a condition for approval in a letter issued to the person under Subsection (f) or (g).

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

SUBCHAPTER J. TEXAS CENTER FOR INNOVATIVE DESALINATION TECHNOLOGY

Sec. 111.131. DEFINITIONS. In this subchapter:

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

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

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

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

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

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

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

(2) develop cost-effective, energy-efficient, and environmentally sound water desalination, brine disposal, and

water conveyance technologies that can enhance the potential for desalinated water to contribute toward the state's long-term water portfolio.

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

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

(2) research and develop innovative seawater and brackish water desalination technologies, including pretreatment technologies and improvements, that are energy efficient and cost effective, minimize environmental impacts, and offer long-term water supply solutions for the state;

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

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

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

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

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

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

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

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

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

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

(5) Renumber the SECTIONS of the bill accordingly.