# **SENATE AMENDMENTS**

# 2<sup>nd</sup> Printing

By: Larson, Guillen

H.B. No. 721

# A BILL TO BE ENTITLED

1	AN ACT
2	relating to the duty of the Texas Water Development Board to conduct
3	studies of and prepare and submit reports on aquifer storage and
4	recovery and aquifer recharge projects.
5	BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:
6	SECTION 1. Section 11.155, Water Code, is amended to read as
7	follows:
8	Sec. 11.155. AQUIFER STORAGE AND RECOVERY AND AQUIFER
9	RECHARGE REPORTS. (a) In this section:
10	(1) "Aquifer recharge project" means a project
11	involving the intentional recharge of an aquifer by means of an
12	injection well authorized under Chapter 27 or other means of
13	infiltration, including actions designed to:
14	(A) reduce declines in the water level of the
15	aquifer;
16	(B) supplement the quantity of groundwater
17	available;
18	(C) improve water quality in an aquifer;
19	(D) improve spring flows and other interactions
20	between groundwater and surface water; or
21	(E) mitigate subsidence.
22	(2) "Aquifer storage and recovery project" has the
23	meaning assigned by Section 27.151.
24	(b) The board shall make studies, investigations, and

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- 1 surveys of the aquifers in the state [as it considers necessary] to
- 2 determine the occurrence, quantity, quality, and availability of
- 3 aquifers in which aquifer storage and recovery projects or aquifer
- 4 recharge projects are feasible [water may be stored and
- 5 subsequently retrieved for beneficial use].
- 6 (c) The board, working with appropriate interested persons,
- 7 <u>including river authorities and major water providers and water</u>
- 8 utilities, regional water planning groups, groundwater
- 9 conservation districts, and potential public sponsors of aquifer
- 10 storage and recovery projects or aquifer recharge projects, shall:
- 11 (1) conduct studies of aquifer storage and recovery
- 12 projects and aquifer recharge projects identified in the state
- 13 water plan or by interested persons; and
- 14 (2) report the results of each study conducted under
- 15 <u>Subdivision (1) to regional water planning groups and interested</u>
- 16 persons.
- 17 (d) This subsection expires January 1, 2021. The board
- 18 shall:
- 19 (1) conduct a statewide survey to identify the
- 20 relative suitability of various major and minor aquifers for use in
- 21 aquifer storage and recovery projects or aquifer recharge projects
- 22 <u>based on consideration of:</u>
- (A) hydrogeological characteristics, with a
- 24 focus on:
- 25 (i) storage potential;
- 26 (ii) transmissivity;
- 27 (iii) infiltration characteristics;

H.B. No. 721

1	(iv) storativity;
2	(v) recoverability; and
3	(vi) water quality;
4	(B) the frequency, volume, and distance from
5	excess water available for potential storage; and
6	(C) the current and future water supply needs
7	identified in the state water plan;
8	(2) prepare a report that includes an overview of the
9	survey conducted under Subdivision (1); and
10	(3) not later than December 15, 2020, submit the
11	report described by Subdivision (2) to the governor, lieutenant
12	governor, and speaker of the house of representatives [The board
13	shall undertake the studies, investigations, and surveys in the
14	following order of priority:
15	[(1) areas designated by the commission as "priority
16	groundwater management areas" under Section 35.008; and
17	[ <del>(2) other areas of the state in a priority to be</del>
18	determined by the board's ranking of where the greatest need
19	exists].
20	SECTION 2. This Act takes effect immediately if it receives
21	a vote of two-thirds of all the members elected to each house, as
22	provided by Section 39, Article III, Texas Constitution. If this
23	Act does not receive the vote necessary for immediate effect, this
24	Act takes effect September 1, 2019.

# ADOPTED

MAY 2 2 2019

Letay Saw Secretary of the Senate

By: \_ Chul terry

<u>H</u>.B. No. <u>121</u>

Substitute the following for  $\underline{\mathcal{H}}$ .B. No.  $\underline{\mathbf{721}}$ :

By: \_\_\_\_

C.S. H.B. No. 721

#### A BILL TO BE ENTITLED

1 AN ACT 2 relating to the duty of the Texas Water Development Board to conduct studies of and prepare and submit reports on aquifer storage and 3 4 recovery and aquifer recharge projects. BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS: 5 SECTION 1. Section 11.155, Water Code, is amended to read as 6 7 follows: 8 Sec. 11.155. AQUIFER STORAGE AND RECOVERY AND AQUIFER RECHARGE REPORTS. (a) In this section: 9 10 (1) "Aquifer recharge project" means a project involving the intentional recharge of an aquifer by means of an 11 12 injection well authorized under Chapter 27 or other means of infiltration, including actions designed to: 13 14 (A) reduce declines in the water level of the 15 aquifer; 16 (B) supplement the quantity of groundwater 17 available; 18 (C) improve water quality in an aquifer; 19 (D) improve spring flows and other interactions 20 between groundwater and surface water; or 21 (E) mitigate subsidence. 22 (2) "Aquifer storage and recovery project" has the

meaning assigned by Section 27.151.

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(b) The board shall make studies, investigations,

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    determine the occurrence, quantity, quality, and availability of
    aquifers in which aquifer storage and recovery projects or aquifer
 3
    recharge projects are feasible [water may be stored and
 4
 5
   subsequently retrieved for beneficial use].
 6
          (c) The board, working with appropriate interested persons,
   including river authorities and major water providers and water
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   utilities, regional water planning groups, groundwater
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 9
   conservation districts, and potential public sponsors of aquifer
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   storage and recovery projects or aquifer recharge projects, shall:
               (1) conduct studies of aquifer storage and recovery
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   water plan or by interested persons; and
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               (2) report the results of each study conducted under
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   Subdivision (1) to regional water planning groups and interested
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               (1) conduct a statewide survey to identify the
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   relative suitability of various major and minor aquifers for use in
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surveys of the aquifers in the state [as it considers necessary] to

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1	(iv) storativity;
2	(v) recoverability; and
3	<pre>(vi) water quality;</pre>
4	(B) the frequency, volume, and distance from
5	excess water available for potential storage; and
6	(C) the current and future water supply needs
7	identified in the state water plan;
8	(2) prepare a report that includes an overview of the
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10	(3) not later than December 15, 2020, submit the
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13	shall undertake the studies, investigations, and surveys in the
14	following order of priority:
15	[(1) areas designated by the commission as "priority
16	groundwater management areas" under Section 35.008; and
17	[(2) other areas of the state in a priority to be
18	determined by the board's ranking of where the greatest need
19	exists].
20	SECTION 2. The Texas Water Development Board is required to
21	implement a provision of this Act only if the legislature
22	appropriates money specifically for that purpose. If the
23	legislature does not appropriate money specifically for that
24	purpose, the board may, but is not required to, implement a
25	provision of this Act using other appropriations available for that
26	purpose.
27	SECTION 3. This Act takes effect immediately if it receives

- 1 a vote of two-thirds of all the members elected to each house, as
- 2 provided by Section 39, Article III, Texas Constitution. If this
- 3 Act does not receive the vote necessary for immediate effect, this
- 4 Act takes effect September 1, 2019.

# FISCAL NOTE, 86TH LEGISLATIVE REGULAR SESSION

May 23, 2019

TO: Honorable Dennis Bonnen, Speaker of the House, House of Representatives

FROM: John McGeady, Assistant Director Sarah Keyton, Assistant Director Legislative Budget Board

IN RE: HB721 by Larson (Relating to the duty of the Texas Water Development Board to conduct studies of and prepare and submit reports on aquifer storage and recovery and aquifer recharge projects.), As Passed 2nd House

Estimated Two-year Net Impact to General Revenue Related Funds for HB721, As Passed 2nd House: a negative impact of (\$1,200,882) through the biennium ending August 31, 2021.

The Texas Water Development Board is required to implement a provision of this Act only if the legislature appropriates money specifically for that purpose. If the legislature does not appropriate money specifically for that purpose, the agency may, but is not required to, implement a provision of this Act using other appropriations available for that purpose.

The bill would make no appropriation but could provide the legal basis for an appropriation of funds to implement the provisions of the bill.

### General Revenue-Related Funds, Five-Year Impact:

Fiscal Year	Probable Net Positive/(Negative) Impact to General Revenue Related Funds
2020	(\$889,300)
2021	(\$311,582)
2022	(\$311,582)
2023	(\$311,582)
2024	(\$311,582)

# All Funds, Five-Year Impact:

Fiscal Year	Probable Savings/(Cost) from General Revenue Fund	Change in Number of State Employees from FY 2019
2020	(\$889,300	3.0
2021	(\$311,582	2) 3.0
2022	(\$311,582	2) 3.0
2023	(\$311,582	2) 3.0
2024	(\$311,582	2) 3.0

# Fiscal Analysis

The bill would amend the Water Code to require the Texas Water Development Board (TWDB) to conduct studies of aquifer storage projects, aquifer recovery projects, and aquifer recharge projects and report on the results of those studies to regional water planning groups and interested parties. In conducting the studies, TWDB would be required to work with river authorities, major water providers, water utilities, and regional water planning groups.

The bill would also require TWDB to conduct a statewide survey to identify the suitability of various aquifers for use in aquifer storage and recovery projects using several different criteria. The section of the bill establishing this requirement would expire January 1, 2021. TWDB would be required to prepare a report on the survey by December 15, 2020. The bill would remove the requirement that TWDB prioritize certain areas of the state for the study.

The bill would take effect September 1, 2019, or immediately if it receives a vote of two-thirds of all the members elected to each house.

# Methodology

Based on information provided by TWDB, this analysis assumes an additional 3.0 Geoscientist IV (\$72,789 salary per FTE per year) would be needed beginning in 2020. These FTEs would support the program, conduct individual project studies, and oversee the contract for the statewide study. In addition, this analysis assumes TWDB would contract for the statewide survey at a cost of \$500,000 in fiscal year 2020. Costs associated with the 3.0 FTEs would be \$328,300 in fiscal year 2020, and \$295,282 each subsequent year. To support these FTEs, TWDB would need additional software licenses (\$51,000 in fiscal year 2020) and ongoing software maintenance (\$6,300 per year beginning in 2021). Based on information provided by TWDB, it is assumed that TWDB would also need additional storage capacity from Data Center Services in the amount of \$10,000 per year, beginning in fiscal year 2020.

# **Technology**

Technology costs include additional storage with Data Center Services (\$10,000 per year), software licenses (\$51,000 in 2020), and ongoing software maintenance (\$6,300 per year beginning in 2021).

#### **Local Government Impact**

No significant fiscal implication to units of local government is anticipated.

Source Agencies: 580 Water Development Board

# FISCAL NOTE, 86TH LEGISLATIVE REGULAR SESSION

# May 11, 2019

**TO:** Honorable Charles Perry, Chair, Senate Committee on Water & Rural Affairs

**FROM:** John McGeady, Assistant Director Sarah Keyton, Assistant Director Legislative Budget Board

**IN RE:** HB721 by Larson (Relating to the duty of the Texas Water Development Board to conduct studies of and prepare and submit reports on aquifer storage and recovery and aquifer recharge projects.), Committee Report 2nd House, Substituted

**Estimated Two-year Net Impact to General Revenue Related Funds** for HB721, Committee Report 2nd House, Substituted: a negative impact of (\$1,200,882) through the biennium ending August 31, 2021.

The Texas Water Development Board is required to implement a provision of this Act only if the legislature appropriates money specifically for that purpose. If the legislature does not appropriate money specifically for that purpose, the agency may, but is not required to, implement a provision of this Act using other appropriations available for that purpose.

The bill would make no appropriation but could provide the legal basis for an appropriation of funds to implement the provisions of the bill.

#### General Revenue-Related Funds, Five-Year Impact:

Fiscal Year	Probable Net Positive/(Negative) Impact to General Revenue Related Funds
2020	(\$889,300)
2021	(\$311,582)
2022	(\$311,582)
2023	(\$311,582)
2024	(\$311,582)

# All Funds, Five-Year Impact:

Fiscal Year	Probable Savings/(Cost) from General Revenue Fund 1	Change in Number of State Employees from FY 2019
2020	(\$889,300)	3.0
2021	(\$311,582)	3.0
2022	(\$311,582)	3.0
2023	(\$311,582)	3.0
2024	(\$311,582)	3.0

#### Fiscal Analysis

The bill would amend the Water Code to require the Texas Water Development Board (TWDB) to conduct studies of aquifer storage projects, aquifer recovery projects, and aquifer recharge projects and report on the results of those studies to regional water planning groups and interested parties. In conducting the studies, TWDB would be required to work with river authorities, major water providers, water utilities, and regional water planning groups.

The bill would also require TWDB to conduct a statewide survey to identify the suitability of various aquifers for use in aquifer storage and recovery projects using several different criteria. The section of the bill establishing this requirement would expire January 1, 2021. TWDB would be required to prepare a report on the survey by December 15, 2020. The bill would remove the requirement that TWDB prioritize certain areas of the state for the study.

The bill would take effect September 1, 2019, or immediately if it receives a vote of two-thirds of all the members elected to each house.

#### Methodology

Based on information provided by TWDB, this analysis assumes an additional 3.0 Geoscientist IV (\$72,789 salary per FTE per year) would be needed beginning in 2020. These FTEs would support the program, conduct individual project studies, and oversee the contract for the statewide study. In addition, this analysis assumes TWDB would contract for the statewide survey at a cost of \$500,000 in fiscal year 2020. Costs associated with the 3.0 FTEs would be \$328,300 in fiscal year 2020, and \$295,282 each subsequent year. To support these FTEs, TWDB would need additional software licenses (\$51,000 in fiscal year 2020) and ongoing software maintenance (\$6,300 per year beginning in 2021). Based on information provided by TWDB, it is assumed that TWDB would also need additional storage capacity from Data Center Services in the amount of \$10,000 per year, beginning in fiscal year 2020.

### **Technology**

Technology costs include additional storage with Data Center Services (\$10,000 per year), software licenses (\$51,000 in 2020), and ongoing software maintenance (\$6,300 per year beginning in 2021).

#### **Local Government Impact**

No significant fiscal implication to units of local government is anticipated.

Source Agencies: 580 Water Development Board

# FISCAL NOTE, 86TH LEGISLATIVE REGULAR SESSION

#### May 9, 2019

TO: Honorable Charles Perry, Chair, Senate Committee on Water & Rural Affairs

**FROM:** John McGeady, Assistant Director Sarah Keyton, Assistant Director Legislative Budget Board

**IN RE:** HB721 by Larson (Relating to the duty of the Texas Water Development Board to conduct studies of and prepare and submit reports on aquifer storage and recovery and aquifer recharge projects.), **As Engrossed** 

**Estimated Two-year Net Impact to General Revenue Related Funds** for HB721, As Engrossed: a negative impact of (\$1,200,882) through the biennium ending August 31, 2021.

The bill would make no appropriation but could provide the legal basis for an appropriation of funds to implement the provisions of the bill.

# General Revenue-Related Funds, Five-Year Impact:

Fiscal Year	Probable Net Positive/(Negative) Impact to General Revenue Related Funds
2020	(\$889,300)
2021	(\$311,582)
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#### All Funds, Five-Year Impact:

Fiscal Year	Probable Savings/(Cost) from <i>General Revenue Fund</i> 1	Change in Number of State Employees from FY 2019
2020	(\$889,300)	3.0
2021	(\$311,582)	3.0
2022	(\$311,582)	3.0
2023	(\$311,582)	3.0
2024	(\$311,582)	3.0

#### **Fiscal Analysis**

The bill would amend the Water Code to require the Texas Water Development Board (TWDB) to conduct studies of aquifer storage projects, aquifer recovery projects, and aquifer recharge projects and report on the results of those studies to regional water planning groups and interested parties. In conducting the studies, TWDB would be required to work with river authorities, major water providers, water utilities, and regional water planning groups.

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The bill would take effect September 1, 2019, or immediately if it receives a vote of two-thirds of all the members elected to each house.

### Methodology

Based on information provided by TWDB, this analysis assumes an additional 3.0 Geoscientist IV (\$72,789 salary per FTE per year) would be needed beginning in 2020. These FTEs would support the program, conduct individual project studies, and oversee the contract for the statewide study. In addition, this analysis assumes TWDB would contract for the statewide survey at a cost of \$500,000 in fiscal year 2020. Costs associated with the 3.0 FTEs would be \$328,300 in fiscal year 2020, and \$295,282 each subsequent year. To support these FTEs, TWDB would need additional software licenses (\$51,000 in fiscal year 2020) and ongoing software maintenance (\$6,300 per year beginning in 2021). Based on information provided by TWDB, it is assumed that TWDB would also need additional storage capacity from Data Center Services in the amount of \$10,000 per year, beginning in fiscal year 2020.

# **Technology**

Technology costs include additional storage with Data Center Services (\$10,000 per year), software licenses (\$51,000 in 2020), and ongoing software maintenance (\$6,300 per year beginning in 2021).

#### **Local Government Impact**

No significant fiscal implication to units of local government is anticipated.

Source Agencies: 580 Water Development Board

# FISCAL NOTE, 86TH LEGISLATIVE REGULAR SESSION

#### March 27, 2019

**TO:** Honorable Lyle Larson, Chair, House Committee on Natural Resources

**FROM:** John McGeady, Assistant Director Sarah Keyton, Assistant Director Legislative Budget Board

IN RE: HB721 by Larson (Relating to the duty of the Texas Water Development Board to conduct studies of and prepare and submit reports on aquifer storage and recovery and aquifer recharge projects.), Committee Report 1st House, Substituted

**Estimated Two-year Net Impact to General Revenue Related Funds** for HB721, Committee Report 1st House, Substituted: a negative impact of (\$1,200,882) through the biennium ending August 31, 2021.

The bill would make no appropriation but could provide the legal basis for an appropriation of funds to implement the provisions of the bill.

# General Revenue-Related Funds, Five-Year Impact:

Fiscal Year	Probable Net Positive/(Negative) Impact to General Revenue Related Funds
2020	(\$889,300)
2021	(\$311,582)
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# All Funds, Five-Year Impact:

Fiscal Year	Probable Savings/(Cost) from <i>General Revenue Fund</i> 1	Change in Number of State Employees from FY 2019
2020	(\$889,300)	3.0
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### **Fiscal Analysis**

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# **Technology**

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#### **Local Government Impact**

No significant fiscal implication to units of local government is anticipated.

Source Agencies: 580 Water Development Board

# FISCAL NOTE, 86TH LEGISLATIVE REGULAR SESSION

#### March 17, 2019

**TO:** Honorable Lyle Larson, Chair, House Committee on Natural Resources

FROM: John McGeady, Assistant Director Sarah Keyton, Assistant Director

Legislative Budget Board

IN RE: HB721 by Larson (Relating to the duty of the Texas Water Development Board to conduct studies of and prepare and submit reports on aquifer storage and recovery.), As Introduced

**Estimated Two-year Net Impact to General Revenue Related Funds** for HB721, As Introduced: a negative impact of (\$1,200,882) through the biennium ending August 31, 2021.

The bill would make no appropriation but could provide the legal basis for an appropriation of funds to implement the provisions of the bill.

# **General Revenue-Related Funds, Five-Year Impact:**

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Source Agencies: 580 Water Development Board