

**First Regular Session
Sixty-eighth General Assembly
STATE OF COLORADO**

INTRODUCED

LLS NO. 11-0708.01 Thomas Morris

HOUSE BILL 11-1231

HOUSE SPONSORSHIP

Fischer, Ryden, Vaad

SENATE SPONSORSHIP

Brophy, Hodge

House Committees

Agriculture, Livestock, & Natural Resources

Senate Committees

A BILL FOR AN ACT

101 **CONCERNING THE AUTHORIZATION OF A STUDY OF THE SOUTH PLATTE**
102 **RIVER ALLUVIAL AQUIFER.**

Bill Summary

(Note: This summary applies to this bill as introduced and does not reflect any amendments that may be subsequently adopted. If this bill passes third reading in the house of introduction, a bill summary that applies to the reengrossed version of this bill will be available at <http://www.leg.state.co.us/billsummaries>.)

The bill directs the Colorado water conservation board to conduct a comprehensive study of the interaction between the South Platte alluvial aquifer and surface streams, including specifically:

- ! The number and location of alluvial wells withdrawing groundwater in the South Platte river basin;

Shading denotes HOUSE amendment. Double underlining denotes SENATE amendment.
Capital letters indicate new material to be added to existing statute.
Dashes through the words indicate deletions from existing statute.

- ! The number and location of alluvial wells in the basin that are currently curtailed from pumping;
- ! The impact of well withdrawals on groundwater levels and surface flows in the basin;
- ! Whether the current administrative framework achieves the state's dual goals of protection of senior rights and maximization of the beneficial use of waters of the state; and
- ! Whether additional usage of the alluvial aquifers could be permitted in a manner consistent with protecting senior rights.

The board is to report the results of the study to the general assembly no later than June 1, 2012.

1 *Be it enacted by the General Assembly of the State of Colorado:*

2 **SECTION 1.** 37-60-115, Colorado Revised Statutes, is amended
3 BY THE ADDITION OF A NEW SUBSECTION to read:

4 **37-60-115. Water studies - rules - repeal. (7) South Platte**
5 **river alluvial aquifer study. (a) Legislative declaration.** PRECEDING
6 THE PASSAGE OF THE "WATER RIGHTS DETERMINATION AND
7 ADMINISTRATION ACT OF 1969", ARTICLE 92 OF THIS TITLE, REFERRED TO
8 IN THIS SUBSECTION (7) AS THE "1969 ACT", THE GENERAL ASSEMBLY
9 COMMISSIONED A STUDY OF THE INTERACTION BETWEEN THE SOUTH
10 PLATTE ALLUVIAL AQUIFER AND THE SURFACE FLOWS IN THE SOUTH
11 PLATTE RIVER. THE RESULTS OF THIS STUDY ARE CONTAINED IN A REPORT
12 ENTITLED "ENGINEERING WATER CODE STUDIES FOR THE SOUTH PLATTE
13 RIVER (MORTON W. BITTINGER AND ASSOCIATES AND WRIGHT WATER
14 ENGINEERS, AUGUST, 1968)", ALSO REFERRED TO AS THE "BITTINGER
15 STUDY". THE GENERAL ASSEMBLY CONSIDERED THE RESULTS OF THE
16 BITTINGER STUDY IN ITS PASSAGE OF THE 1969 ACT. AUGMENTATION
17 PLANS AUTHORIZED UNDER THE 1969 ACT ARE OPERATING ON A LARGE
18 SCALE IN THE SOUTH PLATTE RIVER BASIN. MANY SCIENTIFIC AND

1 TECHNOLOGICAL ADVANCES HAVE OCCURRED SINCE THE BITTINGER
2 STUDY AND THE PASSAGE OF THE 1969 ACT, YET NO COMPREHENSIVE
3 STUDY HAS BEEN CONDUCTED SINCE 1968 REGARDING THE IMPACT OF
4 ALLUVIAL GROUNDWATER USAGE ON THE SOUTH PLATTE RIVER OR THE
5 RELATIVE SUCCESS OF AUGMENTATION PLANS AUTHORIZED BY THE 1969
6 ACT IN PROTECTING SENIOR SURFACE DIVERTERS AND MAXIMIZING THE
7 USE OF THE WATERS OF THE STATE. THE GENERAL ASSEMBLY FINDS THAT
8 THE SOUTH PLATTE ALLUVIAL AQUIFER PLAYS A CRITICAL ROLE IN THE
9 STATE'S ECONOMY, THAT DEVELOPMENT OF THIS AQUIFER IS AND WILL
10 CONTINUE TO BE AN IMPORTANT SOURCE OF WATER SUPPLY FOR FUTURE
11 DEVELOPMENT, AND THAT IT IS APPROPRIATE AT THIS TIME TO ENGAGE IN
12 ADDITIONAL STUDY ON THESE MATTERS.

13 (b) **Study authorized.** IN FURTHERANCE OF THE PURPOSES
14 STATED IN PARAGRAPH (a) OF THIS SUBSECTION (7), THE BOARD SHALL, IN
15 CONSULTATION WITH THE STATE ENGINEER, COMMISSION A
16 COMPREHENSIVE STUDY OF THE INTERACTION BETWEEN THE SOUTH
17 PLATTE ALLUVIAL AQUIFER AND SURFACE STREAMS. THE STUDY SHALL
18 INVESTIGATE, WITHOUT LIMITATION:

19 (I) THE NUMBER AND LOCATION OF ALLUVIAL WELLS
20 WITHDRAWING GROUNDWATER IN THE BASIN;

21 (II) THE NUMBER AND LOCATION OF ALLUVIAL WELLS IN THE BASIN
22 THAT ARE CURRENTLY TOTALLY OR PARTIALLY CURTAILED FROM
23 PUMPING;

24 (III) THE IMPACT OF WELL WITHDRAWALS ON GROUNDWATER
25 LEVELS AND SURFACE FLOWS IN THE BASIN, INCLUDING, WITHOUT
26 LIMITATION, INVESTIGATION OF THE FOLLOWING ISSUES:

27 (A) CURRENT AND HISTORICAL GROUNDWATER LEVELS;

1 (B) CURRENT AND HISTORICAL AMOUNTS OF WATER LEAVING THE
2 STATE IN EXCESS OF COMPACT REQUIREMENTS;

3 (C) CURRENT AND HISTORICAL DELIVERIES TO SENIOR SURFACE
4 RIGHTS;

5 (D) THE RELATIONSHIP BETWEEN GROUNDWATER PUMPING AND
6 NONBENEFICIAL CONSUMPTIVE USE;

7 (E) THE IMPACT OF THE FOLLOWING ON SURFACE FLOWS AND
8 GROUNDWATER LEVELS: EXISTING AND PROJECTED REUSE OF TRANSBASIN
9 AND OTHER FULLY CONSUMABLE SUPPLIES; EXISTING AND PROJECTED
10 CONSERVATION PRACTICES; INSTALLATION OF LINED STORAGE FACILITIES
11 IN THE ALLUVIUM; AND INSTALLATION AND OPERATION OF ALLUVIAL
12 RECHARGE FACILITIES;

13 (F) THE NUMBER, SIZE, SCOPE, AND EFFECTIVENESS OF
14 AUGMENTATION PLANS OPERATING IN THE BASIN AND THE IMPACT OF
15 THESE PLANS ON THE ISSUES SPECIFIED IN THIS SUBPARAGRAPH (III);

16 (G) WHETHER AND TO WHAT EXTENT DEPLETIONS CAUSED BY PAST
17 PUMPING OF THE WELLS IN THE BASIN CONTINUE TO IMPACT THE SURFACE
18 STREAMS, CONSIDERING CURRENT AND HISTORICAL GROUNDWATER
19 LEVELS;

20 (IV) WHETHER THE CURRENT ADMINISTRATIVE FRAMEWORK
21 ACHIEVES THE STATE'S DUAL GOALS OF PROTECTION OF SENIOR RIGHTS
22 AND MAXIMIZATION OF THE BENEFICIAL USE OF WATERS OF THE STATE;
23 AND

24 (V) WHETHER ADDITIONAL USAGE OF THE ALLUVIAL AQUIFERS
25 COULD BE PERMITTED IN A MANNER CONSISTENT WITH PROTECTING SENIOR
26 RIGHTS. IN THIS REGARD, THE STUDY MUST INCLUDE AN INVESTIGATION
27 OF THE FOLLOWING CONCEPTS:

1 (A) PLANNED USE OF AVAILABLE GROUNDWATER STORAGE TO
2 MAXIMIZE THE SUSTAINABLE YIELD OF THE BASIN, INCLUDING THE
3 POTENTIAL FOR ADDITIONAL DRAWS ON GROUNDWATER DURING TIMES OF
4 DROUGHT, FOLLOWED BY INTENTIONAL RECHARGE ACTIVITIES IN TIMES OF
5 SURPLUS;

6 (B) SERVICE OF SENIOR SURFACE RIGHTS BY GROUNDWATER
7 PUMPING, EITHER DIRECTLY OR VIA THE USE OF RETIMING WELLS
8 PROVIDING SURFACE FLOW DURING TIMES OF SHORTAGE;

9 (C) WHETHER MANAGEMENT BASED UPON MEASURED
10 GROUNDWATER LEVELS COULD INCREASE BASIN EFFICIENCY AND PROTECT
11 SENIOR SURFACE RIGHTS;

12 (D) WHETHER IT WOULD BE BENEFICIAL TO ASSIGN THE STATE
13 ENGINEER INCREASED MANAGEMENT RESPONSIBILITY IN THE BASIN, AND,
14 IF SO, THE NATURE AND EXTENT OF THIS RESPONSIBILITY. IN THIS REGARD,
15 THE STUDY SHALL CONSIDER, WITHOUT LIMITATION, THE IMPACT OF
16 CURRENT RESERVOIR FILL SEASON ADMINISTRATIVE PRACTICES AND
17 WHETHER SUCH PRACTICES COULD BE IMPROVED TO ALLOW INCREASED
18 EFFICIENCY IN A MANNER CONSISTENT WITH PROTECTING SENIOR RIGHTS.

19 (E) USE OF THE SOUTH PLATTE DECISION SUPPORT SYSTEM AS A
20 MANAGEMENT AND PLANNING TOOL TO MORE EFFECTIVELY MANAGE THE
21 SOUTH PLATTE RIVER SYSTEM TO FACILITATE CONJUNCTIVE USE OF
22 GROUNDWATER AND SURFACE SUPPLIES. TO THE EXTENT THE SOUTH
23 PLATTE DECISION SUPPORT SYSTEM DOES NOT CURRENTLY SUPPORT THIS
24 FUNCTIONALITY, THE STUDY SHALL INVESTIGATE THE FEASIBILITY AND
25 COST OF MAKING NECESSARY IMPROVEMENTS TO ACCOMPLISH THIS GOAL.

26 (F) THE ESTABLISHMENT OF A BASIN-WIDE NETWORK OF
27 MONITORING WELLS, A PILOT PROJECT, OR BOTH, IN A SPECIFIC LOCATION

1 TO VERIFY AND CALIBRATE EXISTING GROUNDWATER MODELS AND
2 METHODS OF CALCULATING THE DEPLETIVE EFFECTS OF WELL PUMPING
3 AND THE ACCRETIVE EFFECTS OF RECHARGE ACTIVITIES IN THE SOUTH
4 PLATTE RIVER, INCLUDING THOSE INCORPORATED IN THE SOUTH PLATTE
5 DECISION SUPPORT SYSTEM.

6 (c) THE BOARD SHALL COMMENCE THE STUDY AS SOON AS
7 PRACTICABLE AND SHALL REPORT THE RESULTS OF THE STUDY TO THE
8 GENERAL ASSEMBLY NO LATER THAN JUNE 1, 2012.

9 **SECTION 2. Act subject to petition - effective date.** This act
10 shall take effect at 12:01 a.m. on the day following the expiration of the
11 ninety-day period after final adjournment of the general assembly (August
12 10, 2011, if adjournment sine die is on May 11, 2011); except that, if a
13 referendum petition is filed pursuant to section 1 (3) of article V of the
14 state constitution against this act or an item, section, or part of this act
15 within such period, then the act, item, section, or part shall not take effect
16 unless approved by the people at the general election to be held in
17 November 2012 and shall take effect on the date of the official
18 declaration of the vote thereon by the governor.