

Second Regular Session
Seventy-second General Assembly
STATE OF COLORADO

ENGROSSED

*This Version Includes All Amendments Adopted
on Second Reading in the House of Introduction*

LLS NO. 20-0327.01 Duane Gall x4335

HOUSE BILL 20-1072

HOUSE SPONSORSHIP

Arndt and Saine, Catlin, Roberts, Titone

SENATE SPONSORSHIP

Sonnenberg and Bridges, Coram, Donovan

House Committees

Rural Affairs & Agriculture
Appropriations

Senate Committees

A BILL FOR AN ACT

101 **CONCERNING A REQUIREMENT THAT COLORADO INSTITUTIONS OF**
102 **HIGHER EDUCATION STUDY POTENTIAL USES OF EMERGING**
103 **TECHNOLOGIES TO MORE EFFECTIVELY MANAGE COLORADO'S**
104 **WATER SUPPLY, AND, IN CONNECTION THEREWITH, MAKING AN**
105 **APPROPRIATION, CONDITIONED ON THE RECEIPT OF MATCHING**
106 **FUNDS FROM GIFTS, GRANTS, AND DONATIONS.**

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://leg.colorado.gov/>.)

Water Resources Review Committee. The bill declares that new

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

HOUSE
Amended 2nd Reading
March 9, 2020

technologies, such as blockchain, telemetry, improved sensors, and advanced aerial observation platforms, can improve monitoring, management, conservation, and trading of water and enhance confidence in the reliability of data underlying water rights transactions. To advance the potential use of these new technologies, the bill:

! Authorizes and directs the university of Colorado, in collaboration with the Colorado water institute at Colorado state university, to conduct feasibility studies and pilot deployments of these new technologies to improve water management in Colorado; and

! Appropriates \$40,000 from the general fund, contingent on the university of Colorado's receipt of a matching \$40,000 in gifts, grants, and donations, for the purpose of funding the studies and pilot programs.

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

2 **SECTION 1. Legislative declaration.** (1) The general assembly
3 finds and determines that emerging new and improved technologies may
4 offer significant benefits to Colorado water users and managers by:

5 (a) Improving the monitoring, management, conservation, and
6 trading of both surface water and groundwater;

7 (b) Reducing inefficiency and waste in the process of recycling,
8 reclaiming, or disposing of produced water and wastewater; and

9 (c) Allowing parties to water rights transactions to have more
10 confidence in the data on which those transactions are based.

11 (2) Therefore, the general assembly declares that it is in the public
12 interest to authorize and direct the university of Colorado, in
13 collaboration with Colorado state university and the Colorado water
14 institute, to conduct feasibility studies and pilot deployments of these
15 technologies and to report to the general assembly on the potential of
16 these technologies to improve Colorado water management.

17 **SECTION 2.** In Colorado Revised Statutes, **add** 23-20-141 as

1 follows:

2 **23-20-141. Emerging technologies for water management -**
3 **study - report - repeal.** (1) (a) SUBJECT TO SUBSECTION (2) OF THIS
4 SECTION AND IN COLLABORATION WITH COLORADO STATE UNIVERSITY
5 AND THE COLORADO WATER INSTITUTE CREATED IN SECTION 23-31-801 OR
6 ITS SUCCESSOR, THE UNIVERSITY OF COLORADO SHALL CONDUCT
7 FEASIBILITY STUDIES AND PILOT DEPLOYMENTS OF NEW AND EMERGING
8 TECHNOLOGIES THAT HAVE POTENTIAL TO IMPROVE THE MONITORING,
9 MANAGEMENT, CONSERVATION, AND TRADING OF SURFACE WATER AND
10 GROUNDWATER AND TO REDUCE INEFFICIENCY AND WASTE IN THE
11 PROCESS OF RECYCLING, RECLAIMING, OR DISPOSING OF PRODUCED WATER
12 AND WASTEWATER.

13 (b) THE TECHNOLOGIES TO BE INVESTIGATED BY THE UNIVERSITIES
14 PURSUANT TO SUBSECTION (1)(a) OF THIS SECTION MAY INCLUDE:

15 (I) IN-SITU SENSORS TO MONITOR SURFACE AND GROUNDWATER
16 USE;

17 (II) DIRECT OR REMOTE SENSORS TO MONITOR WATER QUALITY;

18 (III) CELLULAR AND SATELLITE TELEMETRY SYSTEMS ALLOWING
19 REMOTE ACCESS TO SENSOR DATA;

20 (IV) AERIAL OBSERVATION PLATFORMS, INCLUDING
21 HIGH-ALTITUDE BALLOONS AND UNMANNED AERIAL VEHICLES;

22 (V) SATELLITE-BASED REMOTE SENSING AND WATER RESOURCE
23 FORECASTING TECHNOLOGIES; AND

24 (VI) BLOCKCHAIN-BASED DOCUMENTATION, COMMUNICATION,
25 AND AUTHENTICATION OF DATA REGARDING WATER USE, TRADING, AND
26 CONSERVATION.

27 (c) ON OR BEFORE JULY 15, 2021, AND UPON REQUEST OF THE

1 WATER RESOURCES REVIEW COMMITTEE IN ANY YEAR THEREAFTER,
2 NOTWITHSTANDING SECTION 24-1-136 (11), THE UNIVERSITIES SHALL
3 PROVIDE LIVE TESTIMONY AND A WRITTEN REPORT ON THE PROGRESS OF
4 THE STUDIES AND PILOT DEPLOYMENTS CONDUCTED PURSUANT TO THIS
5 SUBSECTION (1), INCLUDING ANY CONCLUSIONS REGARDING THE
6 POTENTIAL OF THESE TECHNOLOGIES TO IMPROVE COLORADO WATER
7 MANAGEMENT AND ANY RECOMMENDATIONS FOR ADMINISTRATIVE OR
8 LEGISLATIVE ACTION TO PROMOTE THEIR USE, TO THE WATER RESOURCES
9 REVIEW COMMITTEE OF THE GENERAL ASSEMBLY.

10 (d) ANY FEASIBILITY STUDIES OR PILOT DEPLOYMENTS MADE
11 PURSUANT TO THIS SECTION, AND ANY RECOMMENDATIONS FOR
12 ADMINISTRATIVE OR LEGISLATIVE ACTION TO PROMOTE THE USE OF THE
13 TECHNOLOGIES CONSIDERED, MUST TAKE ACCOUNT OF THE EXISTING
14 SYSTEM OF PRIOR APPROPRIATION UNDER ARTICLE XVI OF THE STATE
15 CONSTITUTION AND COLORADO WATER LAW.

16 (2) (a) THE UNIVERSITY OF COLORADO AND COLORADO STATE
17 UNIVERSITY MAY SEEK, ACCEPT, AND EXPEND GIFTS, GRANTS, OR
18 DONATIONS FROM PRIVATE OR PUBLIC SOURCES FOR THE PURPOSES OF THIS
19 SECTION. THE UNIVERSITIES SHALL NOT CONDUCT THE STUDIES OR PILOT
20 DEPLOYMENTS DESCRIBED IN SUBSECTION (1) OF THIS SECTION UNTIL THEY
21 HAVE RECEIVED AT LEAST FORTY THOUSAND DOLLARS PURSUANT TO THIS
22 SUBSECTION (2). AFTER THE UNIVERSITIES HAVE CERTIFIED TO THE STATE
23 CONTROLLER THAT THE UNIVERSITIES HAVE RECEIVED AT LEAST FORTY
24 THOUSAND DOLLARS FROM GIFTS, GRANTS, AND DONATIONS FOR THE
25 PURPOSES OF CARRYING OUT THIS SECTION, THE GENERAL ASSEMBLY
26 SHALL APPROPRIATE AN ADDITIONAL TWENTY THOUSAND DOLLARS FROM
27 EACH GENERAL FUND TO THE UNIVERSITY.

1 (b) THIS SUBSECTION (2) WILL BE REPEALED IF THE UNIVERSITIES
2 DETERMINE THAT INSUFFICIENT MONEY HAS BEEN RECEIVED TO SATISFY
3 THE CONDITION STATED IN SUBSECTION (2)(a) OF THIS SECTION. THE
4 UNIVERSITIES SHALL NOTIFY THE REVISOR OF STATUTES IN WRITING OF THE
5 DATE ON WHICH A CONDITION SPECIFIED IN THIS SUBSECTION (2) HAS
6 OCCURRED BY E-MAILING THE NOTICE TO
7 REVISOROFSTATUTES.GA@STATE.CO.US. THIS SUBSECTION (2) IS
8 REPEALED, EFFECTIVE THE SEPTEMBER 1 FOLLOWING THE DATE IDENTIFIED
9 IN THE NOTICE THAT THE CONDITION SPECIFIED IN THIS SUBSECTION (2)
10 HAS OCCURRED OR, IF THE NOTICE DOES NOT SPECIFY THAT DATE,
11 FOLLOWING THE DATE OF THE NOTICE TO THE REVISOR OF STATUTES.

12 (3) THIS SECTION IS REPEALED, EFFECTIVE JULY 1, 2022.

13 **SECTION 3.** In Colorado Revised Statutes, 23-31-801, **amend**
14 (4)(e)(V) and (4)(f); and **add** (4)(g) as follows:

15 **23-31-801. Colorado water institute - creation.** (4) It is the duty
16 of the institute to:

17 (e) Facilitate and stimulate scientific research and policy analysis
18 that:

19 (V) Examines the interconnections between climate change, water
20 supply, and water quality and provides tools water managers and
21 policymakers need to adapt to global climate change; and

22 (f) Establish and maintain a clearinghouse and archive of water
23 research, water quality, and climate projection data; AND

24 (g) COLLABORATE WITH THE UNIVERSITY OF COLORADO AND
25 COLORADO STATE UNIVERSITY IN STUDYING THE FEASIBILITY OF NEW AND
26 IMPROVED WATER-RELATED TECHNOLOGIES IN ACCORDANCE WITH
27 SECTION 23-20-141.

1 **SECTION 4.** In Colorado Revised Statutes, 23-3.3-103, **add** (9)
2 as follows:

3 **23-3.3-103. Annual appropriations - repeal.** (9) (a) THE
4 PROVISIONS OF SUBSECTION (1) OF THIS SECTION CONCERNING
5 APPROPRIATIONS FOR STUDENT FINANCIAL ASSISTANCE UNDER THIS
6 ARTICLE 3.3 DO NOT APPLY TO APPROPRIATIONS MADE FOR THE PURPOSE
7 OF CONDUCTING FEASIBILITY STUDIES AND PILOT PROGRAMS TO
8 INVESTIGATE EMERGING TECHNOLOGIES FOR WATER MANAGEMENT
9 PURSUANT TO SECTION 23-20-141.

10 (b) THIS SUBSECTION (9) IS REPEALED, EFFECTIVE JULY 1, 2022.

11 **SECTION 5.** In Colorado Revised Statutes, 23-18-308, **amend**
12 (1)(f); and **add** (1)(h) as follows:

13 **23-18-308. Fee-for-service contracts - limited purpose - repeal.**

14 (1) Subject to available appropriations, the department shall enter into
15 fee-for-service contracts for the following purposes:

16 (f) Providing services to maximize concurrent enrollment across
17 the community college system as provided in section 23-60-202.7; and

18 (h) THE CONDUCT OF FEASIBILITY STUDIES AND PILOT PROGRAMS
19 TO INVESTIGATE EMERGING TECHNOLOGIES FOR WATER MANAGEMENT
20 PURSUANT TO SECTION 23-20-141. THIS SUBSECTION (1)(h) IS REPEALED,
21 EFFECTIVE JUNE 30, 2022.

22 **SECTION 6. Appropriation.** (1) For the 2020-21 state fiscal
23 year, \$40,000 is appropriated to the department of higher education. This
24 appropriation is from the general fund. To implement this act, the
25 department may use this appropriation for the college opportunity fund
26 program to be used for limited purpose fee-for-service contracts with
27 state institutions.

1 (2) For the 2020-21 state fiscal year, \$40,000 is appropriated to
2 the department of higher education. This appropriation is from
3 reappropriated funds received from the limited purpose fee-for-service
4 contracts with state institutions under subsection (1) of this section. To
5 implement this act, the department may use this appropriation for the
6 regents of the university of Colorado and of Colorado state university.

7 **SECTION 7. Act subject to petition - effective date.** (1) Except
8 as otherwise provided in subsection (2) of this section, this act takes
9 effect at 12:01 a.m. on the day following the expiration of the ninety-day
10 period after final adjournment of the general assembly (August 5, 2020,
11 if adjournment sine die is on May 6, 2020); except that, if a referendum
12 petition is filed pursuant to section 1 (3) of article V of the state
13 constitution against this act or an item, section, or part of this act within
14 such period, then the act, item, section, or part will not take effect unless
15 approved by the people at the general election to be held in November
16 2020 and, in such case, will take effect on the date of the official
17 declaration of the vote thereon by the governor.

18 (2) Section 6 of this act shall only take effect if the university of
19 Colorado certifies in writing to the state controller that the university has
20 received at least forty thousand dollars (\$40,000) in gifts, grants, and
21 donations for the purposes of this act. After receiving this certification,
22 the state controller shall notify the joint budget committee in writing that
23 the state controller has received the certification from the university.