

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

**INTRODUCED**

LLS NO. 12-0626.01 Thomas Morris x4218

**SENATE BILL 12-107**

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**SENATE SPONSORSHIP**

**Carroll,**

**HOUSE SPONSORSHIP**

**Wilson,**

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**Senate Committees**  
Judiciary

**House Committees**

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**A BILL FOR AN ACT**

101     **CONCERNING ADDITIONAL PROTECTIONS FOR WATER RELATING TO**  
102     **HYDRAULIC FRACTURING.**

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**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 enacts the "Water Rights Protection Act", under which the Colorado oil and gas conservation commission (commission) must establish rules for:

- !       Hydraulic fracturing near radioactive materials and sites listed on the national priority list pursuant to the federal

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.*

"superfund" law; and

- ! The shut-down of hydraulic fracturing operations when monitoring equipment detects a pressure drop.

Oil and gas operators must submit water quantity reports showing projected and actual sources and amounts of water needed for hydraulically fracturing a well. Operators must also submit pre- and post-fracturing water quality reports for all active water wells located within .5 mile of oil and gas wells that will be or have been hydraulically fractured. This information will be posted on the commission's web site. Operators cannot inject into the ground any chemical compound that would cause cancer.

In addition to existing financial assurances, each operator that engages in a high-risk hydraulic fracturing treatment must take out an environmental bond that would be forfeited if the operator's operations cause any damage to water rights.

Subject to listed affirmative defenses, an operator is presumed to be responsible for the pollution of a water supply that is within .5 mile of a line between the well head and the surface projection of the bottom hole location of the well, if the pollution occurred within 6 months after the completion of the hydraulic fracturing of the well. Hydraulic fracturing would be prohibited within .5 mile of any surface water, including a pond, reservoir, or other natural or artificial impoundment or stream, ditch, or other artificial waterway, unless the operator uses a closed-loop system.

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

2 **SECTION 1. Legislative declaration.** (1) The general assembly  
3 hereby finds and declares that:

4 (a) Energy exploration by means of hydraulic fracturing is a topic  
5 of increasing interest and significance in Colorado;

6 (b) Energy exploration by means of hydraulic fracturing should be  
7 conducted in a responsible way that ensures the safety of Colorado  
8 residents and Colorado communities;

9 (c) Water quality and an adequate supply of water are essential to  
10 Colorado's economy and are topics of great concern to Colorado's cities  
11 and towns, Colorado's agricultural economy, and the outdoor recreation

1 and tourism for which Colorado is known across the nation and  
2 throughout the world;

3 (d) To follow up on findings made in the October 2011 "Colorado  
4 Hydraulic Fracturing State Review":

5 (I) The Colorado oil and gas conservation commission and the  
6 division of water resources should evaluate available sources of water for  
7 use in hydraulic fracturing; and

8 (II) The Colorado oil and gas conservation commission should  
9 evaluate naturally occurring radioactive materials in wastes associated  
10 with hydraulic fracturing operations;

11 (e) According to the April 2011 report addressing chemicals used  
12 in hydraulic fracturing of the United States house of representatives  
13 committee on energy and commerce, between 2005 and 2009, hydraulic  
14 fracturing companies in Colorado used more than:

15 (I) 1.5 million gallons of fracturing products containing at least  
16 one carcinogen; and

17 (II) 375,000 gallons of fracturing products containing at least one  
18 chemical regulated under the "Safe Drinking Water Act of 1974";

19 (f) The United States environmental protection agency has called  
20 the use of diesel fuel in fracturing fluids the greatest threat to  
21 underground sources of drinking water;

22 (g) The United States secretary of energy advisory board shale gas  
23 production subcommittee has stated that there is no technical or economic  
24 reason to use diesel fuel in fracturing fluids, and has further  
25 recommended that manifests be used to document all transfers of water  
26 among different locations; and

27 (h) It is in the interest of all Colorado water right holders to

1 maintain the value of those water rights.

2 **SECTION 2.** In Colorado Revised Statutes, **add** 34-60-130 as  
3 follows:

4 **34-60-130. Hydraulic fracturing - water rights protection.**

5 (1) **Short title.** THIS SECTION SHALL BE KNOWN AND MAY BE CITED AS  
6 THE "WATER RIGHTS PROTECTION ACT".

7 (2) **Contamination protocols.** THE COMMISSION SHALL  
8 ESTABLISH RULES FOR:

9 (a) HYDRAULIC FRACTURING NEAR:

10 (I) RADIOACTIVE MATERIALS; AND

11 (II) SITES LISTED ON THE NATIONAL PRIORITY LIST PURSUANT TO  
12 THE FEDERAL "COMPREHENSIVE ENVIRONMENTAL RESPONSE,  
13 COMPENSATION, AND LIABILITY ACT OF 1980", 42 U.S.C. SEC. 9601 ET  
14 SEQ., AS AMENDED; AND

15 (b) SHUT-DOWN OF HYDRAULIC FRACTURING OPERATIONS WHEN  
16 PRESSURE READINGS INDICATE THAT THE HYDRAULIC FRACTURING FLUID  
17 HAS ENTERED A NONTARGETED AREA OF THE GEOLOGIC FORMATION.

18 (3) **Water quantity reporting.** (a) BEFORE CONDUCTING A  
19 HYDRAULIC FRACTURING TREATMENT, AN OPERATOR SHALL PREPARE AND  
20 ELECTRONICALLY SUBMIT TO THE COMMISSION A WATER QUANTITY  
21 REPORT, IN A FORMAT AND BY A DEADLINE SPECIFIED BY THE COMMISSION,  
22 THAT INCLUDES:

23 (I) A GOOD-FAITH ESTIMATE OF WHERE AND HOW THE OPERATOR  
24 INTENDS TO ACQUIRE THE REQUISITE WATER FOR THE HYDRAULIC  
25 FRACTURING TREATMENT; AND

26 (II) A GOOD-FAITH ESTIMATE OF THE AMOUNT OF WATER THAT  
27 WILL BE REQUIRED FOR THE HYDRAULIC FRACTURING TREATMENT.

1           (b) WITHIN SIXTY DAYS FOLLOWING THE CONCLUSION OF A  
2       HYDRAULIC FRACTURING TREATMENT AND ANNUALLY THEREAFTER IF  
3       MORE WATER IS REQUIRED FOR THE DRILLING OF OR PRODUCTION FROM A  
4       WELL, AN OPERATOR SHALL PREPARE AND ELECTRONICALLY SUBMIT TO  
5       THE COMMISSION A WATER QUANTITY REPORT, IN A FORMAT AND BY A  
6       DEADLINE SPECIFIED BY THE COMMISSION, THAT INCLUDES:

7           (I) WHERE AND HOW THE OPERATOR ACTUALLY ACQUIRED THE  
8       REQUISITE WATER FOR THE HYDRAULIC FRACTURING TREATMENT; AND

9           (II) THE AMOUNT OF WATER ACTUALLY USED IN THE HYDRAULIC  
10      FRACTURING TREATMENT.

11          (c) THE COMMISSION SHALL PROMPTLY POST THE WATER  
12      QUANTITY REPORTS ON ITS WEB SITE. THE REPORTS MUST BE SEARCHABLE  
13      BY OPERATOR, WELL LOCATION, AND OTHER FACTORS ESTABLISHED BY  
14      THE COMMISSION, AND MUST ALLOW THE PUBLIC TO EASILY FIND THE  
15      TOTAL AMOUNT OF WATER USED FOR EACH WELL.

16          (4) **Water quality reporting.** (a) (I) BEFORE THE COMMISSION  
17      AUTHORIZES AN OPERATOR TO HYDRAULICALLY FRACTURE A WELL, THE  
18      OPERATOR SHALL COLLECT WATER QUALITY SAMPLES RELATED TO  
19      POTENTIAL IMPACTS FROM HYDRAULIC FRACTURING, AS DETERMINED BY  
20      THE COMMISSION, FROM ALL ACTIVE WATER WELLS LOCATED WITHIN  
21      ONE-HALF MILE OF THE OIL AND GAS WELL. THE OPERATOR SHALL  
22      COLLECT WATER QUALITY SAMPLES RELATED TO POTENTIAL IMPACTS  
23      FROM HYDRAULIC FRACTURING BY THE FIRST, THIRD, AND SIXTH  
24      ANNIVERSARY OF COMPLETION OF THE HYDRAULIC FRACTURING,  
25      PURSUANT TO A SCHEDULE ESTABLISHED BY AND AS DETERMINED BY THE  
26      COMMISSION, FROM ALL WATER WELLS LOCATED WITHIN ONE-HALF MILE  
27      OF THE OIL AND GAS WELL. THE OPERATOR SHALL SUBMIT THE SAMPLES IN

1 A WATER QUALITY REPORT TO THE COMMISSION, IN A FORMAT AND BY A  
2 DEADLINE ESTABLISHED BY THE COMMISSION.

3 (II) THE COMMISSION SHALL PROMPTLY POST THE WATER QUALITY  
4 REPORTS ON ITS WEB SITE. THE REPORTS MUST BE SEARCHABLE BY  
5 OPERATOR, WELL LOCATION, AND OTHER FACTORS ESTABLISHED BY THE  
6 COMMISSION.

7 (b) (I) AN OPERATOR SHALL NOT INSERT INTO THE GROUND ANY  
8 QUANTITY OF CHEMICALS KNOWN TO CAUSE OR REASONABLY  
9 ANTICIPATED TO CAUSE CANCER, INCLUDING:

10 (A) DIESEL FUEL;

11 (B) BENZENE, TOLUENE, ETHYLBENZENE, OR XYLENE; AND

12 (C) ANY SUBSTANCE INCLUDED IN THE MOST RECENT "REPORT ON  
13 CARCINOGENS" RELEASED BY THE NATIONAL TOXICOLOGY PROGRAM OF  
14 THE UNITED STATES DEPARTMENT OF HEALTH AND HUMAN SERVICES.

15 (II) NOTHING IN THIS PARAGRAPH (b) PROHIBITS THE USE OR  
16 REINJECTION OF FLOW-BACK FLUID.

17 (5) **Financial assurance.** (a) IN ADDITION TO THE FINANCIAL  
18 ASSURANCES OF SECTION 34-60-106 (3.5) AND (13), EACH OPERATOR THAT  
19 ENGAGES IN A HIGH-RISK HYDRAULIC FRACTURING TREATMENT SHALL  
20 TAKE OUT AN ENVIRONMENTAL BOND OR OTHER FINANCIAL ASSURANCE  
21 LISTED IN SECTION 34-60-106 (13) THAT WOULD BE FORFEITED IF THE  
22 OPERATOR'S OPERATIONS CAUSE ANY DAMAGE TO ABSOLUTE OR DECREED  
23 CONDITIONAL WATER RIGHTS OR NONTRIBUTARY WATER. THE  
24 COMMISSION SHALL PROMULGATE RULES TO ESTABLISH THE REQUIRED  
25 AMOUNT AND TYPE OF ASSURANCE. THE RULES MUST ALLOW AN  
26 OPERATOR TO BOND PER HIGH-RISK WELL OR FOR ALL OF THE OPERATOR'S  
27 WELLS IN OPERATION IN THE STATE AT THE OPERATOR'S ELECTION.

1 (b) AS USED IN THIS SUBSECTION (5), "HIGH-RISK HYDRAULIC  
2 FRACTURING TREATMENT" MEANS A HYDRAULIC FRACTURING TREATMENT  
3 THAT IS LOCATED WITHIN ONE-HALF MILE OF:

4 (I) ANY SITE LISTED ON THE NATIONAL PRIORITY LIST PURSUANT  
5 TO THE FEDERAL "COMPREHENSIVE ENVIRONMENTAL RESPONSE,  
6 COMPENSATION, AND LIABILITY ACT OF 1980", 42 U.S.C. SEC. 9601 ET  
7 SEQ., AS AMENDED;

8 (II) NATURALLY OR NONNATURALLY OCCURRING RADIOACTIVE  
9 MATERIAL EXPLOSIVES, INCLUDING MUNITIONS;

10 (III) SURFACE WATER; OR

11 (IV) FEDERALLY DESIGNATED WILDERNESS.

12 (6) **Rebuttable presumption.** (a) UNLESS REBUTTED BY ONE OR  
13 MORE OF THE DEFENSES ESTABLISHED IN PARAGRAPH (b) OF THIS  
14 SUBSECTION (6), AN OPERATOR IS PRESUMED TO BE RESPONSIBLE FOR THE  
15 POLLUTION OF A WATER SUPPLY THAT IS WITHIN ONE-HALF MILE OF A LINE  
16 BETWEEN THE WELL HEAD AND THE SURFACE PROJECTION OF THE BOTTOM  
17 HOLE LOCATION OF THE WELL, IF THE POLLUTION OCCURRED WITHIN SIX  
18 MONTHS AFTER THE COMPLETION OF THE HYDRAULIC FRACTURING OF THE  
19 WELL.

20 (b) IN ORDER TO REBUT THE PRESUMPTION OF LIABILITY  
21 ESTABLISHED IN PARAGRAPH (a) OF THIS SUBSECTION (6), THE OPERATOR  
22 MUST AFFIRMATIVELY PROVE ONE OF THE FOLLOWING DEFENSES:

23 (I) THE POLLUTION EXISTED PRIOR TO THE HYDRAULIC  
24 FRACTURING, AS DETERMINED BY A PREDRILLING OR PREALTERATION  
25 SURVEY, INCLUDING A WATER QUALITY REPORT SUBMITTED PURSUANT TO  
26 PARAGRAPH (a) OF SUBSECTION (4) OF THIS SECTION;

27 (II) THE SURFACE OWNER OR WATER WELL OWNER FAILED TO

1 ALLOW THE OPERATOR ACCESS TO CONDUCT A PREDRILLING OR  
2 PREALTERATION SURVEY;

3 (III) THE WATER SUPPLY IS NOT WITHIN ONE-HALF MILE OF THE  
4 WELL;

5 (IV) THE POLLUTION OCCURRED MORE THAN SIX MONTHS AFTER  
6 INITIAL HYDRAULIC FRACTURING OF THE WELL; OR

7 (V) THE POLLUTION OCCURRED AS THE RESULT OF SOME CAUSE  
8 OTHER THAN THE HYDRAULIC FRACTURING OF THE WELL.

9 (7) **Water-based setbacks.** (a) AN OPERATOR SHALL NOT  
10 CONDUCT HYDRAULIC FRACTURING WITHIN ONE-HALF MILE OF ANY  
11 SURFACE WATER, INCLUDING A POND, RESERVOIR, OR OTHER NATURAL OR  
12 ARTIFICIAL IMPOUNDMENT OR STREAM, DITCH, OR OTHER ARTIFICIAL  
13 WATERWAY UNLESS THE OPERATOR USES A CLOSED-LOOP SYSTEM.

14 (b) NOTHING IN THIS SECTION PROHIBITS THE COMMISSION OR A  
15 LOCAL GOVERNMENT FROM ADOPTING MORE STRINGENT LOCAL  
16 PROTECTIONS.

17 **SECTION 3. Applicability.** The provisions of this act apply to  
18 acts occurring on or after the effective date of this act.

19 **SECTION 4. Safety clause.** The general assembly hereby finds,  
20 determines, and declares that this act is necessary for the immediate  
21 preservation of the public peace, health, and safety.