

Safe Water in Schools Act

HB17-1306

ANNUAL REPORT TO LEGISLATURE

February
2019



Foreword

The Water Quality Control Division of the Colorado Department of Public Health and Environment is pleased to submit the second annual report for HB17-1306 - Safe Water In Schools Act for the period of January 2018 through January 2019. This report covers all of program year one and the first half of year two. The legislation specifically requires the annual report to document:

- A. The number, types, names and location of public schools that have applied for grants.
- B. The number of grants that have been issued; the individual amounts and total amount of grant money awarded; and the number, types, names and locations of public schools that received grants.
- C. A summary of the test results.
- D. Any legislative proposals that the Department believes to be warranted that would provide financial assistance to public schools to facilitate the testing for or remediation of high lead levels in drinking water.

The annual report is due each February 1 for years 2018 - 2021 and is provided to the following the House [Health, Insurance & Environment Committee](#) and Senate [Health & Human Services Committee](#).



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February 1, 2019

Executive summary

The “Safe Water in Schools Act” (HB17-1306) provides funding for eligible public schools to test for the presence of lead in drinking water. The legislation required the Water Quality Control Division of the Colorado Department of Public Health and Environment to develop and implement the program. Subsequently, the division completed a robust stakeholder process and conducted a rulemaking hearing before the Water Quality Control Commission to establish the program and issue grants to schools for lead testing. In the first year of the program (SFY 2017-18), the division issued a request for applications on November 14, 2017 and received 23 applications totalling \$76,560 from two school districts. The second year of the program (SFY 2018-19), the division received 30 applications totalling \$114,021. Since the amount of funding requested has been below the amount available, the division has done significant outreach via social media, press release, email announcements, site visits and targeted correspondence to market the program and communicate the importance of lead testing in schools. In turn, all applicants have been funded because the legislation allocated up to \$300k for grants in each fiscal year. Combined, the first two years of the program have provided participating schools the ability to sample 3,398 fixtures in 53 schools that serve 23,288 students. Out of the 53 applications received, 41 were elementary and 12 were other schools. See Appendix A and B for a complete list of applications in the first two years of the program.

The complete water quality test results are on the Water Quality Control Division website at www.colorado.gov/cdphe/school-lead-testing-results. At the time of this report, the division has received results for 1,804 initial samples, 82 or 4.5 percent of which exceeded the recommended action level (15 parts per billion) for lead, with the remaining 1,722 or 95.5 percent of samples below the recommended action level (15 ppb). For the samples that exceeded the action level, the grant recipients implemented corrective actions to reduce the lead exposure risk. This included the fixture being replaced, fixture was taken out of service, valve(s) shut off, or posting a sign stating “Do Not Drink.”

Background

Under the Colorado Primary Drinking Water Regulations (Regulation 11), and specifically under the Lead and Copper Rule, regulated water suppliers are required to sample lead at designated tier sites. These tier sites are typically single or multi-family homes. Schools that receive water directly from a city or other public water utility are not separately regulated under the Lead and Copper Rule, or for that matter, any other part of the Safe Drinking Water Act since the utility is the regulated entity. As a result, these schools are not required to sample for lead in their drinking water. Lead testing in schools is especially important because of the increased risk of delays in physical and mental development, lower IQ levels and brain damage in young children and infants who may be exposed to lead. Because of the amount of time children spend in schools and the serious health risks associated with lead exposure, it is critical that schools, particularly elementary schools, know if lead is present in their drinking water. According to the Centers for Disease Control and Prevention April 2004 edition of Morbidity Mortality Weekly Review, “No safe blood level has been identified and all sources of lead exposure for children should be controlled or eliminated. Lead concentrations in drinking water should be below the U.S. Environmental

Protection Agency’s action level of 15 ppb.” The division has also opted to use the value of 15 ppb in the grant programs lead testing protocol. With the publication of the revised 3Ts Guidance from EPA in late 2018, the division is evaluating if this threshold will continue to be used in the future.

Sampling in appropriate locations and utilizing the proper sampling procedures is essential to get high quality and accurate results for lead testing. Therefore, to be eligible for grant funding, schools must develop a sampling plan that considers the location of plumbing fixtures, type of plumbing materials (lead lines or lead solder) and how water flows in the school. The sampling plan is designed to assist with actual sampling, the interpretation of results and determination of proper remediation steps, if warranted.

The Safe Water in Schools Act helps schools with the cost of lead testing through grant funding. The legislation authorized up to \$300,000 for grants each state fiscal year for three years, pending available funds in the Water Quality Improvement Fund. The Water Quality Improvement Fund was originally created in 2006 by the General Assembly for the purpose of improving water quality in Colorado by providing grant funds for water quality improvement projects using civil penalties from water quality violations. The fund was amended in 2011 by HB11-1026 to authorize grants for stormwater management training and best practices training to prevent or reduce the pollution of state waters. In 2017, the fund was amended again to include funding for the Safe Water in Schools Act. Eligible public schools include 1) public schools not registered as a public water system; and 2) public schools that have not already tested for lead under the requirements of the 1991 federal Lead and Copper Rule or are not currently testing for lead. Grant recipients are required to follow the division’s established lead testing protocol and submit results to their local public health agency, supplier of water, school board and the division.

Rulemaking hearing

The Water Quality Control Commission is the administrative agency responsible for developing water quality policy in Colorado in a manner that implements the broader policies set forth by the legislature in the Colorado Water Quality Control Act, or in this case, the expanded use of the Water Quality Improvement Fund. Rulemaking is the formal process by which control regulations, water quality classifications, standards and all other binding regulations are adopted. Regulation 55, State Funded Water and Wastewater Infrastructure Programs, is the commission’s regulation that provides rules for how the division must administer and implement the Water Quality Improvement Fund. When use of the fund is expanded beyond what is included in the current regulation, the division must conduct a rulemaking hearing to add the additional use. In short, the rulemaking hearing is a public process where the division engages stakeholders to create a thorough proposal for the commission to act upon. Because HB17-1306 added a new program, the division initiated a rulemaking hearing to amend Regulation 55 so the division could issue grants for lead testing. Below is the timeline of events leading to the commission adoption of revisions to the regulation.

Timeline

Date	Activity
May 2017	The division developed draft public school lead testing program proposal, including the testing protocol, to initiate the stakeholder process. In addition, a website for the proposed lead testing program was developed to inform stakeholders.
June 8, 2017	HB17-1306 - Signed into law.
June 22 and June 28, 2017	The division held two stakeholder meetings to solicit input on the draft public school lead testing program.
July 10, 2017	Public comments based on the draft public school lead testing program due. The division received approximately 34 comments most of which involved clarity of the program and sampling process. Very few comments were about program implementation.
July 20, 2017	The division held the final stakeholder meeting to outline the final proposal to the commission for revising Regulation 55.
Aug. 8, 2017	Commission publicly noticed the rulemaking hearing for the public school lead testing program.
Sept. 20, 2017	Written comments from the division due to the commission.
Oct. 11, 2017	Responsive comments from public due to commission. The division received one comment that requested clarification with respect to the tie breaking criteria.
Nov. 1, 2017	The division responded to comments and provided additional clarity regarding tie-breaking criteria for funding in the regulation.
Nov. 13, 2017	The commission conducted the rulemaking hearing and approved the adoption of proposed revisions to include the public school lead testing program in Regulation 55.
Dec. 31, 2017	Revisions to Regulation 55 became effective.

Stakeholder process

As previously mentioned, the division initiated a stakeholder process to develop a strong program that met the intent of the legislation and the commission's procedural requirements for revising the regulation. The division solicited stakeholder participation by publishing in various newsletters, sending emails to a large distribution group consisting of local water providers, local public health agencies, counties, non-governmental organizations, along with direct contact with schools and school associations both through the division's email distribution list and also the Colorado Department of Education.

Stakeholders and the division agreed that a streamlined review process should be utilized by the division to evaluate grant applications and prioritize funding requests in the event that the total dollar amount requested exceeded the funds available, i.e. \$300,000 in any one year. Three priorities were identified from the definitions within the legislation and then tie-breaking criteria were developed for use if needed. The three priorities are:

1. Oldest elementary schools.
2. Oldest schools that are not elementary schools.
3. Other schools.

The tie-breaking criteria involves considerations of financial affordability and readiness to proceed. The financial affordability criteria includes the percentage of students eligible for free and reduced cost lunches and the school district's median household income. Please see Appendix C for the final prioritization criteria.

Program Results

Below is a summary of applications received, grants issued, along with a summary of results, if available, for each fiscal year the program has issued funding.

PROGRAM YEAR ONE: SFY 2017-18

Grant applications

The division received 23 applications from two school districts. Appendix A is the complete list of applications received in SFY 2017-18.

Number of grants issued

The division issued grants to all 23 applications, which totaled \$76,560. Combined, these applications have sampled 1804 fixtures in 23 schools that serve a population of 7,726 students. Appendix A is the complete list of grants issued in SFY 2017-18.

Summary of test results

The division received lead test results from all 23 schools that participated in SFY 2017-18. The division has created an automated process for grantees to submit results based on the approved lead testing sampling plan that was submitted as part of their application. This allows schools to accurately submit their lab results to the division. Sample results for lead samples need to be analyzed by a state certified lab and results should be received by the division within 90 days of being sent to the lab. However, this time line can vary depending on the certified lab used and the wait time to process samples.

Internal plumbing fixture results for SFY 2017-18:

- Total number of samples collected: 1,893.
- Total number of initial samples collected from fixtures: 1,804.
- Number of follow-up samples collected: 73.
- Number of remediation and other samples collected: 16.
- Number of samples that exceeded the recommended action level (15 ppb): 82.
- Percentage of samples that exceed the recommended action level (15 ppb): 4.5%.
- Range of lead testing values: <2.00 ppb to 398.90 ppb.
- Number of corrective actions taken: 82.

All internal plumbing fixture sample results that came back above the recommended action level (15 ppb) had a corrective actions taken. These actions include: remediation (fixture replaced), fixture was taken out of service (valve was shut off) or a sign was posted stating “Do Not Drink.”

Service line results for SFY 2017-18:

With respect to the schools service lines, All 23 schools sampled for lead. In all, 43 service line samples were collected with lead results ranging from <2.00 ppb to 768.80 ppb of lead. Although some results are extremely high concentrations, many of the sample results, if not all, have been deemed invalid and not representative. This is a result of the schools not following the state’s sampling protocol. To prevent any further invalid test results, the division has provided additional technical assistance for proper sampling techniques.

The complete sampling locations and results for each school are posted on the division’s website at www.colorado.gov/cdphe/school-lead-testing-results.

PROGRAM YEAR TWO: SFY 2018-19

Grant applications

The division received 30 applications from six school districts. Appendix B is the complete list of applications received in SFY 2018-19.

Number of grants issued

The division issued grants to all 30 applications, which totaled \$114,021.00 . Combined these applications will sample 1618 fixtures in 30 schools that serve a student population of 15,562. Appendix B is the complete list of grants issued in SFY 2018-19.

Summary of test results

At the time of this report, the division has not received any lead test results for SFY 2018-19. These results will be reported in the 2020 report.

Outreach efforts

In order to continue to promote the grant program for SFY 2018-19, the division conducted numerous outreach efforts. These efforts included, staffing booths at conferences, presenting at conferences and local health meetings, individual outreach such as site visits and phone calls, partnering with the Colorado Department of Education and other agencies to publish articles in newsletters and send out numerous email announcements. In all, the division made contact with over 14,000 individuals.

During the initial request for applications in SFY 2018-19 the division received 11 grant applications. The division’s extensive outreach efforts yielded an additional 19 grant applications.

Legislative proposals

The division is not requesting any legislative proposal for 2019. The data suggests that most of the lead action level exceedances are a result of problems with fixtures, which are relatively inexpensive to replace. Further, the division only has one year of sample results and would like to have an additional year to evaluate any trends or needs prior to making any further proposals.

Appendices

- A. Program year one - SFY 2017-18 application and awards.
- B. Program year two - SFY 2018-19 applications and awards.
- C. Prioritization criteria.

APPENDIX A - Program year one - SFY17-18 Lead testing applications and awards

#	School Name	School District	School Type	School Address	\$ Amount Requested	\$ Amount Awarded
1	Byers Pre-K-12	Byers SD	Pre-K - 12	444 East Front Street Byers, CO	\$ 5,000.00	\$ 5,000.00
2	Berthoud Elementary School	Thompson SD	Elementary	560 Bunyan Avenue Berthoud, CO 80513	\$ 3,400.00	\$ 3,400.00
3	BF Kitchen Elementary School	Thompson SD	Elementary	915 Deborah Drive Loveland, CO 80537	\$ 2,510.00	\$ 2,510.00
4	Big Thompson Elementary School	Thompson SD	Elementary	7702 West Hwy 24 Loveland, CO 80537	\$ 2,705.00	\$ 2,705.00
5	Bill Reed Middle School	Thompson SD	Middle	370 West 4th Street Loveland, CO 80537	\$ 3,770.00	\$ 3,770.00
6	Carrie Martin Elementary School	Thompson SD	Elementary	4129 Joni Lane Loveland, CO 80537	\$ 2,795.00	\$ 2,795.00
7	Centennial Elementary School	Thompson SD	Elementary	1555 West 37th Street Loveland, CO 80538	\$ 3,860.00	\$ 3,860.00
8	Conrad Ball Middle School	Thompson SD	Middle	2660 North Monroe Ave Loveland, CO 80538	\$ 3,665.00	\$ 3,665.00
9	Cottonwood Plains Elementary School	Thompson SD	Elementary	525 Turman Drive Fort Collins, CO 80525	\$ 4,025.00	\$ 4,025.00
10	Garfield Elementary School	Thompson SD	Elementary	720 Colorado Avenue Loveland, CO 80537	\$ 2,690.00	\$ 2,690.00
11	Ivy Stockwell Elementary School	Thompson SD	Elementary	175 5th Street Berthoud, CO 80513	\$ 2,870.00	\$ 2,870.00

#	School Name	School District	School Type	School Address	\$ Amount Requested	\$ Amount Awarded
12	Lincoln Elementary School	Thompson SD	Elementary	3312 North Douglas Avenue Loveland, CO 80538	\$ 3,065.00	\$ 3,065.00
13	Mary Blair Elementary School	Thompson SD	Elementary	860 East 29th Street Loveland, CO 80538	\$ 3,680.00	\$ 3,680.00
14	Monroe Elementary School	Thompson SD	Elementary	1500 North Monroe Avenue Loveland, CO 80538	\$ 3,560.00	\$ 3,560.00
15	Namaqua Elementary School	Thompson SD	Elementary	209 North Namaqua Avenue Loveland, CO 80537	\$ 3,680.00	\$ 3,680.00
16	Sarah Milner Elementary School	Thompson SD	Elementary	743 Jocelyn Drive Loveland, CO 80537	\$ 3,125.00	\$ 3,125.00
17	Stansberry Elementary School	Thompson SD	Elementary	407 East 42nd Street Loveland, CO 80538	\$ 2,915.00	\$ 2,915.00
18	Truscott Elementary School	Thompson SD	Elementary	211 West 6th Street Loveland, CO 80537	\$ 2,435.00	\$ 2,435.00
19	Turner Middle School	Thompson SD	Middle	950 Massachusetts Avenue Berthoud, CO 80513	\$ 2,975.00	\$ 2,975.00
20	Van Buren Elementary School	Thompson SD	Elementary	1811 West 15th Street Loveland, CO 80538	\$ 3,065.00	\$ 3,065.00
21	Walt Clark Middle School	Thompson SD	Middle	2605 Carlisle Drive Loveland, CO 80537	\$ 3,800.00	\$ 3,800.00
22	Winona Elementary School	Thompson SD	Elementary	201 South Boise Loveland, CO 80537	\$ 3,995.00	\$ 3,995.00
23	Laurene Edmondson ES	Thompson SD	Elementary	307 W 49th St, Loveland, CO 80538	\$ 2,975.00	\$ 2,975.00
Totals					\$ 76,560.00	\$ 76,560.00

APPENDIX B - Program year two - SFY18-19 Lead testing applications and awards

#	School Name	School District	School Type	School Address	\$ Amount Requested	\$ Amount Awarded
1	Animas Valley Elementary School	Durango 9-R SD	Elementary	373 Hermosa Rd. Durango, CO 81301	\$ 3,971.00	\$ 3,971.00
2	Berthoud High School	Thompson SD	High School	255 S. Cleveland Ave. Loveland, CO	\$ 4,055.00	\$ 4,055.00
3	Chatfield Elementary School	Mesa County Valley 51 SD	Elementary	3188 D 1/2 Rd. Grand Junction, CO 81504	\$ 3,800.00	\$ 3,800.00
4	Chipeta Elementary School	Mesa County Valley 51 SD	Elementary	950 Chipeta Ave. Grand Junction, CO 81501	\$ 3,550.00	\$ 3,550.00
5	Coyote Ridge Elementary School	Thompson SD	Elementary	7115 Avondale Rd. Fort Collins, CO 80525	\$ 3,365.00	\$ 3,365.00
6	Crested Butte Community School	Gunnison Watershed RE-1J SD	Kindergarten to High School	818 Red Lady Ave. Crested Butte, CO 81224	\$ 5,000.00	\$ 5,000.00
7	Gunnison Community School	Gunnison Watershed RE-1J SD	Elementary /Middle	1099 N. 11th St. Gunnison, CO 81230	\$ 4,800.00	\$ 4,800.00
8	Gunnison High School	Gunnison Watershed RE-1J SD	High School	800 W. Ohio Ave. Gunnison, CO 81230	\$ 4,300.00	\$ 4,300.00
9	Harold Ferguson High School	Thompson SD	High School	1101 Hilltop Dr. Loveland, CO 80537	\$ 2,375.00	\$ 2,375.00
10	High Plains School	Thompson SD	Elementary /Middle	4255 Buffalo Mountain Dr. Loveland, CO 80538	\$ 4,070.00	\$ 4,070.00
11	Lake City Community School	Hinsdale County SD	Elementary to High School	614 N. Silver St. Lake City, CO 81235	\$ 2,842.00	\$ 2,842.00
12	Lake Preschool & Kindergarten	Gunnison Watershed RE-1J SD	Preschool & Kindergarten	800 N. Boulevard St, Gunnison, CO 81230	\$ 3,030.00	\$ 3,030.00
13	Loveland High School	Thompson SD	High School	920 W. 29th St. Loveland, CO 80537	\$ 5,000.00	\$ 5,000.00

#	School Name	School District	School Type	School Address	\$ Amount Requested	\$ Amount Awarded
14	Lucille Erwin Middle School	Thompson SD	Middle School	4700 Lucerne Ave. Loveland, CO 80538	\$ 3,890.00	\$ 3,890.00
15	Mountain View High School	Thompson SD	High School	3500 Mountain Lion Dr. Loveland, CO 80537	\$ 5,000.00	\$ 5,000.00
16	Needham Elementary School	Durango 9-R SD	Elementary	2425 W. 3rd Ave. Durango, CO 81301	\$ 4,328.00	\$ 4,328.00
17	New Emerson Elementary School	Mesa County Valley 51 SD	Elementary	2660 Unsweep Ave. Grand Junction, CO 81503	\$ 2,700.00	\$ 2,700.00
18	Park Elementary School	Durango 9-R SD	Elementary	510 E. 6th Ave. Durango, CO 81301	\$ 4,328.00	\$ 4,328.00
19	Pathways School	Gunnison Watershed RE-1J SD	High School	800 N. Boulevard St, Gunnison, CO 81230	\$ 2,150.00	\$ 2,150.00
20	Pear Park Elementary School	Mesa County Valley 51 SD	Elementary	432 30 1/4 Rd. Grand Junction, CO 81504	\$ 4,000.00	\$ 4,000.00
21	Pinnacle Charter School	Charter School Institute	Elementary to High School	1001 W. 84th Ave Federal Heights, CO 80260	\$ 2,359.00	\$ 2,359.00
22	Pomona Elementary School	Mesa County Valley 51 SD	Elementary	588 25 1/2 Rd. Grand Junction, CO 81505	\$ 3,850.00	\$ 3,850.00
23	Ponderosa Elementary School	Thompson SD	Elementary	4550 Florence Dr. Loveland, CO 80538	\$ 4,370.00	\$ 4,370.00
24	Riverview Elementary School	Durango 9-R SD	Elementary	2900 Mesa Ave. Durango, CO 81301	\$ 4,328.00	\$ 4,328.00
25	Rocky Mountain Elementary School	Mesa County Valley 51 SD	Elementary	3260 D 1/2 Rd. Clifton, CO 81520	\$ 4,000.00	\$ 4,000.00
26	Scenic Elementary School	Mesa County Valley 51 SD	Elementary	451 W Scenic Dr. Grand Junction, CO 81507	\$ 2,650.00	\$ 2,650.00

#	School Name	School District	School Type	School Address	\$ Amount Requested	\$ Amount Awarded
27	Thompson Valley High School	Thompson SD	High School	1669 Eagle Dr. Loveland, CO 80537	\$ 4,610.00	\$ 4,610.00
28	Thunder Mountain Elementary School	Mesa County Valley 51 SD	Elementary	3063 F 1/2 Rd. Grand Junction, CO 81504	\$ 3,750.00	\$ 3,750.00
29	Tope Elementary School	Mesa County Valley 51 SD	Elementary	2220 N. 7th St. Grand Junction, CO 81501	\$ 4,050.00	\$ 4,050.00
30	Wingate Elementary School	Mesa County Valley 51 SD	Elementary	351 S Camp Rd. Grand Junction, CO 81507	\$ 3,500.00	\$ 3,500.00
Totals					\$ 114,021.00	\$ 114,021.00

APPENDIX C - Prioritization criteria

PRIORITIZATION FACTOR		POINTS
School age eligibility based on originally constructed date (not the average age of the buildings)		
1	Oldest school*	1 point per year from date of original construction to the year the RFA is introduced.

TIE BREAKER		POINTS
Financial /Affordability		
1	Percentage of students eligible for the free/reduced lunch program per school**	
	100% - 90%	50
	89% - 80%	40
	79% - 70%	30
	69% - 60%	20
	59% - 50%	10
	49% - 25%	5
	Less than 25%	0

School District Median Household Income (MHI)		
2	Lowest district MHI***	Schools will be ranked from lowest district MHI to the highest district MHI with the lowest taking priority.

Readiness to Proceed		
3	The time a school can start the lead testing from the date of the award letter.	
	≤ 4 weeks	5
	> 4 weeks	0

*Data will be confirmed with Colorado Department of Education's BEST program facility assessment.

** The Free and Reduced Lunch Program totals are calculated annually upon the fall pupil membership data as collected by the Colorado Department of Education.

***The school district MHI is calculated using the latest 5 year American Community Survey data collected by the United States Census Bureau. Institute charter schools will be assigned the state average.

NOTE: Projects are funded based on the highest points in prioritization factor 1. In the event that two or more projects are tied, the highest total in prioritization factor 2 scores will be used to break the tie. Should a tie between projects remain after sorting by the Financial Affordability scores, the School District MHI will be reviewed. Should a tie still remain, the Readiness to Proceed scores will be ranked from highest to lowest.