

Program Evaluation

Public Water and Subdivisions Bureau

Department of Environmental Quality



WATER POLICY INTERIM COMMITTEE

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Introduction

Montana law requires the Water Policy Interim Committee to conduct program evaluations of the agencies under the committee's oversight.¹

The WPIC allocated 272 hours of staff time to evaluate the four agency programs under committee oversight during the 2015-16 interim. This evaluation generally covers the Public Water and Subdivisions Bureau (Department of Environmental Quality) and its five primary sections or units.

Background

The Public Water and Subdivisions Bureau regulates public drinking water, wastewater, and other related sanitation systems. The bureau accomplishes this through technical reviews of proposed developments and systems; licensing and certifications; collecting and monitoring certain water quality data; and training and technical assistance.

Water quality protection generally began in 1907, when the Legislature passed laws responding to typhoid outbreaks in the Milk River basin.² In 1967, the Legislature passed broad public health laws, which created the foundation of today's regulatory environment for drinking water and sanitation facilities. That legislation promised to "protect, maintain, and improve the quality and potability of water for public water supplies and domestic uses,"³ and required rules and standards that "provide the basis for approving subdivision maps or plats for various types of water and sewage facilities, both public and private."⁴

Federal law would soon supersede state law for drinking water.⁵ Congress passed the Safe Drinking Water Act in 1974 to regulate the nation's public drinking water supply by setting standards to control the level of contaminants.

Congress amended the act in 1986 and 1996 to expand protections. The act allows the Environmental Protection Agency to set drinking water standards – and to ensure these standards are met. Regulations set either a maximum contaminant level or treatment technique rules.⁶ Regulated contaminants⁷ include:

- Microorganisms, such as coliform bacteria
- Disinfectants, such as chlorine and chloramine
- Disinfection byproducts, such as bromate
- Inorganic chemicals, such as copper, cyanide, fluoride, and mercury

¹ Section 5-5-231, MCA.

² Montana Legislative Environmental Policy Office, *A Guide to Montana Water Quality Regulation* (2015), 2.

³ Sec. 140, Ch. 197, Laws of Montana 1967.

⁴ Sec. 152, Ch. 197, Laws of Montana 1967.

⁵ Regulation of sanitation in subdivisions does not depend on a federal overlay.

⁶ www.epa.gov/sdwa.

⁷ A more explicit list is available at www.epa.gov/sites/production/files/2016-06/documents/npwdr_complete_table.pdf.

- Organic chemicals, such as atrazine, benzene, and glyphosate
- Radionuclides, such as natural and human-made radioactive minerals.

The EPA granted primacy to the DEQ in the 1990s to regulate what are now 2,168 public water systems in Montana.⁸

As allowed by state and federal law,⁹ the Board of Environmental Review has general supervision of all public water supply systems in Montana – and of the bureau. The board approves all rules and standards developed by the experts in the bureau. The board may consider appeals to bureau decisions and set application fees.¹⁰

In addition to its duties described earlier, the bureau may issue variances and exemptions for systems, depending on the circumstances.¹¹ The bureau may also issue boil orders or emergency responses, if necessary.

Administrative rule and DEQ “circulars” provide specific guidance and standards for the bureau’s activities. The DEQ Enforcement Division pursues violations of these laws, rules, permit conditions, or orders.¹²

The bureau has five primary sections or units:¹³

- Subdivision Review Section
- Public Water Supply Plan Review Section
- Field Services Section
- Monitoring/Reporting Section
- Operator Certification Unit.

Subdivision Review Section

The Subdivision Review Section reviews small nonpublic or individual water and wastewater systems within a proposed subdivision. Laws related to “sanitation in subdivisions” form the legal basis for the subdivision review.¹⁴ From this, the bureau establishes standards for public and private water supplies, sewage disposal facilities, storm water drainageways, and solid waste disposal. The department may delegate review to a local department or board of health. Counties typically do sanitations review of smaller subdivisions.¹⁵

The Subdivision Review Section evaluates subdivisions with parcels smaller than 20 acres, as well as all condominiums, RV parks, and mobile home parks. This section ensures that adequate sanitation facilities can be constructed, operated, and maintained to support each parcel. If so, this section awards a certificate of subdivision approval to a subdivider. State law and administrative rule¹⁶ guide this section’s work. Standards depend on the specific facility proposed. The DEQ has developed design manuals to provide standards for wastewater treatment systems, water supply development, and storm drainage systems, including:

⁸ Interview with Jon Dilliard, Public Water and Subdivisions Bureau, June 9, 2016.

⁹ Safe Drinking Water Act, 42 U.S.C. 300f; and Title 75, ch. 6, part 1, MCA.

¹⁰ Title 75, ch. 6, part 1, MCA.

¹¹ Section 75-6-107, MCA.

¹² Section 75-6-110, MCA.

¹³ Not listed is the bureau’s Data and Administrative Support Unit.

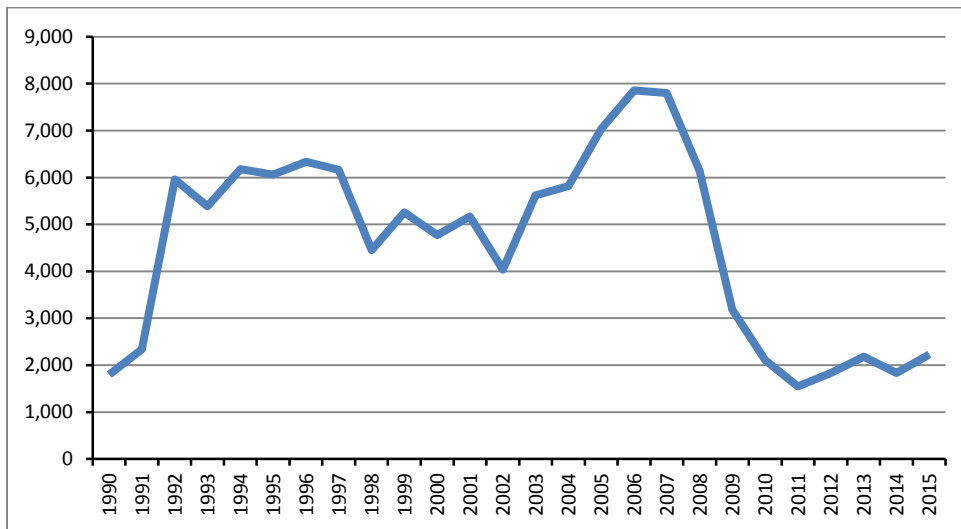
¹⁴ Title 76, ch. 4, part 1, MCA.

¹⁵ Local government entities also review all subdivisions to evaluate effects on agriculture, agricultural water user facilities, local services, the natural environment, wildlife and wildlife habitat, and public health and safety. This review is under the authority of the Montana Subdivision and Platting Act, Title 76, ch. 3, MCA.

¹⁶ ARM 17.36.

- Water works (DEQ Circular 1)
- Wastewater facilities (DEQ Circular 2)
- Small water systems (DEQ Circular 3)
- On-site subsurface sewage treatment systems (DEQ Circular 4)
- Subdivision storm drainage (DEQ Circular 8)
- Development of springs for public water systems (DEQ Circular 10)
- Development of springs for individual and shared nonpublic systems (DEQ Circular 11)
- Hauled water cisterns (DEQ Circular 16)
- Cisterns for shared, nonpublic systems (DEQ Circular 17)
- Ground water under the direct influence of surface water (Public Water Supply Circular 5)
- Source water protection delineation (Public Water Supply Circular 6).

Figure 1. Number of Approved Subdivision Lots, 1990-2015¹⁷



The Subdivision Review Section also offers assistance and tools. The online Subdivision Web Application Tool allows a small developer to explore the process of approval.¹⁸ The section also educates developers and consultants about sanitation standards for subdivisions through conference presentations, meetings with local governments, and webinars.

Public Water Supply Plan Review Section

In some cases, the work of the Public Water Supply Plan Review Section picks up from the Subdivision Review Section, as the two sections work together on subdivision proposals. The Public Water Supply Review Section does not approve individual wells or septic systems but instead focuses on larger, public water supply and wastewater systems. A public water system is defined as one providing at least 15 service connections or serving at least 25 people per day for 60 days per year. There are further distinctions: “Community water systems” serve the same people year-round in cities, towns, and mobile home parks, and “non-community water systems” serve the public but

¹⁷ Subdivision Review Section (February 2016).

¹⁸ deq.mt.gov/Water/PWSUB/sub.

not the same people year-round.¹⁹ Different design standards apply to a system, depending on size and type.²⁰ Engineers conduct technical reviews and approve the systems and their operational plans.

Field Services Section

The Field Services Section provides a statewide presence for the bureau, with staff located at offices in Billings, Helena, Kalispell, and Missoula. This section conducts sanitary surveys through field visits to public systems. It also offers technical assistance to help system operators maintain regulatory compliance.

The section investigates complaints, which may result in a notice of violation. The section forwards notices of violation to the DEQ’s Enforcement Division. The Enforcement Division’s primary tool is an “administrative order on consent,” which creates a series of steps for a system to meet compliance, although fines may also be levied. The section aids the Enforcement Division with continued monitoring.

Monitoring and Reporting Section

The Monitoring and Reporting Section tracks the status of public drinking water systems, through a comprehensive database of public drinking water system sampling results and design and maintenance activities.²¹ Public access through the Drinking Water Watch website allows a user to access various information about a public water supply, such as sampling results, violations, and contact information for the system operator.²² The section also oversees the water sampling at these systems.

The bureau issues an annual compliance report. Montana’s 2015 Annual Public System Compliance Report reported the following number of systems with rules violations:

Public water systems with violations	
Exceeded contaminant limits	180
Monitoring and reporting violations	969
Other violations	100
Treatment technique violations	41

The section must also adapt to changing federal rules,²³ which may tighten standards or add a previously unregulated contaminant.²⁴ For example, the DEQ must reapply to the EPA for primacy to regulate the “revised total coliform

¹⁹ “Non-community water systems” can be more specifically defined as “non-transient, non-community water systems” for systems that serve the same people for more than 6 months, but not year-round, like a school; and “transient, non-community water systems,” which serve the public but not the same individuals for more than 6 months, such as a rest area or a campground.

²⁰ This includes DEQ circulars 1, 2, 3, 4, 10, 16, and 17 and Public Water Supply circulars 5 and 6. Available at deq.mt.gov/Water/TFA/srf/circulars.

²¹ Safe Drinking Water Information System (SDWIS/FED).

²² sdwisdww.mt.gov:8080/DWW/.

²³ The Safe Drinking Water Act requires the EPA to review its regulations every 6 years. www.epa.gov/sdwa.

²⁴ The EPA regulates more than 90 contaminants. www.epa.gov/sdwa.

rule.”²⁵ Other examples of federal rules include those for chlorination, disinfection byproducts, ground water, lead and copper, nitrate/nitrite, and public notification.²⁶

Operator Certification Unit

State law requires the DEQ to certify operators of water and wastewater treatment plants and of water distribution systems.²⁷ An operator must meet experience and education requirements, pass an exam, renew certification annually, and fulfill continuing education requirements.²⁸

The Operator Certification Unit works with other sections to provide training for operators, including fall and spring “water schools” in Billings, Bozeman, Helena, and Kalispell.

Fiscal Analysis

Although the Legislature does appropriate some general fund dollars to the bureau, most of its funding comes from application fees or federal grants. The Legislature has approved the following appropriations for the past four bienniums:

For fiscal years 2016-17	\$9,614,564
2014-15	\$9,170,285
2012-13	\$10,369,996
2010-11	\$11,768,184

The bureau employs 44.2 full-time equivalent employees.

Audits

The Legislative Audit Division has not specifically audited the Public Water and Subdivisions Bureau. LAD conducts financial audits of the DEQ biennially and of the Drinking Water State Revolving Fund and Wastewater State Revolving Fund annually. The fund provides low-interest loans to communities for water treatment facilities, which must meet the standards described in this program evaluation and remain in good standing to receive federal loan funds. The DEQ’s Technical and Financial Assistance Bureau manages the revolving fund. A review of these audits since 2008 found no direct recommendations related to the Public Water and Subdivisions Bureau’s work.

²⁵ The Board of Environmental Review will consider the bureau’s rule package in an upcoming meeting. Interview with Jon Dilliard, Public Water and Subdivisions Bureau, June 9, 2016.

²⁶ deq.mt.gov/Water/PWSUB/pws/lawsrules.

²⁷ Title 37, ch. 42, part 3, MCA.

²⁸ ARM 17.40.

Issues²⁹

Funding stability is an ongoing issue for this bureau. While much of the bureau's budget is comprised of application fees, federal funds compose most of the rest. Bureau staff have said they are concerned because federal funds and application fees have remained static for many years.³⁰

A fee-based program is also subject to the cyclical nature of those regulated activities. For example, the budget for the Subdivision Review Section fluxes based on the number of subdivision applications. The section may have too many or too few staff, as there is a months-long lag time to add or subtract staff. For example, this section had twice as many staff before the economic downturn in 2009.³¹ The section is experiencing increased applications, which the current staff cannot adequately handle, thus missing deadlines. A onetime appropriation may reduce this lag time.³²

The bureau is developing new information products. For example, the bureau is working on a GIS layer that will enable users to view an individual parcel of land's certificate of subdivision approval. The bureau is reviving "the big report," which will provide additional water supply system information beyond the Montana Water Watch for bureau staff and the public.³³

²⁹ At the September 2015 WPIC meeting, the committee decided that these program evaluations should identify potential issues with an agency based on criteria in section 5-5-215(1)(c), MCA. This section of state law directs interim committees to identify issues likely to require future legislative attention, opportunities to improve existing law through the analysis of problems experienced with the application of the law by an agency, and experiences from citizens that may be amenable to improvement through legislative action.

³⁰ Interview with Jon Dilliard, Public Water and Subdivisions Bureau, June 9, 2016.

³¹ Ibid.

³² Ibid.

³³ Ibid.