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Improving Safe Drinking Water Programs One Essential Service at a Time: Closing the Water Quality Gap

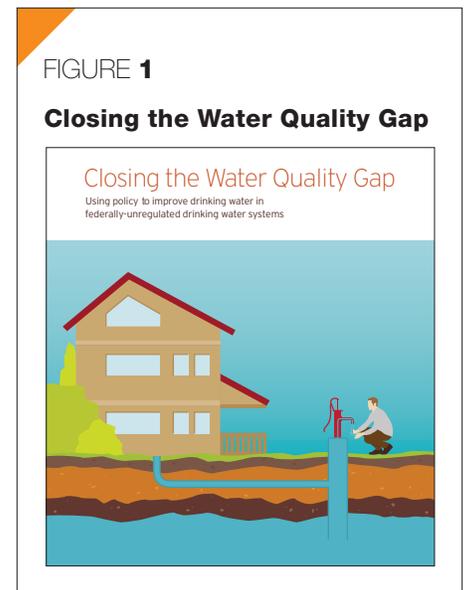
Editor’s Note: NEHA strives to provide up-to-date and relevant information on environmental health and to build partnerships in the profession. In pursuit of these goals, we feature a column from the Environmental Health Services Branch (EHSB) of the Centers for Disease Control and Prevention (CDC) in every issue of the *Journal*.

In these columns, EHSB and guest authors share insights and information about environmental health programs, trends, issues, and resources. The conclusions in this column are those of the author(s) and do not necessarily represent the official position of CDC.

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In 2015, the Centers for Disease Control and Prevention’s (CDC) Environmental Health Services Branch (EHSB) reviewed past cooperative agreements with state and local public health agencies that had worked on safe drinking water programs. EHSB determined that the essential environmental public health services of developing policy and enforcing regulations were addressed less frequently than other service areas (Sabogal & Hubbard, 2015). There were instances, however, where local efforts to work on feasible, community-supported policy were effective at expanding service delivery, preventing exposure to drinking water contaminants, and protecting health (Cerro Gordo County Department of Public Health, 2015).

In 2016, EHSB entered into a cooperative agreement with ChangeLab Solutions to define the spectrum of approaches taken by state and local health departments when using policy in their safe drinking water programs. ChangeLab Solutions is a group of public health lawyers and professionals that “work with neighborhoods, cities, and states to transform communities with laws and policies that create lasting change” (ChangeLab Solutions, 2017a). In working with EHSB, ChangeLab Solutions focused solely on safe drinking water programs that had addressed policy for federally unregulated drinking water systems (e.g., household wells, springs). The intent of the agreement was not to create policy, but rather to understand the



elements and best practices used by health agencies to enact feasible, community-driven solutions for drinking water problems.

ChangeLab Solutions reviewed information from state and local environmental public health agencies previously funded by EHSB to

- understand the influence of water projects on policy;
- identify challenges the agency personnel encountered when asked to provide data for policy efforts, and outline the strategies the agencies used to overcome those challenges;
- understand the type of partnerships the agencies needed to facilitate policy development;

FIGURE 2

Federal Definition of a Public Water System

The Safe Drinking Water Act only regulates water systems that meet the federal definition of a public water system.

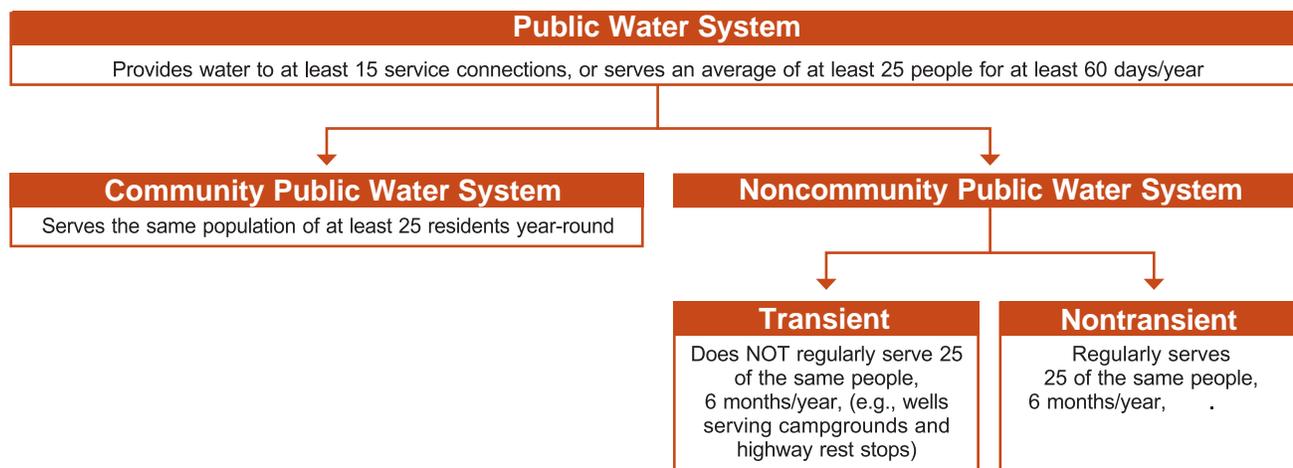


TABLE 1

Steps for Working on Policy

1	Identify potential new policy or policy change based on available data, including gaps in existing policies, problems recognized in the field, health inequities, and health risks.
2	Clearly articulate to management the problems identified and how policy change will address those problems.
3	Advocate to managers within the agency chain of command for the proposed policy change. This advocacy should be supported by data showing how the new policy or policy change would reduce health risks and provide health benefits to the public.
4	Meet with groups, professions, organizations, and individuals who might be impacted by the new policy or policy change.
5	Work to educate the impacted community as to why the new policy or policy change is important and necessary.
6	Seek input and if possible, support from stakeholders who might be impacted by the new policy or policy change.
7	Be the leader or part of the team that drafts the new policy or policy change.
8	Serve as a resource for agency leadership, the board of health, and policy makers to answer questions and provide necessary information as requested.

- identify how communities benefit from water policies; and
- identify training and resource needs of state and local health agency staff working on water projects.

After reviewing materials, ChangeLab Solutions prioritized 10 agencies that worked on issues related to policy. Next, they conducted discussions with the 10 public health

agencies, and then prioritized 6 of the 10 to learn more about their safe drinking water work. ChangeLab Solutions used in-person interviews to collect information from public health staff and partners that addressed policy issues. They used qualitative thematic analysis to compile responses and summarize their results.

ChangeLab Solutions analyzed the information collected from the six public health agencies to understand the differences and nuances of how policy is developed and used by state and local health departments. Additionally, the information collected was used broadly to

- inform the development of guidance to improve the delivery of essential environmental public health services for state and local safe drinking water programs and
- develop examples of how state and local health department personnel contributed to the development of policy.

At no time were the data used to develop a national approach to policy. On the contrary, ChangeLab Solution’s activities were meant to capture what state and county public health agencies had accomplished in the local context that was feasible, sustainable, and supported by the community being served.

In July 2017, ChangeLab Solutions released the guidance document, *Closing the Water Quality Gap: Using Policy to Improve Drinking Water in Federally-Unregulated Drinking Water Systems* (ChangeLab Solutions, 2017b) (Figure 1). The guidance provides environmental and public health practitioners with current information outlining how policy has been used to address federally-unregulated drinking water, and focuses on some of the

potential issues. Concepts such as the difference between public water systems and federally-unregulated drinking water systems and sources are presented in easy to understand charts (Figure 2). Likewise, policy and types of policies are defined with easy to understand examples. The guidance provides useful historical references of effective public health policies that have made vast improvements in the health and well-being of Americans. The document also provides clear examples of the roles and activities that environmental health practitioners took when supporting policy efforts (Table 1).

Most important, the guidance document reflects the best available science and practice and describes how policy has been used in various state and local environments to achieve improved water quality for consumers, including

- adopting water quality and testing standards for water sources not covered by the Safe Drinking Water Act,
- ensuring proper well construction,

- establishing consistent well identification systems, and
- assuring well driller certifications are in place.

The guidance has already been used by local health departments to support and educate local boards of health and other drinking water stakeholders engaged in policy work.

Current and future efforts by EHSB and ChangeLab Solutions will be the development of detailed case stories describing efforts by state and local agencies to strengthen policy. Case stories will address how outreach and educational efforts and work with nontraditional stakeholders were used to support policy compliance.

To learn more about CDC's Safe Water for Community Health program, visit www.cdc.gov/nceh/ehs/safe-watch/index.html.

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