



Annual Groundwater and Drinking Water Program Review



Calendar Year 2018

Illinois Environmental Protection Agency



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Review
Calendar Year 2018**

December 2019

**Illinois Environmental Protection Agency
Bureau of Water
Division of Public Water Supplies**

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Acronyms and Abbreviations

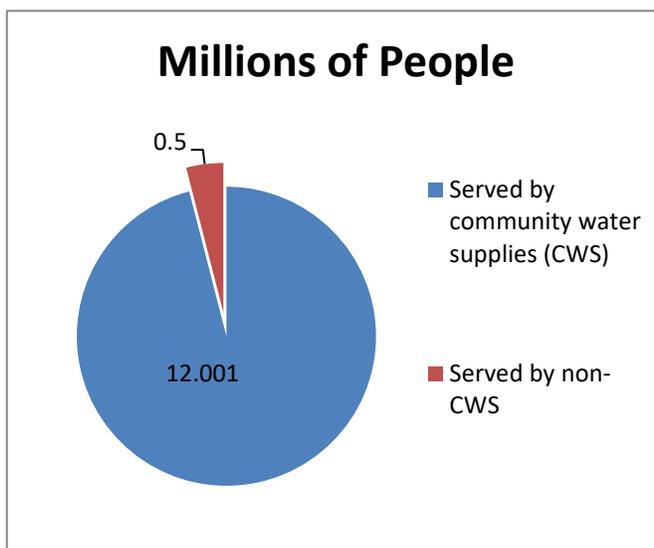
Act	Illinois Environmental Protection Act
BOW	Bureau of Water
CAS	Compliance Assurance Section
CCA	Compliance Commitment Agreement
CCCDI	Cross-Connection Control Device Inspector
CWS	Community Water Supply
DoIT	Department of Innovation and Technology
DPH	Department of Public Health
DPWS	Division of Public Water Supplies
EDG	Enforcement Decision Group
EPA	Environmental Protection Agency
FOS	Field Operations Section
GAC	Groundwater Advisory Council
GWS	Groundwater Section
HAB	Harmful Algal Bloom
ICCG	Interagency Coordinating Committee on Groundwater
IFAS	Infrastructure and Financial Assistance Section
IGPA	Illinois Groundwater Protection Act
ILCS	Illinois Compiled Statutes
Ill. Adm. Code	Illinois Administrative Code
IPCB	Illinois Pollution Control Board
JCAR	Joint Committee on Administrative Rules
LHD	Local Health Department
LSLR	Lead Service Line Replacement
MCL	Maximum Contaminant Level
M&R	Monitoring and Reporting
MRDL	Maximum Residual Disinfectant Levels
NCA	Non-Compliance Advisory
NCPWS	Non-Community Public Water Supply
NPDWR	National Primary Drinking Water Regulations
NTNC	Non-Transient, Non-Community
OECA	Office of Enforcement and Compliance
PS	Permit Section
PWS	Public Water Supply or System
PWSS	Public Water System Supervision
RO	Regional Office
ROINC	Responsible Operators in Charge
RTC	Returned to Compliance

RTCR	Revised Total Coliform Rule
SDWA	Safe Drinking Water Act
SDWIS	Safe Drinking Water Information System
TNC	Transient Non-Community
UCMR	Unregulated Contaminant Monitoring Regulation
VN	Violation Notice

Executive Summary

This report provides information on the efficacy of existing programs to protect and support public water purveyors and groundwater resources in Illinois. This document is intended to identify program stresses and future directions in overcoming existing insufficiencies. Further, this report attempts to provide information on anticipated future resource needs in the regulatory oversight and technical assistance to drinking water systems in Illinois. Current vacancies are emboldened in the organizational tables. Finally, this is intended to meet the reporting requirements of the Safe Drinking Water Act (SDWA) Amendments of 1996 and the Illinois Groundwater Protection Act (IGPA) adopted in 1987.

The Illinois Environmental Protection Agency (EPA) regulates 1,749 community water supplies (e.g., municipalities, privately owned utilities, etc.) that serve 12,001,944 individuals. The Illinois Department of Public Health (DPH) regulates 3,785 non-community water supplies (e.g., schools, factories, campgrounds, rest areas, etc.) that serve approximately 500,106 customers. The mission of these two state agencies is to assure that all persons served by public water supplies receive water that is safe and adequate in quantity.



The Illinois EPA, Illinois DPH, and U.S.

EPA recognize the importance of an ongoing program to evaluate the sanitary conditions of all public water supplies in Illinois. For the 2016-2018 calendar year timeframe, the Illinois EPA conducted sanitary surveys at approximately **78.4** percent of the community water supplies and the Illinois DPH conducted sanitary surveys at approximately **97.5** percent of the non-community water supplies in the state. Similarly, the Agencies understand the importance of an ongoing program to protect ground and surface water sources of public water supplies. In calendar year 2018, **73** percent of the population served by community water systems in Illinois had source water that was substantially protected by their respective water systems, exceeding the U.S. EPA established measure for source water protection programs.

The Governor and General Assembly further understand the importance of well credentialed and properly certified public water supply operators in protecting water consumers. For Calendar Year 2018, there were 3,737 certified community water supply operators (not including 249 operators in training) and 533 certified non-transient non-community water supply (day care centers, schools and factories) operators in Illinois. Expansion of the State's technical capacity (such as the operator in training certification process and revisions to the Public Water Supply Operations Act) remains one of the hallmarks of the drinking water protection program. Further, the Illinois EPA and DPH continue to support the development of financial and managerial capacity in water systems. We continue to look for opportunities to enhance these important elements in the

stability of water supplies. Such initiatives as the capacity development technical assistance contractual agreement will be given priority to ensure the continued viability of our water systems. Recognizing the *mission* of the Illinois EPA and DPH, for calendar year 2018, 99 percent of the population served by public water supplies in Illinois received drinking water that met all applicable health-based drinking water standards.

Core Public Water Supply Supervision (PWSS) Program Activities

In 2018, the Illinois EPA and DPH agreed to:

Federal funds provided by the PWSS program currently provide less than 50 percent of the funds used to support the drinking water protection program in Illinois. The remainder of staff resources are provided for by state funding sources.

Rules and primacy - Illinois will continue to maintain primacy for, and implement all of the drinking water rules contained in **Appendix H**. These rules will continue to be administered by the Illinois EPA and DPH.

- Illinois requested and was granted a 2-year extension, to February 2017, to submit the Revised

Total Coliform Rule (RTCR) primacy application. Illinois DPH Legal Section is working to get the Illinois DPH draft State Specific RTCR rule to the State Board of Health Meeting in September 2019 and First Notice Publication out in October 2019.

- Illinois has not yet completed programming to be able to fully report RTCR violations, including Level 1 and 2 assessment information, to SDWIS/STATE. Non-CWS tracking of RTCR will be evaluated and a plan developed in 2018 to more fully report on this Rule.
- U.S. EPA Region 5 will continue to track state reporting of rule violations.

Sanitary surveys - Illinois will continue to maintain a baseline core of individuals with the technical expertise needed to perform sanitary surveys.

- Illinois will ensure that sanitary surveys are conducted periodically that, at a minimum, meet frequency requirements specified by rule.
- U.S. EPA Region 5 will track state commitments to conduct sanitary surveys within the federally required intervals.

Laboratory certification - Illinois will continue to provide an adequate laboratory certification program for all regulated contaminants, at a minimum to certify commercial laboratories within the State.

- Illinois will continue to certify all laboratories that produce results for compliance with SDWA at least once every three years and will meet all regulatory requirements.
- Illinois EPA's Division of Laboratories will maintain a certification program and a certified State Lab for inorganic and organic contaminants of concern.
- Illinois DPH will maintain a certification program and a certified State Lab for bacteriologic contaminants of concern.
- Illinois EPA and DPH will submit annual questionnaires to U.S. EPA Region 5.
- U.S. EPA Region 5 will track state commitments to conduct laboratory certification activities by the Illinois DPH and the Illinois EPA's Division of Laboratories.

Compliance and enforcement management - Illinois EPA and DPH will maintain an adequate enforcement and compliance assistance program. Illinois and U.S. EPA Region 5 will continue

to implement data exchange to ensure that enforcement resources are targeted at the non-compliant PWSs.

- Illinois (EPA & DPH) will continue to address all systems not in compliance with state rule and regulation. Specifically, Illinois will address non-compliant PWSs that have a score of 11 or higher on the U.S. EPA's Enforcement Targeting Tool report.
- As an enforcement option, Illinois will continue to refer noncompliant PWSs to the U.S. EPA Region 5 for follow-up action.
- Illinois EPA and DPH will continue to keep records relating to enforcement decisions.
- Illinois EPA and DPH will continue to produce an annual compliance report by July 1 as part of a consolidate report program efficacy.
- U.S. EPA Region 5 will track state commitments under measure SDWA02 (involving addressing with a formal enforcement action or return to compliance), the number of priority systems equal to the number of its PWSs that have a score of 11 or higher on the July Enforcement Targeting Tool report, and update Illinois quarterly.

Data management and reporting - Illinois EPA and DPH maintain adequate data management systems (and updates it for new rules, and new versions of FedRep) that tracks requirements for all rules, which includes the appropriate combination of hardware, software, and personnel to accurately and within a reasonable timeframe identify the inventories (including routine updates of system information), maintain water quality monitoring information, and track compliance with all M/R, MCL, MRDL, TT, PN, and public information requirements.

- Illinois EPA and DPH will continue to report to U.S. EPA actions and sample data quarterly and inventory data at least annually in accordance with 40 CFR 142.15.
- Illinois EPA and DPH utilizes SDWIS/STATE to manage water system compliance with all regulatory compliance concerns.
- As noted previously, Illinois EPA has not yet completed programming to be able to fully report RTCR violations, including Level 1 and 2 assessment information, to SDWIS/STATE. Non-CWS tracking of RTCR by Illinois DPH will be evaluated and a plan developed in 2017 to more fully report on this Rule. Illinois DPH has proposed a target date of 12-31-20 in the 2017 IL Joint File Review Corrective Action Plan to fully report all RTCR violations.
- U.S. EPA Region 5 will track quarterly and annual data reporting requirements.

Operator certification - Illinois will continue to maintain regulations for the operation and maintenance of all public water systems by properly certified individuals.

- Illinois will continue to report to U.S. EPA the status of the operator certification program on an annual basis.
- U.S. EPA Region 5 will track completion of this report to avoid a 20 percent withholding of the Illinois Drinking Water Revolving Loan Fund grant should Illinois fail to meet this commitment.
 - During FFY19, the U.S. EPA Region 5 staff plan to evaluate Illinois Operator Certification Programs based upon established baseline standards.

Capacity development - Illinois will continue to work with existing PWSs and require capacity demonstrations for new PWSs to enhance water system technical, managerial, and financial capacity to operate in compliance with federal and state regulations.

- Illinois EPA and DPH will continue to report to U.S. EPA the status of the Illinois Capacity Development Program on an annual basis.
- U.S. EPA Region 5 will track completion of this report to avoid a 20 percent withholding of the Illinois Drinking Water Revolving Loan Fund grant should Illinois fail to meet this commitment.
 - The U.S. EPA Region 5 staff will continue to work with Illinois to promote proactive efforts that will build water system capacity.

Source water assessments and protection - Illinois will continue to report the number of CWSs with source water protection (SWP) plans and the number of CWSs implementing SWP measures electronically via SDWIS/STATE.

- Illinois will continue to update source water assessments, as resources allow, and complete source water assessment reports for new public water systems.
- U.S. EPA Region 5 will continue to track the Source Water Assessment and Protection Program through SDWIS and other State and Federal Reports.

Measures and Indicators - Illinois will continue to use quantitative measures developed by U.S. EPA Region 5 to regularly assess program performance.

- Illinois will continue to participate in semi-annual conference calls with U.S. EPA Region 5 to discuss national program measures, Region 5 specific shared goals and special high priority queries.
- Illinois will continue to provide information regarding lead action level exceedances upon request from U.S. EPA Region 5.
- U.S. EPA Region 5 will continue to track the status of the Illinois Drinking water program with respect to national program measures, Region 5 specific shared goals and special high priority queries.
- Public health concerns related to Lead and Copper Rule (LCR) implementation will remain a high priority area of focus.
- The U.S. EPA Region 5 will complete a data and enforcement verification audit report in Calendar Year 2018.
 - Illinois will work toward developing corrective action plans regarding identified items within the Report.

Priorities for 2019

The following activities outline the priorities for the Illinois EPA and DPH for Calendar Year 2019:

- Implement Corrective Action Plan to address the 2017 U.S. EPA Joint File Review and Enforcement Verification:
 - Add one full time equivalent to the Illinois DPH to implement the non-community water supply program;
 - Adding an additional engineer to the Illinois EPA Elgin Regional Office to implement sanitary surveys; and
 - Two engineers hired for the Illinois EPA Regional Offices in Champaign and Springfield to assist with conducting sanitary surveys.
- Focus on implementing the to-be-adopted rules for CWS permitting (602) and for design, operation and maintenance of CWS (604). We believe our effort to streamline the PWS

regulations will be beneficial for both the Illinois EPA and regulated community- easy to understand and implement:

- Amends permitting rules in Part 602:
 - *Adds details for what is required in a permit application for the construction of wells or surface water intakes;*
 - *Adds details on what is required for stability and corrosion control (corrosive water can cause leaching from lead pipes; and*
 - *Changed how a CWS demonstrates satisfactory disinfection to obtain an operating permit. Currently, the membrane filter technique or presumptive test, fermentation tube method was required to show no bacterial growth. New rules allow presence/absence test for coliform bacteria.*
- *Creates an operating permit by rule for water main projects or projects not requiring disinfection. Must submit a certification and evidence of disinfection (where required), and after submitting the certification may begin operating immediately.*
- Creates a new Part 604—Highlights:
 - *Requires CWS without a free chlorine residual (systems with ammonia in their source water or that add ammonia to create chloramines) must to create a nitrification action plan. The plan would set forth monitoring and system specific levels of the chemical when corrective action must be taken. This rule was based on what is being done in Texas.*
 - *Requires CWS to develop a source water protection plan and submit that plan to the Illinois EPA for review and approval.*
 - *Increases distribution system chlorine residuals for free chlorine from 0.2 to 0.5 mg/l and for combined from 0.5 to 1.0 mg/l. Illinois EPA believes that this increase is necessary for the protection of public health simply because the strong disinfectant residuals are more effective in the control of bacteria in the distribution system.*

New rules that double the state’s minimum chlorine levels in municipal water supplies and are hoped to reduce water-borne illnesses such as **Legionnaires’ disease** received approval recently from the Illinois Pollution Control Board.

“This gives Illinois a chance to emerge as a leader,” Bradley Considine, director of strategic initiatives for the Washington, D.C.-based Alliance to Prevent Legionnaires’ Disease, said Thursday.

If the rules are implemented later this year, Illinois would join states such as Kansas, Ohio, North Carolina and Oklahoma in requiring chlorine concentrations at or above 1 milligram of chlorine per liter of water. The current minimum requirement in Illinois is 0.5 milligrams.

- Illinois EPA will be investing resources in developing programs that address failing drinking water systems, workforce development, and asset management.
- Per and Polyfluoroalkyl Substances (PFAS): Illinois EPA is working on a PFAS strategy. One of the first steps in Illinois EPA’s draft PFAS strategy is to determine the statistical prevalence of 18 PFAS contaminants in 118 community water supply wells and 32 surface water intakes. For the purposes of this study, community water intakes and wells

were selected on a random basis to represent all of the CWS wells and intakes in the State. Currently, there is a bid out for analytical laboratory services to analyze the samples collected by Illinois EPA staff. This statistical study will focus on:

- This one network of wells and intakes in different aquifers and surface water sources across the state; and
- The sampling of wells and intakes will start early 2020 and will take a year to finish.
- Additionally, the Illinois EPA PFAS strategy includes:
 - Developing a comprehensive web site for PFAS;
 - A response strategy for community water supplies where PFOA and PFOA exceed levels of concern to develop public notification and treatment if necessary; and
 - Illinois EPA is also be proposing a combined new groundwater quality standard for PFOS and PFOA to Part 620.
- Finalize the streamlining of IPCB drinking water regulations (Part 611) to enhance drinking water protection in Illinois.
- Continue to support statutorily established committees, councils and boards charged with assisting the Illinois EPA and DPH in improving program activities in support of the Agencies' mission.
- Continue to use, support and improve technology, such as SDWIS/STATE, to track the efficacy of water treatment facilities in protecting water consumers.
- Continue to initiate efforts to enhance the technical, financial and managerial capacity of public water supplies. This priority includes ensuring that the Permitting, Operator Certification, Cross-Connection Control and Source Water Protection Programs remain high priorities in protecting public health and ensuring water system viability. Additionally, the Illinois EPA will continue to support a contractual agreement to work with community water supplies on capacity development.
- Place added priority on increasing the number of inspections to achieve goals and provide emergency and technical assistance to water systems as necessary to maintain Illinois' high public health protection goals.
- Continue to conduct the prevention-oriented programs to protect groundwater required by the Illinois Groundwater and Environmental Protection Acts and recommended by the Interagency Coordinating Committee on Groundwater, Groundwater Advisory Council, and the Priority Groundwater Protection Planning Committees.
- Continue to support protection of the Mahomet Aquifer.
- Continue to support various Bureau/Illinois EPA groundwater related compliance investigations including, but not limited to, assisting in: the enforcement process; preparation of compliance commitment agreements; providing testimony and assisting in the development of consent decrees or agreed upon orders by the court.

PURPOSE OF THIS REPORT

The Illinois EPA and Illinois DPH hope that by making this document available for review the public will have a better understanding of drinking water quality concerns in Illinois. Furthermore, this document is intended to meet several independent reporting requirements of the Safe Drinking Water Act (SDWA) Amendments of 1996, serve as the annual self-assessment for the Public Water System Supervision (PWSS) Grant (which should aid the U.S. EPA Region 5 in oversight of Illinois' primacy programs), as well as reporting requirements of the Illinois Environmental Protection Act (Act).

First, Section 1414(c)(3) of the SDWA requires States with primary enforcement authority to prepare, make readily available to the public, and submit to the Administrator of the U.S. EPA by July 1 of each year, an annual report on violations of national primary drinking water regulations by public water systems.

Second, this report is intended to meet the Capacity Development Program reporting requirements of Section 1420 of the SDWA. The SDWA requires annual documentation to the U.S. EPA and triennial reporting to the Governor on the efficacy of Illinois' program with emphasis on improving technical, managerial and financial capacity of public water systems in Illinois.

Third, States are required to adopt and implement an Operator Certification Program for public water supplies. The Guidelines pursuant to Section 1419(b) of the SDWA require the Illinois EPA to provide information to U.S. EPA annually for program review.

Fourth, Section 4 of the Illinois Groundwater Protection Act requires the Interagency Coordinating Committee on Groundwater (ICCG) to report biennially on groundwater quality and quantity to the Governor and General Assembly. The Illinois EPA chairs the ICCG. Specifically, the Division of Public Water Supplies (DPWS) chairs the committee for the Director.

INTRODUCTION

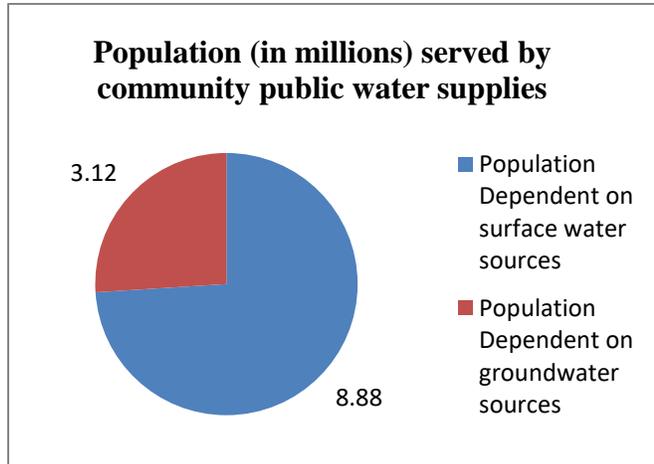
In Illinois, regulatory oversight of public water systems (PWS)¹ is shared by the Illinois EPA and DPH. The Illinois EPA was designated as Illinois' primary enforcement authority by the U.S. EPA on August 29, 1979. The Illinois EPA, through an Intergovernmental Funding Agreement² has empowered the Illinois DPH to administer the Non-Community PWS Program while the Illinois EPA retains regulatory authority over Community PWS³.

¹ PWS serve 15 service connections or 25 residents.

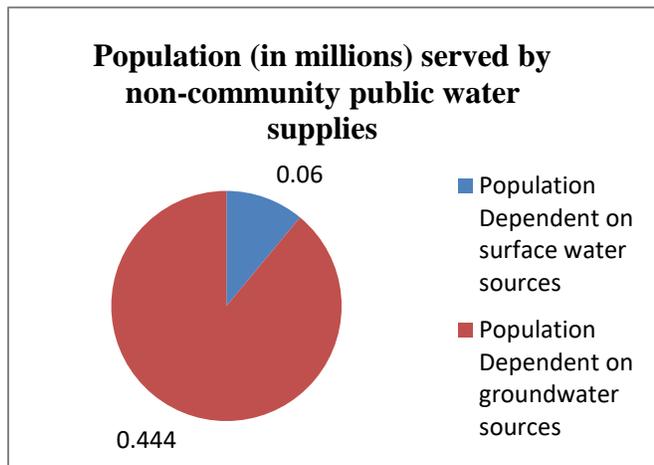
² U.S. EPA commented that the Non-community primacy program was not discussed in the previous report. This footnote indicates the contrary.

³ CWS serve 15 or more year-round service connections or 25 or more year-round residents.

The Illinois EPA regulates 1,749 community water supplies (CWS). These water supplies utilize groundwater and surface water sources of potable water. At this time, 1,145 CWS use groundwater sources, 604 use surface water sources or groundwater sources under the direct influence of surface water 12 use both ground and surface water sources, and 721 supplies purchase water from other CWS. A total of 12,001,944 persons are served by those systems; 39 percent of that population is directly served from surface water systems. 35 percent of the population is served by purchased surface water, two percent by purchased groundwater, and 24 percent by groundwater systems. It is worth noting that although only 26 percent of the population is served by groundwater (including purchased groundwater); groundwater dependent systems comprise almost 66 percent of the total number of CWS.



The Transient Non-Community (TNC) PWS served a population of 335,268 in 2018, while NTNC PWS served a population of 164,838. A total of 444,840 persons are served by systems using groundwater, while only 55,266 persons are served by surface water. These numbers reflect the areas where Non-Community Public Water Supply (NCPWS) are located predominantly in rural or non-incorporated areas where groundwater is generally available as a source of potable water.



STATUTORY BACKGROUND

The program to protect PWS in Illinois began in 1915 and has undergone considerable legal and regulatory restructuring over the years. In 1970, the General Assembly formulated the Illinois Environmental Protection Act (Act), 415 ILCS 5/1 *et seq.* They found that “state supervision of public water supplies is necessary in order to protect the public from disease and to assure an adequate source of pure water for all beneficial uses.” The Illinois Groundwater Protection Act (IGPA), 415 ILCS 55/1 was also adopted in 1987. Additionally, programs to protect groundwater were initiated by the Act in conjunction with “Water Quality Standards” for waters of the state that included underground water (35 Ill. Adm. Code 302). In 1991, the Illinois Pollution Control Board (IPCB) adopted comprehensive groundwater quality (35 Ill. Adm. Code 620).

The “core mission” of the Illinois EPA’s Division of Public Water Supplies (DPWS) is to *assure that all persons served by community public water supplies receive water which is safe in*

quality, clean, adequate in quantity and of satisfactory mineral character for ordinary domestic consumption. To accomplish this goal, the DPWS oversees the design, construction and operation of CWS in Illinois. More specifically, the Illinois EPA must review the safety and protection of drinking water source water, implement a permitting program for the design, construction and operation of PWS treatment facilities, and maintain a surveillance program of water systems' untreated and treated waters.

To support these activities, the DPWS has been staffed by a diverse contingent of engineers, geologist and scientist that comprise the Compliance Assurance (CAS), Field Operations (FOS), Groundwater (GWS), and Permit (PS) Sections. The DPWS is further supported by the Infrastructure and Financial Assistance Section (IFAS) of the Bureau of Water (BOW), the Division of Legal Counsel, the Division of Laboratories, the State of Illinois' Central Management Services and Department of Innovation and Technology (DoIT).

As mentioned previously, the Illinois DPH supports the Non-Community PWS program through a series of rules including, but not limited to: the Illinois Plumbing Code (77 Ill. Adm. Code 890); the Illinois Water Well Construction Code (415 ILCS 30); the Surface Source Water Treatment Code (77 Ill. Adm. Code 930) and the Drinking Water Systems Code (77 Ill. Adm. Code 900). The Illinois DPH's Division of Environmental Health works to reduce the incidence of disease and injury related to environmental factors that fall within five major areas of responsibility: rulemaking; plan reviews and construction permits; inspections; vocational and facility licensing; and engineering and toxicological reports.

To support these areas of responsibility within the Non-Community PWS, Illinois DPH has field staff located in the Illinois DPH's six Regional Offices (RO) and leverages the resources of Local Health Departments (LHD). Compliance assurance and engineering services are generally conducted by staff located in the Central Office in Springfield. Consistent with the requirements of the Safe Drinking Water Act (SDWA) program activities include: sanitary surveys, water analysis and reporting; plan review; technical assistance; and training and education.

Under the SDWA and subsequent amendments, the U.S. EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCL) and Maximum Residual Disinfectant Levels (MRDL). For some regulations, treatment techniques (TT) are established in lieu of an MCL to control unacceptable levels of contaminants in water. The SDWA also requires PWS to notify their consumers when they have violated these regulations. The consumer notifications must provide an understandable explanation of the nature of the violation, its potential adverse health effects, steps that the PWS is undertaking to correct the violation and the possibility of using alternative water supplies during the violation.

Through the ongoing review of Illinois EPA's programs, the U.S. EPA has granted the Illinois EPA primary enforcement authority to determine the frequency that CWS monitor and report on the contaminants present in their water. (Generally, the larger the population served by a water system, the larger the number of samples collected and the more frequent the monitoring and reporting (M&R) requirements. Additionally, the U.S. EPA supports the development of new MCLs by requiring CWS to monitor and report on currently unregulated contaminants (e.g.,

Unregulated Contaminant Monitoring Regulation (UCMR)). As data are acquired for these contaminants, scientific analyses are conducted to determine the need for development of new MCLs.

In 1998, the Illinois EPA began making CWS revolving loans through a partnership with the U.S. EPA and the Federal Government. Since this time, the Illinois EPA has made more than \$2.3 billion in revolving loans to water systems. This money has gone to public water supply systems around the state to maintain compliance with federal and state laws and regulations and maintain and improve the state's drinking water infrastructure.

REPORTING REQUIREMENTS

Each quarter, the Illinois EPA submits data to the Federal Safe Drinking Water Information System (SDWIS/FEDERAL), an automated database maintained by the U.S. EPA. The data submitted by Illinois include, but are not limited to the following:

- PWS inventory information;
- incidences of violations of MCLs, MRDLs, monitoring, and TT violations;
- information on enforcement activity related to these violations; and
- source water protection information.

The Illinois EPA publishes a report on its web site which contains information on permits issued during the previous year. The report includes CWS construction and operating permit process including milestones that measure program efficacy.

The ICCG reports biennially to the Governor and the General Assembly on groundwater quality, quantity, and the State's enforcement efforts.

OVERVIEW OF THE PWS PROGRAMS IN ILLINOIS

Community Public Water Supply Surveillance Program

To sustain compliance with regulatory requirements and ensure the safety of Illinois CWS consumers, the Illinois EPA is committed to completing engineering evaluations (sanitary surveys) as frequently as possible. Through the DPWS' institutional knowledge, the more frequent the contact between the Illinois EPA and CWS, the higher the percentage of compliant water systems.

The focus of the Illinois EPA's inspections of CWS continues to be an evaluation of the general operation and maintenance practices at the respective systems. Inspectors evaluate state regulations under 35 Ill. Adm. Code and various ancillary programs that affect the CWS, such as the regulations under the *Public Health Security & Bioterrorism Preparedness & Response Act of 2002*. Fundamental aspects of these inspections also revolve around the provision of technical assistance, identification of significant deficiencies and necessary corrective actions to ensure the safety of drinking water supplies. The DPWS conducts surveillance and inspections at CWS from six regional offices located in Rockford, Elgin, Champaign, Springfield, Collinsville and Marion.

With assistance of national stakeholder groups, the U.S. EPA has established that over the next two-year reporting cycle, state primary enforcement programs should complete sanitary surveys at a minimum of 79.5 percent of the CWS in their state on a 3-year frequency. For this reporting period, the Illinois EPA has conducted sanitary surveys at approximately 78.4 percent (1,370 of 1,748) of the CWS under its regulatory authority. In response to the U.S. EPA Calendar Year 2017 Joint File Review and Enforcement Verification Report, the Illinois EPA has added two additional field staff for increased regulatory oversight of CWS. While the number of sanitary surveys conducted has slightly increased within the most recent reporting cycle, the Illinois EPA anticipates significant progress in achieving and surpassing the stated goal indicated above. In addition, we are in the process of posting a field staff position in our Elgin Regional Office.

Personnel	
Field Operations Section	
Springfield Central Office	Champaign Regional Office
<i>Rick Cobb, Acting Division Manager</i>	Vacant, Manager
Vacant, Deputy Division Manager	Matt Talbert
Steve Vance, Manager	Vacant (Env. Protection Engineer)
Rockford Regional Office	Springfield Regional Office
Vacant, Manager	Vacant, Manager
Joy Bliton	John Bartolomucci
Gene Forster	Michael Dragovich
	Jamie Cowles
Elgin Regional Office	Collinsville Regional Office
Segundo Nallatan, Manager	Gayle Renth, Manager
Dwayne Booker	James Blessman
Grover Hopkins	Regan Taylor
Dharmishtha Patel	
Vacant EPE	Marion Regional Office
Shibu Vazha	Vacant, Manager
Marlene Diamond (Admin. Support)	John Kinder
	Chris Johnston

Non-Community Public Water Supply Surveillance Program

The NCPWS surveillance Program shares many commonalities with the CWS surveillance activities. Sanitary surveys are intended to review the adequacy of the water system’s source of water, facilities, equipment, operation and maintenance to ensure the production and distribution of safe drinking water. Sanitary surveys for NCPWS are intended to identify and correct significant deficiencies and are conducted once every two years by the Illinois DPH or LHD field staff. Illinois DPH Field Offices are located in Rockford, Peoria, Champaign, Marion, Edwardsville and West Chicago. There are 93 LHDs throughout the State that help conduct NCPWS surveillance and perform sanitary surveys. Illinois DPH RO staff and LHD staff that perform sanitary surveys generally work in several Public Health Surveillance Programs and many times conduct multiple program inspections while visiting a NCPWS.

Illinois DPH Policy sets a goal for completing sanitary surveys once every two years. For the 2016-2018 calendar year time-frame, the Illinois DPH has conducted sanitary surveys at approximately 97.5 percent of the NCPWS under its regulatory authority.

Community Public Water Supply Compliance Assurance Program

To ensure Illinois CWS are in compliance with state and federal statutes and regulations, the Illinois Pollution Control Board (IPCB) adopts identical in substance regulatory provisions from the U.S. EPA, per Section 5/7.2 of the Act. Ensuring that CWS are in compliance with these regulations, which include MCLs in drinking water, is substantially the core mission of the Compliance Assurance Section (CAS). Additionally, CAS coordinates technical outreach to water systems to assure proactive compliance measures are taken ahead of formal enforcement. The DPWS conducts compliance efforts for CWS from the Central Office in Springfield.

Personnel
Compliance Assurance Section
Mary Reed, Manager
Andrea Rhodes, Lead Specialist
Shirley Leonard (Office Assistant)
Vacant (Environmental Protection Specialist)
Vacant (Office Coordinator 2)
Chemical Monitoring Unit
Jeri Long, Manager
Paul Connelly
Tatum DeMay
Vacant (Environmental Protection Specialist)

Non-Community Public Water Supply Compliance Assurance Program

Similar to the CWS compliance program, the Illinois DPH tracks water system compliance with state and federal statutes and regulations. All NCPWS are tested at least annually for total coliform bacteria and nitrate. NTNC PWS are also tested for contaminants, such as pesticides, solvents, lead and copper, arsenic, metals and disinfection byproducts. Responsibility for tracking water system compliance is shared by Regional and Central Office staff. Data tracking activities are conducted by Central Office Staff.

Personnel
Eric Portz, Safe Drinking Water Program Manager
Jamie Tossetti, Administrative Assistant

Community Public Water Supply Operator Certification Program

The Illinois Public Water Supply Operations Act (415 ILCS 45/) establishes the statutory basis for the community water supply operator certification program in Illinois. This statute further establishes a reliable mechanism for Illinois EPA communications with CWS, ensuring that Responsible Operators in Charge (ROINC) supervise the portions of the CWS for which they are accountable, and requiring the timely submittal of information that the Illinois EPA relies upon to protect drinking water quality. Finally, this statute provides the basis for the regulatory requirements found in 35 Ill. Adm. Code Part 681. The most recent amendments to this Part

became effective in 2017. The 2017 revisions to the regulation focused on further defining the experience requirements to become a licensed water supply operator in Illinois.

The Illinois EPA would also like to make note of our training partners. The operator training opportunities provided by the Environmental Resources Training Center at Southern Illinois University-Edwardsville, the Illinois Potable Water Supply Operators Association, Illinois Rural Water Association, Illinois Section of the American Water Works Association and two-year colleges are a huge factor in the successful treatment of potable water in Illinois. Whether large conferences, webinars, semester long classes, regional forums or water system specific curricula these educators, associations and individuals have afforded opportunities to water professionals in Illinois that is unparalleled across the country.

The Illinois EPA’s CWS Operator Certification Program is administered by the CAS of the DPWS. The Illinois EPA estimates that this program requires approximately two full time staff. The Operator Certification Program is coordinated by a staff member from the CAS of the DPWS:

Personnel
Andrea Rhodes, Operator Certification Coordinator

Non-Community Public Water Supply Operator Certification Program

The Illinois DPH NCPWS program administers a program to properly credential NTNC PWS from the Central Office in Springfield. The Illinois DPH uses the services of the Water Quality Association to conduct initial Operator Certification Training and administer certification examinations. The following Illinois DPH Environmental Health Services staff is actively involved in the administration of the program:

Personnel
Eric Portz, Safe Drinking Water Program Manager
Maria Craine, Administrative Assistant

Community Public Water Supply Capacity Development Program

The Illinois EPA and DPH continue to support the Capacity Development Program and are convinced that maintaining PWS capacity is essential in operating a safe drinking water system. The original premises presented in the Illinois Capacity Development Strategy have proven accurate. Technical assistance remains the cornerstone in developing capacity in PWS that are in distress. Although the resource demands of capacity assistance are significant, Illinois continues to believe that capacity development is an integral element of the working relationship between regulatory staff and PWS officials. As such, capacity demonstration elements will continue to be integrated into the routine activities of both Agencies in order to ensure continued progress.

It is difficult to estimate the full-time equivalents devoted to this program as it is integrated into all aspects of the drinking water program. In several recent U.S. EPA evaluations of the Illinois Capacity Development Program, U.S. EPA has expressed concerns that this program is understaffed. The Capacity Development program is now coordinated by a staff member from the Permit Section of the DPWS:

Personnel
Kent Cook, Capacity Development Coordinator

Non-Community Public Water Supply Capacity Development Program

The Safe Drinking Water Program Manager coordinates Capacity Development Program activities at Illinois DPH. Currently, the Program Manager reviews new NTNC Public Water System Construction Permit Applications and performs capacity reviews on these new systems. When capacity reviews are needed at existing NTNC Public Water Systems, the Program Manager coordinates the reviews with water system personnel and RO/LHD field staff.

Cross-Connection Control Program

The Cross-Connection Control Program in Illinois is one of several tools intended to protect water consumers in the state. Statutes in Illinois establish that no person can threaten a water supply and water supply officials are responsible for protecting their water mains from connections that have the potential to allow the backflow of contaminants into their respective distribution systems (a cross-connection). Regulations have been developed and modified to outline what comprises a viable Cross-Connection Control Program.

Water supplies in Illinois have significant partners in the implementation of their Cross-Connection Control Program. While it is up to the Illinois EPA to ensure that CWS have viable programs through physical inspection of water treatment facilities and documentation reviews, the Illinois DPH deals with the plumbing aspects of the program.

The Environmental Resources Training Center located at Southern Illinois University-Edwardsville provides for the training of licensed plumbers who wish to become certified Cross-Connection Control Device Inspectors (CCCDI). While any Illinois licensed plumber can inspect plumbing, or install a backflow device or assembly, only an Illinois CCCDI can test that device or assembly. Additionally, the Illinois EPA relies upon the Environmental Resources Training Center to track and properly credential CCCDIs.

It is difficult to estimate the full-time equivalents devoted to this program as it is integrated into all aspects of the DPWS's programs. However, the Cross-Connection Control Program Coordinator Position remains vacant at this time.

Groundwater and Source Water Protection Program

The Groundwater and Source Water Protection Program in Illinois is framed by Public Acts 83-1268 and 85-063, and the SDWA Section 1453. These laws amended the Act, created the Illinois Groundwater Protection Act (IGPA), and led to the development of IPCB regulations for groundwater quality standards and protection requirements. Further, the IGPA requires stakeholder input from the ICCG and Groundwater Advisory Council (GAC) on the development of groundwater protection programs, laws and policies. The Act was amended to require the development and implementation of a "priority" Regional Groundwater Protection Planning Program comprised of local stakeholders. In addition, the IGPA requires the ICCG to undertake a comprehensive evaluation of progress being made under these laws with biennial reporting to the Governor and General Assembly. The DPWS source water protection initiatives are

generally managed from the Central Office in Springfield and the Rockford Office by the GWS of the DPWS. See the IGPA Biennial Report.

Personnel	
Groundwater Section	Source Water Protection Unit
Rick Cobb Manager	Anthony Dulka, Manager
Vacant, Office Associate	Vacant (Springfield Office)
	Laurie Moyer (Rockford Office)
	Greg White (Rockford Office)
Geographical Analysis Unit	Hydrogeology and Compliance Unit
Vacant, Manager	Bill Buscher, Manager
Ryan Bennett	Lynn Dunaway, Lead Geologist
Alan Fuhrman	Amy Zimmer
Keri Beckham,	Vacant, Environmental Protection Geologist

Permitting Program

Correct construction and operation of a PWS is essential for providing a safe and adequate supply of drinking water. The DPWS conducts all permitting functions for CWS from the Central Office in Springfield. Illinois EPA is working toward posting a lead engineer position to fill the current vacancy.

Personnel	
Permit Section	
David Cook, Manager	Chris Kohrman,
Vacant, Lead Engineer	Gerard Zimmer
Kent Cook	Carolyn Ealey, Office Associate
Cody Bauer	Vacant, Office Associate
Vacant, Environmental Protection Engineer	

The Safe Drinking Water Program Manager conducts all permitting functions for NTNCWS from the Central Office in Springfield.

Personnel
Eric Portz, Safe Drinking Water Program Manager

Public Water Supply Revolving Loan Program

The PWS revolving loan program is administered by the Illinois EPA’s BOW-IFAS. IFAS also administers the Water Pollution Control revolving loan program. IFAS manages all aspects of the funding process with input from the DPWS. Detailed program information is available on the Illinois EPA web site at <https://www2.illinois.gov/epa/topics/grants-loans/state-revolving-fund/Pages/default.aspx>.

Generally, the first step toward the Illinois EPA working with an applicant to fund a project is the submittal of a planning report, called a “Project Plan” in Illinois’ Administrative Loan Rules.

An applicant must also complete a Project Planning Submittal Checklist which identifies the location of other necessary information for application processing. Once a scope of work is identified in a “Project Plan,” IFAS staff will distribute the planning report to the PS and FOS for review and approval. The CAS is also consulted to ensure funding is provided to address the loan applicant’s most pressing needs. Once comments from each of these Sections are received, IFAS sends a review letter requesting any additional information that is needed or answers to any questions the Illinois EPA may have. IFAS then produces a Project Summary document and the loan applicant will be required to either hold a public hearing (if the potential for environmental issues exists or if financial impacts to the loan applicant’s residents are significant), or simply place an ad in the local newspaper announcing the proposed project and request for funding. The public hearing, or placement of an ad in the local newspaper, is followed by a 10-day public comment period allowing for the submission of written comments concerning the proposed project. Once the public comment period is over and IFAS receives proof of the public notification in the newspaper and any responses to any public comments, the Illinois EPA will issue Planning Approval. Planning Approval is good for five years. Therefore, once a scope of work has been identified and approved, the loan applicant can pursue funding for any portion(s) of that scope within the following five years.

The Illinois EPA’s revolving loan funding process is unlike that of a bank in the respect that the Illinois EPA does not offer the funding agreement until after the recipient has demonstrated a definitive need for the project, obtained Illinois EPA Planning Approval, obtained all necessary permits, demonstrated the means and ability to

The U.S. EPA has determined that lead service line replacement is an eligible loan expense. Following a legislative amendment, the Illinois EPA processed its first lead service line replacement project in 2017.

repay the funding, adopted all necessary ordinances to do so and then gone out to bid on the project. Once a “winning/low” bidder is identified, the Illinois EPA can issue the Loan Agreement followed by the loan applicant entering into the contract for construction of the project. The Illinois EPA can fund the construction costs as well as planning efforts, design engineering and construction engineering/oversight. At the present time, loan applicants are anticipating a “Base” interest rate of approximately 2.00 percent for State Fiscal Year 2020. Interest rates are established each July 1 for the wastewater loan program, and the drinking water loan program, for the following 12-month period based upon one-half of the previous 12-month mean interest rate of the 20 General Obligation Bond Buyer Index. As of July 1, 2017, loan applicants can qualify for reduced interest rates (Small Community Rate and/or Hardship Rate) based upon their service population, median household income, unemployment rate and population trends. Loan applicants qualifying for the Small Community Rate or Hardship Rate also have the option of extending the term of their loan beyond the traditional 20 years, up to a maximum of 30 years, provided the term of the loan exceeds the useful life of the funded project. Details on the fixed loan rate of a loan agreement and repayment periods can be found within Title 35 Ill. Adm. Code Part 662.

The BOW estimates that this program currently utilizes 15 full-time staff.

MEASURING RESULTS

Numerous tools are used to measure program effectiveness. The SDWIS/STATE is a key component in the tracking of overall program effectiveness. Quarterly uploads of data by the DPWS CAS and DoIT to U.S. EPA is the foundation by which the Illinois EPA and CWS are evaluated with regard to primacy requirements and program measures. Beyond these federal requirements, SDWIS/STATE is used by the DPWS to ensure that routine inspections of CWS are occurring, proper permits are obtained, and safe water is being supplied to Illinois' water consumers. Additionally, the PS utilizes a permit tracking data system to ensure that construction and operating permits are issued in a timely fashion. This tracking system is reliant upon the SDWIS/STATE as a framework, as is the Groundwater Section's PROTEUS system. PROTEUS is a database designed using web-based development tools. Groundwater, source water, and PWS engineering evaluation data and SDWIS/STATE continue to be integrated into the PROTEUS database.

Community Water Supply Compliance Assurance Program

For calendar year 2018, 98.9 percent (11,870,075 of 12,001,944) of the population served by CWS in Illinois receive drinking water that meets all applicable health-based drinking water standards. Also, for calendar year 2018, 97 percent (1,697 of 1,748) of CWS in Illinois meet all applicable health-based drinking water standards.

Each quarter, the Illinois EPA submits data to the SDWIS/FEDERAL. The data submitted include but are not limited to: PWS inventory information; the incidences of violations of Maximum Contaminant Levels; Maximum Residual Disinfectant Levels; monitoring, and treatment technique violations; and information on enforcement activity related to these violations. This report provides the numbers of violations in each of six categories:

- 1) Maximum Contaminant Level violations;
- 2) Maximum Residual Disinfectant Level violations;
- 3) Treatment Technique requirement violations;
- 4) Significant violations of Monitoring and Reporting requirement violations;
- 5) Significant violations of the Consumer Notification requirements; and
- 6) Violations of Variances and Exemptions.

Appendix B of this report is a listing for each contaminant regulated by the SDWA, which includes the numbers of MCL, MRDL, Treatment Technique and M&R requirement violations for each compliance period during calendar year 2018, the number of violations that were returned to compliance (RTC), and the number of systems incurring violations. **Appendix C** and **Appendix D** of this report contain a detailed listing of PWS with MCL, MRDL, or Treatment Technique violations.

Acute vs. Chronic Indicators - It is important that safe drinking water be free of contamination which has the potential to cause either short-term or long-term health effects. Contaminants fall into two groups according to the health effects that they cause:

ACUTE

Acute effects occur within hours or days of the time that a person consumes a contaminant. People can suffer acute health effects from almost any contaminant if they are exposed to extraordinarily high levels (as in the case of a spill). In drinking water, microbes, such as bacteria and viruses, are the contaminants with the greatest chance of reaching levels high enough to cause acute health effects. Most people's bodies can fight off these microbial contaminants the way they fight off germs; and these acute contaminants typically do not have permanent effects. Nonetheless, when high enough levels occur, they can make people ill, and can be dangerous or deadly for infants, the elderly and persons whose immune systems are already weak due to HIV/AIDS, chemotherapy, steroid use, or another reason.

CHRONIC

Chronic effects occur after people consume a contaminant at levels over EPA's safety standards for many years. U.S. EPA develops the standards for chronic MCLs on the basis that a person may have an adverse health effect after consuming two liters of water daily over a 70-year lifetime. The drinking water contaminants that can have chronic effects are chemicals (such as disinfection by-products, solvents, and pesticides), radionuclides (such as radium), and minerals (such as arsenic). Examples of the chronic effects of drinking water contaminants are cancer, liver or kidney problems, or reproductive difficulties.

As described previously, over 99 percent of the population served by Illinois CWS received drinking water in compliance with acute (short-term) health requirements, and 99 percent were in compliance with chronic (long-term) health requirements. It is important to note that most non-compliance was for a short duration, and the potential for health risk was minimized through prompt corrective action by the water supplies. Supplies with microbial problems (bacterial or turbidity non-compliance) are required to issue boil orders when the violation occurs. Community water systems with acute MCLs were limited to 5 (nitrate, nitrite and e coli MCL and SWTR TT) water systems.

Lead and Copper Compliance -

Lead and copper are regulated by a Treatment Technique that requires systems to control the corrosiveness of their water. The lead action level (15 parts per billion), when exceeded in more than ten percent of the water samples collected in consumers' homes, requires the water supply to implement optimal corrosion control treatment plans or

procedures which would prevent anticipated adverse health effects and ensure that lead or copper is controlled in the drinking water.

In 2016, beyond the regulatory requirements of the Lead and Copper Rule, the Illinois EPA:

- Made revisions to sampling instructions and education materials to CWSs based upon information supplied by U.S. EPA, including deletion of any mention of "pre-flushing" lead service lines the night before sample collection and removing faucet aerators;
- Expedited the path from lab analysis of samples to consumers, in that CWSs now notify consumer/volunteer sample collectors of results greater than 15 ppb within 10 days of becoming aware of lab results.

In 2018, 707 CWS sampled for Lead/Copper. Ten of these systems were over lead action level. In addition, 16 of these CWS were over the 90th percentile established for copper. These water systems were required to make timely notification to all water consumers of the action level exceedance. Prior to this comprehensive announcement, water systems are required to advise

voluntary monitoring participants of the outcome of their respective laboratory analysis and provide information regarding health effects and ways to minimize lead in drinking water. The notice to these monitoring participants is expedited (essentially immediate upon receipt of results) if the lead level detected is above a 15 part per billion threshold. Where necessary, the Illinois EPA follows up to ensure this notification has been properly administered.

Consumer Awareness for CWS - Every CWS must provide an annual water quality report (sometimes called a Consumer Confidence Report or CCR) to its customers. The report provides information on local drinking water quality, including the water's source, the contaminants found in the water, and how consumers can get involved in protecting drinking water. If the consumers have been looking for specific information about their drinking water, this annual water quality report will provide them with the information they need. In 2018, 92 percent of the CWS issued a satisfactory Consumer Confidence Report by the annual July 1 deadline.

Public Notification for CWS - In conjunction with each violation described in the previous sections, public notification is required to be issued. Public notification provides a means to protect public health, build trust with consumers through open and honest sharing of information, and establishes an ongoing, positive relationship with the community. Public notice can also be used to help consumers understand rate increases and support increased funding for drinking water treatment and protection. Properly done, the notices can work for the benefit of the water supplier as well as the public. If a problem occurs, educated consumers are more likely to understand the issue and support the actions a water utility must take. Many deadlines for public notice issuance depend upon prompt contact and discussion between the water system and Illinois EPA. Efficient communication with prompt reporting is the cornerstone for compliance. In 2018, less than three percent of the community water systems failed to meet all public notice requirements.

Public Education for Lead for CWS – Public education materials for lead must be provided to customers if a CWS exceeds the lead action level in their most current round of monitoring. As mentioned previously, approximately 98.3 percent of CWS were below the lead action level in their most recent round of sampling and therefore public education was not required. During 2018, 1 public education violation was issued.

Monitoring and Reporting Compliance for CWS - The U.S. EPA has established contaminant-specific minimum testing schedules for public water systems. Water systems typically monitor for bacteria, protozoa and viruses, nitrate and nitrite, volatile organic compounds (e.g., benzene), synthetic organic compounds (e.g., pesticides), inorganics (e.g., arsenic), lead and copper, radionuclides, and disinfectant disinfection by-products. Although failure to monitor does not necessarily suggest safety problems, conducting the required M&R is critical to ensure that problems will be detected. In 2018, 94 percent of community supplies were compliant with M&R requirements.

Illinois EPA Enforcement Strategy - The Illinois EPA has enforcement authority over CWS in Illinois. Illinois EPA has a standardized protocol for all enforcement matters to ensure unilateral, consistent treatment of enforcement cases. For any violation outlined in the previous pages, a failure to take corrective action could result in the water system being considered for

enforcement under Section 31 of the Act. Enforcement normally begins with the identification of a significant unresolved violation by technical staff. Information about the violator/violations is forwarded to the Compliance Group (composed of Section Managers). If the Compliance Group determines a Violation Notice (VN) is warranted, the VN recommendation is sent to the Illinois EPA's Compliance Management Panel for review. After review by the Panel, the CAS prepares and issues the VN. After the VN is sent, the violator will have a set time period (45 days or 60 days depending on whether a meeting is requested) to respond in writing with a Proposed Compliance Commitment Agreement (CCA). Enforcement activities are suspended if the proposed CCA is accepted by the Illinois EPA. If at a later point in time, the violator does not follow the CCA agreement, enforcement may resume.

If the proposed CCA is not accepted or the violator fails to respond to the VN, the case is brought before the Enforcement Decision Group (EDG), composed of senior BOW and Division of Legal Counsel management. The EDG determines the next course of action such as recommending a case for formal enforcement. Formal enforcement normally consists of referring the water system to the Illinois Attorney General or the U.S. EPA for filing with a court to direct corrective actions, which may include imposition of penalties.

Violation Summary - Current and historical violation data⁴ and follow-up enforcement actions can be found at the following web site: <http://water.epa.state.il.us/dww/index.jsp> .

The following table summarizes the number of CWS in violation with aspects of the drinking water compliance program during 2018.

Violations during Calendar Year 2018 COMMUNITY Water Systems						
Total Number of Regulated Systems					1749	
Total Number of Systems in Violation					97	
Total Number of Violations					195	
Rule Subtotal by Violation Type						
Rule Category	MCLs		Treatment Techniques		Significant Monitoring Reporting	
	Number of Violations	Number of Systems*	Number of Violations	Number of Systems*	Number of Violations	Number of Systems*
Radiological	16	8	NA	NA	2	2
Nitrates	0	0	NA	NA	1	1
IOCs	24	8	NA	NA	0	0
SOCs	0	0	NA	NA	8	1
VOCs	0	0	NA	NA	1	1
Coliform	0	0	NA	NA	28	8
Ground Water Rule	NA	NA	0	0	0	0
All SWTR	NA	NA	3	2	1	1

⁴ The data for this reporting originates and is maintained in the Illinois Safe Drinking Water Act Information System.

Violations during Calendar Year 2018 COMMUNITY Water Systems						
Total Number of Regulated Systems					1749	
Total Number of Systems in Violation					97	
Total Number of Violations					195	
Rule Subtotal by Violation Type						
Rule Category	MCLs		Treatment Techniques		Significant Monitoring Reporting	
	Number of Violations	Number of Systems*	Number of Violations	Number of Systems*	Number of Violations	Number of Systems*
DBPR (Stage 1) (chlorine_chloramines)	NA	NA	4	1	9	9
DBPR (Stage 2)	7	5	0	0	32	32
Lead & Copper	NA	NA	2	2	35	32
Public Notice	NA	NA	NA	NA	25	19
Consumer Awareness	NA	NA	NA	NA	2	2
TOTALS	7	5	9	5	132	103
	Percentage of Systems In Compliance = 99%		Percentage of Systems In Compliance = 99%		Percentage of Systems In Compliance = 94%	

Numbers from U.S. EPA-CDX Reporting Services. Although a CWS may be out of compliance with more than one contaminant or violation type, when calculating totals, it is counted no more than once within the population being totaled. So, the sum of NUMBER OF CWS IN VIOLATION, over the various violation types or contaminants, may not add up to the total.

Non-Community Water Supply Compliance Assurance Program

Both NTNC and TNC are required to monitor for contaminants like CWS and issue public notification if in violation. However, TNC only monitor for nitrates, coliform bacteria, and are subject to some requirements of the surface water treatment rule (if they use surface water). NTNC monitors the same contaminants as CWS but are not required to monitor radionuclides or issue/publish a Consumer Confidence Report.

Lead and Copper Rule- The Illinois DPH conducts a thorough review of sample results at NTNC PWS with special emphasis on schools and daycares. The Illinois DPH reviewed and revised sample site selection criteria and sampling protocol in 2016. These documents were revised based on sampling protocol recommendations from U.S. EPA following Flint and ensure sample site locations represent the highest level of health protection based on the criteria of human consumption and “worst case” risk for lead leaching. Illinois DPH included these documents in a quarterly sample schedule letter sent to all NTNC PWS in June 2016 and requested that all systems re-submit a sample site plan prior to their next Lead/Copper sampling event. This was fully implemented in 2017 and all Lead and Copper sampling are now conducted following the revised sample site collection criteria and sampling protocol.

At the end of 2018, only 14 NTNC PWS were over the lead action level, thus 97 percent of systems were below the action level. Illinois DPH will continue to follow-up with these 14 water systems to meet the lead action levels and the follow-up activities required under the LCR.

Illinois DHP Enforcement Strategy - The Illinois DPH has enforcement authority over NCPWS in Illinois. Illinois DPH has a standard protocol for enforcement matters to ensure consistent treatment of enforcement cases. For any violation outlined in the previous pages, a failure to take corrective action could result in the water system being considered for enforcement under Section 9 of the IGPA. Enforcement normally begins with identification of a significant unresolved violation by technical staff. The Illinois DPH RO or LHD determines an appropriate amount of time to perform corrective action and send a VN to the water supply requesting corrective action within the time frame allowed. If corrective action is not performed within this time frame, information is forwarded to the Illinois DPH Central Office to initiate formal enforcement action. A letter is then sent to the State's Attorney, the Attorney General or U.S. EPA requesting enforcement action which may include imposition of penalties.

Illinois DPH uses the automated compliance determination modules for compliance for most of the major rules. Manual compliance is used for surface water rule compliance as Illinois DPH numbers have now decreased to ten surface water systems and only three of these are Non-Transient Non-Community Water systems with conventional treatment. The other seven systems are Transient Non-Community Water Systems that utilize slow sand filtration systems.

As detailed under future directives, Illinois DPH was able to complete 2018 nitrate compliance determinations and will provide complete reporting of the violations enumerated in the table below. Unfortunately, Revised Total Coliform Rule (RTCR) and Groundwater (GW) Rule compliance determinations and reporting for treatment technique and monitoring violations could not be completed again in 2018. Resource limitations and stressors that contributed to this deficiency are also detailed under future directives.

Violation Summary - During calendar year 2018, the percentage of persons served by Illinois NCPWS that were compliant with all health requirements, treatment techniques, or health advisories was 99.6 percent**. The following table summarizes the number of NCPWS in violation with aspects of the drinking water compliance program.⁵

⁵ These figures are not complete because Coliform Treatment Technique and Coliform / GW Rule monitoring data have not been verified with Local Health Department (LHD) staff, which has direct oversight for these water systems. MCL data is complete.

Violations during Calendar Year 2018 NON-COMMUNITY Water Systems						
Total Number of Regulated Systems					3,785	
Total Number of Systems in Violation					1210**	
Total Number of Violations					3450**	
Rule Subtotal by Violation Type						
Rule Category	MCLs		Treatment Techniques		Significant Monitoring Reporting	
	Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems
Radiological	NA	NA	NA	NA	NA	NA
IOCs	9	5	NA	NA	1127	1064****
SOCs	0	0	NA	NA	595	16
VOCs	0	0	NA	NA	1512	57
Coliform	14	13	0*	0*	45*	42*
Ground Water Rule	NA	NA	0	0	0*	0*
SWTRs	NA	NA	0	0	0	0
DBPR (Stage 1)	0	0	0	0	64	26
Lead & Copper	NA	NA	1	1	83	72
Consumer Awareness	NA	NA	NA	NA	0	0****
TOTALS	23	18	1**	1**	3426**	1198**
	Percentage of Systems In Compliance = 99.5%		Percentage of Systems In Compliance = 99.9%		Percentage of Systems In Compliance = 68.3%**	

Although a NCPWS may be out of compliance with more than one contaminant or violation type, when calculating totals, it is counted no more than once within the population being totaled. So, the sum of NUMBER OF NCPWS IN VIOLATION, over the various violation types or contaminants, may not add up to the total.

* These figures have not been verified with Local Health Department staff that have direct oversight for these water systems.

** This data is incomplete at this time due to Coliform and GW Rule treatment technique and monitoring data.

*** Illinois DPH does not include public notice for monitoring violations in the compliance rate.

**** This number is very high due to the Illinois DPH lab discontinuing Nitrate testing for Non-Community Water Systems. Illinois DPH is committed to bringing these systems back into compliance for Nitrate Monitoring.

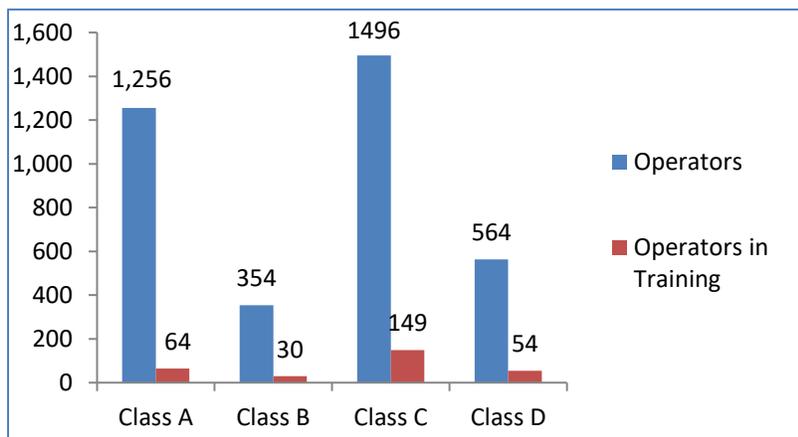
Community Water Supply Operator Certification Program

The Illinois EPA administers the Drinking Water Operator Certification program through authority granted by the Illinois Public Water Supply Operations Act, 415 ILCS 45/et seq. This Act provides rulemaking authority to the Illinois EPA. The Illinois EPA has promulgated these rules in 35 Ill. Adm. Code Part 681. The State ensures the public health objectives of the national Operator Certification Guidelines, published in the Federal Register on February 5, 1999, are met by the Illinois EPA's program.

Illinois' Operator Certification Regulations can be found at the following web site:
<https://pcb.illinois.gov/SLR/IPCBandIEPA/EnvironmentalRegulationsTitle35>

In 2018 there were 1,749 Community Water Supply (CWS) facilities in Illinois. These facilities are divided into four classifications based on the complexity of treatment: Class D facilities are CWS with limited pumpage, storage and distribution systems. Class C facilities are CWS whose treatment facilities are limited to chemical addition. Class B facilities are CWS whose treatment facilities generally include filtration, filtration and aeration, or ion exchange. Finally, Class A CWS are water treatment facilities that generally employ surface water treatment techniques, including coagulation, lime softening, sedimentation, or advanced filtration. In 2018, there were 452 Class D, 714 Class C, 422 Class B, and 160 Class A CWS. Illinois does not have a separate certification for distribution operators. Certification at a D level covers distribution systems; certifications at higher levels are cumulative; and include qualifications for distribution operations. Any change in facility classification is generally communicated by the Field Office Section to Drinking Water Compliance personnel. The change is documented in the Safe Drinking Water Information System (SDWIS). If the change in classification of the CWS necessitates a change in certification requirements for an operator the water system is notified by Field Office Section personnel.

In 2018, there were 3,670 fully certified drinking water operators in Illinois. The certification level breakdown was as follows: 1,256 A operators, 354 B operators, 1,496 C operators and 564 D operators. Each CWS in Illinois is required to employ a ROINC to directly supervise the water system. The ROINC is required to



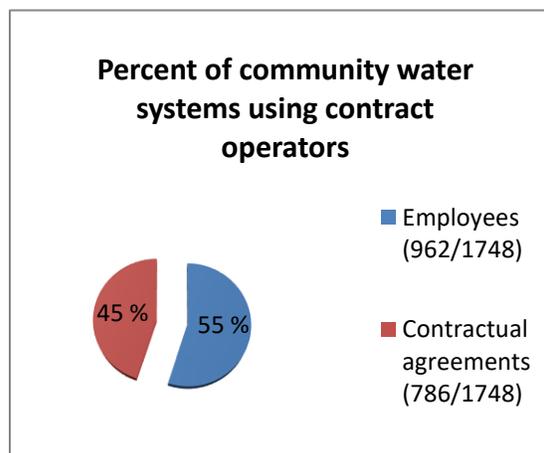
hold a valid certificate at a level equal to or greater than the classification of the CWS. The owner of the CWS and the ROINC are jointly responsible for the proper operation of the water supply.

The Responsible Operator in Charge (ROINC) at a Community Water Supply makes all decisions concerning the proper operation of the water supply that may affect public health either by telephone, e-mail, or a Standard Operating Procedure implemented at the facility. Operational personnel may perform day to day operations and may carry out any operating instructions conveyed by the ROINC.

To become a certified drinking water operator in Illinois, a person must take and pass an exam. The exams are comprised of multiple-choice questions to establish that person has the necessary knowledge to perform the job. A passing score is 70 percent. In 2018, Illinois offered exams at 12 locations for a total of 54 exam dates throughout the year. The following exams were taken: Total: 859 exams; Class A: 120; Class B: 88 B exams; Class C: 436; and Class D: 215 exams. The pass rate in 2018 was as follows: A exam passed 33.3 percent of the time, B exam passed 44.3 percent of the times, C exam passed 22 percent of the time and the D exam passed 25.6 percent of the time.

A person earns the title of Operator in Training (OIT) once they achieve a passing score on an exam. The certificate for an OIT is valid for a period of six years. An OIT is not fully certified and therefore is not able to act as a ROINC for any water system. To obtain full certification, an OIT is required to submit an application showing that the education (a high school diploma or GED) and experience requirements have been met for the level of certification requested. At one time, the Illinois EPA required proof of a high school diploma or GED prior to allowing a person to sit for an exam but that was changed in 2017. This was done to promote internships by allowing a high school student to attempt the exam before graduation. A high school diploma or GED is required to meet the qualifications for full certification. The minimum experience requirements defined in the regulation must be met before full certification will be granted. Late in 2017, Illinois adopted a revision to the operator certification regulations. A person is now required to meet the experience requirements defined in hours. Certification for a Class A requires 5,340 hours of experience, a Class B requires 5,340 hours of experience, a Class C requires 1,780 hours of experience, and a Class C requires 890 hours of experience. A portion of the experience requirements may be met with advanced education or training pertinent to the field. This requirement is more stringent than the previous regulation and therefore no backsliding has occurred. A person may hold a valid certification and be an OIT at a higher certification level at the same time. During 2018 there were a total of 297 OITs broken down as follows: 64 A OITs, 30 B OITs, 149 C OITs and 54 D OITs. Of the total number of OITs 93 individuals hold valid certifications at one level and hold an OIT designation at a higher level. Of the total number of OITs listed previously (297), 90 earned their OIT status in 2018. Additionally, 161 operators were fully certified in 2018, comprised of: 26 Class A; 20 Class B, 63 Class C; and 52 Class D certifications.

In 2017, the Illinois EPA stopped issuing Non-Compliance Advisories (NCAs) to CWSs that were not in compliance with the requirement to have a valid contract with a certified operator. In August 2018, we started to issue NCAs once more. Although the NCAs seem to be an exercise in paperwork, in some instances they get the attention of the CWS owner and result in a return to compliance before it is necessary to initiate formal enforcement. Currently, a CWS is sent a reminder letter 60 days prior to expiration of the contract. If a new contract is not received in a timely manner the Compliance Assurance Section follows up with a phone call to the CWS.



A formal Violation Notice (VN) consistent with Section 31 of the Act is issued once the expiration date has passed. The VN, in turn, can be followed by a Notice of Intent to Pursue Legal Action. The culmination of this process is a referral to the Attorney General’s Office to ensure compliance and to seek a monetary penalty. The Illinois EPA generally believes this process has been effective as documented by the high compliance rates described subsequently. The Illinois EPA uses SDWIS and an internally developed Operator Certification database to track certification requirements. Information is queried weekly to determine compliance with the

requirement for each CWS to employ a ROINC. A report is run bimonthly to maintain consistency between the two databases.

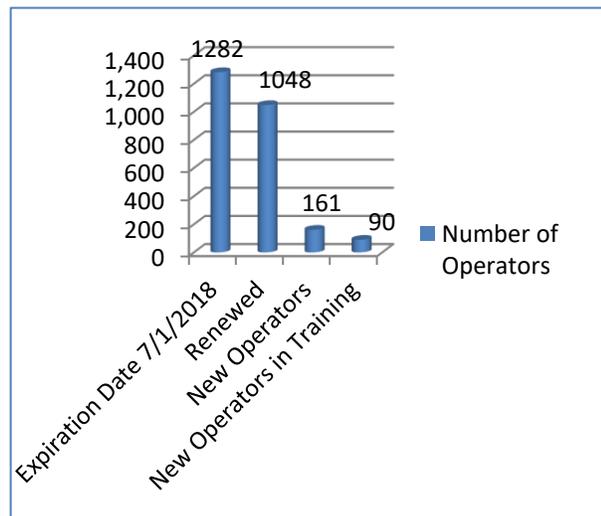
In 2018, four water systems were enforced against for failure to have a properly accredited responsible operator in charge.

During this reporting period, the Illinois EPA sent 16 NCAs and 18 VNs to water systems to address their lack of properly credentialed operational staff. Of the total number of VNs issued, 11 were issued due to failure to submit a contract, 3 were issued for failure to submit a contractual agreement that met all of the required parameters, and 4 were issued due to multiple violations including failure to have a certified operator. Of the four VNs issued due to multiple violations one has been referred to the Illinois Attorney General’s Office for further enforcement. That system remains without a certified operator. One system was still under enforcement from 2017. That system has now employed a properly certified operator. Of the remaining 17 VNs issued, the average time for resolution is approximately 3 months. This time is due more to procedural restrictions of the section 31 process than submittal of the required contracts. In general, a CWS that receives a VN for failure to submit a contract has a Responsible Operator employed at the facility but is simply lacking the paperwork.

In addition to enforcement actions under Section 31 of the Act, the Illinois EPA has tools to assure actions by water supply officials are in the best interest of protecting public health:

- The Public Water Supply Operations Act gives the Illinois EPA the authority to issue an administrative citation (AC) for certain paper work violations committed by ROINC.
 - The Illinois EPA issued 2 ACs in 2018.
- The Illinois EP Act makes it a Class 4 felony for a person to knowingly make a false, fictitious or fraudulent material statement, orally or in writing to the Illinois EPA. Due to budgetary constraints, the Illinois EPA refers criminal cases to the Criminal Investigation Division of the U.S. EPA.
 - No criminal cases were referred during 2018.
- 35 Il Adm. Code 681, Subpart G provides the procedure whereby the Illinois EPA may revoke or suspend an operator’s certification.
 - There were no suspensions or revocations in 2018.

Approximately one-third of operators have certificates that are due for renewal each year. All Illinois drinking water operators are required to have training as a prerequisite for their certificate renewals. Training courses are approved by the Illinois EPA to ensure that the subject matter is acceptable and applicable to the profession. Operators with a valid A or B Certification are required to obtain 30 renewal training hours per each 3-year renewal period. Operators with a valid C or D Certification are required to obtain 15 renewal training hours per each 3-year renewal period. A minimum of two-thirds of the required



training must be comprised of courses that are technical in nature. In March of the year that their certificate is set to expire, operators are sent a Renewal Application Form and Training Summary Report to advise them of their remaining hours required for certificate renewal. All approved training courses can be found on the Operator Certification System link on the Illinois EPA website. In 2018, 1,048 operators successfully completed the required training and renewed their certificates while 213 operators had certificates that expired. Non-compliance Advisories (NCA) were sent to 6 CWSs that had operators with certificates that expired in 2018. For two of the CWSs the operators restored their certifications within a month and the other four hired new operators all within a couple of weeks of the NCA.

If an operator fails to renew their certification within the three-year period, their certification expires. That operator then has two years in which to provide documentation of successful completion of the required renewal training hours to restore their certification. However, the date of expiration of the restored certificate remains the same as it would have been had he or she renewed on time. If certification is not restored within a two-year period, the certification becomes invalid and to recertify the person must retest and apply as if they were seeking certification for the first time. The Illinois EPA issued 29 restorations in 2018, 21 for certifications that expired July 1, 2018 and 8 from certifications that expired prior to 2018.

Early in the Operator Certification program, “grandfathering” of operators was permitted. Upon successful completion of a program, a certificate was awarded at the same level as the water system for which the person was responsible. The certifications were site specific and non-transferable. The grandfathered operator was then required to obtain renewal training hours in the same manner as non-grandfathered operators to maintain their certification. The grandfathered operator is required to renew their certification every three years. At one time, Illinois had 139 operators with grandfathered certifications. In 2018, only 22 of the certifications were still valid. Illinois no longer issues grandfathered certifications for CWS.

Reciprocal certification applications are reviewed on a case by case basis. Illinois has a residency requirement, applicants for reciprocity must either live or work in Illinois to be eligible for reciprocity. The requirements for certification in other states must be at least as stringent as the requirements in Illinois. In 2018, Illinois issued 5 certifications through reciprocity; one A certification, one B certification, two C certifications, and one D certification. Illinois also offers reciprocity to military veterans; however, there were no applicants during 2018.

The Illinois EPA, through statutory authorization, administers a fee program to recover a portion of the cost of administering the Operator Certification Program. Fees are collected for application, renewal, and reinstatement. Certification fees are processed daily by the CAS and sent to the Illinois EPA’s Division of Fiscal Services. These fees are tracked on reports. The Illinois EPA continues to emphasize the importance of the Operator Certification Program and utilizes several funding mechanisms to overcome shortfalls in the existing fee structure.

The success of the program also relies on both internal and external reviews of the CWS Operator Certification Program. During 2017, Illinois EPA finalized its 2016 rulemaking proposal containing revisions and clarifications within the existing operator certification

regulations. The Illinois EPA provides outreach at two large conferences and many operator meetings during the year to update operators on regulatory changes.

The Illinois EPA meets with the Public Water Supply Operator Certification Advisory Board at least two times per year. For meeting times, minutes and agendas see <https://www2.illinois.gov/epa/topics/drinking-water/operator-certification/Pages/default.aspx>. During these meetings, the Advisory Board reviews proposed changes to the Operator Certification Regulations, reports from the Exam Committee, and application/applicant approval process for testing, and training criteria. At these meetings, the Illinois EPA is also provided direction for Operator Certification Program enhancements.

The Illinois EPA also meets at least annually with the Examination Review Committee. This Committee is supported by the Environmental Resources Training Center through contractual agreement with the Illinois EPA. The examination committee reviews and updates questions in the data bank and develops new questions as regulations change. In addition, pass/fail rates of each exam, and pass/fail rates of each question on the exams are reviewed. In 2015, new examinations for Class A were released with a great deal of resources devoted to the question database. A new exam for Class B was released in May 2017 and new exams for the C and D were released in August 2017. It is important to note that the Environmental Resources Training Center is also the location of one of the state's leading water and waste water training facilities and has been integral in assisting the Illinois EPA in the development of the certified operator database, use of modernized testing software and development of technical assistance documents.

Finally, the Illinois EPA would like to make note of our training partners. The operator training opportunities provided by the Environmental Resources Training Center at Southern Illinois University-Edwardsville, the Illinois Potable Water Supply Operators Association, Illinois Rural Water Association, Illinois Section of the American Water Works Association and two-year colleges are a huge factor in the successful treatment of potable water in Illinois. Whether at large conferences, webinars, semester long classes, regional forums or water system specific curricula, these educators, associations, and individuals have afforded opportunities to water professionals in Illinois that is unparalleled across the country.

Non-Transient Non-Community Water Supply Operator Certification Program

All major program elements for the NTNC Water Operator Certification Program have been implemented. (As previously described NTNC are PWS serving at least 25 of the same non-residents for 6 months per year.) Currently there are 420 of these systems in Illinois. Over the reporting period, 373 (88.8 percent compliance) of these have properly certified responsible operators. For the 113 NTNC systems that have some type of chlorine disinfection installed, 105 (approximately 92.9 percent) have a certified operator. There are 601 NTNC water supply operators that are currently trained and certified in Illinois (533 are certified by the Illinois DPH and 68 are certified by the Illinois EPA).

Initially, NTNC operators must pass a 12-hour course consisting of eight sections with an exam at the end of the course. This course is currently administered by the Water Quality Association in coordination with Illinois DPH. Course applicants must have a high school diploma or

equivalent, or must be currently employed by a non-transient, non-community public water system. Periodically, a review of the course's eight sections is done to evaluate the effectiveness of the training, ensure quality, and compliance with U.S. EPA's guidelines. The eight sections of the course include: 1) workplace safety; 2) source water characteristics; 3) equipment maintenance; 4) sampling requirements and procedures; 5) system disinfection; 6) emergency procedures; 7) administration for water supply operations; and 8) mathematics. Currently, no fewer than two initial courses are held annually allowing systems to maintain operator compliance. In 2018, 90 new operators were certified through these two courses. The passing rate for these courses was approximately 95 percent.

After the initial training, operators must meet training requirements for subsequent certificate renewals. Certification renewals began in the fall of 2005. Illinois DPH phased-in the renewal-training requirement as approximately one-third of the operators renew their expiring certificates each year. All NTNC operators must complete an approved renewal course as a prerequisite for their certificate renewals. Operators who renew are required to submit documentation to the Illinois DPH that they have taken the required training.

Renewal course guidelines were reviewed with several industry-wide water education organizations (e.g., typically IL Section AWWA and IL Rural Water Association are consulted and in recent years IL Rural Community Assistance Program has been consulted.). After this review was complete, computer-based training, meeting renewal-training requirements was chosen as the most effective option available. The Illinois DPH selected the Operator Basics 2005 Program developed by the Montana Water Center in cooperation with U.S. EPA as the renewal course.

In June of each year, operators are sent a letter advising them of their expiring certificates. This letter provides instructions on how to download and complete the course or how to order the CD version from the National Environmental Services Center. As of April 30, 2008, the availability to complete the Operator Basics 2005 Course online was discontinued by the Montana Water Center. The Illinois DPH acquired a supply of CDs from National Environmental Services Center and, in the letters mailed, informed operators a CD could be obtained directly from the Illinois DPH.

Feedback on the course remains positive; however, Illinois DPH is concerned that the Montana 2005 Basics Course is no longer available for download from the Montana website and CDs are having increased technical problems. This course has been the Illinois DPH standby for operator recertification. This being the case, Illinois DPH is getting help from technical providers for classroom sessions. Rural Community Assistance Program (RCAP) provided two classroom recertification courses as an option to the Montana Course in 2018. Illinois DPH will continue to use help from RCAP in 2019 and review other options for recertification opportunities. In 2018, 164 current operators renewed their certifications by completing the Operator Basics Course or attending an RCAP class room session.

In August of each year, all NTNC PWS are sent "Operator Summary" letters informing them of the operators registered with Illinois DPH. This information is tracked in an Access Database

and these letters notify each system of any operators with expiring certificates and the importance and legal responsibility of having a properly certified responsible operator.

Non-compliant, NTNC water supplies are immediately advised of the serious nature of not having a properly certified responsible operator and options for achieving compliance. Formal enforcement is evaluated for systems that are significantly non-complaint. Enforcement actions are conducted similar to water quality or monitoring violations. A VN is sent and formal enforcement follows if the water system does not take action. Some LHDs are issuing violations for operator compliance, but the Illinois DPH has not been inputting those in SDWIS/STATE the last four years due to resource limitations, but the information is tracked in an Access database. However, the supplies requiring enforcement action has decreased over time.

Current Compliance Drop. The current compliance rate of 88.8 percent is lower than it has been the last few years. This drop-in compliance is due in large part to Illinois DPH employee turnover. The previous operator compliance officer retired in mid-2018. This position covers three Illinois DPH programs that perform licensing and certification among many other duties. The adjustments necessary to compensate for this retirement and replacement of a long-time employee that had performed these duties allowed a lapse in tracking and compliance rate. This adjustment period is closing, and Illinois DPH is confident a push can be made to bring compliance rates back up to the previous high levels by 2020.

U.S. EPA has expressed concern regarding the status of NCPWS that chlorinate and that utilize surface water sources. Eight of these systems (7.1 percent) are currently out of compliance with operator requirements. As discussed above, these systems are contacted immediately by Regional Office or LHD field staff. This approach is limiting any period of Non-compliance to a maximum of only a few months. The Illinois DPH Central Office Program staff are monitoring any schools/daycares that chlorinate and contacting these systems directly if operator non-compliance persists. **Currently, one school and one daycare that chlorinate do not have a properly certified operator. These two water systems have been contacted to correct this situation as soon as possible to avoid enforcement action.** The compliance rate for chlorinating water systems dipped to 92.9 percent in 2018. This drop was also due in large part to the retirement of the previous operator compliance officer and the adjustment period. The Illinois DPH will push to bring these compliance rates back to the previous exceptional level.

The Illinois DPH continues to place emphasis on the seven TNC PWS that use surface water as their source. The Illinois DPH will continue providing training to these facilities on a periodic (as needed) basis. Since these systems receive annual sanitary surveys by RO staff, technical assistance opportunities are conducted at least once per year.

The number of NTNC PWS on the U.S. EPA ERP non-compliance list continues to remain lower than past totals. This success is, in-part, attributable to the Operator Certification Program providing qualified operators for NCPWS. Further, the Illinois DPH has instructed Regional Office (RO) staff and LHDs to increase efforts to contact systems without a certified operator to keep compliance rates high. Indications are that this strategy is having success.

As mentioned above, the Illinois DPH sends an annual letter to each NTNC PWS with the certification status of all operators on file. The dates of new operator classes are also sent to all NTNC PWS prior to each class. In June of each year, a letter goes out to all certified operators that are due for re-certification by the end of the year. Each time these letters are sent out a list of systems in non-compliance is sent to the ROs and LHDs instructing them to contact these water systems. ROs and LHDs are also instructed to cite operator non-compliance as a significant deficiency in sanitary surveys.

Stakeholder Involvement. The Illinois DPH still intends to solicit increased stakeholder involvement in the operator certification program. The Illinois DPH would like to convene the stakeholder group during the formal rule-making process for the Illinois DPH State Specific Revised Total Coliform Rule (RTCR). This rule-making is scheduled to begin in Summer 2019.

Illinois DPH ensures the public health objectives of the national Operator Certification Guidelines, published in the Federal Register on February 5, 1999, are met by Illinois DPH's program. With respect to the nine baseline standards established by the U.S. EPA for the operator certification program, the following summarizes the Illinois DPH program status:

- **Authorization** - Illinois DPH implements the Operator Certification Program under the Drinking Water Systems Code (77 Ill. Adm. Code 900.45). The authorization is by Section 9 of the Illinois Groundwater Protection Act, (415 ILCS 55/9).
- **Certification** - Process control/system integrity decisions are made under the supervision of the certified operator.
- **Grandfathered NTNCW Operators** - Grandfathered operators are not allowed. All NTNCPW must have a properly certified operator.
- **Operational Requirements** - The certified operator does not have to be present at each operating shift. However, operations are conducted under the certified operator's direction and oversight.
- **Enforcement** - 77 Ill. Adm. Code 900.45(d) outlines the process to suspend or revoke an operator. Illinois DPH has not suspended or revoked an operator in the recent past.
- **Certification Renewal** - Illinois DPH requires operators to go through the initial certification class if they fail to recertify within two years of certification expiration.
- **Resources needed to Implement the Program** - Illinois DPH personnel listed in the overview section above are funded under the PWSS Grant funds. Sufficient resources have been provided to run an adequate program.
- **Stakeholder Involvement** - Stakeholder involvement in the operator certification program operations and possible revisions will be solicited in the Illinois DPH specific RTCR rule process as indicated above.
- **Program Review** - Illinois DPH reviews all aspects of the operator certification program as needed. In particular, training materials are reviewed as new Primary Drinking Water Standards are revised. Budgeting, staffing and data management are reviewed as needed.

Capacity Development Program

A review of SDWIS/STATE data indicates that 90 new CWS and 133 new NCPWS have been activated since October of 2003 (five and 15, respectively, of which have subsequently become inactive). As described in the ILLINOIS ANNUAL REPORT ON THE EFFICACY OF

CAPACITY DEVELOPMENT, September 30, 2005, Illinois' program has been implemented in two parts:

- First, all new public water supplies that became active after October 1, 1999, were required to complete a capacity development demonstration. Illinois adopted regulations to implement this requirement. Failure to meet this deadline would have resulted in a loss of up to 20 percent of the State Revolving Loan Fund monies allocated to Illinois each year.
- Second, Illinois was required to develop a Capacity Development Strategy by September 30, 2000. The purpose of this Strategy is to structure a work plan that Illinois will implement to ensure that existing public water supplies have the capacity to achieve compliance and continue to operate in compliance with all existing and future drinking water program standards and requirements. Failure to meet this deadline would have resulted in a loss of up to 20 percent of the State Revolving Loan Fund monies allocated to Illinois each year. The Illinois Capacity Development Strategy was approved by U.S. EPA on September 27, 2000.

This strategy has proven effective. As documented in **Appendix E**, none of these new systems have had significant compliance issues even though most would be considered small systems.

The Illinois DPH administers the NCPWS Capacity Development Program (see **Appendix F**, for a summary of new systems and compliance issues. This program is unique because these systems are not in the business of producing water for resale; therefore, the treatment and monitoring of the water system has not traditionally been a routine function of management. The water supply at these facilities is used for drinking, sanitation and, in some cases, manufacturing processes. Demonstrating capacity for these types of NCPWS is, for the most part, a small part of the overall management, budget and operating plan for a specific PWS. Illinois DPH uses existing field survey and visit opportunities to identify NCPWS which need or may benefit from capacity development assistance. However, Illinois DPH approaches the water supply compliance issues from a somewhat unique perspective of a side benefit activity rather than a primary activity and must work within the framework of the entire operation to best assist the supply in developing capacity. Central Office staff coordinates the dissemination of information and education of NCPWS personnel for all new or amended regulations and requirements. When capacity assistance is needed on-site, Central Office staff accompanies field staff or LHD staff to provide training or technical assistance. Additionally, Central Office Staff also perform a capacity review on all proposed new NTNCPWS. When capacity assistance is needed on-site, Central Office staff coordinate with Regional Office or LHD staff to provide training or technical assistance.

Again, the Illinois EPA and DPH would like to make special note of the leadership shown by Illinois associations, education institutions and

In 2018 the Illinois EPA contracted with the Illinois Rural Water Association and hired them as a service provider to conduct statewide small system capacity development.

operator groups in the development of Financial, Managerial and Technical Capacity. The Illinois EPA especially thanks the Illinois Rural Water Association for their partnership. The Illinois Rural Water Association routinely meets with the Illinois EPA to discuss emerging education needs in all three areas of capacity development. Additionally, the Illinois EPA is

appreciative of the efforts of the Illinois Section of the American Water Works Association and the Illinois Potable Water Supply Operator’s Association. All three Associations, as well as local operator groups, routinely invite Illinois EPA staff to speak at their conferences (four separate multi-day annual conferences between the three Statewide Associations). These collaborations are highly effective in educating water supply officials. Over the reporting period, technical assistance has focused on revision to the Total Coliform Rule, revisions to operator regulations, revisions to state regulations (including, but not limited to Permit Regulations), *Legionella* and micro-biological control, lead in drinking water, water loss accounting, as well as a myriad of other regulatory concerns. Finally, the Illinois EPA expresses thanks to the efforts of the Southern Illinois University-Edwardsville’s Environmental Resources Training Center. The Environmental Resources Training Center is unique to Illinois and their collaboration on the Operator Certification Program, including their hands-on operator training program and assistance in operator test preparation, is invaluable to the citizens of Illinois.

The following documentation provides the reporting criteria for the annual State Capacity Development Program Implementation Report as required by U.S. EPA through guidance from Cynthia Dougherty in her June 1, 2005, Memorandum. The Illinois EPA and Illinois DPH anticipate this information fulfills the annual reporting requirements for Illinois’ approved strategy.

New Systems Program Annual Reporting Criteria -

- There have been no modifications to Illinois’ legal authority to implement New System Programs.⁶
- There have not been any modifications to Illinois’ control points.⁷
- The following data summarizes the Annual new system data for the Capacity Development Program.⁸

Annual Report on New Systems Capacity Development Program January 1, 2018 – December 31, 2018	
Method(s) used to evaluate and verify program implementation	Construction and Operating Permits
Number of proposed new CWS	2
Number of proposed new Non-Transient Non-Community Water Supplies (NTNC PWS)	10

⁶ See *ILLINOIS ANNUAL REPORT ON THE EFFICACY OF CAPACITY DEVELOPMENT*, September 30, 2005 at: <https://www2.illinois.gov/epa/topics/drinking-water/field-operations/Pages/capacity-development.aspx>. U.S. EPA believes this information will help identify whether States have maintained the necessary authority to implement the new systems program.

⁷ See *ILLINOIS ANNUAL REPORT ON THE EFFICACY OF CAPACITY DEVELOPMENT*, September 30, 2005. Each State's New Systems Program identified a set of Control Points, which is an integrated feature of a State's program. A control point identifies a place where the Primacy Agency (or other unit of government) can exercise its authority to ensure the demonstration of new system capacity. States should provide a discussion or a list that explains the modification(s) of control points for new systems, followed by an explanation of how and why the modification(s) have been identified. The explanation should include how the modification(s) is projected to affect the new systems program.

⁸ U.S. EPA believes that compilation of compliance data is intended to identify whether there are noncompliance patterns during the first three years of a new system's operation.

Number of approved new CWS	11
Number of approved new NTNC PWS	6
Number of new CWS (commenced operation after October 1, 1999)	137
Number of new CWS (commenced operation after October 1, 2003)	96 ⁹
Number of CWS that commenced operation after October 1, 2003 that have gone inactive	5
Number of new CWS activated since October 1, 2003 considered to be in “significant non-compliance ¹⁰ ”	0
Number of new NTNC PWS (commenced operation after October 1, 1999)	191
Number of new NTNC PWS (commenced operation after January 1, 2004)	151 ¹¹
Number of new NTNC PWS activated since January 1, 2004 considered to in “significant non-compliance”	0
Number of new CWS that are not in compliance, Reason for non-compliance:	0
Number of new NTNC PWS that are not in compliance, (These are mostly Nitrate, Phase II/V and Lead and Copper Rule (LCR) monitoring violations. Owner/Operators are generally new to the Drinking Water Regulations and have difficulty keeping up with the testing schedule and their other job duties.)	45

Existing System Strategy -

- There have been no modifications to Illinois’ existing systems strategy. Both the Illinois EPA and the Illinois DPH utilized existing programs, tools and activities as described in the *ILLINOIS ANNUAL REPORT ON THE EFFICACY OF CAPACITY DEVELOPMENT, September 30, 2005*.
- Illinois has continued to identify systems in need of technical, financial and managerial capacity development, as described in the *ILLINOIS ANNUAL REPORT ON THE EFFICACY OF CAPACITY DEVELOPMENT, September 30, 2005*, and its Attachments 3 and 4.
- Over the reporting period, Illinois EPA conducted over 420 Engineering Evaluations (Sanitary Surveys) at CWS and Illinois DPH conducted approximately 215 sanitary surveys at NTNC PWS. Public water system capacity concerns were evaluated during each of these evaluations. The Illinois EPA and DPH find that each system must be handled on an individual basis and no common trends not previously noted were identified.
- During the reporting period, no revisions or modifications to the implementation strategy for existing system strategy were made.
- The Illinois EPA will continue the current capacity outreach process in Illinois. The Illinois Rural Water Association (IRWA) contractor hired in 2018, provides the Illinois EPA with statewide small systems technical assistance set-aside quarterly reports. The reports include the detailed technical, managerial, and financial capacity work completed. The contractor meets with Illinois EPA staff to determine potential public water supply

⁹ U.S. EPA has requested the list provided in Appendix E to this Report.

¹⁰ For the purpose of this report significant noncompliance corresponds to an Enforcement Tracking Tool score greater than or equal to 11.

¹¹ U.S. EPA has requested the list provided in Appendix F to this Report.

systems in need of assistance. The contractor assists the small systems' staff, owners, operators, clerks, boards and council members with system improvements, loans and grant applications, rate setting, and technical, managerial, and financial matters. Generally, groups like the Illinois Rural Water Association, Illinois Section of the American Water Works Association, Illinois Potable Water Supply Operators Association and local operator associations request technical assistance from the Illinois EPA. These requests come in throughout the year and generally focus on areas of concern as they arise or are perceived by the particular interest group. For the Illinois EPA to track this level of detail, we would need to institute a separate tracking system with no purpose other than reporting. At this time, the Illinois EPA-DPWS does not have the resources to institute such a process and is not convinced that doing so would be in the best interest of the State.

- While the Illinois EPA will continue to evaluate the use of various programs to assist CWS in developing capacity, the Illinois EPA will continue to work with the training providers mentioned in the previous bullet on these programs, including the Check Up Program for Small Systems. In the future, Illinois training providers may modify the Check Up Program for Small Systems to accommodate the very small systems that struggle most to achieve compliance.
- The Illinois EPA and the Public Water Supply Operator Advisory Board remain concerned that the technical capacity of water systems will be affected by staff attrition resulting from the aging workforce in Illinois. In light of this impending issue, the Illinois EPA has devoted a large resource investment in working with the Board. This effort has resulted in the statutory changes described in the Operator Certification Program description within this chapter.
- In previous program reviews, U.S. EPA has noted that Illinois' Capacity Development Program would benefit from an enhancement to address these financial and managerial capacity issues such as promoting more realistic user rates and budget planning for current and long-term needs. While the Illinois EPA agrees with this conceptually, it can be difficult influencing water supplies with respect to financial capacity. Further, very few water systems are subject to statutory rate setting in Illinois (only privately-owned utilities are subject to the Illinois Commerce Commission). Therefore, other than encouraging water systems to act progressively, the Illinois EPA has no authority to require actions beyond our current program.

Cross-Connection Control Program

The DPWS evaluates community water supply cross-connection control programs during routine engineering evaluations of each system. A viable program consists of an ordinance, an ongoing survey of the distribution system service connections, identification of at-risk service connections, mitigation of recognized risks via a plumber/CCCDI, and documentation.

In terms of corrective action, if a system does not have an ordinance, has no information on file relative to a survey of its distribution system, cannot produce reports on reduced pressure backflow devices, or cannot show that devices within its facility have been tested annually, it is safe to say that the system does not have an active and effective program. These situations are normally cited in either an NCA letter or a VN to the water supply as violation(s) of 35 Ill. Adm. Code 607.104(a) and (b). While the Illinois EPA does not track

To verify the effectiveness of each water system's Cross-Connection Control Program the DPWS FOS normally evaluates the following questions:

1. Does the system have a Cross-Connection Control Ordinance?
2. Does the system survey the service connections on its distribution system and at what frequency?
3. Does the system receive reduced pressure backflow preventer annual test reports?
4. Does the system have an adequate tracking procedure whereby test reports and high-risk service connections are tracked?
5. Does the system ensure that devices within its water treatment facility are properly tested on an annual basis?
6. Are there any locations within the water treatment facility that should have backflow protection that do not?

VNs to the level of specificity needed to quantitatively evaluate CWS compliance with this requirement, the Illinois EPA can say that compliance has increase dramatically over the past decade and the program is reaching a level of maturity where almost 100 percent of CWS have ordinances or water use agreements and evaluate high risk activities. The bulk of the noncompliance occurs in tracking routine surveillance of the distribution system. The Illinois EPA believes that these activities are even seeing great improvements.

Groundwater and Source Water Protection Program

See the Illinois Groundwater Protection Act Report.

Permitting Program

The following table summarizes the DPWS permit activity for Calendar Year 2018. It is noteworthy that all permits were issued well within statutory deadlines.

Permits Issued by Illinois EPA's Division of Public Water Supplies for CWS						
Permit Types	Deadlines	Public Hearing Required	Public Notice Required	Calendar Year 2018		
				Applications Received	Permits Issued	Approx. Turn-around time (days)
Construction permits	45/90 Days	No	No	1222	1216	23
Operating permits	90 Days	No	No	1008	1058	4
Emergency permits	n/a	No	No	22	28	13
As-built approvals	none	No	No	19	24	19
Aquatic Pesticide/Algaecide	90 Days	No	No	16	16	7

The PS has also taken the following actions in response to the need for enhanced health protection from lead in drinking water:

- The PS now requires three, six-month rounds of initial lead and copper monitoring following an operating permit that involves a change in source or significant change in treatment. This is an increase above the current requirement of two rounds.
- The PS began placing a special condition on all water main replacement permits that require notice to each service connection regarding precautions that can be taken to minimize the effects of “disturbances” to water consumers.
- All new corrosion control evaluations will have enhanced project tracking.

Future Directions:

Illinois Environmental Protection Agency

Priorities for 2019

Division of Public Water Supplies (DPWS) Manager's Initiatives

The focus is on implementing the to-be-adopted rules for CWS permitting (Part 602) and for design, operation and maintenance of CWS (Part 604). We believe our effort to streamline the PWS regulations will be beneficial for both the Illinois EPA and regulated community- easy to understand and implement.:

The Illinois EPA is:

- Working with U.S. EPA to finalize the streamlining of IPCB drinking water regulations (Part 611) to further streamline and enhance drinking water protection in Illinois.
- Working to control of bacteria in the distribution system.
- The DPWS will be investing resources in developing programs that address small and disadvantaged drinking water systems, workforce development, and asset management
- Continue to support various Bureau/Illinois EPA groundwater related compliance investigations including, but not limited to, assisting in: the enforcement process; preparation of compliance commitment agreements; providing testimony and assisting in the development of consent decrees or agreed upon orders by the court.
- The DPWS will continue to support and review legislative proposals to enhance drinking water protection in Illinois. Additionally, the DPWS will continue to support statutorily established committees, councils and boards. These include, but are not limited to the ICCG, the GAC, four Regional Groundwater Protection Committees and the PWS Operator's Advisory Board.
- During 2019, the Illinois EPA will continue to implement the expanded HAB monitoring effort. Additional reservoirs used as PWS sources will be assessed by the Ambient Lake Monitoring Program of the BOW. Illinois EPA continues to participate and support the efforts of the Illinois' Nutrient Loss Reduction Strategy. When fully developed and implemented, the strategy has the potential to reduce HAB impacts from nutrients to source water protection areas for surface water systems in the state. Further, as total microcystins and cylindrospermopsin are detected as part of Illinois EPA monitoring efforts, DPWS/FOS staff have provided systems with technical assistance on appropriate treatment evaluation/optimization alternatives. If monitoring results indicate that a system has met the criteria for issuing a health advisory, the Illinois EPA will encourage systems to implement EPA's cyanotoxin health advisory for drinking water.

Field Operations Section

FOS helps achieve the DPWS key outcome measure of ***percent population served with good quality drinking water from CWS***, in addition to the output measure of ***conduct engineering evaluations every 3 years at CWS***.

The following activities outline the priorities for the Illinois EPA for Calendar Year 2019:

Implement Corrective Action Plan to address the 2017 U.S. EPA Joint File Review and Enforcement Verification:

- Adding an additional engineer to the Illinois EPA Elgin Regional Office to implement sanitary surveys;
- Two engineers hired for the Illinois EPA Regional Offices in Champaign and Springfield to assist with conducting sanitary surveys;
- Place added priority on increasing the number of inspections to achieve goals and provide emergency and technical assistance to water systems as necessary to maintain Illinois' high public health protection goals.

Attrition has resulted in five staff vacancies. However, two of these vacancies have been filled. In addition, we are in the process of posting another position. Preliminary plans have been developed to provide oversight in each of the regional offices without regional managers.

2019 Objectives: The FOS will also work to maintain current inspection goals and provide emergency and technical assistance to CWS as necessary. Additionally, FOS will continue to support other BOW and DPWS programs including, but not limited to the Operator Certification, Capacity Development and Cross-Connection Control Programs.

As part of routine engineering evaluations/sanitary surveys of water systems, field engineers will begin initiating a process to verify that the water quality parameter ranges are being met on a daily basis. The Illinois EPA recognizes that water treatment operation is just as important as design when it comes to maintaining water quality. Additionally, inspectors will begin evaluating water service line materials inventories in preparation for revisions to the Lead and Copper Rule and advised by U.S. EPA.

Compliance Assurance Section

The CAS helps achieve the Division's key outcome measure of *percent population served with good quality drinking water from CWS* and *percent of CWS serving good quality drinking water*. The CAS has necessarily used a strategic planning approach for implementation of programs for the past 10 years. This process includes cross-training of all staff for rule implementation and programmatic corrective actions. Additionally, the CAS has assisted the Division Manager since the Cross-Connection Control and Capacity Development Program Coordinator vacancy has existed for an extended time.

Continue to use, support and improve technology, such as SDWIS/STATE, to track the efficacy of water treatment facilities in protecting water consumers.

2019 Objectives: The CAS will continue integration of the Operator Certification, Capacity Development and Cross-Connection Control Programs into base activities to optimize staff resources. Additionally, CAS is in the process of working with IT staff on several data systems including the operator certification data system, updating a web service to track operator certification status, the transition of the existing state and federal SDWIS to SDWIS Prime (supported by the “cloud”) and local data systems.

In response to the concern for lead in drinking water, the CAS is evaluating processes to:

- Follow up with water supplies on all individual user results above 15 ug/L and encourage either lead service line replacement, replacement of premise plumbing that contains lead, or improved corrosion control treatment at the water treatment plant; and
- Working with the second year of CWS that provided updates to their lead service line inventory pursuant to Section 17.11 of the Act. <https://www2.illinois.gov/epa/topics/drinking-water/public-water-users/Pages/lead-service-line-information.aspx>.

Illinois EPA is working with the systems that have not submitted inventories.

The Act was amended to include [Section 17.11](#) in January 2017 to help respond to lead in drinking water. For Lead Service Lines (LSLs), it directs utilities to: 1) create a comprehensive materials service line inventory, and 2) provide notice to occupants of residences potentially affected by construction or repair work on water mains, LSLs, or water meters.

Under Section 17.11, CWSs must provide the Illinois EPA with a “water distribution system material inventory” on April 15 of each year, starting in 2018, until the inventory is complete. Illinois EPA also [directs CWSs to post their materials inventory](#), including locations of LSLs, on their public website. If the CWS does not have a public website, Illinois EPA will post their inventory data for them; however, this will not include location information. The inventory must identify the:

- Total number of service lines within or connected to the distribution system, including privately owned service lines;
- Number of all known LSLs within or connected to the distribution system, including privately owned LSLs; and
- Number of LSLs that were added to the inventory after the previous year’s submission.

As of March 2019, 1,659 CWSs have [reported to the Illinois EPA](#) on 3.74 million service lines (84 CWSs have not yet reported). About 11 percent of the total service lines were reported as lead and 40 percent were reported as unknown. Illinois has between 415,000 and 1.92 million lead pipes (including unknowns). Illinois EPA published [an online tool](#) to enable customers to determine service line material types in their CWSs.

Utilities must follow specific requirements when performing construction or repair work on a water main, service line or a water meter. With limited exceptions, they must provide individual written notice to residents at least 14 days before work begins. The notice must warn potentially affected residents of the dangers of lead and what practices they should follow to prevent the consumption of any lead in drinking water. The recommended practices must include flushing of water lines during and after the completion of the repair or replacement work and cleaning of faucet aerator screens.

If the utility serves a significant portion of non-English speaking consumers, the notification must contain information in the appropriate language and provide contact information to request assistance. For multi-dwelling buildings, the notice may be posted on the primary entrance to the dwelling.

In addition, Illinois requires sellers to [disclose to homebuyers](#) if they are “aware of unsafe concentrations of or unsafe conditions related to lead paint, lead water pipes, lead plumbing pipes, or lead in the soil on the premises.

In 2019, two additional material categories (Ductile/Cast Iron or Transite) were added to the reporting portal to account for large diameter service lines or water main reporting for wholesale systems. Water systems were instructed to report these material types as "unknown" for the 2018 reporting cycle. This future reporting modification will reduce this category in the material inventory by approximately 10,000 services. Additionally, several water systems indicated they will significantly reduce the unknown category in 2019 through confirmatory work being conducted in 2018. Finally, water systems have indicated they do not have lead service lines; however, they did not track the customer owned portion of service line replacements although they know lead was not used (e.g., local knowledge such as the age of construction relative to the lead ban in 1988). This resulted in reporting the service line as unknown (which may overestimate the amount of lead present). Therefore, the Illinois EPA has split the Unknown Material class into two classes in 2019 (e.g., Unknown and Unknown - Not Lead.)

Permit Section

The PS continues to assist the Division in achieving the key outcome measure of ***percent population served with good quality drinking water from CWS***. Because of the current economic downturn, modernization of the Permit Database and streamlining strategies, the PS has been able to meet current work-loads. This trend seems to be reversing itself and workloads are increasing.

The PS will continue to initiate efforts to enhance the technical, financial and managerial capacity of public water supplies. This priority includes ensuring that the Permitting, Operator Certification, Cross-Connection Control and Source Water Protection Programs remain high priorities in protecting public health and ensuring water system viability. Additionally, the Illinois EPA will continue to support a contractual agreement to work with community water supplies on capacity development using the Drinking Water State Revolving Fund Capitalization Set-aside Grant.

2019 Objectives: The PS will continue to evaluate the business processes to further streamline and automate certain functions to maintain current work activities to issue construction and operating permits. Furthermore, they will continue to support other BOW and DPWS programs including, but not limited to the Operator Certification, Capacity Development and Cross-Connection Control Programs.

In response to the concern for lead in drinking water, the PS is evaluating processes to:

- Continue a review of corrosion control treatment practices at water systems with highest vulnerability to lead corrosion and with greatest populations served;
- Initiate an audit of lead sampling design (Tier I sites): The Illinois EPA intends to begin a process to audit sites as resources allow. The Illinois EPA is currently considering use of Geographical Information System technology to aid in this process;
- Illinois Agencies issued a press release supporting point of use filters to reduce lead exposure: <https://www2.illinois.gov/Pages/news-item.aspx?ReleaseID=20091>.

Bureau of Water Infrastructure and Financial Assistance Section

Drinking Water - \$250 Million Average Annual Funding

- Develop and implement a revised project prioritization scoring process to use for State FY2021. Illinois EPA anticipates adoption of the revised rule before February 2020, which will allow for the development of the FY2021 Project Priority List and Intended Use Plan based on the revised scoring system;
- Investigate ways to incentivize development of the technical, managerial, and financial capability of public water system owners to maintain compliance with the state and federal SDWA requirements;
- Looking into ways to incentivize the consolidation and/or regionalization of struggling/failing systems so that these systems may take advantage of economies of scale available to larger water systems;
- Principal Forgiveness for Lead Service Line Replacement (LSLR), \$8.3 million annually. To qualify, a community water system must document lead service lines are connected to its system. The LSLR principal forgiveness will be available up to a maximum of \$2 million in FY2020 for communities with a median household income of less than 70 percent of the state average. For other communities, principal forgiveness will be available up to a maximum of \$1 million in FY2020. LSLR principal forgiveness will be available for FY2020 recipients until the allotted funds are expended;
- Small grants program for small and disadvantaged communities – focus on eliminating underserved systems;
- Reduced Interest Rates and Principal Forgiveness for Small/Economically Disadvantaged Communities; and
- Investigating ways to provide financial assistance with planning efforts.

Groundwater Section

As with the FOS and PS, the GWS assists the Division in achieving the key outcome measure of ***percent population served with good quality drinking water from CWS***, in addition to the output measures associated with ***enhancing source water protection programs at CWS***.

For the calendar year 2018, **49.7** percent (869 of 1,749) of CWS have minimized risks to public health through substantial implementation of source water protection programs. Additionally,

72.5 percent (8,706,870 of 12,001,944) of the population served by community water systems have source water that has been substantially protected by their respective water systems. In August of 2019, Part 604 will require CWS to prepare source water protection plans that must be approved by the Illinois EPA. We anticipate that we will maintain a measure of 50 percent of CWS that have minimized risks to public health through substantial implementation of source water protection programs.

The GWS continues to use the strategic planning approach for implementation of various program activities. These strategic plans are developed with input from the Interagency Coordinating Committee on Groundwater (ICCG), Groundwater Advisory Council (GAC), and Priority Groundwater Protection Planning Committees. Starting with the *Illinois Groundwater Protection Act Biennial Report* published 1998, the DPWS began setting objectives and implementing tactical plans based on a self-assessment of metrics.

The GWS will continue to conduct the prevention-oriented programs to protect groundwater required by the Illinois Groundwater and Environmental Protection Acts and recommended by the ICCG, GAC, and the Priority Groundwater Protection Planning Committees.

The GWS will continue to support protection of the Mahomet Aquifer.

Per and Polyfluoroalkyl Substances (PFAS)

Illinois EPA is working on a PFAS strategy. One of the first steps in Illinois EPA's draft PFAS strategy is to determine the statistical prevalence of 18 PFAS contaminants in 118 community water supply wells and 32 surface water intakes. This statistical study will focus on:

- This statistical study will focus on network of wells and intakes in different aquifers across the state;
- For the purposes of this study, community water intakes were selected on a random basis;
- The sampling of wells and intakes will in early 2020, and will take a year to finish;
- Currently, there is a bid in place for analytical laboratory services to analyze the samples collected by Illinois EPA staff;
- Illinois EPA is also working on a comprehensive website for PFAS;
- Illinois EPA will be working with community water supplies where PFOS and PFOA exceed 70 ppt to develop public notification and treatment if necessary; and
- Illinois EPA will also be proposing a combined new groundwater quality standard for PFOS and PFOA to Part 620.

2019 Objectives: The GWS will continue the measured outcome metric of *good quality groundwater*, from previous planning cycles. Further, the Section will continue groundwater monitoring efforts in 2019 with emphasis on assessment of nitrate contamination in groundwater. The GWS will also continue support of BOW programs including, but not limited to the Mine Pollution Control Program and Water Pollution Control Permit Program. See the IGPA Report.

Administrative Support Unit

The role of this small unit cannot be underestimated. The group assists all aspects of the Division. Through attrition, the Division is down to one full time staff. At this time, the Division is unsure how this functionality will continue. The Bureau has initiated a pooled support system

to deal with this issue. The Bureau has also hired summer student workers to assist with administrative functions.

2019 Objectives: The DPWS will continue to work with the new pooled resources approach.

Illinois Department of Public Health

The Illinois DPH continues to administer the NCPWS Program, protecting public health of the 500,106-population served by NCPWS. Illinois DPH continues doing program work in the Central Office with only two full time employees. These employees do Plan Review, Federal Reporting, Compliance Assurance for all Non-Transient Systems with IOCs, VOCs, SOCs, Lead and Copper Rule, Arsenic, Disinfection/ Disinfection Byproducts Rule and Surface Water Rule (T and NT). Additional duties include SDWIS/STATE administration including data migration and compliance decision support checks. These two positions further provide training of Local Health Department staff, adopt new rules and program policies.

2019 Objectives:

Resources: Two vacancies continue to exist in the NCPWS Program. Efforts will continue to be made to fill these vacancies as Division of Environmental Health priorities and funding opportunities allow. The Program was able to get some assistance again in 2018 by finding help from other employees within the Division to perform some duties, but the Program cannot be properly administered long-term without filling these two vacancies. This would constitute a fully staffed program under current established positions.

Reporting of Coliform and Nitrate Violations: As noted in on-going discussions with U.S. EPA, reporting of coliform and nitrate violations fell off in 2012 and 2013 due to loss of a staff position. However, some gains were made in 2014 and 2015 with the help of some contractor support and re-prioritization of duties. Efforts to restore contractor help were again successful for 2016 thru 2017 and more gains were made towards closing the gap of complete reporting. However, contractor support was no longer available in 2018 and further gains were not made.

In 2016, the upgrade to SDWIS/State version 3.33 was completed and in 2017, the following database initiatives were completed: 1. The SDWIS Bridge Module for RTCR and GW Rule compliance determinations was successfully set-up and tested; 2. The majority of Illinois private Labs began reporting Nitrate data with Electronic files for SDWIS migration; and 3. the Illinois DPH lab successfully set-up and ran test files in the “lab to state” format for migration into SDWIS. Unfortunately, as of May 2019, the Illinois DPH lab has not been able to provide production files as a contract for the LIMS System to produce these files has not been secured.

2019 Objectives: (Cont'd)

Program Highlight: Nitrate compliance determinations were completed for 2017 and again in 2018. Complete 2018 Nitrate violation data will be reported with the 2nd Quarter 2019 federal report. This is a major Program accomplishment! This effort is resource intensive as Program staff has to work closely with RO and LHD staff to track and get Nitrate results submitted. In addition, the Nitrate monitoring compliance rate is very low – 71.9 percent. This is due in large part to the Illinois DPH lab discontinuing free Nitrate analyses after 2015 and the lack of resources to make a compliance push on these systems. Illinois DPH will continue to work with ROs and LHDs to bring these systems into compliance in 2019. As mentioned under Resources above, the help obtained by other Division employees once fully trained should free up time in 2019 to make a compliance push on Nitrate Monitoring.

Despite the initiatives completed in 2017, Illinois DPH was unable to perform complete compliance determination in SDWIS and reporting of RTCR and GW Rule violations again in 2018. In addition to full time equivalent limitations, as mentioned above, Illinois DPH was no longer able to bring in contractor support with SDWIS experience as was done in previous years. Other stressors that prevented this work were increased reviews of Legionella prevention via secondary disinfection at healthcare facilities, implementation of seasonal start-up procedures and the effort to eliminate Lead Levels to Non-Detect beyond the LCR requirements at Non-Transient, Non-Community Schools and Daycares. These efforts detracted from completing 2018 RTCR and GW Rule compliance determination and violation reporting.

Illinois DPH will make every effort to run RTCR and GW Rule compliance determination in SDWIS/State in 2019 so that complete reporting can be achieved. Illinois DPH hopes to accomplish this with the following initiatives: 1. Provide additional resources to the extent possible dedicated to RTCR and GW Rule compliance and reporting. 2. Fully implement SDWIS modules for RTCR and GW Rule which are properly installed and working; 3. Continue working with the Illinois DPH lab to provide “lab to state” Coliform files for migration into SDWIS in full production mode; 4. Continue re-assigning some priorities within Illinois DPH to provide some additional help to Program Staff.

It should be noted Illinois DPH ROs and LHDs are monitoring for compliance and protecting public health when confirmed Coliform contamination is present at Non-Community Public Water Supplies. Central Office program staff have not had the resources over the last seven years to run the compliance determination through SDWIS/State to verify the work performed in the field and completely report all violations, particularly all monitoring violations.

Revised Total Coliform Rule Adoption: The Illinois DPH is adopting an alternative RTCR for NCPWS in 77 Ill. Admin. Code Part 900 of the Public Health Rules. Illinois DPH is working closely with U.S. EPA Region V program staff on this proposed rule. This rule is more stringent than the federal rule and makes more efficient use of State and LHD resources. Along with rule adoption, program policies and reporting forms are being revised and updated to provide more consistency in the NCPWS Program. Illinois DPH has made changes to the draft rule requested by U.S. EPA Region V and Headquarters. Illinois DPH Draft 900 rules have been submitted to the Division of Legal Services for the 2019 summer meeting of the Board of Health. The Rule First Draft is also anticipated to be out during summer 2019. As of April 1, 2016, Illinois NCPWS are subject to the federal RTCR as adopted in 35 Ill. Admin. Code Part 611 of the Illinois Pollution Control Board Rules until the Part 900 rules are adopted.

2019 Objectives: (Cont'd)

Lead and Copper Rule/School Daycare Response: The Illinois DPH conducts a thorough review of sample results at NTNC PWS with special emphasis on schools and daycares. The Illinois DPH reviewed and revised sample site selection criteria and sampling protocol in 2016 to ensure sample site locations represent the highest level of health protection based on the criteria of human consumption and “worst case” risk for lead leaching. This was fully implemented in 2017 and all Lead and Copper sampling are now conducted following the revised sample site collection criteria and sampling protocol. **Note: Reporting of ALE information should be more timely if dedicated resources are gained for RTCR / GWR compliance and reporting. Currently, NTNC school/daycare Lead ALE reporting is generally on time. Non-school/daycare Lead ALE reporting is lagging.**

In addition, Illinois DPH has a lead role in implementing the new **Lead in Water School Law** which requires all Illinois Schools/Daycares to mitigate Lead in Water. Under this law, the Non-Community Program is working with the Plumbing and Water Quality Program to require all schools and daycares to mitigate any lead levels at consumption sites (drinking/food preparation) to Non-Detection.

Legionella Response: Legionella response and control are a critical priority for Illinois DPH programs. The concern with preventing a Legionella outbreak is prompting many healthcare facilities in Illinois to install secondary disinfection systems. Illinois DPH is regulating these facilities as Non-Transient Non-Community Public Water Systems. **This is another water safety issue the Non-Community Program is coordinating with Plumbing and Water Quality Program.** Review of proposals at healthcare and other facilities proposing secondary disinfection to meet recognized construction and operational standards, while also providing effective control of Legionella Bacteria will be a critical priority in 2019.

Appendix A
FEDERAL FISCAL YEAR 2019 AND 2020 ILLINOIS EPA WORK PLAN TO FULFILL PRIMARY ENFORCEMENT AUTHORITY FOR THE PUBLIC WATER SYSTEM SUPERVISION (PWSS) PROGRAM¹²

U.S. EPA Region 5 provided Public Water Supply Supervision (PWSS) program work plan guidance for the FFY20 grant to the state drinking water directors on May 28, 2019. The format for the annual PWSS work plan currently includes this overall summary that identifies state-specific priorities and core program descriptions.

EPA Strategic Plan: This continuing program grant is consistent with U.S. EPA's Strategic Plan Goal 2: Clean and Safe Water, which calls for protecting public health by providing safe drinking water. **Appendix H** includes the projected measures for 2020. Many of the grant work plan activities contribute to the goal of assuring that people served by public water systems (PWSs) receive drinking water that meets all applicable standards through effective treatment and source water protection. Continuing program implementation includes adopting rules at least as stringent as federal regulations, providing assistance to PWSs on regulatory requirements, conducting sanitary surveys, ensuring that monitoring and follow-up is conducted, and enforcing regulations.

1. Status of Rule Adoption and Implementation

- Illinois has primacy for implementing the National Primary Drinking Water Regulations (NPDWRs) and implements the safe drinking water statutes and rules on which primacy is based.
- U.S. EPA and Illinois expect a priority area of focus will continue to be the public health concerns related to Lead and Copper Rule (LCR) implementation. As such, Illinois will continue to provide information regarding lead action level exceedances bi-annually to U.S. EPA Region 5.
- Specific state compliance targets are included in the Measures and Indicators, attached. **See Page 32. U.S. EPA is currently reviewing the draft streamlining of Part 611.**

2. Sanitary Surveys relative to Illinois EPA and see page 5-6 relative to Illinois DPH.

- Illinois will maintain technical expertise needed to perform sanitary surveys and ensure that sanitary surveys meet the content and frequency requirements specified by rule. During the FY 20 grant year, Illinois will complete 495 sanitary surveys.
- Illinois will also evaluate all eight elements and report status quarterly to SDWIS-FED. U.S. EPA Region 5 will track state targets to conduct sanitary surveys for all system types within the federally required intervals (see FY20 measures and indicators, attached).

3. Enforcement

- Illinois will maintain an adequate enforcement and compliance assistance program.
- Illinois will continue to address systems not in compliance with state rule, and report enforcement actions quarterly to U.S. EPA, via SDWIS-FED (See also FY20 Office of Enforcement and Compliance Assurance (OECA) measure and state commitment in the

¹² Work Plan commitments are negotiated as part of the Illinois EPA/U.S. EPA Performance Partnership Agreement. These agreements cover a two-year time frame that is based on the Federal Fiscal Year beginning in October. Therefore, these agreements overlap with the calendar year being reported on within this report.

attached Measures and Indicators) and respond to U.S. EPA requests for compliance and enforcement updates on priority systems (significant non-compliers) on a quarterly basis.

- Illinois will continue to refer noncompliant PWSs to U.S. EPA Region 5 for follow-up action, if appropriate.
- Illinois will submit an annual compliance report to U.S. EPA annually by July 1st. Illinois Annual Compliance Report is part of this Annual Consolidated Report.
- In FY20, the Illinois EPA will implement the compliance and enforcement activities described on **page 33 – 35 for Illinois EPA and on pages 38-40 for Illinois DPH.**

4. Capacity Development, Small System Support, and DWSRF Program Integration

- Illinois will continue assisting existing PWSs in acquiring and maintaining technical, managerial and financial (TMF) capacity. Further, the State will require new PWSs to demonstrate they have the TMF capacity to operate in compliance with federal and state regulations. **See pages 26 – 29.**
- Illinois will continue to submit the annual State Capacity Development Program report as Part of the Annual Consolidated Report including providing a list of new PWSs within the last three years and indicating if they had Enforcement Targeting Tool (ETT) score of 11 or greater. (Also submit Governor’s report every 3 years).
- In FY20, the Illinois EPA will continue with specific activities planned to use PWSS grant funds for Capital Development and small system support as **described on Page 29.**

5. Operator Certification

- Illinois will continue to maintain regulations for the operation and maintenance of PWSs by properly certified individuals.
- Illinois will continue to report to U.S. EPA, on an annual basis, how the state is implementing an Operator Certification program that complies with EPA’s Operator Certification Guidelines, including the nine baseline standards. **See pages 17 – 26.**

6. Data Management and Reliability

- Illinois will maintain adequate data management systems (and update for new rules and new versions of FedRep) that track reporting requirements for all rules.
- Illinois will report in a timely manner to U.S. EPA actions and sample data quarterly and inventory data at least annually, in accordance with 40 CFR 142.15. Illinois has not yet completed programming to be able to fully report RTCR violations, including Level 1 and Level 2 assessment information, to SDWIS/State.
- To date, there have been no activities to transition to SDWIS Prime. Illinois EPA is fully utilizing SDWIS/State to report all aspects of the RTCR.

7. Source Water Protection

- Illinois will continue to report¹³ annually progress toward source water protection measures and targets for FY20. **See pages 36 – 37.**

8. Laboratory Certification

- Illinois will continue to provide an adequate laboratory certification program for all regulated contaminants, at a minimum, to certify commercial laboratories within the State and maintain Principal State Laboratory capacity.
- Illinois' Laboratory Certification Program will continue to submit annual questionnaires to the Region.

9. Security/America's Water Infrastructure Act (AWIA¹⁴)

- States are required to ensure that community water supplies maintain an adequate plan for the provision of safe drinking water under emergency circumstances. Systems should certify to Illinois EPA that this has been completed.

¹³ Reporting is done either electronically to SDWIS/Fed or via separate reporting to Region 5.

¹⁴ Section 2013 of AWIA requires the community water systems (CWSs) serving more than 3,300 people to conduct a risk assessment (RA) addressing malevolent acts and natural hazards. In addition, the law requires these water systems to prepare or revise an emergency response plan (ERP) that incorporates the findings from this assessment. State review of ERP may be required under state law. AWIA does not require review of the RA or ERP. However, AWIA allows states to review the ERP as part of a state on-site visit, but not the RA.

Appendix B
Illinois EPA Annual Compliance Report
Calendar Year 2018
Summary Community Water Supplies
Numbers Used from U.S. EPA's CDX Reporting Services database

Contaminant Code	Contaminant	Rule Family	Violation Category	# of Violations	# of Resolved Violations	# of CWS in Violation
1005	Arsenic	IOC	Maximum Contaminant Level Violation	23	0	7
1010	Barium	IOC	Maximum Contaminant Level Violation	1	0	1
1040	Nitrate	IOC	Monitoring and Reporting	1	0	1
5000	Lead and Copper Rule	LCR	Monitoring and Reporting	35	0	32
5000	Lead and Copper Rule	LCR	Treatment Technique Violation	2	0	2
4010	Combined Radium (-226 and -228)	Rads	Maximum Contaminant Level Violation	16	0	8
4010	Combined Radium (-226 and -228)	Rads	Monitoring and Reporting	1	0	1
4000	Adjusted Gross Alpha	Rads	Monitoring and Reporting	1	0	1
0999	Chlorine	St1 DBP	Monitoring and Reporting	8	0	8
1006	Chloramine	St1 DBP	Monitoring and Reporting	1	0	1
2920	Total Organic Carbon	St1 DBP	Treatment Technique	4	0	1

Contaminant Code	Contaminant	Rule Family	Violation Category	# of Violations	# of Resolved Violations	# of CWS in Violation
2456	Total Haloacetic Acids (HAA5)	St2 DBP	Monitoring and Reporting	17	0	17
2950	TTHM	St2 DBP	Maximum Contaminant Level Violation	7	0	5
2950	TTHM	St2 DBP	Monitoring and Reporting	15	0	15
8000	Coliform (RTCR)	Revised Total Coliform Rule	Monitoring and Reporting	7	0	6
7500	Public Notice (PN)	PN	Consumer Awareness	71	0	33
7000	Consumer Confidence Report	CCR	Consumer Awareness	2	0	2
2039	Di(2-ethylhexyl) phthalate	SOC	Monitoring and Reporting	1	0	1
2046	Carbofuran	SOC	Monitoring and Reporting	1	0	1
2050	Atrazine	SOC	Monitoring and Reporting	1	0	1
2051	Lasso	SOC	Monitoring and Reporting	1	0	1
2036	Oxamyl	SOC	Monitoring and Reporting	1	0	1
2035	Di(2-ethylhexyl) adipate	SOC	Monitoring and Reporting	1	0	1
2306	Benzo(a)pyrene	SOC	Monitoring and Reporting	1	0	1

Contaminant Code	Contaminant	Rule Family	Violation Category	# of Violations	# of Resolved Violations	# of CWS in Violation
2037	Simazine	SOC	Monitoring and Reporting	1	0	1
3100	Coliform (TCR)	Total Coliform Rule	Monitoring	21	0	2
2991	Toluene	SOC	Monitoring and Reporting	1	0	1

*Illinois DPH Annual Compliance Report
Calendar Year 2018
Summary NCPWS*

Volatile Organic Chemicals (VOCs)								
Code	Name	MCL (mg/l)	MCLs			Monitoring		
			# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation
2977	1,1-Dichloroethylene	0.007	0	0	0	72	15	57
2981	1,1,1-Trichloroethane	0.2	0	0	0	72	15	57
2985	1,1,2-Trichloroethane	0.005	0	0	0	72	15	57
2980	1,2-Dichloroethane	0.005	0	0	0	72	15	57
2983	1,2-Dichloropropane	0.005	0	0	0	72	15	57
2378	1,2,4-Trichlorobenzene	0.07	0	0	0	72	15	57
2990	Benzene	0.005	0	0	0	72	15	57
2982	Carbon Tetrachloride	0.005	0	0	0	72	15	57
2380	Cis-1,2-Dichloroethylene	0.07	0	0	0	72	15	57
2964	Dichloromethane (Methylene Chloride)	0.005	0	0	0	72	15	57
2992	Ethylbenzene	0.7	0	0	0	72	15	57
2989	Monochlorobenzene (Chlorobenzene)	0.1	0	0	0	72	15	57
2968	o-Dichlorobenzene	0.6	0	0	0	72	15	57
2969	p-Dichlorobenzene	0.075	0	0	0	72	15	57
2996	Styrene	0.1	0	0	0	72	15	57
2987	Tetrachloroethylene	0.005	0	0	0	72	15	57
2991	Toluene	1	0	0	0	72	15	57
2979	Trans-1,2-Dichloroethylene	0.1	0	0	0	72	15	57
2984	Trichloroethylene	0.005	0	0	0	72	15	57
2955	Xylenes, Total	10	0	0	0	72	15	57
2976	Vinyl Chloride	0.002	0	0	0	72	15	57
VOC Totals			0	0	0	1,512	315	57

Synthetic Organic Chemicals (SOCs)								
Code	Name	MCL (mg/l)	MCLs			Monitoring		
			# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation
2931	1,2 Dibromo-3-Chloropropane (DBCP)	0.0002	0	0	0	25	8	16
2105	2,4-D	0.07	0	0	0	25	8	16
2063	2,3,7,8-TCDD (Dioxin)	3x10-8	-	-	-	-	-	-
2110	2,4,5-TP (Silvex)	0.05	0	0	0	25	8	16
2051	Alachlor (Lasso)	0.002	0	0	0	25	8	16
2047	Aldicarb	NA	-	-	-	-	-	-
2044	Aldicarb Sulfone	NA	-	-	-	-	-	-
2043	Aldicarb Sulfoxide	NA	-	-	-	-	-	-
2050	Atrazine	0.003	0	0	0	25	8	16
2306	Benzo (A) Pyrene	0.0002	0	0	0	16	5	11
2010	BHC-gamma (Lindane)	0.0002	0	0	0	25	8	16
2046	Carbofuran	0.04	0	0	0	25	8	16
2959	Chlordane	0.002	0	0	0	25	8	16
2031	Dalapon	0.2	0	0	0	15	5	9
2035	Di(2-Ethylhexyl) Adipate	0.4	0	0	0	15	5	9
2039	Di(2-Ethylhexyl) Phthalate	0.006	0	0	0	18	8	11
2041	Dinoseb	0.007	0	0	0	15	5	10
2032	Diquat	0.02	0	0	0	16	5	11
2033	Endothall	0.1	0	0	0	16	5	11
2005	Endrin	0.002	0	0	0	15	5	10
2946	Ethylene Dibromide (EDB)	0.00005	0	0	0	25	8	16
2034	Glyphosate	0.7	0	0	0	16	5	11
2065	Heptachlor	0.0004	0	0	0	25	8	16
2067	Heptachlor Epoxide	0.0002	0	0	0	25	8	16
2274	Hexachlorobenzene (HCB)	0.001	0	0	0	15	5	10
2042	Hexachlorocyclopentadiene	0.05	0	0	0	15	5	10
2015	Methoxychlor	0.04	0	0	0	25	8	16
2036	Oxamyl (Vydate)	0.2	0	0	0	16	5	11
2326	Pentachlorophenol	0.001	0	0	0	25	8	16
2040	Picloram	0.5	0	0	0	16	5	11

SOCs (cont'd)

			MCLs			Monitoring		
Code	Name	MCL (mg/l)	# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation
2037	Simazine	0.004	0	0	0	16	5	11
2383	Total Polychlorinated Biphenyls (PCB)	0.0005	0	0	0	25	8	16
2020	Toxaphene	0.003	0	0	0	25	8	16
SOC Totals			0	0	0	595	193	16
			Treatment Technique			Monitoring		
Code	Name	MCL (mg/l)	# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation
2257	Epichlorohydrin	TT	-	-	-	-	-	-
2265	Acrylamide	TT	-	-	-	-	-	-
Totals			-	-	-	-	-	-

Ground Water Rule (GWR)							
Violation Type (code)	Violation Name	# of Violations		# of RTC Violations		# of PWSs In Violation	
31 (0700) & 19 (3002, 3014, 3028)	Monitoring of Treatment (Major Monitoring)	0		0		0	
34 (3014)	Monitoring of Source (Major Monitoring)	0		0		0	
41 (0700)	Failure to Maintain Microbial Treatment - TT	0		0		0	
42 (0700)	Failure to Provide Treatment -TT	0		0		0	
45, 48 (0700)	Failure to Address Deficiency – TT	0		0		0	
		Monitoring			Treatment Technique		
		# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation
GWR Totals		0*	0*	0*	0*	0*	0*

Inorganic Chemicals (IOCs)

Code	Name	MCL (mg/l)	MCLs			Monitoring		
			# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation
1074	Antimony, Total	0.006	0	0	0	0	0	0
1005	Arsenic	0.01	8	3	4	14	0	10
1010	Barium	2	0	0	0	4	0	1
1075	Beryllium, Total	0.004	0	0	0	0	0	0
1015	Cadmium	0.005	0	0	0	0	0	0
1020	Chromium	0.1	0	0	0	0	0	0
1024	Cyanide	0.2	0	0	0	0	0	0
1025	Fluoride	4	-	-	-	-	-	-
1035	Mercury	0.002	0	0	0	0	0	0
1040	Nitrate	10	0	0	0	1127	120	1064
1038	Total Nitrite & Nitrate	10	0	0	0	0	0	0
1041	Nitrite	1	1	0	1	0	0	0
1045	Selenium	0.05	0	0	0	0	0	0
1085	Thallium, Total	0.002	0	0	0	0	0	0
1094	Asbestos	7 MFL	-	-	-	-	-	-
IOC Totals			9	3	5	120	120	1064

Coliform (TCR)							
Violation Type	Violation Name	# of Violations		# of RTC Violations		# of PWSs In Violation	
1A	MCL, Ecoli	14*		1*		13*	
21	MCL, Acute	NA		NA		NA	
22	MCL, Monthly	NA		NA		NA	
23, 25	Monitoring Routine & Repeat Major	NA		NA		NA	
3A	Monitoring, Major	45*		27*		42*	
		MCLs			Monitoring		
		# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation
TCR Totals		14*	1*	13*	45*	27*	42*

Lead and Copper Rule (LCR)							
Violation Type	Violation Name	# of Violations		# of RTC Violations		# of PWSs In Violation	
51	Monitoring, Initial Tap Sampling for Pb/Cu	10		0		9	
52	Monitoring, Follow-up & Routine Tap Sampling for Pb/Cu	72		9		71	
58	Treatment Installation	0		0		0	
65	Public Education	1		1		1	
		Monitoring			Treatment Technique		
		# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation
LCR Totals		83	10	72	1	1	1

Consumer Notification										
Violation Type	Violation Name			# of Violations	# of RTC Violations			# of PWSs In Violation***		
75	Public Notice Rule Reporting			0	0			0		
Stage 1 Disinfectants and Disinfection Byproducts Rule (Stage 1 DBPR)										
Violation Type	Contam Code	Violation Name			# of Violations	# of RTC Violations			# of PWSs In Violation	
12 and 37	0400	Qualified Operator Failure or Failure to Profile/Consult TT			0	0			0	
46	2920	Inadequate DBP Precursor Removal Treatment Technique			0	0			0	
02	1011	Bromate MCL			0	0			0	
02	1009	Chlorite MCL			0	0			0	
02	2456	Total Haloacetic Acids (HAA) MCL			0	0			0	
02	2950	Total Trihalomethanes (TTHM) MCL			0	0			0	
11	0999	Chlorine Maximum Residual Disinfectant Level (MRDL)			0	0			0	
11	1006	Chloramine MRDL			0	0			0	
11	1008	Chlorine Dioxide MRDL			0	0			0	
11	1008	Chlorine Dioxide Monitoring			0	0			0	
13	1008	Chlorine Dioxide MRDL Acute			0	0			0	
27	0400	No DBPR Monitoring Plan			0	0			0	
27	0999	Chlorine Monitoring			0	0			0	
27	1004	Bromide Monitoring			0	0			0	
27	1006	Chloramine Residual Monitoring			0	0			0	
27	1008	Chlorine Dioxide Residual Monitoring			0	0			0	
27	1009	Chlorite Monitoring			0	0			0	
27	1011	Bromate Monitoring			0	0			0	
27	2456	Total Haloacetic Acids (HAA) Monitoring			32	3			26	
27	2920	TOC Monitoring			0	0			0	
27	2950	Total Trihalomethanes (TTHM) Monitoring			32	3			26	
		MCLs/MRDL			Monitoring			Treatment Technique		
		# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation
Stage 1 DBPR Totals		0	0	0	64	6	26	0	0	0

2017 State Summary – Non-Community Water Supplies (NCPWS)										
Rule Group	Chemical Sub-Group	MCLs			Monitoring/Notification			Treatment Technique		
		# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation	# of Violations	# of RTC Violations	# of PWSs In Violation
CHEM	VOC	0	0	0	1,512	315	57			
	SOC	0	0	0	595	193	16			
	IOC	9	3	5	1,127	120	1,064			
CHEM Subtotal		9	3	5	3,234	628	1,146			
TCR Subtotal		14	1	13	45*	27*	42*			
Stage 1 DBPR Subtotal		0	0	0	64	6	26	0	0	0
All SWTRs Subtotal					0	0	0	0	0	0
LCR Subtotal					83	10	72	1	1	1
GWR					0	0	0	0	0	0
Consumer Notification Subtotal					-	-	-			
TOTAL		23	4	18	3,426**	671**	1,198**	1	1	1
Total Number of NCPWSs				Grand Total Number NCPWS Violations (MCL, Monitoring, and Treatment Technique)				Grand Total of NCPWSs in Violation (MCL, Monitoring, and Treatment Technique)		
3,785				3,450**				1,210***		

* These figures have not been verified with Local Health Department staff that have direct oversight for these water systems.

** This data is incomplete at this time.

*** Public notice for monitoring violations is not included in the compliance rate.

Appendix C
Illinois EPA 2018 Annual Compliance Report
Maximum Contaminant Level and Treatment Technique Violations by CWS
Sort by Contaminant
From U.S. EPA's CDX Reporting Services database

Contaminant Name	Community Water System ID	Community Water System Name	Violation Category	Comment
Arsenic	IL0195925	TRIANGLE MHP	MCL	Under Enforcement
Arsenic	IL0195945	FOUNTAIN VALLEY MHP	MCL	Under Enforcement
Arsenic	IL0450100	CHRISMAN	MCL	Under Enforcement
Arsenic	IL0730080	HICKORY HILLS 2ND ADDITION WATER ASSN	MCL	Under Enforcement
Arsenic	IL0735280	LYNWOOD 3RD ADDITION	MCL	Under Enforcement
Arsenic	IL1030450	STEWARD	MCL	Under Enforcement
Arsenic	IL1135100	COLONIAL MEADOWS WATER COMPANY	MCL	Under Enforcement
Barium	IL0971770	VOLO	MCL	Under Enforcement
Combined Radium (-226 and -228)	IL0150300	SHANNON	MCL	Under Enforcement
Combined Radium (-226 and -228)	IL0935150	FOX LAWN HOMEOWNERS WATER ASSOCIATION	MCL	Under Enforcement
Combined Radium (-226 and -228)	IL1035100	WOODHAVEN	MCL	Under Enforcement
Combined Radium (-226 and -228)	IL1410500	ROCHELLE	MCL	Under Enforcement
Combined Radium (-226 and -228)	IL1450050	CUTLER	MCL	Under Enforcement
Combined Radium (-226 and -228)	IL1610100	CARBON CLIFF	MCL	Under Enforcement
Combined Radium (-226 and -228)	IL1775255	TIMBER RIDGE MOBILE ESTATES	MCL	Under Enforcement
Combined Radium (-226 and -228)	IL2015488	GREAT OAKS AND BEACON HILLS APARTMENTS	MCL	Under Enforcement
Lead and Copper Rule	IL0015200	CLAYTON-CAMP POINT WATER COMMISSION	TT	Under Enforcement
Lead and Copper Rule	IL0735600	GENESEO HILLS SUBDIVISION	TT	Returned to Compliance
Total Organic Carbon	IL0610150	GREENFIELD	TT	Under Enforcement
TTHM	IL0510010	FAYETTE WATER COMPANY	MCL	Under Enforcement
TTHM	IL0950050	ABINGDON	MCL	Under Enforcement
TTHM	IL1370020	ALEXANDER WATER DISTRICT	MCL	Under Enforcement
TTHM	IL1395150	MOULTRIE COUNTY RWD	MCL	Under Enforcement
TTHM	IL1450150	PINCKNEYVILLE	MCL	Under Enforcement

*Illinois DPH 2017 Annual Compliance Report
Maximum Contaminant Level and Treatment Technique Violations by NCPWS
Sort by Contaminant*

ID	Non Community Water Supply Name	Contaminant Name	Violation Category	Comment
IL3001883	GREENWOOD SCHOOL	ARSENIC	MCL, AVERAGE	no SOX
IL3057844	OLYMPIA SCHOOL	ARSENIC	MCL, AVERAGE	no SOX
IL3057844	OLYMPIA SCHOOL	ARSENIC	MCL, AVERAGE	no SOX
IL3057844	OLYMPIA SCHOOL	ARSENIC	MCL, AVERAGE	no SOX
IL3057844	OLYMPIA SCHOOL	ARSENIC	MCL, AVERAGE	no SOX
IL3147652	CORNERSTONE CHRISTIAN ACADEMY	ARSENIC	MCL, AVERAGE	Returned to Compliance
IL3155085	ROSEBUD DAYCARE	ARSENIC	MCL, AVERAGE	Returned to Compliance
IL3155085	ROSEBUD DAYCARE	ARSENIC	MCL, AVERAGE	Returned to Compliance
IL3002212	BONANZA CAMPGROUND #1	E. COLI	MCL, E. COLI, POS E COLI (RTRC)	no SOX
IL3006577	ROCK CUT ST PK-HICKORY HILLS	E. COLI	MCL, E. COLI, POS E COLI (RTRC)	no SOX
IL3026831	ST PATRICK'S SCHOOL	E. COLI	MCL, E. COLI, POS E COLI (RTRC)	no SOX
IL3030577	CROSSROADS OF IVANHOE	E. COLI	MCL, E. COLI, POS E COLI (RTRC)	no SOX
IL3030577	CROSSROADS OF IVANHOE	E. COLI	MCL, E. COLI, POS E COLI (RTRC)	no SOX
IL3069757	SCHILLER WOODS 3084	E. COLI	MCL, E. COLI, POS E COLI (RTRC)	no SOX
IL3080184	PARK PLACE OF SCHAUMBURG	E. COLI	MCL, E. COLI, POS E COLI (RTRC)	Returned to Compliance
IL3095596	STRONGHOLD BARRICK	E. COLI	MCL, E. COLI, POS E COLI (RTRC)	no SOX
IL3096750	MARATHON ROUND LAKE	E. COLI	MCL, E. COLI, POS E COLI (RTRC)	no SOX
IL3102186	BUSSE FOREST MAIN DAM HP 1233	E. COLI	MCL, E. COLI, POS E COLI (RTRC)	no SOX
IL3113621	BARRINGTON HILLS CC HALFWAY HOUSE	E. COLI	MCL, E. COLI, POS E COLI (RTRC)	no SOX

IL3120600	CHEBANSE RECREATION AREA MAIN	E. COLI	MCL, E. COLI, POS E COLI (RTCR)	no SOX
IL3132456	MADD MAXXS PIZZA & PUB	E. COLI	MCL, E. COLI, POS E COLI (RTCR)	no SOX
IL3140996	LAKE RENWICK PRESERVE	E. COLI	MCL, E. COLI, POS E COLI (RTCR)	no SOX
IL3123695	NORWAY STORE	NITRITE	MCL	no SOX
IL3113837	ILLINOIS CENTRAL	LEAD & COPPER RULE	PUBLIC EDUCATION (LCR)	No SOX

Appendix D
Illinois EPA 2018 Annual Compliance Report
Maximum Contaminant Level and Treatment Technique Violations
Sort by CWS
From U.S. EPA's CDX Reporting Services database

ID	Community Water System Name	Contaminant Name	Violation Category Code	Compliance Status Code
IL0015200	CLAYTON-CAMP POINT WATER COMMISSION	Lead and Copper Rule	TT	Under Enforcement
IL0150300	SHANNON	Combined Radium (-226 and -228)	MCL	Under Enforcement
IL0195925	TRIANGLE MHP	Arsenic	MCL	Under Enforcement
IL0195945	FOUNTAIN VALLEY MHP	Arsenic	MCL	Under Enforcement
IL0450100	CHRISMAN	Arsenic	MCL	Under Enforcement
IL0510010	FAYETTE WATER COMPANY	TTHM	MCL	Under Enforcement
IL0610150	GREENFIELD	Total Organic Carbon	TT	Under Enforcement
IL0730080	HICKORY HILLS 2ND ADDITION WATER ASSN	Arsenic	MCL	Under Enforcement
IL0735280	LYNWOOD 3RD ADDITION	Arsenic	MCL	Under Enforcement
IL0735600	GENESEO HILLS SUBDIVISION	Lead and Copper Rule	TT	Returned to Compliance
IL0935150	FOX LAWN HOMEOWNERS WATER ASSOCIATION	Combined Radium (-226 and -228)	MCL	Under Enforcement
IL0950050	ABINGDON	TTHM	MCL	Under Enforcement
IL0971770	VOLO	Barium	MCL	Under Enforcement
IL1030450	STEWARD	Arsenic	MCL	Under Enforcement
IL1035100	WOODHAVEN	Combined Radium (-226 and -228)	MCL	Under Enforcement
IL1135100	COLONIAL MEADOWS WATER COMPANY	Arsenic	MCL	Under Enforcement
IL1370020	ALEXANDER WATER DISTRICT	TTHM	MCL	Under Enforcement
IL1395150	MOULTRIE COUNTY RWD	TTHM	MCL	Under Enforcement
IL1410500	ROCHELLE	Combined Radium (-226 and -228)	MCL	Under Enforcement
IL1450050	CUTLER	Combined Radium (-226 and -228)	MCL	Under Enforcement
IL1450150	PINCKNEYVILLE	TTHM	MCL	Under Enforcement
IL1610100	CARBON CLIFF	Combined Radium (-226 and -228)	MCL	Under Enforcement
IL1775255	TIMBER RIDGE MOBILE ESTATES	Combined Radium (-226 and -228)	MCL	Under Enforcement
IL2015488	GREAT OAKS AND BEACON HILLS APARTMENTS	Combined Radium (-226 and -228)	MCL	Under Enforcement

Appendix E
Community Public Water Supply Facilities
Activated Between October 1, 2003 and December 31, 2018

Facility Number	Facility Name	Status A=Active P=Proposed	Status Date	Capacity Demonstration Notes/ Approval Date	ETT Score
IL0015500	IL VETERANS HOME (QUINCY)	A	4/12/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL0070060	GREENVIEW ESTATES MHP	A	9/8//2014	status change - system was active (exempt) prior to 10/1/1999	0
IL0070200	POPLAR GROVE WELL 7 SERVICE AREA	P	1/24/2006	(no permit info available)	
IL0070350	POPLAR GROVE WEST-COUNTRYSIDE	A	10/1/2004	status change - system was active (exempt) prior to 10/1/1999	0
IL0170010	CASS RURAL WATER DISTRICT	A	5/1/2008	8/12/2004	0
IL0170080	ARENZVILLE RURAL WATER COOPERATIVE	A	3/2/2011	2/16/2007	0
IL0190660	MAPLEWOOD MAC LLC	A	3/7/2017	formerly exempt - existed prior to 1999 - no SEP required	0
IL0195310	WOODLAND ACRES MHC	A	11/27/2018	formerly exempt - existed prior to 1999 - no SEP required	0
IL0195350	ILUR PORTFOLIOS - CARRIAGE ESTATES LLC	A	1/1/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL0195360	ILUR WOODS EDGE MHP LLC	A	12/7/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL0195370	ILUR PORTFOLIO 5 - WILSON MHP LLC	A	12/7/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL0195380	ILUR PORTFOLIO 5 - TRAILSIDE MHP LLC	A	12/7/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL0195390	ILUR PORTFOLIO 5- SURBANA ESTATES MHP LLC	A	12/7/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL0195400	ILUR LIBERTY COMMONS MHP LLC	A	12/7/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL0210030	SHARPSBURG AND NEIGHBORING AREA WATER SY	A	4/13/2011	6/23/2011	0

Facility Number	Facility Name	Status A=Active P=Proposed	Status Date	Capacity Demonstration Notes/ Approval Date	ETT Score
IL0270040	GATEWAY REGIONAL WATER COMPANY	A	5/10/2007	5/11/2004	0
IL0310010	PARADISE MHP	A	1/5/2017	formerly exempt - existed prior to 1999 - no SEP required	0
IL0310200	WOODS OF SOUTH BARRINGTON	A	7/26/2007	7/29/2005	0
IL0310230	MID-MARK WATER COMMISSION	A	1/13/2011	Discovered System-system was active prior to 10/1/1999	0
IL0310370	LINDENTREE TOWNHOMES	A	12/1/2005	10/24/2003	0
IL0311540	LA GRANGE ESTATES MHP	A	7/6/2006	Discovered System-system was active prior to 10/1/1999	0
IL0311900	OAK LANE MHC	A	2/02/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL0311960	MORTON GROVE - NILES WATER COMMISSION	P	5/16/2017	11/1/2017	
IL0312020	NILES NURSING AND REHABILITATION	P	3/19/2018	formerly exempt - existed prior to 1999 - no SEP required	0
IL0312050	AQUA ILLINOIS-SUMMERDALE	A	11/19/2015	status change - system was active (exempt) prior to 10/1/1999	0
IL0312433	LARAMIE PARK HOMEOWNER ASSOCIATION	P	10/1/2004	status change - system was active (exempt) prior to 10/1/1999	
IL0312540	GRANDBRIAR OF PROSPECT HEIGHTS	A	5/23/2017	3/4/2016	0
IL0312800	WEATHERSTONE LAKES MHP - SAUK TRAIL, LLC	A	11/22/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL0315125	ALPINE VILLAGE MHP	A	1/6/2017	formerly exempt - existed prior to 1999 - no SEP required	0
IL0315617	EDWARD HINES JR V A HOSPITAL	A	5/17/2007	status change - system was active (exempt) prior to 10/1/1999	0
IL0315850	STERLING ESTATES MHP	A	7/1/2005	status change - system was active (exempt) prior to 10/1/1999	0
IL0317830	NORTH PARK UNIVERSITY	P	12/19/2018	formerly exempt - existed prior to 1999 - no SEP required	

Facility Number	Facility Name	Status A=Active P=Proposed	Status Date	Capacity Demonstration Notes/ Approval Date	ETT Score
IL0350100	JEWETT	A	12/1/2003	status change - system was active (exempt) prior to 10/1/1999	0
IL0374860	SANDWICH ESTATES MHP	A	8/3/2011	status change - system was active (exempt) prior to 10/1/1999	0
IL0374865	TRIANGLE MANUFACTURED HOME COMMUNITY	A	8/18/2011	Discovered System-system was active prior to 10/1/1999	0
IL0375500	NORTHERN ILLINOIS UNIVERSITY-DEKALB	A	11/24/2004	status change - system was active (exempt) prior to 10/1/1999	0
IL0495400	EASY BREEZE MANUFACTURED HOME PARK	A	5/4/2012	system existed prior to 10/1/1999 but not regulated until 2012	0
IL0510020	KASKASKIA SPRINGS WTER CO.	P	4/21/2009	4/22/2010	
IL0530260	PAXTON MHP LLC	A	12/7/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL0570150	BANNER	P	2/10/2014	Permit Denied, No appeal	
IL0578020	BERNADOTTE TOWNSHIP	P	8/5/2009	8/31/2009	
IL0630070	BURT ESTATES MHC	A	2/2/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL0750910	SUGAR CREEK MANUFACTURED HOME COMM., LLC	A	11/15/2006	Discovered System-system was active prior to 10/1/1999	0
IL0775160	CRAB ORCHARD LAKE MHC	A	9/14/2017	formerly exempt - existed prior to 1999 - no SEP required	0
IL0810030	MOORES PRAIRIE TOWNSHIP WATER COMPANY	A	5/9/2013	2/23/2012	0
IL0890160	PINGREE GROVE	A	10/6/2005	8/18/2004	0
IL0894400	WILLOW LAKE ESTATES MHP	A	7/1/2015	status change - system was active (exempt) prior to 10/1/1999	0
IL0930300	HIGHGROVE CONSERVATION DEVELOPMENT	P	6/5/2006	5/28/2008	
IL0970010	BEACH MHP	A	5/03/2018	formerly exempt - existed prior to 1999 - no SEP required	0

Facility Number	Facility Name	Status A=Active P=Proposed	Status Date	Capacity Demonstration Notes/ Approval Date	ETT Score
IL0970240	BLUFF LAKE LODGES, INC.	A	12/21/2017	formerly exempt - existed prior to 1999 - no SEP required	0
IL0970330	ARBORIA OF LONG GROVE SENIOR CARE	A	7/25/2017	3/5/2016	0
IL0970340	LONG GROVE	A	5/14/2018	4/15/2016	0
IL0971200	PRAIRIE TRAILS OF LONG GROVE	A	2/18/2004	status change - system was active (exempt) prior to 10/1/1999	0
IL0975040	AQUA ILLINOIS-HAWTHORN WOODS	A	1/1/2005	1/15/2004	0
IL0975070	AQUA ILLINOIS-RAVENNA	A	8/24/2006	7/27/2004	0
IL0975090	SEDGEBROOK INC	P	6/21/2004	status change - system was active (exempt) prior to 10/1/1999	
IL0990510	BELLE AIRE MHP	A	9/26/2018	formerly exempt - existed prior to 1999 - no SEP required	0
IL0990560	MENDOTA MOBILE HOME COMMUNITY	A	5/1/2006	Discovered System-system was active prior to 10/1/1999	0
IL0995329	LA SALLE COUNTY NURSING HOME	A	8/30/2017	Went inactive briefly due to tornado – reactivated following repairs	0
IL0995750	WEST WALNUT TRAILER COURT	A	6/9/2011	status change - system was active (exempt) prior to 10/1/1999	0
IL0995840	SHERIDAN CRCTL CNTR	A	10/15/2003	status change - system was active (exempt) prior to 10/1/1999	0
IL1030350	SAUK VALLEY STUDENT HOUSING	I	9/28/2005	Facility closed – 5/15/2016	0
IL1050500	DANA/LONG POINT, READING, ANCONA RWD	I	1/04/2016	Purchased by IAWC – Streator – 6/1/2009	0
IL1050650	IL AMERICAN-SAUNEMIN	A	9/1/2004	status change - system was active (exempt) prior to 10/1/1999	0
IL1090020	SCIOTA	A	11/1/2003	status change - system was active (exempt) prior to 10/1/1999	0
IL1090030	WEST PRAIRIE WATER CO-OP	A	8/22/2007	status change - system was active (exempt) prior to 10/1/1999	0

Facility Number	Facility Name	Status A=Active P=Proposed	Status Date	Capacity Demonstration Notes/ Approval Date	ETT Score
IL1090380	KILJORDAN MEADOWS	A	10/01/2018	formerly exempt - existed prior to 1999 - no SEP required	0
IL1110070	SPRING GROVE	P	9/23/2005	11/15/2005	
IL1110130	WOODS CREEK WATER SUPPLY	I	11/30/2005	7/22/2003	0
IL1110930	MEADOWS OF WEST BAY WATER TREATMENT	I	10/19/2007	9/15/2005	0
IL1130210	BLM GW MHP, LLC	A	3/7/2017	formerly exempt - existed prior to 1999 - no SEP required	0
IL1135130	WILLOW CREEK NORTH MHP	A	8/23/2006	Discovered System-system was active prior to 10/1/1999	0
IL1150020	BOODY COMMUNITY WATER COMPANY	A	10/23/2006	8/24/2005	0
IL1170060	SOUTH PALMYRA WATER COMMISSION	A	12/19/2003	status change - system was active (exempt) prior to 10/1/1999	0
IL1190260	UNIVERSITY FLATS MHP	A	3/23/2017	formerly exempt - existed prior to 1999 - no SEP required	0
IL1195160	ENCHANTED VILLAGE	A	6/15/2015	status change - system was active (exempt) prior to 10/1/1999	0
IL1195180	OAK GROVE MHP - MADISON COUNTY	A	12/6/2016	formerly exempt - existed prior to 1999 - no SEP required	
IL1235125	AUTUMN RIDGE ESTATES	A	3/29/2007	status change - system was active (exempt) prior to 10/1/1999	0
IL1270200	GALLAGHER SUBDIVISION	P	6/19/2012	not active	
IL1375050	NORTH MORGAN WATER COOP	A	11/1/2007	10/14/2005	0
IL1430080	BUFFALO HOLLOW FARMS WATER ASSOC	A	9/7/2004	status change - system was active (exempt) prior to 10/1/1999	0
IL1590200	OLNEY	A	4/3/2008	status change - system was active (exempt) prior to 10/1/1999	0
IL1590220	ACORN ACRES MHP	A	7/01/2018	formerly exempt - existed prior to 1999 - no SEP required	0

Facility Number	Facility Name	Status A=Active P=Proposed	Status Date	Capacity Demonstration Notes/ Approval Date	ETT Score
IL1610350	MISSISSIPPI MANUFACTURED HOME COMMUNITY	A	5/29/2014	status change - system was active (exempt) prior to 10/1/1999	0
IL1610410	HIGH CLIFF ESTATES	A	5/03/2018	formerly exempt - existed prior to 1999 - no SEP required	0
IL1615540	TENNANTS SHADY OAKS SUBDIVISION	A	10/1/2012	system existed prior to 10/1/1999 but not regulated until 2012	0
IL1630070	CONCORDIA WATER COOPERATIVE	P	12/20/2011	2/3/2012	0
IL1670060	OAKWOOD ESTATES	A	8/20/2014	status change - system was active (exempt) prior to 10/1/1999	0
IL1670070	GRAND VALLEY VILLAGE MHP	A	09/01/2018	formerly exempt - existed prior to 1999 - no SEP required	0
IL1670080	SOUTH SANGAMON WATER COMMISSION	A	5/10/2012	12/23/2010	0
IL1670090	ROUND PRAIRIE WATER COOP	A	10/8/2013	7/28/2011	0
IL1670100	WOODSIDE MHC	I	1/22/2013	status change - system returned to exempt 6/24/2015	0
IL1670110	PARK RIDGE MHC	A	1/22/2013	status change - system was active (exempt) prior to 10/1/1999	0
IL1670120	BISSELL VILLAGE MHC	A	2/11/2013	1/11/2013	0
IL1670130	NORTHBROOK MHC	A	2/11/2013	1/11/2013	0
IL1670140	EDGEWOOD MOBILE HOME COURT (MHC)	A	6/28/2013	status change - system was active (exempt) prior to 10/1/1999	0
IL1670160	RIDGE VILLAGE MHP	A	9/24/2013	status change - system was active (exempt) prior to 10/1/1999	0
IL1670170	MILTON MANOR MHP	A	4/30/2014	status change - system was active (exempt) prior to 10/1/1999	0
IL1670180	LINDEN MANOR MHP	A	4/30/2014	status change - system was active (exempt) prior to 10/1/1999	0
IL1670190	WESTWOOD	A	10/10/2014	status change - system was active (exempt) prior to 10/1/1999	0
IL1670210	WESTWOOD PLACE	A	10/10/2014	status change - system was active (exempt) prior to 10/1/1999	0

Facility Number	Facility Name	Status A=Active P=Proposed	Status Date	Capacity Demonstration Notes/ Approval Date	ETT Score
IL1670220	GASLITE COURT MHC	A	9/17/2015	status change - system was active (exempt) prior to 10/1/1999	0
IL1670230	EJ WATER - SANGCHRIS SERVICE AREA	A	1/10/2017	4/27/2016	0
IL1670240	DEERWOOD ESTATES	A	9/29/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL1670250	PHEASANT RUN MHP	A	6/20/2018	formerly exempt - existed prior to 1999 - no SEP required	0
IL1690020	DHS RUSHVILLE TREATMENT AND DETENTION	A	8/31/2009	status change - system was active (exempt) prior to 10/1/1999	0
IL1710020	SCOTT COUNTY RURAL WATER CO-OP	A	7/24/2008	6/10/2002	0
IL1970130	GODLEY PUBLIC WATER DISTRICT	A	5/5/2004	8/26/2011	0
IL1975140	BONNIE BRAE FOREST MANOR SNDST	A	4/26/2018	formerly exempt - existed prior to 1999 - no SEP required	0
IL1975225	IMPERIAL MHC	A	2/2/2016	formerly exempt - existed prior to 1999 - no SEP required	0
IL1977070	LOCKPORT HEIGHTS SD	A	5/09/2018	formerly exempt - existed prior to 1999 - no SEP required	0
IL2010030	FOREST VIEW MHP	A	6/1/2005	formerly exempt - existed prior to 1999 - no SEP required	0
IL2010080	AQUA ILLINOIS- SHERIDAN GROVE	A	5/4/2005	9/19/2007	0
IL2010460	SOUTH BLUFF MHP	A	7/15/2015	formerly exempt - existed prior to 1999 - no SEP required	0

Appendix F
Non-Transient Non-Community Water Supplies
Activated between January 1, 2004 and December 31, 2017

Facility #	Facility Name	Facility Status A=Active I=Inactive	Activation Date	ETT Score
IL3147652	Cornerstone Christian Academy	A	2-24-04	42
IL3147660	Springhaven Park	I	3-1-04	
IL3147728	American Precision Electronics	A	3-10-04	
IL3147801	All State West Plaza	A	3-25-04	
IL3147900	Barbara Rose Elementary School	A	6-10-04	
IL3148270	Ag View FS Inc.	A	10-14-05	2
IL3148361	Will County Forest Preserve Op & Maint.	I	10-18-04	
IL3148430	Rankin School Dist	A	9-7-04	
IL3148619	North Boone High School (09-27-04)	A	1-4-05	
IL3148742	Barrington Methodist Church	A	3-29-05	
IL3149005	TOYAL AMERICA	A	3-15-05	
IL3149039	Monsanto Agronomy Center	A	6-6-05	
IL3149088	QTC Development, Inc	A	6-7-05	1
IL3149252	Countryside Private School	A	10-3-05	4
IL3149427	Mobil Truck Stop	A	10-4-05	
IL3149443	Wilton Federated Church	A – Changed to Transient System	10-4-05	
IL3149559	Citgo Refinery North Well	A	8-2-06	
IL3149591	Plainfield Township	A – Changed to Transient System	1-23-06	
IL3149807	Flower Garden Toddler Center	I	2-1-06	
IL3149849	Walco Tool and Engineering	A – Changed to Transient System	2-15-06	
IL3150052	Toolamation	A	4-21-06	
IL3150102	Forming America Ltd.	A	4-25-06	
IL3150169	Merichkas	A	5-11-06	
IL3150433	Crest Foods Production	A	11-2-06	
IL3150441	Crest Foods Warehouse	A	11-2-06	
IL3150548	Monsanto Seeds	A	11-2-06	
IL3150581	Victory Christian Center	A-Changed to Transient System	1-24-07	
IL3150748	Seward Screw Products 16377	A	3-7-07	
IL3150763	Illinois Crime Lab	I	3-7-07	
IL3139337	Superior Felt	I	8-13-07	
IL3151654	Monsanto Corn Research	A	1-9-08	
IL3151670	Pioneer Hi-Bred Intl. Corn Research	A	3-4-08	
IL3151944	Freemont Intermediate School	A	4-2-08	
IL3152173	Sav A Pet	A	5-14-08	3
IL3152223	Apachi Day Camp	A-Changed to Transient System	5-1-08	
IL3152462	Danisco	A	10-1-08	
IL3152504	Monsanto Office	A	10-1-08	
IL3152629	Patriot Renewable Fuels	A	12-17-08	
IL3152645	Monsanto Barn	A	5-8-08	
IL3152744	Mary Sears Child Care	I	11-13-14	

Facility #	Facility Name	Facility Status A=Active I=Inactive	Activation Date	ETT Score
IL3152835	West Hills Shopping Center	A	9-18-08	
IL3152850	Deans Food Company	A	12-29-08	
IL3153015	Chemtool Rockton	A	3-12-09	
IL3153023	Pentecostal Center	I	12-17-08	
IL3153064	Menards	A	2-3-09	
IL3153072	Jewel Wells Spring Grove	A	3-31-09	
IL3153080	Pioneer Hi-bred Int.	A	3-31-09	
IL3153213	Little Bit Country Preschool	A – Changed to Transient System	6-25-09	
IL3153239	ROSENBERG CAR DEALERSHIP	A	3-30-15	
IL3153288	Cross Roads Community Church	A – Changed to Transient System	6-25-09	
IL3153346	Scott Company Hyponex	A	6-25-09	
IL3153411	Vermilion Power Station	I	9-17-09	
IL3153569	Rovanco Piping System Inc.	A	9-25-09	
IL3153890	Curry Ice & Coal	I	12-30-09	
IL3153924	Hanson Pressure Pipe West Well	I	6-3-09	
IL3154047	Full Fill Industries	A	2-16-10	
IL3154153	CORNERSTONE EARLY LEARNING	I	1-25-10	
IL3154161	HELMAR LUTHERAN CHURCH	A – Changed to Transient System	3-20-12	
IL3154476	Open Bible Church	I	3-30-10	
IL3154724	Lifes Little Miracles	A	4-13-10	
IL3154567	Moore Tires Inc.	A	4-26-10	
IL3154633	Lutheran General Hospital	A	6-24-10	1
IL3154666	Monroe Center School 2 nd Well	A	6-24-10	4
IL3155028	MASJID AL HUDA SCHOOL	I	6-20-17	
IL3155085	We Care Daycare	A	1-3-11	5
IL3147736	Flower Garden Day Care 3 rd Building	A	2-9-11	
IL3148429	MONTESSORI ACADEMY GLEN ELLYN	A	2-10-11	
IL3151365	Children of Promise	A	2-10-10	4
IL3155382	SEPTRAN INC	A	2-24-11	
IL3155168	SAUBER MFG CO 11 BAY	I	3-15-11	
IL3155150	SAUBER MFG CO SUPER SHOP	A	3-15-11	
IL3155390	PEACEFUL PATHWAYS	A	4-3-11	
IL3155416	FOX METRO WATER RECLAMATION DISTRICT	A	4-19-11	
IL3155358	SUNSET FOODS VILLAGE OF LONG GROVE	A	5-17-11	
IL3155291	H B FULLER	A	5-26-11	5
IL3155309	NORTHSHORE UNIVERSITY HEALTH SYSTEM	A	6-28-11	
IL3155606	UIC MEDICAL CENTER CHICAGO	A	8-31-11	1
IL3155614	HEARTLAND PRIVATE SCHOOL	A	9-21-11	1
IL3155747	NORTHFIELD BLOCK COMPANY 1	A	9-29-11	
IL3155754	NORTHFIELD BLOCK COMPANY 2	A	9-29-11	

Facility #	Facility Name	Facility Status A=Active I=Inactive	Activation Date	ETT Score
IL3155762	NORTHFIELD BLOCK COMPANY 3	A	09-29-11	
IL3155796	AMERICAN AD BAG	A	10-12-11	
IL3155804	MARION JOY REHAB HOSPITAL	A	01-10-12	8
IL3155952	CHRIST COMMUNITY CHURCH	A	01-10-12	
IL3155986	KOLB-LENA CHEESE COMPANY	A	01-10-12	6
IL3156323	TRINITY COMMONS	A – Changed to Transient System	04-02-12	
IL3156471	PCS PHOSPHATE	A	06-26-12	4
IL3156554	QUENTIN ROAD BIBLE BAPTIST SCHOOL	A	07-17-12	
IL3156646	WONDERS OF CHILDREN DAYCARE	A	08-02-12	
IL3156695	NACHUSA LUTHERAN HOME	A	09-13-12	
IL3156737	ILLINOIS MARINE TOWING INC	A	09-13-12	
IL3156760	PRECISION PLANTING	A	09-17-12	
IL3156836	JW MARRIOTT HOTEL	A	11-12-12	
IL3156943	COUNTRYSIDE CENTER HANDICAPPED	A	12-31-12	
IL3156950	WHOLE FOODS MARKET WELL	A	12-31-12	
IL3157149	JX PETERBUILT	A	04-02-13	
IL3157164	AUX SABLE MORRIS	A	04-02-13	
IL3157289	RIVER TERRACE CHURCH	A	05-13-13	
IL3157297	BERNER FOOD & BEV	A	05-15-13	
IL3157347	PREMIER FABRICATION	A	06-04-13	
IL3157412	RINKS HOLDING LLC	A	07-15-13	
IL3157479	TUGRANT DIVERSIFIED BRANDS	A	09-24-13	
IL3157487	NORTHSHORE UNIVERSITY GLENVIEW	A	10-2-13	
IL3157586	TECHNISAND WEDRON	A	10-9-13	
IL3157594	WEDRON SILCA 2	A	10-9-13	
IL3157636	MYCOGEN SEEDS GRAND RIDGE	I	05-03-18	
IL3157677	NUSSBAUM TRANSPORTATION	A	10-24-13	4
IL3157990	AZZ GALVANIZING	A	12-05-13	
IL3157933	PEARL VALLEY EGGS	A	12-26-13	
IL3157974	CITY OF ROCHELLE AIRPORT	A	12-26-13	
IL3158444	CANTIGNY PARK	A	9-3-14	
IL3158519	NATURE SCHOLARS DAYCARE	A	9-30-14	
IL3158600	INTEGRYS GAS 2 ND WELL	A	10-8-14	
IL3158717	ALLOY SPECIALTIES INC	A	12-26-14	
IL3158774	MACLEAN FOGG	A	1-15-15	
IL3158873	WEDRON SILICA SCREENING HOUSE	A	2-17-15	
IL3158881	WEDRON SILICA MINE SITE	A	2-17-15	
IL3158923	KSI CONVEYORS INC	A	3-4-15	
IL3158774	MACLEAN FOGG M1	A	01/15/2015	
IL3158873	WEDRON SILICA SCREEN HOUSE	A	2-17-15	
IL3158881	WEDRON SILICA MINE SITE	A	2-17-15	
IL3158923	KSI CONVEYORS INC	A	3-3-15	
IL3158956	J M HUBER WELL 1	A	4-9-15	

Facility #	Facility Name	Facility Status A=Active I=Inactive	Activation Date	ETT Score
IL3159053	FAITH CHRISTIAN ELEM SCHOOL	A	4-9-15	
IL3159061	CELANESE	A –Changed to Transient	4-9-15	
IL3159418	PRIMROSE SCHOOL/DAYCARE	A	6-17-15	
IL3159459	J M HUBER WELL 2	A	6-30-15	
IL3159582	DURA BAR METAL SERVICES	A	8-25-15	
IL3159780	Winnebago Co. Rock 59	A	1-14-16	1
IL3159806	SWENSON SPREADER LLC	A	1-14-16	
IL3159889	ARNTZEN CORPORATION	A	2-18-16	1
IL3159897	DUPONT PIONEER	A	3-08-16	
IL3161240	Capt. James A Lovell FHCC	A	11-14-17	

Appendix G:

Rules	Illinois Implementation Status	U.S. EPA Primacy Revision Application or Program Update		U.S. EPA Status Explanation	U.S. EPA Timelines and Milestones
		Status	Date		
Phase II/V Contaminants	Implemented	Approved	9/12/1994		
Total Coliform	Implemented	Approved	6/7/1993		
Lead and Copper	Implemented	Approved	9/12/1994		
New PWS Definition	Implemented	Approved	7/29/2013		
Administrative Penalty Authority	Implemented	Approved	8/1/1998		
Consumer Confidence Report	Implemented	Extension	9/1/2007	R5 primacy backlog	R5 will add the date we received this application.
Operator Certification Program	Implemented	Approved	2/1/2001		
Interim Enhanced Surface Water Treatment	Implemented	Received	1/15/2009	R5 primacy backlog	Working to approve in FY17.
Stage 1 Disinfection Byproducts	Implemented	Received	1/15/2009	R5 primacy backlog	
Lead and Copper Minor Revisions Rule	Implemented	Received	1/15/2009	R5 primacy backlog	
Public Notice	Implemented	Received	9/28/2010	R5 primacy backlog	
Radionuclides	Implemented	Adopted	10/1/2001	R5 primacy backlog	Working to approve in FY17. R5 will add the date we received this application.
Arsenic	Implemented	Approved	7/29/2013		
Filter Backwash	Implemented	Received	1/15/2009	R5 primacy backlog	
Long Term 1 Enhanced Surface Water Treatment	Implemented	Received	1/15/2009	R5 primacy backlog	
Variance and Exemption	Implemented	Extension	9/1/2007	R5 primacy backlog	R5 will add the date we received this application.
Stage 2 Disinfection Byproducts	Implemented	Approved	3/16/2012		
Long Term 2 Enhanced Surface Water Treatment	Implemented	Approved	3/16/2012		

Ground Water Rule	Implemented	Approved	7/29/2013		
Lead and Copper Rule Short Term Revisions	Implemented	Received	10/13/2010	R5 primacy backlog	Working to approve in FY17.
Revised Total Coliform	CWS Implemented, Non-CWS Partial Implementation	Received	3/20/2014	Working to resolve issues regarding NCWS implementation in order to have an approvable package.	Working to approve in FY17/18.

Appendix H
Table of FY20 Regional/State Measures

Description	Name and update schedule	Target
# of ETT priority systems to be addressed	OECA Measure:	FY20: # of ETT priority systems
Percent of CWSs and population served by CWSs that meet all applicable health-based drinking water standards	SDW-2.1.1	FY20: % CWS Systems FY20: % population served by CWS Systems
Percent of CWS and NCWS with san. survey w/in the past 3 or 5 yrs as required.	R5 - Updated by Region 5 in April and October	FY20: % CWS % NCWS
Percent of CWS where risk to public health is minimized through source water protection (SDW-SP4a)	R5 SWP Program measure	FY20: % CWS Systems
Percent of population served by CWS where risk to public health is minimized through source water protection (SDW-SP4b)	R5 SWP Program measure	FY20: % population served by CWS Systems
All Rule Violation Completeness Reporting	R5 High Priority: Updated quarterly by Region 5	FY20: % of rules
1. Percent of <u>CWS systems</u> meeting all health-based standards	Shared Goals: Updated annually in April by Region 5	CY19: ≥95%
2. Percent of <u>population</u> of CWS meeting all health-based standards	Shared Goals: Updated annually in April by Region 5	CY19: ≥95%
3. Percent of <u>NTNCWSs</u> meeting all health-based standards	Shared Goals: Updated annually in April by Region 5	CY19: ≥95%
4. Percent of <u>TNCWSs</u> meeting all health-based standards	Shared Goals: Updated annually in April by Region 5	CY19: ≥95%
5. Percent of <u>population</u> served by CWSs with <u>significant /major monitoring violations</u>	Shared Goals: Updated annually in April by Region 5	CY19: <5%
6. Percent of <u>CWS systems</u> with <u>significant /major monitoring violations</u> (includes LCR Type 66 violations)	Shared Goals: Updated annually in April by Region 5	CY19: <10%
7. Percent of <u>NTNCWSs</u> with significant/major monitoring violations for <u>acute health risks</u>	Shared Goals: Updated annually in April by Region 5	CY19: <5%
8. Percent of <u>NTNCWSs</u> with significant/major monitoring violations for <u>chronic health risks</u>	Shared Goals: Updated annually in April by Region 5	CY19: <10%
9. Percent of <u>TNCWSs</u> with significant/major monitoring violations	Shared Goals: Updated annually in April by Region 5	CY19: <10%

