

Summary of State Operator Certification Programs

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Executive Summary

Under section 1419(b) of the Safe Drinking Water Act (SDWA), EPA is directed to withhold 20 percent of the funds a state was otherwise entitled to receive under SDWA section 1452 (the Drinking Water State Revolving Fund (DWSRF) Program) unless the state adopted and began implementing a program that meets the requirements of *EPA's Guidelines for the Certification (and Recertification) of Operators of Community and Nontransient Noncommunity Public Water Systems* (64 Fed. Reg. 5915). In order to continue to receive funding, state operator certification program adoption was required by February 5, 2001, (That is, 2 years after final publication of EPA's Guidelines). Each state met this deadline and EPA approved all of the state programs, allowing full funding of allocations under the DWSRF.

This document summarizes each state's response to Section 1419(b) of the SDWA. It is a reference tool for making comparisons among state programs for certifying operators of community water systems (CWSs) and nontransient noncommunity water systems (NTNCWSs). The document is organized as follows:

- I. State Summaries of Existing Operator Certification Programs, which provides a detailed look at each state's program, including information on:
 - A. Authorization Statutory and regulatory citations that authorize the Operator Certification Program and the implementing agency or agencies.
 - B. Classification of Systems, Facilities, and Operators Description of the method by which the state classifies its water supply systems, such as by system type, complexity of system components (for example, production, treatment, distribution), or size (for example, population served or volume in either gallons per day (GPD) or million gallons per day (MGD)).
 - C. Operator Qualifications Qualifications required for certification. For example, most states require a high school diploma (HSD) or equivalent, such as the General Educational Development (GED) test. Some states offer an Operator-in-Training (OIT) program for operators who receive temporary certification while working at a PWS as they seek full certification. Also describes any applicable grandparenting requirements. (Grandparenting, can provide an exception for operators to be certified even if they did not meet the new or modified program requirements established by February 2001).
 - D. Enforcement Description of the methods used by the state to enforce operator certification requirements (including actions against systems, operators, or both), and the agency or agencies that carry out enforcement actions.
 - E. Certification Renewal Ongoing requirements that an operator must meet to maintain a certification (for example, continuing education, contact hours, renewal period, and experience).
 - F. Resources Needed to Implement the Program List of funding sources, including fee based programs, staffing resources, budget, and data management activities. Most programs draw on a variety of state resources and staff that may not be clearly identified

on program Web sites, such as data management or field inspection staff. These staff may be funded through federal funds (such as set-aside funds from the DWSRF, the Public Water Supply Supervision (PWSS) grant, or the Expense Reimbursement Grant (ERG)) or other state funding such as state general funds.

- G. Recertification Identification of recertification requirements to renew a certificate, or loss of a certificate due to revocation or suspension.
- H. Stakeholder Involvement Description of stakeholder involvement in Operator Certification Program implementation and review, including identification of any advisory boards, committees, etc.
- I. Program Review Information on whether there is a regular formal review (internal or external) process for the state's program.
- II. Summary Tables of Existing Operator Certification Programs, which serve as quick references and allow for easy comparison among the programs.

I: State S	ummary of	Existing Ope	erator Certif	ication Progra	ms

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Alabama	Code of Alabama 1975: § 22-22A, § 22-25-1 through 22-25-15, and The Alabama Department of Environmental Management (ADEM) Admin. Code R. 335-10-1. Last amended in 2007. ADEM's Permits and Services Division is authorized to implement the Operator Certification Program.	Water distribution systems: Grade IC: Water Distribution Systems. Water treatment plants: Grade II: Basic ground water source (treatment including aeration and pressure filtration). Grade III: Advanced ground water (treatment using flocculation & clarifier). Grade IV: Surface water source or groundwater source under the influence of surface water.	Applicants must score ≥ 70 percent on written exam. Minimum experience required within 5 years of passing exam: Grade I: 12 months Grade II: 18 months in a Grade II facility or 24 months combined Grade I, and II, III, or IV experience Grade III: 24 months in a Grade III facility or 36 months combined Grade II, III, or IV experience Grade IV: 24 months in a Grade IV facility Experience may be acquired in applicable grade level or one grade below, except Grade IV Water which requires surface water treatment experience. Approved training programs, classes, or seminars may substitute for up to 12 months of experience. Operator Intern title applies to people that have successfully passed examinations but have not achieved the required experience. Grandparenting: Not allowed.	The Director of the Department may revoke or suspend certificates, and initiate proceedings to enforce the requirements of Code of Alabama 1975 22-25-1 to 22-25-15. Proceedings may include: a notice of violation; an administrative order directing compliance; an administrative order assessing a civil penalty of between \$100 and \$25,000; and a civil or criminal action.	Certificates must be renewed every 3 years. Operators must complete 24 continuing education hours (CEH), per certificate over the 3-year period. For a list of approved CEH sources, see page 15 of: http://www.adem.state.al.us/alEnviroRegLaws/files/Div10Eff4-3-07.pdf.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Alabama	Exam: \$270 Certification: \$105 Paper renewal: \$80 Online renewal: \$60 Late renewal: \$180 Reciprocity: \$150 Funding: Funded through fees. Exam is administered by Applied Measurement Professionals (AMP).	A complete application for renewal must be received at least 30 days prior to the expiration date of the certificate. Operators who fail to achieve CEH requirements within the 3 year renewal period may, upon approval, be granted an additional 180 days to acquire their CEHs. For a late application submittal, an operator may apply within 180 days of the certificate's expiration date and pay a late fee in addition to the certification fee. The operator may not practice as a certified operator until the effective date of the new certificate. An operator who fails to submit an application for renewal within 180 days after the certificate's expiration must reapply and take a new exam.		Exams are reviewed by a Multi-Branch ADEM Operator Certification Committee every 5 years or more frequently, based on examinee feedback. Internal Program Reviews are conducted annually and External Program Reviews are conducted on an on-going basis through quarterly meetings with Alabama certified operator committees (AWPCA and ARWA).

Program Web site: http://www.adem.state.al.us/programs/water/opCertification.cnt

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Alaska	Title 46, Chapter 30 of the Alaska Statutes, and Chapter 74, Articles 1-3 of the Alaska Administrative Code (AAC). Last amended in 2010. The Department of Environmental Conservation (DEC) implements the Operator Certification Program.	Distribution systems are classified as Class I-IV based on number of service connections. Distribution systems may be classified one class higher than the classification described above based on five or more pressure zones and whether water is circulated to prevent freezing. Treatment system points are assigned according to design capacity, source water, and complexity of treatment, as follows: Class I: 1 - 30 points Class II: 31 - 55 points Class III: 56 - 75 points Class IV: ≥76 points Systems that serve fewer than 100 connections or fewer than 500 people, or small treated or untreated water systems using surface water or GWUDI, are classified and treated separately. More information on system classification is available at: http://dec.alaska.gov/commish/regulations/pdfs/18%20AAC%2074.pdf .	All operators must have an HSD or GED, pass an Association of Boards of Certification (ABC) exam for the class of system for which they will be certified, and have at least the following experience: Water Distribution Provisional: 3 months or completion of course Level II: 1 year Level III: 4 years, 1 additional year of education Level IV: 6 years, 1 additional year of education Water Treatment Provisional: 3 months or completion of course Level II: 1 year Level II: 3 years Level II: 4 years, 2 additional years of education Level IV: 4 years, 4 additional years of education Certain experience may be substituted for education and certain levels of education can be substituted for experience.	The DEC may revoke a certificate if the following acts of misconduct occurred: fraud or deceit in obtaining the certificate or plant record keeping, gross negligence or a substantial violation of requirements.	Certification is valid for 3 years beginning on January 1 of the year of issue. Ten hours of approved training equals one Continuing Education Unit (CEU). The number of CEU's that each level of operator must complete during the 3-year period are as follows: Small, Untreated: 0.5 Small, Treated: 1 Provisional or Class Level I-IV: 3

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Alaska	Application: \$20 Exam: \$30 (\$40 for online exam) Temporary certification: \$35 Renewal: \$50 (\$35 for online renewal) Operator training classroom course: 1 day: \$75 2 day: \$100 3 day: \$150 4 day: \$175 5 day: \$200 Correspondence course: \$20 per CEU	The DEC will reinstate certification within 180 days if requested. After 180 days, the Department may require reexamination. If certification has lapsed for more than 2 years, the operator must follow the certification procedures for new applicants.	Stakeholder involvement is sought mainly through trade organizations and technical assistance providers. The Water and Wastewater Works Advisory Board advises the Department in matters pertaining to operator certification. The Commissioner of the DEC and eight additional water/wastewater professionals appointed by the governor make up the Board. The Board meets twice yearly.	Internal reviews are conducted mainly through feedback collected during the testing cycle. External reviews are conducted when an owner or operator appeals a specific policy. Neither type of review is carried out on a regular basis.
	Reciprocal certificate: \$100 Replacement certificate: \$20 Funding: All fees are used to fund program activities. Five staff are listed on the program Web site. Budget: Total collected fees amount to approximately \$57,000 annually.	If the DEC has revoked certification, the operator must wait 1 year before reapplying.		

Program Web site: www.dec.state.ak.us/water/opcert/index.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Arizona	Arizona Revised Statute 49-351 authorizes the Department of Environmental Quality (the Department) to oversee the Operator Certification Program. The Arizona Administrative Code, Title 18, Chapter 5, Article 1 authorizes the Program. Last amended in 2009.	Distribution systems are classified according to a point system, taking into account population served, pressure zones, booster stations, storage tanks, blending, fire protection systems, cathodic protection, control system technologies, water quality, and treatment: Grade 1: 0 points Grade 2: 1 - 20 points Grade 3: 21 - 35 points Grade 4: > 35 points Treatment plants are also classified according to a point system, taking into account maximum treatment capacity, population served, water source, complexity of treatment, and water quality: Grade 1: 1 - 25 points Grade 2: 26 - 50 points Grade 3: 51 - 70 points Grade 4: > 70 points Operators are classified according to the systems they are qualified to operate.	In order to become certified, operators must have a HSD or GED, pass a written exam with a grade of 70 percent or above and meet the following relevant experience and education requirements. Grade 1: No experience required. Grade 2: 1 year as Grade 1 operator or equivalent; or 2 years postsecondary education and 1 year of experience, including 6 months at a Grade 1 facility or equivalent; or a Bachelor's degree and 6 months of experience Grade 3: 2 years of experience including 1 year at a Grade 2 facility or equivalent; or 2 years of post-secondary education and 18 months experience at a Grade 2 facility or equivalent; or a Bachelor's degree and 1 year of experience Grade 4: 3 years of experience including 1 year at a Grade 3 facility or equivalent; or 2 years of post-secondary education and 30 months of experience including 1 year at a Grade 3 facility or equivalent; or a Bachelor's degree and 2 years of experience Grandparenting: Not permitted.	The Department can decide whether to deny or revoke a certificate if the operator: operates a facility in violation of federal law; is negligent in their supervision of facility operation; fails to comply with Department orders or consent decrees; obtains a certificate by fraud, misrepresentation, or deceit; knowingly prepares a false or fraudulent report or record on operation or management of a facility; endangers public safety, health, or welfare; fails to comply with the terms or conditions of probation or suspension; or fails to cooperate with an investigation by the department including failing or refusing to provide information required by this article. Compliance is tracked through the state's Safe Drinking Water database.	Certificates are valid for 3 years. An operator may renew his/her certificate before 3 years, if the request is made in writing. Operators must accumulate at least 30 Professional Development Hours (PDH) during the certification period. At least 10 PDHs must be specifically related to the job function of the operator. Instead of completing PDHs, operators may renew a certificate by passing an exam for the applicable grade.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Arizona	Fees: There currently are no fees. In December 2014, the Department submitted a Notice of Final Rulemaking to the Governor's Regulatory Review Council, which is the final step in the rulemaking process, to establish fees which would cover costs to administer the program, to be deposited in the State General Funds. Proposed fees: Exam: \$150 per early review (if requested less than triennially) Initial certificate: \$65 Renewal: \$150 plus \$50 for each additional renewal if expiration date is the same Reciprocity: \$250 Until fees are established, the program continues to be funded through vehicle emissions fees. ADEQ contracts with Gateway Community College (GWCC) to proctor ABC exams. Data Management: ADEQ's Safe Water Operator Certification System (SWCOS) database contains detailed certified operator and certificate-related information. Operator information for regulated PWSs is maintained in the SDWIS/State database.	An operator can renew a certificate within 90 days after its expiration. After 90 days, operators must follow the procedure for new applicants. Operators whose certificates have been revoked may not be certified.	Arizona Administrative Code R18-5-103 establishes an Operator Certification Committee consisting of 11 members, including one Department representative and 10 stakeholders, including operators, engineers, academics, municipal officials and other representatives. The Committee is to meet at least twice a year to provide recommendations, technical advice, and assistance to the Department.	The Department is required to review all of its rules every 5 years to determine whether any rules should be amended or repealed. The Department must prepare a written report summarizing its findings and detailing any courses of action. The report should cover the rule's effectiveness, any criticisms, and consistency of the rule with other Department goals and rules. Review of the Program may also take place in Operator Certification Committee meetings and may result in recommendations for the Department.

Program Web site: www.azdeq.gov/environ/water/dw/opcert.html

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Arkansas	Act 333 of 1957, last amended in 1997. Title 17, Chapter 51, Sections one and two of the Arkansas Code provides the statutory authority for the program. The Arkansas State Board of Health's Engineering Section (the Board), within the Arkansas Department of Health's Center for Local Public Health, promulgated Operator Certification Program regulations. Last regulation revision was effective January 1, 2003.	Treatment facilities are assigned classifications of T I-IV, based on population served and type of treatment. Distribution systems are assigned classifications of D I-IV, based on population served and type of equipment used in the distribution system. PWSs serving fewer than 500 people, with a single pressure plane water distribution facility, are classified as Very Small Systems. OIT status is awarded to people who pass the exam but do not have required experience.	All operators must have an HSD or equivalent. However, the Drinking Water Advisory and Operator Licensing Committee (the Committee) may waive this requirement on a case-by-case basis. All operators must complete certain training courses for each license grade and type prior to examination. The total training required can range from 40 contact hours for the lowest license grades (Very Small Systems and D-1) to 96 hours for the highest license grades (D-3, T-3, T-4). All operators then must pass a written examination for each level of certification. Each license level has a certain level of experience that must be obtained prior to the license being issued: Grade I: 6 months Grade II: 1 year Grade III: 2 years Grade IV: 3 years Very Small System: No experience requirement Various educational achievements may be substituted for partial experience credit. Grandparenting: Not permitted.	Department utilizes	To renew a certification, an operator must complete at least 24 contact hours of approved training every 2 years. A minimum of 12 of these hours must be in subjects directly related to operating or maintaining the water system. The other 12 hours may be in indirectly related subjects, such as safety, wastewater treatment, plumbing inspection and laboratory processes. A license that has not been renewed within 90 days of expiration is invalid.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Arkansas	Exam: \$25	Certifications that have	The Committee is the main avenue of	The Committee reviews the
	License: \$10	lapsed for less than 1 year can be reinstated upon	stakeholder involvement. This Committee consists of seven members,	program's activities each quarter, including pass rates
	Renewal: \$10	documentation that past	including water system managers, water	for each exam category,
	Renewal: \$10 Late renewal: \$15 (includes renewal fee and \$5 penalty) Reciprocity: \$25 Reinstatement of inactive license: \$10 per 2-year renewal period up to \$35 Reinstatement of revoked license: \$10 per 2-year renewal period, plus license fee Funding: All fees collected (about \$25,000) are dedicated to the Operator Certification Program. In addition, funds from the PWS service fees, state general revenue funds, and the Federal PWSS grant support the program. Data Management: The Board has a training attendance database for operators to document their renewal and license exam required course training attendance online.	documentation that past renewal training requirements and fee payments have been met. Suspended certificates must be renewed. The operator must meet the standard renewal requirements, unless the suspension order stipulated additional renewal requirements. Revoked certificates cannot be renewed. A revoked certificate can only be reinstated by examination under time frames stipulated in the revocation order.	including water system managers, water system operators, academics, consulting engineers, and regulatory personnel. All meetings are open to the public. The Board makes appointments to the Committee, with the exception of the Department staff position. The Committee advises the Board in all matters relating to operator training programs and certification. All operator certification rules and regulations are first submitted to the Committee for review. The Arkansas Environmental Training Academy (AETA) and Arkansas Rural Water Association (ARWA) contract with the Board to conduct exam trainings. The Board also utilizes stakeholder groups consisting of representatives of field staff, water operator training organizations, and licensed water operators to develop exams from validated ABC exams.	for each exam category, budget activity, and general drinking water program status.

 $Program\ Web\ site: \underline{http://www.healthy.arkansas.gov/programsServices/environmentalHealth/Engineering/operatorCertification/Pages/default.aspx}$

State Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
California Sections 106875 - 106910 of the California Health and Safety Code, Division 4, authorize the California Department of Public Health (CDPH) to implement the Operator Certification Program. Section 116271 transferred the program from CDPH to the State Water Resources Control Board (State Water Board) on July 1, 2014. The State Water Board established the Office of Operator Certification to administer the regulations. Title 22 California Code of Regulations (CCR) Chapter 13 specifies water treatment and distribution operator requirements and Chapter 15 Article 2 describes system classification.	There is a five-level system classification for distribution and treatment systems. Distribution systems are classified as D1 to D5 by population served and system complexity. The population categories are: D1: ≤ 1,000 D2: 1,001 - 10,000 D3: 10,001 - 50,000 D4: 50,001 - 5 million D5: > 5 million Distribution systems can be upgraded one level due to complexity, using a point system which takes into account: number of pressure zones, storage reservoirs and uncovered storage reservoirs, treatment, the size of the largest pump utilized, and customers with a nonpotable water supply connection. Treatment systems are classified as T1-T5, according to a point system that takes into account various source water characteristics, maximum capacity and treatment techniques. Section 64413.1, Classification of Water Treatment Facilities, describes the point system in the regulations at: http://www.waterboards.ca.gov/drinking_water/certlic/occupations/documents/opcert/OperatorCertificationRegulations.pdf.	Applicants must have an HSD or GED, pass the relevant certification exam, and meet education and experience requirements, which vary by system class. California's education and experience requirements are complex. For complete regulations, see http://www.waterboards.ca.go v/drinking_water/certlic/occupations/documents/opcert/OperatorCertificationRegulations.pdf. Minimum qualifications for operator certification are included below: Water treatment: http://www.waterboards.ca.go v/drinking_water/certlic/occupations/documents/opcert/MQ sforexamcert.pdf Water distribution: http://www.waterboards.ca.go v/drinking_water/certlic/occupations/documents/opcert/DistributionQualifications.pdf Grandparenting: Not allowed.	The State Water Resources Control Board (State Water Board) initiates proceedings due to failure to meet renewal requirements, or if an operator does not properly or is unable to perform his or her duties; conducts fraudulent actions; fails to use reasonable care or judgment in performing his or her duties or causes or allows violations of the SDWA. The State Water Board can suspend, revoke, and refuse to renew, or refuse to grant certificates. The Board also can place on probation or reprimand the certificate holder.	Certification must be renewed every 3 years, or at least 120 days, but not more than 180 days, before the expiration date. An application including the renewal fee and list of completed contact hours must be submitted. Contact hour requirements for each certification: D1, T1: 12 hours D2, T2: 16 hours D3, T3: 24 hours D4, T4: 36 hours D5, T5: 36 hours Up to 25 percent of contact hours can be fulfilled by completing safety training.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
California	Fees listed below include 1) exam, 2) reexamination, 3) certificate, 4) triennial renewal and 5) discount certification and renewal for operators with both a water treatment and water distribution certificate, respectively. Note: discounted certification and renewal fee is paid for each certification. D1, T1: \$50, \$30, \$70, \$70, \$55 D2, T2: \$65, \$45, \$80, \$80, \$60 D3, T3: \$100, \$70, \$120, \$120, \$90 D4, T4: \$130, \$95, \$140, \$140, \$105 D5, T5: \$155, \$120, \$140, \$140, \$105 Late renewal penalty: \$50 if submitted after the renewal due date, but at least 45 days prior to the expiration date or \$100 if submitted less than 45 days prior to the expiration date. Funding: The Operator Certification Unit is fully funded from fee revenue. The unit utilizes two FileMaker Pro databases (for distribution and treatment, respectively) that work together to record operator certification information.		The State Water Board sponsors and participates in an operator certification stakeholder's group, which meets biannually to discuss implementation of operator certification regulations. Membership includes U.S. EPA, California-Nevada Section of AWWA, Local Union 39 (representing Stationary Engineers), California Rural Water Association (CRWA), Rural Community Assistance Corporation, water distribution and treatment instructors, and operators from large and small water systems. The California Technical Assistance Providers Stakeholders Group offers training assistance to small systems operators and includes the State Water Board personnel as well as representatives from CRWA, RCAC, California-Nevada Section of the AWWA and academia.	The stakeholder's group provides ongoing program review, including changes to contact hours needed, specialized training courses required, and the definition of "operator experience." The State Water Board sponsors workshops attended by subject matter experts to review, revise, and validate exam questions. The committee will review contact hours for content, relevance, and quality of instruction, and recommend changes and additions. The committee meets every 6 months to review the regulations and advise implementation practices.

Program Web site: http://www.waterboards.ca.gov/drinking_water/certlic/occupations/DWopcert.shtml

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Colorado	Colorado Revised Statutes (CRS) Title 25 Article 9 sections 101 et. seq. authorizes the Operator Certification Program and creates the Water and Wastewater Facility Operators Certification Board (the Board). The provisions of the statute are implemented through the Water and Wastewater Facility Operators Certification Requirements, Regulation 100, 5 Code of Colorado Regulations § 1003-2. (Last amended August 2014.)	Colorado requires certified operators for water, domestic and industrial treatment facilities, water distribution, and wastewater collection systems. Treatment facilities are classified based on design features or characteristics, plant design flow, source water and complexity of treatment unit processes as Class A , B, C, or D, where A is the highest. Distribution systems are classified based on population: Class 1: serving ≤ 3,300 Class 2: serving 3,301 − 25,000 Class 3: serving 25,001 − 100,000 Class 4: serving ≥ 100,000. Operator classification is based on the level of certificate issued which correspond to the facility classifications. The division may change classification based on system specific factors. The Board has authorized combined certificates for small and very small systems. A Class S certificate (combined Class D treatment and Class 1 distribution) authorizes operator to serve as the certified operator in responsible charge for systems that serve less than 3,300 people. A Class T certificate (combined Class D treatment and Class 1 distribution) authorizes an operator to serve as the certified operator in responsible charge for systems that are classified as Class D treatment and Class 1 distribution, as transient noncommunity water systems, serve ≤ 100 people, and treat only with non-gaseous chlorine.	Applicants must have a high school diploma or GED to apply for examination. Applicants must pass a validated written exam and must meet minimum experience requirements for each exam level. Education may substitute for experience. Exams must be taken in sequential order. Minimum experience requirements: Class T: none Class S: 1 month Class C or 2: 2 years Class B or 3: 3 years Class A or 4: 4 years Grandparenting: Not allowed.	The Water Quality Control Division (the Division) of the Department of Public Health and Environment (CDPHE) has primary responsibility for enforcement for enforcement of the certified operator requirements. Enforcement actions may include notices of violation and consent agreements, with or without civil penalties. The Division investigates all certified operator related disciplinary actions, and makes recommendations to the Board. The Board makes all decisions regarding certified operator disciplinary actions. The Board may issue a formal reprimand, suspend or revoke the certificate(s) of an operator who violates the requirements of the statute or regulations.	All certified operators must earn training units to qualify for certificate renewal. Certificates must be renewed every 3 years: (1 unit = 10 contact hours) Class T: 1.2 units Class S: 1.8 units Class D: 1.2 units Class C: 1.8 units Class B: 2.4 units Class A: 3 units Class 1: 1.2 units Class 2: 1.8 units Class 4: 3 units Class 3: 2.4 units Class 4: 3 units

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Colorado	Application: \$15 Paper exam: \$45 Online exam: \$80 Administration fee: \$55 Renewals: \$85 Reciprocity: \$90 Penalty for late renewal: \$50 Funding: The Board contracts (non-monetarily) with Colorado Environmental Certification and Testing, Inc. (CECTI) to administer certification exams, certification renewals, reciprocity and certification-related record keeping functions. Funding through the above fees are paid directly to the organization. CECTI supplies approximately 1.5 FTEs of volunteer hours and subcontracts daily operations of the program. The Division is funded through state general funds, general program fees and various federal grants. The Division dedicates 1.0 FTE as staff to the Board. Compliance and enforcement staff perform roles listed under Enforcement. The Engineering and Field services sections of the Division conduct sanitary surveys, facility classifications, and design approvals. The Division's data system, management and administrative teams are also available to the program.	A certificate is valid for 3 years from the date of issuance. Operators may renew for up to 2 years after it expires, by paying the renewal fee and meeting all applicable requirements. Certificates not renewed within 2 years of issuance are revoked. Any operator with a revoked certificate will be treated as a new applicant and must meet all initial certification requirements.	The Water and Wastewater Facility Operators Certification Board (the Board) oversees the operator certification program in Colorado. The Board members are volunteers appointed by the Governor. They are operators, managers and industry professionals. CECTI represents water treatment operators and the Certification Council represents water distribution operators to administer testing, certification, renewals, training approvals, reciprocity, etc. Both groups are made up of certified operators. The Board and the Certification Council Board meet monthly and the CECTI Board meets bi-monthly. Meetings are open to interested parties. The Division began the regulation revision process in May 2013. 8,000 people were invited to participate in the stakeholder process. Proposed amendments continued to August 2014. The Safe Drinking Water Program publishes a quarterly newsletter that is distributed to approximately 3,200 system owners, operators and others each quarter and contains at least one article specifically focused on operator certification requirements and any changes to regulation or policy.	The Division conducts periodic reviews of its processes, procedures and data management. The Division implemented changes to the operator certification program and the drinking water compliance and enforcement groups in late 2013. Internal review of the Program is an ongoing process. The Board undergoes a legislative sunset review every 7-9 years with the next review due in 2020.

Program Web site: http://www.ocpo-Web.com/index.cfm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
	Connecticut General Statute 25-32n authorizes the Operator Certification Program, and Connecticut Public Health Code 25-32-7a through 25-32- 14 authorizes the Department of Public Health (DPH) to implement the Program. EPA approved Connecticut's Operator Certification Program in November 2001.	Classification of treatment systems is based on the ABC's point system which ranks treatment complexity, plant size, and water source: Class I: 30 points or less Class II: 30 - 55 points Class III: 56 - 75 points Class IV: 76 points or higher Classification of distribution systems is based on population served: Class I: 1,000 - 5,000 Class II: 5,001 - 50,000 Class III: > 50,001 Small Water Systems (SWS): Systems serving fewer than 1,000 people that do not provide treatment; or provide non-chemical treatment, process adjustment, backwashing, or media regeneration by an operator.	All operators must have an HSD or GED. All operators must pass an exam, and have at least the following length of experience: Treatment Plant (TP) Operators Class I - 1 year at class 1 Class II - 2 years at class 2 or 2 yrs. in Direct Responsible Charge (DRC) of Class 1 Class III - 3 years at class 3 or 3 yrs. in DRC of Class 2 Class IV - 4 years at class 4 or 4 yrs. in DRC of Class 3 Distribution System (DS) Operators: Class II - 1 year at a DS Class III - 2 years at a DS Class III - 4 years at a DS Education beyond 12 years may be substituted for the experience requirements for TP and DS Operators. Small Water System Operators: 6 months or substituted by 20 hours of approved training Grandparenting: Not allowed.	Public Health Code Section 25-32-13 allows the DPH to take certain disciplinary actions against an operator (as outlined in Connecticut General Statute 19a-17) for: fraud or deception in procuring certification or in the performance of an operator's duties; incompetent, negligent, or illegal performance of the operator's professional activities; conviction of an operator for a felony; and failure of an operator to complete the required training for renewal. DPH also may take informal and formal enforcement actions (violation letters, consent orders, orders and notices of violation with civil penalties) against systems for failure to have an operator.	Certificates must be renewed every 3 years. To qualify for renewal, operators must complete a required number of training hours. Training hours may be fulfilled through CEUs or college credits (http://www.ct.gov/dp h/lib/dph/drinking_wa ter/pdf/Certified_Operator_Renewal_Requirements.pdf): Class I (TP and DS) and SWS: 10 hours Class III (TP and DS): 20 hours Class III (TP and DS) and IV (TP): 30 hour

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Connecticut	Application: \$224 Exam: \$41, paid to ABC Funding: The Program is funded through state funds and supported by DWSRF Set Asides. A reciprocity agreement may be established if DPH deems the requirements of the other state or ABC are at least as stringent as those in Connecticut. The Drinking Water Section implemented an E-Licensure program which allows certification activities to be completed online. The Grants & Administration Unit provides technical assistance on operator certification problems.	An operator certification may be renewed up to 6 months following the expiration of the certificate if all requirements for renewal are satisfied. This renewal certificate will have an expiration date of 3 years following the expiration date of the prior certificate. Operators must follow procedures for new applicants if more than 6 months has passed since certificate expiration. Any disciplinary action taken against an operator may specify the conditions for renewing a revoked or suspended certification (determined on a on a case-by-case basis).	Primary stakeholder involvement occurs through the Operator Certification Committee (CT Section, AWWA), which serves as an advisory group to the Program and provides input on regulation development, exams and program administration. The 6-person Committee meets monthly and consists of certified operators of water systems and the DPH. State water association representatives also contribute to regulatory revisions.	Exams are reviewed by the Operator Certification Committee every 2 to 3 years, or more frequently, based on examinee feedback. Evaluation of SWS operator training curriculum is ongoing. Compliance is reviewed daily by the Drinking Water Section and annually by EPA. The Drinking Water Section budget is prepared annually and periodically reviewed.

Program Web site: http://www.ct.gov/dph/cwp/view.asp?q=387328

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Delaware	16 Delaware Code, Section 122(3)(c) provides the statutory authority for the Program. Regulations for the Licensing and Registration of Operators of Public Water Supply Systems can be found at http://dhss.delaware.gov/dph/hsp/files/watropregs031101final.pdf . Last amended March 2014. The Advisory Council for certification of PWS Operators (the Council) within the Division of Public Health (DPH) of the Department of Health and Social Services (DHHS) implements the Operator Certification Program.	Systems are grouped into six endorsements according to treatment techniques: disinfection, chemical feed, filtration, surface water operations, other specified treatment and distribution. Each endorsement has several sub-endorsements. There are six classifications of operators: base level, limited, distribution, OIT, circuit rider, and grandparented.	Operators must pass the exam with a minimum score of 75 percent for each endorsement category. Additional qualifications are as follows: Base Level and Distribution System Operators: HSD or GED and 1 year of experience, or 3 years of experience. Limited License: Same as Base Level, but license is nontransferable to another water system. OIT: Does not meet above requirements, but passed the written exam. Circuit Rider: Must be certified for all systems for which they are in direct responsible charge, conduct at least three visits each week at each water system that he/she is in direct-responsible-charge (number may be adjusted by Council upon yearly review) and be within 2 hours of each system. Reciprocity: Must demonstrate equivalent requirements, but no exam is required. Grandparenting: Ended July 1, 2001 and is no longer allowed. Licenses are site-specific and not transferable.	The state may take action against systems that fail to use a certified operator, and against operators who have acted fraudulently, engaged in illegal, incompetent, or negligent conduct in the provision of water system operation or have violated the regulations. The state has the authority to impose probation and fines, and can suspend or revoke certification licenses. An investigation conducted by the Council occurs upon notice of violation. The Council forwards recommendations to Dept. Secretary for hearing and final enforcement actions. Operators can request a hearing upon receipt of a notice of violation.	Licenses are valid for 2 years, except OIT licenses are valid for 1 year. Operators must have the following number of contact hours in each 2-year period: All operators: 20 hours At least 50% of training (10 educational contact hours) must be obtained in classes directly related to waterworks operation, treatment or distribution. Grandparented operators must meet the same requirements.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Delaware	Exam: No charge Initial annual license: \$50 Renewal of annual license: \$50 License valid for 2 years and operators are billed \$100 for initial license and renewed license. Funding: Fees are deposited into an account dedicated to the Operator Certification Program. Additional funding is from EPA grants, primarily the DWSRF 10 percent set-aside. Reciprocity: Regular license fee Data Management: Provided by the Office of Drinking Water staff. Testing: Administered by operator certification staff with assistance from the Delaware Technical Community College (DTCC). The Council has delegated approval of training to the Program Administrator of DPH's Office of Drinking Water (ODW). ODW provides investigative support for enforcement actions.	Certification can be reinstated without reexamination within 1 year of expiration. An individual whose license was revoked must wait at least 1 year before reapplying.	The Council was created to administer the Operator Certification Program and advise the Secretary of DHHS. It is made up of nine members, appointed by the Secretary and representing the public, municipalities, business or industry, public water utilities, and certified operators. The Council meets at least quarterly.	The Council proposes any needed changes to the program. Program has internal and external reviews per EPA guidelines.

Program Web site: http://www.dhss.delaware.gov/dph/hsp/odwprogs.html

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Florida	Chapter 403, Sections .86588, Florida Statutes (last amended in 2012), provides the statutory authority for the Program. Regulations are found at Chapter 62-602, Florida Administrative Code (last amended in 2012). The State of Florida, Department of Environmental Protection (FL DEP) implements the Operator Certification Program.	Water treatment plants (including CWSs and NTNCWSs) are classified as Category I-V based on treatment type and flow rate. Each category is further divided into classification levels A, B, C, or D based on permitted design flow. Water treatment system classifications are described at: http://www.dep.state.fl.us/water/wff/ocp/docs/ocp-handbook.pdf . Water Distribution Systems are classified as Category I or II and further divided into levels 1 through 4). Category I Distribution System connected to a Class A, B, or C water treatment plant with: Level 1: Serving 100,000 or more people. Level 2: Serving at least 10,000 and less than 100,000 people. Level 3: Serving at least 1,000 and less than 10,000 people. Category II Distribution System is connected to a Class D water treatment plant with: Level 4: No minimum population served.	All applicants must have an HSD or GED and score at least 70 percent on FL DEP's Class/Level-specific examination. To be eligible to take the examination for any license classification the candidate must document successful completion of an approved training course within 5 years of filing an application (course is optional for Level 4). The required experience is: Class A/Level 1: At least 5 years (10,400 hours) and an active Class B/Level 2 license Class B/Level 2: At least 3 years (6,240 hours) and an active Class C/Level 3 license Class C/Level 3: At least 1 year (2,080 hours) Class D/Level 4: At least 3 calendar months or completion of an approved course and one hour of experience Grandparenting: Not allowed.	FL DEP has jurisdiction in enforcement actions against operators and systems. Disciplinary proceedings may be brought for operating a plant without a valid license, submitting false information, operating a plant in a manner inconsistent with Standard Operating Procedures (SOPs), or otherwise violating regulations or a lawful order of the FL DEP. The state's enforcement actions may include: bilateral compliance agreements, administrative orders and civil and criminal penalties. FL DEP may impose monetary penalties of up to \$1,000, and may suspend or revoke licenses; place a license holder on probation or refuse to issue, renew, or reactivate a license.	Licenses must be renewed every 2 years. Licenses expire on April 30 of odd numbered years (renewal notices are mailed 90 days before an active license expires). To be eligible for renewal the operator must pay a fee and document completion of an appropriate number of continuing education units (CEU) based on the class/level of license being renewed. FL DEP notifies operators upon renewal or denial of renewal.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
	Class A, B, & C exam: \$100	After the expiration date, a license	Florida requires stakeholder	The Office of the
	Class D/Level 1-4 exam: \$75	becomes inactive and an applicant must pay up to \$250 to reactivate. An	involvement in the development of any new rules	Inspector General reviews Florida's
	Class A, B, & C license: \$100	inactive license may be reactivated	or modifications to existing	Program every 5 years.
	Class D/Level 1-4 license: \$50	within 2 years. After 2 years the license is expired and an applicant must reapply	rules. A Technical Advisory Committee of at least five	The Technical Advisory Committee
	Class A, B, & C active license renewal: \$75	as a first-time applicant.	members, consisting of at least	can conduct any
	Class D/Level 1-4 active license renewal: \$50	Operators who have their certificates	two licensed operators, regulators, and interested and affected parties provides	additional reviews, as necessary.
	Renewal (inactive license): \$175-\$250, based on length of time after expiration date.		guidance for the development of the rules. The general public can participate in workshops and public comments are incorporated into the rules as appropriate.	
	Reciprocity: Not available.			
	Budget: The Program's annual budget averages about \$446,000.			
	Funding: The program is entirely funded by fees which are deposited into a dedicated fund.			
	Data Management: A database has been developed for the Operator Certification Program compliance and enforcement staff which includes operators' exams, applications, license history, and enforcement actions.			
	The Florida Rural Water Association (FRWA) contracts with FL DEP to provide technical assistance to operators in the form of training sessions and exam preparation courses.			

Program Web site: www.dep.state.fl.us/water/wff/ocp/

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Georgia	Title 43, Chapter 51 Official Code of Georgia Annotated authorizes the program. Chapter 750-1 to 750-10 of the Rules of the Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts (the Board) provides regulations. Last amended February 2012. The Professional Licensing Boards Division of the Office of the Secretary of State implements the Operator Certification Program.	PWSs are classified as Class I-IV or Distribution based on source water (surface water, ground water, or distribution only), population (for ground water systems), treatment complexity, and plant capacity. Class IV systems are very small ground water systems serving fewer than 1,000 people.	All applicants must have at least an HSD or GED; pass a written exam; have a certain amount of experience based on license Class; and, complete a certain number of hours of course work (identified as advanced or basic), depending upon license class. Applicants for Public Water Supply System Operator Classes I & II, and Biological Wastewater Treatment System Operator Classes I & II, must have completed experience requirements in actual system operation before taking the exam. Applicants for Public Water Supply System Operator Classes III & IV, Biological Wastewater Treatment System Operator Classes III & IV, Industrial Wastewater Treatment System Operator, Water & Wastewater Laboratory Analysts, Water Distribution System Operator, and Wastewater Collection System Operator may take the exam before completing experience requirements, but cannot apply for the license until completion of the requisite experience in actual system operation. Experience requirements include: Class I: 3 years, Associate degree and 2.5 years, or Bachelor of Science and 2 years. Also current Class II certification. Class II: 2 years, Associate degree and 1.5 years, or Bachelor of Science and 1 year. Also current Class III certification and 48 hours advanced course work. Class III: 3 months experience and 40 hours course work. Class IV: 1 month experience and 6 hours course work. Class IV: 1 month experience and 6 hours course work.	The Board handles enforcement against operators while the Environmental Protection Division of the Dept. of Natural Resources enforces the requirements for systems. The Board may revoke or suspend the certificate of an operator following a hearing conducted in accordance with the Georgia Administration Procedure Act. The state's enforcement actions may include court orders, administrative orders, bilateral compliance agreements, and civil or criminal penalties. The Board may investigate the actions of any operator, or anyone who shall assume to act in such capacity, if the Board believes a violation has occurred.	Certificates must be renewed every 2 years prior to the expiration date, and expire on June 30 of odd-numbered years. Continuing education requirements: Class IV: 6 points Class III: 12 points Class II: 18 points Class II: 24 points Certificates may be renewed within 3 months of expiration with a \$115 late fee. An operator with dual certificates must obtain a minimum of 25 percent required continuing education points in each discipline.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Georgia	Exam: \$75 Application: \$25 Renewal: \$65	Failure to renew within 3 months of expiration of a renewal year has the same effect as revocation of the certificate.	The Board consists of 6 members (5 are active in the profession and 1 from the public), and meets 6 times per year.	The Board reviews the operator certification rules and approved courses for basic and continuing education during meetings.
	Late renewal: \$115 Certificate reinstatement: \$165 Reciprocity: \$100 Funding: The Board is self-supporting. However, fees first go to the state general fund and must be re-appropriated to the Program. Applied Measurement Professionals (AMP) administers the Board examinations.	Within 2 years of expiration, the Board may reinstate a certificate to an applicant who submits the appropriate reinstatement application, fee of \$165, and proof of continuing education. After 2 years, the Board may reinstate certification if the above requirements (for reinstatement within 2 years), are fulfilled and the exam is retaken and passed.	All rule revisions are open for public comment. The Georgia Water and Wastewater Institute (GWWI) develops guidance on rule revisions.	External reviews are provided by the House Industry Committee on an ongoing basis.

Program Web site: http://www.gawp.org/?page=WaterWastewaterOper

State Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
340F authorizes the Operator Certification Program, and §340F-4 authorizes a Board of Certifications (the Board) under the Department of Health (DOH) to implement the Program. Hawaii Administrative Rules, Title 11, Chapter 25 provide the regulations for	Water treatment plants (WTP) are classified as Grade 1 - Grade 4, according to complexity of treatment. Grade 1 WTPs (for example, slow sand filtration; chlorination, fluoridation, etc.), are the simplest to operate. Grade 4 (for example, conventional treatment or direct filtration), are the most complex. Distribution systems (DS) are classified according to population served: Class $1: \leq 1,500$ Class $2: 1,501 - 15,000$ Class $3: 15,001 - 50,000$ Class $4: \geq 50,001$ Operators are classified according to the system they are qualified to operate.	Applicants must have an HSD or GED and pass a certification exam with a minimum grade of 70 percent. For DSs only, an eighth grade education plus 4 years of work experience can be considered to be the equivalent of a GED. Experience requirements: OIT: No experience. Grade 1: 1 year. Grade 2: Grade 1 certification and 1 year; 2 years with a HSD; or 1 year with a Bachelor's degree. 1 year of experience must be at Class 2 or higher WTP. Grade 3: Grade 2 certification and 1 year; 3 years and HSD; 2 years and Associate's degree; or 1 year and Bachelor's degree. Must include one year at a membrane filtration, Class 3 or 4 WTP, with one month at a Class 3 or 4 WTP. Grade 4: Grade 3 certification and 1 year at Class 3 or 4 WTP; 4 years and HSD, 3 years and Associate degree; or 2 years and Bachelor's degree. Must include one year at a membrane filtration, Class 3 or 4 WTP and 1 year at Class 3 or 4 WTP. Grandparenting: Allowed until Dec 31, 2003. No longer allowed.	The Board may suspend, revoke, or refuse to renew certification for fraud or deceit in obtaining certification or in performing duties; failure to use reasonable care, judgment, or the application of knowledge or ability in the performance of duties; being unable to perform duties. Within 20 days of receiving notice from the Board, an operator may request a hearing. The Board can seek, through legal action, an injunction and the imposition of civil penalties of up to \$25,000 per day for a continuing violation. False statements, representations, or certifications may be prosecuted as misdemeanors.	Certificates must be renewed every 3 years. The Board will send a courtesy renewal notice to the license holder. Renewal is contingent on completion of continuing education units (CEUs) every 2 years. 10 hours are required for each CEU. Grade 1 or 2: 0.8 CEUs. Grade 3 or 4: 1.6 CEUs. One month after expiration, the operator can no longer perform duties of an operator, until he/she has applied for renewal. For the second through twelfth months following a certificate's expiration, renewal fees are doubled.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Hawaii	Application fee regular certification: \$20	An operator who does not	A Stakeholder Committee was	The Program is reviewed annually
	Exam fee regular certification: \$30	within 1 year after its expiration will have to follow the procedure for new applicants.		during the preparation of an annual report. Informal reviews occur
	Application fee reciprocity certification: \$50		large water purveyors, military	throughout the year, covering state
	Application fee temporary, provisional or conditional certification: \$40		organizations, such as AWWA	rules, rule implementation, compliance, training, and exam passing rates.
	Application fee OIT: \$40	Hawaii did not provide information on the	Assistance Corporation	The Board provides external reviews
	Renewal: \$10 per year for up to 3 years	recertification of revoked or	(RCAC). The Committee reviewed the revisions to state	of the Program. The main function
	Funding: All fees collected by the Program are deposited into the state's general fund. DWSRF funds support both the Operator Certification position and all operating costs	suspended licenses.	rules at meetings held from 1999 through 2001, and provided input on proposed rule changes.	of the review is to revise the Program rules to meet new operator certification guidelines.
	for the Program. Data Management: The Safe Drinking Water Branch maintains an Access database of certified operators with information such as name, grade, certification ID, and address. An Access database is maintained with CEUs		The Board, which consists of members representing all islands and both the public and private sector, now review the rules and propose changes. The Board meets quarterly.	
	earned by each operator.		Association (HRWA continuing education program for operator by U.S. EPA and the (using DWSRF). The	The Hawaii Rural Water Association (HRWA) runs a continuing education training program for operators, funded by U.S. EPA and the DOH (using DWSRF). The program is designed to be self-sustaining.
			The American Water Works Association (AWWA) eLearning Program is approved for CEUs in Hawaii.	

Program Web site: http://health.hawaii.gov/sdwb/operatorcert/

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Idaho	Idaho Code, Chapter 1, Title 39, Section 39-105 provides statutory authority for the Operator Certification Program. Idaho Statute Title 54 Chapter 24 provides the regulations for the program. The Department of Environmental Quality (DEQ) contracted with the Idaho Water and Wastewater Operators Certification Board, Inc. (the Board) to implement the Program. The Board entered into an agreement with the Idaho Bureau of Occupational Licenses (IBOL) to review and recommend applications, administer exams, collect fees and issue operator licenses.	Classification of treatment systems into Class I-IV is based on system complexity, size, and source water. Classification of distribution systems into Class I-IV is based on system complexity and size. A Very Small System is a CWS or NTNCWS that serves 500 or fewer people and has no treatment other than disinfection or has only treatment which does not require any chemical treatment, process adjustment, and backwashing or media regeneration by an operator. OIT status is awarded to people who pass the exam but do not have required experience.	All operators must have an HSD or GED and must pass a written exam with a minimum score of 70 percent. The following onsite experience requirements apply: Class I restricted: 260 hours of experience during 12 consecutive months at a specific system and 16 hours of continuing education. After 1,600 hours of supervised experience, will be eligible to upgrade to Class I. Class I: 1 year of experience Class II: 3 years of experience at a Class I or higher system Class III: 2 years of post-high school education and 4 years of experience at a Class II or higher system, including 2 years in charge of a major segment of a system in same or next lower class Class IV: 4 years of post-high school education and 4 years of experience at a Class III or higher system, including 2 years in charge of a major segment of a system in same or next lower class Very Small System: 88 hours of experience; plus a 6-hour water treatment course, chlorination course, or combination and a 6-hour water distribution course OIT: No further requirements Some education can be substituted for experience, and some experience can be substituted for education. Grandparenting: No longer allowed.	The DEQ may use administrative orders, bilateral compliance agreements, and civil and stipulated penalties against public water system owners for the failure to have a properly licensed operator. The state may use also impose criminal penalties. The Board may revoke, suspend, refuse to issue, refuse to renew or otherwise limit any license or certificate for fraudulent or false activities, negligence of incompetence, or any other violations of the program rules and regulations. The Board may impose a civil fine of up to \$1,000.	Certifications must be renewed annually. Operators must complete 0.6 continuing education units (CEUs) (6 contact hours). A reinstatement fee is required of operators who fail to renew their license prior to expiration, in addition to proof of continuing education or required documentation. The Board conducts annual audits to ensure compliance with continuing education requirements.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
	Water & Wastewater Operator applicant Application fee: 25.00 Original license fee: 30.00 Endorsement fee: 30.00 Exam fee: 37.00 Drinking Water Operator License/renewal - current year: 30.00 Reinstatement penalty - current year: 25.00 Duplicate license fee: 10.00 Fees are described in more detail at: https://secure.ibol.idaho.gov/eIBO LPublic/BoardFees.aspx?Bureau= WWP&BureauLinkID=120. Funding: The Program is self-supporting. Administration: The Board is responsible for data management and testing. IBOL collects fees and issues operator licenses.	Operators whose certification has expired for less than 5 years may renew the certification by paying a renewal fee and providing proof of CEUs earned during the period the certificate was lapsed. Operators who have failed to renew or failed to qualify to renew beyond 5 years, must reapply according to requirements for new applicants and meet with IBOL for an examination.	The Board consists of seven members, including operators, backflow assembly testers, public citizens, and the DEQ Director or designated agent. DEQ's Drinking Water Advisory Committee (DWAC) is the mandated stakeholder involvement group. This group includes representatives from different size system, professional groups, public health officials, and elected officials. The DWAC will make quarterly reports to the Board on issues relating to the Operator Certification Program. (The DWAC last met in 2011.)	The accuracy of Community and Nontransient Noncommunity Water System classifications are reviewed on a monthly basis. A review of operator certification compliance is conducted quarterly.

Program Web site: https://www.deq.idaho.gov/water-quality/drinking-water/pws-classification-licensure/operator-resources.aspx

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Illinois	415 Illinois Combined Statutes (ILCS) 45 authorizes the Operator Certification Program for CWSs. 20 ILCS 2305 gives the Department of Public Health (DPH) the authority to adopt regulations related to the sanitary practices of drinking water. 35 IL Administrative Code Part 681 (last amended in 2014) authorizes the Illinois Environmental Protection Agency (IEPA) to implement the program for CWSs. 77 IL Administrative Code 900.45 extends the operator certification requirements to NTNCWSs. The DPH administers this program.	CWSs are classified as Class A, B, C, or D, according to source water and complexity of treatment: Class D: Distribution, storage, pumping Class C: Ground water that utilize chemical feed only Class B: Ground water that includes filtration, aeration and filtration or ion exchange Class A: Surface water or ground water under the direct influence (GWUDI) that include coagulation, lime softening or sedimentation An Operator-in-Training status is awarded to a person who passes the exam but does not have required experience. NTNCWSs are classified by the DPH. Operators are classified according to the systems they are certified to operate.	Applicants must have an HSD or GED, pass an exam with a minimum score of 70 percent for a specific class of system, and meet the following experience requirements: Class A and B: At least 3 years of experience or training Class C: At least 1 year of experience or training Class D: At least 6 months of experience or training NTNCWSs: At least 12 hours of training Grandparenting: No longer permitted.	Certificates can be revoked or suspended. Anyone can initiate a sanction procedure by filing a complaint with IEPA. If the operator requests a hearing, the Water Supply Operator Certification Advisory Board (the Board) reviews the hearing transcript and makes a recommendation to IEPA as to whether the certificate should be suspended or revoked. The ultimate decision lies with the Director of IEPA. The state has the authority to enter into bilateral compliance agreements with systems that operate without a certified operator; and impose civil, criminal, and stipulated penalties.	Certificates must be renewed every 3 years. Class A and B operators are required to accumulate 30 hours of drinking water-related training within this period. Class C and D operators must accumulate 15 hours of training. NTNCWS operators must attend a DPH-approved recertification training. Renewal applications must be submitted to IEPA before June 30th of the expiration year. A one-month grace period is granted before the restoration fee for a late renewal is assessed.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Illinois	Application: \$30 Exam, reciprocal certificate, renewal or restoration, duplicate certificates: \$10 Funding: The Program is funded by fees, which are deposited into the Environmental Protection Permit and Inspection Fund. Fees are handled by Operator Certification Program and Fiscal Services staff. Data Management: IEPA keeps a database to track operator and facility inventories, certification levels and compliance, exam processing, continuing education, and certificate renewals. Certification exams are given by Field Operations staff every month.	If an operator's certificate has been expired for less than 2 years, it may be renewed upon payment of the restoration fee and demonstration that the required training hours have been completed during the certificate's effective period. If an individual's certificate has been expired for over 2 years, he or she must pass the relevant exam to become recertified. Individuals whose certificates have been revoked must wait 1.5-4 years, depending on the revocation period, before reapplying.	all policies, events, and developments concerning operator certification and state water supply issues in general. The Board must meet at least once a year. The Drinking Water Examination Review committee is comprised of	Internal reviews of certification compliance and enforcement are conducted monthly. Reviews of training (fee processing, relevancy, and needs), are conducted at least annually. Reviews of the data management system, budget, and staffing are conducted on an ongoing basis by program staff. Illinois EPA internal auditors conduct reviews as needed to evaluate compliance with statutory mandates. External reviews are performed every six months by the Board. The Illinois Auditor General conducts audits every 2 years to evaluate program efficacy with respect to statutory mandates. The Drinking Water Examination Review Committee meets at least annually to review examination questions and testing information. Generally, these reviews look at fee processing, task analysis, exams, questions, and statistics.

Program Web sites: CWSs: http://www.epa.illinois.gov/topics/drinking-water/operator-certification/index
http://www.ilga.gov/commission/jcar/admincode/077/077009000000450R.html

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Indiana	Indiana Code 13-18- 11 authorizes the Operator Certification Program. 327 Indiana Administrative Code 8-12 authorizes the Indiana Department of Environmental Management (IDEM) to implement the Program.	Distribution systems are classified as: Small (DSS): Serving 3,300 or fewer people, and having only basic components. Medium (DSM): Serving 3,301 to 10,000 people with minimal components. Large (DSL): Serving more than 10,000 people with more complex components. Treatment systems are classified as WT 1 through WT 6, according to population served, type of treatment, character of wastes or water to be treated and other physical conditions. A Facility Specific Operator (FSO) may be given to systems that are NTNC DSS, or WT1 small community systems with population of 100 or less. OIT status is awarded to people who pass the exam but do not have required experience. They have up to 3 years (one certification cycle) to obtain the necessary experience.	Applicants must have an HSD or equivalent; score of 70 percent or higher on the exam; demonstrate knowledge about operation of treatment or distribution; and have the following hands on experience in operation at the specific class level (may substitute up to 2 years using college credit at levels WT 3 and above) but must have at least 1 year of hands on experience at each class level: DSS: 1 year at DSS DSM: 1 year at DSM or 2 years at DSM, or 5 years at DSS WT 1: 1 year at WT 1 WT 2: 1 year at WT 2 or 2 years at WT 1 WT 3: 2 years at WT 3 WT 4: 2 years at WT 3 for 1 year at a WT 4) WT 5: 3 years at WT 5 or 5 years at WT 4 and 2 years at WT 3 may substitute for 1 year of experience with a maximum of 2 years substitution WT 6: qualifications are plant-specific Grandparenting: No longer allowed.	The Commissioner of the IDEM may suspend or revoke the certification of any operator following a hearing if the operator has practiced fraud or deception; failed to use care, judgment, knowledge, or ability in the performance of duties or if the operator is incompetent or unable to properly perform his or her duties. The operator may have to pay a penalty, in addition to the suspension or revocation depending on the violation.	Certification cards expire on June 30 of the third year after issuance. Continuing education unit (CEU) requirements vary according to system: DSS, WT1: 10 hours DSM, DSL, WT2: 15 hours WT3: 25 hours WT4, 5, 6: 30 hours A notice of certificate expiration is sent to operators one month prior to expiration. FSO operator certificates are valid for 3 years. To renew, these operators must have CEUs for their classification.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Indiana	Certification, certification for new classification, reciprocity, renewal: \$30 Duplicate or replacement certificate, replacement card: \$15 Fees are deposited with the Indiana Treasurer of State. Funding: From fees	Operators who fail to renew their certification cards when due may renew within one year after expiration upon payment of fee and demonstration that CEU hours have been completed. Failure to renew within this grace period, requires the applicant to re-take and pass the exam. Operators who have had their certifications revoked or suspended must abide by the terms of the settlement which may include a permanent ban or a suspension for a specified period. Recertification conditions, if recertification is allowed, are established in the settlement.	Stakeholder involvement is sought on an as needed basis during development of new rules or modifications to rules. Indiana is currently developing new operator certification exams. A stakeholder workgroup has been formed to assist in the project. The workgroup consists of operators, IDEM staff, and professional association staff including the Indiana Section of AWWA, Indiana Rural Water Association and the Alliance of Indiana Rural Water. IDEM is an active member of numerous committees in the professional associations.	Program review is done annually in-house and in preparation of the annual report due to EPA.

Program Web site: http://www.in.gov/idem/5091.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Iowa	The Iowa Department of Natural Resources (IDNR) is authorized by the Iowa Code Section 455B.213 and Chapter 81 of the Iowa Administrative Code (IAC) Part 567 to run the Operator Certification Program (last amended in 2007).	Treatment facilities are classified as I-IV based on treatment type and average daily pumpage. Water distribution systems are classified as I-IV, based on the average daily pumpage. Rural water districts are classified by miles of pipe. See 81.4(1) of Chapter 81 IAC for system classification details, available at: http://www.iowadnr.gov/InsideDN R/RegulatoryWater/Certification/ WaterWastewaterOperators. A Grade A classification was created for small CWSs (serving < 250 people) and NTNCWSs (serving < 500 people). Grade A systems provide no treatment except for hypochlorination or treatment that does not require any chemical addition.	Applicants must pass a written exam and meet the following requirements: Education A, I, and II – HSD or GED III – 2 years post HS IV – 4 years post HS Experience A – DNR training course I – 1 year II – 3 years III – 4 years IV – 4 years with 2 years as OIRC at a III Experience and education substitutions are listed in IAC Chapter 81.7(1). Grandparenting: Not permitted.	IDNR Central and Field Offices can take disciplinary action for fraud; incompetence; making false, misleading, or deceptive statements; habitual intoxication or addition to drugs; or felony convictions related to a license. Actions may include the suspension or revocation of the license; probation; additional education, training, and examinations; and the imposition of civil penalties not to exceed \$1,000. IDNR will also deny an application or suspend a license for noncompliance with child support orders.	Certifications are valid for 2 years. Certificates of operators not meeting continuing education requirements by March 31 of the 2-year period, expire on June 30 of each odd-numbered year. Grade III and IV operators must earn 2 units, or 20 contact hours per certificate, every 2 years to renew. All other operators must earn 1 unit, or 10 contact hours per certificate, every 2 years.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Iowa	Exam: \$30 Oral Exam: \$90 Certification: \$20 for every 6 months Reciprocity: \$30 Renewal: \$60 Late renewal: \$78 These fees are adjustable up to 20 percent annually to cover the costs of administering the Program. Funding: All fees go into a dedicated fund for the Operator Certification Program. IDNR is using a dedicated database to track operator certification data, including exam and renewal applications as well as continuing education. The database is also linked to the Safe Drinking Water Information System (SDWIS). IDNR has contracted with ABC to provide electronic testing services.	An operator must recertify if the certification is expired for more than 60 days. An applicant can recertify after 2 years of a revoked certificate.	There are two advisory groups, the SDWA Advisory Group and the Iowa Joint Operator Certification and Training Coordination Committee. The former is a diverse group of associations and agencies that reviews and comments on new regulations. The latter is a more select group which provides advice only to the Program.	Internal reviews occur annually prior to an internal report to EPA and are ongoing to address issues that arise during routine functions of the program. Iowa's program was the first to undergo an external review according to ABC's Model Standards Conformity Assessment Service in 2013 and will continue to have an external review at least once every 5 years.

Program Web site: https://programs.iowadnr.gov/opcert-Web/pages/opmenu.aspx

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Kansas	Chapter 65, Article 45 of the Kansas Statute Annotated authorizes the Kansas Department of Health and Environment (KDHE) to implement the Operator Certification Program. The regulations for the Program are found in the Kansas Administrative Regulations 28-16-30 through 28-16-36. Last amended in 2001.	Systems are classified based on source, population, and complexity of treatment. (Population served in parentheses) Small System: Distribution system only (all) or chlorination of ground water (<501) Class I: Chlorination of ground water (501 - 1,500) or treatment of ground water (<501) Class II: Chlorination of ground water (1,501 - 5,000), treatment of ground water (501 - 2,500) or treatment of surface water (<2,501) Class III: Chlorination of ground water (5,001 - 20,000), treatment of ground water (5,001 - 20,000), treatment of ground water or surface water (2,501 - 10,000) Class IV: Chlorination of ground water (>20,000), treatment of ground or surface water (>10,000) OIT status is awarded to people who pass the exam but do not have required experience.	All operators must have an HSD or GED, be employed at a PWS, and accrue points based on education, experience, and training for each system class: HSD or GED: 12 points 2-year environmental technology degree: 6 points College: 1 point/year 10-hour course: 0.25 points California State University correspondence course: 1 point Semester course (54 hours): 1.5 points Point requirements: Small System: 12.5 points, 6 months of experience Class I: 13 points, 1 year of experience Class II: 14 points, 1 year of experience Class III: 16 points, 2 years of experience Class IV: 18 points, 2 years of experience Grandparenting: Not allowed.	KDHE has primary enforcement authority and can impose administrative penalties and enter into bilateral compliance agreements with systems that operate without a certified operator, and can revoke or suspend an operator's license following a hearing. People in violation of the regulations will be charged with a misdemeanor and shall pay a fine of \$500. Compliance is checked during regularly scheduled facility inspections.	Certificates are valid for 2 years. In order to renew, all operators (except small system operators) must complete a minimum of 10 hours of training. Small system operators must complete 5 hours of training during each 2-year period. KDHE sends a renewal reminder to operators 60 days prior to certificate expiration. Following the expiration date, operators are no longer permitted to operate and are removed from the database.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Kansas	Exam: \$25 OIT one-year certificate: free OIT one-year renewal: \$5 2-year renewal: \$20 Reinstatement of lapsed certification after: 1 year: \$15 2 years: \$25 1-year reciprocity: \$25 Funding: The Kansas Legislature appropriates funds for the Operator Certification Program. Additional support is provided through the KDHE Capacity Development program. The Certified Operator Database tracks renewal dates and continuing education hours.	Operators may reinstate lapsed certifications if the appropriate training requirements are met and the certification has lapsed for less than 2 years. The new certificate will expire 2 years from the date of expiration on the previously held certificate. Operators whose certification has been revoked must wait 1 year and then reapply and meet initial certification requirements.	Several schools (Ft. Scott, Salina, and Dodge City), Kansas Section American Water Works Association, Kansas Rural Water Association (KsAWWA), Midwest Assistance Program, and the Kansas Environmental Training System (KETS) are involved with operator training and certification. KsAWWA provides training through its Operator Training Committee and works with the program to coordinate activities. The Committee reviews fees, on- site technical assistance, and standards for the Program, as well as other matters related to the Program.	During each budget cycle, KDHE Technical Services Section staff evaluate the effectiveness of the Program as part of the reporting requirements on performance measures mandated by the Kansas Legislature. Kansas maintains reciprocity with states that use ABC exams. Kansas considers reciprocity from other states to be external review of their program. If other states agree to grant Kansas operators reciprocity, then Kansas assumes that other states have reviewed and validated their program.

Program Web site: http://www.kdheks.gov/water/www.html

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Kentucky	Kentucky Revised Statutes (KRS) Chapters 223 and 224 authorize the program. The regulations for the program appear in 401 Kentucky Administrative Regulations (KAR) 8:030 and 11:050 which were last amended in February 2010. The Kentucky Department of Environmental Protection implements the Program.	There are 4 classes of water treatment plants (Class I, II, III, or IV) with 2 subclasses for treatment type (A or B). Classifications of treatments plants are based on the following assigned design capacity: Class I: < 50,000 GPD Class II: ≥ 50,000 to < 500,000 GPD Class III: ≥500,000 to < 3,000,000 GPD Class IV: ≥ 3,000,000 GPD There are 4 classes of water distribution systems (Class I, II, III, or IV). Distribution systems are classified based on population served: Class I: < 1,500 Class II: ≥ 1,500 to < 15,000 Class III: ≥ 15,000 to < 50,000 Class IV: ≥ 50,000 Combined treatment and distribution classifications also exist for Class I and II systems: Class IA-D, Class IB-D, and Class IIB-D.	Applicants must score ≥ 70 percent on a class-specific exam. All water treatment and water distribution operators are divided into Classes I, II, III, or IV, each with 12 subclasses. Operators must have a HSD or GED and: Class I: 1 year of experience Class II: 2 years of experience Class III: 3 years of experience Class IV: Bachelor's degree from an accredited college and 1 year of experience Experience can be substituted for education, and education may be substituted for experience (except for 1 year of base experience). No substitutions for Class I or IV. Grandparenting: Not permitted.	The Energy and Environment Cabinet (EEC), in consultation with Kentucky Board of Certification of Water Treatment and Distribution System Operators, may take disciplinary action against an operator including probation not to exceed 1 year; suspension not to exceed 4 years; revocation of the certificate; the imposition of civil penalties not to exceed \$1,000; the imposition of an additional \$1,000 per day penalty for operation thereafter; and criminal penalties. Violations may be discovered through written complaints to EEC or unannounced inspections by EEC.	Certificates must be renewed every 2 years and expire on June 30 of even-numbered years. Certifications terminate if not renewed on or before December 31 of the year the certification expired. Operators must meet continuing education requirements during the 2 year period immediately prior to the certificate expiration date. Class I and II: 12 hours of training Class III and IV: 24 hours of training If an operator holds more than one certificate, he/she is only required to obtain the training hours for the higher certificate.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Kentucky	Application fee: \$100 Paper renewal: \$100 Online renewal: \$50 Late fee (renewal): \$250 (in addition to renewal fee) Reexamination: \$100 Reciprocity: \$500 Training fees are set by EEC each year. Currently, the fees are at \$5 per credit hour. The E-Search application allows operators to track continuing education requirements and renew their certificates.	Certifications terminate on or before December 31 of the year the certification expired. If not renewed before this time, an operator can reapply according to the requirements for new applicants. If disciplinary action has been taken against an operator's certificate, he/she may file a petition for a hearing to the EEC. Recertification of such certificates will be at the discretion of EEC. If a certification is revoked, the operator shall be ineligible for future certification.	manager, a member from academia, and one EEC	Internal reviews occur annually and are ongoing to address issues that arise during routine functions of the program. The Board is involved in ongoing review and revision of the Operator Certification Program.

Program Web site: www.dca.ky.gov/certification/

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Louisiana	40 Revised Statutes 1141-1151 authorizes the Operator Certification Program, and Louisiana Administrative Code, Title 48, Part V, Subpart 21, Chapter 73 contains the regulations for the Program. The Louisiana Department of Health and Hospitals' (DHH) Office of Public Health implements the Operator Certification Program. Program was approved June 1, 2001.	Systems are classified by water production, water distribution, and water treatment, and then by the size of the population served: Class 1: < 1,000 Class 2: 1,001 - 5,000 Class 3: 5,001 - 25,000 Class 4: > 25,000	All operators must have an approved HSD or GED and pass a written exam with a score of 70 percent or higher. Operators are eligible for different classes of operation based on a point system that takes into account experience, education, and training: For more information on the point system, see sections 7309 and 7311 of the regulation at: http://www.dhh.la.gov/assets/oph/Center-EH/operator/04-20-2002OperatorCertificationRule.pdf . Grandparenting: Limited certificates were awarded prior to April 2002 and are site-specific and non-transferable.	DHH has the authority to issue civil administrative penalties and stipulated penalties, and can suspend or revoke a certification with the recommendation of the Committee of Certification.	Certifications are valid for 2 years. Renewal is contingent upon completion of a minimum of 16 contact hours of training for one or two certificates for the 2-year period, or a minimum of 24 hours in the 2-year period for all three certificates. Limited certificates shall be renewable upon application provided the requirements for renewal without reexamination for certificates of the grade are satisfied.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Louisiana	Exam:\$5 First certification: \$20 Each additional certificate: \$10, or \$40 for all three certifications (Treatment, Production and Distribution). People granted limited certificates and renewals of limited certificates shall pay the same fees as required for mandatory certificates of grade. Renewal: Same as initial certification fees. Reciprocity: Same as certification fees Duplicate/Replacement Certificates and IDs: \$5 Funding: Fees partially support the program with the remainder coming from the state general fund.	Applicants may renew their certification within 2 years of expiration without having to completely recertify. An individual who wishes to renew a certificate that has been expired for over 2 years must follow procedures for new applicants. Additional requirements for operators whose certification has been revoked will be made by the Committee of Certification on a case-by-case basis.	The Louisiana Committee of Certification (the Committee), is composed of nine appointees from the state health officer, including representatives from the municipal waterworks operators, municipal sewage treatment plant operators, and investor-owned waterworks or sewerage works operators, and one ex officio member from the DHH. The Committee is charged to develop exams, examine candidates, maintain records, establish fees and make recommendations about rules and policies governing its work. The Committee holds an annual examination, regular meetings that are open to the public, and may schedule additional meetings if the committee deems it necessary. Committee members are unpaid, but travel and incidental expenses associated with attending meetings are reimbursed.	No information provided, or publicly available.

Program Web site: http://www.dhh.la.gov/index.cfm/page/416

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Maine	Maine Statutes Revised and Annotated §2628 authorizes the Operator Certification Program. Rule 90-429 authorizes the Board of Licensure of Water System Operators to implement the Program. Program approved February 1, 2001. Latest rule revision November 15, 2011	Distribution systems are classified according to population served: Class I: ≤ 1,500 Class II: 1,501 - 15,000 Class III: 15,001 - 50,000 Class IV: ≥ 50,001 Treatment systems are classified as Very Small Water System (VSWS) (if population served is less than 500), Class I, Class II, Class III, and Class IV according to a point system that takes into account treatment complexity, population served, flow, water supply sources and facility characteristics. For classification details, see "Rules" at: http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/water Operators.shtml. Operators are classified according to the system they are qualified to operate.	Applicants must have an HSD or GED and pass an ABC exam for the class of system for which they will be certified and have at least the following experience: VSWS: 6 months in VSWS or higher, or 1 year related experience Class I: 1 year at Class I or higher, or 2 years related experience Class II: 2 years at Class I or higher, or 4 years related experience Class III: 3 years at Class I or higher, or 6 years related experience Class IV: 4 years at Class I or higher, or 8 years related experience Class IV: 4 years at Class I or higher, or 8 years related experience OIT status is awarded to people who pass the exam but do not have required experience. Grandparenting: Restricted certificates are only available to operators of VSWSs who qualified for the education waiver in the years 2007-2011 and are site-specific and non-transferable.	The Board of Licensure of Water System Operators (the Board) certifies operators and can revoke or suspend an operator's license for misconduct. The state's enforcement capabilities include administrative orders; and civil, administrative, stipulated, and criminal penalties.	Certificates are valid for 2 years and must be renewed within 60 days of expiration. Renewal is contingent upon completion of a designated number of training contact hours: VSWS: 6 hours Class I: 12 hours Class II: 18 hours Class III: 24 hours Class IV: 24 hours

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Maine	Application: \$75 Paper exam: \$95 Online exam: \$75 for VSWS and \$93 for Class I-IV Treatment and Distribution Renewal and Reciprocity: \$75 per 2-year cycle Upgrade license: \$20 Funding: Sources include the PWSS grant, DWSRF and exam and license renewal fees. (The online exam is administered by a third party and the fee is paid to them. The Board collects the paper exam fee for hosting the exam.) Licensing fees support a clerical position (0.5 FTE). The licensing officer is supported through DWSRF set-asides Additional resources from the DWP are provided for Information Management Services to help with the Web site and database, and for 9 field inspectors who confirm PWS classification and operator license classification matches the system type and processes in place at time of sanitary survey or other inspection.	Lapsed certificates may be renewed within 2 years of expiration, upon payment of a reinstatement fee, renewal fee and proof of completion of training contact hours. An individual who wishes to renew a certificate that has been inactive for over 2 years must follow procedures for new applicants. Individuals whose certificates have been revoked must wait at least 3 years from the date of revocation before reapplying for certification. Requirements for initial certification must then be met.	The Board is composed of nine appointees from the governor, including representatives from operators, system representatives by size category and type, industry professionals, the public, water management representative; and the Drinking Water Program (DWP). The Board usually meets four times per year, and additional meetings may be scheduled at the Board's discretion. The Board helped to develop the state's understanding of federal operator certification regulations, and sent members to conferences to remain up-to-date on operator certification issues. DWP also works with the Maine Rural Water Association and the Maine Water Utilities Association to raise awareness of drinking water and operator certification issues.	The Board is involved in ongoing review and revision of the Operator Certification Program, including licensing fees.

Program Web site: http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/waterOperators.shtml

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Maryland	Title 12 of the Environment Article of Maryland Annotated Code authorizes the Operator Certification Program. Title 26, Department of the Environment, Subtitle 06 of the Code of Maryland Regulations authorizes the Maryland Department of the Environment (MDE) to implement the Program. Program approved July 1, 2001	Class 3: Simple iron removal (chlorination, pH control, fluoridation, filtration and iron removal utilizing ion exchange or contact oxidation processes) Class 4: Complete treatment (chlorination, pH control,	Each applicant for certification must have an HSD or GED, minimum experience specified by the level of certification sought and take an exam that is provided by the ABC. A passing score is at least 69.5 percent. OITs with temporary certification must work under a certified operator. Grandparenting: Not allowed	MDE's State Board of Waterworks and Wastewater System Operators (the Board) may take action against an operator or system owner who is in violation of the Operator Certification Program. When applicable, enforcement actions against systems will be coordinated with other enforcement actions against the system. Enforcement actions include bilateral compliance agreements; administrative orders and civil, administrative and criminal penalties.	The triennial renewal requires completion of a specified number of hours of Boardapproved training, noted below. Each hour of training is equal to 1.5 units, once an attendee passes the exam for the course. Class D: 16 hours Class G: 7 hours Class 1: 16 hours Class 2: 16 hours Class 3: 30 hours Class 4: 30 hours Class 5: Determined by the Board For Classes 3, 4, and 5, a minimum of 50 percent of the training units submitted for issuance or renewal of a certificate shall be process related.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Maryland	Application: \$100 Exam: \$100 (online exams may cost an additional \$46-\$82) Renewal for first certificate: \$100 Late renewal: additional \$100 Renewal for each additional certification category: \$100 each, capped at \$200 in any 3-year renewal period Reciprocity: \$200 for each classification Funding: Fees and additional funding through MDE. MDE funds the Maryland Rural Water Association and Maryland Center for Environmental Training to provide training for small water systems serving < 3,300 persons.	Recertification is required for all operators whose certification has lapsed for more than 2 years. Suspensions may not exceed 1 year. After more than 1 year following revocation of a certificate, the person may apply for a new certificate subject to a new examination and review by the Board.	The Board is comprised of 11 stakeholders appointed by the Governor or the Secretary of the MDE, and includes representatives from the public at large, waterworks and waste system operators, state, county, and municipal governments. The Board meets monthly.	The Maryland Program Evaluation Act (sunset law) requires the Maryland House and Senate to review the Board and the program and vote whether to reauthorize and extend the program's termination provisions for another period. The Office of Legislative Services also reviews the statutory and regulatory authority of the Board and makes program recommendations. The most recent regulation changes were finalized on June 27, 2014 and the current sunset provisions extend the program through July 1, 2020.

Program Web site: http://mde.maryland.gov/programs/Water/Water-Supply/Pages/OperatorInformation.aspx/Pages/OperatorGuidance.aspx

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Massachusetts	Massachusetts General Law (MGL) Chapter 13, Section 66B creates the Board of Certification of Operators of Water Supply Facilities Regulations authorizing the program are 236 CMR 1.00 – 5.00 Regulations citing staffing requirements for PWSs are 310 CMR 22.11B Department of Environment Protection (DEP) is responsible for the classification of PWSs.	Facilities are classified as treatment (T) distribution systems (D), and Water Vending Machines with or without treatment (VND-T or VND-D). Distribution systems are classified according to population served: Very Small Systems (VSS): ≤ 500 1D: 501 - 1,500 2D: 1,501 - 15,000 3D: 15,001 - 50,000 4D: ≥ 50,001 Treatment Systems are classified according to a point system, based on complexity of treatment: I-T, II-T, III-T, or IV-T. VNT/D are classified according to GPD: No treatment: 1D-VND and 2D-VND With treatment: I-VDT, II-VDT, III-VDT, or IV-VDT Operators grades include: VND (vending), VS (very small system), and Grade I to IV for treatment and distribution systems.	All applicants must pass an exam and must have an HSD or GED. Applicants for Grade 2 or higher level exams must satisfactorily complete training requirements in order to sit for the exams. Grade 2 or higher level distribution exams require applicants to complete a Basic Distribution Training Course approved by the Board. Grade 2 treatment exams require applicants to complete a Basic Treatment Training Course approved by the Board. Grade 3 or 4 treatment exams require applicants to complete an Advanced Training Course approved by the Board. Minimum experience requirements: VSS: 6 months of experience operating a VSS Grade 1: 2 years of experience operating a Grade 1 system Grade 2: 3 years of experience operating a Grade 2 system; or a Grade 1 Full certificate with 1 additional year experience operating a Grade 1 or higher system after certification Grade 3: 5 years of experience operating a Grade 2 or higher system after certification Grade 4: A certificate of competency in water treatment technology or 1 or more years of college with 5 years of experience operating a Grade 4 system; or a Grade 3 Full certificate with 1 additional year experience operating a Grade 3 or higher system after certification. Education may be substituted for experience in all grades. VND-T/D: Class 1T-4T and 1D-2D: 3 months of experience or a certificate of proficiency Grandparenting: Not allowed.	The Board responds to operator misconduct complaints. If misconduct is proven, then disciplinary action is taken by the Board. An operator may be reprimanded or have his or her license suspended or revoked. The Board may use administrative orders, bilateral compliance agreements, criminal penalties, civil or administrative penalties, or stipulated penalties against operators.	Certificates must be renewed every 2 years. During this 2-year period, operators must accumulate the required number of Training Contact Hours (TCH): VSS and VHD: 5 or more Grades 1 and 2: 10 or more TCH Grade 3: 15 or more TCH Grade 4: 20 or more TCH

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Massachusetts	Application: \$28	An individual can	The Board is chaired by the	DEP's drinking water program
	Exam: \$131	license within 2 years, if all training contact	Commissioner of the Department of Environmental Protection or his	director and staff regularly review the Operator
	License (after passing exam): \$42		designee and consists of the	Certification Program. DEP's
	License Renewal Fee: \$42	hours are completed and a fee is paid. After	chairman of the water resources commission or his designee. The	drinking water regulations are reviewed as needed.
	Late Renewal Charge: \$57	this 2-year window,	Commissioner of the Department of	The Board reviews its own
	Certification of Registration: \$15	individuals must follow the procedure	Public Health or his designee and four members to be appointed by the	regulations periodically.
	Duplicate License: \$17	for new applicants.	governor (a professional engineer	An external review was
	Name Change: \$27	Revoked or suspended licenses are dealt with on a case-by-case basis.	engaged in the practice of sanitary engineering, a member of the	conducted in 2014.
	Wall Certificate: \$27		Massachusetts Labor Organization, a qualified operator recommended by the executive committee of New	
	Duplicate Wall Certificate: \$27			
	Charge for Returned Checks: \$23		England Water Works Association,	
	Public Information CD-ROM: \$30		and a qualified person recommended by the executive committee of	
	Reciprocity: \$70		Massachusetts Water Works	
	Upgrade from OIT to full license: must pay application and license fees		Association). The Board reviews the Program at each monthly meeting, and by correspondence and phone, as necessary. The New England Water Works	
	Temporary Emergency Certification Application: \$28			
	Provisional Certification Application: \$28		Association Certified Operator	
	Funding: Program funding comes from state general funds.		Committee meets quarterly to discuss updates, concerns, and new ideas on each New England state's	
	Data Management: The Division of Professional Licensure maintains a database of all operators and issues the licenses. DEP maintains information on the PWSs.		Operation Certification Program.	

Program Web site: http://www.mass.gov/ocabr/licensee/dpl-boards/dw/

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Michigan	Michigan Compiled Laws Section 325.1009 authorizes the Operator Certification Program. Administrative Rules for Water and Distribution System Operators Act 399, P.A. 1976 Part 19 authorizes the Department of Environmental Quality (DEQ) to implement the Program. Program approved July 1, 2001.	Distribution systems are classified according to population served, from Class S-1 to Class S-5: S-1: CWSs serving > 20,000 S-2: CWSs serving 4,000 - 20,000 S-3: CWSs serving 1,000 - 4,000 S-4: CWSs serving < 1,000 S-5: NTNCWSs or CWSs with no treatment and limited distribution system Treatment systems are classified as Class D (limited treatment) or F (complete treatment): D/F-1: For CWSs serving > 20,000 or with a rated treatment capacity (RTC) > 5 MGD D/F-2: For CWSs serving 4,000 - 20,000 or with an RTC of 2-5 MGD D/F-3: For CWSs serving 1,000 - 4,000 or with an RTC of 0.5-2 MGD D/F-4: For CWSs serving < 1,000 or with an RTC of < 0.5 MGD D/F-5: Noncommunity supplies Operators are classified according to the system they are qualified to operate. Systems may be placed into a different classification based on the complexity of treatment performed within the plant.	Applicants must meet education and experience requirements, which vary according to system classification, and pass an exam. An applicant must have a certain number of points (determined by education level and experience level) and take the required exams for each system. Full details are available in the rules at http://www.michigan.gov/documents/deq/deq-ess-otu-dw-Requirements_257401_7 . Grandparenting: Must have occurred before March 8, 2003 and applied only to systems newly classified as S-5, D-5, or F-5. Certification is site-specific and non-transferable.	Under certain circumstances, the Director of the DEQ may, after a hearing, suspend or revoke a certificate or place an operator on probation. The state has the authority to issue administrative orders, enter into bilateral compliance agreements, and impose civil and criminal penalties. The Advisory Board of Examiners act in advising capacity to the DEQ in dealing with matters of enforcement.	Certificates must be renewed every 3 years. To qualify for renewal, operators must accumulate approved training or continuing education hours: System levels 1, 2, and 3: 24 or more hours of which 18 hours must be technical or managerial training System level 4: 12 or more hours of which 6 hours must be technical or managerial System level 5: 9 or more hours with no categorical requirement An expired certificate may be renewed within 1 year of expiration if the operator has completed the necessary prorated training/continuing education requirements for renewal.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Michigan	Exam: \$70 per exam for Levels 1-4, \$45 per exam for Level 5 Renewals: \$95 Reciprocity: same as a applicable exam (operator must take first available exam) Funding: An operator training and certification fund within the state Treasury receives money from fees and earns interest from investments directed by the state treasurer. Continuing Education Credit (CEC) course approvals: \$75 per course (paid to course providers) CEC course renewals: \$50 per course (paid to course providers) In addition to these operator fees, Michigan utilizes DWRF set-aside funding to support the operator training and certification program.	If a certificate is not reinstated within 1 year, the individual must re-test for the desired certification. Operators whose certificates have been revoked must follow the procedures for new applicants in order to become recertified. However, they may not apply for examination until 5 years after the date of revocation. Operators whose certificates have been suspended may renew their certificates if all requirements for renewal have been met. Individuals wishing to appeal a decision or action of the department may request a hearing.	The Advisory Board of Examiners must meet at least twice a year to advise the DEQ on program implementation and any revisions to the Program. Members are appointed by the director.	The Advisory Board advises the DEQ on program revision.

Program Web site: http://www.michigan.gov/deq/0,1607,7-135-3308 3333 4171---,00.html

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Minnesota	Minnesota Statute 115 authorizes the Operator Certification Program. Chapter 9400 of the Minnesota Administrative Rules authorizes the Department of Health to implement the Program for water system operators. Program approved July 1, 2001.	Water systems are classified (Class A, B, C, D, or E) according to a point system which takes into account source water, complexity of treatment, storage capacity, number of wells, and population served. Full details are available in chapter 9400.0400 of the Minnesota Administrative Rules, available at: https://www.revisor.mn.gov/rules/?id=9400.04 00. System operators are classified according to the system they are qualified to operate.	All applicants must have an HSD or GED, pass an examination with at least a 70 percent score, and meet the following conditions: Class A: 2 years in management of Class A or B system, 2 years certification at Class B, and 8 years' experience; or Bachelor's degree and 4 years' experience Class B: 1 year certification at Class C, and 6 years' experience operating Class A, B, or C; or Bachelor's degree and 2 years' operating Class A, B, or C Class C: 3 years' experience operating Class A, B, or C; or Bachelor's degree and 1 year operating Class A, B, C, or D Class D: 1 year experience operating Class A, B, C, D, or E; or completion of postsecondary courses in water or wastewater technology Class E: 3 months experience operating Class A, B, C, D, or E; or completion of postsecondary courses in water or wastewater technology Operators may be issued a 3 year conditional certificate to allow the current operator with direct responsibility of a system to gain necessary years of experience after passing all exams required to receive certification at the facility's higher level. For information about substituting experience for education, see: https://www.revisor.mn.gov/rules/?id=9400.0800 . Grandparenting: Not allowed.	The Commissioner of Health may deny, refuse to renew, revoke or suspend an operator's certificate. The state has the authority to issue administrative orders; enter into bilateral compliance agreements with systems operating without a certified operator and impose civil, administrative, and stipulated penalties.	Certificates must be renewed every 3 years, within 30 days of the expiration date. Operators must have received credit for the following number of contact hours: Class A: 32 hours Class B: 24 hours Class C: 16 hours Class D: 8 hours Class E: 4 hours hours E: 4 hours Class C: 16 hours Class C: 18 ho

State Res	esources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Cert Rec Fun is us Prog dedi	rtification: \$23 ciprocity: \$40 nding: DWSRF set-aside funding used in part to sustain the ogram. In addition, there is a dicated fund for the Program.	Individuals with expired certificates may apply for reinstatement within 1 year of the certificate's expiration date. The certificate will be reinstated provided all necessary continuing education requirements have been met. If more than 1 year has elapsed since the certificate's expiration, an individual must follow the procedure for new applicants. If a certificate has been suspended, it can be reinstated providing the terms of the suspension order have been fulfilled and all other requirements for obtaining a certificate have been met. An individual whose certificate has been revoked may not apply for recertification before the expiration date of the revocation or for at least 1 year after receiving written notice of revocation.	The Water Supply Systems and Wastewater Treatment Facilities Advisory Council advises the Department of Health and Pollution Control Agency on classification of systems, qualifications and evaluation of operators, and any other procedures related to the operation of water systems and wastewater treatment facilities. The 11-voting member council comprised of two regulators, six water and wastewater operators, one municipal organization representative, and two public members meets quarterly.	The Council periodically reviews the regulations governing the program.

Program Web site: http://www.health.state.mn.us/divs/eh/water/wateroperator/index.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Mississippi	Municipal and Domestic Water and Wastewater System Operator Certification Act of 1986, Mississippi Code Section 21-27-201 et. seq., and Title 15 – Mississippi Department of Health Part 20 – Bureau of Public Water Supply Subpart 72 – Public Water Supply Chapter 02 – Regulation Governing the Certification of Municipal and Domestic Water System Operators The Mississippi Department of Health, Bureau of Public Water Supply (BPWS) implements the Operator Certification Program. Program approved January 30, 2001.	Classification is based on the type of treatment provided by the system: Class A: Surface water treatment, lime softening, or coagulation and filtration for the removal of constituents other than iron or manganese Class B: Two or more Class C treatment facilities of different types; or with iron or manganese removal facilities breaking pressure or requiring flocculation, sedimentation, or both. Class C: Aeration, pH adjustment, corrosion control, or closed pressure type treatment facilities, including zeolite softening or iron removal Class D: No treatment other than chlorination or fluoridation or both, or direct chemical feed such as polyphosphate Class E: Purchases water and does not provide additional treatment. Responsible for O&M of distribution.	All operators must have an HSD or GED, take an exam and receive a score of at least 70 percent and have the following experience: Class A: A Bachelor's degree in engineering or applied sciences from an accredited college or university with 1 year under a Class A certified operator or 6 years in a Class A or B water plant, of which 1 year must be in a Class A water plant; Class B: 3 years under a certified operator in a Class A, B, or C water plant, of which 1 year must be in a Class A or B water plant Class C: 2 years while working under a certified operator in a Class A, B, C, or D water plant, of which 1 year must be in a Class A, B, or C water plant Class D: 1 year under a certified operator with a Class D or higher license Class E: 1 year while working under a certified operator with a Class D or higher license Class E: 1 year while working under a certified operator with a Class E or higher license Grandparenting: Certificates issued prior to 1986, are site-specific, nontransferable, and only valid if system does not change class or as long as the operator does not allow his/her certification to expire.	The Mississippi State Board of Health (the Board) has jurisdiction over enforcement actions against operators and systems. The Board may issue a notice of violation or administrative order, impose civil penalties of \$25,000/day per violation, or require the system to provide injunctive relief if public health is threatened in any way.	Certificates must be renewed every 3 years and may be renewed without examination. Operators who have been continuously licensed less than 9 years must complete 48 hours of related CEUs per renewal period with at least 12 hours of these CEUs in approved regulation and compliance training programs. Operators who have been continuously licensed for 9 years or more are required to complete 24 hours of related CEUs per renewal period with at least 12 hours of these CEUs in approved regulation and compliance training programs. All training must be approved by the BPWS.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Mississippi	Exam: \$35 Certification: \$50 Application for renewal: \$30 Reciprocity: \$50 Funding: Appropriations come from the Water Division's budget, allocated from the state general fund. Fees go into the Water Division's certification direct credit fund. CEUs are tracked in a database maintained by the Mississippi State University Extension Service. For more information, see: http://msucares.com/water .	Operators may renew their certification up to 30 days after expiration. After 30 days, operators must take and pass appropriate exams and apply for a new certificate. An operator's certification will not be suspended or revoked without notice to the operator and an opportunity for a hearing. In the event an operator's certification is suspended or revoked, he/she will have ten days to appeal.	A five-member Advisory Committee reviews the Program and discusses its status. The committee meets at least annually, and includes representatives from various government and non-government stakeholder groups.	Internal reviews discuss exam questions, changes or improvements to the Program, enforcement, and compliance of the exam process. An external review is provided by the Advisory Committee. The committee provides a review report annually.

BPWS Web site: http://www.msdh.state.ms.us/msdhsite/static/44,0,76.html

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Missouri	Missouri Revised Statutes 640.100 authorizes the Operator Certification Program. Title 10 Missouri Code of State Regulations (CSR), Division 60, Chapter 14, provides regulations for the program. The Department of Natural Resources (DNR) Water Protection Program/Public Drinking Water Branch administers the program.	Treatment systems are classified A-D, based on treatment facility complexity, source of water, type of treatment performed and, for surface water systems only, size. Distribution systems (DS) are classified I-III based on population served and complexity of the system. For additional details, see the Water Treatment System Classification Table and the Water Distribution System Classification table at: http://www.sos.mo.go v/adrules/csr/current/1 Ocsr/10c60-14.pdf.	All operators must be at least 18 years old, have an HSD or GED (which may be substituted for with 6 months of additional experience), and pass an exam (score at least 70 percent). Operators are required to have the following number of years of operational experience (the numbers in parentheses are the number of years that can be equivalent experience): Class A: 5.5 years (2 years) Class B: 3.5 years (1 year) Class C: 1.5 years (1 year) Class D: 6 months (all) DS-III: 3 years (1 year) DS-II: 1 year (6 months) DS-I: 6 months (all) For additional details, see the Equivalent Experience Table at: http://www.sos.mo.gov/adrules/csr/current/10csr/10c60-14.pdf . Grandparenting: Ended in 2008.	DNR may deny an application, suspend a certificate for up to a year or revoke the certificate(s) of an operator found to have practiced fraud or deception; exhibited gross negligence, malpractice, or incompetence in operating the system; sabotaged the system; misled or lied to a government official; participated in sample tampering or selective sampling; or falsified facility operating records or reports. DNR may issue administrative orders, assess administrative penalties, and enter into bilateral compliance agreements. At the request of the Department, the Missouri Attorney General can bring injunctive or other appropriate actions and impose penalties.	

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Missouri	Application (includes exam): \$45 Repeat exam (if failed): \$20 Reciprocal certification: \$65 Renewal: \$45 Late renewal fee: \$10/month up to \$20 Fees directly related to certification, testing, and renewal go into the Safe Drinking Water Fund. Funding: Funding comes from the PWSS grant and the DWSRF Capitalization Grant. A new electronic database was developed to help with operator certification tracking and training, and to help systems without operators to acquire one. The Missouri Department of Natural Resources provides funding to assist operators who work for systems serving populations of 3,300 or less renew their certifications.	A certification that has been expired for less than 2 months may be renewed under regular recertification procedures (if all renewal training has been completed prior to expiration). An operator must wait 1 year before reapplying after certificate revocation.	The Safe Drinking Water Commission is a citizen advisory board that advises the Operator Certification Program. In addition, Missouri has an extensive public participation process, including many stakeholders around the state. Operators are able to provide input to training through the operator certification and training voucher program.	Internal reviews include annual planning and budget submission, as well as resource need projections. Reviews of other aspects of the Program occur periodically by system personnel. Stakeholders who are subject matter experts participate in examination review and validating workshops. Every training voucher includes course evaluations.

Program Web site: www.dnr.mo.gov/env/wpp/opcert/oprtrain.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Montana	State Statute 37-42-101 authorizes the Operator Certification Program. 37-42-301 authorizes the Department of Environmental Quality (DEQ) to implement the Program. Program approved December 1, 2000.	Distribution systems are classified according to the population served: Class 1:> 20,000 Class 2: 2,500 to 20,000 Class 3: 500 to 2,499 Class 4: 100 to 499 Class 5: < 100 Treatment systems are classified according to complexity of treatment, and, in some cases, population served: Class 1: Surface water using chemical coagulation, filtration, and disinfection Class 2: Surface water not using chemical coagulation Class 3: Well water serving > 2,500 with or without disinfection Class 4: Well water serving 100-2,500 with or without disinfection Class 5: Well water serving < 100 with or without disinfection	All operators must hold an HSD or equivalent, unless granted an exception by the DEQ. Applicants for certification for Class 1-5 water systems (distribution or treatment) must pass the DEQ's certification exam for the specific classification. Required experience: Class 1: 2 years Class 2: 1.5 years Class 3: 1 year Class 4: 6 months Class 5: 3 months Grandparenting: Only permitted for operators who were working before initial requirements were in place (July 1, 1967).	DEQ can initiate an investigation whenever a written complaint is filed, or if the Department believes that a certified operator has violated 37-42-321 of the Montana Code. DEQ may initiate hearings if there are grounds for revoking certification. DEQ can revoke or suspend certification or reprimand an operator. The Department's enforcement options include: administrative orders, bilateral compliance agreements, and civil administrative, criminal, and stipulated penalties.	Certified operators must earn continuing education credits (based on Class) during each 2-year period beginning on July 1 of each evennumbered year: Class 1: 2 credits per certificate held Class 2, 3, 4: 1 credit per certificate held Class 5: Minimum 4 contact hours of seminar training per 2-year renewal period (1 credit = 10 contact hours) Certificates are valid from July 1 for 1 year.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Montana	Annual application: \$70 Exam: \$70 Annual renewal: \$30 Reciprocity: \$70 (also must pay application fee) Renewal of suspended license: Additional \$30 Duplicate certificate: \$10 Funding: Application and certification fees are deposited into a special state revenue fund, and are used to pay the DEQ and the Water and Wastewater Operators' Advisory Council. Data Management: There is an operator certification database that tracks applicants, operators, certification, exams, compliance and training information.	Certificates not renewed by July 1 are suspended, and revoked if the suspension lasts more than 30 days. Operators whose certificates are revoked due to a personal error may reapply and may be required to take an exam. Operators who move out of state, or otherwise terminate employment as an operator, may renew a certificate annually for up to 2 years beyond the expiration date of the current certificate by paying the renewal fee. Beyond 2 years, there are further DEQ requirements for renewal. Operators whose certificates are revoked must follow the same procedures for new applicants, for recertification, and may be required to retake the certification exam.	The Water and Wastewater Operators' Advisory Council is composed of seven members appointed by the governor, including certified operators, a college professor, municipality representatives, and DEQ staff. The Council takes part in exam validations, material revisions, continuing education policy review, raising fees, and administering exams. The Continuing Education Credit Review Committee (CECRC) is made up of Council members, DEQ staff, operators, trainers, and faculty members, and gives advice to the Council and certification staff on training course approval and policy.	There are regular reviews of exams, regulations, compliance and enforcement, and the budget. A compliance status report is compiled monthly, showing the status of all non-compliant systems and follow-up activities by DEQ staff. The budget is reviewed monthly, and a presentation on the budget is given at the Council meetings.

Program Web site: http://deq.mt.gov/wqinfo/opcert/default.mcpx

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Nebraska	Nebraska Revised Statutes Sections 71- 5301 to 71-5313 contain the Nebraska SDWA and the statutory authorization for the Operator Certification Program. Title 179 Nebraska Administrative Code 10 contains the specific regulations governing the Operator Certification Program. The Department of Health and Human Services (the Department) implements the Program. The Program was approved September 1, 2001.	Water systems are classified as follows: Class I: Serves over 15,000 people and filters its raw water, or serves over 50,000 people Class II: Serves between 2,000 and 15,000 people and filters, or serves between 15,000 and 50,000 people Class III: Serves fewer than 2,000 people and filters, or serves between 2,000 and 15,000 people, or CWSs that purchase water in whole or in part to serve more than 15,000 people Class IV: Serves fewer than 2,000 people and no filtration, or CWSs that purchase water to serve fewer than 15,000 people Class V: All other water supply systems including TNCWSs Operators must obtain a Grade I – V license. Reciprocity is not allowed.	Qualifications for operators of CWS and NTNC are sequential and build from the previous grade, beginning with Grade IV. All operators must meet general requirements, including age, academic, physical, and character requirements. Applicants for Grade I - V must pass the grade-specific exam, provide documentation of having passed the exam of the previous grade, and meet other grade-specific requirements, including level of education and years of responsible charge or demonstrated competency. Applicants for Grade VI (backflow prevention) must complete a 32-hour course, which includes a hands-on portion and written test. Provisional: This license may be issued to an applicant for Grade I – IV license while experience is being acquired. All education, training substitutions, and experience requirements for Grade must be met during provisional period. It is non-renewable and site-specific. For additional details, see the on Procedures to Apply for Licensure section at: http://dhhs.ne.gov/publichealth/Pages/crl_rcs_water_water.aspx . Grandparenting: Not allowed.	The Department has primary enforcement responsibility for the Program. The Department may seek injunctions, issue administrative orders, enter into bilateral compliance agreements, issue probationary terms and impose civil administrative penalties against systems. For operators, the Department may deny, suspend, revoke or refuse renewal of any such license for due cause. The holder of a water operator license may also be placed on probation by the Director for due cause.	Licenses expire every odd year on December 31. For renewal, operators must have at least 10 hours of continuing education. Grade V operators do not need to complete continuing education or renewal requirements.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Nebraska	Initial and Renewal Fees for Grades I-IV and VI: \$115 Initial Fee for Grade V: \$31 (no renewal required) Reinstatement Fee (in addition to renewal fee to reinstate an expired or inactive certification): \$35 Department course (Grade IV): \$80 (includes exam, also offered as correspondence format) Department course (Grades I-III): \$200 (includes exam) Individual exam (scheduled separately from course offered by Department: \$50 No fee is charged for the Grade V exam. Certification of License Fee: \$25 Verification of Credential Fee: \$5 Duplicate Credential Fee: \$10 Administrative Fee (retained from the licensing fee when a credential is denied or application is withdrawn): \$25 Funding: Fees fund the program. Data Management: SDWIS is used to maintain data on systems. Data on operators is maintained by the Department's Licensure Unit. Training and examination: Exam and training approval are completed by Department staff.	There is no grace period for operators whose license has expired. They must apply for reinstatement and have obtained 10 hours of continuing education within the preceding 24 months or pass the applicable exam. An individual whose license was suspended or limited may apply for reinstatement at any time. An individual whose license was revoked may apply for reinstatement after 2 years.	The Advisory Council on Public Water Supply serves as an advisory body to implementation of the Nebraska SDWA. The sevenmember council meets at least once a year and is made up of a professional engineer, a licensed physician, consumers of public water, and certified operators. In addition, Nebraska requests input from licensed operators and other interested groups during revision of the Program.	Internal reviews are conducted every 3 years, although some aspects are reviewed more frequently. Training needs and scheduling, for instance, are reviewed every 3 months for relevancy by the Nebraska Water Operator Training Coalition, which is an informal group made up of representatives from the Department and numerous technical assistance providers, industry groups, educators and associations.

Program Web site: http://dhhs.ne.gov/publichealth/Pages/crl rcs water water.aspx

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Nevada	Nevada Revised Statute 445A.875 and 445A.880 authorizes the Operator Certification Program. Nevada Administrative Code Chapter 445A 617-652, provides the specific rules and regulations for the program. The Department of Conservation and Natural Resources, Nevada Division of Environmental Protection (the Division) implements the Program.	Systems are classified using a point system. There are two different point systems for PWSs using only ground water or water provided by another PWS and not providing any treatment other than chlorination (Distribution 1-4); and for PWSs that use surface water or GWUDI, or use groundwater and provide treatment other than chlorination (Treatment 1-4). The point system takes into account population served, source, complexity of treatment, and other characteristics. More detailed information about the classification system can be found in the regulations at NAC 445A.629 (http://www.leg.state.nv.us/nac/nac-445a.html).	Applicants must be at least 18 years of age, pass an exam with a score of at least 70 percent, and meet the following requirements: Education: Grade I & II: HSD or GED Grade III: 2 postsecondary courses Grade IV: 4 postsecondary courses Experience: Class 1: 6 months Class 2: 1 year Class 3: 2 years Class 4: 4 years Operators who pass the exam but do not meet experience requirements can receive OIT certification. Grandparenting: Not permitted after December 31, 2000.	NAC 445A.646 The Division can deny an application, suspend or revoke a certificate, or issue a civil or criminal penalty or administrative fine if an operator: has made any false statement in the application for certification or material to the administration or enforcement of the operator certification chapter; is negligent or incompetent or commits misconduct; demonstrates disregard for public health or safety; acts outside the rights and privileges of the certificate they hold; has been convicted of a violation relating to water quality or a crime involving moral turpitude, dishonesty, or corruption; or has failed to renew certification.	Certificates must be renewed by December 31 of the first calendar year after the calendar year for which they are issued. Class 1 and 2: 0.5 credits (5 hours) of CEUs during the 2 years immediately preceding the application renewal date. Class 3 and 4: 1 credit (10 hours) of CEUs during the 2 years immediately preceding the application renewal date. OIT certifications expire on December 31 of the first calendar year after the calendar year in which they are issued and cannot be reinstated.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Nevada	Full certification: \$84 OIT certification: \$57 Provisional certification: \$30 Converting OIT certification to full certification: \$30 Renewal: \$30 Reinstatement and renewal of full certificate: \$100 Reciprocity: \$57 Funding: Fees and additional funding. Testing: Nevada has contracted with AWWA to administer, grade, and evaluate the exams.	An operator may reinstate a certificate, upon payment of a fee, within 6 months after its expiration. A provisional or an operator-in-training certificate cannot be reinstated. An operator who can provide documentation of health problems that made it impossible meet CEUs can request reinstatement and renewal of certification up to 2 years after the certificate expired. An operator who can provide documentation of military duty that made meeting CEUs impossible, may request reinstatement and renewal of certification up to 4 years after expiration. An operator who fails to renew a certificate within these timelines must meet new applicant requirements.	The Nevada Water and Wastewater Operator's Forum (Forum) discusses issues regarding the education, training and testing of operators, and disseminates exchanges information. The Forum is consolidated from the Water Operator Certification Advisory Board, the Certified Drinking Water Operators Forum, and the Water and Wastewater Training Coalition; and includes technical assistance providers; operators; and a member of the general public.	The Forum meets quarterly. The Operator Certification Regulations that became effective on October 31, 2005 will serve the program for the foreseeable future. No amendments are currently proposed. The BSDW believes that the Nevada operator certification program and the regulations meet all applicable US EPA guidance requirements. There is no official external review process The DEP must review each PWS's classification at least once every 3 years.

Program Web site: ndep.nv.gov/bsdw/cert_home.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
New Hampshire	New Hampshire Statute, Chapter 332- E:3 authorizes the Operator Certification Program, and regulations at Part Env- DWs 502 authorize the Department of Environmental Services' (DES) Drinking Water and Groundwater Bureau (DWGB) to administer the state's Operator Certification Program. A section of Env-Dw 502 also authorizes the DES to approve drinking water operator training courses. Program approved February 1, 2001.	Treatment systems are classified as Grade I-A, I, II, III, or IV, based on treatment complexity, as well as population served and fire protection for Grade 1 and Grade 1-A. For more information, see: http://des.nh.gov/organization/commissioner/legal/rules/document s/env-dw502.pdf. Distribution systems are classified according to population served: Grade I-A: < 500 people or 200 service connections for CWS with no fire protection, or NTNC without fire protection for any size population Grade I: ≤ 1,500 (except I-As) Grade II: 1,501 - 15,000 Grade III: 15,001 - 50,000 Grade IV: ≥ 50,001 System operators are classified according to the system they are qualified to operate. OIT status is awarded to people who meet all requirements for Grades I – III except required experience.	All applicants must have an HSD or GED, be able to read and write in English, and meet physical requirements. Applicants must pass an exam with at least a 70 percent and meet experience requirements (at least 50 percent of experience requirements must be actual operating experience in a plant or system classified at no more than one grade below the grade desired): Grade I-A: 6 months experience or completion of a Department sanctioned course Grade II: 3 years experience Grade II: 2 years of post-secondary education and 4 years' experience Grade IV: 4 years of post-secondary education and 6 years' experience Substitutions for education or experience can be found at Env-Dw 502.19. Grandparenting: Not allowed.	DES has enforcement responsibility for the Program. If the Department receives information that indicates that there may be cause to suspend or revoke an operator's certificate, it may take steps to do so. The state has the authority to issue administrative orders and administrative penalties. The state can refer cases to the Attorney General if a judicial remedy is recommended. This can result in the imposition of criminal penalties.	Certificates must be renewed every 2 years. In order to renew a certificate, distribution or treatment system operators must accumulate training contact hours: Grade 1-A: 5 hours Grades I to IV: 20 hours Operators certified for both treatment and distribution need only accumulate the contact hours required for renewal of one certificate.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
New Hampshire	Application/Exam: \$50 Renewal for treatment or distribution certification (and combined distribution/treatment Grade 1-A) or both: \$50, \$100 if both certifications are held for Grades I - IV Funding: The application and renewal fees for operators contribute to a dedicated fund associated with the state Program. DES also collects a small fee (\$50) to cover the expenses of the training programs that it sponsors. DES administers the ABC exam for Grades I - IV and developed a New Hampshire-specific exam for Grade IA.	If a certificate is not renewed within 90 days of its expiration date, it becomes invalid. An individual with an invalid certificate must follow the procedure for new applicants in order to become recertified. A revoked or suspended certificate will not be reinstated until the Department determines that the initial reason for revocation or suspension has been corrected to conform to necessary requirements, and the operator submits a written request for reinstatement.	DES continually interacts with local and regional groups composed of industry and operational professionals as well as with fellow regulatory personnel. These associations allow for a continual dialogue as it relates to industry dynamics, regulatory changes and training needs. DES also encourages public participation in its decision-making process.	The ABC reviews and updates exams as a service to its members. DES staff review exams and investigate comments following each exam session. Revenues and expenditures are reviewed every 2 years, at which time fee adjustments may be proposed. Staffing issues are addressed when necessary. The Program's coordinator annually reviews compliance issues, rule changes, evaluation forms, and test results. The purpose of this review is to determine training requirements for the upcoming year and ensure the relevance and helpfulness of the training for operators.

Program Web site: http://des.nh.gov/organization/divisions/water/dwgb/op_cert/index.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
New Jersey	New Jersey Statutes Annotated 58:11-64- 58:11-73 authorizes the Operator Certification Program. NJ Administrative Code Title 7, Chapter 10A, provides the regulations for the Program. The New Jersey Department of Environmental Protection (NJ DEP) implements the Program.	Distribution systems (W) are classified as W1-W4, based on population served: W1: > 100 service connections and < 1,501 people W2: 1,501 - 15,000 people W3: 15,001 - 50,000 people W4: > 50,000 people Treatment systems (T) are classified as T1-T4, based on a point system which can be found at: http://www.nj.gov/dep/rules/rules/njac710a.pdf . VSWS are CWSs serving 100 or fewer dwellings or properties and having no treatment; or NTNCWSs having no treatment, disinfection only, or some limited types of passive treatment, or both.	All operators must have at least a HSD or GED, pass an exam, take a course approved by the DEP, and have: VSWS: 6 months experience Class 1: 1 year experience, or Associate's and 2 years' experience, or Bachelor's and 1.5 years' experience Class 3: 6 years' experience (with 3 years in DRC), or Associate's and 4 years' experience (with 2 years in DRC), or Bachelor's and 3 years' experience (with 1.5 years in DRC) Class 4: 10 years' experience (with 4 years in DRC), or Associate's and 7 years' experience (with 3 years in DRC), or Associate's and 7 years' experience (with 3 years in DRC), or Bachelor's and 5 years' experience (with 2 years in DRC). Grandparenting: Site-specific grandparenting is if systems are reclassified by the NJ DEP. The licensed operator of the reclassified system may continue as the licensed operator, except that a VSWS operator shall not operate a system reclassified as a T or W system. Grandparenting was not allowed to initially certify existing personnel.	The NJ DEP may issue Administrative Orders (AOs) for refusing or prohibiting immediate entry and inspection; false statements or representations; or for intentional or deliberate willful acts or omissions. AOs may include the imposition of civil penalties according to a regulatory structure, to suspend or revoke a license, or for injunctive relief. Additional information on the imposition of civil penalties appears at: http://www.nj.gov/dep/rules/rules/njac7_10a.pdf .	Operators must renew certificates every year by September 30. Effective October 1, 2003, licensees must demonstrate that they have accumulated the required number of Training Contact Hours (TCHs) every 3 years, as follows: VSWS: 12 TCHs Class 1 and 2: 18 TCHs Class 3 and 4: 36 TCHs .

	Resources Needed To applement the Program	Recertification	Stakeholder Involvement	Program Review
Initial I Annual Late rer Funding state's g is also g DWSR aside. F operato paid int Service Training through commutechnol individe Californ corresp the train	ation: \$70 license: \$50 l license renewal: \$50 enewal: \$20 lig: Appropriation from general fund. This Program partially funded by the EF operator certification set-Penalties for violating the or certification program are to the state's Environmental les Fund. Ing: Courses are offered h State universities, unity colleges and vocation logy schools. Alternatively, luals may complete mia State University condence courses to satisfy ining requirements to a for an exam.	If an operator does not submit the renewal fee within 1 year after the September 30 expiration date, he/she must meet the current requirements for the license and successfully pass another qualifying exam. Any person whose license has been revoked for the first time shall be ineligible for an exam for a new certificate for a period of 1 year from the effective revocation date.	Legislation has established a Board of Examiners that advises and assists the Department in the preparation and administration of exams. The Board consists of three Department personnel, three drinking water operators, and three actively engaged licensed wastewater operators having at least 5 years of experience and possessing a current Class 4 license for one or more systems. An Advisory Committee on Water Supply and Wastewater Operator Training was also established to advise the Board with respect to the instructional process for certification and further educational advancement of licensing. The committee is directed to meet at least once a year.	environmental groups, are represented on the Advisory Committee.

Program Web site: http://www.nj.gov/dep/exams/wsw.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
New Mexico	The Utility Operators Certification Act of 1973 is the governing statute. The regulations are located at 20.7.4 of the New Mexico Administrative Code. The Water Quality Control Commission has delegated most responsibilities for implementing the Program to the Utility Operator Certification Program (UOCP) of the Surface Water Quality Bureau, which is a part of the Water Protection Division of the New Mexico Environment Department (NMED). Program approved October 1, 2001.	Systems are classified from 1 - 4 based on the size of the system and the treatment processes involved. In addition, there are two classes of small systems based on the types of treatment processes. Distribution systems are also rated according to the size of the system and the type of water that is being distributed (for example, chlorinated, ground water, treated surface water). Water Sample Tech 1 & Water Sample Tech 2 certifications exist strictly for taking BAC-T and chemical/radiological water samples, as required by SDWA. Details can be found in the regulations (20.7.4.12) at: http://164.64.110.239/n mac/parts/title20/20.00 7.0004.pdf.	All operators must pass the exam for the type and class of certification for which they are applying, and must have an HSD or GED. In addition, to be certified, operators must have the following: Class 1 and Small Systems: 1 years' experience and 10 training credits Class 2: 2 years' experience plus 30 training credits Class 3: 4 years' experience plus 50 training credits Class 4: 1 year experience as a Class 3 certificate holder plus 80 training credits Water Sample Tech 1: 0 years' experience plus 5 training credits Water Sample Tech 2: 0 years' experience plus 10 training credits Various amounts of education (college, vocational school, etc.) can count towards experience. Grandparenting: Not allowed.	UOCP may revoke or suspend an operator's certificate for fraud, gross incompetence, dereliction of duty, performing duties for which the operator was not certified and conviction of violating any state or federal water quality requirement. Administrative orders, bilateral compliance agreements, civil penalties and the referring of criminal cases to the Attorney General's Office are all possible enforcement actions.	Operators must be recertified every 3 years. Renewal is contingent upon demonstration of 30 training credits during the 3 years that the operator has been certified.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
New Mexico	Exam: \$30 (small water systems are \$25) Renewal of certificate: \$20, \$25, \$30 Reciprocity (or endorsement): \$30 Replacement certificate: \$5/certificate Replacement Operator ID: \$5/card All exam, certification & reciprocity fees are collected and transferred into a dedicated fund for the UOCP in accordance with 61-33-5 NMSA 1978. Funding: State general funds, and state fee programs fund the Program. Data Management: Supported by the Bureau's System Analyst. UOCP conducts testing, enforcement, administration, and training approval in-house.	If certification has lapsed, it can be reinstated within 30 days without penalty. Within 1 year, a payment of \$10 per month per certificate beyond the certification expiration date will reinstate an operator's certificate. Both methods are contingent upon showing the same 30 credits of training. After 1 year, reexamination is required. If certification is revoked, an operator must reapply for certification after the period of revocation set by the Water Quality Control Commission. The Commission may also suspend an operator's certification for a specified period of time.	The Utility Operators Certification Advisory Board was created by the governing statute and its accompanying regulations. It is made up of seven certified operators and two alternate members (also certified operators). It holds regular open public meetings to discuss the Program and advises UOCP on program directions.	The Program is reviewed by UOCP, NMED, and the Advisory Board.

Program Web site: http://www.nmenv.state.nm.us/swqb/UOCP/

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
New York	Public Health Law, Article 2, Sec. 225 authorizes the sanitary code to prescribe qualifications for drinking water system operators. Chapter I State Sanitary Code, Subpart 5-4: provides the regulations for the Operator Certification Program. The Department of Health's (DOH) Bureau of Water Supply Protection implements the Program.	Grade IA: Plant > 2.5 MGD surface water or GWUDI of surface water that provides filtration Grade IIA: Plant ≤ 2.5 MGD surface water or GWUDI of surface water or GWUDI of surface water that provides filtration Grade IB: Plant > 2.5 MGD groundwater (excluding GWUDI of surface water) or surface water system with filtration avoidance without facilities for clarification Grade IIB: ≤ 2.5 MGD groundwater (excluding GWUDI of surface water) or surface water system with filtration avoidance without facilities for clarification Grade C: Water treatment plant or distribution system serving ≤ 1,000 people Grade D: Distribution system serving > 1,000 people or purchasing water system A Grade D certificate is needed along with Grade A or B for operating a plant and distribution system serving > 1000 people.	All operators must have at least a HSD or GED; pass the appropriate exam; and complete training courses or demonstrate equivalent training, education, experience. Operators can substitute higher education for years of experience for Grade IA or IB. Experience or relevant training, or both may be substituted for a HSD or GED for Grades C and D. Experience requirements: Grade IA: 10 years with 1 year at Grade IA facility plus 1 year at Grade IA or IIA facility Grade IIA: 1 year at filtration plant Grade IB: 10 years at plant, 2 years' experience a minimum of a Grade B. Grade IIB: 1 year at a treatment plant Grade C: 6 months at a minimum of a C plant Grade D: 1 year at Grade D facility Specific training requirements are included in Table 5-4.3 at: https://www.health.ny.gov/regulations/nycrr/title 10/part 5/subpart 5-4.htm. Grandparenting: No longer permitted.	DOH can revoke or suspend a certificate for fraud or misrepresentation; gross incompetence; negligence; or mental or physical incapacity of the operator. A suspension term will last for a period not to exceed 3 years and will be based on factors such as: number of acts committed, degree of physical or environmental harm resulting from acts, degree of cooperation and other relevant information. Three suspensions in any three-year period, time period starting with the effective date of the first suspension, will result in an automatic revocation. A revocation may be permanent or have a defined term, depending on the circumstances. A certificate may be reinstated upon request from the suspended/revoked operator after the operator serves his/her suspension period and has completed necessary training and other suspension/revocation conditions prescribed by the State. Fines can be up to \$2,000 per violation.	Operators must renew certificates every 3 years. Must successfully complete Continuing Education Unit (CEU) within the previous 3 years from a list of acceptable training. Grades A and B must complete 3.0 CEUs. Grade A operators must complete a 0.5 CEU laboratory refresher course as part of the total. Grades C and D must complete 1.5 CEUs

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
New York	Fees: There are no fees. Funding: Revenue for the Program comes from the state general purpose fund and two federal grants: Public Water System Supervision grant and Drinking Water State Revolving Fund. The federal Operator Certification Expense Reimbursement grant that supported the majority of the DOH-offered training programs expired in 2012 and no additional funds have been allocated to support that training.	An individual who allows a certification to lapse for more than 1 year is required to repeat the experience and training required for that grade of certification. A certificate may be reinstated upon request from the suspended operator after the operator serves his/her suspension period and has completed necessary training and other suspension conditions prescribed by the State. Revocations can be reinstated when conditions set by the department are met.	The DOH has an established stakeholder committee for the implementation of the New York State Program. This group is comprised of water operators, government agencies, training providers, local health departments, industry associations, and engineering firms. The DOH also has an Education and Outreach stakeholder committee to guide work on promoting the value of water and the importance of water operators. The committees meet regularly to evaluate the efficiency and effectiveness of the Program and outreach efforts, and make the necessary changes to improve the Program.	The DOH follows an internal controls process to continually review and update its Operator Certification Program. The DOH also tracks operator certification performance measures and processing metrics on a monthly and annual basis. Budgetary reviews are conducted on an annual basis. The Program is also reviewed during the preparation of the annual report to EPA. The DOH solicits comments from the local health departments, district offices, and external parties several times per year. The comments are reviewed and adjustments are made to improve the Program, as necessary. Review of the Program may also take place in stakeholder and outreach committee meetings and may result in recommendations for the DOH.

Program Web site: http://www.health.state.ny.us/environmental/water/drinking/operate/opcertfs.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
North Carolina	Article 2 of the General Statutes (G.S.) (90-A-20 through 90-A-32), and North Carolina Administrative Code Title 15A, Subchapter 18D, Sections .0100070 1. The North Carolina Water Treatment Facility Operators Board of Certification (the Board) under the Department of Environment and Natural Resources (DENR), implements the Program. Program approved August 10, 2001.	Treatment facilities are classified as Class A, Class B or Class C, by a point system based on water source, treatment type, plant capacity, population served and on-site quality controls. For more information, see 15A NCAC 18D .0203 at: http://www.ncwater.org/files/pws/ncwtfocb/Facility_Operator_Rules.pdf. Distribution system classification is based on the number of service connections: Class D: ≤ 100 with no fire protection Class C: 101 - 1,000 with no fire protection Class B: 1,001 - 3,300, or any system with < 1,000 with fire protection Class A: > 3,300 Operators are certified by grade for each system class: Surface (A, B, C) Well (A, B, C, D) Distribution (A, B, C, D) Cross-Connection	Operators must be at least 18 years old. Qualification includes a combination of experience, education, attendance at an approved training course, and passing score on the appropriate exam. For more information, see 15A NCAC 18D .0201 at: http://www.ncwater.org/files/pws/ncwtfocb/Facility Operator Rules.pdf. Apprentice status is awarded to people who pass the exam but do not have required experience. Grandparenting: Available until July 1, 1981. Certificates are site-specific and not transferable.	The Board has jurisdiction in enforcement actions against operators. DENR has jurisdiction in enforcement actions against system owners. Upon recommendation of the Board, an administrative civil penalty may be imposed upon any person, corporation, company, association, etc., who owns or operates a water treatment facility without a duly certified operator. Each day of violation is a separate offense. The penalty cannot exceed \$100 per day. In addition, DENR has authority to impose fines of up to \$25,000/day for violation of the state's drinking water regulations. The Certification Board administrative staff has the authority to issue an administrative order for persistent non-compliance. Violations may be discovered by sanitary surveys, public complaints, and through a cross-comparison of water supply system records and the records on operators.	Certificates must be renewed annually. All certificates expire on the last day of the calendar year. Certified operators are required to obtain 6 professional growth hours (PGHs) each year for annual renewal. If renewal fees are not paid annually by the first day of February, or if operator fails to obtain 6 PGHs, certification will expire.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
North Carolina	Exam and certificate: \$50 Upgrade apprentice to Class C, D or CC certificate: \$50 Temporary certificate: \$50 Renewal charges: \$30 Reciprocity: \$50 Late fees: \$30 Funding: All fees are dedicated to operator certification. The Program is self-supporting. Budget: The operator certification expenditures in 2013 were \$282,964. FTEs: 4.0	An operator whose certification has expired may seek reinstatement within 2 years of expiration by paying any renewal fees in arrears, including late fees, and passing another examination of that grade. Any person having a certification expired for more than 2 years or revoked must apply to the Board for approval to be eligible for any further certification or reinstatement of certificate.	The North Carolina Program is controlled by the 8-member Board, which consists of stakeholders appointed by the Governor. Members include a water treatment facility operator, three people in management positions in a state municipality, one member of the private sector responsible for the operation or supervision of a water supply and treatment facility, one academic, one employee of the DENR, and one uncertified individual representing the public.	The Board reviews the regulations and solicits public comment. An annual report on the Program is provided to the Governor.

Program Web site: http://www.ncwater.org/?page=61

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
North Dakota	North Dakota Century Code (NDCC) 23-26-01 authorizes the Operator Certification Program and North Dakota Administrative Code (NDAC) 33- 19-01 provides the regulations for the Program and authorizes the Department of Health to implement it. The Municipal Facilities Division of the Department of Health (DOH) oversees the Operator Certification Program.	Water treatment facilities and distribution systems are classified as Class 1A, I, II, III, and IV based on population served, design population, type of treatment/distribution system, raw water quality and volume of water to be treated/handled, and complexity of sludge handling units. See the full details at: http://www.ndhealth.gov/mf/forms/Operator Certificat ion Information.pdf. Operators are classified according to education level, experience, and years in DRC of a system.	Operators must pay an exam fee, pass the certification exam with a score of 70 percent or higher, and must satisfy the education and experience requirements, or their equivalents. Must have at least an HSD or GED. The number of years of experience correlates to the level of education obtained (such as, an HSD/GED requires more experience while a BA requires less). One year of acceptable experience may be considered equivalent to one year of high school. Experience applied to the educational requirement may not also be applied to the experience requirement. For specific details see NDAC 33-19-01-12 at: http://www.legis.nd.gov/information/acdata/pdf/33-19-01.pdf. Grandparenting: Not permitted.	Violating the provisions of NDCC 23-26-01 or the regulations adopted thereunder is a class A misdemeanor. DOH may revoke or suspend a certification for fraud, deception, changing records, or by omission; failure to take corrective action, required samples protect the public health or water resources; or for lack of reasonable care, in the performance of the duties.	Certificates must be renewed annually and expire on the first day of July of the year after which it was issued. Operators are required to earn 12 Continuing Education Credits every 3 years.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
North Dakota	Exam: \$10 Yearly renewal: \$5 Reciprocity: \$10 Funding: All receipts from the fees are deposited in the state treasury to be credited to a special fund to be known as the "Operators' Certification Fund" to be used by DOH to administer and enforce the Program and in conducting operator training programs. Any surplus at the end of the fiscal year shall/can be rolled-over for future expenditures.	Expired certificates may be renewed within 1 year of expiration if the continuing education requirements are satisfied, and all delinquent fees are paid. Certificates that have been expired for more than 1 year can only be renewed by following the procedure for new applicants. If certification is revoked or suspended, a new application may be considered after the conditions upon which revocation or suspension were based, have been corrected.	The State Water Pollution Board, State Health Council, and Operator Certification Advisory Committee review the Operator Certification Program and related rules. The make-up of the Advisory Committee includes: One member from the DOH, one member from the North Dakota Water and Pollution Control Conference, one member from the general public, four members who are certified operators, one member from a technical assistance provider, and one member who is a utility manager.	The State DOH conducts annual internal reviews and the Advisory Committee conducts annual external reviews.

Program Web site: www.health.state.nd.us/MF/dw.html

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Ohio	Chapter 6109 Ohio Revised Code authorizes the Operator Certification Program. Ohio Administrative Code (OAC) Chapter 3745 -7 authorizes the Ohio Environmental Protection Agency (Ohio EPA) to implement the Program.	Operators of all types of PWSs (CWS, NTNCWS and TNCWS) must be certified. Distribution Systems are classified I or II based on population. Treatment plants are classified A and I-IV based on source of supply, quality of source, complexity of treatment, design capacity and the system's potential for health hazards. Ohio's system for classifying treatment systems is complex. For a link to the regulation, see: http://www.epa.state.oh.us/portals/28/documents/rules/Final/3745-07-03_effective_02-23-12.pdf.	Operators of any water system classification level must pass a written exam; have an HSD (or equivalent) or appropriate vocational training; and meet the following minimum operating experience requirements: Class A: 1,040 hours Class II: 12 months Class II: 36 months Class III: 60 months, including 12 months as a Class III operator. Class IV: 36 months as a Class III operator, with 24 months management experience at a Class III or IV facility. Individuals applying for Class A, I, or II level certification without sufficient experience may take the exam. With a passing score, they become an OIT and have 48 months to fulfill the appropriate experience requirement. OIT is not available for Class III or IV certification. For specific information on the types of operating experience that can be used toward the experience credit requirement, please visit: heet.pdf . Grandparenting: Applied to eligible operators through February 12, 2003	The Director of Ohio EPA (the Director) may revoke or suspend certificates of negligent operators, or work with county prosecutors in the event of falsification of data. Ohio EPA has the authority to issue administrative orders; enter into bilateral compliance agreements and impose civil, administrative and stipulated penalties in response to operator certification rule violations. Ohio EPA has the ability to pursue criminal charges.	Operators must renew their certifications every 2 years. Certificates expire on December 31 of the second year. A minimum number of contact hours are required for renewal of certifications and based on the level of certification: Class A: 8 hours Class II, III, IV: 24 hours For specific information on requirements for contact hours, please visit: http://www.epa.state.oh.us/portals/28/documents/rules/Final/3745-07-15_effective_02-23-12.pdf.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Ohio	Paper Exam: Class A: \$80 (\$50) Class I: \$105 (\$70) Class II: \$120 (\$80) Class III: \$130 (\$90) Class IV: \$145 (\$100) Starting on December 1, 2016, the fees for the above written essay exams will change to the values in parentheses. (This is a sunset provision and only kicks in if Ohio EPA does not renew the fees) On-line ABC exam: \$110 Renewal (written essay exam): Class A: \$25 Class II: \$35 Class III: \$55 Class IV: 65 Add \$20 for late renewal payment (>30 days but ≤ one year after expiration date). Funding: Ohio funds its program through fees collected under the Operator Certification Program. Ohio EPA holds Class A-IV exams only twice a year (May and November). In addition, Ohio EPA has approved the Association of Boards of Certification (ABC) to provide the Class A through Class III computer based exams more frequently than twice a year at several locations throughout the state.	To renew a certification, operators must submit an application for renewal, pay the required renewal fees, and prove contact hour courses (if requested by the Director) before the expiration date of the certificate. Lapsed certificates may be renewed within 1 year of expiration upon submission of a complete application for the exam, payment of the required fees, and passing grade on the exam required for an initial applicant. An individual who wishes to renew a certificate that has been expired for over 1 year must follow procedures for new applicants. Individuals whose certificates have been suspended may submit a request for reinstatement no earlier than 30 days before the end of the suspension period, pay the renewal fee and meet requirements for contact hours required for renewal. The Operator Certification Advisory Council (the Council) may recommend either reinstatement or an extension of the suspension period to the Director. Revocation of a certificate is permanent.	The Operator Certification Advisory Council (Council), an eight member group established by OAC Rule 3745-7-10, provides guidance and input to Ohio's water and wastewater operator certification program. Members of the Council are appointed by the Director and include four Class III or IV operators, two actively employed sanitary or environmental engineers, and two Ohio EPA members.	The Council is responsible for providing an informal review of the Program not less than every 5 years.

Program Web site: http://www.epa.state.oh.us/ddagw/opcert.aspx

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Oklahoma	Oklahoma Statute (O.S.) 27A-2-1-101, (O.S.) 59-1101, and Federal Register Volume 64 No. 24 (1999) authorizes the Operator Certification Program. Oklahoma Administrative Code Title 252, Chapter 710 authorizes the Department of Environmental Quality (DEQ) to implement the Program.	Operators of all types of PWSs (CWS, NTNCWS and TNCWS) must be certified. Facilities are classified based on population served, size (MGD), number of service connections, complexity of treatment, and source of supply. For more information, see: http://www.deq.state.ok.us/rules/710.pdf . The classifications include Class A, Class B, Class C, and Class D, with Class A serving the largest population and responsible for the most complex treatment, and Class D serving the smallest population without treatment responsibilities.	Operators must have an HSD, GED or appropriate experience or training to substitute for the educational requirement, or both; pass a written exam and comply with the documentation requirements for citizenship or immigration status of the state's immigration law. There are additional experience and training requirements for each class: Class A: 5 years of experience (≤ 2 years as operator), and 200 hours of training (≤ 40 hours of DEQ-approved courses) Class B: 3 years of experience (≤ 1 year as operator) and 100 hours of training Class C: 1 year of experience and 36 hours of training Class D: 16 hours of training Equivalencies for experience and training are listed at OS 252:710-3-36. Temporary certification for Class D operators: Must be under supervision of an appropriately certified operator and valid for one year from date of employment. Grandparenting: Not allowed.	The DEQ has enforcement authority. It can revoke or suspend certification, seek monetary penalties, and recommend bringing criminal charges. The DEQ has the authority to seek administrative orders and consent orders, as well as assess civil and criminal penalties. Stipulated penalties may also be assessed as part of a consent order.	Certification must be renewed every year. A minimum of 4 hours of approved training per year is required for renewal and experience may not be substituted for this required training.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Oklahoma	Application: \$62 Temporary certification: \$62 Late payment of application fee: \$8 per month after 120 day grace period following date of examination. After 180 days without payment, the applicant must reapply and pass the validated exam. Renewal: \$46 Reinstatement penalty: \$8 per month for each month certification is expired Non-certified helper registration/renewal fee (for individual with a suspended certificate): \$23 Funding: All fees collected enter a dedicated fund for the Operator Certification Program. The Program also receives funding from other sources.	An operator whose certification has expired for a period exceeding 2 years must reapply, pass the required exam and complete continuing education requirements. DEQ will also consider previous experience and training. An operator with a suspended certificate may be reinstated by the DEQ if the operator submits a proper application, pays all back fees and completes all reinstatement requirements, including completion of continuing education requirements and reexamination with exam score of at least 70 percent (applicants who fail to receive this passing grade may not retake the exam for one year). They also may work as a noncertified helper under the supervision of an individual certified by DEQ. After certificate revocation, an operator must wait 1 year before applying for any new certification.	The Water Quality Management Advisory Council (WQMAC) reviews and approves water quality rules and recommends changes to the Environmental Quality Board. The council is made up of twelve members, appointed for three-year terms, representing local government, industry, oil and gas, geology, engineering, agriculture, rural water districts, environmental groups, the general public, private laboratory, operator of a municipal waterworks or wastewater works facility and operator in rural water and sewer district. Four members are appointed each by the Governor, the Speaker of the House, and the President Pro Tempore of the Senate. It typically meets 3 times each calendar year in January, May and October. However, additional meetings are sometimes scheduled in order to address a rule change that does not fit the regular meeting schedule.	The Operator Certification Staff, with DEQ Legal Staff, conducts program reviews prior to the annual session of the Oklahoma State Legislature. All fees shall be automatically adjusted every 5 years to correspond to the percentage by which the Consumer Price Index (CPI) for the most recent calendar year exceeds the CPI for the calendar year immediately preceding the start of that five-year period.

Program Web site: www.deq.state.ok.us/wqdnew/opcert/index.html

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Oregon	Oregon Revised Statutes (ORS) 448.131 provides the statutory authority for the Operator Certification Program. Administrative Rules Chapter 333, Division 061 contain the regulations of Oregon Drinking Water Services (DWS), which implements the Operator Certification Program.	Small Water Systems (S) are ground water systems that serve fewer than 150 connections or purchase water without adding any additional treatment. Water Distribution (WD) System classification is based on population served: WD Level 1: < 1,500 and not S WD Level 2: 1,501 - 15,000 WD Level 3: 15,001 - 50,000 WD Level 4: > 50,000 Water Treatment (WT) System classification is based on a point system for WT Levels 1-4 for all systems that are not classified S. Points are assigned based on system size, water source, treatment type, residuals disposal and facility characteristics instrumentation. For more information on Oregon's point system, see: http://public.health.oregon.gov/HealthyEnvironments/Drinking Water/Rules/Documents/61-0210.pdf.	Individuals applying for a WD or WT certification at any level (1-4) must pass the ABC exam for certification. To qualify for the exam, applicants must have at least a HS diploma or GED or a 2 yr., AA degree, 4 yr. degree or masters and the following: Level 1: 1 year of experience or an Associate's degree in water technology, which may be substituted for 6 months of required experience. Level 2: 3 years of experience or 1 year of relevant post-high school education and 2 years of experience. Level 3: 1-3 years of relevant post-high school education combined with 3-5 years of experience, with 1.5-2.5 years of operational decision making (ODM). Level 4: 2-4 years of relevant post-high school education, and 4-6 years of experience with 2-3 years of ODM. Filtration endorsements (FE) for treatment systems only: Must be Level 2 certified water treatment operator or higher with 1 year of experience at a Level 2 (or higher) plant with conventional filtration. Small Water System Operation (SWSO): Must have an HSD or GED and complete required training course every 3 years. Any individual with a WD or WT certification, may operate an "S" system contingent on submitting the appropriate application. For more detail on these requirements, please visit: http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/OperatorCertification/Levels1-4/Documents/1to4grade.pdf.	The Department can issue notices of violation, remedial orders, and issue civil penalties. In addition, statutory penalties are available.	Level 1-4 operators must renew certification and accumulate 20 hours of approved credits (or 2 CEUs every 2 years). Small ground water system operators must renew their certification every 3 years and produce evidence of completing 6 hours of Department- approved free small water system training course during the 3-year period.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Oregon	Initial Exam Application: Level 1: \$50 Level 2: \$70 Level 3: \$90 Level 4: \$110 Note: no fees are required for "S" or "SWSO" certification. Certification renewal (biennial) \$80 Combination certification: \$40 for each additional certification or renewal Exam: \$95 (They pay AMP directly) Reciprocity review: \$100 for each certification Reinstatement: \$50 plus renewal fee Document replacement fee: \$25 FE certification: extension of a water treatment certification so no additional annual fee is required to maintain the endorsement. Funding: Program is self-funding through fees for Level 1-4 certification and EPA	Oregon's Drinking Water Services may grant certification renewal without a reinstatement fee within one month of the expiration date of the certification. After the month long grace period, the individual recertifying must pay a reinstatement fee, in addition to any appropriate renewal fees, and provide documentation of CEUs. After 1 year, the operator must retake all exams to recertify. After certification has been revoked or suspended, an operator must wait 1 year before reapplying for certification. A SWSO certification expires July 31 of every third year and can be renewed by attending an approved small water system training course.		The Department must report every 2 years to the legislature on program actions and their effectiveness. The Secretary of State's Audits Division may conduct periodic performance audits. The Drinking Water Advisory Committee reviews issues raised by stakeholders.

Program Web site: http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/OperatorCertification/Pages/index.aspx

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Pennsylvania	Section 4(c) of the Water and Wastewater Systems Operators' Certification Act (63 P. S. §1004(c)) authorizes the program. Water and Wastewater Systems Operators Certification Program Regulations are authorized in the Pennsylvania Code in Chapter 302 (71 P.S. § 510-20, Section 1920-A). Department of Environmental Protection (DEP) and the State Board for Certification of Water and Wastewater Systems Operators (the Board) administer the Program.	Pennsylvania classifies systems and facilities by capacity and treatment technology: Class A: > 5 MGD Class B: 1 to 5 MGD Class C: 100,000 GPD to 1 MGD Class D: < 100,000 GPD to 1 MGD Class E: Distribution and consecutive systems Dc – Small Systems (serving <500 people or <150 connections) using disinfected groundwater only Dn – Small Systems with no treatment Each Class is linked to the treatment technologies used at the system. These technologies have been divided into 15 categories; 6 for filtration, 4 for chemical treatment, 4 for disinfection, and 1 for laboratory supervisor.	Each applicant must have a HSD or GED. Operators of any class level must pass both a General exam and system-specific exam and have the following minimum operating experience: Class A: 4 years Class B: 3 years Class C: 2 years Class D: 1 year Class D: 6 months Experience requirements are reduced significantly if an applicant has completed a DEP approved certificate program, has an Associate's degree with a focus in water or wastewater or an Associate's or Bachelor's degree in an associated field of science or engineering. Successful completion of 10 hours of DEP- approved water or wastewater training is considered equal to 1 month of operating experience. Certified operators for any system classification must also complete DEP's system security course. The course must be completed by the end of the operator's first full 3-year cycle that begins on or after October 1, 2010. Failure to complete the course results in the loss of an operator's license. Grandparenting: A one-time opportunity for NTNC water systems and wastewater collection systems with pump station(s).	DEP can assess criminal and civil penalties against an owner or an operator of a system after an order has been issued and the owner or operator violates that order. DEP can also petition the Board to modify, revoke or suspend and operator's license.	Certification must be renewed every 3 years. Operators must complete a specific number of continuing education hours during each 3-year period, depending on the type of system. The values below represent the number of training hours required for an operator's first 3-year cycle and subsequent 3-year cycles, respectively: Class A: 15, 30 Class B: 15, 30 Class C: 15, 30 Class D: 8, 15 Dc: 4, 9 Dn: 3, 6

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
To a a a a a a a a a a a a a a a a a a a	Initial certification and reciprocity: Class A, B, C, D \$150, Class Dc, Dn and E - \$100 Certification renewal: \$60 Examination fee for both nitial certification and certain license upgrades: \$35 per exam Fraining provider approval application: \$90 Approved Exam providers: \$400-\$800 (based on number of exam sessions per year) Course approvals: \$115 Brief) \$300 (full) Continuing Education: \$240-\$900 by approved training provider; \$10 per contact nour (classroom), \$30 per contact hour (online), or \$1,600 (onsite) for Department training Annual system service fee: \$65-\$500 (varies by class) Fees are deposited into a restricted Safe Drinking Water Account in the General Fund, which is administered by DEP.	Certificates are renewable without examination if the operator pays all processing fees, meets continuing education requirements for the period prior to expiration, and submits a completed application. If certification has lapsed, it can be reinstated without examination within 24 months by paying all prior years processing fees, meeting all continuing education requirements for the period prior to expiration, and submitting a completed application. If certification has lapsed for more than 2 years, the operator must apply for initial certification and re-take the appropriate examinations. If certification has been suspended, it will be reinstated by the Board after the term of the suspension has expired and operator has met any requirements of the Board.	The Board reviews the rules and regulations proposed by the Environmental Quality Board (EQB) and conducts the review of all certification applications. The 7-member Board includes a representative of the DEP, two operators, two system owners, an academic involved in environmental or sanitary engineering, and a public member. The Certification Program Advisory Committee (CPAC) consists of 10 certified operators, an academic in civil, environmental, or sanitary engineering, four system owners, a professional engineer, and a public member. The Small Systems Technical Assistance Center Advisory Board (TAC) consists of representatives of a number of local and state agencies and industry associations involved in small drinking water system operation. Both CPAC and TAC provide comments to DEP and the Board on regulatory proposals, guidance and the implementation of the Operator Certification Program.	Recently, significant changes to the business processes were made as a result of internal and external review of the Program during regulatory development. The Board completes an annual review of the exam and exam administration protocols. Protocols for extensive external program review for subsequent reviews on a 3-5 year basis are now under development. The regulations are subject to a sunset review, which requires the Department to determine whether the regulations effectively fulfill the goals for which they were intended. The Department reviews the adequacy of the fees to administer the program at least triennially and provides a written report to the EQB which makes recommendations for adjustments, where needed.

Program Web site: http://www.dep Web.state.pa.us/portal/server.pt/community/operator_certification/21067

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Puerto Rico	Constitution of Puerto Rico Section 6 Article IV, and Act No. 53, as amended	Treatment systems are classified based upon a point system that takes into account design flow, population, treatment units, and treatment type. Category I: ≤ 45 points Category II: 36 - 75 points Category III: 76 - 100 points Category IV: ≥ 101 points Operators are classified based upon the category of system they operate, education, and experience.	HSD and 1 year of experience. Operator II: Can operate a Category I or II system, and needs an HSD and 1 year as a certified Operator I. Operator III: Can operate a	The Examining Board of Operators of Drinking Water and Wastewater Treatment Systems and Plants (the Board) can suspend, or revoke certificates of negligent operators, or after failure to meet the requirements of Act 53, as amended. Puerto Rico also has the authority to issue administrative orders.	Permanent licenses must be renewed every 3 years and provisional licenses are issued for 1 year. In order to renew a certificate, operators must complete CEUs: Operator I: 10 CEUs Operator II: 15 CEUs Operator III: 20 CEUs Operator IV: 25 CEUs

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Puerto Rico	Fees are deposited into the General Fund of the Commonwealth of Puerto Rico. Funding is available through the DWSRF/PWSS Program. FTEs: There is a sevenmember board and additional DOH staff are available for specific activities of the Program.	Operators are allowed to request a license renewal within 1 year of the expiration date. After 1 year, operators must retake the certification exam. Licenses may be denied, suspended or revoked by the Board after written notification of a failure to meet the requirements of Act 53, as amended.	The Board consists of seven members, including the Secretary of Health, the President of the Environmental Quality Board, the Executive Director of the Puerto Rico Aqueduct and Sewer Authority, the Secretary of the Department of Environmental and Natural Resources, and three community members (1 of which must be a licensed operator). This Board is appointed by the Governor, and reports to the Governor annually on its actions.	The DOH is undertaking internal reviews and is considering external reviews by a group of stakeholders or an advisory council on a 5-year basis.

Program Web site: Not available.

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Rhode Island	Chapter 23-65 of the General Laws of Rhode Island authorizes the Operator Certification Program. RI Rules and Regulations R23-65-DWQ authorize the Department of Health's (DOH) Board of Certification for Drinking Water Operators (Board) to implement the Program.	Water supply and distribution systems (D) are classified according to population served: VSSD: < 500 Class 1D: 501 - 1,500 Class 2D: 1,501 - 15,000 Class 3D: 15,001 - 40,000 Class 4D: > 40,000 Treatment facilities (T) are classified according to a point system, which takes into account population served, source water, design flow, average raw water quality, complexity of treatment, sludge/backwash water disposal, and laboratory control: VSST: < 10 points Class 1T: 10 - 30 points Class 2T: 31 - 55 points Class 3T: 56 - 75 points Class 4T: > 75 points For more information on Rhode Island's point system for treatment facilities, see Appendix A of R3-65-DWQ at: http://sos.ri.gov/documents/archives/regdocs/released/pdf/DOH/7064.pdf.	For all system classes, applicants must pass an exam prepared by the Association of Boards of Certification (ABC), have an HSD or GED, and meet the experience requirements specific to each system class: VSST/D: 3 months operating class VSST/D or higher; experience or training can be used to satisfy the educational requirement. Class 1T/D: 6 months full-time experience at Class 1 T/D facility or higher. Class 2T/D: Full Class 1T/D certification and 1 year full-time experience at Class 1 T/D after certification or 2 years full-time experience at Class 1T/D or higher. Class 3T/D: Full Class 2T/D certification and 2 years full-time experience after certification, or 4 years full-time experience at Class 2T/D or higher, or Associate's degree in physical or biological science and 2 years full-time experience at Class 2T/D or higher, or Bachelor's degree in physical or biological science and 1 year full-time experience at Class 3T/D or higher. Class 4T/D: Associate's degree (see above) and 4 years full-time experience at Class 3T/D or higher, or Bachelor's degree (see above) and 2 years full-time at Class 3T/D or higher nor having been employed by a RI PWS Class 3T/D or higher (For Class 4T only: 14 semester credits of post-high school education in physical, and biological science, or both). Grandparenting: Permitted for operators at CWSs serving > 500 if employed as of June 25, 1997, and for operators at CWSs serving < 500; or operators at non-GWUDI or non-surface water NTNCWSs employed as of July 1, 1999.	Enforcement is initiated by DOH staff and brought before the Board. The Board, after a hearing, may revoke, suspend, or otherwise discipline the holder of the certificate. The Board can also impose fines and imprisonment. Cases may be referred to the Attorney General's Office.	Certificates must be renewed every 3 years. To renew, operators must have actively worked in their area of certification at least 20 percent of the time. Operators must also complete the following number of contact hours: VSS: 3 hours Class II: 15 hours Class III: 30 hours Class IV: 30 hours Grandparented operators must follow the same renewal procedures as non-grandparented operators. Applicants must complete 50 percent or more of their required training contact hours in technical areas directly related to the operations of the water system and may complete no more than 25 percent of their training in the areas of health/safety or supervisory skills.

State	Resources Needed to Implement the Program	Recertification	Stakeholder Involvement	Program Review
Rhode Island	Application/exam fee: \$38.50 (As of 2014 fee is determined by the Board to cover the cost of the examination but cannot exceed fifty dollars.) Renewal fee: none Funding: Fees and additional funding. Testing: Examinations are held at least three times per year at a time and place designated by the Board. The state plans to increase the frequency of testing to certify grandparented operators, and operators at small CWSs and NTNCWSs. The state will continue to use ABC validated exams. Data Management: Handled by DOH staff through a licensing software tracking applicants, operators, certificates, exams, compliance, and renewals.	Operators whose certificates have lapsed may submit an application for renewal up to 6 months after expiration. After 6 months, operators must meet all requirements for new applicants in order to become recertified. - In order to become recertified applicants must apply to the Board. If the Board does not agree to reinstate the license the applicant must qualify through the examination process.	Stakeholder involvement in the Operator Certification Program is ensured by the make-up of the Certification Board. The Board is comprised of seven people, including the Director of the DOH, or his designee, and six members appointed by the governor. These six members include a professional water supply engineer, a qualified operator of a publicly owned PWS, a director of a water supply facility, a labor union representative, a representative of business or industry, and a residential consumer of water. The state is working towards increasing stakeholder participation, as outlined in EPA guidelines, to include obtaining Board approval, community review, review by other interested parties, public hearing and comment, and state responses to comments.	The Board meets at least quarterly for continuous review of the Program. Any changes to the regulations are discussed, and decisions are rendered on all certification issues (for example, exam results, compliance issues, budgeting, and training approval). The Certification Board and DOH conduct reviews at least every 3 years.

Program Web site: http://www.health.ri.gov/water/for/drinkingwateroperators/

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
South Carolina	SC Code of Laws Annotated Section 40-23-5 et seq. provides statutory authority for the Operator Certification Program. SC Code of Regulations Annotated Chapter 51 provides the specific rules and regulations for the Program. The Labor, Licensing, and Regulation, Board of Environmental Certification (the Board) implements the Program.	Treatment systems are classified Group I-VI based on source water and complexity of treatment. For more information, see: http://www.scdhec.gov/environment/WaterQuality/DrinkingWater/OperatorClassification/. Group VII treatment systems are water dispensing stations that use water from an approved PWS, or bottled water plants that treat water from a PWS, or from non-GWUDI systems. Distribution systems are classified as follows: Group I: TNCWSs (no certified operator required) Group II: < 600,000 GPD and no fire protection Group III: 600,000 -6,000,000 GPD, or Group II systems that provide fire protection Group IV: 6 - 20 MGD Group V: > 20 MGD Group II- V are CWSs and NTNCWSs classified during sanitary survey with reliable production capacity (including all wells, surface water sources, and purchased sources).	Treatment plants (TP) of Group I-VI (with VI being the highest) must have a certified operator of class E - A (with A being the highest). Distribution systems (DS) of Group II-V (with V being the highest) must have a certified operator of Class D - A (with A being the highest). OIT (trainee): May apply for a 2 year OIT license and shall always be under the direct supervision of a legally licensed operator of the proper grade. Applicants must meet the following additional requirements for each system class: Levels of Certification: Trainee: Valid trainee permit and fee Level E (TP only): Valid trainee permit, pass exam, 6 months experience Level D: Valid trainee permit (DS), valid E permit (TP), pass exam, and 1 year experience Level C: Valid D permit, pass exam, and at least 2 years of experience Level B: Valid C permit, pass exam, and 3 years of experience Level A: Valid B permit, pass exam, and 4 years of experience Grandparenting: No longer applies.	The Department of Health and Environmental Control (DHEC) establishes the certification classifications while the Board enforces operator certification requirements. Any willful violation of §44-55-80 is deemed a misdemeanor with a fine of less than \$10,000 per day of violation, imprisonment or both. Any other violation may result in a civil penalty of less than \$5,000 per day in violation. The state may also seek injunctive relief. Violations are discovered through inspections, sanitary surveys (about once a year), or through monitoring.	Certificates must be renewed annually and operators must complete 12 CEUs every 2 years.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
South Carolina	Application: \$50 Exam: \$103 Renewal: \$30 Late Renewal: \$230 Reciprocity: \$50 Education: State relies on ABC's Continuing Education Course Topic Criteria. For more information, see ABC's Continuing Education Course Topic Criteria available at: http://www.abccert.org/abc_certification_program/Renew_your_ABC_Certification.asp . Applied Measurement Professionals (AMP) administers the Board examinations.	An operator may pay a penalty and renew certification for one year after expiration (through June 30 of the following year). After that, the license is no longer valid, nonrenewable, and the operator must reapply.	The 9-member Environmental Certification Board is made up of licensed operators of water treatment and distribution systems, wastewater facilities, and a well driller; environmental training instructor; regulators; employees from several governmental entities and the public. The board meets quarterly.	Periodically, the Legislative Audit Council evaluates the Program at the request of the South Carolina General Assembly. The South Carolina Environmental Certification Board is primarily responsible for providing the external review of the program.

Program Web site: http://www.llr.state.sc.us/pol/environmental/index.asp?file=PDF_Files/qualifications.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
South Dakota	South Dakota Codified Law 34A-3 authorizes the Operator Certification Program. The Administrative Rules of South Dakota 74:21:02 contain the regulations for the Program. The South Dakota Department of Environment and Natural Resources (DENR) implements the Program.	There are 4 classifications of operators that correspond to the plant or system classification. Treatment Plant (TP) classification is based on a point system that takes into account population served, plant flow, water source, water quality, complexity of treatment. Class I: ≤ 30 points Class II: 31-55 points Class III: 56-75 points Class IV: > 75 points For more information on the point system, see: http://legis.sd.gov/rules/DisplayRule.aspx?Rule=74:21:02:61. Distribution System (DS) classification is based on population served. Class I: ≤ 1,500 people Class III: 15,001-15,000 people Class IV: > 50,000 people Class IV: > 50,000 people	Applicants must have at least a HSD or GED, pass an ABC exam of the associated class level with a minimum grade of 70 percent, and meet the following requirements: Class I: One year at a Class I facility or higher Class II: 3 years at a Class I facility or 2 years at a Class II facility or higher Class III: 2 years of college or vocational school in engineering, environmental science, or a related field, and 4 years of experience, (including at least 2 years in DRC at Class II facility or higher); or 6 years of experience, (including at least 3 years at a Class II facility or higher) Class IV: Completion of a 4 year college or vocational school degree in engineering, environmental science, or related field, and 4 years of experience (including at least 2 years in DRC at Class III facility or higher); or 8 years of experience (including at least 4 years of experience (including at least 4 years of experience at a Class III facility or higher). Experience may be substituted for education. For details on substitutions for the education requirements, please visit: http://legis.sd.gov/rules/DisplayRule.aspx?Rule=74:21:02:47 . Grandparenting: No longer permitted.	DENR has the authority to suspend or revoke a certificate for: fraud, deception, or submitting or omitting inaccurate qualifications; negligence; lacking reasonable care, judgment, or the application of knowledge in the performance of duties; or incompetence or inability to perform the duties. Civil penalties of up to \$1,000 per day can be assessed for operating a system without a certificate. Operating a system without a properly certified operator is a Class 2 misdemeanor.	Certificates expire on February 1 every year. Operators must obtain the following CEUs in the 3 years prior to the renewal date: Class I or II: 1 CEUs Class II or IV: 2 CEUs More than one Class I and II: 1.5 CEUs More than one (with at least one Class III or IV): 3 CEUs 1 CEU = 10 contact hours

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
South Dakota	Exam: \$10 Renewal: \$6 Funding: All fees are deposited into an operator certification fund to be used by the state's Operator Certification Program. South Dakota Association of Rural Water provides training activities through a DENR contract.	Lapsed certificates, or certificates of operators who have terminated employment, may be renewed for up to 2 years after the date of the certificate's expiration. After the 2-year period, it is necessary to follow the procedure for initial certification. Operators whose certificates have been suspended or revoked may reapply to the Secretary of the DENR if the conditions on which the suspension or revocation was based have been remedied.	The Board of Certification, comprised of four certified operators, a faculty member from an engineering college, and a city engineer, advises DENR on the Program. The Board meets two to three times each year. Meetings are open to the public and are advertised through various water and wastewater publications.	There is no formal internal or external review process. However, internal reviews are conducted regularly by DENR staff and the Board, while external reviews are recommended at least every 5 years.

Program Web site: http://denr.sd.gov/des/dw/opcertqa.aspx

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Tennessee	Water and Wastewater Operator Certification Act T.C.A. 68-221-901 through 68-221-915, and Rules of the Tennessee Department of Environment and Conservation (TDEC) Board of Certification for Water and Wastewater Operators (the Board): Chapter 0400-49-01. The Division of Water Resources (the Division), within the TDEC, administers the compliance portion of the Operator Certification Program.	Treatment plant classification into Grade I – IV is based on a point system that takes into account population served, type of treatment, source of supply, complexity of treatment, and laboratory control by plant personnel. For more information, please visit: http://www.tn.gov/sos/rules/040 0/0400-49/0400-49- 01.20140819.pdf Distribution system classification is based on the number of service connections: Small Water System (SWS): < 50 service connections, includes all water systems which have a ground water source not under the direct influence of surface water, provided the system does not use any treatment other than disinfection, and those systems which purchase water for resale and serve less than 50 service connections. Grade I: 50-5,000 service connections Grade II: > 5,000 service connections	Applicants must have a HSD or GED and pass an exam of the associated class level with a minimum grade of 70 percent. For treatment plant certifications, applicants must also demonstrate: Grade I: At least 12 months experience at a Grade I or SWS. Grade II: At least 12 months experience at a Grade I or II. Grade III: At least 12 months experience at a Grade III or 12 months at a Grade II and six months at Grade III. Grade IV: At least 60 months of experience at a Grade III or IV or Bachelor's degree in chemistry or related science and 12 months experience at Grade III or IV. For distribution plant certifications, applicants must also demonstrate: SWS: At least three months of experience at a SWS Grade I & II: At least 12 months operating experience at a water distribution system Grandparenting: Not allowed.	TDEC has jurisdiction in enforcement actions against operators and systems. The Commissioner of the TDEC may revoke or suspend an operator's certificate. Any municipality, utility district, corporation, or person violating any provisions of the rules commits a Class C misdemeanor (each day of violation is a separate offense). Civil penalties may include a fine of ≥ \$10,000/day. Administrative orders may also be issued. The Division tracks compliance through frequent operator surveys that verify all systems have correct level of certified operator.	Operators must renew certificates annually. All certificates expire January 31 of each year. An operator may renew his/her certificate until June 30. Operators with Grade III and IV (treatment plant) certificates must complete 12 contact hours of training per 3-year continuing education period. Operators with Grades I and II (both treatment and distribution) certificates and SWS must complete 6 contact hours of training per 3-year continuing education period.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Tennessee	Application: \$100 Discount renewal: \$30 (payment prior to February 1) Standard renewal: \$60 (payment from February 1 through June 30) Reciprocity certificate: \$100 Funding: All fees are paid to the state treasury. The Fleming Training Center (FTC) administers the training and manages certification records of operators — FTC staff supervises the examination of operators on behalf of the board.	An operator whose certificate is	The 5-member Board includes certified operators, a municipal official, a university faculty member, and a member of Department staff. The Board reviews rules, budgeting, staffing, and the Program's fee structure.	Internal reviews are conducted, in part, during fiscal planning and in the preparation of the Department's Annual Performance Plan. A financial review is performed every 2 years by the state Comptroller's Office. The Operator Certification Board reviews budgeting, fee structures, and staffing needs of the Program. A sunset review of the Board occurs every 5 years.

Program Web site: http://www.state.tn.us/environment/water/fleming_operator-certification.shtml

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Texas	Texas Water Code, Chapter 37 provides statutory authorization for the Operator Licensing Program. The Texas Health and Safety Code, Section 341.034 requires operators to have a license. Title 30 Texas Administrative Code (TAC), Chapter 30 provides the regulations and authorizes the Texas Commission On Environmental Quality (TCEQ) to implement the Program. Subchapter A applies to all licenses issued by the TCEQ. TAC 30 Subchapter A was last updated in July 2014. Subchapter K 30.387 Definitions was last updated in 2012.	There are four classes of operator licenses, A-D, based on source, number of connections, and treatment applied. This information is used to determine the number, type, and level of operators needed at the systems. Additional information on the class of license needed for the type of system are described in TAC Chapter 30, Subchapter K at: https://www.tceq.texas.gov/licensing/licenses/water-lic .	Applicants must have a at least a HSD or equivalent, pass an exam with a minimum grade of 70 percent, have: Class A: 164 hours training; and master's degree and 4 years' experience, bachelor's degree and 5 years' experience, or HSD and 8 years' experience Class B: 100 hours training (groundwater and distribution systems) or 124 hours (surface water); and a bachelor's degree and 2.5 years' experience or HSD and 5 years' experience Class C: 60 hours training and 2 years' experience Class D: 20 hours training Training courses and specific requirements for experience (for example, must be in a related field), and education (for example, required majors) can be found at: http://www.tceq.state.tx.us/licensing/licenses/waterlic . Operators must also complete a Criminal Conviction Notification form. Grandparenting: Not permitted.	TCEQ can issue administrative orders with or without penalties; make referrals to the Texas Attorney General's Office for civil judicial action or to the EPA for civil judicial or administrative action; make referrals for criminal action; suspend or revoke a license; or deny a license or the opportunity to take an exam. Criminal history may be taken into account. Texas has a program whereby systems/operators may perform community service in order to reduce financial penalties.	All licenses are valid for 3 years. Operators must complete 30 hours of continuing education (10 hours for each year the license is in effect), during the life of the license. 1 credit hour = 1 hour of attendance in TCEQ approved training courses, correspondence courses, seminars, and association meetings.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Texas	Application: \$111 Renewal: \$111 Duplicate license: \$20 Funding: Funding for the Program comes from the state's General Revenue Fund. Fees are deposited in the state treasury to the credit of the TCEQ occupational licensing account.	If a license has lapsed for more than 30 days, an operator must meet all current education, training, and experience requirements as well as submit an application, pay the fee, and pass the exam. If a license is suspended, the operator may renew the license if the renewal date falls within the suspension period. The license will then be automatically reinstated following the suspension period unless the operator failed to renew. If a license is suspended a second time, the suspension becomes a permanent revocation. If a license is revoked, an operator must apply as if applying for the first time, following the revocation period.	The Water Utility Operator Licensing Advisory Committee (WUOLAC) is a 13-member committee that assists with reviews of exams, training procedures, and provides recommendations for rule revisions. For more information on WUOLAC, please see: https://www.tceq.texas.gov/l icensing/groups/wuoc_com m.html	Internal review is recommended every 3 years. External review is recommended every 5 years.

Program Web site: http://www.tceq.state.tx.us/licensing/licenses/waterlic

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Utah	Utah Code 19-4- 104 authorizes the Operator Certification Program, and Utah Administrative Code, Rule 309- 300-1 to 19 authorizes the Department of Environmental Quality Division of Drinking Water (the Division) Drinking Water Board (the Board) to implement the Program.	Treatment systems are classified based on a point system or the size of the population served, whichever results in a higher classification. The point system ranks design flow (in MGD), source water, water quality, and complexity of treatment. http://www.deq.utah.gov/Laws_Rules/ddw/docs/rules/300/R309-300.pdf. There are four levels: Grade 1: ≤ 1,500 people, 0-40 points Grade 2: 1,501-5,000 people, 41-65 points Grade 3: 5,001-15,000, 66-90 points Grade 4: > 15,000, >91 points Distribution systems also use points and population served for classification: Small System: 25-500 people, 0-10 points Grade 1: 501-1,500 people, 0-10 points Grade 2: 1,501-5,000 people, 10-25 points Grade 3: 5,001-15,000 people, 26-50 points Grade 4: > 15,000 people, >51 points	Applicants must pass an exam (at the same grade as the system they are operating) with a minimum grade of 70 percent and meet the following experience and education requirements: Small system and Grade 1: 1 year of experience (does not have to be in direct responsible charge, or DRC). Grade 2: 2 years of experience (0 years in DRC) with any level of education over a HSD; without HSD, 3 years of experience (0 years in DRC) Grade 3: With Associate's degree or higher, 2 years of experience (1 year in DRC); with only HSD, 4 years of experience (2 in DRC); without HSD, 6 years of experience (3 in DRC). Grade 4: With a Bachelor's degree or higher, 4 years of experience (2 in DRC); with an Associate's degree, 6 years of experience (2 in DRC); with only HSD, 8 years of experience (4 in DRC); without HSD, 10 years of experience (5 in DRC). Grandparenting: Available to operators of NTNCWSs or CWSs serving < 800 people using only ground water or purchased water sources before February 1, 2003.	Cases of non-compliance with certification rules are considered by the Commission, and referred to the Board for appropriate enforcement action. Actions may include revocation or suspension of the certificate subject to an appeals process.	All certificates must be renewed every 3 years. CEUs are required for the renewal of all certificates and must be earned within the 3-year renewal period. Requirements apply to all operators, including those with grandparented certificates: Small systems and Grade 1: 2 CEUs Grade 2: 2 CEUs Grade 3: 3 CEUs Grade 4: 3 CEUs As part of the 2 CEU requirement, grandparented operators must earn 0.7 CEUs from an approved pre-exam training course. (1 CEU = 10 contact hours)

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Utah	Application: No fee.	A lapsed certificate can be renewed	An Operator Certification	There is no formal internal or
	Exam (all grade levels): \$100	within 6 months of its expiration through an application. A certificate	Commission (the Commission) is appointed by the director of the	external review process. However, the Operator Certification
	Renewal: \$100	that has lapsed more than 6 months,	Drinking Water Board, based on	Program is reviewed by the
	Reciprocity: \$100	but less than 18 months, may be renewed through an application for	recommendations from DEQ, the Utah League of Cities and Towns,	Commission. The Commission meets at least annually to review
	Reinstatement of lapsed certificate: \$200	renewal and payment of the reinstatement fee, or by passing an	the Training Coordinating Committee of Utah, the	the Program.
	Funding: State general fund, federal and collected fees	exam. A certificate that has lapsed 18 months or more may not be renewed: the individual must meet	Intermountain Section of the American Water Works Association, the Civil or	
	Data Management: Program data will be stored in the Division's database.	all requirements of initial certification.	Environmental Engineering Departments of Utah's	
	Testing: Certification tests are offered four times a year in written format	The Commission reviews situations of revoked or suspended licenses	Universities, and the Rural Water Association of Utah.	
	and year-round online in electronic	and decides how to handle	The 7-member Commission has	
	format.	reinstatement. The decision depends on the severity of the infraction and the length of the suspension.	the authority to conduct all work necessary to promote the Operator Certification Program,	
		the length of the suspension.	recommend certification of operators, and maintain program	
	W.L. to Low //		records.	

Program Web site: http://www.deq.utah.gov/Certification/certification/drinkingwater/certifiedoperators.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Vermont	Title 10 Vermont Statutes Annotated (VSA) Chapter 56 authorizes the Operator Certification Program. Vermont Water Supply Rule Chapter 21 provides the regulations. The Agency of Natural Resources' (ANR) Drinking Water & Groundwater Protection Division (DWGWPD) implements the Program. The Water Supply Rule was last updated in December 2010.	There are 5 classes of systems: Classes 1-4 (with subclasses 1A, 1B, 4A1, 4A, 4B, and 4C), determined based on system type, source water, and type of treatment(s); and Class D which are distribution systems purchasing water and providing no treatment and serving 3,300 or more people. There are three types of operator classifications: Operator in Training (OIT), a Provisional Certification, and a Full Certification. For more information on the classification system or the types of certifications, see: http://drinkingwater.vt.gov/dwru les/pdf/vtwsr2010.pdf.	Applicants must have at least a HSD or GED, pass an exam of the associated class level (except Class 1), submit a letter from their supervisor that verifies knowledge and years of experience (except Class 1), and meet the following operating experience requirements: Class 1: No experience Classes 2 & 3: 1.5 years Classes 4A1 & 4A: 2 years Class 4B: 2.5 years Class 4C: 3 years Class D: 1.5 years Substitutions of related schooling may be made for up to 50 percent of required experience. An applicant must also certify that he is in good standing with respect to child support payable under a support order. Grandparenting: Not permitted.	ANR can revoke or suspend an operator's certificate for submission of materially false or inaccurate information; violation of any material requirement, restriction, or condition of certification, including violation of any statute, rule, or order governing water supply regulation; and failure to use care or judgment in the performance of duties. ANR can also issue Administrative Orders, imposition penalties, order injunctive relief, and can refer a case to the Attorney General's Office for civil or criminal action.	Certificates for all system classes must be renewed every 3 years. Operators must complete the following continuing education during each 3 year renewal period: Class 1A: None; encouraged to attend at least 8 hours Class 1B: Minimum 3 hours Class 2: Minimum 10 hours Class 3, 4, D: Minimum 20 hours DWGWPD approves training courses by third party providers.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Vermont	Application: \$45 (Class 1A and 1B); \$80 (Class 2, 3, 4A1, 4A, 4B, 4C, and D) Exam: No fee. Renewal: \$45 (Class 1A and 1B); \$80 (Class 2, 3, 4A1, 4A, 4B, 4C, and D)	procedures for new applicants. If a license is suspended or revoked, ANR will decide the recertification procedure for the former applicant. The Secretary may decide that the revocation will	The Operator Certification Advisory Committee may help to rewrite the Water Supply Rules applying to operator certification in order to incorporate EPA guidelines and state program changes. Stakeholder involvement has also contributed to review and revision of exams, identification of training needs, and the development of the operator tuition reimbursement program. All Committee meetings are open to the public. The Green Mountain Water Environment Association's training committee coordinates water and wastewater training activities in Vermont. The Certification Officer is a member of the committee.	Reviews are done internally by the Operator Advisory Committee every 1-3 years and externally every 3-5 years.

Program Web site: http://drinkingwater.vt.gov/opcertcertification.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Virginia	Title 54.1, Chapter 23 of the Virginia Code provides the statutory authorization for the Operator Certification Program. 18 Virginia Administrative Code (VAC) 160-20 contains the rules and regulations for the Program. VA Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals (the Board) administers the Program. The Board is located within the Department of Professional and Occupational Regulation (DPOR).	System classification is based on population served, complexity of treatment, and design capacity. There are six classifications (1-6), with Class 1 being the most complex system. Class 1: Serves ≥ 50,000 or has a rated capacity of ≥ 5.0 MGD; various treatment methods Class 2: Serves 5,000 - 50,000 or has a capacity of 0.5 MGD - 5.0 MGD; various treatment methods Class 3: Serves < 5,000 people or has a capacity of < 0.5 MGD; different treatment methods than Class 4 Class 4: Serves < 5,000 people or capacity of < 0.5 MGD; various treatment methods Class 5: Serves < 5,000 people; no treatment methods Class 5: Serves < 400 people; no treatment or hypochlorination for disinfection Class 6: Serves < 400 people; no treatment For more information, please visit: http://www.dpor.virginia.gov/uploadedFiles/MainSite/Content/Boards/WWWOOSSP/A436-19REGS.pdf.	and pass a Board-approved and classification-specific exam, and meet the following education and experience requirements: Class 1: Bachelor's degree, Class 2 license and 2.5 years of experience; or Class 2 license with 5 years of experience with HSD or GED; or Class 2 license and 10 years of experience without a HSD or GED. Class I operators can operate all classes of system. Class 2: Bachelor's degree and 18 months of experience; or Class 3 license and 3 years of experience with HSD or GED; or Class 3 license and 6 years of experience without a HSD or GED Class 3: Bachelor's degree and 1 year of OIT experience; or 2 years of OIT experience with HSD or GED; or Class 4 license and 4 years OIT experience without a HSD or GED Bachelor's degree for any level must be in engineering or engineering	DPOR's, Enforcement Division investigates regulatory violations by licensees. The Department's Special Criminal Investigations Division will investigate facilities and operators alleged to be in violation of the operator certification regulations. The Board has the power to discipline and fine any licensee, suspend a license, revoke a license, refuse to renew a license, refuse to reinstate a license, and deny any application for a license.	-

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Virginia	Application: \$100 Renewal: \$80 Late renewal fee: \$25 Exam: \$85 Funding: Self-supporting. Testing: Exams are administered daily by PSI to applicants who have submitted an Exam and License Application to the Board which has been deemed eligible. Specialized Training: Several organizations provide Board-approved specialized training for Class 1, 2, and 3 certifications.	If operator fails to submit the renewal notice and fee to DPOR within 30 days (but before 12 months) after the certification expiration date, a late penalty will be imposed. This operator may renew his/her license without reexamination. An operator who fails to submit the renewal notice and fee to DPOR within 12 months of the certification expiration date must follow the procedures for new applicants. The Board decides what is required for recertification of revoked or suspended licenses.	Department of Health's Office of Water Programs, the executive director of the State water Control Board, and one citizen. The Board and its ad hoc committees facilitate stakeholder involvement. Additionally, the Board and its committees oversee	There are no formal internal review procedures. Exams are reviewed as part of the validation process. Regulations are reviewed by the Board when an issue arises. External reviews consist of a mandatory 20-day public comment period every 3 years to review the appropriateness of all VA regulations.

Program Web site: http://www.vdh.state.va.us/ODW/Licensure.htm

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Washington	The Revised Code of Washington (RCW) 70.119 provides the statutory authority for the Operator Certification Program. Washington Administrative Code (WAC), Chapters 246- 292 provide the specific rules and regulations governing the Program. The Department of Health's Office of Drinking Water (ODW) administers the Operator Certification Program.	Treatment facilities, or purification plants, are classified using a point system that takes into account size, type of source water, and complexity of treatment. The standards used are the ABC's <i>Purification Plant Criteria</i> . Class 1: < 31 points Class 2: 31 to 55 points Class 3: 56 to 75 points Class 4: >75 points Additional information on the point system is found at: http://www.doh.wa.gov/Portals/1/Documents/4200/ch246-292wacPublic.pdf . Distribution systems are classified based on population served: Group S: < 251 Group 1: 251 - 1,500 Group 2: 1,501 - 15,000 Group 3: 15,001 - 50,000 Group 4: > 50,000 There are 4 Water Treatment Plant Operator (WTPO) certification levels and 4 Water Distribution Manager (WDM) levels. Group S distribution systems only need a water distribution specialist (WDS).	Grandparenting: No longer permitted.	oDW may issue: an informal letter directing appropriate corrective measures; a notice of violation requiring appropriate corrective measures; a compliance schedule; or an order requiring specific actions or ceasing unacceptable activities. ODW may also impose civil penalties, revoke or suspend a certification; and take other legal action by the Attorney General or local prosecutor.	Certificates must be renewed every year except that an initial certificate issued after October 1st will be valid through the following calendar year. During each professional growth reporting period of at least 3 years, operators must accumulate a minimum of three CEU or college credits or advance as a WDM or WTPO by examination to a higher level classification.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Washington	Application fee: \$87 (WTPO, WDM, WDS) and \$51 (Cross connection control specialist and backflow assembly tester) ABC exam charge: \$35 Renewal: \$42 Reapplication: \$42 Renewal late fee: \$35 Reciprocity fee: \$177 per classification Funding: DWSRF and federal operator certification funds initially. Future funding will come from fees, as the Program is required by state law to be supported by fees.	Certifications that lapse for less than 2 months after the annual expiration date may be renewed by paying the renewal fee, late fee, and any other renewal requirements. Certifications that lapse for more than 2 months are invalid. Operator must meet the requirements of a new applicant. Operators with a suspended certificate must continue to meet all renewal requirements to maintain certification after the suspension period has ended. Operators with a revoked certificate must meet the requirements of a new applicant.	The Water Works Certification Advisory Committee was established to advise ODW on matters pertaining to the Operator Certification Program. The committee membership consists of the Operator Certification Program Coordinator, the Certification Program Coordinator's supervisor, the Office of Drinking Water Director, Stakeholder members include representatives from the following: Cross Connection Control WDM Distribution Water Treatment Plant operations Sewer and water Districts Public Utility Districts Employer of Certified operators At Large (Satellite Management Agencies) Pacific Northwest Section- American Water Works Association Washington State Pipe Trades Backflow Assembly Testers Small Systems The Committee acts as a link between ODW and operators, water systems, consumers, and other stakeholders.	The Water Works Certification Advisory Committee, as well as other ODW committees assist in program reviews. Additional external review is conducted through the regulation revision process.

Program Web site: http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/WaterworksOperatorCertification

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
West Virginia	West Virginia Code 16-1-4 and 16-1-9 contain the statutory authorization for the Operator Certification Program. Title 64 Legislative Rules of the Bureau for Public Health, Series 4, contain the regulations for the Program operated by the Certification and Training (C&T) Program of the Department of Health and Human Resources (DHHR), Environmental Engineering Division.	Systems are classified based on source water, population served, and complexity of treatment. There are six classes of systems, including 1D, Water Distribution (WDS), and Class I-IV, with Class IV being the highest. All CWSs and all NTNCWSs except R systems are at a minimum Class I systems; all surface water and GWUDI systems are at a minimum Class II systems; and all TNCWSs are 1D systems. There are seven classes of certified operators; 1D, WD, OIT, and Class I-IV. For more on the identifying attributes of each system type and the related classes of operator certification, see: http://apps.sos.wv.gov/adlaw/csr/readfile.aspx?DocId=23656 &Format=PDF.	All applicants must be at least 18 years old, have a HSD or GED (not required for Class 1D), complete an approved certification course, pass the Class-level exam with a minimum score of 70 percent and meet the following experience requirements: 1D and R: None WD: 1,000 hours experience at a WDS or higher PWS. Class I: 2,000 hours experience at a PWS. Class II: 4,000 hours experience at a PWS system, with at least 2,000 hours at Class II or higher PWS. Class III: 90 CEUs, and 8,000 hours experience at a Class I or higher PWS, with at least 2,000 at a Class II or higher PWS. Class IV: 180 CEUs, and 10,000 hours experience at a Class I or higher PWS with at least 2,000 hours experience at a Class I or higher PWS with at least 2,000 hours at a Class III or higher PWS. Class II-IV operators may substitute experience for education and vice versa. Grandparenting: Not allowed.	The DHHR has responsibility for enforcing the Operator Certification Program. The state primarily relies upon public water system field inspections to identify violations. In addition, system compliance is determined through queries of the SDWIS/State software. The Department can suspend or revoke an operator's certification. WV uses a variety of enforcement methodologies — bilateral compliance agreements, administrative orders with penalties, boil water advisories, and, if necessary, civil action in circuit court.	Operators must renew their certification every 2 years. Operators must complete & document the required number of approved continuing education hours for their highest classification level to submit with their renewal application: 1D: 0 WDS: 6 OIT: 6 Class I: 12 Class II-IV: 24

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
West Virginia	Fees: No fees are charged. Funding: No information is available. Testing: The C&T Program administers all exams, except for the 1D certification. Exams are offered twice a year in each district area of the state. Continuing Education/Training: The C&T program chairs the CEH committee which meets monthly to review and approve all certification courses for renewal. The C&T program is also directly and indirectly involved with EPA training grants (such as Rural Water Association, American Water Works Association, and Rural Community Assistance Partnership) to provide recommendations on content, location, attendees and other related support.	Operators may reinstate their certification without examination within 1 year of the certification's expiration. After 1 year, the operator must pass the exam at the certification level previously held for reinstatement. Operator certification is invalid during suspension, which cannot exceed 1 year in length. Reinstatement of a suspended certification is automatic once period of ineligibility has passed, as long as the individual has earned all required CEHs during the suspension period. Operators with revoked certification (not less than 1 year in length) must, at a minimum, pass the exam for recertification once period of ineligibility has passed.	The WV Coalition is the primary stakeholder organization involved in the Operator Certification Program. Its voting members include AWWA-WV, National Drinking Water Clearinghouse, WV Environmental Training Center, WV-Rural Water Association, and WV-Rural Community Assistance Program. This group helps develop and review policies and training courses and participates in state program reviews.	Through monthly, mid-year and annual state and federal reports the program is informally internally reviewed. WV Coalition suggestions as well as any issues that arise from routine program functions can also prompt internal review at any time. Formal internal reviews are done every 3 years. Formal external reviews are done every 5 years.

Program Web site: http://www.wvdhhr.org/oehs/eed/swap/training&certification/

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Wisconsin	Wisconsin Statutes Section 281.17(3) provides statutory authority for the Operator Certification Program. Wisconsin Administrative Code NR 114 provides the specific rules and regulations for the Program. The Wisconsin Department of Natural Resources (DNR) is authorized to implement the Program.	All PWS are classified as Class 1 with subclasses based on the type of treatment or process used at the system, as follows: D: Distribution system G: Ground water source O: General water system operation Z: Zeolite and resin treatment I: Oxidation and filtration treatment S: Surface water source L: Lime-soda ash treatment V: Specialized treatment (for example, air stripping, granular activated carbon) There are two classifications of operator certifications: Municipal Waterworks Operator (MC) and Small Water Systems Operators (OTM/NN). These operators are assigned one of two grades: Grade T (for OIT) and Grade 1, as well as subclasses which are the same as the system subclasses listed above. Small Water Systems: OTM: Other than Municipal Waterworks systems serve groups of 25 or more yearround residents; they can include mobile home parks, apartments, condominiums and other facilities. NN: Nontransient Noncommunity water systems serve groups of 25 or more people over six months of the year; examples include schools, day care centers, dairies and cheese plants, factories and industrial facilities.	Applicants must have at least an HSD or GED (or at least 2 years of experience operating a waterworks prior to December 1, 2000), and pass the appropriate subclass exam by scoring at least 75 percent. MC Grade 1 operators must also complete 1 year of satisfactory subclass experience. Operators who already hold current municipal waterworks certifications in subclasses D, G or S are also qualified to operate OTM/NN water systems, and do not need to take the general operation exam. Grandparenting: Not permitted.	The Department can revoke, suspend, or refuse to renew a certification. Operators can appeal Department sanctions through an administrative process.	Certificates must be renewed every 3 years. An operator who fails to renew certification by the expiration date must submit all renewal materials, including the required fee. Operators must complete a the following CEUs every 3 years: Certification type MC, Grades T and 1: 18 hours Operator-in-charge (for surface water systems only): 24 hours Operators may not use more than 6 hours of health and safety training per 3-year renewal period. Operators of other-than-municipal (OTM/NN) and NTNCWSs: 6 hours

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Wisconsin	Paper Exam: \$25 Renewal: \$45 Late renewal penalty: \$25 Reciprocity (known as comparable certification in Wisconsin): \$100 Funding: Funds for the Program are taken from the SRF set-aside fund.	Once a certification expires, an operator has one year from their expiration date to reinstate their lapsed certification. An operator is not considered a certified operator during this lapse of certification. If a certification is not renewed within that one year time period, the operator will need to retake the exams as a new operator. Application may be made for taking the necessary examinations for a new certificate one year after the date of revocation or refusal to renew.	The Operator Certification Work Group was established to advise the Department on proposed rules development, training objectives, course materials, and continuing education for the Small System Operator Certification Program. The Work Group, which consists of representatives of water systems, professional associations and businesses, and Department staff, is not continuously constituted but is formed as needed to review and comment on proposed changes such as exam revisions, subclass changes, or administrative code revisions. The DNR meets quarterly with the DNR Liaison Group to discuss a wide range of drinking water issues, including operator certification. This group includes representatives from industry and trade associations, municipal water systems and other state agencies. The meetings provide a forum for sharing information on emerging issues and receiving feedback on training needs and other areas.	The Department conducts self-assessments informally, on an ongoing basis which include: training and technical assistance reviews and reviewing course topics annually. Results of all OpCert exams are analyzed by the University of Wisconsin for statistical validity. Exam questions are revised and corrected as needed. The DNR used its social scientists to evaluate operator training needs. Results of this research are used to guide future operator training efforts.

Program Web site: http://dnr.wi.gov/regulations/opcert/

State	Authorization	Classification of Systems, Facilities, and Operators	Operator Qualifications	Enforcement	Certification Renewal
Wyoming	Wyoming Statute 35-11-302 (a)(iv) authorizes the Water Quality Division Administrator to write rules addressing Operator Certification. Wyoming Water Quality Rules and Regulations Chapter 5 covers Operator Certification in Wyoming and was last revised in August 2012.	Wyoming water treatment (WT) facilities are classified into four levels (Level 1-4), Level 1 being the lowest, based on the facility classification scheme presented in the 2007 ABC Standards manual, with is based on unit operations. Wyoming water distribution (WD) facilities are classified into two levels (Level 1 and 2), Level 1 being the lowest, based on population and whether or not a booster station is used. Policy outlining classification of these facilities is available on the Operator Certification web site. Water treatment and distribution operators are classified according to the level of facility they are qualified to operate.	All must demonstrate HSE, pass an area/level specific exam with a score or 70 %, and meet these experience and training requirements: Level 1 WT: Minimum 6 mo. experience at a Level 1 or higher WT facility; 35 hrs. of training. This license will allow operators to operate Level 1 WT and WD facilities. Level 1 WD: Minimum 6 mo. experience at a Level 1 or higher WD facility; 35 hrs. of training. Level 2 WT: Minimum 1 yr. experience at a Level 1 or higher WT facility; 70 hrs. of training. Level 2 WD: Minimum 1 yr. experience at a Level 1 or higher WD facility; 70 hrs. of training. Level 3 WT: Min. 2 yrs. experience, 1 of which must be at a Level 2 or higher WT facility; 300 hours of training. Level 4 WT: Minimum 3 yrs. experience, 2 of which must be at a Level 3 or higher WT facility; 400 hours of training. Grandparenting: Not allowed.	The state has the authority to suspend or revoke an operator's certification. Operators have the right to appeal suspensions or revocations. The state's options for enforcement actions include: administrative orders, civil penalties, criminal penalties, and stipulated penalties.	Certificates are valid for 3 years. Operators must earn 24 hours of continuing education within the 3 year period to qualify for a certification renewal. A minimum of 8 of these 24 hours of continuing education needed for renewal must be earned in topic areas listed on the DEQ/WQD Operator Certification Program web site.

State	Resources Needed To Implement the Program	Recertification	Stakeholder Involvement	Program Review
Wyoming	No fees are charged. Funding: Funding is allocated by the state legislature and comes primarily from the state General Fund.	An operator may request recertification after losing their certification for failing to complete the required 24 hours of continuing education. For requests within three months of the end of the certification period, the operator must submit proof of required continuing education. For requests more than three months after the end of the certification period, the operator must complete an additional eight hours for each year or part of year past the termination date (not exceeding 24 hours) and pass an exam at the level of the certification desired. The hours can only be used for this recertification. Following the end of a certificate suspension period (minimum of one year), an operator has three months to apply for reinstatement. Failure to apply within three months results in the termination of the certification. Revocation of an operator's certificate is permanent.	Stakeholder involvement includes public meetings and hearings held by the Water and Wastewater Advisory Board (Advisory Board) and the Environmental Quality Council (EQC). The 5-member Advisory Board and 7-member EQC are outside the DEQ and include public, industry, agriculture, and political representatives, providing input as noted above. The EQC meets in locations across the state to seek public input. Wyoming has been using ABC exams since 2004.	Wyoming conducts informal internal reviews of the program on an ongoing basis.

Program Web site: http://deq.wyoming.gov/wqd/operator-certification/

II: Summary	Tables of Exist	ting Operator	Certification	Programs

Implementing Authority

The following table illustrates where authority lies for the implementation of the SDWA and the Operator Certification Program in each state. Broad categories have been used to encompass all variations (for example, "Dept. of Health and Welfare" would be classified as "Health,", "Dept. of Environment and Conservation" would be classified as "Environment/Natural Resources," etc.). If an Agency does not fit into one of these categories, it is classified as "Other" (for example, State Licensing Agency or Certification Board). The ♣ denotes the state drinking water primacy agency, while the ♦ illustrates where the Operator Certification Program is located, if different.

State	Health	Environment/Natural Resources	Other
Alabama		*	
Alaska		*	
Arizona		*	
Arkansas	*		
California	*	*	
Colorado ¹			*
Connecticut	*		
Delaware	*		
Florida		*	
Georgia ²		*	*
Hawaii	*		
Idaho		*	
Illinois ³	*	♦♣	
Indiana		*	
Iowa		*	

¹ The Water Quality Control Division of the Department of Public Health and Environment is Colorado's primacy agency. The implementing authority is the Colorado Water and Wastewater Facility Operators Certification Board through contracts with non-profit administrative services providers, Colorado Environmental Certification and Testing, Inc., and the Colorado Water Distribution and Wastewater Collection Systems Certification Council.

² In Georgia, the implementing agency is the state Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts, which is within the Georgia Secretary of State's Professional Licensing Boards Division.

³ The Illinois Environmental Protection Agency administers the Operator Certification Program for CWSs, and the Department of Public Health administers the Operator Certification Program for NTNCWSs.

State	Health	Environment/Natural Resources	Other
Kansas ⁴			*
Kentucky		*	
Louisiana	*		
Maine	*		
Maryland		*	
Massachusetts ⁵		*	*
Michigan		*	
Minnesota	*		
Mississippi	*		
Missouri		*	
Montana		*	
Nebraska	*		
Nevada ⁶		*	
New Hampshire		*	
New Jersey		*	
New Mexico		*	
New York	*		
North Carolina		.	
North Dakota	*		
Ohio		•	
Oklahoma		•	
Oregon	♦		
Pennsylvania ⁷		*	.

⁴ In Kansas, the implementing authority is the Kansas Department of Health and Environment.

⁵ In Massachusetts, the Board of Certification of Operators of Drinking Water Supply Faculties under the office of the Division of Professional Licensure is responsible for implementation of the certification of operators.

⁶ In Nevada, the Program is implemented by the Department of Conservation and Natural Resources, Division of Environmental Protection.

⁷ In Pennsylvania, implementation authority is shared between the Department of Environmental Protection and the State Board for Certification of Water and Wastewater Systems Operators.

State	Health	Environment/Natural Resources	Other
Puerto Rico ⁸	♦ ♣		*
Rhode Island	*		
South Carolina ⁹		*	*
South Dakota		*	
Tennessee		*	
Texas		*	
Utah		•	
Vermont		•	
Virginia ¹⁰			*
Washington	♦ ♣		
West Virginia	*		
Wisconsin		•	
Wyoming ¹¹		•	*
TOTAL •	12	20	3
TOTAL ♦	18	32	9

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⁸ In Puerto Rico, the administration of the program is shared by the Puerto Rico Department of Health and the Examining Board for the Certification of Operators of Drinking Water Treatment Systems and Plants.

⁹ In South Carolina, the Program is implemented by the Labor, Licensing, and Regulation, Board of Environmental Certification.

¹⁰ In Virginia, the board governing the Operator Certification Program is located within the Department of Professional and Occupational Regulation.

¹¹ In Wyoming, US EPA Region 8 has primacy for the PWS Oversight Program. Wyoming Department of Environmental Quality has primacy for the Operator Certification Program.

Coverage

This table illustrates which systems are required to have a certified operator according to state statutes and regulations. Note that a system type is included if any systems within that type are required to be certified even though many states exempt some systems within a type (for example, TNCWS using only groundwater). Also, some states allow remote supervision at certain facilities (for example, small, non-complex systems). States allowing remote supervision for certain system types are included in this table since an operator is required; although not necessarily on-site. Refer to detailed state summaries for more information on any excluded system types and remote supervision requirements.

	CWS Yes	CWS No	NTNCWS Yes	NTNCWS No	TNCWS Yes	TNCWS No
Alabama	→	110	*	110	*	110
Alaska	•		•		*	
Arizona	*		*		*	
Arkansas	*		*		•	
California	+		*		*	
Colorado	+		*		*	
Connecticut	•		•			*
Delaware ¹	•		*		*	
Florida	*		*		*	
Georgia	*		*		*	
Hawaii	*		*			*
Idaho	*		*			*
Illinois	*		*			*
Indiana	*		*			*
Iowa	*		*		*	
Kansas	*		*		*	
Kentucky	*		*		*	
Louisiana ²	*		*		*	
Maine	*		*		*	
Maryland	*		*		*	

¹ In Delaware, distribution systems capable of producing less than or equal to 500 gallon-per-minute at 20 pounds persquare inch, are exempt.

² In Louisiana, operators must prove they can respond to systems within one hour of notification that their presence is required.

	CWS	CWS	NTNCWS	NTNCWS	TNCWS	TNCWS
	Yes	No	Yes	No	Yes	No
Massachusetts	♦		*		*	
Michigan	*		*		*	
Minnesota	*		•		*	
Mississippi	♦		•			
Missouri ³	♦		•		*	
Montana	*		*		*	
Nebraska	*		*		*	
Nevada	*		*			*
New Hampshire	*		+			*
New Jersey	*		*		*	
New Mexico	*		*		*	
New York	*		*			•
North Carolina	*		*		*	
North Dakota	*		*		*	
Ohio	*		*		*	
Oklahoma	*		*		*	
Oregon	*		*			
Pennsylvania	*		*			*
Puerto Rico	*		*		*	
Rhode Island	*		*			*
South Carolina	*		*			*
South Dakota	•		•		•	
Tennessee ⁴	♦		•		*	
Texas	•		•		•	
Utah	*		•		*	
Vermont	*		*		*	

³ In Missouri, the rule applies to TNCWSs that use surface water or GWUDI. The Department may establish minimum operator oversight requirements for facilities with extensive instrumentation, automation, and SCADA systems. Minimum operator oversight determinations will be made on a case-by-case basis.

⁴ Systems in Tennessee in operation 60 consecutive days or a total of 120 days of the year are required to have a certified operator.

	CWS Yes	CWS No	NTNCWS Yes	NTNCWS No	TNCWS Yes	TNCWS No
Virginia	*		*		*	
Washington ⁵	*		*		*	
West Virginia ⁶	*		*		*	
Wisconsin	*		*			*
Wyoming	*		*			*
TOTAL	51	0	51	0	36	13

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⁵TNCWS systems in Washington can be required to have a certified operator if they are required to provide treatment, advanced disinfection, or they demonstrate poor compliance that presents a potential health risk.

⁶ In WV, the rule specifies minimum adequate operator coverage for each system classification level. On a case-by case basis, a few individual written exceptions are allowable through this rule and an additional policy based on proven automation.

Reciprocity

This table lists whether states accept other states' operator certifications, and identifies two of the most common limitations that exist for reciprocal certification: reciprocity determined on a case-by-case basis if the originating state's criteria is as stringent as the new state's criteria and the operator's certificate is valid and in good standing in the originating state, or permitted only with other Association of Boards of Certification (ABC) Member states' certifications. The special requirements listed in the table are those above and beyond holding a certificate in good standing that was issued under a program at least as stringent as the new state's program.

State	Yes Case-by-Case if as Stringent as State's Criteria	Yes ABC Members Only	Yes Special Requirements	No
Alabama	•		Only if reciprocal agreement exists with other state.	
Alaska	•		Alaska's certification must be accepted by other state.	
Arizona	•		State must have DEQ-approved exam, comparable to Arizona's.	
Arkansas	•			
California ¹	•			
Colorado	*			
Connecticut	•		Must have passed an equivalent ABC examination and have met the educational and experience requirements.	
Delaware	•			
Florida				*
Georgia	•			
Hawaii	•			
Idaho	•			
Illinois	•		Illinois certification must be accepted by other state.	
Indiana	•			
Iowa	*			
Kansas	+			

¹ Operators who were certified by California/Nevada AWWA by December 31, 2000 could convert their certificates to DHS certificates. Operators who were certified with the California/Nevada AWWA after that date cannot receive reciprocity.

State	Yes Case-by-Case if as Stringent as State's Criteria	Yes ABC Members Only	Yes Special Requirements	No
Kentucky	*			
Louisiana	*			
Maine	*			
Maryland	•			
Massachusetts		♦		
Michigan	•			
Minnesota	*			
Mississippi	*			
Missouri	*			
Montana	•		Operator must be employed with a Montana system.	
Nebraska				*
Nevada	•		Automatic for NV/CA-AWWA certificate holders.	
New Hampshire	*			
New Jersey	•		Other state must be willing to grant reciprocity to New Jersey operators.	
New Mexico	*			
New York				*
North Carolina	•			
North Dakota	•			
Ohio	•		Operator must have an active certificate in another state (or have held an Ohio certification within the previous 10 years). Ohio must be able to review exam to determine equivalent certificate level. Once approved, operator must gain employment in Ohio before a certificate will be issued.	
Oklahoma				•
Oregon	•			
Pennsylvania	•		Must submit Pennsylvania Police criminal history record.	
Puerto Rico	*		-	
Rhode Island	•			

State	Yes Case-by-Case if as Stringent as State's Criteria	Yes ABC Members Only	Yes Special Requirements	No
South Carolina	*			
South Dakota	+		State must accept South Dakota's certifications.	
Tennessee	•		State must accept Tennessee's certifications. Operator must	
Texas	•		State must accept Texas' certifications.	
Utah	•		State must accept Utah's certifications. Operator must be seeking employment in Utah.	
Vermont	•			
Virginia	•		Operator must also take Virginia exam.	
Washington	•	•	Applicant must meet the states experience and education requirements, possess a current certificate in good standing, and have passed the ABC exam with a passing score equivalent to what Washington requires.	
West Virginia	•		Operator must also meet West Virginia education and experience requirements, pass West Virginia exam, and be actively seeking or have accepted employment at a PWS in West Virginia.	
Wisconsin	*			
Wyoming	•		Operator must live in or be employed in Wyoming, and meet Wyoming experience and training requirements.	
TOTAL	45	2		4

Certification Board or Equivalent Agency

The table below provides information on the existence and make-up of a certification board or equivalent body (for example, advisory board) in each state program. Boards classified as "Normative" are those which possess the authority to set program standards.

State	Yes	No	Type Advisory Only	Types Normative
Alabama		*		
Alaska	*		•	
Arizona	*		•	
Arkansas	*		*	
California	*		*	
Colorado	*			*
Connecticut	*		•	
Delaware	*			*
Florida	*		•	
Georgia	*			*
Hawaii	*			*
Idaho	*			*
Illinois	*		*	
Indiana		♦		
Iowa	*		*	
Kansas	*		*	
Kentucky	*		*	
Louisiana	*		*	
Maine	*			*
Maryland	*			*
Massachusetts	*			*
Michigan	*		*	
Minnesota	*		*	
Mississippi	*		*	
Missouri	*			*
Montana	•		•	

State	Yes	No	Type Advisory Only	Types Normative
Nebraska	*		•	
Nevada	*		*	
New Hampshire	*		•	
New Jersey	*		•	
New Mexico	*			*
New York	*		•	
North Carolina	*			*
North Dakota	*		•	
Ohio	*		•	
Oklahoma	*		•	
Oregon	*		•	
Pennsylvania	*			*
Puerto Rico				
Rhode Island	*			*
South Carolina	*		•	
South Dakota	*		•	
Tennessee	*			*
Texas	*		•	
Utah	*			*
Vermont	*		•	
Virginia	*			*
Washington	•		•	
West Virginia	*		•	
Wisconsin		*		
Wyoming	*		•	
TOTAL	47	3	31	16

Classification of Systems/Facilities

This table depicts the various methods by which states classify their water supplies. The letter "D" represents distribution systems and the "T" stands for treatment facilities. States listed without D/T rows classify all their systems by the same scheme.

State	Туре	Type of Point System	Population Served	Size (MGD)	# of Service Connections	Complexity of Treatment	Source of Supply	Other
Alabama	D							*
	Т					*	*	
Alaska	D				*			
	Т	*		*		*	*	
Arizona ¹	D	*	*			*		*
	Т	*		♦		*	*	*
Arkansas	D		*			*		*
	Т		*			*		
California ²	D	*	*			*		*
	T	*		*		*	*	*
Colorado	D		*					
	T			*		*	*	
Connecticut	D		*					
	T	*		*		*	*	
Delaware						*		
Florida				*		♦	*	
Georgia			*	*		♦	*	
Hawaii	D		*					
	T					*		

¹ In Arizona, "Other" for distribution refers to pressure zones, booster stations, storage tanks, blending fire protection systems/testable backflow prevention assemblies, cathodic protection, control system technologies, and water quality. "Other" for treatment refers to water quality

² In California, "Other" for distribution refers to: number of pressure zones, storage reservoirs, and uncovered storage reservoirs; treatment; largest pump utilized; and customers with a nonpotable water supply connection. "Other" for treatment refers to various measures of influent water microbiological quality.

State	Туре	Type of Point System	Population Served	Size (MGD)	# of Service Connections	Complexity of Treatment	Source of Supply	Other
Idaho	D			*		*		
	Т			*		*	*	
Illinois	T					♦	*	
Indiana ³	D					*	*	
	T		*			♦		♦
Iowa ⁴	D			*				
	Т			*		*		♦
Kansas			*			*	*	
Kentucky	D		*					
	T			*		*	*	
Louisiana			*					
Maine ⁵	D		*					
	Т	*	*			*	*	♦
Maryland						*		
Massachusetts	D		*					
	Т	*				*		
Michigan	D		♦					
	Т		*	*		*	*	
Minnesota ⁶		*	*		*	*	*	*
Mississippi						*	*	
Missouri	D		*			*	•	
	Т			*		*	•	
Montana	D		*					
	Т		*			*	•	
Nebraska			*			*		
Nevada	D	*	*				•	
	Т	*	*			*	*	

³ In Indiana, "Other" refers to system components.

⁴ In Iowa, "Other" refers to rural water district's miles of pipe.

⁵ In Maine, "Other" refers to facility characteristics (instrumentation) and residual management.

⁶ In Minnesota, "Other" refers to distribution storage capacity.

State	Туре	Type of Point System	Population Served	Size (MGD)	# of Service Connections	Complexity of Treatment	Source of Supply	Other
New Hampshire	D		*					
	T	*	*	*		*	*	*
New Jersey	D		*		*			
	T	*	*	*		*	*	
New Mexico	D		*	*		*	*	
	T		*			*		
New York			*	*		*	*	
North Carolina ⁷	D				•			*
	T	*	*	*		*	*	
North Dakota	D		*					
	T		*			*		
Ohio ⁸	D		*	*				
	T		*	*		*	*	*
Oklahoma			*	*	*	*	*	
Oregon ⁹	D		*					
	T	*	*	*		*	*	*
Pennsylvania				*		•		
Puerto Rico								
Rhode Island ¹¹	D		*					
	Т	*	*	*		*	*	*

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⁷ In North Carolina, "Other" refers to the presence of fire protection.

⁸ In Ohio, "Other" refers to a system's potential to cause health hazards. For example, the Class III system classification includes considerations of treatment for chemical contaminants with maximum (or secondary maximum) contaminant levels.

⁹ Oregon separately classifies their small ground water systems by population served, number of service connections, and source of supply.

¹⁰ In Pennsylvania, the primary focus is on treatment technology, with size of the system as a second factor. There is a separate small system classification for systems serving less than 150 connections or 500 customers, provided the source of water is ground water.

¹¹ In Rhode Island, "Other" refers to raw water quality, sludge/backwash water disposal, and lab control.

State	Туре	Type of Point System	Population Served	Size (MGD)	# of Service Connections	Complexity of Treatment	Source of Supply	Other
South Carolina ¹²	D		•	*				•
	T					*	*	
South Dakota ¹³	D		•					
	Т	*	*	*		*	*	*
Tennessee ¹⁴	D				*			
	Т	*	*	*		*	*	*
Texas					*	*	*	
Utah	D	*	*					
	Т	*	*	*		*	*	
Vermont ¹⁵			*			*	*	
Virginia			*	*		*		
Washington	D		*					
	T	*		*		*	*	
West Virginia			*			*	*	
Wisconsin	T					•		
Wyoming ¹⁶	D	•	•			*		
	T	*	*	*		*	*	*
TOTAL		16	39	20	6	34	26	10

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¹² In South Carolina, "Other" refers to fire protection capacity.

¹³ In South Dakota, "Other" refers to raw water quality.

¹⁴ In Tennessee, "Other" refers to the type and complexity of laboratory control by plant personnel.

¹⁵ In Vermont, "Other" refers to system complexity.

 $^{^{16}}$ In Wyoming, systems are classified based on the points system from the ABC 2007 Standards, which weighs population served and unit operations.

Renewal

This table presents how often an operator must renew a certificate. For specific information on continuing education or other training requirements, see the individual state summary.

State	1 Year	2 Years	3 Years
Alabama			*
Alaska			*
Arizona			*
Arkansas		*	
California			*
Colorado			*
Connecticut			*
Delaware		*	
Florida		*	
Georgia		*	
Hawaii			*
Idaho	+		
Illinois			*
Indiana			*
Iowa		*	
Kansas		*	
Kentucky		*	
Louisiana		*	
Maine		*	
Maryland			*
Massachusetts		*	
Michigan			*
Minnesota			*
Mississippi			*
Missouri			*
Montana	•		
Nebraska		*	

State	1 Year	2 Years	3 Years
Nevada ¹		*	
New Hampshire		*	
New Jersey	*		
New Mexico			*
New York			*
North Carolina	•		
North Dakota	•		
Ohio		*	
Oklahoma	•		
Oregon ²		*	*
Pennsylvania			*
Puerto Rico			
Rhode Island			*
South Carolina		*	
South Dakota	•		
Tennessee	•		
Texas ³			*
Utah			*
Vermont			•
Virginia		•	
Washington	•		
West Virginia		•	
Wisconsin			•
Wyoming			•
TOTAL ⁴	9	18	24

¹ The renewal period for Nevada is between one and 2 years depending on when the certificate is issued. A certificate expires on December 31 of the first calendar year after the calendar year in which it (the certificate) was issued.

 $^{^{2}}$ In Oregon, small ground water system operators only have to renew every 3 years. All other operators must renew every 2 years.

³ In Texas, certifications for Class "D" operators are only valid for 2 years.

⁴ Total equals 51 because Oregon has two different renewal schedules and Puerto Rico's renewal schedule is unconfirmed at this time.

Recertification

This table illustrates time requirements for recertification of certificates due to expiration, revocation or suspension. The ♦ denotes the amount of time after which an operator must reapply for certification or retake the exam following certificate expiration and the ♣ denotes the amount of time that an operator must wait following a revoked or suspended certificate prior to reapplying for certification, if specified by the state. Additional details concerning renewal deadlines and recertification requirements can be found in individual state summaries. States denoted by (*) have complex requirements described in their individual summary. Additionally, any state without a ♣ denotation either deal with recertification after revocation or suspension of a certificate or did not provide information on the time that an operator must wait following a revoked or suspended certificate prior to reapplying for certification; in such cases, see the state's individual summary for details.

State	< 6 Months	≥ 6 Months	≥1 Year	≥2 Years
Alabama		*		
Alaska*		*	*	•
Arizona	*			
Arkansas			*	
California			*	
Colorado				+
Connecticut		*		
Delaware			♦ ♣	
Florida				•
Georgia*				+
Hawaii			*	
Idaho				+
Illinois*			*	•
Indiana			*	
Iowa	*			•
Kansas			*	•
Kentucky*	*			
Louisiana				+
Maine				♦ ♣
Maryland			*	+
Massachusetts				+
Michigan			•	*

State	< 6 Months	≥ 6 Months	≥1 Year	≥ 2 Years
Minnesota			♦ ❖	
Mississippi	*			
Missouri	•		*	
Montana*	•			
Nebraska*	•			
Nevada*		*		*
New Hampshire	*			
New Jersey			♦ ❖	
New Mexico*			*	
New York			*	
North Carolina*	*			
North Dakota			*	
Ohio			*	
Oklahoma			*	*
Oregon			* *	
Pennsylvania				*
Puerto Rico				
Rhode Island		*		
South Carolina*		*		
South Dakota				*
Tennessee	•		*	
Texas	•			
Utah*		*		
Vermont	•			
Virginia			*	
Washington	*	*		
West Virginia*			♦ ♣	
Wisconsin			*	
Wyoming*	•		*	
TOTAL ♦	14	7	16	15
TOTAL ♣	0	0	13	3

Enforcement

This table illustrates the types of enforcement action against non-compliant systems a state may take. Administrative orders may include the power to suspend, revoke, or refuse to renew certification. In the table, the column marked "Other" lists types of enforcement actions not already listed in the table, including court orders and injunctions. Additional details concerning enforcement actions can be found in individual state summaries.

State	Administrative Orders	Bilateral Compliance Agreements	Criminal Penalties	Civil/ Administrative Penalties	Stipulated Penalties	Other
Alabama	*		*	*		
Alaska	*					
Arizona	*		*	*		*
Arkansas	•		*	*		
California	•			*		*
Colorado	•	*	*	*		
Connecticut	•	*	*	*		*
Delaware	*	*		*		
Florida	•	*	*	*		
Georgia	•	*	*	*	*	*
Hawaii	*		*	*		
Idaho	•	*	*	*	*	
Illinois	•	*	*	*	*	
Indiana	•			*		
Iowa	*			*		*
Kansas	*	*	*	*	*	*
Kentucky	*		*	*		*
Louisiana	*			*	*	
Maine	*		*	*	*	
Maryland	•	*	*	*		
Massachusetts	•	*	*	*	*	*
Michigan	*	*	*	*		
Minnesota	•	*		•	*	
Mississippi	•			•		

State	Administrative Orders	Bilateral Compliance Agreements	Criminal Penalties	Civil/ Administrative Penalties	Stipulated Penalties	Other
Missouri	*	*		*		
Montana	•	*		•	♦	*
Nebraska	*	*		*	*	*
Nevada	*		*	•		
New Hampshire	*		*	*		
New Jersey	*		*	*		
New Mexico	*	*	*	*		
New York	♦		*	♦		
North Carolina	*			*		
North Dakota	*		*	*		
Ohio	*	*	*	*	*	
Oklahoma	♦		*	♦	*	
Oregon	♦			♦		
Pennsylvania	♦		*	♦		
Puerto Rico						
Rhode Island	*		*			
South Carolina	♦			♦		*
South Dakota	*			*		
Tennessee	*			*		
Texas	*		*	•		
Utah	*					*
Vermont	*		*	*		
Virginia	*			*		
Washington	*	*		*		
West Virginia	*	•		*		♦
Wisconsin	*					
Wyoming	*		*	*	*	
TOTALS	50	18	30	46	13	13