

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

CHAPTER Env-Wq 2100 WATER CONSERVATION; USE REGISTRATION AND REPORTING

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CHAPTER Env-Wq 2100 WATER CONSERVATION; USE REGISTRATION AND REPORTING

PART Env-Wq 2101 WATER CONSERVATION

Statutory Authority: RSA 485:61

REVISION NOTE:

This part was formerly designated Env-Ws 390. Document #8353, effective 5-14-05, adopted Env-Ws 390. This part was subsequently redesignated editorially with a new subtitle as Env-Wq 2101 pursuant to a rules reorganization plan for Department rules approved by the Director of the Office of Legislative Services on 9-7-05. The numerals of the rules remained unchanged, and the source notes for the rules under Document #8353 refer to those numbers under the subtitle Env-Ws.

Env-Wq 2101.01 Purpose. The purpose of these rules is to establish water conservation practices as required by RSA 485:61.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.01); ss by #10480-A, eff 12-3-13

Env-Wq 2101.02 Applicability.

(a) As specified in RSA 485:61, II, these rules shall apply to “all new permit applicants and applications for water withdrawals subject to the provisions of RSA 485:3, RSA 485:48, RSA 485-C:21 and section 401 of the Clean Water Act.”

(b) Pursuant to Laws of 2002, 142:3, effective July 12, 2002, the “rules developed under RSA 485:61 shall apply to all new water withdrawal permit applications approved under RSA 485:61, II on or after the effective date of this act.”

(c) Subject to (d) through (f), below, the specific applicants and applications covered by (a), above, shall be as follows:

- (1) Sources of groundwater for community water systems for which an application is filed on or after the 2013 effective date of this part;
- (2) Sources of groundwater for bottled and bulk water operations for which an application is filed on or after the 2013 effective date of this part;
- (3) Sources of groundwater where withdrawals exceed 57,600 gallons over any 24-hour period for which an application is filed on or after the 2013 effective date of this part;
- (4) Surface water sources of water supply associated with projects that require a water quality certification pursuant to Section 401 of the federal Clean Water Act for which an application is filed on or after the 2013 effective date of this part;
- (5) Surface water sources that require water quality certification pursuant to RSA 485-A:12, IV for which an application is filed on or after July 7, 2009, the effective date of that requirement;
- (6) Surface water sources that are augmented by a surface water transfer pursuant to Env-Wq 1708.12 for which an application is filed on or after August 23, 2011, the effective date of the readoption with amendment of that rule; and
- (7) Any consecutive water system or privately owned redistribution system (PORS) that receives water from a wholesale system that is subject to this part.

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(d) Any source or user of the type listed in (c)(1)-(4) or (7), above, that was subject to Env-Wq 2101 as effective May 14, 2005 shall continue to be subject to these rules.

(e) Any source, transfer, or user of the type listed in (c), above, that would not have been subject to Env-Wq 2101 as effective May 14, 2005 shall be subject to these rules as of the 2013 effective date of this part.

(f) These rules shall not apply to any source of water that is developed after the 2013 effective date of this part as a replacement for an existing source of water, provided:

- (1) The existing source is not a wholesale system or a community water system;
- (2) The withdrawal from the replacement source is expected to be less than or the same amount of water as has been historically withdrawn from the existing source; and
- (3) If the existing source being replaced is a well, it is abandoned in accordance with We 100 et seq.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.02); ss by #10480-A, eff 12-3-13

Env-Wq 2101.03 Definitions.

(a) “Agricultural water use” means use of water for crop irrigation or for animal operations associated with farming.

(b) “Annually” means once each calendar year, but not sooner than 10 months after and not later than 12 months after the prior annual event.

(c) “Applicant” means the person who applies for approval of a source pursuant to Env-Dw 301, Env-Dw 302, Env-Dw 303, Env-Wq 403, as applicable and as allowed by those rules, or who otherwise requests an approval or certification identified in Env-Wq 2101.24(a)(5)-(8).

(d) “Automatic irrigation system” means an interconnected network of pipes, pumps, valves, and emitters designed to provide water to growing plant material, that is operated by a remote control valve controlled by a mechanical or electronic clock programmed to operate at specified times.

(e) “Apparent losses” means water that is metered by the water supplier as going into the distribution system and reaching an end user for which the water supplier is unable to bill. Apparent losses are caused by unauthorized consumption, service meter under-registration, data handling errors, or any combination thereof.

(f) “Authorized consumption” means the volume of water removed from the distribution system with the explicit or implicit approval of the water supplier. The term includes water used by registered customers, water delivered to consecutive systems, and water consumed in public service activities including but not limited to fire fighting and training, flushing of mains and sewers, street cleaning, watering of municipal gardens, public fountains, frost protection, bleeder valves for water quality improvement, and water used in construction. Authorized consumption is either metered or unmetered and either billed or unbilled, in any combination.

(g) “Authorized metered consumption” means billed metered water plus unbilled metered water.

(h) “Billed metered water” means authorized consumption by all customer types that is both metered and billed.

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(i) “Bottled water” means water that is placed in a sealed container or otherwise packaged and offered for sale for human consumption or other consumer uses.

(j) “Bulk water” means water intended for potable uses that is transported in containers greater than 10 gallons for the purpose of treatment, packaging or human consumption.

(k) “Community water system (CWS)” means “community water system” as defined in RSA 485:1-a, I, as reprinted in Appendix C.

(l) “Consecutive water system” means a public water system that buys or otherwise receives some or all of its finished water from one or more wholesale systems for at least 60 days per year.

(m) “Conservation source” means a source specified in Env-Wq 2101.02(c)(1)-(6).

(n) “Conservation system” means:

(1) Any water system for which an application is filed on or after the 2013 effective date of this part, which will be a CWS or wholesale system if the source is approved;

(2) Any CWS that is served in whole or in part by a conservation source;

(3) Any wholesale system that is served in whole or in part by a conservation source;

(4) Any industrial, commercial, institutional (ICI) water user that is served in whole or in part by a conservation source; and

(5) Any consecutive water system or PORS specified in Env-Wq 2101.02(c)(7).

(o) “Groundwater” means “groundwater” as defined in RSA 485:C:2, VIII, as reprinted in Appendix C.

(p) “Industrial, Commercial, Institutional (ICI) water user” means a water user that:

(1) Has its own source of water, in lieu of or in addition to a connection to a community water system; and

(2) Uses the majority of its water for other than agricultural water use.

(q) “Large community water system” means a community water system that serves more than 1,000 persons.

(r) “Large groundwater withdrawal” means “large groundwater withdrawal” as defined in RSA 485-C:2, IX-a, as reprinted in Appendix C.

(s) “Monthly” means once every calendar month, but not sooner than 27 days after and not later than 33 days after the date in the prior month on which the event in question occurred.

(t) “Nonrevenue water” means water that is metered by the water supplier as going into the distribution system that produces no revenue, equal to unbilled authorized consumption plus apparent losses plus real losses.

(u) “Operator” means “operator” as defined in RSA 485:1-a, XII, as reprinted in Appendix C.

(v) “Owner” means the person who has legal authority to control the system or source to which the specified requirement applies.

(w) “Person” means “person” as defined in RSA 485:1-a, XIII, as reprinted in Appendix C.

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(x) “Public water system” means “public water system” as defined in RSA 485:1-a, XV, as reprinted in Appendix C.

(y) “Privately owned redistribution system (PORS)” means “privately owned redistribution system” as defined in RSA 485:1-a, XIV-a, as reprinted in Appendix C.

(z) “Real loss” means water that is physically lost from a water supplier’s water storage and distribution system due to overflow from storage tanks, leaking water lines between the source meter(s) and service meters where service meters are in place, and leaking water lines anywhere after the source meter(s) where service meters are not in place.

(aa) “Service connection” means the point of connection between the customer’s service pipe and the water system’s service line.

(ab) “Small community water system” means a community water system that is not a large community water system.

(ac) “Source activation date” means the date a conservation source is placed into use.

(ad) “Specified system” means a conservation system that is listed in Env-Wq 2101.13(a).

(ae) “Surface water” means “surface waters of the state” as defined in RSA:485-A:2, XIV, as reprinted in Appendix C.

(af) “System input volume” means the volume of water input to the water supply system corrected for known errors, which is equal to the volume of water derived from the water system’s own sources, minus water consumed by treatment processes, plus water imported or purchased, plus or minus the net change in water storage where applicable.

(ag) “Unauthorized consumption” means any intentional use of water from the distribution system that is not authorized consumption.

(ah) “Unbilled authorized consumption” means any authorized consumption for which the water supplier does not bill, whether metered or unmetered.

(ai) “Unbilled metered water” means any authorized consumption that is metered but for which the water supplier does not bill.

(aj) “Water balance” means the difference between the system input volume and authorized metered consumption.

(ak) “Water conservation” means “water conservation” as defined in RSA 485:1-a, XIX, as reprinted in Appendix C.

(al) “Wholesale system” means a public water system or ICI water user that treats source water and then sells or otherwise delivers finished water to a consecutive water system or privately owned distribution system.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.03); ss by #10480-A, eff 12-3-13

Env-Wq 2101.04 Owner Liability. The owner may delegate the responsibilities imposed by this part to an operator, but any such delegation shall not relieve the owner from liability for non-compliance with the requirements in this chapter.

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Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.04); ss by #10480-A, eff 12-3-13

Env-Wq 2101.05 Summary of Water Conservation Requirements; Compliance Deadlines.

(a) The owner of a CWS described in Env-Wq 2101.03(n)(1) shall comply with the requirements established in Env-Wq 2101.06 through Env-Wq 2101.13, as summarized in Table 2101-1, below, by the deadline specified in Table 2101-1:

Table 2101-1: Summary of Requirements, Compliance Deadlines for New CWS

Table 2101-1 Requirement	Compliance Deadline
Env-Wq 2101.06 relative to water meters	No later than the source activation date
Env-Wq 2101.07 relative to implementing a leak detection and repair program	No later than the source activation date
Env-Wq 2101.08 relative to performing a water balance	No later than the source activation date
Env-Wq 2101.09 relative to conducting a water audit and preparing and implementing a response plan	If required, submit with the water balance
Env-Wq 2101.10(b) relative to addressing high pressure zones	No later than the source activation date
Env-Wq 2101.11 relative to implementing a rate structure and billing practices to promote conservation	No later than the source activation date
Env-Wq 2101.12 relative to implementing an educational outreach program	No later than the source activation date
Env-Wq 2101.13 relative to notifying consecutive water systems and PORS	Within 5 working days of obtaining final approval for the source

(b) The owner of a large CWS described in Env-Wq 2101.03(n)(2) shall comply with the requirements established in Env-Wq 2101.06 through Env-Wq 2101.13, as summarized in Table 2101-2, below, by the deadline specified in Table 2101-2:

Table 2101-2: Summary of Requirements, Compliance Deadlines for Existing Large CWS

Table 2101-2 Requirement	Compliance Deadline
Env-Wq 2101.06(a)(1), (b) and (c) relative to service meters	Within 3 years of obtaining approval of the new source
Env-Wq 2101.06(a)(2)-(4), (b), and (d) relative to source, analysis, distribution and transfer meters	No later than the source activation date
Env-Wq 2101.07 relative to implementing a leak detection and repair program	Within one year of obtaining approval of the new source
Env-Wq 2101.08 relative to calculating a water balance	No later than the earlier of installing all service meters or within 3 years of obtaining approval of the new source
Env-Wq 2101.09 relative to conducting a water audit and preparing and implementing a response plan	If required, submit with the water balance
Env-Wq 2101.10(a) relative to addressing high pressure zones	Within one year of obtaining approval of the new source, subject to the stated feasibility and consistency requirements

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Table 2101-2 Requirement	Compliance Deadline
Env-Wq 2101.10(b) relative to addressing high pressure zones	In the response plan, if a response plan is required and portions of the distribution system exceed static pressures of 100 psi
Env-Wq 2101.11 relative to implementing a rate structure and billing practices to promote conservation	Within 2 years of installing all service meters or within 5 years of obtaining approval for a new source of water, whichever is earlier
Env-Wq 2101.12 relative to implementing an educational outreach program	No later than the source activation date
Env-Wq 2101.13 relative to notifying consecutive water systems and PORS	Within 5 working days of obtaining final approval for the source

(c) The owner of a conservation system that is, in whole or in part, a wholesale system shall comply with:

- (1) The requirements specified in Table 2101-1 or Table 2101-2, as applicable to the type of community water system the wholesale system is, if it is a community water system; or
- (2) The requirements that apply to specified systems, if the wholesale system is not covered by Table 2101-1 or Table 2101-2.

(d) The owner of a conservation system that is, in whole or in part, a specified system shall comply with the requirements established in Env-Wq 2101.14 through Env-Wq 2101.17 by the deadline specified for the requirement.

(e) The owner of a conservation system that is used, in whole or in part, for agricultural water use shall comply with the requirements specified in Env-Wq 2101.18.

(f) The owner of a conservation system that is, in whole or in part, an ICI water user shall comply with the requirements specified in Env-Wq 2101.13 and Env-Wq 2101.19 through Env-Wq 2101.22.

(g) To the extent that multiple sets of requirements apply to a conservation system, the owner of the system shall comply with all requirements, provided that if the requirements overlap, the more stringent requirement(s) shall apply.

(h) Activities undertaken pursuant to (a) through (f), above, shall be completed under the supervision of a water system operator who is certified pursuant to RSA 332-E and Env-Dw 502.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.05); ss by #10480-A, eff 12-3-13

Env-Wq 2101.06 Water Meters.

(a) The owner of a conservation system shall install water meters for each of the following:

- (1) All service connections, including all public sector service connections;
- (2) Each source of water prior to treatment;
- (3) Transfers to consecutive water systems or privately owned redistribution systems; and
- (4) If a water source undergoes a treatment process that consumes water:

a. Each point of entry into the distribution system for the water source, provided that multiple water sources may be combined prior to the distribution system meter; or

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b. All points of discharge to other than the distribution system, including but not limited to backflush, treatment process water, and continuous analyzers.

(b) The owner shall select, size, install, and maintain the water meters required by (a), above, in accordance with:

(1) The specifications of the manufacturer; and

(2) The procedures and protocols described in “Manual of Water Supply Practices, Water Meters - Selection, Installation, Testing, and Maintenance,” document identification number AWWA M6, American Water Works Association, 2012, available as noted in Appendix A.

(c) The owner shall read the water meters required by (a)(1), above, at least once in each 3-month period, but not sooner than 83 days after and not later than 97 days after the date in the prior quarter on which the meters were read, provided that the owner of a system that has connections which are not used year-round may request a waiver as provided in Env-Wq 2101.23.

(d) The owner shall:

(1) Read the water meters required by (a)(2) and (3), above, at least monthly; and

(2) Report the readings to the department in accordance with Env-Wq 2102.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.06); ss by #10480-A, eff 12-3-13

Env-Wq 2101.07 Leak Detection and Repair.

(a) The owner of a conservation system shall implement a leak detection program in accordance with “Manual of Water Supply Practices, Water Audits and Loss Control Programs”, document identification number AWWA M36, American Water Works Association, 2009 (2009 AWWA M36 Manual), available as noted in Appendix A.

(b) The owner shall:

(1) Repair all leaks within 60 days of discovery; or

(2) Propose an alternative timeframe to the department in writing within 30 days of discovery.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.07); ss by #10480-A, eff 12-3-13

Env-Wq 2101.08 Water Balance.

(a) The owner of a conservation system shall calculate the water balance for each calendar year.

(b) The owner shall submit the water balance calculated as specified in (a), above, to the department no later than the first day of March following the year to which the water balance pertains.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.08); ss by #10480-A, eff 12-3-13

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Env-Wq 2101.09 Development and Implementation of Response Plans.

(a) If the water balance calculated pursuant to Env-Wq 2101.08(a) exceeds 15% of the system input volume, the owner of a conservation system shall:

- (1) Complete a water audit using protocols and procedures described in the 2009 AWWA M36 Manual;
- (2) Prepare a response plan based on the findings of the water audit; and
- (3) Submit the water audit and the response plan to the department with the water balance required by Env-Wq 2101.08.

(b) The response plan prepared pursuant to (a)(2), above, shall identify the measures the owner intends to implement and the schedule on which such measures will be implemented to reduce the water balance to below 15% within 2 years.

(c) The department shall approve the response plan within 90 days if the department agrees that the measures identified in the plan are likely to meet the reduction requirements specified in (b), above.

(d) The department shall include in its approval such conditions as are required to ensure the response plan is implemented as required, including but not limited to requirements for interim progress reports.

(e) The owner shall implement the response plan as approved by the department in accordance with the approved schedule upon receiving approval from the department.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.09); ss by #10480-A, eff 12-3-13

Env-Wq 2101.10 High Pressure Zones.

(a) The owner of a conservation system shall implement pressure reduction as specified in Table 2101-1 or Table 2101-2, as applicable, when:

- (1) Technically feasible;
- (2) Consistent with water system industry standards and regulations; and
- (3) Consistent with other public health and safety considerations.

(b) If a response plan is required per Env-Wq 2101.09(a) and portions of the distribution system exceed static pressures of 100 psi, the response plan prepared pursuant to Env-Wq 2101.09(a)(2) shall address the possibility of leakage from high pressure zones.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.10); ss by #10480-A, eff 12-3-13

Env-Wq 2101.11 Rate Structure and Billing Practices to Promote Water Conservation.

(a) The owner of a conservation system shall implement a rate structure and billing practices that promote water conservation, as specified in this section.

(b) The rate structure shall be based on:

- (1) A unit price of water; and

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- (2) The amount of water used by each connection to the conservation system.
- (c) The unit price of water for residential connections shall:
 - (1) Remain the same for any volume of water consumed; or
 - (2) Increase with the volume of water consumed.
- (d) If service meters are read at least quarterly, the owner shall bill customers not less than quarterly.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.11); ss by #10480-A, eff 12-3-13

Env-Wq 2101.12 Educational Outreach Program.

(a) The owner of a conservation system shall notify municipal governments within its service area as specified in Env-Wq 2101.25.

(b) The owner shall implement an on-going educational outreach initiative for its customers to promote water conservation.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.12); ss by #10480-A, eff 12-3-13

Env-Wq 2101.13 Notice by Wholesale System Required.

(a) The owner of a wholesale system shall notify any consecutive system or privately owned redistribution system to which it delivers water of the projected source activation date within 5 working days of obtaining approval for a new conservation source.

(b) The notice provided pursuant to (a), above, shall be in writing and include the following:

- (1) The projected source activation date; and
- (2) A statement that the consecutive system or privately owned redistribution system will be subject to Env-Wq 2101 as of the source activation date.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.13); ss by #10480-A, eff 12-3-13

Env-Wq 2101.14 Requirements for Specified Systems.

(a) The requirements in Env-Wq 2101.15 through Env-Wq 2101.17 shall apply to the systems listed below, which are collectively referred to as specified systems:

- (1) A conservation system that was a small CWS on or after May 14, 2005 but prior to the 2013 effective date of this part;
- (2) A landlord-owned conservation system in which the landlord supplies water only to tenants and includes water service in a rental fee;
- (3) A conservation system that is a wholesale system, if such system is not covered by Env-Wq 2101.05(a) or (b); and

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(4) A consecutive water system or privately owned redistribution system that receives water from a wholesale system that is subject to this part.

(b) The owner of a specified system shall comply with the applicable requirements by the deadline noted for each requirement.

Source. #8353, eff 5-14-05 (See Revision Note at part heading for Env-Wq 2101) (formerly Env-Ws 390.14); ss by #10480-A, eff 12-3-13

Env-Wq 2101.15 Water Meters for Specified Systems. The owner of a conservation system that is a specified system shall comply with Env-Wq 2101.06(a)(2)-(3), (b), and (d) no later than the source activation date.

Source. #10480-A, eff 12-3-13

Env-Wq 2101.16 Minimization of Water Loss and Water Waste for Specified Systems.

(a) The owner of a specified system shall implement one of the following options to minimize water loss and water waste by the deadlines noted in (b), below:

(1) Comply with the following requirements:

- a. Service metering as specified in Env-Wq 2101.06(a)(1), (b), and (c);
- b. Calculating a water balance as specified in Env-Wq 2101.08;
- c. Water auditing and implementing a response plan as specified in Env-Wq 2101.09; and
- d. Conservation rate structure and billing practices as specified in Env-Wq 2101.11;

(2) Implement a leak detection and repair program as follows:

- a. Complete a comprehensive leak detection survey of the distribution system every 2 years in accordance with “Manual of Water Supply Practices, Water Audits and Loss Control Programs”, document identification number AWWA M36, American Water Works Association, 2009 (2009 AWWA M36 Manual), available as noted in Appendix A; and
- b. Address all leaks as specified in Env-Wq 2101.07(b); or

(3) Implement a high resolution meter reading analysis as follows:

- a. Install water meters between all storage or treatment processes and all points of entry into the distribution system;
- b. Conduct the analysis during periods of low water demand to identify leaks; and
- c. Conduct the analysis not less than twice in each 12-month period, but not sooner than 173 days after and not later than 187 days after the prior analysis; and
- d. Address all leaks as specified in Env-Wq 2101.07(b).

(b) The deadlines for implementing the option selected under (a), above, shall be as follows:

(1) If (a)(1) is selected, the requirements shall be implemented by the deadline specified in:

- a. Table 2101-1 for any landlord-owned system that did not exist as of the 2013 effective date of this part; or
- b. Table 2101-2 for any other specified system;

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(2) If (a)(2) is selected, the first survey shall be completed:

- a. No later than 2 years from the source activation date for any landlord-owned system that did not exist as of the 2013 effective date of this part; or
- b. No later than 2 years from the source approval date for any other specified system; and

(3) If (a)(3) is selected, the requirements shall be implemented no later than:

- a. The source activation date for any landlord-owned system that did not exist as of the 2013 effective date of this part; or
- b. One year from the obtaining final approval for the conservation source for any other specified system.

(c) In addition to the option implemented under (a), above, the owner of a specified system shall comply with:

(1) Env-Wq 2101.10 relative to high pressure zones no later than:

- a. The source activation date for any landlord-owned system that did not exist as of the 2013 effective date of this part; or
- b. One year from the obtaining final approval for the conservation source for any other specified system; and

(2) Env-Wq 2101.13 relative to notifying consecutive water systems and PORS within 5 working days of obtaining final approval for the conservation source.

Source. #10480-A, eff 12-3-13

Env-Wq 2101.17 Educational Outreach Program for Specified Systems.

(a) The owner of a specified system that is a landlord-owned system established on or after the 2013 effective date of this part shall comply with the educational outreach program for conservation systems in Env-Wq 2101.12 no later than the source activation date.

(b) The owner of any specified system not covered by (a), above, shall comply with the educational outreach program for conservation systems in Env-Wq 2101.12 within one year of obtaining final approval for the conservation source.

Source. #10480-A, eff 12-3-13

Env-Wq 2101.18 Requirements for Agricultural Water Use. Each owner of a conservation system that uses the majority of its water for agricultural water use shall:

(a) Implement irrigation processes in accordance with the 1998 edition of the Irrigation Best Management Practices for Agriculture in New Hampshire, published by the department of agriculture, markets and food; and

(b) Register and report water use to the department in accordance with Env-Wq 2102.

Source. #10480-A, eff 12-3-13

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Env-Wq 2101.19 Basic Requirements for Industrial, Commercial, and Institutional (ICI) Water Users.

(a) Each ICI water user shall register and report water use to the department in accordance with Env-Wq 2102.

(b) Each ICI water user shall identify the source(s) and amount of water used for existing and anticipated future uses of water associated with the ICI water user, including but not limited to the following:

- (1) Heating;
- (2) Cooling;
- (3) Processing;
- (4) Product ingredient;
- (5) Sanitary use; and
- (6) Outdoor water use.

(c) Subject to (d), below, each ICI water user shall install and maintain water meters as described below prior to initiating a withdrawal from a conservation source:

- (1) A water meter shall be installed for each water source; and
- (2) All water meters shall be selected, sized, installed, and maintained in accordance with:
 - a. The specifications of the manufacturer; and
 - b. The procedures and protocols described in “Manual of Water Supply Practices, Water Meters - Selection, Installation, Testing, and Maintenance,” document identification number AWWA M6, American Water Works Association, 2012, available as noted in Appendix A.

(d) Each ICI water user that uses a conservation source for snowmaking shall measure water use associated with snowmaking as required by RSA 488:4-a.

Source. #10480-A, eff 12-3-13

Env-Wq 2101.20 Additional Requirements for ICI Water Users.

(a) If water is used in a single-pass cooling system, the ICI water user shall replace or retrofit the process by using one or more of the following methods to achieve maximum water efficiency within 5 years of source activation:

- (1) Recirculating cooling techniques to replace some or all of the single-pass water cooling system;
- (2) The use of sensors and automatic shut-off devices to reduce water used for cooling processes;
- (3) Implementation of water treatment processes that consume less water than the process(es) being used;
- (4) Air cooling techniques to replace some or all of the single-pass water cooling system; or
- (5) Alternative technology that reduces water consumption by at least the amount that would be reduced by implementing one or more processes described in (1) through (4), above.

(b) If the ICI water user has any process that results in the discharge or disposal of unused water, the water user shall identify each process where:

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- (1) Water is used to control temperature; and
 - (2) Unused water could be discharged or otherwise disposed of through an overflow or other outlet.
- (c) The ICI water user shall modify each process identified pursuant to (b), above, within 5 years of source activation by installing:
- (1) Automatic shut-off devices to prevent the discharge of water to waste; and
 - (2) Sensors that optimize the use of water.
- (d) Each ICI water user shall implement water conservation practices not described in Env-Wq 2101.19 as described below:
- (1) The ICI water user shall submit to the department a description of water conservation best management practices or best available technologies that might be applicable to the types of water-using processes at the ICI water user's facility;
 - (2) The ICI water user shall develop a plan and schedule to implement the plan that demonstrates these processes will be implemented within 5 years; and
 - (3) The ICI water user shall implement the plan according to the schedule upon obtaining approval from the department pursuant to Env-Wq 2101.26.

Source. #10480-A, eff 12-3-13

Env-Wq 2101.21 Waiver from ICI Water User Requirement(s) Based on Economic Analysis.

- (a) An ICI water user who wishes to obtain a waiver from complying with a measure described in Env-Wq 2101.20 shall submit to the department an economic analysis prepared by a person employed or contracted by the ICI water user who has training and experience in preparing economic analyses which shows that the payback period for the measure is more than 4 years.
- (b) The economic analysis prepared to support a waiver request under (a), above, shall determine the true cost of the water use, based on the following factors:
- (1) The cost of energy to pump and distribute water;
 - (2) The cost of treating the water if treatment is necessary prior to being used or disposed of by the ICI water user;
 - (3) The cost of disposing of wastewater;
 - (4) The capital costs associated with developing new sources of water;
 - (5) All other costs or fees associated with obtaining or disposing of the water;
 - (6) The capital costs associated with retrofitting existing process equipment or purchasing new process equipment;
 - (7) All other costs or fees associated with retrofitting existing process equipment or purchasing new process equipment; and
 - (8) Whether the ICI water user anticipates any change in circumstances that could act to lower the overall cost of implementing the measure, including but not limited to whether the ICI water user is contemplating moving to a different facility and whether other sources of water may become available.

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(c) The department shall grant a 4-year renewable waiver if the department agrees that the economic analysis submitted to support the request:

- (1) Is complete and accurate; and
- (2) Demonstrates that the payback period for the measure is more than 4 years.

(d) The department shall include in the waiver any condition(s) necessary to ensure efficient water use.

(e) In order to renew a waiver, the ICI water user shall submit a renewal request with an updated economic analysis prepared in accordance with (b), above, by a person employed or contracted by the ICI water user who has training and experience in preparing economic analyses.

(f) The department shall renew the waiver only if the department agrees that the updated economic analysis meets the requirements of (c)(1) and (2), above.

Source. #10480-A, eff 12-3-13

Env-Wq 2101.22 Lawn Irrigation by ICI Water Users.

(a) Subject to (c), below, any ICI water user that is using water to irrigate lawns shall:

- (1) Equip all automatic lawn watering devices with technology that will prevent the devices from operating during rain events or otherwise when the lawn does not need to be watered; and
- (2) Audit all automatic lawn watering systems not less frequently than once every 3 years to ensure the technology required by (1), above, is functioning properly.

(b) Subject to (c), below, any ICI water user that is installing a new lawn area shall require the lawn to be underlain by 6 inches of loam, which is a loose friable topsoil that combines relatively equal parts of sand, clay, and silt and that is generally free from stones, lumps, stumps, roots, weeds, or similar objects larger than 2 inches.

(c) The requirements of (a) and (b), above, shall not apply to lawns associated with golf courses.

Source. #10480-A, eff 12-3-13

Env-Wq 2101.23 Waivers.

(a) The purpose of this section is to accommodate situations where strict compliance with all rules in this part may not be the best outcome in light of the particular circumstances of the situation.

(b) This section shall not apply to the requirements in Env-Wq 2101.20, for which waiver requests shall be filed as specified in Env-Wq 2101.21.

(c) Subject to the limitation in (b), above, any owner of a conservation system who wishes to request a waiver of one or more specific requirements of this part shall do so as specified in this section.

(d) The person requesting the waiver shall submit a written request to the department that includes the following information:

- (1) The name, mailing address, and location of the conservation system or water user to which the waiver request relates;
- (2) The name, daytime telephone number and, if available, fax number and e-mail address of the individual who is knowledgeable about the request and who can answer questions on behalf of the requestor;

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- (3) A description of the conservation system or water user to which the waiver request relates, including the population served by the water system, if applicable;
 - (4) A reference to the specific section of the rules for which a waiver is sought;
 - (5) A full explanation of why a waiver is necessary, including an explanation of the economic and operational consequences of complying with the rule as written;
 - (6) A full explanation with supporting data of the alternative(s), if any, proposed to be implemented or used in lieu of the section's requirements;
 - (7) A discussion of the length of time the waiver will be needed; and
 - (8) A full explanation of how the proposed alternative(s), if any, meets the criteria specified in (f), below.
- (e) The department shall issue a written response to a request for a waiver within 45 days of receipt of the request. If the department denies the request, the reason(s) for the denial shall be clearly stated in the written response.
- (f) The department shall grant a waiver if the submitted request demonstrates that:
- (1) The requirement for which a waiver is requested is not a statutory requirement;
 - (2) The health and safety of the population served by the conservation system will not be compromised if the waiver is granted;
 - (3) The operational and economic consequences of complying with the rule as written outweigh any benefit to be obtained from complying with the rule as written; and
 - (4) Granting a waiver will not contravene the intent of RSA 485:61 or these rules.
- (g) The department shall include in the waiver any conditions necessary to ensure that the criteria specified in (f), above, are met.
- (h) No waiver shall be valid for more than 4 years, but the conservation system or water user for which or to whom a waiver is granted may request the same waiver again, provided that the previous waiver shall expire unless the request is received prior to the expiration of the waiver then in effect.

Source. #10480-A, eff 12-3-13

Env-Wq 2101.24 Water Conservation Plan Required.

- (a) The applicant for approval of a source that would be a conservation source shall submit a water conservation plan that demonstrates compliance with the applicable provisions of Env-Wq 2101.05 through Env-Wq 2101.22 in accordance with the following:
- (1) For an application for a new source of groundwater for a small community water system, the water conservation plan shall be submitted prior to or in conjunction with the preliminary report required by Env-Dw 301.11;
 - (2) For an application for a new source of groundwater for a large community water system, the water conservation plan shall be submitted prior to or in conjunction with the preliminary report required by Env-Dw 302.13;

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(3) For an application for a new large groundwater withdrawal, the water conservation plan shall be submitted prior to or in conjunction with the preliminary application required by Env-Wq 403.05;

(4) For an application for a new bottled water source, the water conservation plan shall be submitted prior to or in conjunction with the report required by Env-Dw 303.20;

(5) For a new withdrawal from a surface water associated with a project requiring a 401 Water Quality Certification, the water conservation plan shall be submitted prior to or in conjunction with the application for a 401 Water Quality Certification pursuant to Section 401 of the federal Clean Water Act;

(6) For a new withdrawal from a surface water that requires water quality certification pursuant to RSA 485-A:12, IV, the water conservation plan shall be submitted prior to or in conjunction with the certification request;

(7) For a new surface water transfer to augment an existing surface water source pursuant to Env-Wq 1708.12, the water conservation plan shall be submitted prior to or in conjunction with the application for approval of the transfer; and

(8) For a consecutive water system or privately owned redistribution system, the water conservation plan shall be submitted to the department within 90 days of receiving notice from the wholesale system pursuant to Env-Wq 2101.13.

(b) The water conservation plan shall be signed by the owner, certifying that the owner has read the water conservation plan, understands the responsibilities as referenced in the plan, and that all information provided is complete, accurate, and not misleading.

(c) If an application is filed pursuant to (a)(1) or (2), above, for an existing community water system that currently bills for water service based on metered consumption, the water conservation plan shall include a water audit prepared using protocols and procedures described in the 2009 AWWA M36 Manual, available as described in Appendix A, for the most recent calendar year.

(d) The department shall contact the applicant within 30 days of receiving the water conservation plan in order to:

(1) Review the water conservation plan with the applicant; and

(2) Assess the accuracy and adequacy of the water conservation plan.

Source. #10480-A, eff 12-3-13

Env-Wq 2101.25 Public Notification.

(a) The department shall send the applicant a summary of the requirements of Env-Wq 2101.

(b) Within 10 working days of receiving the summary from the department, the applicant shall provide a copy of the water conservation plan and summary via certified mail, return receipt requested, to:

(1) The governing board of:

a. The municipality in which a proposed conservation source is located;

b. All municipalities that receive water from the water system; and

c. All wholesale customers of the water system; and

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(2) The regional planning commission established in accordance RSA 36:46 for the location of a proposed new source.

(c) The applicant shall request the governing boards described in (a)(1), above, to amend the body's site planning requirements to:

- (1) Reflect the requirements of Env-Wq 2101 when applicable; and
- (2) Promote water conservation landscaping for new projects.

(d) The applicant shall send copies of the returned receipts to the department prior to receiving approval for the water conservation plan.

Source. #10480-A, eff 12-3-13

Env-Wq 2101.26 Approval.

(a) The department shall issue a written decision on the water conservation plan within 45 days of receipt of the plan.

(b) The department shall approve the water conservation plan if the department determines that:

- (1) The water conservation plan is complete and correct;
- (2) The water conservation plan demonstrates that the applicable water conservation measures required by Env-Wq 2101.05 through Env-Wq 2101.22 are being or will be implemented in accordance with the specified timeframes; and
- (3) The applicant has sent the notice as required by Env-Wq 2101.25.

(c) The department shall include in its approval such conditions as are required to ensure the water conservation plan is implemented as required.

(d) As a condition of obtaining approving of the water conservation plan, the owner of a conservation system shall use one of the following pipe identification and location methods for any non-metallic pipe installed in the water system's distribution system on or after May 15, 2013:

- (1) Detectable tracer tape;
- (2) Detectable tracer wire; or
- (3) GPS locations of pipe for which the data is maintained in a geographic information system dataset.

(e) The department shall not approve the water conservation plan if the criteria specified in (b), above, are not met.

(f) If the department does not approve the water conservation plan, the department shall specify the reason(s) in the notice sent pursuant to (b), above.

Source. #10480-A, eff 12-3-13

Env-Wq 2101.27 On-Going Compliance Reports.

(a) The owner of a conservation system shall provide the following information on a form supplied by the department once every 3 years from the date of approval of the water conservation plan, to demonstrate on-going compliance with the plan:

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- (1) The owner’s name, mailing address, and daytime telephone number;
 - (2) The name, mailing address, and daytime telephone number and, if available, fax number and e-mail address of the individual responsible for maintaining compliance with Env-Wq 2101 on behalf of the owner; and
 - (3) Details and documentation of how compliance with each of the applicable requirements of these rules is being achieved.
- (b) The owner shall sign and date the on-going compliance report. Such signature shall constitute certification that:
- (1) The owner has personally examined and is familiar with the information submitted in or with the on-going compliance form;
 - (2) Based on the owner’s inquiry of those individuals immediately responsible for obtaining the information provided on or with the on-going compliance report, the owner believes that the submitted information is true, accurate and complete; and
 - (3) The owner understands that he or she is subject to the penalties specified in RSA 641:3 for making unsworn false statements.
- (c) If the conservation system is not in compliance with one or more requirement(s), the on-going compliance report shall identify the non-compliance and include an explanation of how the non-compliance has been, is being, or will be addressed.

Source. #10480-A, eff 12-3-13

APPENDIX A: INCORPORATION BY REFERENCE INFORMATION

Rule Section(s)	Title	Dated	Obtain at:
Env-Wq 2101.06(b)(2) Env-Wq 2101.19(c)(2)b.	Manual of Water Supply Practices, Water Meters - Selection, Installation, Testing, and Maintenance, AWWA M6	2012	American Water Works Association www.awwa.org
Env-Wq 2101.07(a) Env-Wq 2101.08(a) Env-Wq 2101.09(a)(1) Env-Wq 2101.16(a)(1), (2) Env-Wq 2101.24(b)	Manual of Water Supply Practices, Water Audits and Loss Control Programs, AWWA M36	2009	American Water Works Association www.awwa.org

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APPENDIX B: STATUTES IMPLEMENTED

Rule Section(s)	State Statute(s) Implemented
Env-Wq 2101 (see additional statutes for specific sections listed below)	RSA 485:61; RSA 485:3, XII
Env-Wq 2101.08	RSA 485:3, XIII(c)
Env-Wq 2101.22	RSA 541-A:22, IV
Env-Wq 2101.23	RSA 485:3, XIII(b)

APPENDIX C: STATUTORY DEFINITIONS

RSA 485:1-a:

I. “Community water system” means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

XII. “Operator” means the individual who has direct management responsibility for the routine supervision and operation of a public water system or of a water treatment plant or collection, treatment, storage, or distribution facility or structure that is a part of a system.

XIII. “Person” means any individual, partnership, company, public or private corporation, political subdivision or agency of the state, department, agency or instrumentality of the United States, or any other legal entity.

XIV-a. “Privately owned redistribution system” means a system for the provision of piped water for human consumption which does not meet the definition of public water system under paragraph XV, and meets all the following criteria: (1) obtains all of its water from, but is not owned or operated by, a public water system; (2) serves a population of at least 25 people, 10 household units, or 15 service connections, whichever is fewest, for at least 60 days per year; and (3) has exterior pumping facilities, not including facilities used to reduce pressure, or exterior storage facilities which are not part of building plumbing.

XV. “Public water system” means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such term includes (1) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (2) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Any water system which meets all of the following conditions is not a public water system:

- (a) Consists only of distribution and storage facilities (and does not have any collection and treatment facilities);
- (b) Obtains all of its water from, but is not owned or operated by, a public water system; and
- (c) Does not sell water to any person.

XIX. “Water conservation” means any beneficial reduction in water losses, waste, or use.

RSA 485-A:2:

XIV. “Surface waters of the state” means perennial and seasonal streams, lakes, ponds, and tidal waters within the jurisdiction of the state, including all streams, lakes, or ponds bordering on the state, marshes, water courses, and other bodies of water, natural or artificial.

RSA 485-C:2:

VIII. "Groundwater" means subsurface water that occurs beneath the water table in soils and geologic formations.

IX-a. "Large groundwater withdrawal" means any withdrawal from groundwater of 57,600 gallons or more of water in any 24-hour period at a single property or place of business except withdrawals associated with short-term use.

RSA 485:61 Rules for Water Conservation. –

I. The department shall adopt rules, pursuant to RSA 541-A, for water conservation practices for water users. These rules shall strike a reasonable balance between environmental, energy, and economic impacts and be consistent with current industry standards and practices for different types of water users.

II. The water conservation rules in paragraph I of this section shall apply to all new permit applicants and applications for water withdrawals subject to the provisions of RSA 485:3, RSA 485:48, RSA 485-C:21 and section 401 of the Clean Water Act.

III. Water conservation rules shall be consistent with applicable state or federal rules and regulations.