

GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2013

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SENATE BILL 163  
Agriculture/Environment/Natural Resources Committee Substitute Adopted 4/9/13  
House Committee Substitute Favorable 6/18/14  
Fourth Edition Engrossed 6/19/14

Short Title: Reclaimed Water as a Source Water.

(Public)

Sponsors:

Referred to:

March 5, 2013

1 A BILL TO BE ENTITLED  
2 AN ACT TO DESIGNATE RECLAIMED WATER AS A SOURCE WATER UNDER  
3 CERTAIN CONDITIONS.

4 The General Assembly of North Carolina enacts:

5 **SECTION 1.** The General Assembly finds that the use of reclaimed water to  
6 supplement source waters for potable water treatment is an appropriate and prudent measure in  
7 regions of the State with limited water resources under limited conditions.

8 **SECTION 2.** G.S. 143-355.5 reads as rewritten:

9 "**§ 143-355.5. Water reuse; policy; rule making.**

10 (a) Water Reuse Policy. – It is the public policy of the State that the reuse of treated  
11 wastewater or reclaimed water and the use of gray water or captured rain water is critical to  
12 meeting the existing and future water supply needs of the State

13 (a1) The General Assembly finds that reclaimed water systems permitted and operated  
14 under ~~G.S. 143-215.1(d2)~~G.S. 143-215.1 in an approved wastewater-reuse program can provide  
15 water for many beneficial purposes in a way that is both environmentally acceptable and  
16 protective of public health. This finding includes and applies to conjunctive facilities that  
17 require the relocation of a discharge from one receiving stream to another under all of the  
18 following conditions:

- 19 (1) The relocation is necessary to create an approved comprehensive wastewater  
20 reuse program.  
21 (2) The reuse program provides significant reuse benefits.  
22 (3) The relocated discharge will comply with all applicable water quality  
23 standards; will not result in degradation of water quality in the receiving  
24 waters; and will not contribute to water quality impairment in the receiving  
25 watershed; and will result in net benefits to water quality, such as the  
26 elimination of a wastewater discharge in a nutrient sensitive river  
27 basin.watershed.

28 (a2) The General Assembly finds that reclaimed water systems permitted and operated  
29 under G.S. 143-215.1 in an approved wastewater reuse program can provide water for the  
30 beneficial purpose of supplementing the water supply source for potable water in a way that is  
31 both environmentally acceptable and protective of public health. Notwithstanding any other  
32 provision of law, a local water supply system may combine reclaimed water with the source  
33 water treated to provide potable water supply if all of the following conditions are satisfied:



- 1           (1)    The reclaimed water use is not permitted for compliance with flow  
2           limitations imposed by a permit issued pursuant to G.S. 143-215.1(a4)(1).
- 3           (2)    The reclaimed water and source water are combined in an impoundment  
4           owned and controlled by the drinking water supplier from which water is  
5           pumped to the water treatment plant.
- 6           (3)    The impoundment is sized to hold a minimum volume corresponding to five  
7           days storage at the authorized operating capacity of the water treatment plant  
8           under normal operating conditions.
- 9           (4)    The impoundment design and pumping infrastructure incorporate features to  
10          ensure mixing of reclaimed water and source water.
- 11          (5)    The reclaimed water is treated to comply with the highest reclaimed water  
12          effluent standards established by the Commission.
- 13          (6)    The average daily flow of reclaimed water into the impoundment, as  
14          measured over a 24-hour period, is no more than twenty percent (20%) of  
15          the sum of the average daily flow of source water and reclaimed water, as  
16          measured over the same 24-hour period, into the impoundment.
- 17          (7)    The local water system has implemented conservation and efficiency  
18          measures designed to achieve water use reductions.
- 19          (8)    Unbilled leakage from the local water system is maintained below fifteen  
20          percent (15%) of annual average potable water consumption of the local  
21          water system.
- 22          (9)    The local water system has a master plan that evaluates alternatives for  
23          reclaimed water use.
- 24          (10)   The local water system provides public notice to potable water recipients  
25          with opportunity for public participation.
- 26          (11)   The potable water supply provided pursuant to this subsection shall comply  
27          with all State and federal laws for the provision of safe drinking water.
- 28       (b)    Water Reuse Rule Making. – The Commission shall encourage and promote safe  
29       and beneficial reuse of treated wastewater as an alternative to surface water discharge. The  
30       Commission shall adopt rules to:
  - 31           (1)    Identify acceptable uses of reclaimed water, including toilet flushing, fire  
32           protection, decorative water features, and landscape irrigation.
  - 33           (2)    Facilitate the permitting of reclaimed water systems.
  - 34           (3)    Establish standards for reclaimed water systems that are adequate to prevent  
35           the direct distribution of reclaimed water as potable water. Standards  
36           adopted pursuant to this subdivision shall not prohibit the direct distribution  
37           of reclaimed water as potable water pursuant to subsection (a2) of this  
38           section.
- 39       (c)    Gray Water Rule Making. – The Commission shall encourage and promote the safe  
40       and beneficial use of gray water. The Commission shall adopt rules to:
  - 41           (1)    Identify acceptable uses of gray water, including toilet flushing, fire  
42           protection, decorative water features, and landscape irrigation.
  - 43           (2)    Facilitate the permitting of gray water systems.
  - 44           (3)    Establish standards, in coordination with the Commission for Public Health,  
45           for gray water systems that protect public health and safety and the  
46           environment and reduce the use of potable water within individual  
47           structures.
- 48       (d)    The Department shall develop policies and procedures to promote the voluntary  
49       adoption and installation of gray water systems."

50       **SECTION 3.** The Department of Environment and Natural Resources, in  
51       consultation with the Environmental Management Commission, shall study the effects of

1 chemicals of emerging concern, such as pharmaceuticals and personal care products, flame  
2 retardants, and perfluorinated compounds (PFCs) in wastewater effluent from municipal and  
3 privately operated wastewater treatment plants and in source water supplies. Recognizing that  
4 the effects of chemicals of emerging concern on human health and aquatic life is a rapidly  
5 evolving field, the report shall provide guidance on future State actions related to monitoring  
6 and mitigating the impacts of chemicals of emerging concern on source waters and surface  
7 waters in order to protect human health and aquatic life.

8 **SECTION 4.** This act is effective when it becomes law.