

**A RESOLUTION TO RECEIVE PUBLIC COMMENT ON PROPOSED ACTIVITIES
UNDER THE DRAFT CARRBORO STORMWATER MANAGEMENT PLAN**

Resolution No. 98/2002-03

WHEREAS, the Carrboro Board of Aldermen seeks to provide ample opportunities for the public to comment on existing and proposed policies and programs.

NOW, THEREFORE BE IT RESOLVED by the Carrboro Board of Aldermen that the Aldermen have received public input on the program elements of the Draft Stormwater Management Plan, and that staff will continue to receive written public comments for two weeks from today.

BE IT FURTHER RESOLVED by the Carrboro Board of Aldermen that the Aldermen direct staff to take into consideration comments of the public, the Planning Board and the Environmental Advisory Board in preparation of a final plan for review by the Aldermen at their March 4, 2003 regular meeting.

This is the 11th day of February in the year 2003.

15A NCAC 2H .0126 is amended as follows:

.0126 Stormwater Discharges

Stormwater picks up pollutants as it drains to waters of the State. When man alters stormwater drainage, the pollutants carried by stormwater to waters of the State may be concentrated or increased, resulting in water pollution. The juncture at which stormwater reaches waters of the State will either be a terminus of a pipe, ditch or other discrete outlet, or in a diffuse sheet flow manner. Stormwater discharges subject to NPDES permitting are addressed in this section, which incorporates, supplements and expands the federal rules on stormwater NPDES discharges. Other stormwater control requirements are mainly addressed in Section 2H .1000 entitled "Stormwater Management", but may also be addressed in sections dedicated to particular water classifications or circumstances. If there is an overlap, the more stringent requirements apply. NPDES permits for stormwater discharges to surface waters shall be issued in accordance with these Rules and United States Environmental Protection Agency regulations 40 CFR 122.21 and 122.26 122.21, 122.26, and 122.28 through 122.37 which are hereby incorporated by reference including any subsequent amendments. Copies of this publication are available from the Government Institutes, Inc. 4 Research Place, Suite 200, Rockville, MD 20850-1714 for a cost of ~~thirty-six~~ sixty-nine dollars (\$~~36.00~~) (\$69.00) each plus ~~four-six~~ six dollars (\$~~4.00~~) (\$6.00) shipping and handling. Copies are also available at the Division of Environmental Management, Water Quality, Archdale Building, 512 N. Salisbury Street, Raleigh, North Carolina 27604. These federal regulations can also be accessed on the world wide web at <http://www.gpo.gov/nara/cfr/index.html>

(1) For the purpose of this Rule, these terms shall be defined as follows:

(a) Department means the North Carolina Department of Environment and Natural Resources.

(b) Regulated public entities (RPE) means all municipalities and counties identified by a decennial U.S. Census as being located in whole or in part within a Urbanized Area, all federally designated public bodies, and all state designated public bodies.

(c) Municipal separate storm sewer system (MS4) pursuant to 40 CFR 122.26(b)(8) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(i) Owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.

(ii) Designed or used for collecting or conveying stormwater;

(iii) Which is not a combined sewer; and

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

- 1 (d) 1 year, 24 hour storm means the surface runoff resulting from a rainfall of an intensity expected to be
2 equaled or exceeded, on average, once in 12 months.
- 3 (e) Permitted by Rule means an entity is considered permitted pursuant to G.S. 143-215.1 and subject to
4 judicial review pursuant G.S. 143-215.5. It shall not be necessary for the Department to issue separate
5 permits, provided such entities comply with Item (11) of this Rule. Such entities shall be subject to
6 enforcement remedies pursuant to G.S. 143-215.6A, 143-215.6B and 143-215.6C.
- 7 (f) Population Density means the population of an area divided by the area's geographical measure in
8 square miles, equal to persons per square mile. For the purposes of this definition, the population shall
9 equal the sum of the permanent and seasonal populations, or be calculated from a measure of housing
10 unit density.
- 11 (g) Public body means the United States, the State of North Carolina, city, village, township, county,
12 school district, public college or university, single purpose governmental agency; or any other
13 governing body which is created by federal or state statute or law.
- 14 (h) Redevelopment means any rebuilding activity other than a rebuilding activity that:
15 (i) Results in no net increase in built-upon area, and
16 (ii) Provides equal or greater stormwater control than the previous development.
- 17 (i) Significant contributor of pollutants means an MS4 or a discharge that,
18 (i) Contributes to a pollutant loading(s) which may reasonably be expected to exert detrimental
19 effects on the quality and uses of that water body; or
20 (ii) That destabilizes the physical structure of a water body such that the discharge may reasonably be
21 expected to exert detrimental effects on the quality and uses of that water body.
22 Uses of the waters shall be determined pursuant to 15A NCAC 2B .0211 - .0222 and 15A NCAC 2B
23 .0300.
- 24 (j) Small municipal separate storm sewer system "small MS4" pursuant to 40 CFR 122.26(b)(16) means
25 all separate storm sewers that are:
26 (i) Owned or operated by the United States, a State, city, town, borough, county, parish, district,
27 association, or other public body (created by or pursuant to State law) having jurisdiction over
28 disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under
29 State law such as a sewer district, flood control district or drainage district, or similar entity, or an
30 Indian tribe or an authorized Indian tribal organization, or a designated and approved management
31 agency under section 208 of the CWA that discharges to waters of the United States.
32 (ii) Not defined as "large" or "medium" municipal separate storm sewer systems pursuant to 40 CFR
33 122.26(b), or designated under Sub-Item (2)(b) of this Rule.
34 This term includes systems similar to separate storm sewer systems in municipalities, such as systems
35 at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term
36 does not include separate storm sewers in very discrete areas, such as individual buildings.

1 (k) Total maximum daily load (TMDL) means a written, quantitative plan and analysis for attaining and
2 maintaining water quality standards in all seasons for a specific waterbody and pollutant.

3 (2) Designation: Designation consists of an automatic federal designation of public entities as described by
4 Sub-Item (2)(a) of this Rule and a two step state designation process as described by Sub-Item (2)(b) of this
5 Rule. All regulated public entities shall comply with the permit application schedule set forth in Item (6) of
6 this Rule.

7 (a) Federal designation.
8 In accordance with 40 CFR 122.32, all small MS4s located in whole or in part within an urbanized area
9 as determined by the most recent Decennial Census by the Bureau of the Census must seek coverage
10 under a NPDES permit for stormwater management.

11 (b) State designation process.
12 The department shall identify additional public bodies that have the potential to discharge stormwater
13 resulting in exceedances of water quality standards, including impairment of designated uses, or other
14 significant water quality impacts, including adverse habitat and biological impacts. As a first step, the
15 public bodies shall be identified based on the categories listed at Sub-Item (2)(b)(i) of this Rule. Once
16 a public body has been identified, the designation of that body, step two, as subject to the requirement
17 to apply for permit coverage will be made based on the criteria at Sub-Item (2)(b)(ii) of this Rule.

18 (i) Step One: Identification of public bodies potentially subject to regulation.
19 (A) Municipality. A municipality, outside of an urbanized area as determined by the most recent
20 Decennial Census by the Bureau of the Census, will be identified as a potential regulated MS4
21 if:
22 (I) The population is greater than 10,000; and
23 (II) The population density is at least 1,000 people per square mile.
24 (B) County. A County, outside of an urbanized area as determined by the most recent Decennial
25 Census by the Bureau of the Census, will be identified as a potential regulated public body if
26 the county municipal and non-municipal population (including permanent and seasonal
27 population) is greater than 45,000 persons. The seasonal population will be determined from
28 the most recent data available from local, state and/or federal sources.
29 (C) Other public bodies. A public body may be designated if:
30 (I) They are a municipality located within a regulated county, and have not been designated
31 under any other category; or
32 (II) They are a municipality and have not been designated under any other category; or
33 (III) They are a MS4 such as, but not limited to, state and federal facilities, universities,
34 community colleges, local sewer districts, hospitals, military bases, and prisons.

35 (ii) Step Two: Criteria for designation of public bodies. In making designations, the department will
36 evaluate the public bodies identified as per Sub-Item (2)(b)(i) of this Rule for designation using
37 the following criteria:

- 1 (A) Whether the public body discharges or has the potential to discharge stormwater to sensitive
2 waters, including:
3 (I) Waters classified as high quality, outstanding resource, shellfish, trout or nutrient
4 sensitive waters in accordance with 15A NCAC 2B .0101(d) and (e);
5 (II) Waters which have been identified as providing habitat for federally-listed aquatic animal
6 species that are listed as threatened or endangered by the U.S. Fish and Wildlife Service
7 or National Marine Fisheries Service under the provisions of the Endangered Species
8 Act, 16 U.S.C. 1531-1544; or
9 (III) Waters for which the designated use, as set forth in the classification system at 15A
10 NCAC 2B .0101(c), (d) and (e); have been determined to be impaired in accordance with
11 the requirements of 33 U.S.C. 1313(d); and
12 (B) Has exhibited high population growth or population growth potential, where
13 (I) High growth shall be defined as a 10 year rate of growth exceeding 1.3 times the state
14 population growth rate for that same period or a 2 year rate of growth which exceeds
15 fifteen percent (15%);or
16 (II) An area having growth potential shall be defined as a jurisdictional area adjoining an area
17 determined to have high growth in accordance with Sub-Item (2)(B)(I) of this Rule or an
18 area having a projected growth rate exceeding 1.3 times the state growth rate for the
19 previous 10 years;
20 (C) Whether the public body discharges are, or have the potential to be, a significant contributor
21 of pollutants to waters of the United States.
22 (3) State Designation Administration: Review and finalization of public body designation shall be handled
23 under the following guidelines.
24 (a) The department will implement the designation process in accordance with the department schedule
25 for Basinwide Plans starting January 01, 2004.
26 (b) The department shall publish a list of public bodies identified in accordance with Sub-Item (2)(b)(i) of
27 this Rule. Lists shall be developed for a river basin area in accordance with North Carolina's
28 Basinwide Planning Schedule. Publication of this list may be coordinated with public notices issued
29 through basinwide planning efforts.
30 (c) All public bodies identified shall be notified in writing by the department prior to publication of the list
31 in Sub-Item (3)(b) of this Rule.
32 (d) The department shall accept public comment on the application of the evaluation criteria in Sub-Item
33 (2)(b)(ii) of this Rule for each of the identified public bodies. A public comment period of not less
34 than 30 days will be provided.
35 (e) After review of the evaluation criteria in Sub-Item (2)(b)(ii) of this Rule and review of public
36 comments received, the department will review the effectiveness of any existing water quality
37 protection programs. The effectiveness will be determined based upon the water quality of the

1 receiving waters, and whether the waters have been determined to be supporting the uses as set forth in
2 the classifications pursuant to 15A NCAC 2B .0101(c), (d) and (e) and the specific classification of the
3 waters pursuant to 15A NCAC 2B .0300. The Department shall then make a final determination on
4 designation for each of the listed public bodies.

5 (f) The department shall notify a public body of its designation for NPDES stormwater coverage in
6 writing. This notification shall include the category under which the public body was designated, the
7 basis(es) of the designation and the date on which the application for coverage shall be submitted to
8 the Department.

9 (4) Other State designations

10 (a) Total Maximum Daily Load (TMDL) MS4s. TMDL MS4s include public bodies discharging
11 pollutants that are contributing to the impairment of a water body's use, as determined in accordance with
12 33 U.S.C 1313 (d). TMDL MS4s shall be designated if the MS4 is specifically listed by name for urban
13 stormwater Total Maximum Daily Load development.

14 (b) Designated by petition. Entities subject to a petition shall be designated by the department based on
15 the process and procedures identified in Item (5) of this Rule.

16 (5) Petitions

17 (a) In accordance with 40 CFR 122.26(f),

18 (i) Any operator of a MS4 may petition the department to require a separate NPDES stormwater
19 permit for any discharge into the MS4, and

20 (ii) Any person may petition the department to require a NPDES stormwater permit for a discharge
21 composed entirely of stormwater which contributes to a violation of a water quality standard or is
22 a significant contributor of pollutants to waters of the United States.

23 (b) Petition Submittal. Petitions to designate a small MS4 or discharge for NPDES stormwater permit
24 coverage must meet the following requirements:

25 (i) Petitions must be submitted on department approved forms.

26 (ii) A separate petition must be filed for each petitioned entity.

27 (iii) The petition must be complete prior to consideration by the department.

28 (iv) Petitions must demonstrate the need for NPDES stormwater permit coverage for the petitioned
29 entity based on the following standards:

30 (A) For stormwater discharges to impaired waters, monitoring data must be submitted to
31 demonstrate that the petitioned entity is the source of or a significant contributor of pollutants
32 to the impairment.

33 (B) For stormwater discharges to non-impaired waters, monitoring data must be submitted to
34 demonstrate that the petitioned entity is a significant contributor of pollutants to the receiving
35 waters.

36 (C) Monitoring data must include, at a minimum, representative sampling of the stormwater
37 discharges subject to the petition; and

- 1 (D) The petitioner must present information documenting how the sampling may be considered
2 representative of the stormwater discharges. The petitioner may present technical scientific
3 literature to support the sampling methods.
- 4 (E) The Petitioner shall notify the potential petitioned entity in advance of stormwater discharge
5 monitoring activities.
- 6 (v) The petitioner must certify that a copy of the petition and any subsequent additional information
7 submitted by the petitioner has been provided to the chief administrative officer of the petitioned
8 entity within 48 hours of submitting said petition and additional information to the department.
- 9 (vi) Petitions must include the following to be eligible for consideration:
- 10 (A) Completed set of petition form(s);
- 11 (B) In accordance with Sub-Item (5)(b)(iv) of this Rule, a demonstration of the need for NPDES
12 stormwater permit coverage. These data may be supplemented with technical study
13 information on land uses in the drainage area and the characteristics of stormwater runoff
14 from these land uses;
- 15 (C) Documentation of receiving waters impairment or degradation;
- 16 (D) A map delineating the drainage area of the petitioned entity, the location of sampling stations,
17 the location of the stormwater outfalls in the adjacent area of the sampling locations and
18 general features such as, surface waters, major roads and political boundaries to appropriately
19 locate the area of concern for the reviewers; and
- 20 (E) Certification of petitioned entity notification.
- 21 (vii) On a case by case basis the department may request additional information necessary to evaluate
22 the petition.
- 23 (c) Petition Administration. All petitions received by the department will be processed under the
24 following guidelines:
- 25 (i) The department will make a determination on the completeness of the petition and acknowledge
26 receipt of the petition within 90 days of receipt. The petition is considered complete if the
27 department does not notify the petitioner of receipt within 90 days.
- 28 (ii) Substantially incomplete petitions will be returned to the petitioner with guidance on what is
29 needed to complete the petition package.
- 30 (iii) Pursuant to 40 CFR 122.26(f)(5), the department must make a final determination on any petition
31 within 180 days of receipt. The 180-day period begins upon receipt of a complete petition
32 application. The department will draft the designation decision pursuant to the applicable
33 designation criteria from Sub-Item (2)(b)(ii) of this Rule.
- 34 (iv) The petition will be sent to public notice, which includes a public comment period of at least 30
35 days.
- 36 (v) The department may hold a public hearing on any petition and shall hold a public hearing if the
37 department receives a written request for a public hearing on the petition within 15 days after the

1 notice of the petition is published and the department determines that there is a significant public
2 interest in holding such hearing. The hearing date will be no less than 15 days from the receipt of
3 the request for public hearing.

4 (vi) Information on the petitioned entity will be accepted until the end of the public comment period
5 and will be considered in making the final determination on the petition. New petitions for the
6 same entity received during this time will become a party to the original petition.

7 (vii) New petitions for the same entity received after the public comment period ends and before the
8 final determination is made will be considered incomplete and placed on administrative hold
9 pending a final determination on the original petition.

10 (A) If the department designates the petitioned entity, any new petitions placed on administrative
11 hold will be considered in the development of the NPDES permit.

12 (B) If the department makes the final determination that the petitioned entity should not be
13 designated, new petitions for the previously petitioned entity must present new information or
14 demonstrate that conditions have changed substantially in order to be considered. If new
15 information is not provided, the petition shall be returned as substantially incomplete.

16 (viii) If the final determination is that the petitioned entity shall be designated, then the department
17 will notify the petitioned entity of its designation and will require a stormwater permit application.
18 The application shall be required to be submitted no later than 18 months from the date of
19 notification.

20 (6) Application schedule. Regulated public entities must submit applications on department approved forms.
21 Designated small MS4 applications shall include program descriptions for the minimum measures
22 identified in Item (7) of this Rule. The application for regulated public entities that do not own or operate
23 a small MS4 shall certify the lack of ownership or operation of a small MS4. Regulated public entities that
24 do not own or operate a small MS4 may elect to implement a stormwater management program pursuant
25 the options available in this Rule.

26 (a) The application deadline will not be less than 18 months from the date of designation notification,
27 except for:

28 (i) 1990 Decennial Census regulated public entities, which must apply by March 10, 2003.

29 (ii) Municipally operated industrial activities, which must apply by March 10, 2003.

30 (b) Regulated public entities that are newly identified based upon the 2000 Decennial Census, or a future
31 decennial census, must apply for permit coverage within 18 months of State notification. The
32 Department, within 3 months of federal verification of decennial census data, will notify in writing all
33 the public entities identified.

34 (7) Stormwater Management Requirements

35 (a) All regulated public entities subject to this Rule shall develop, implement and enforce a stormwater
36 management plan approved by the department in accordance with Sub-Items (7)(b)-(7)(e) of this Rule.

The plan shall be designed to reduce discharge of pollutants to the maximum extent practicable and except as otherwise provided, shall include but not be limited to the following minimum measures:

(i) A public education and outreach program on the impacts of stormwater discharges on water bodies to inform citizens of how to reduce pollutants in stormwater runoff. The public body may satisfy this requirement by developing a local education and outreach program; by participating in a statewide education and outreach program coordinated by the department; or a combination of those approaches.

(ii) A public involvement and participation program consistent with all applicable state and local requirements.

(iii) A program to detect and eliminate illicit discharges within the MS4. The program shall include a storm sewer system mapping component which at a minimum identifies stormwater outfalls and the names and location of all waters within the jurisdiction of the public body.

(iv) A program to reduce pollutants in any stormwater runoff to the MS4 from construction activities resulting in a land disturbance of greater than or equal to one acre. Implementation and enforcement of the Sedimentation Pollution Control Act, G.S. 113A-50 et seq., By either the Department or through a local program developed pursuant to G.S. 113A-54(b), in conjunction with the states NPDES permit for construction activities, may be used to meet this minimum measure either in whole or in part.

(v) A program to address post-construction stormwater runoff from new development and redevelopment projects that cumulatively disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4 or into an interconnected MS4, pursuant to Item (10) of this Rule; and

(vi) A pollution prevention/good housekeeping program for municipal operations that addresses operation and maintenance, including a training component, to prevent or reduce pollutant runoff from those operations.

(b) Minimum measures and permit coverage for regulated public entities:

(i) For municipalities which own and operate a small MS4:

(A) They shall implement all six minimum measures;

(B) Their permit will cover their jurisdictional area including any area where they have exercised their Extraterritorial Jurisdiction Authorities under General Statute G.S. 160A-360. They shall implement the six minimum measures in their ETJ areas to the extent allowable under existing rules and statutes.

(ii) For counties which own and operate one or more small MS4s:

(A) They shall implement all six minimum measures;

(B) The permit will cover the jurisdictional area of the small MS4(s). The county may elect to have the permit cover their entire jurisdictional area;

- 1 (C) The county may elect to implement the six minimum measures throughout the remaining
2 unincorporated areas of the county that drain in whole or in part to publicly owned MS4's
3 using the "permitted by rule" option pursuant to Item (11) of this Rule. The county may
4 also elect to cover all unincorporated areas of the county.
- 5 (iii) For regulated public entities that do not own or operate a small MS4
6 (A) They may apply for a permit to implement all six minimum measures; or
7 (B) They may apply to implement the post construction control and good housekeeping /
8 pollution prevention minimum measure using the "permitted by rule" option pursuant to
9 Item (11).
- 10 (C) The permit coverage areas would be as follows:
11 (I) For municipalities, their permit will cover their jurisdictional area including any area
12 where they have exercised their Extraterritorial Jurisdiction Authorities under
13 General Statute G.S. 160A-360. They shall implement the six minimum measures in
14 their ETJ areas to the extent allowable under existing rules and statutes.
15 (II) For counties, the permit would cover the unincorporated areas of the county that
16 drain in whole or in part to publicly owned MS4's. The county may also elect to
17 cover all unincorporated areas of the county.
18 (III) For all other public bodies, the permit would cover their jurisdictional area.
- 19 (c) All public bodies designated by petition shall meet the requirements set out in Sub-Item (7)(b) of this
20 Rule as applicable.
- 21 (d) All public bodies designated by TMDL, pursuant to Item (4) of this Rule, shall meet the requirements
22 as set out in Sub-Item (7)(b) of this Rule as applicable including, but not limited to additional
23 requirements associated with the TMDL.
- 24 (e) The Department may allow regulated public entities to use existing state and local programs to meet
25 the required permit minimum measures either in whole or in part.
- 26 (f) Within the jurisdictional area of all regulated public entities, the post construction controls pursuant to
27 Item (10) of this Rule, shall be required and implemented where the construction activity drains in
28 whole or in part to a publicly owned MS4.
- 29 (8) Waiver. The department may waive the requirements set out in Item (7) of this Rule pursuant to 40 CFR
30 122.32(d) or 40 CFR 122.32(e).
- 31 (9) Implementation Schedule.
32 (a) Regulated public entities, pursuant to Item (2) of this Rule, shall have permit conditions that establish
33 schedules for implementation of each component of the stormwater management program based on the
34 submitted application, and shall fully implement a program meeting the requirements set out in Item
35 (7) and Item (10) of this Rule within five years from permit issuance.
36 (b) Regulated public entities electing to be permitted by rule shall adopt ordinances and fully implement
37 the required post-construction program meeting the applicable requirements set out in Item (7) and

- 1 Item (10). They will thereafter report annually on the implementation of the ordinance(s). They shall
2 fully implement the pollution prevention / good housekeeping measure at their publicly owned
3 facilities within two years of notification of approval of their application for permitted by rule status.
- 4 (10) Post-construction stormwater management
- 5 (a) All regulated public entities, required to implement the post construction stormwater management
6 minimum measure, must develop, implement and adopt by ordinance a post-construction stormwater
7 management program for all new development and redevelopment as part of their plan to meet the
8 minimum requirements pursuant to Sub-Item (7)(a)(v) of this Rule. These ordinances, and subsequent
9 modifications, will be reviewed and approved by the Department prior to implementation. The
10 approval process will establish subsequent timeframes when the Department will review performance
11 under the ordinance (s). The reviews will occur, at a minimum, every five years. Regulated public
12 entities without ordinance making powers, shall demonstrate similar actions taken in their post
13 construction stormwater management program to meet the minimum measure requirements.
- 14 (b) The post-construction program shall apply to all new development projects that cumulatively disturb
15 one acre or more, and to projects less than an acre that are part of a larger common plan of
16 development or sale. The post-construction program shall apply to all redevelopment projects that
17 cumulatively disturb one acre or more, and to projects less than an acre that are part of a larger
18 common plan of development or sale.
- 19 (c) The department shall submit a model ordinance including best management practices to control and
20 manage stormwater runoff from development and redevelopment sites subject to this Rule to the
21 Commission for approval. The department shall work in cooperation with local governments to
22 develop this model ordinance. The model ordinance shall include both structural and non-structural
23 best management practices adequate to meet the minimum requirements of this Rule.
- 24 (d) The deadlines for implementation of the local post-construction program are as follows:
- 25 (i) 1990 Decennial Census federally designated small MS4's, March 10, 2005.
26 (ii) 2000 Decennial Census and future decennial Census federally designated small MS4's, 12 months
27 from date of permit issuance or 12 months from date of the granting of permit by rule status; and
28 (iii) All other regulated public entities, 12 months from date of permit issuance or 12 months from date
29 of the granting of permit by rule status.
- 30 (e) A post construction stormwater management program shall be developed and implemented that meets
31 the following requirements:
- 32 (i) The program shall require all projects as defined in Sub-Item (10)(B) of this Rule to apply for
33 locally issued permit coverage under one of the following stormwater management options:
34 (A) Low Density Projects. Projects shall be permitted as low density if the project meets the
35 following:
36 (I) No more than 2 dwelling units per acre or 24 percent built-upon area BUA for all
37 residential and non-residential development;

1 (II) Stormwater runoff from the development shall be transported from the development by
2 vegetated conveyances to the maximum extent practicable;

3 (III) All BUA shall be at a minimum of 30 feet landward of all perennial and intermittent
4 surface waters. For the purpose of this Rule, a surface water shall be present if the
5 feature is approximately shown on either the most recent version of the soil survey map
6 prepared by the Natural Resources Conservation Service of the United States Department
7 of Agriculture or the most recent version of the 1:24,000 scale (7.5 minute) quadrangle
8 topographic maps prepared by the United States Geologic Survey (USGS). An exception
9 to this requirement may be allowed when surface waters are not present in accordance
10 with the provisions of 15A NCAC 2B .0233 (3)(a); and

11 (IV) The permit shall require recorded deed restrictions and protective covenants to ensure
12 that development activities maintain the development consistent with the approved
13 project plans.

14 (B) High Density Projects. Projects exceeding the low density threshold established in Sub-Item
15 (10)(d)(i)(A) of this Rule shall implement stormwater control measures that:

16 (I) Control and treat the difference in stormwater runoff volume leaving the project site
17 between the pre and post development conditions for the 1 year 24 hour storm. Runoff
18 volume drawdown time shall be a minimum of 24 hours, but not more than 120 hours;

19 (II) All structural stormwater treatment systems used to meet the requirements of the
20 program shall be designed to have an 85% average annual removal for Total Suspended
21 Solids;

22 (III) General Engineering Design Criteria for all projects shall be in accordance with 15A
23 NCAC 2H .1008(c);

24 (IV) All BUA shall be at a minimum of 30 feet landward of all perennial and intermittent
25 surface waters. For the purpose of this Rule, a surface water shall be present if the
26 feature is approximately shown on either the most recent version of the soil survey map
27 prepared by the Natural Resources Conservation Service of the United States Department
28 of Agriculture or the most recent version of the 1:24,000 scale (7.5 minute) quadrangle
29 topographic maps prepared by the United States Geologic Survey (USGS). An
30 exception to this requirement may be allowed when surface waters are not present in
31 accordance with the provisions of 15A NCAC 2B .0233 (3)(a); and

32 (V) The permit shall require recorded deed restrictions and protective covenants to ensure
33 that development activities maintain the development consistent with the approved
34 project plans;

35 (f) The program shall include an operation and maintenance component that ensures the adequate long-
36 term operation of the structural BMP's required by the program. The program shall include a
37 requirement that the owner of a permitted structural BMP, submit annually to the local program, a

maintenance inspection report on each structural BMP. The inspection must be conducted by a qualified professional; and

(g) A program shall be developed to control, to the maximum extent practicable, the sources of fecal coliform. At a minimum, the program shall include the development and implementation of an oversight program to ensure proper operation and maintenance of on-site wastewater treatment systems for domestic wastewater. For municipalities, this program should be coordinated with the local county health department.

(h) For programs with development/redevelopment draining to SA waters, the following additional requirements must be incorporated into their program:

(i) A local ordinance shall be developed, adopted and implemented to ensure that the best practice for reducing fecal coliform loading is selected. The best practice shall be the practice that results in the highest degree of fecal die off and controls to the maximum extent practicable sources of fecal coliform while still meeting the requirements of Sub-Item (10)(d) of this Rule. The local ordinance(s) shall incorporate a program to control the sources of fecal coliform to the maximum extent practical, including:

(A) Implementation of a pet waste management program. Appropriate revisions to an existing litter ordinance can be used to meet this requirement; and

(B) Implementation of an oversight program to ensure proper operation and maintenance of on-site wastewater treatment systems for domestic wastewater. For municipalities, this program should be coordinated with the local county health department; and

(ii) New direct points of stormwater discharge to SA waters or expansion of existing points of discharge to any constructed stormwater conveyance system, or constructed system of conveyances that discharge to SA waters, shall not be allowed. Expansion is defined as an increase in drainage area or an increase in impervious surface within the drainage area resulting in a net increase in peak flow or volume from the 1 year 24 hour storm. Overland sheetflow of stormwater or stormwater discharge to a wetland, vegetated buffer or other natural area capable of providing treatment or absorption will not be considered a direct point of stormwater discharge for the purposes of this Rule.

(i) For programs with development/redevelopment draining to trout (Tr) waters, the following additional requirements must be incorporated into their program:

A local ordinance shall be developed, adopted and implemented to ensure that the best management practices selected do not result in a sustained increase in the receiving water temperature, while still meeting the requirements of Sub-Item (10)(d) of this Rule.

(i) For programs with development/redevelopment draining to Nutrient Sensitive waters, the following additional requirements must be incorporated into their program:

(i) A local ordinance shall be developed, adopted and implemented to ensure that the best management practice for reducing nutrient loading is selected while still meeting the requirements

- 1 of Sub-Item (10)(d) of this Rule. Where a Department approved NSW Urban Stormwater
2 Management Program is in place, the provisions of that program fulfill this requirement; and
3 (ii) A nutrient application (both inorganic fertilizer and organic nutrients) management program shall
4 be developed and included in the stormwater management program.
5 (k) Public bodies may develop and implement comprehensive watershed protection plans that may be used
6 to meet part, or all, of the requirements of Item (10) of this Rule.
7 (l) The department may require more stringent stormwater management measures on a case-by-case basis
8 where it is determined that additional measures are required to protect water quality and maintain
9 existing and anticipated uses of these waters.
10 (m) The Department may develop guidance on the scientific and engineering standards for best
11 management practices that shall be used to meet the post construction elements of this Rule.
12 Alternative design criteria may be approved by the Department where a demonstration is made that the
13 alternative design will provide:
14 (i) Equal or better management of the stormwater;
15 (ii) Equal or better protection of the waters of the state; and
16 (iii) No increased potential for nuisance conditions.
17 (11) Permitted by Rule Option. To be "permitted by rule" the public body shall:
18 (a) Adopt ordinance(s) and implement programs addressing post-construction stormwater runoff
19 throughout the public bodies entire jurisdictional area, pursuant to Item (10) of this Rule; and
20 (b) Institute the pollution prevention / good housekeeping measure at their publicly owned facilities,
21 pursuant to Sub-Item (7)(a)(vi) of this Rule, in accordance with a separate NPDES permit for
22 municipal operations.
23 If the public body selects this option, the State will implement the remaining four minimum measure
24 requirements throughout the public bodies entire jurisdictional area through existing programs and NPDES
25 stormwater permits to the extent allowed under those programs and permits.
-

26
27
28 *History Note: Authority G.S. 143-214.1; 143-214.7; 143-215.1; 143-215.3(a)(1);*
29 *Eff. November 1, 1986;*
30 *Amended Eff. August 3, 1992.*



Michael F. Easley, Governor
 William G. Ross Jr., Secretary
 North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E., Director
 Division of Water Quality

11/6/2002

THE TOWN OF CARRBORO
 ROBERT W. MORGAN, TOWN MANAGER
 301 W. MAIN STREET
 CARRBORO, NC 27510-2029

Subject: NPDES Phase II Stormwater Program

Robert W. Morgan:

In 1990 the U.S. Environmental Protection Agency's (EPA) Phase I stormwater program was promulgated under the Clean Water Act. Phase I relies on National Pollutant discharge Elimination System (NPDES) permit coverage to address stormwater runoff from: (1) "medium" and "large" municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater, (2) construction activity disturbing 5 acres of land or greater, and (3) ten categories of industrial activity. The NPDES Stormwater Phase II Final Rule was promulgated in December 1999 and is the next step in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted storm water runoff. The Phase II program expands the Phase I program by requiring additional operators of MS4s in urbanized areas and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control stormwater runoff. Phase II is intended to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation.

The NPDES Stormwater Phase II Final Rule requires nationwide coverage of all operators of small MS4s that are located within the boundaries of a Bureau of the Census defined "urbanized area" based on the latest decennial Census. We are writing to you to remind you that the Town of Carrboro has been identified as being located within a census designated urbanized area in both the 1990 and 2000 decennial census. As a regulated community, you are required to develop a stormwater management program and apply for stormwater permit coverage, if you own and operate a small MS4 or file a certification that the Town of Carrboro does not own or operate a small MS4. The deadline for submitting your application package or non-ownership certification is March 10, 2003. Application and certification documents, as well as additional information on the NPDES stormwater program, are available for download at our web site. Our web address is <http://h2o.enr.state.nc.us/su/stormwater.html>. You may also contact us for hard copies of the documents. If you have any questions about this letter, please feel free to contact me (919-733-5083, ext.525) or Darren England (919-733-5083, ext. 545).

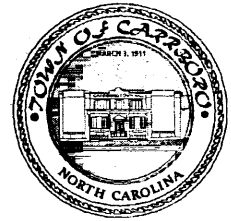
Sincerely,

Bradley Bennett

Bradley Bennett, Supervisor
 Stormwater and General Permits Unit

cc: Central Files
 Stormwater and General Permits Unit Files
 Raleigh Regional Office





Town of Carrboro
Planning Department

NPDES Phase II: Storm Water Management in Carrboro

The Plan – Executive Summary

The elimination and reduction of storm water laden with pollutants can be best addressed by implementing an integrated storm water management program that includes both source control and delivery reduction measures. Benefits from an effective and comprehensive storm water management program can be:

- Improved surface water quality
- Improved drinking water quality
- Land preservation due to erosion control measures
- Reduction of sanitary sewer overflows as a result of storm water infiltration
- Improved /preserved animal habitats
- Increased viability for fish
- Improved wetland and estuary habitats of waterfowl and other animal life.
- Potentially decrease flooding related problems

The Town of Carrboro has designed this stormwater management program to:

- 1) Reduce the discharge of pollutants to the “maximum extent possible;”
- 2) Protect water quality; and
- 3) Satisfy the appropriate water quality requirements of the Clean Water Act.

In order to achieve the goal of the NPDES Phase II Regulations and derive the benefits, the Town of Carrboro would need to develop and implement cost effective operations, maintenance, and training programs using appropriate Best Management Practices (BMP's) to satisfy each of six minimum control measures.

The following summary provides an overview of the implementation strategies for the six control measures for meeting or exceeding the regulatory requirements.

[Note: The use of the symbol “X→” for a BMP indicates that activity is not complete within the 5 year timeframe of the plan or is ongoing.]

I. Public Education and Outreach.....**Regulatory Requirements**

The Town must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

Carrboro Strategy.....**Table 7.1: BMP's and Measurable Goals for Public Education and Outreach**

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
1	Distribute pollution prevention brochures	Distribute brochures through event displays through displays and neighborhood and business associations. Include information on steps to reduce pollution sources including proper disposal of used oil and toxic materials, and public reporting of illicit discharges.				X	X	State / Environmental Advisory Board / Environmental Planner
2	Informational Website	Develop and maintain a stormwater information page for the Town's internet website. Post the plan, updates to the plan, and any other educational information acquired. Provide information on reporting illicit discharges.	X	X	X	X	X→	Environmental Planner
3	Educate through Volunteer Watch Group	Provide information and training to local voluntary watershed watch group formed to monitor streams in the watershed on an ongoing basis. Post data collected on the Town Web site.	X	X	X	X	X	Environmental Planner
4	Explore Various Media/Public Awareness Resources	Explore Various Media/Public Awareness Resources – including cable TV, web sites, local newspapers, brochures, water and sewer bill inserts to communicate program.			X	X	X→	Environmental Planner
5	Work with Schools	Develop age-specific educational information for use in schools and for presentations to school age children. Present information in appropriate forums.				X	X→	Engineer/ Environmental Planner / Environmental Advisory Board
6	Public Outreach Program	Develop and conduct an educational campaign to inform residents and businesses on illicit discharges, reporting, improper waste disposal, sources of pollutants around the home or business and actions they can take to minimize them. Communicate to businesses, institutions, and residents the importance of identifying and eliminating pollutant sources. Promote proper disposal of waste oil, antifreeze, household hazardous waste, and least toxic pest management.				X	X→	Environmental Planner/ Environmental Advisory Board
7	Storm Drain Labeling Program	Local school students initiated a storm drain labeling program with assistance from the Town and labeled drains in one neighborhood using stencils. The Town and the Environmental Advisory Board will inventory and evaluate efforts to date, and develop guidelines and specifications for a Town-wide program to label storm drains, and work with volunteer groups and the schools to implement.	X	X	X	X	X	Streets Superintendent / Environmental Planner / Environmental Advisory Board

II. Public Involvement and Participation

Regulatory Requirements

The Town must, at a minimum, comply with state, tribal, and local public notice requirements when implementing a public involvement/participation program.

Carrboro Strategy.....

Table 7.2: BMP's and Measurable Goals for Public Involvement and Participation

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
1	Public Hearing	Town Board of Aldermen to schedule a public hearing for February 11.	X					Environmental Planner
2	Public Comment Period	Town will receive public comment for two weeks following the public hearing.	X					Environmental Planner
3	Involve Citizen Advisory Boards	Plan to be presented to the Town Environmental Advisory Board and Planning Board for review	X					Environmental Planner
4	Input from Advisory Board	Environmental Advisory Board will serve as a vehicle for review of implementation and input to program	X	X	X	X	X	Environmental Planner
5	Citizen Involvement	Local voluntary watershed watch group formed to monitor streams in the watershed on an ongoing basis and report data to the Town.	X	X	X	X	X→	Environmental Planner
6	Storm Drain Labeling Program	Local school students initiated a storm drain labeling program with assistance from the Town and labeled drains in one neighborhood using stencils. The Town and the Environmental Advisory Board will inventory and evaluate efforts to date, and develop guidelines and specifications for a Town-wide program to label storm drains, and work with volunteer groups and the schools to implement.	X	X	X	X	X	Streets Superintendent / Environmental Planner / Environmental Advisory Board

III. Illicit Discharge Detection and Elimination.....

Regulatory Requirements

- (i) The Town must develop, implement, and enforce a program to detect and eliminate illicit discharges (as defined at Sec. 122.26(b)(2)) into your small MS4.
- (ii) The Town must:
 - (A) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;
 - (B) To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions;
 - (C) Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system; and
 - (D) Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.
- (iii) The Town program needs address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).

Carrboro Strategy.....

Table 7.3. BMP's and Measurable Goals for Illicit Discharge Detection and Elimination

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
1	Inventory storm water system	The town will develop and maintain an inventory of the storm sewer system within the Town's jurisdiction.	X	X	X	X	X→	Engineer / GIS Specialist / Streets Superintendent
2	Prepare storm system map	Develop and maintain a GIS-based map of all pipes, outfalls, basins, and other stormwater treatment and conveyance devices, and receiving waters.		X	X	X	X→	Engineer / GIS Specialist / Streets Superintendent
3	Develop regulatory mechanisms to enforce illicit discharge	The Town will seek legislative authority, and develop an appropriate ordinance that prohibits illicit discharges, specifies corrective measures and penalties, and provides for enforcement mechanism.			X	X	X	Attorney / Zoning Administrator / Streets Superintendent
4	Develop plan for detection, correction, and prevention of illicit discharges	The Town will define illicit discharges that trigger response action, and develop a plan to inspect, detect and address illicit discharges (including illegal dumping) to the storm sewer system, and develop procedure for correcting problems.			X	X	X→	Environmental Planner / Engineer / Streets Superintendent / Deputy Fire Chief / Police Chief
5	Evaluate local stream monitoring efforts	The Town will evaluate the current level and location of monitoring and determine if additional monitoring needs are required to facilitate identifying and localizing problems, and explore cooperative solutions to identified gaps.			X	X	X→	Environmental Planner

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
6	Explore funding	The Town will explore opportunities to acquire funding to implement the illicit discharge detection, correction, and prevention plan.			X	X	X→	Planning Director
7	Explore cooperative arrangements	The Town will explore cooperative arrangements with other jurisdictions to implement the inspection and enforcement provisions.				X	X→	Planning Director / Public Works Director
8	Begin implementing detection program	The Town will initiate implementation of the illicit discharge detection, correction, and prevention plan at a level commensurate with available resources.				X	X→	Engineer / Code Enforcement Supervisor / Streets Superintendent / Deputy Fire Chief / Police Chief
9	Train employees	The Town will develop and implement a program to train Town employees on detecting illicit discharges and proper response.				X	X→	Environmental Planner / Public Works Director / Code Enforcement Supervisor/ Deputy Fire Chief / Police Chief
10	Public Outreach Program	Develop and conduct an educational campaign to inform residents and businesses on illicit discharges, reporting, improper waste disposal, and requirements of the ordinance.				X	X→	Public Works Director / Environmental Planner / Deputy Fire Chief / OWASA
11	Evaluate non-stormwater discharges to the stormwater system	Carrboro will begin to develop a plan to evaluate sources and occurrences of non-storm water discharges or flows (i.e., illicit discharges) and determine if they are significant contributors of pollutants to the system and develop strategies to manage.				X	X→	Planning Director / Public Works Director / Deputy Fire Chief / Police Chief / OWASA

IV. Construction-Site Stormwater Runoff Control.....

Table 7.4: BMP's and Measurable Goals for Construction Site Stormwater Runoff Control

Regulatory Requirements

- The Town must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives requirements for storm water discharges associated with small construction activity in accordance with Sec. 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.
- The Town's program must include the development and implementation of, at a minimum:
 - A. An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;
 - B. Requirements for construction site operators to implement appropriate erosion and sediment control (ESC) best management practices;
 - C. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
 - D. Procedures for site plan review which incorporate consideration of potential water quality impacts;
 - E. Procedures for receipt and consideration of information submitted by the public, and
 - F. Procedures for site inspection and enforcement of control measures.

Carrboro Strategy.....

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
1	County implements	County implements and enforces construction site stormwater runoff control.	X	X	X	X	X→	Orange County Soil and Erosion Control
2	State and Federal Projects	DOT will comply with local requirements on roadway projects within the Town's planning jurisdiction. The State or Federal Agency in charge of other development projects will comply with all local requirements.	X	X	X	X	X→	DOT Division Maintenance Engineer or Project Lead Agency
3	Review effectiveness of County and DOT program	Review the effectiveness of the County and DOT program to identify gaps in coverage, communication, or other opportunities for improvement.		X	X	X	X→	Zoning Administrator/ Planning Director / Public Works Director

V. Postconstruction Stormwater Management.....

Regulatory Requirements

- The Town must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts.
- The Town must:
 - Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community;
 - Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law;
 - Ensure adequate long-term operation and maintenance of BMPs.

Carrboro Strategy.....

Table 7.5: BMP's and Measurable Goals for Post-Construction Site Stormwater Runoff Control

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
1	Encourage innovative stormwater BMPs	Communicate to developers and architects through the development review process that the Town is interested in the development of innovative BMP designs.		X	X	X	X→	Environmental Planner / Engineer / Streets Superintendent / Development Review Administrator
2	Sponsor Workshops for Local Developers	Review recent design developments and applications in North Carolina and elsewhere. Identify potential sponsors and professionals to conduct training for local designers.				X	X→	Environmental Planner / Engineer / Streets Superintendent
3	Develop protocol for inspecting BMPs	Develop a protocol and schedule for inspecting BMPs for proper operation and maintenance, including requirements for maintenance and inspection plans for all new projects and existing facilities.		X	X	X	X	Engineer / Zoning Administrator / Streets Superintendent
4	Implement BMP inspection program	Begin to implement inspection of stormwater management facilities in private developments as resources allow.				X	X→	Engineer / Zoning Enforcement Officer / Streets Superintendent

VI. Pollution Prevention/Good Housekeeping.....**Regulatory Requirements**

The Town must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, your State, Tribe, or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

Carrboro Strategy.....**Table 7.6: BMP's and Measurable Goals for Pollution Prevention / Good Housekeeping**

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Position/Party
1	Evaluate Town operations.	Develop a plan to audit all Town operations and facilities to identify practices and situations that pose potential releases.	X	X	X	X	X	Fire Marshall / Public Works Director / Environmental Planner
2	Corrective Action	Implement actions to correct identified potential releases or to prevent pollution sources.	X	X	X	X	X→	Town Manager / All Town Departments
3	Employee Training	Develop and implement training program to increase employee awareness of implications of actions and provide information to alert them to opportunities for pollution source reduction and controls.		X	X	X	X→	Environmental Planner / Public Works Director/ Safety Officer / Personnel Director / All Town Departments
4	Public Awareness	Provide information to users of public facilities on efforts and measures implemented, instructions for proper use of facilities, and penalties for failure to comply. Communicate to businesses, institutions, and residents the importance of identifying and eliminating pollutant sources. Promote proper disposal of waste oil, antifreeze, household hazardous waste, and least toxic pest management.		X	X	X	X→	Public Works Director / Environmental Planner / Parks and Recreation Director / Environmental Advisory Board