314 CMR 4.00: MASSACHUSETTS SURFACE WATER QUALITY STANDARDS

Section

4.01: General Provisions

(1) Title. 314 CMR 4.00 shall be known as the "Massachusetts Surface Water Quality Standards".

(2) Organization of the Standards. 314 CMR 4.00 is comprised of six sections, General Provisions (314 CMR 4.01) Definitions (314 CMR 4.02), Application of Standards (314 CMR 4.03), Antidegradation Provisions (314 CMR 4.04), Classes and Criteria (314 CMR 4.05), and Basin Classification and Maps (314 CMR 4.06).

(3) Authority. The Massachusetts Surface Water Quality Standards are adopted by the Department pursuant to the provisions of M.G.L. c. 21, § 27.

(4) Purpose. M.G.L. c. 21, §§ 26 through 53 charges the Department with the duty and responsibility to protect the public health and enhance the quality and value of the water resources of the Commonwealth. It directs the Department to take all action necessary or appropriate to secure to the Commonwealth the benefits of the Clean Water Act, 33 U.S.C. §1251 *et seq.* The objective of 33 U.S.C. §1251 *et seq.* is the restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters. To achieve the foregoing requirements the Department has adopted the Massachusetts Surface Water Quality Standards which designate the most sensitive uses for which the various waters of the Commonwealth shall be enhanced, maintained and protected; which prescribe the minimum water quality criteria required to sustain the designated uses; and which contain regulations necessary to achieve the designated uses and maintain existing water quality including, where appropriate, the prohibition of discharges.

(5) Severability. If any provision of 314 CMR 4.00 is held invalid, the remainder of 314 CMR 4.00 shall not be affected.

4.02: Definitions

Aquatic Life. A native, naturally diverse, community of aquatic flora and fauna including, but not limited to, wildlife and threatened and endangered species.

Authorization. An approval granted pursuant to 314 CMR 4.04(5) for a discharge to High Quality Waters, Outstanding Resource Waters or Special Resource Waters.

Background Conditions. That water quality which exists or would exist in the absence of pollutants requiring permits and other controllable cultural factors that are subject to regulation under M.G.L. c. 21, §§ 26 through 53.

Best Available Treatment Technology. The technology based standard of the Clean Water Act defined as Best Available Technology Economically Achievable (BAT) for privately owned treatment works. BAT effluent limitation guidelines reflect the best performance technologies for a particular pollutant or group of pollutants, or for a category or class of point sources, that are economically achievable.

4.02: continued

Best Management Practices or BMPs. Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the Commonwealth. BMPs include treatment requirements, operating procedures, structures, devices, and/or practices to control plant site runoff, spillage, or leaks, sludge or waste disposal, or drainage from raw material storage.

Best Professional Judgment. The method used by the Department to develop technology based Surface Water Discharge Permit Conditions on a case by case basis using all reasonably available and relevant data.

Biological Integrity. The capability of supporting and maintaining a balanced, integrated, adaptive community of organisms having species composition, diversity, and functional organization comparable to that of the natural habitat of the region.

Coastal and Marine Waters. The Atlantic Ocean and all contiguous saline bays, inlets and harbors within the jurisdiction of the Commonwealth including areas where fresh and salt waters mix and tidal effects are evident or any partially enclosed coastal body of water where the tide meets the current of a stream or river.

Cold Water Fishery. Waters in which the mean of the maximum daily temperature over a seven day period generally does not exceed 68°F (20°C) and, when other ecological factors are favorable (such as habitat), are capable of supporting a year-round population of cold water stenothermal aquatic life such as trout (*salmonidae*).

Combined Sewer Overflow or CSO. Any intermittent overflow, bypass or other discharge from a municipal combined sewer system which results from a wet weather flow in excess of the dry weather carrying capacity of the system.

Criteria. Elements of state water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a use.

Cultural Eutrophication. The human induced increase in nutrients resulting in acceleration of primary productivity, which causes nuisance conditions, such as algal blooms or dense and extensive macrophyte growth, in a waterbody.

Designated Use. Those uses specified in 314 CMR 4.05 and 314 CMR 4.06 for each water Class whether or not they are being attained.

Discharge of Pollutants. Any addition of any pollutant or combination of pollutants to the waters of the Commonwealth from any source.

EPA. The United States Environmental Protection Agency.

Epilimnion. The upper circulating layer of a stratified lake or pond.

Existing Use. Those designated uses and any other uses that do not impair the designated uses that are actually attained in a waterbody on or after November 28, 1975; except that in no case shall assimilation or transport of pollutants be considered an existing use.

Federal Act. The Federal Water Pollution Control Act (FWPCA), currently known as the Clean Water Act, 33 U.S.C. §1251, *et seq.*

Harmonic Mean Flow. A longterm flow value calculated by dividing the number of daily flows analyzed by the sum of the reciprocals of those daily flows.

Highest and Best Practical Treatment (HBPT). The best practicable waste treatment technology for publicly owned treatment works that is the most appropriate means available on a regional basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters. HBPT effluent limitation guidelines reflect the best performance technologies for a particular pollutant or group of pollutants that are economically achievable.

4.02: continued

Inland Waters or Fresh Waters. Any surface water not subject to tidal action or not subject to the mixing of fresh and ocean waters.

Lakes and Ponds. Waterbodies having open water, situated in a topographical depression, generally with a maximum depth of greater than two meters. Lakes and ponds do not include constructed stormwater retention basins, constructed impervious basins or impervious impoundments, permitted wastewater lagoons, constructed farm ponds into which and from which no stream or river flows, and generally do not include dammed river or stream impoundments. The Department may determine, on a case by case basis, that a shallower waterbody or a dammed river or stream impoundment is a lake or pond based on aquatic and other resources or uses to be protected.

Massachusetts Act. The Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53.

National Goal Uses. Propagation of fish, shellfish other aquatic life and wildlife and recreation in and on the water in accordance with 33 U.S.C. § 1251 *et seq.*

New or Increased Discharge. Any discharge which commences after the date 314 CMR 4.00 initially became effective; any discharge requiring a permit which is unpermitted and commenced prior to the date 314 CMR 4.00 became effective; and any increase in discharges except for an increase in conformance with a currently valid permit.

Nonpoint Source. Any source of pollutant discharge that is not a point source.

Point Source. Any discernable, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

Pollutant. Any element or property of sewage, agricultural, industrial or commercial waste, runoff, leachate, heated effluent, or other matter in whatever form, and whether originating at a point or nonpoint source, that is or may be discharged, drained or otherwise introduced into any sewage system, treatment works or waters of the Commonwealth.

Primary Contact Recreation. Any recreation or other water use in which there is prolonged and intimate contact with the water with a significant risk of ingestion of water. These include, but are not limited to, wading, swimming, diving, surfing and water skiing.

Rivers and Streams. Waterbodies contained within a channel (naturally or artificially created) which periodically or continuously contains flowing water or forms a connecting link between two bodies of standing water.

Secondary Contact Recreation. Any recreation or other water use in which contact with the water is either incidental or accidental. These include but are not limited to fishing, including human consumption of fish, boating and limited contact incident to shoreline activities. Where designated, secondary contact recreation also includes shellfishing, including human consumption of shellfish.

Segment. A finite portion of a waterbody established by the Department for the purpose of classification.

Source Reduction. In-plant changes in production processes or raw materials that reduce, avoid or eliminate the use of pollutants, including but not limited to toxic or hazardous substances, or generation of pollution by-product per unit of product, so as to reduce risks overall to the environment. Also compliance with M.G.L. c. 21I, the Toxics Use Reduction Act, to the extent required by such law.

4.02: continued

Surface Waters. All waters other than groundwaters within the jurisdiction of the Commonwealth, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters and vernal pools.

Total Maximum Daily Load (TMDL). The sum of a receiving water's individual waste load allocations and load allocations and natural background, which, together with a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality, represents the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards in all seasons.

Toxic Pollutants. Any pollutant or combination of pollutants, including disease causing agents, that are capable of producing an adverse effect in an organism or its offspring including food chain effects, according to information available to the Department. The effect may be the result of direct or indirect exposure and may injure structure, function or cause death to the organism. These pollutants include, but are not limited to, those identified in 314 CMR 3.17. (Massachusetts Surface Water Discharge Permit Program, Toxic Pollutants).

Use Attainability Analysis (UAA). A structured scientific assessment of the factors affecting the attainment of a use, which may include physical, chemical, biological, and economic factors as described in 40 CFR 131.10(g).

Variance. A temporary modification of the surface water quality standards issued pursuant to 314 CMR 4.03(4).

Vernal Pool. A waterbody that has been certified by the Massachusetts Division of Fisheries and Wildlife as a vernal pool. Vernal pools are confined basin depressions which, at least in most years, hold water for a minimum of two continuous months during the spring and/or summer, and which are free of adult fish populations.

Warm Water Fishery. Waters in which the maximum mean monthly temperature generally exceeds 68° F (20° C) during the summer months and are not capable of sustaining a year-round population of cold water stenothermal aquatic life.

Waters of the Commonwealth. All waters within the jurisdiction of the Commonwealth, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters, groundwaters, and vernal pools.

4.03: Application of Standards

(1) (a) Establishment of Effluent Limitations. The Department will limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected and maintained or attained. The level of treatment for an individual discharger will be established by the discharge permit in accordance with 314 CMR 3.00 (Massachusetts Surface Water Discharge Permit Program). In establishing water quality based effluent limitations the Department shall take into consideration natural background conditions and existing discharges. Discharges shall be limited or prohibited to protect existing uses and not interfere with the attainment of designated uses in downstream and adjacent segments. The Department will provide a reasonable margin of safety to account for any lack of knowledge concerning the relationship between the pollutants being discharged and their impact on water quality. Where the Department has not established water quality based effluent limitations in a permit and a violation of water quality standards attributable to a discharge occurs, the Department may modify, suspend or revoke the permit, in whole or in part, for cause in accordance with 314 CMR 3.00.

4.03: continued

(b) Compliance Schedules. A permit may, when appropriate, specify a schedule leading to compliance with the Massachusetts and Federal Clean Water Acts and regulations. The purpose of a schedule of compliance generally is to afford a permittee adequate time to comply with one or more permit requirements or limitations that are based on new, newly interpreted or revised water quality standards that became effective after both issuance of the initial permit for a discharge and July 1, 1977. The Department may include a schedule of compliance in a permit at the time of permit reissuance or modification where the permittee either cannot comply with such permit requirements or limitations, or there is insufficient information available to determine whether the permittee can comply with such permit requirements or limitations. A schedule of compliance shall require compliance at the earliest practicable time, as determined by the Department. A schedule of compliance shall include dates for specified tasks or activities leading to compliance and may include interim effluent limitations, as the Department deems appropriate.

(c) TMDLs. The Department may develop and enforce compliance with TMDLs and TMDL implementation plans for waters or segments impaired by a pollutant or pollutants.

(2) Mixing Zones. In applying 314 CMR 4.00 the Department may recognize a limited area or volume of a waterbody as a mixing zone for the initial dilution of a discharge. Waters within a mixing zone may fail to meet specific water quality criteria provided the following conditions are met:

(a) Mixing zones shall be limited to an area or volume as small as feasible. There shall be no lethality to organisms passing through the mixing zone as determined by the Department. The location, design and operation of the discharge shall minimize impacts on aquatic life and other existing and designated uses within and beyond the mixing zone.

(b) Mixing zones shall not interfere with the migration or free movement of fish or other aquatic life. There shall be safe and adequate passage for swimming and drifting organisms with no deleterious effects on their populations.

(c) Mixing zones shall not create nuisance conditions, accumulate pollutants in sediments or biota in toxic amounts or otherwise interfere with the existing or designated uses of surface waters.

(3) Hydrologic Conditions. The Department will determine the most severe hydrologic condition at which water quality criteria must be applied. The Department may further stipulate the magnitude, duration and frequency of allowable excursions from the magnitude component of criteria and may determine that criteria should be applied at flows lower than those specified in order to prevent adverse impacts of discharges on existing and designated uses.

(a) For rivers and streams, the lowest flow condition at and above which aquatic life criteria must be applied is the lowest mean flow for seven consecutive days to be expected once in ten years. When records are not sufficient to determine this condition, the flow may be estimated using methods approved by the Department.

(b) In waters where flows are regulated by dams or similar structures, the lowest flow condition at which aquatic life criteria must be applied is the flow equaled or exceeded 99% of the time on a yearly basis, or another equivalent flow agreed upon by the Department and the federal, state or private entity controlling the flow. The minimum flow established in such an agreement will become the critical low flow for those waters covered by the agreement. When the Department issues a 401 Water Quality Certification of an activity subject to licensing by the Federal Energy Regulatory Commission, flows shall be maintained or restored to protect existing and designated uses.

(c) In coastal and marine waters and for lakes and ponds, the Department will establish extreme hydrologic conditions at which aquatic life criteria must be applied on a case-by-case basis. In all cases existing uses shall be protected and the selection shall not interfere with the attainment of designated uses.

(d) For rivers and streams and waters whose flows are regulated by dams or similar structures, human health based criteria may be applied at the harmonic mean flow. For coastal and marine waters and lakes and ponds, human health based criteria may be applied at conditions the Department determines will result in protection at least equivalent to that provided for rivers and streams.

4.03: continued

(4) National Goal Uses, Partial Uses, and Variances. The Department may remove a national goal use that is not an existing use, designate a segment as partial use, or grant a variance to authorize a discharge, provided the applicant demonstrates that:

(a) Naturally occurring pollutant concentrations prevent the attainment of the use; or

(b) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating state water conservation requirements to enable uses to be met; or

(c) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place, or

(d) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or

(e) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or

(f) Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact, this demonstration may include documentation of median household income or other economic measures adjusted to reflect the cost of living or other circumstances particular to the affected area.

Prior to removal of a use or the designation of a partial use, the Department shall provide public notice and the opportunity for a public hearing in accordance with M.G.L. c. 30A and the applicant shall submit to the Department the information necessary for completion of a Use Attainability Analysis. The Department may grant a variance for a specified period of time for a particular discharger and for specific pollutants so that it can be determined through a Use Attainability Analysis whether uses can be attained. A variance applicant shall submit to the Department a detailed assessment of the types of information that will be needed for completion of the Use Attainability Analysis. A variance may be granted only for the pollutants causing noncompliance with criteria and all other provisions of 314 CMR 4.00 apply for the term of the variance. Prior to granting a variance, the Department will provide or require public notice and provide an opportunity for a public hearing in accordance with 314 CMR 2.00. An applicant granted a variance shall submit to the Department information necessary for completion of a Use Attainability Analysis in accordance with the provisions of the variance and the permit.

(5) Natural Background Conditions. Excursions from criteria due to solely natural conditions shall not be interpreted as violations of standards and shall not affect the water use classifications adopted by the Department.

(6) Procedures for Sampling and Analyses. All procedures used for the purpose of collecting, preserving and analyzing samples in connection with 314 CMR 4.00 shall be approved by the Department. Approved procedures include the following and the Department may approve others as it deems appropriate:

(a) the latest edition of *Standard Methods for the Examination of Water and Wastewater*, American Public Health Association, *et al.*;

(b) the latest edition of National Handbook of Recommended Methods for Water Resources Investigations prepared cooperatively by agencies of the United States Government;

(c) the latest edition of Techniques of Water Resources Investigations of the United States Geological Survey;

(d) Non-potable Fresh Water Methods U.S. EPA. 40 CFR Part 136. April 4th, 1995. Vol. 60, No. 64, Pages 17160-17169, as may be revised;

(e) Parsons, T.R., Maita, Y., and Lalli, C.M., *A Manual of Chemical and Biological Methods for Seawater Analysis*, Pergamon Press, New York, 1984; and

(f) *Methods for the Determination of Chemical Substances in Marine and Estuarine Environmental Matrices* - 2nd Edition. EPA/600/R-97/072. Office of Research and Development, U.S. EPA, Washington, D.C. 1997, as may be revised.

4.04: Antidegradation Provisions

(1) Protection of Existing Uses. In all cases existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(2) Protection of High Quality Waters. High Quality waters are waters whose quality exceeds minimum levels necessary to support the national goal uses, low flow waters, and other waters whose character cannot be adequately described or protected by traditional criteria. These waters shall be protected and maintained for their existing level of quality unless limited degradation by a new or increased discharge is authorized by the Department pursuant to 314 CMR 4.04(5). Limited degradation also may be allowed by the Department where it determines that a new or increased discharge is insignificant because it does not have the potential to impair any existing or designated water use and does not have the potential to cause any significant lowering of water quality.

(3) Protection of Outstanding Resource Waters. Certain waters are designated for protection under this provision in 314 CMR 4.06. These waters include Class A Public Water Supplies (314 CMR 4.06(1)(d)1.) and their tributaries, certain wetlands as specified in 314 CMR 4.06(2) and other waters as determined by the Department based on their outstanding socio-economic, recreational, ecological and/or aesthetic values. The quality of these waters shall be protected and maintained.

(a) Any person having an existing discharge to these waters shall cease said discharge and connect to a Publicly Owned Treatment Works (POTW) unless it is shown by said person that such a connection is not reasonably available or feasible. Existing discharges not connected to a POTW shall be provided with the highest and best practical method of waste treatment determined by the Department as necessary to protect and maintain the outstanding resource water.

(b) A new or increased discharge to an Outstanding Resource Water is prohibited unless:

1. the discharge is determined by the Department to be for the express purpose and intent of maintaining or enhancing the resource for its designated use and an authorization is granted as provided in 314 CMR 4.04(5). The Department's determination to allow a new or increased discharge shall be made in agreement with the federal, state, local or private entity recognized by the Department as having direct control of the water resource or governing water use; or

2. the discharge is dredged or fill material for qualifying activities in limited circumstances, after an alternatives analysis which considers the Outstanding Resource Water designation and further minimization of any adverse impacts. Specifically, a discharge of dredged or fill material is allowed only to the limited extent specified in 314 CMR 9.00 and 314 CMR 4.06(1)(d). The Department retains the authority to deny discharges which meet the criteria of 314 CMR 9.00 but will result in substantial adverse impacts to the physical, chemical, or biological integrity of surface waters of the Commonwealth

(4) Protection of Special Resource Waters. Certain waters of exceptional significance, such as waters in national or state parks and wildlife refuges, may be designated by the Department in 314 CMR 4.06 as Special Resource Waters (SRWs). The quality of these waters shall be maintained and protected so that no new or increased discharge and no new or increased discharge to a tributary to a SRW that would result in lower water quality in the SRW may be allowed, except where:

(a) the discharge results in temporary and short term changes in the quality of the SRW, provided that the discharge does not permanently lower water quality or result in water quality lower than necessary to protect uses; and

(b) an authorization is granted pursuant to 314 CMR 4.04(5).

(5) Authorizations.

(a) An authorization to discharge to waters designated for protection under 314 CMR 4.04(2) may be issued by the Department where the applicant demonstrates that:

1. The discharge is necessary to accommodate important economic or social development in the area in which the waters are located;

2. No less environmentally damaging alternative site for the activity, receptor for the disposal, or method of elimination of the discharge is reasonably available or feasible;

4.04: continued

3. To the maximum extent feasible, the discharge and activity are designed and conducted to minimize adverse impacts on water quality, including implementation of source reduction practices; and

4. The discharge will not impair existing water uses and will not result in a level of water quality less than that specified for the Class.

(b) An authorization to discharge to the narrow extent allowed in 314 CMR 4.04(3) or 314 CMR 4.04(4) may be granted by the Department where the applicant demonstrates compliance with 314 CMR 4.04(5)(a)2. through 314 CMR 4.04(5)(a)4.

(c) Where an authorization is at issue, the Department shall circulate a public notice in accordance with 314 CMR 2.06. Said notice shall state an authorization is under consideration by the Department, and indicate the Department's tentative determination. The applicant shall have the burden of justifying the authorization. Any authorization granted pursuant to 314 CMR 4.04 shall not extend beyond the expiration date of the permit.

(d) A discharge exempted from the permit requirement by 314 CMR 3.05(4) (discharge necessary to abate an imminent hazard) may be exempted from 314 CMR 4.04(5) by decision of the Department.

(e) A new or increased discharge specifically required as part of an enforcement order issued by the Department in order to improve existing water quality or prevent existing water quality from deteriorating may be exempted from 314 CMR 4.04(5) by decision of the Department.

(6) The Department applies its Antidegradation Implementation Procedures to point source discharges subject to 314 CMR 4.00.

(7) Discharge Criteria. In addition to the other provisions of 314 CMR 4.00, any authorized discharge shall be provided with a level of treatment equal to or exceeding the requirements of the Massachusetts Surface Water Discharge Permit Program (314 CMR 3.00). Before authorizing a discharge, all appropriate public participation and intergovernmental coordination shall be conducted in accordance with Permit Procedures (314 CMR 2.00).

4.05: Classes and Criteria

(1) Classes and Uses. The surface waters of the Commonwealth shall be segmented and each segment assigned to one of the Classes listed in 314 CMR 4.05(3) and (4). Each class is identified by the most sensitive, and therefore governing, water uses to be achieved and protected. Surface waters may be suitable for other beneficial uses, but shall be regulated by the Department to protect and enhance the existing and designated uses.

In accordance with 314 CMR 4.03(4), the Department may designate a partial use subcategory for these Classes. A partial use designation may be appropriate where waters are impacted by combined sewer overflows or stormwater discharges. Partial use is described in 314 CMR 4.06(1)(d)11.

(2) Criteria. Minimum criteria for each Class accompany each class description. Additional minimum criteria for all surface waters are listed in 314 CMR 4.05(5). Provided that all existing and designated uses are protected, the Department may establish site specific criteria as alternative minimum criteria. Such site specific numerical criteria shall supersede the otherwise applicable minimum numerical criteria in 314 CMR 4.00. Site specific numerical criteria also may supplement any of the narrative criteria in 314 CMR 4.00. Should the Department develop site specific numerical criteria for any pollutant that is the primary cause of nonattainment of any criteria in 314 CMR 4.00, the Department may determine that such site specific criteria supersede other criteria in 314 CMR 4.00. The Department may establish site specific criteria for a segment or segments of a water, for an entire water, or for a group of waters with similar physical, chemical or biological qualities. The Department may establish site specific hydrologic conditions at which criteria are applied. The Department will adopt any such site specific criteria as revisions to 314 CMR 4.00 in accordance with M.G.L. c. 30A.

Criteria for segments designated for partial use in 314 CMR 4.06 shall be site specific but, to the maximum extent feasible, shall be the same as the criteria assigned to the Class. For segments so designated because of the impacts of CSO or stormwater discharges, criteria may depart from the criteria assigned to the Class only to the extent necessary to accommodate the technology based treatment limitations of the CSO or stormwater discharges.

4.05: continued

(3) Inland Water Classes.

(a) Class A. These waters include waters designated as a source of public water supply and their tributaries. They are designated as excellent habitat for fish, other aquatic life and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation, even if not allowed. These waters shall have excellent aesthetic value. These waters are protected as Outstanding Resource Waters.

1. Dissolved Oxygen. Shall not be less than 6.0 mg/l in cold water fisheries and not less than 5.0 mg/l in warm water fisheries. Where natural background conditions are lower, DO shall not be less than natural background conditions. Natural seasonal and daily variations that are necessary to protect existing and designated uses shall be maintained.

2. Temperature.

a. Shall not exceed 68° F (20° C) based on the mean of the daily maximum temperature over a seven day period in cold water fisheries, unless naturally occurring. Where a reproducing cold water aquatic community exists at a naturally occurring higher temperature, the temperature necessary to protect the community shall not be exceeded and natural daily and seasonal temperature fluctuations necessary to protect the community shall be maintained. Temperature shall not exceed 83°F (28.3°C) in warm water fisheries. The rise in temperature due to a discharge shall not exceed 1.5°F (0.8°C); and

b. natural seasonal and daily variations that are necessary to protect existing and designated uses shall be maintained. There shall be no changes from natural background conditions that would impair any use assigned to this Class, including those conditions necessary to protect normal species diversity, successful migration, reproductive functions or growth of aquatic organisms.

3. pH. Shall be in the range of 6.5 through 8.3 standard units but not more than 0.5 units outside of the natural background range. There shall be no change from natural background conditions that would impair any use assigned to this Class.

4. Bacteria.

a. At water supply intakes in unfiltered public water supplies: either fecal coliform shall not exceed 20 fecal coliform organisms per 100 ml in all samples taken in any six month period, or total coliform shall not exceed 100 organisms per 100 ml in 90% of the samples taken in any six month period, If both fecal coliforn and total coliform are measured, then only the fecal coliform criterion must be met. More stringent regulations may apply under the Massachusetts Drinking Water regulations, 310 CMR 22.00 (*see* 314 CMR 4.06(1)(d)1.);

b. at bathing beaches as defined by the Massachusetts Department of Public Health in 105 CMR 445.010: where E. coli is the chosen indicator, the geometric mean of the five most recent samples taken during the same bathing season shall not exceed 126 colonies per 100 ml and no single sample taken during the bathing season shall exceed 235 colonies per 100 ml; alternatively, where enterococci are the chosen indicator, the geometric mean of the five most recent samples taken during the same bathing season shall not exceed 33 colonies per 100 ml and no single sample taken during the bathing season shall exceed 61 colonies per 100 ml;

c. for other waters and, during the non bathing season, for waters at bathing beaches as defined by the Massachusetts Department of Public Health in 105 CMR 445.010: the geometric mean of all E. coli samples taken within the most recent six months shall not exceed 126 colonies per 100 ml typically based on a minimum of five samples and no single sample shall exceed 235 colonies per 100 ml; alternatively, where enterococci are the chosen indicator, the geometric mean of all enterococci samples taken within the most recent six months shall not exceed 33 colonies per 100 ml typically based on a minimum of five samples, and no single sample shall exceed 61 colonies per 100 ml. These criteria may be applied on a seasonal basis at the discretion of the Department; and

d. consistent with Massachusetts Department of Public Health regulations for bathing beaches, the single sample maximum values in the primary contact recreation bacteria criteria in 314 CMR 4.05(3)(a)4.b. and 4.05(3)(a)4.c. also are for use in the context of notification and closure decisions.

5. Solids. These waters shall be free from floating, suspended and settleable solids in concentrations or combinations that would impair any use assigned to this class, that would cause aesthetically objectionable conditions, or that would impair the benthic biota or degrade the chemical composition of the bottom.

4.05: continued

6. Color and Turbidity. These waters shall be free from color and turbidity in concentrations or combinations that are aesthetically objectionable or would impair any use assigned to this class.

7. Oil and Grease. These waters shall be free from oil and grease, petrochemicals and other volatile or synthetic organic pollutants.

8. Taste and Odor. None other than of natural origin.

(b) Class B. These waters are designated as a habitat for fish, other aquatic life, and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation. Where designated in 314 CMR 4.06, they shall be suitable as a source of public water supply with appropriate treatment ("Treated Water Supply"). Class B waters shall be suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses. These waters shall have consistently good aesthetic value.

1. Dissolved Oxygen.

a. Shall not be less than 6.0 mg/l in cold water fisheries and not less than 5.0 mg/l in warm water fisheries. Where natural background conditions are lower, DO shall not be less than natural background conditions. Natural seasonal and daily variations that are necessary to protect existing and designated uses shall be maintained.

2. Temperature.

a. Shall not exceed 68°F (20°C) based on the mean of the daily maximum temperature over a seven day period in cold water fisheries, unless naturally occurring. Where a reproducing cold water aquatic community exists at a naturally occurring higher temperature, the temperature necessary to protect the community shall not be exceeded and the natural daily and seasonal temperature fluctuations necessary to protect the community shall be maintained. Temperature shall not exceed 83°F (28.3°C) in warm water fisheries. The rise in temperature due to a discharge shall not exceed 3°F (1.7°0C) in rivers and streams designated as cold water fisheries nor 5°F (2.8°C) in rivers and streams designated as warm water fisheries (based on the minimum expected flow for the month); in lakes and ponds the rise shall not exceed 3°F (1.7°0C) in the epilimnion (based on the monthly average of maximum daily temperature);

b. natural seasonal and daily variations that are necessary to protect existing and designated uses shall be maintained. There shall be no changes from natural background conditions that would impair any use assigned to this Class, including those conditions necessary to protect normal species diversity, successful migration, reproductive functions or growth of aquatic organisms;

c. alternative effluent limitations established in connection with a variance for a thermal discharge issued under 33 U.S.C. § 1251 (FWPCA, § 316(a)) and 314 CMR 3.00 are in compliance with 314 CMR 4.00. As required by 33 U.S.C.§1251 (FWPCA, § 316(a)) and 314 CMR 3.00, for permit and variance renewal, the applicant must demonstrate that alternative effluent limitations continue to comply with the variance standard for thermal discharges; and

d. in the case of a cooling water intake structure (CWIS) regulated by EPA under 33 U.S.C. §1251 (FWPCA § 316(b)), the Department has the authority under 33 U.S.C. § 1251 (FWPCA §401), M.G.L. c. 21, §§ 26 through 53 and 314 CMR 3.00 to condition the CWIS to assure compliance of the withdrawal activity with 314 CMR 4.00, including, but not limited to, compliance with narrative and numerical criteria and protection of existing and designated uses.

3. pH. Shall be in the range of 6.5 through 8.3 standard units and not more than 0.5 units outside of the natural background range. There shall be no change from natural background conditions that would impair any use assigned to this Class.

4. Bacteria.

a. At bathing beaches as defined by the Massachusetts Department of Public Health in 105 CMR 445.010: where E. coli is the chosen indicator, the geometric mean of the five most recent samples taken during the same bathing season shall not exceed 126 colonies per 100 ml and no single sample taken during the bathing season shall exceed 235 colonies per 100 ml; alternatively, where enterococci are the chosen indicator, the geometric mean of the five most recent samples taken during the same bathing season shall not exceed 33 colonies per 100 ml and no single sample taken during the bathing season shall exceed 61 colonies per 100 ml;

4.05: continued

b. for other waters and, during the non bathing season, for waters at bathing beaches as defined by the Massachusetts Department of Public Health in 105 CMR 445.010: the geometric mean of all E. coli samples taken within the most recent six months shall not exceed 126 colonies per 100 ml typically based on a minimum of five samples and no single sample shall exceed 235 colonies per 100 ml; alternatively, the geometric mean of all enterococci samples taken within the most recent six months shall not exceed 33 colonies per 100 ml typically based on a minimum of five samples and no single sample shall exceed 61 colonies per 100 ml. These criteria may be applied on a seasonal basis at the discretion of the Department; and

c. consistent with Massachusetts Department of Public Health regulations for bathing beaches, the single sample maximum values in the primary contact bacteria criteria in 314 CMR 4.05(3)(b)4.a. and 4.05(3)(b)4.b. also are for use in the context of notification and closure decisions.

5. Solids. These waters shall be free from floating, suspended and settleable solids in concentrations and combinations that would impair any use assigned to this Class, that would cause aesthetically objectionable conditions, or that would impair the benthic biota or degrade the chemical composition of the bottom.

6. Color and Turbidity. These waters shall be free from color and turbidity in concentrations or combinations that are aesthetically objectionable or would impair any use assigned to this Class.

7. Oil and Grease. These waters shall be free from oil, grease and petrochemicals that produce a visible film on the surface of the water, impart an oily taste to the water or an oily or other undesirable taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life.

8. Taste and Odor. None in such concentrations or combinations that are aesthetically objectionable, that would impair any use assigned to this Class, or that would cause tainting or undesirable flavors in the edible portions of aquatic life.

(c) Class C. These waters are designated as a habitat for fish, other aquatic life and wildlife, including for their reproduction, migration, growth and other critical functions, and for secondary contact recreation. These waters shall be suitable for the irrigation of crops used for consumption after cooking and for compatible industrial cooling and process uses. These waters shall have good aesthetic value.

1. Dissolved Oxygen.

a. Shall not be less than 5.0 mg/l at least 16 hours of any 24-hour period and not less than 3.0 mg/l at any time. Where natural background conditions are lower, DO shall not be less than natural background conditions. Natural seasonal and daily variations that are necessary to protect existing and designated uses shall be maintained.

2. Temperature.

a. Shall not exceed 85°F (29.4°C) nor shall the rise due to a discharge exceed 5°F (2.8°C);

b. Natural seasonal and daily variations that are necessary to protect existing and designated uses shall be maintained. There shall be no changes from natural background conditions that would impair any use assigned to this Class, including those conditions necessary to protect normal species diversity, successful migration, reproductive functions or growth of aquatic organisms;

c. alternative effluent limitations established in connection with a variance for a thermal discharge issued under 33 U.S.C. § 1251 (FWPCA, § 316(a)) and 314 CMR 3.00 are in compliance with 314 CMR 4.00. As required by 33 U.S.C. § 1251 (FWPCA, § 316(a)) and 314 CMR 3.00, for permit and variance renewal, the applicant must demonstrate that alternative effluent limitations continue to comply with the variance standard for thermal discharges; and

d. in the case of a cooling water intake structure (CWIS) regulated by EPA under 33 U.S.C. § 1251 (FWPCA § 316(b)), the Department has the authority under 33 U.S.C. § 1251 (FWPCA § 401), M.G..L. c. 21, §§ 26 through 53 and 314 CMR 3.00 to condition the CWIS to assure compliance of the withdrawal activity with 314 CMR 4.00, including, but not limited to, compliance with narrative and numerical criteria and protection of existing and designated uses.

3. pH. Shall be in the range of 6.5 through 9.0 standard units and not more than 1.0 standard unit outside of the natural backgound range. There shall be no change from natural background conditions that would impair any use assigned to this Class.

4.05: continued

4. Bacteria. The geometric mean of all E. coli samples taken within the most recent six months shall not exceed 630 colonies per 100 ml typically based on a minimum of five samples, and 10% of such samples shall not exceed 1260 colonies per 100 ml. This criterion may be applied on a seasonal basis at the discretion of the Department.

5. Solids. These waters shall be free from floating, suspended and settleable solids in concentrations and combinations that would impair any use assigned to this Class, that would cause aesthetically objectionable conditions, or that would impair the benthic biota or degrade the chemical composition of the bottom.

6. Color and Turbidity. These waters shall be free from color and turbidity in concentrations or combinations that are aesthetically objectionable or would impair any use assigned to this Class.

7. Oil and Grease. These waters shall be free from oil, grease and petrochemicals that produce a visible film on the surface of the water, impart an oily taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life.

8. Taste and Odor - None in such concentrations or combinations that are aesthetically objectionable, that would impair any use assigned to this Class, or that would cause tainting or undesirable flavors in the edible portions of aquatic life.

(4) Coastal and Marine Classes

(a) Class SA. These waters are designated as an excellent habitat for fish, other aquatic life and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation. In certain waters, excellent habitat for fish, other aquatic life and wildlife may include, but is not limited to, seagrass. Where designated in the tables to 314 CMR 4.00 for shellfishing, these waters shall be suitable for shellfish harvesting without depuration (Approved and Conditionally Approved Shellfish Areas). These waters shall have excellent aesthetic value.

In the case of a water intake structure (IS) at a desalination facility, the Department has the authority under 33 U.S.C. § 1251 (FWPCA § 401), M.G.L. c. 21, §§ 26 through 53 and 314 CMR 3.00 to condition the IS to assure compliance of the withdrawal activity with 314 CMR 4.00, including, but not limited to, compliance with the narrative and numerical criteria and protection of existing and designated uses.

1. Dissolved Oxygen. Shall not be less than 6.0 mg/l. Where natural background conditions are lower, DO shall not be less than natural background. Natural seasonal and daily variations that are necessary to protect existing and designated uses shall be maintained.

2. Temperature.

a. Shall not exceed 85°F (29.4°C) nor a maximum daily mean of 80°F (26.7°0C), and the rise in temperature due to a discharge shall not exceed 1.5°0F (0.8°0C);

b. there shall be no change from natural background that would impair any uses assigned to this class including those conditions necessary to protect normal species diversity, successful migration, reproductive functions or growth of aquatic organisms;

c. alternative effluent limitations established in connection with a variance for a thermal discharge issued under 33 U.S.C. § 1251 (FWPCA, § 316(a)) and 314 CMR 3.00 are in compliance with 314 CMR 4.00. As required by 33 U.S.C. § 1251 (FWPCA, § 316(a)) and 314 CMR 3.00, for permit and variance renewal, the applicant must demonstrate that alternative effluent limitations continue to comply with the variance standard for thermal discharges; and

d. in the case of a cooling water intake structure (CWIS) regulated by EPA under 33 U.S.C. § 1251 (FWPCA § 316(b)), the Department has the authority under 33 U.S.C. § 1251 (FWPCA § 401), M.G.L. c. 21, §§ 26 through 53 and 314 CMR 3.00 to condition the CWIS to assure compliance of the withdrawal activity with 314 CMR 4.00, including, but not limited to, compliance with narrative and numerical criteria and protection of existing and designated uses.

3. pH. Shall be in the range of 6.5 through 8.5 standard units and not more than 0.2 standard units outside of the natural background range. There shall be no change from natural background conditions that would impair any use assigned to this Class.

4.05: continued

4. Bacteria.

a. Waters designated for shellfishing: fecal coliform shall not exceed a geometric mean Most Probable Number (MPN) of 14 organisms per 100 ml, nor shall more than 10% of the samples exceed an MPN of 28 per 100 ml, or other values of equivalent protection based on sampling and analytical methods used by the Massachusetts Division of Marine Fisheries and approved by the National Shellfish Sanitation Program in the latest revision of the *Guide For The Control of Molluscan Shellfish* (more stringent regulations may apply, see 314 CMR 4.06(1)(d)(5));

b. at bathing beaches as defined by the Massachusetts Department of Public Health in 105 CMR 445.010, no single enterococci sample taken during the bathing season shall exceed 104 colonies per 100 ml, and the geometric mean of the five most recent samples taken within the same bathing season shall not exceed a geometric mean of 35 enterococci colonies per 100 ml. In non bathing beach waters and bathing beach waters during the non bathing season, no single enterococci sample shall exceed 104 colonies per 100 ml and the geometric mean of all samples taken within the most recent six months typically based on a minimum of five samples shall not exceed 35 enterococci colonies per 100 ml. These criteria may be applied on a seasonal basis at the discretion of the Department; and

c. consistent with Massachusetts Department of Public Health regulations for bathing beaches, the single sample maximum values in the primary contact recreation bacteria criteria in 314 CMR 4.05(4)(a)4.b. also are for use in the context of notification and closure decisions.

5. Solids. These waters shall be free from floating, suspended and settleable solids in concentrations or combinations that would impair any use assigned to this class, that would cause aesthetically objectionable conditions, or that would impair the benthic biota or degrade the chemical composition of the bottom.

6. Color and Turbidity. These waters shall be free from color and turbidity in concentrations or combinations that are aesthetically objectionable or would impair any use assigned to this class.

7. Oil and Grease. These waters shall be free from oil and grease and petrochemicals.

8. Taste and Odor. None other than of natural origin.

(b) Class SB. These waters are designated as a habitat for fish, other aquatic life and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation. In certain waters, habitat for fish, other aquatic life and wildlife may include, but is not limited to, seagrass. Where designated in the tables to 314 CMR 4.00 for shellfishing, these waters shall be suitable for shellfish harvesting with depuration (Restricted and Conditionally Restricted Shellfish Areas). These waters shall have consistently good aesthetic value.

In the case of a water intake structure (IS) at a desalination facility, the Department has the authority under 33 U.S.C. § 1251 (FWPCA § 401), M.G.L. c. 21, §§ 26 through 53 and 314 CMR 3.00 to condition the IS to assure compliance of the withdrawal activity with 314 CMR 4.00, including, but not limited to, compliance with the narrative and numerical criteria and protection of existing and designated uses.

1. Dissolved Oxygen. Shall not be less than 5.0 mg/l. Seasonal and daily variations that are necessary to protect existing and designated uses shall be maintained. Where natural background conditions are lower, DO shall not be less than natural background.

2. Temperature.

a. Shall not exceed 85°F (29.4°C) nor a maximum daily mean of 80°0F (26.7°C), and the rise in temperature due to a discharge shall not exceed 1.5°F (0.8°C) during the summer months (July through September) nor 4°0F (2.2°0C) during the winter months (October through June);

b. there shall be no changes from natural background that would impair any uses assigned to this class including those conditions necessary to protect normal species diversity, successful migration, reproductive functions or growth of aquatic organisms;

c. alternative effluent limitations established in connection with a variance for a thermal discharge issued under 33 U.S.C. § 1251 (FWPCA, § 316(a)) and 314 CMR 3.00 are in compliance with 314 CMR 4.00. As required by 33 U.S.C. § 1251 (FWPCA, § 316(a)) and 314 CMR 3.00, for permit and variance renewal, the applicant must demonstrate that alternative effluent limitations continue to comply with the variance standard for thermal discharges; and

4.05: continued

d. in the case of a cooling water intake structure (CWIS) regulated by EPA under 33 U.S.C. § 1251 (FWPCA § 316(b)), the Department has the authority under 33 U.S.C. § 1251 (FWPCA § 401), M.G..L. c. 21, §§ 26 through 53 and 314 CMR 3.00 to condition the CWIS to assure compliance of the withdrawal activity with 314 CMR 4.00, including, but not limited to, compliance with narrative and numerical criteria and protection of existing and designated uses.

3. pH. Shall be in the range of 6.5 through 8.5 standard units and not more than 0.2 units outside of the natural background range. There shall be no change from natural background conditions that would impair any use assigned to this Class.

4. Bacteria.

a. Waters designated for shellfishing shall not exceed a fecal coliform median or geometric mean MPN of 88 organisms per 100 ml, nor shall more than 10% of the samples exceed an MPN of 260 per 100 ml or other values of equivalent protection based on sampling and analytical methods used by the Massachusetts Division of Marine Fisheries and approved by the National Shellfish Sanitation Program in the latest revision of the *Guide For The Control of Molluscan Shellfish* (more stringent regulations may apply, *see* 314 CMR 4.06(1)(d)(5));

b. at bathing beaches as defined by the Massachusetts Department of Public Health in 105 CMR 445.010, no single enterococci sample taken during the bathing season shall exceed 104 colonies per 100 ml and the geometric mean of the five most recent samples taken within the same bathing season shall not exceed 35 enterococci colonies per 100 ml. In non bathing beach waters and bathing beach waters during the non bathing season, no single enterococci sample shall exceed 104 colonies per 100 ml and the geometric mean of all of the samples taken during the most recent six months typically based on a minimum of five samples shall not exceed 35 enterococci colonies per 100 ml. These criteria may be applied on a seasonal basis at the discretion of the Department; and

c. consistent with Massachusetts Department of Public Health regulations for bathing beaches, the single sample maximum values in the primary contact recreation bacteria criteria in 314 CMR 4.05(4)(b)4.b. also are for use in the context of notification and closure decisions.

5. Solids. These waters shall be free from floating, suspended and settleable solids in concentrations or combinations that would impair any use assigned to this class, that would cause aesthetically objectionable conditions, or that would impair the benthic biota or degrade the chemical composition of the bottom.

6. Color and Turbidity. These waters shall be free from color and turbidity in concentrations or combinations that are aesthetically objectionable or would impair any use assigned to this class.

7. Oil and Grease. These waters shall be free from oil, grease and petrochemicals that produce a visible film on the surface of the water, impart an oily taste to the water or an oily or other undesirable taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life.

8. Taste and Odor. None in such concentrations or combinations that are aesthetically objectionable, that would impair any use assigned to this class, or that would cause tainting or undesirable flavors in the edible portions of aquatic life.

(c) Class SC. These waters are designated as a habitat for fish, other aquatic life and wildlife, including for their reproduction, migration, growth and other critical functions, and for secondary contact recreation. They shall also be suitable for certain industrial cooling and process uses. These waters shall have good aesthetic value.

1. Dissolved Oxygen. Shall not be less than 5.0 mg/l at least 16 hours of any 24-hour period and not less than 4.0 mg/l at any time. Where natural background conditions are lower, DO shall not be less than natural background. Natural seasonal and daily variations that are necessary to protect existing and designated uses shall be maintained.

2. Temperature.

a. Shall not exceed 85°F (29.4C) nor shall the rise due to a discharge exceed 5°F (2.8°C);

b. there shall be no change from natural background conditions that would impair any use assigned to this class, including those conditions necessary to protect normal species diversity, successful migration, reproductive functions or growth of aquatic organisms;

4.05: continued

c. alternative effluent limitations established in connection with a variance for a thermal discharge issued under 33 U.S.C. § 1251 (FWPCA, § 316(a)) and 314 CMR 3.00 are in compliance with 314 CMR 4.00. As required by 33 U.S.C. § 1251 (FWPCA, § 316(a)) and 314 CMR 3.00, for permit and variance renewal, the applicant must demonstrate that alternative effluent limitations continue to comply with the variance standard for thermal discharges; and

d. in the case of a cooling water intake structure (CWIS) regulated by EPA under 33 U.S.C. § 1251 (FWPCA § 316(b)), the Department has the authority under 33 U.S.C. § 1251 (FWPCA § 401), M.G..L. c. 21, §§ 26 through 53 and 314 CMR 3.00 to condition the CWIS to assure compliance of the withdrawal activity with 314 CMR 4.00, including, but not limited to, compliance with narrative and numerical criteria and protection of existing and designated uses.

3. pH. Shall be in the range of 6.5 through 9.0 standard units and not more than 0.5 standard units outside of the natural background range. There shall be no change from natural background conditions that would impair any use assigned to this Class.

4. Bacteria. The geometric mean of all enterococci samples taken within the most recent six months shall not exceed 175 colonies per 100 ml, typically based on the five most recent samples, and 10% of such samples shall not exceed 350 enterococci colonies per 100 ml. This criterion may be applied on a seasonal basis at the discretion of the Department.

5. Solids. These waters shall be free from floating, suspended and settleable solids in concentrations and combinations that would impair any use assigned to this class, that would cause aesthetically objectionable conditions, or that would impair the benthic biota or degrade the chemical composition of the bottom.

6. Color and Turbidity. These waters shall be free from color and turbidity in concentrations or combinations that are aesthetically objectionable or would impair any use assigned to this class.

7. Oil and Grease. These waters shall be free from oil, grease and petrochemicals that produce a visible film on the surface of the water, impart an oily taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life.

8. Taste and Odor. None in such concentrations or combinations that are aesthetically objectionable, that would impair any use assigned to this Class, or that would cause tainting or undesirable flavors in the edible portions of aquatic life.

(5) Additional Minimum Criteria Applicable to all Surface Waters.

(a) Aesthetics. All surface waters shall be free from pollutants in concentrations or combinations that settle to form objectionable deposits; float as debris, scum or other matter to form nuisances; produce objectionable odor, color, taste or turbidity; or produce undesirable or nuisance species of aquatic life.

(b) Bottom Pollutants or Alterations. All surface waters shall be free from pollutants in concentrations or combinations or from alterations that adversely affect the physical or chemical nature of the bottom, interfere with the propagation of fish or shellfish, or adversely affect populations of non-mobile or sessile benthic organisms.

(c) Nutrients. Unless naturally occurring, all surface waters shall be free from nutrients in concentrations that would cause or contribute to impairment of existing or designated uses and shall not exceed the site specific criteria developed in a TMDL or as otherwise established by the Department pursuant to 314 CMR 4.00. Any existing point source discharge containing nutrients in concentrations that would cause or contribute to cultural eutrophication, including the excessive growth of aquatic plants or algae, in any surface water shall be provided with the most appropriate treatment as determined by the Department, including, where necessary, highest and best practical treatment (HBPT) for POTWs and BAT for non POTWs, to remove such nutrients to ensure protection of existing and designated uses. Human activities that result in the nonpoint source discharge of nutrients to any surface water may be required to be provided with cost effective and reasonable best management practices for nonpoint source control.

(d) Radioactivity. All surface waters shall be free from radioactive substances in concentrations or combinations that would be harmful to human, animal or aquatic life or the most sensitive designated use; result in radionuclides in aquatic life exceeding the recommended limits for consumption by humans; or exceed Massachusetts Drinking Water Regulations as set forth in 310 CMR 22.09.

4.05: continued

(e) Toxic Pollutants. All surface waters shall be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife. For pollutants not otherwise listed in 314 CMR 4.00, the *National Recommended Water Quality Criteria: 2002, EPA 822-R-02-047, November 2002* published by EPA pursuant to Section 304(a) of the Federal Water Pollution Control Act, are the allowable receiving water concentrations for the affected waters, unless the Department either establishes a site specific criterion or determines that naturally occurring background concentrations are higher. Where the Department determines that naturally occurring background concentrations are higher, those concentrations shall be the allowable receiving water concentrations. The Department shall use the water quality criteria for the protection of aquatic life expressed in terms of the dissolved fraction of metals when EPA's 304(a) recommended criteria provide for use of the dissolved fraction. The EPA recommended criteria based on total recoverable metals shall be converted to dissolved metals using EPA's published conversion factors. Permit limits will be written in terms of total recoverable metals. Translation from dissolved metals criteria to total recoverable metals permit limits will be based on EPA's conversion factors or other methods approved by the Department. The Department may establish site specific criteria for toxic pollutants based on site specific considerations. Site specific criteria, human health risk levels and permit limits will be established in accordance with the following:

1. Site Specific Criteria: Where EPA recommended criteria for a specific pollutant are not available or where the Department determines that they are invalid due to site specific physical, chemical or biological considerations, the Department shall use a site specific criterion as the allowable receiving water concentration for the affected waters. In all cases, at a minimum, site specific criteria shall not exceed safe exposure levels determined by toxicity testing using methods approved by the Department. The Department will adopt any such site specific criteria as revisions to 314 CMR 4.00 in accordance with M.G.L. c. 30A.

2. Human Health Risk Levels. Where EPA has not set human health risk levels for a toxic pollutant, the human health based regulation of the toxic pollutant shall be in accordance with guidance issued by the Department of Environmental Protection's Office of Research and Standards. The Department's goal is to prevent all adverse health effects which may result from the ingestion, inhalation or dermal absorption of toxins attributable to waters during their reasonable use as designated in 314 CMR 4.00. When this goal is not attainable, the Department will use a goal of 10-6 as the acceptable excess lifetime cancer risk level for individual carcinogens.

3. Accumulation of Pollutants. Where appropriate the Department shall use an additional margin of safety when establishing water quality based effluent limits to assure that pollutants do not persist in the environment or accumulate in organisms to levels that:

a. are toxic to humans, wildlife or aquatic life; or

b. result in unacceptable concentrations in edible portions of marketable fish or shellfish or for the recreational use of fish, shellfish, other aquatic life or wildlife for human consumption.

4. Public Notice. Where EPA recommended criteria are used to establish water quality based effluent limitations, the effluent limitations shall be documented and subject to full intergovernmental coordination and public participation as set forth in 314 CMR 2.00 "Permit Procedures".

4.06: Basin Classification and Maps

(1) Classification. For the purposes of applying 314 CMR 4.00, the surface waters of the Commonwealth are classified as shown in 314 CMR 4.06. The following terms used in the classification tables have the following meanings:

(a) Boundary. a description of the boundaries of the segment being classified.

(b) Mile Points. for rivers and streams, the upstream and downstream mile points; it is also used to indicate the point at which a tributary enters the main stem of a river or stream.

(c) Class. the appropriate water use Class for each segment in accordance with 314 CMR 4.05.

(d) Qualifiers. indicates special considerations and uses applicable to the segment that may affect the application of criteria or antidegradation provisions of 314 CMR 4.00.

4.06: continued

1. Public Water Supply - these waters may be used as a source of public drinking water in accordance with the Massachusetts Drinking Water Regulations, 310 CMR 22.00. They may be subject to more stringent regulation in accordance with the Massachusetts Drinking Water Regulations, 310 CMR 22.00, adopted pursuant to M.G.L. c. 111, and may have restricted use. These waters are designated for protection as Outstanding Resource Waters under 314 CMR 4.04(3). No discharge of dredged or fill material into wetlands or waters of the Commonwealth shall be allowed within 400 feet of the high water mark of a Class A surface water (exclusive of its tributaries), unless conducted by a public water system under 310 CMR 22.00, conducted by a public agency or authority for the maintenance or repair of existing public roads or railways, or conducted by a person granted a variance pursuant to 314 CMR 9.08. Any maintenance or repair of existing public roads or railways shall also include the removal or implementation of the highest and best practical method of treatment of stormwater discharges in accordance with 314 CMR 4.04(3) within the reasonable vicinity of the activity. Maintenance or repair of an existing public road or railway shall not include substantial reconstruction, substantial enlargement, replacement or realignment of any portion of the roadway or railway. The Department will presume that any reconstruction or enlargement is substantial and requires a variance under 314 CMR 9.08. The Department may determine that a public agency or authority has overcome the presumption based upon a showing that the activity proposed within 400 feet of the high water mark of a Class A surface water will result in the loss of less than 5000 square feet cumulatively of bordering and isolated vegetated wetlands and land under water, and that the entirety of the activity will improve water quality, or maintain water quality if removal or implementation of the highest and best practical method of treatment of stormwater discharges already has been achieved.

2. Outstanding Resource Waters - denotes those waters, other than Class A Public Water Supplies and their tributaries, that are designated for protection as Outstanding Resource Waters under 314 CMR 4.04(3). Outstanding Resource Waters are assigned at the discretion of the Department, as appropriate. An application to nominate a waterbody as an Outstanding Resource Water must be submitted in accordance with applicable Department application procedures and requirements.

3. Special Resource Waters – denotes waters that are designated for protection as Special Resource Waters under 314 CMR 4.04(4). Special Resource Waters are assigned at the discretion of the Department, as appropriate.

4. High Quality Waters - denotes certain waters designated for protection under 314 CMR 4.04(2) (Protection of High Quality Waters). Other waters as described in 314 CMR 4.04(2) also are high quality, although they are not necessarily denoted as high quality in the classification tables.

5. Shellfishing - these waters are subject to more stringent regulation in accordance with the rules and regulations of the Massachusetts Division of Marine Fisheries pursuant to M.G.L. c. 130, § 75. These include applicable criteria of the National Shellfishing Sanitation Program. Approval for use of areas designated for shellfishing is issued by the Massachusetts Division of Marine Fisheries. To determine whether a particular water designated for shellfishing also is approved for use, the Massachusetts Division of Marine Fisheries and/or the appropriate local authority (usually the Shellfish Department) should be contacted.

6. Treated Water Supply - denotes those Class B waters that are used as a source of public water supply after appropriate treatment. These waters may be subject to more stringent site-specific criteria established by the Department as appropriate to protect and maintain the use. *See*, also, 310 CMR 22.00.

7. Cold Water - in these waters dissolved oxygen and temperature criteria for cold water fisheries apply. Certain waters not designated as cold water in 314 CMR 4.00 may contain habitat that supports a cold water fish population and, in such cases, the cold water fish population and habitat shall be protected and maintained as existing uses. The Massachusetts Division of Fisheries and Wildlife is responsible for identifying cold water fish populations that meet their protocol regardless of whether or not the water meets the cold water criteria in 314 CMR 4.00. Where a cold water fish population has been identified by the Division of Fisheries and Wildlife as meeting their protocol, but the water has not been documented to meet the cold water criteria in 314 CMR 4.00, the Department will protect the existing cold water fish population and its habitat as an existing use.

8. Warm Water - in these waters dissolved oxygen and temperature criteria for warm water fisheries apply.

4.06: continued

9. Aquatic Life - in these waters Class C dissolved oxygen and temperature criteria apply. This designation is made only where natural background conditions prevent the attainment of a "higher use" designation.

10. CSO – these waters are identified as impacted by the discharge of combined sewer overflows; however, a long term control plan has not been approved or fully implemented for the CSO discharges.

11. Partial Use, B(CSO) and SB(CSO) - these waters occasionaly are subject to short-term impairment of swimming or other recreational uses due to untreated CSO discharges in a typical year, and the aquatic life community may suffer adverse impact yet is still generally viable. In these waters, the uses for Class B and Class SB waters are maintained after the implementation of long term control measures described in the approved CSO long term control plan, except as identified in such plan. The Department may designate a segment partial use, B(CSO) or SB(CSO), provided that:

a. a Department approved long term control plan provides justification for the overflows;

b. the Department finds through a use attainability analysis, and EPA concurs, that achieving a greater level of CSO control is not feasible for one of the reasons specified at 314 CMR 4.03(4);

c. existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected; and

d. public notice is provided through procedures for permit issuance under M.G.L. c. 21, §§ 26 through 53 and regulations promulgated pursuant to M.G.L. c. 30A. In addition, the Department will publish a notice in the *Environmental Monitor*. Other combined sewer overflows may be eligible for a variance granted pursuant to 314 CMR 4.03(4). When a variance is not appropriate, partial use may be designated for the segment after public notice and opportunity for a public hearing in accordance with M.G.L. c. 30A.

12. Vernal Pools. No point source discharge shall be allowed to a vernal pool certified by the Massachusetts Division of Fisheries and Wildlife; and no discharge of dredged or fill material shall be allowed to a vernal pool certified by the Massachusetts of Division of Fisheries and Wildlife, unless a variance is granted under 314 CMR 9.08.

(e) Treated Water Supply, Public Water Supply, and Shellfishing are assigned at the discretion of the Department, as appropriate.

(f) Cold Water, Warm Water and Aquatic Life are considered consistent with the national goal uses and are assigned whenever attainable, as applicable.

(2) Wetlands. Wetlands bordering Class A Outstanding Resource Waters are designated Class A Outstanding Resource Waters. Vernal pools are designated Class B Outstanding Resource Waters. All wetlands bordering other Class B, SB or SA Outstanding Resource Waters are designated as Outstanding Resource Waters to the boundary of the defined area. All other wetlands are designated Class B, High Quality Waters for inland waters and Class SA, High Quality Waters for coastal and marine waters.

(3) Active and Inactive Reservoirs. All active and inactive reservoirs approved by the Department's Drinking Water Program after December 29, 2006 as a source of public water supply are designated Class A, Outstanding Resource Waters, regardless of whether they are listed in the tables to 314 CMR 4.00.

(4) Other Waters. Unless otherwise designated in 314 CMR 4.06 or unless otherwise listed in the tables to 314 CMR 4.00, other waters are Class B, and presumed High Quality Waters for inland waters and Class SA, and presumed High Quality Waters for coastal and marine waters. Inland fisheries designations and coastal and marine shellfishing designations for unlisted waters shall be made on a case-by-case basis as necessary.

(5) Figures and Tables. For the purpose of applying the Surface Water Quality Standards, the surface waters are classified as shown in the following figures and tables, which are part of 314 CMR 4.00. Segments and their classifications are shown on the figures for general orientation. In cases of inconsistency between the tables and the figures, the information contained in the tables controls.

4.06: continued

(6) Tributaries. Tributaries to a Class A public water supply include, but are not limited to, waterbodies from which water is manually diverted to the Class A public water supply.

(7) Site Specific Criteria. Site specific numerical criteria appear in the last table in 314 CMR 4.00.

For all tables and figures, please follow this link: www.mass.gov/dep/water/laws/tblfig.pdf to view. If a browser window does not open for you, please copy and paste the above link into your browser's address bar.

4.06: continued

FIGURE	LIST OF FIGURES
A	River Basins and Coastal Drainage Areas
1	Hudson River Basin (formerly Hoosic, Kinderhook and Bashbish River Basins)
2	Housatonic River Basin
3	Farmington River Basin
4	Westfield River Basin
5	Deerfield River Basin
6	Connecticut River Basin
7	Millers River Basin
8	Chicopee River Basin
9	Quinebaug River Basin
10	French River Basin
11	Blackstone River Basin
12	Ten Mile River Basin
13	Narragansett Bay/Mount Hope Bay Drainage Area
14	Taunton River Basin
15	Boston Harbor Drainage Area (formerly Boston Harbor Drainage System and Mystic, Neponset and Weymouth & Weir River Basins)
16	Charles River Basin
17	Nashua River Basin
18	SuAsCo River Basin (formerly Concord River Basin)
19	Shawsheen River Basin
20	Merrimack River Basin
21	Parker River Basin
22	Ipswich River Basin
23	North Coastal Drainage Area
24	South Coastal Drainage Area
25	Buzzards Bay Coastal Drainage Area
26	Cape Cod Coastal Drainage Area
27	Islands Coastal Drainage Area (formerly Martha's Vineyard and Nantucket)

4.06: continued

TABLES	LIST OF TABLES
1	Hudson River Basin (formerly Hoosic)
2	Kinderhook and Bashbish River Basins)
2	Housatonic River Basin
3	Farmington River Basin
4	Westfield River Basin
5	Deerfield River Basin
6	Connecticut River Basin
7	Millers River Basin
8	Chicopee River Basin
9	Quinebaug River Basin
10	French River Basin
11	Blackstone River Basin
12	Ten Mile River Basin
13	Narragansett Bay/Mount Hope Bay Drainage Area
14	Taunton River Basin
15	Boston Harbor Drainage Area (formerly Boston Harbor Drainage System and Mystic, Neponset, and Weymouth & Weir River Basins)
16	Charles River Basin
17	Nashua River Basin
18	SuAsCo River Basin (formerly Concord River Basin)
19	Shawsheen River Basin
20	Merrimack River Basin
21	Parker River Basin
22	Ipswich River Basin
23	North Coastal Drainage Area
24	South Coastal Drainage Area
25	Buzzards Bay Coastal Drainage Area
26	Cape Cod Coastal Drainage Area
27	Islands Coastal Drainage Area
28	Site Specific Criteria

Names in parentheses in the tables are unofficial, locally used names.

4.06: continued

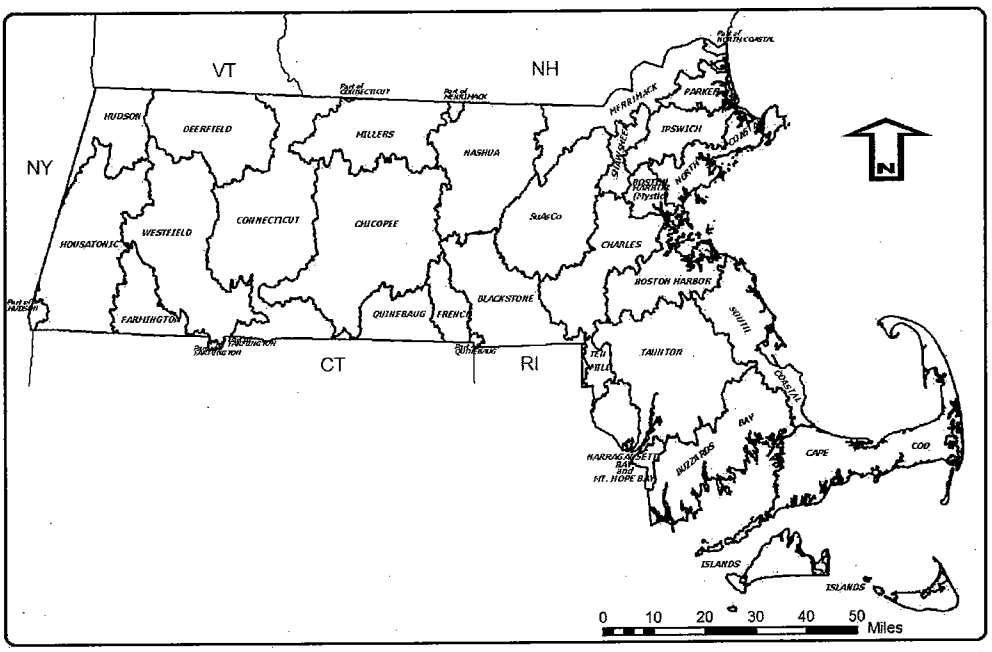
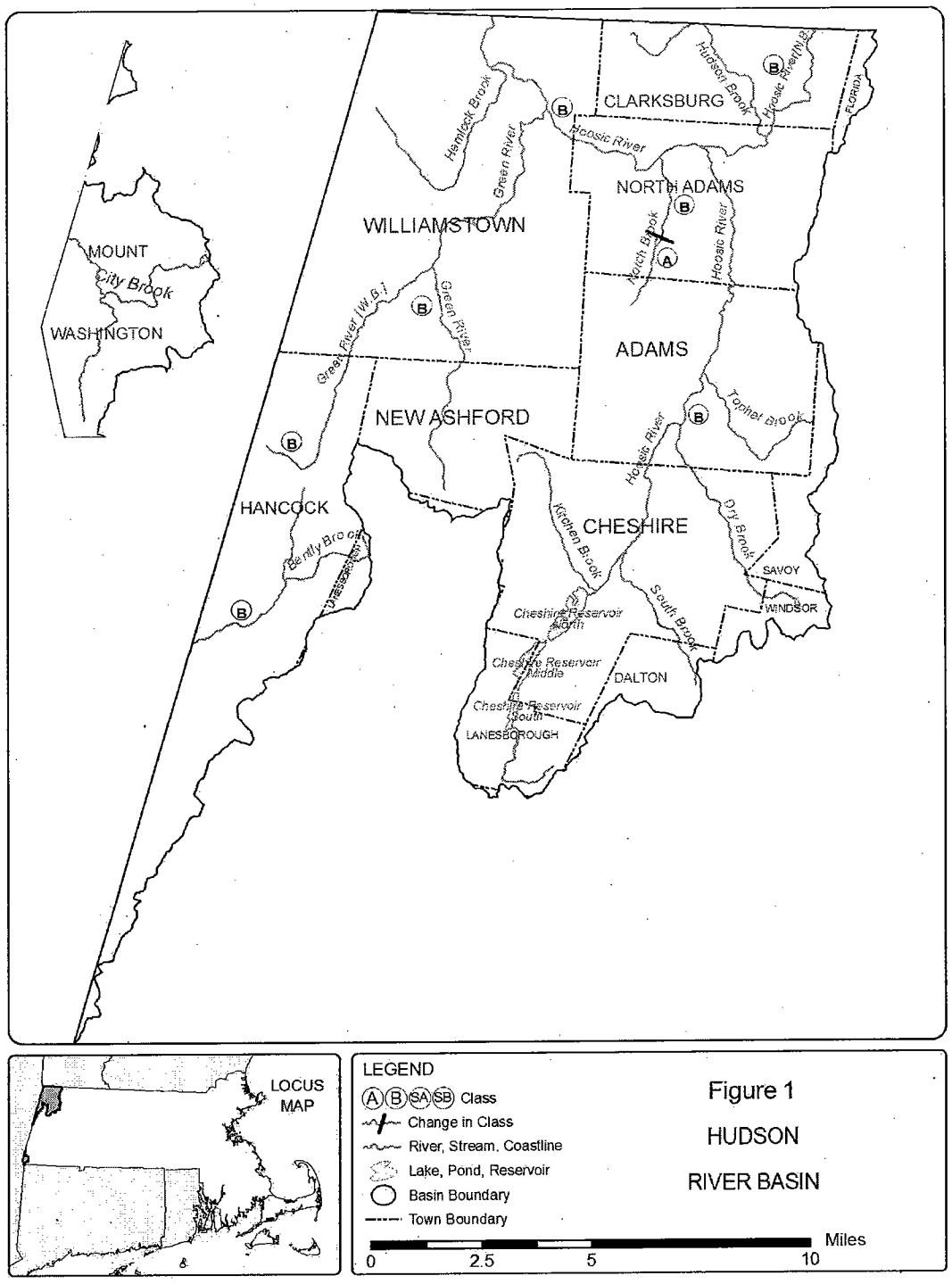


Figure A	COMMONWEALTH OF MASSACHUSETTS RIVER BASINS and COASTAL DRAINAGE AREAS

4.06: continued



4.06: continued

TABLE 1
HUDSON RIVER BASIN

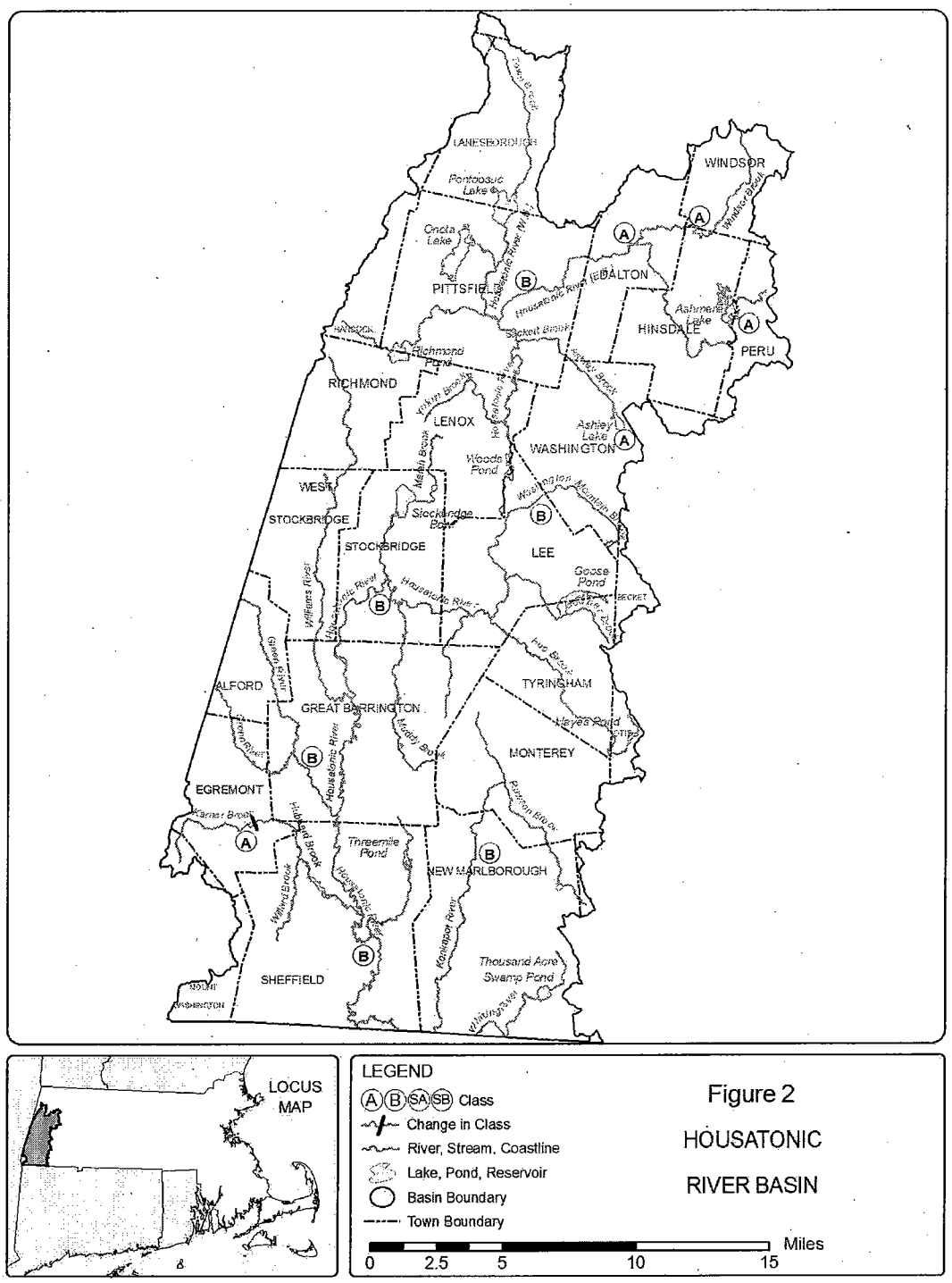
BOUNDARY	MILE POINT	CLASS	QUALIFIERS
North Branch Hoosic River			
Vermont-Massachusetts state line to confluence with the Hoosic River (South Branch Hoosic River)	9.9 - 0.0	B	Cold Water High Quality Water
Hoosic River (South Branch Hoosic River)			
Outlet Cheshire Reservoir to Adams WWTF	23.5 - 15.4	B	Cold Water High Quality Water
Adams WWTF to confluence with the North Branch Hoosic River	15.4 - 10.3	B	Warm Water
Hoosic River			
Confluence of North Branch Hoosic River and Hoosic River (South Branch Hoosic River) to MA-VT state line	10.3 - 0.0	B	Warm Water
Green River			
Entire Length	10.8 - 0.0	B	Cold Water
Basset Brook Reservoir			
Source to outlet in Cheshire and those tributaries thereto	-	A	Public Water Supply
Unnamed Reservoir (Kitchen Brook Reservoir)			
Source to outlet in Cheshire and those tributaries thereto	-	A	Public Water Supply
Notch Reservoir			
Source to outlet in North Adams and those tributaries thereto	-	A	Public Water Supply
Mt. Williams Reservoir			
Source to outlet in North Adams and those tributaries thereto	-	A	Public Water Supply
Sherman Springs			
Source to outlet in Williamstown and those tributaries thereto		A	Public Water Supply

4.06: continued

TABLE 1
HUDSON RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Thunder Brook			
Entire length and those tributaries thereto	-	A	Public Water Supply
Kinderhook Creek			
Source to state border	-	B	Cold Water High Quality Water
Bashbish Brook			
Source to state border	-	B	Cold Water High Quality Water
Hemlock Brook	entire length		Cold Water
Buxton Brook	entire length		Cold Water
Tunnel Brook	entire length		Cold Water
McDonald Brook	entire length		Cold Water

4.06: continued



4.06: continued

TABLE 2
HOUSATONIC RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
East Branch Housatonic River			
Source to outlet Center Pond, Dalton	69.0 - 60.9	B	Cold Water High Quality Water
Outlet Center Pond, Dalton to confluence with Housatonic River	60.9 - 55.4	B	Warm Water
Housatonic River			
Confluence of Southwest and West Branches Housatonic River to Pittsfield WWTF	55.4 - 50.9	B	Warm Water
Pittsfield WWTF to state line	50.9 - 0.0	B	Warm Water
West Branch Housatonic River			
Entire Length	55.4 + 36.0 - 0.0	B	Cold Water High Quality Water
Southwest Branch Housatonic River			
Entire Length	55.4 + 0.8 + 34.1 - 0.0	B	Cold Water High Quality Water
Goose Pond Brook			
Entire Length	2.3 - 0.0	B	Cold Water High Quality Water
Williams River			
Entire Length	10.0 - 0.0	B	Cold Water High Quality Water
Green River			
Entire Length	9.5 - 0.0	B	Cold Water High Quality Water
Hubbard Brook			
Entire Length	6.6 - 0.0	B	Cold Water High Quality Water
Fenton Brook			
Entire Length	2.9 - 0.0	B	Cold Water High Quality Water

4.06: continued

TABLE 2
HOUSATONIC RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Karner Brook			
Source to Karner Brook Reservoir dam	4.2 - 0.0	A	Tributary to Public Water Supply
Entire Length			Outstanding Resource Water
East Mountain Reservoir			
Source to outlet in Great Barrington and those tributaries thereto	-	A	Public Water Supply
Long Pond			
Source to outlet in Great Barrington and those tributaries thereto	-	A	Public Water Supply
Belmont Reservoir			
Source to outlet in Hinsdale and those tributaries thereto	-	A	Public Water Supply
Lower Reservoir (Codding Brook Lower Reservoir, Vanetti Reservoir)			
Source to outlet in Lee and those tributaries thereto	-	A	Public Water Supply
Leahey Reservoir (Codding Brook Upper Reservoir)			
Source to outlet in Lee and those tributaries thereto	-	A	Public Water Supply
Mt. Washington Brook			
Source to outlet in Washington and those tributaries thereto	-	A	Public Water Supply
Lenox Reservoir (Lower Root Reservoir)			
Source to outlet in Lenox and those tributaries thereto	-	A	Public Water Supply
Lenox Reservoir (Upper Root Reservoir)			
Source to outlet in Lenox and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 2
HOUSATONIC RIVER BASIN (continued)

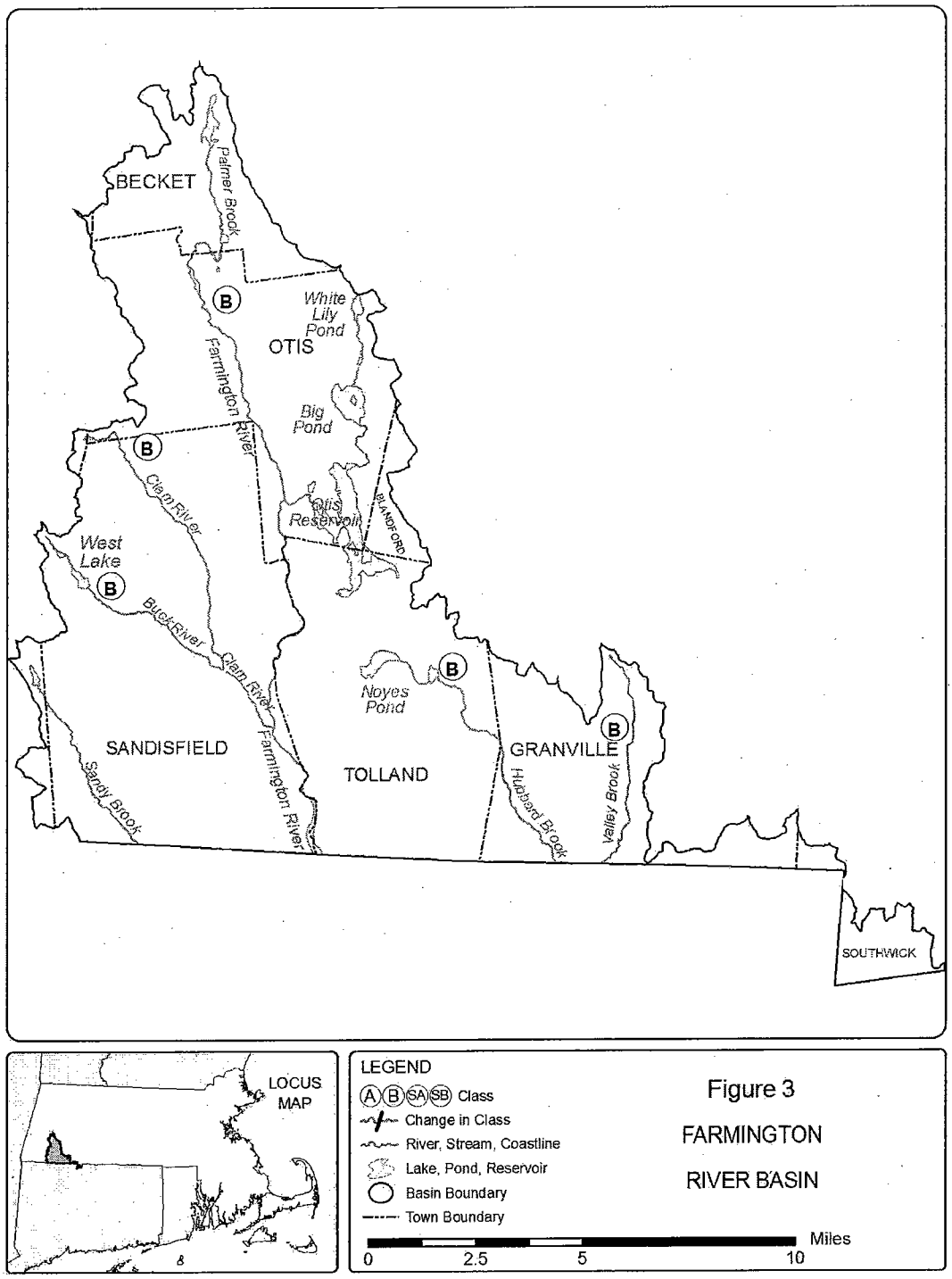
BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Ashley Lake (Ashley Lake Reservoir)			
Source to outlet in Washington and those tributaries thereto	-	A	Public Water Supply
Sandwash Reservoir			
Source to outlet in Washington and those tributaries thereto	-	A	Public Water Supply
Farnham Reservoir			
Source to outlet in Washington and those tributaries thereto	-	A	Public Water Supply
School House Lake and tributaries thereto		A	Public Water Supply
Cleveland Brook Reservoir (Cleveland Reservoir)			
Source to outlet in Hinsdale and those tributaries thereto	-	A	Public Water Supply
Lake Averic (Echo Lake, Mountain Mirror Lake)			
Source to outlet in Stockbridge and those tributaries thereto	-	A	Public Water Supply
Egypt Pond (Egypt Brook Reservoir)			
Reservoir to outlet in Dalton and those tributaries thereto	-	A	Public Water Supply
Windsor Reservoir (Cady Brook Reservoir)			
Reservoir to outlet in Windsor and those tributaries thereto	-	A	Public Water Supply
Upper Sackett Reservoir (Sackett Brook Reservoir)			
Reservoir to outlet in Hinsdale and those tributaries thereto	-	A	Public Water Supply
Anthony Pond (Anthony Brook Reservoir)			
Pond to outlet in Dalton and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 2
HOUSATONIC RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Ashley WTP Intake Reservoir			
Reservoir to outlet in Dalton and those tributaries thereto	-	A	Public Water Supply
Karner Brook Reservoir and tributaries thereto		A	Public Water Supply
Sandisfield Road Reservoir and tributaries thereto		A	Public Water Supply
Tyler Brook	entire length		Cold Water
Welch Brook	entire length		Cold Water
Churchill Brook	entire length		Cold Water

4.06: continued

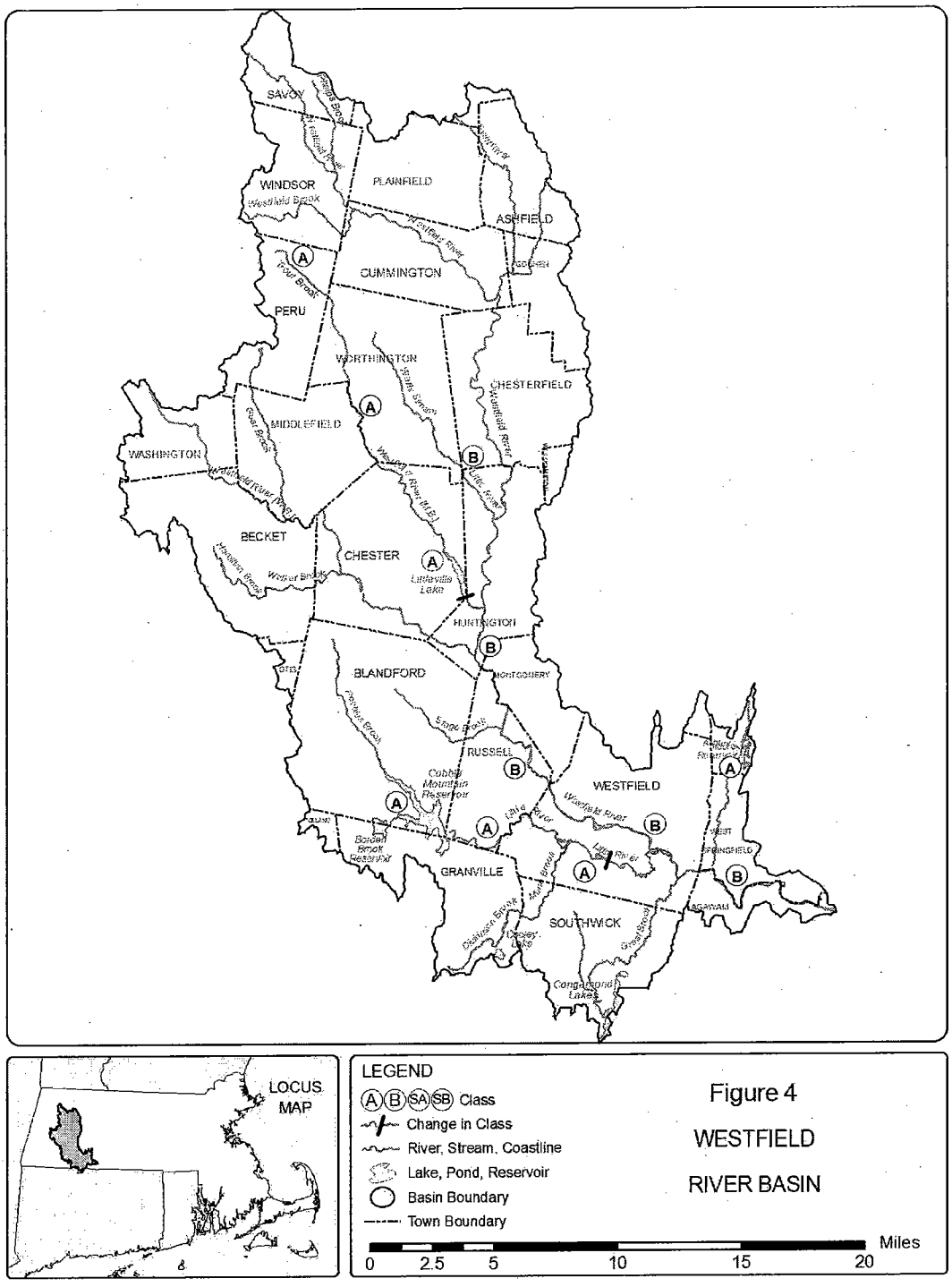


4.06: continued

TABLE 3
FARMINGTON RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
All surface waters in the Farmington River Basin with the exception of those designated otherwise	-	B	Cold Water High Quality Water

4.06: continued



4.06: continued

TABLE 4
WESTFIELD RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Middle Branch Westfield River			
Source to Kinnebrook Road, Dayville			Cold Water
Source to Littleville Dam and tributaries thereto	27.1 + 18.0 - 1.0	A	Public Water Supply
Littleville Dam to confluence with the Westfield River	27.1 + 1.0 - 0.0	B	Warm Water High Quality Water
West Branch Westfield River			
Source to Chester Center	25.0 + 17.5 - 7.5	B	Cold Water High Quality Water
Chester Center to confluence with Westfield River	25.0 + 7.5 - 0.0	B	Cold Water
Westfield River			
Source to confluence with Middle Branch Westfield River	62.5 - 27.1	B	Cold Water High Quality Water
Confluence with Middle Branch Westfield River to confluence with Connecticut River	27.1 - 0.0	B	Warm Water
Westfield River East Branch			Cold Water
Source to confluence with Dead Branch			
Dead Branch			Cold Water
Outlet of Long Pond to confluence with East Branch Westfield River			
Little River			
Cobble Mt. Reservoir Dam to hydroelectric dam		A	Cold Water Tributary to public water supply
Hydroelectric dam to confluence with Westfield River		B	Cold Water
Long Pond (Long Pond Reservoir, Tucker Healy Pond, Lincoln Pond)			
Source to outlet in Blandford and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 4
WESTFIELD RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Unnamed Reservoir (Austin Brook Reservoir)			
Source to outlet in Chester and those tributaries thereto	-	A	Public Water Supply
Horn Pond (Horn Pond Reservoir)			
Source to outlet in Becket and those tributaries thereto	-	A	Public Water Supply
Cold Brook Reservoir			
Source to outlet in Huntington and those tributaries thereto	-	A	Public Water Supply
Russell Reservoir (Lower Black Brook Reservoir)			
Source to outlet in Russell and those tributaries thereto	-	A	Public Water Supply
Bearhole Reservoir (Bearhole Brook Reservoir, Prudys Pond)			
Source to outlet in West Springfield and those tributaries thereto	-	A	Public Water Supply
Granville Reservoir			
Source to outlet in Granville and tributaries thereto	-	A	Public Water Supply
Cobble Mt. Reservoir			
Source to outlet in Russell and those tributaries thereto	-	A	Public Water Supply
Intake Reservoir			
At hydroelectric dam in Russell and tributaries thereto		A	Public Water Supply
Sedimentation Basin and tributaries thereto		A	Public Water Supply
Ashley Reservoir (Ashley Pond,Wright Pond, Cedar Reservoir)			
Source to outlet in Holyoke and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 4
WESTFIELD RIVER BASIN (continued)

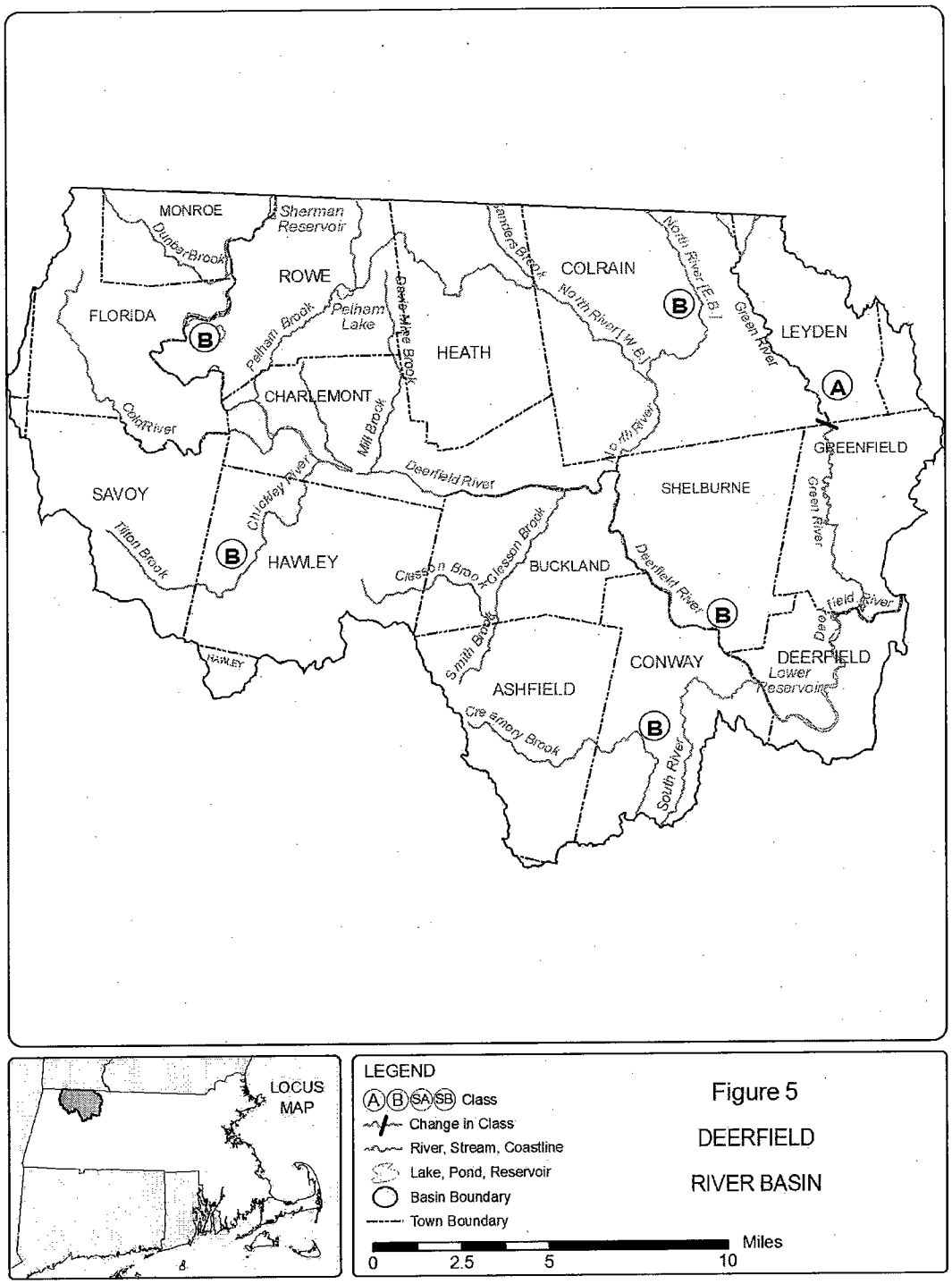
BOUNDARY	MILE POINT	CLASS	QUALIFIERS
McLean Reservoir			
Source to outlet in Holyoke and those tributaries thereto	-	A	Public Water Supply
Unnamed Reservoir (Upper Black Brook Reservoir)		A	Public Water Supply
Reservoir to outlet in Blandford and those tributaries thereto	-		
Austin Brook Reservoir and tributaries thereto		A	Public Water Supply
Littleville Lake (Littleville Reservoir) and tributaries thereto		A	Public Water Supply
Swift River	entire length		Cold Water
Swift River North Branch	entire length		Cold Water
White Brook	entire length		Cold Water
Miller Brook	entire length		Cold Water
Kellog Brook	entire length		Cold Water
Bush Brook	entire length		Cold Water
Barry Brook	entire length		Cold Water
Arm Brook			
Source to inlet of unnamed impoundment upstream of Rte. 90 highway crossing			Cold Water
Munn Brook	entire length		Cold Water
Dickerson Brook	entire length		Cold Water
Potash Brook	entire length		Cold Water
Stage Brook	entire length		Cold Water
Roaring Brook (1)	entire length		Cold Water
Roaring Brook (2)	entire length		Cold Water
Abbott Brook	entire length		Cold Water
Walker Brook	entire length		Cold Water

4.06: continued

TABLE 4
WESTFIELD RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Factory Brook	entire length		Cold Water
Geer Brook	entire length		Cold Water
Yokum Brook	entire length		Cold Water
Depot Brook	entire length		Cold Water
Shaker Hill Brook	entire length		Cold Water
Kinne Brook	entire length		Cold Water
Fuller Brook	entire length		Cold Water
Pond Brook	entire length		Cold Water
West Branch Brook	entire length		Cold Water
Bronson Brook	entire length		Cold Water
Kearney Brook	entire length		Cold Water
Tower Brook	entire length		Cold Water
Stones Brook	entire length		Cold Water
Mill Brook (1)	entire length		Cold Water
Bartlett Brook	entire length		Cold Water
Westfield Brook	entire length		Cold Water
Shaw Brook	entire length		Cold Water
Steep Bank Brook	entire length		Cold Water

4.06: continued



4.06: continued

TABLE 5
DEERFIELD RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Deerfield River			
Vermont-Massachusetts state line to confluence with North River	42.9 - 18.2	B	Cold Water
North River confluence to confluence with Connecticut River	18.2 - 0.0	B	Warm Water
North River			
East and West Branches from the Vermont-Massachusetts state line to their confluence	-	B	Cold Water High Quality Water
Confluence to BBA Fiberweb, Inc. WWTF	3.1 - 2.7	B	Cold Water High Quality Water
BBA Fiberweb, Inc. WWTF to confluence with Deerfield River	2.7 - 0.0	B	Cold Water
Green River			
Vermont-Massachusetts state line to Green River water supply intake and tributaries thereto	14.5 – 8.4	A	Cold Water Public Water Supply High Quality Water
Green River water supply intake to former Greenfield Treatment Plant	8.4 - 0.6	B	Cold Water High Quality Water
Former Greenfield Treatment Plant to confluence with the Deerfield River	0.6 - 0.0	B	Cold Water
Highland Springs Reservoir (Upper Reservoir)			
Source to outlet in Ashfield and those tributaries thereto	-	A	Public Water Supply
Mountain Spring Reservoir			
Source to outlet in Colrain and those tributaries thereto	-	A	Public Water Supply
Greenfield Reservoir (Leyden Glen Reservoir, Glen Brook Upper Reservoir)			
Source to outlet in Leyden and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 5
DEERFIELD RIVER BASIN (continued)

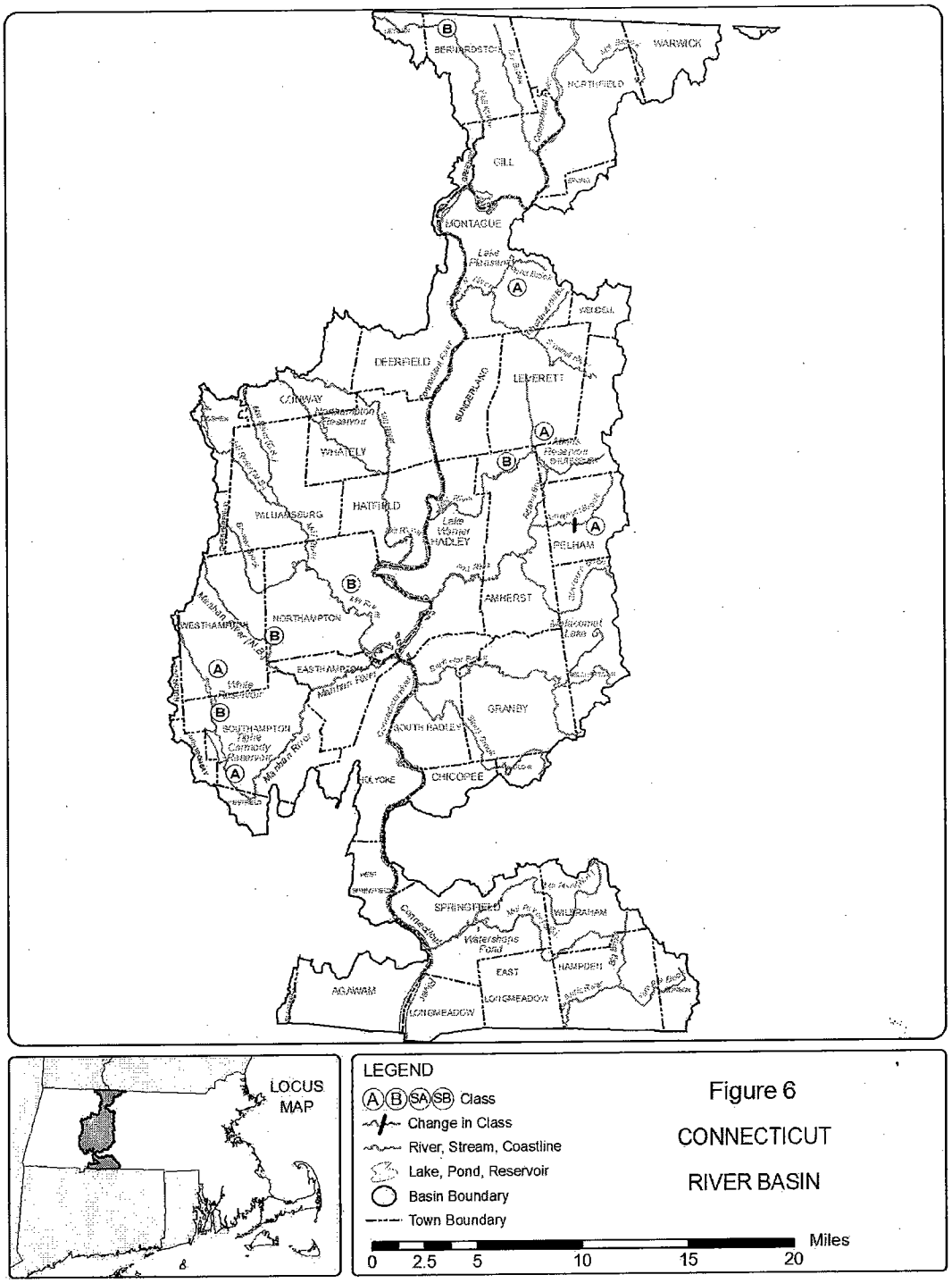
BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Fox Brook Reservoir			
Source to outlet in Colrain and those tributaries thereto	-	A	Public Water Supply
Phelps Brook Reservoir			
Reservoir to outlet in Monroe and those tributaries thereto	-	A	Public Water Supply
Hinsdale Brook	entire length		Cold Water
South River			
Source to confluence with Johnny Bean Brook			Cold Water
Poland Brook	entire length		Cold Water
Chapel Brook	entire length		Cold Water
Creamery Brook	entire length		Cold Water
Hawkes Brook	entire length		Cold Water
Bear Brook	entire length		Cold Water
Drakes Brook	entire length		Cold Water
Kinsman Brook	entire length		Cold Water
West Branch Brook	entire length		Cold Water
Hog Hollow Brook	entire length		Cold Water
Wilder Brook	entire length		Cold Water
Third Brook	entire length		Cold Water
Second Brook	entire length		Cold Water
Avery Brook	entire length		Cold Water
First Brook	entire length		Cold Water
Willis Brook	entire length		Cold Water
Albee,Brook	entire length		Cold Water
Mill Brook (2)	entire length		Cold Water
Maxwell Brook	entire length		Cold Water
Rice Brook	entire length		Cold Water

4.06: continued

TABLE 5
DEERFIELD RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Bozrah Brook	entire length		Cold Water
Chickley River	entire length		Cold Water
Mill Brook (3)	entire length		Cold Water
North Brook	entire length		Cold Water
Cold River	entire length		Cold Water
Black Brook	entire length		Cold Water
Tannery Brook	entire length		Cold Water
Todd Brook	entire length		Cold Water
Pelham Brook	entire length		Cold Water
Taylor Brook	entire length		Cold Water
Bear Swamp Outflow	entire length		Cold Water
Reed Brook	entire length		Cold Water
Whitcomb Brook	entire length		Cold Water
Fife Brook	entire length		Cold Water
Dunbar Brook	entire length		Cold Water

4.06: continued



4.06: continued

TABLE 6
CONNECTICUT RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Connecticut River			
New Hampshire, Vermont, Massachusetts state line to Turner's Falls Dam	138.2 - 123.4	B	Warm Water
Turner's Falls Dam to Holyoke Dam	123.4 - 85.7	B	Warm Water CSO
Holyoke Dam to CT line Longmeadow/Agawam	85.7 - 69.8	B	Warm Water CSO
Bachelor Brook, Weston Brook and Lampson Brook	12.4 - 0.0	B	Warm Water
From the Belchertown School WWTF to confluence with the Connecticut River			
Aktins Reservoir			
Source to outlet in Shutesbury and those tributaries thereto	-	A	Public Water Supply
Amethyst Brook (Hawley/Hill Intake) and tributaries thereto		A	Public Water Supply
Hawley Reservoir			
Source to outlet in Pelham and those tributaries thereto	-	A	Public Water Supply
Hill Reservoir			
Source to outlet in Pelham and those tributaries thereto	-	A	Public Water Supply
Unnamed Reservoir (Running Gutter Brook Reservoir)			
Source to outlet in Hatfield and those tributaries thereto	-	A	Public Water Supply
White Reservoir			
Source to outlet in Southampton and those tributaries thereto	-	A	Public Water Supply
Tighe Carmody Reservoir (Manhan Reservoir)			
Source to outlet in Southampton and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 6
CONNECTICUT RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Whiting Street Reservoir			
Source to outlet in Holyoke and those tributaries thereto	-	A	Public Water Supply
Green Pond			
Source to outlet in Montague and tributaries thereto	-	A	Public Water Supply
Lake Pleasant			
Source to outlet in Montague and those tributaries thereto	-	A	Public Water Supply
Roberts Meadow Reservoir			
Source to outlet in Northampton and those tributaries thereto	-	A	Public Water Supply
Mt. Street Reservoir			
Source to outlet in Williamsburg and those tributaries thereto	-	A	Public Water Supply
Unnamed Reservoir (Northampton Reservoir [New], Ryans Reservoir)			
Source to outlet in Whately and those tributaries thereto	-	A	Public Water Supply
West Whately Reservoir (Northampton Reservoir [Old])			
Source to outlet in Whately and those tributaries thereto	-	A	Public Water Supply
Unnamed Reservoir (Louisiana Brook Reservoir, Grandin Reservoir, Upper Reservoir)			
Source to outlet in Northfield and those tributaries thereto	-	A	Public Water Supply
Lythia Springs Reservoir			
Source to outlet in South Hadley and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 6
CONNECTICUT RIVER BASIN (continued)

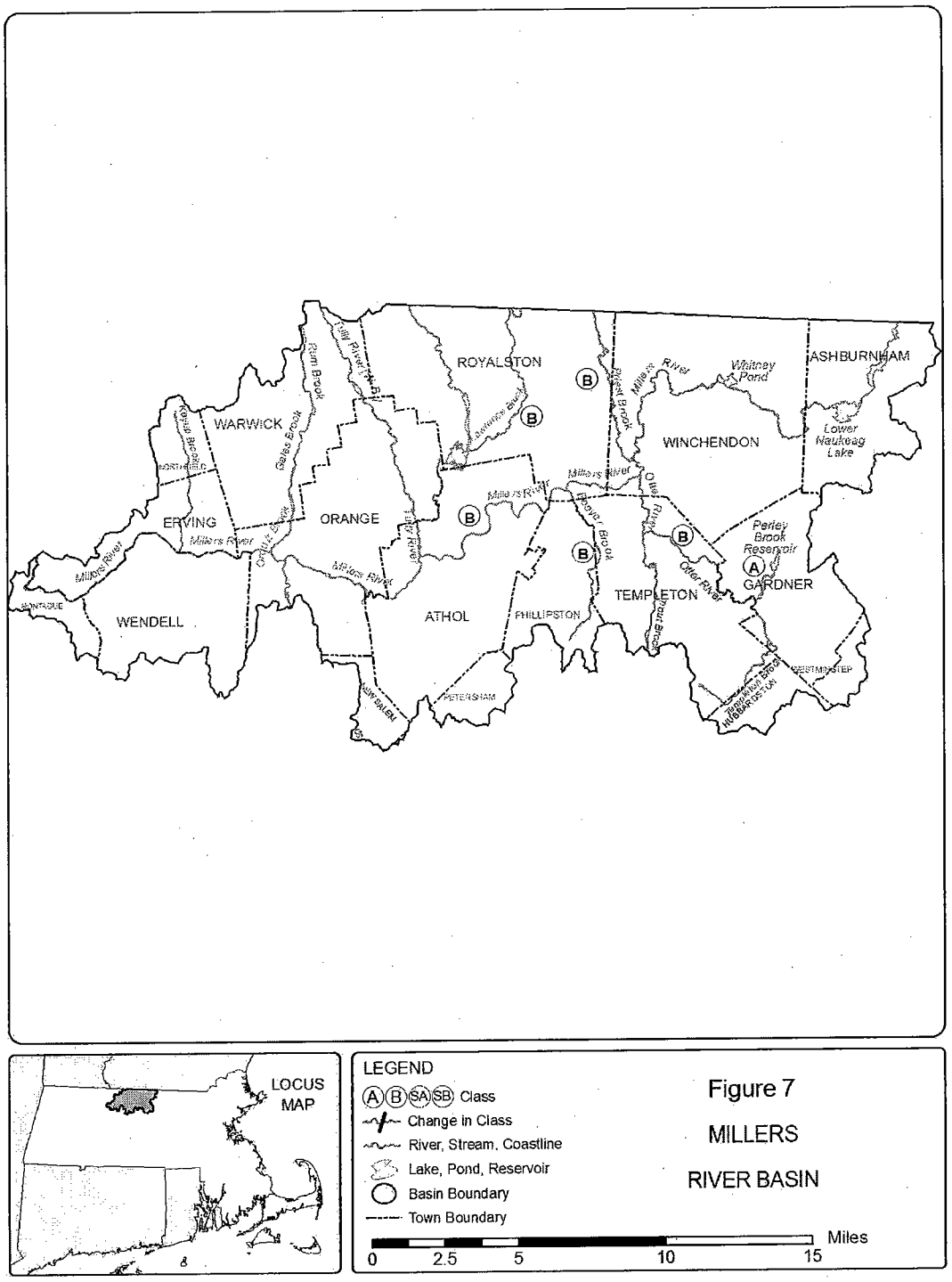
BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Reservoir (Mt. Brook Reservoir)			
Source to outlet in Westhampton and those tributaries thereto	-	A	Public Water Supply
Unquomonk Brook Reservoir			
Source to outlet in Williamsburg and those tributaries thereto	-	A	Public Water Supply
Unnamed Reservoir (Roaring Brook Reservoir)			
Reservoir to outlet in Conway and those tributaries thereto	-	A	Public Water Supply
Conway Reservoir and tributaries thereto		A	Public Water Supply
Mill River in Springfield			CSO
Buttery Brook			CSO
Stony Brook			CSO
Manhan River, North Branch			Cold Water
Source to confluence with Manhan River			
Mill River, East Branch			Cold Water
Source to confluence with West Branch, Williamsburg			
Mill River, West Branch			Cold Water
East St. Goshen to Meekin Brook, Williamsburg			
Sawmill River			Cold Water
Dudley Rd. to confluence with Connecticut River			
Fall River	entire length		Cold Water
Schneelock Brook	entire length		Cold Water
Schoolhouse Brook	entire length		Cold Water
Broad Brook	entire length		Cold Water

4.06: continued

TABLE 6
CONNECTICUT RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Sodom Brook	entire length		Cold Water
Rice Brook	entire length		Cold Water
Tripple Brook	entire length		Cold Water
Moose Brook	entire length		Cold Water
Sachet Brook	entire length		Cold Water
Joe Wright Brook	entire length		Cold Water
Rogers Brook	entire length		Cold Water
Scarboro Brook	entire length		Cold Water
Dean Brook	entire length		Cold Water
Nurse Brook	entire length		Cold Water
Buffum Brook	entire length		Cold Water
Gates Brook	entire length		Cold Water
Harris Brook	entire length		Cold Water
West Brook	entire length		Cold Water
Shattuck Brook	entire length		Cold Water
Fourmile Brook	entire length		Cold Water
Mill Brook(2)	entire length		Cold Water

4.06: continued

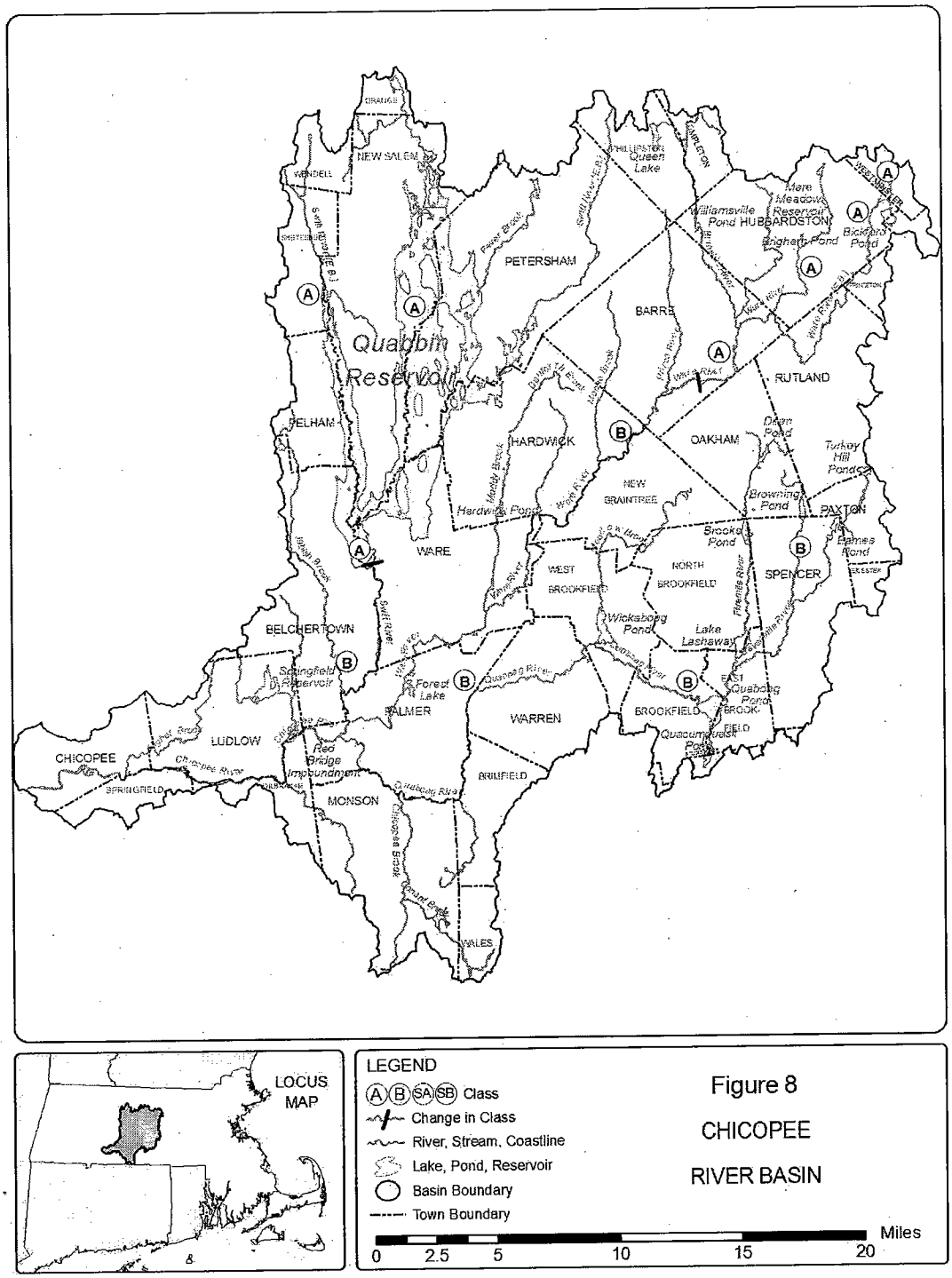


4.06: continued

TABLE 7
MILLERS RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Millers River			
Source to Winchendon WWTF	42.2 - 35.7	B	Cold Water
Winchendon WWTF to confluence with Connecticut River	35.7 - 0.0	B	Warm Water
Otter River			
Source to Gardner	12.2 - 9.7	B	Aquatic Life
Gardner WWTF to confluence with Millers River	9.7 - 0.0	B	Warm Water
Beaver Brook			
Source to confluence with Millers River	entire length	B	Cold Water
Upper Naukeag Lake			
Source to outlet in Ashburnham and those tributaries thereto	-	A	Public Water Supply
Newton Reservoir			
Source to outlet in Athol and those tributaries thereto	-	A	Public Water Supply
Crystal Lake (Crystal Lake Reservoir)			
Source to outlet in Gardner and those tributaries thereto	-	A	Public Water Supply
Cowee Pond (Mamjohn Pond)			
Source to outlet in Gardner and those tributaries thereto	-	A	Public Water Supply
Perley Brook Reservoir			
Source to outlet in Gardner and those tributaries thereto	-	A	Public Water Supply
Lake Ellis (Ellis Pond)			
Lake to outlet in Athol and those tributaries thereto	-	A	Public Water Supply
Lyons Brook	entire length		Cold Water

4.06: continued



4.06: continued

TABLE 8
CHICOPEE RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Ware River			
Source to MDC intake and tributaries thereto	34.0 - 29.1	A	Public Water Supply
MDC intake to dam at South Barre	29.1 - 27.3	B	Cold Water High Quality Water
Dam at South Barre to confluence with Quaboag River	27.3 - 0.0	B	Warm Water CSO
Prince River			
Entire Length	26.4 + 8.4 - 0.0	B	Cold Water High Quality Water
Swift River			
Upstream of Winsor Dam and tributaries thereto	0.8 + Above 9.8	A	Public Water Supply
Winsor Dam to Railroad Bridge Crossing, Bondsville (Palmer)	9.8 - 5.9	B	Cold Water
Railroad Bridge Crossing, Bondsville to confluence with Ware River	5.9 - 0. 0	B	Cold Water, CSO
Sevenmile River			
Source to confluence with Cranberry River	8.6 - 2.4	B	Warm Water High Quality Water
Cranberry River to confluence with East Brookfield River	2.4 - 0.0	B	Warm Water
East Brookfield River			
Entire Length	2.2 - 0.0	B	Warm Water
Quaboag River			
Source to Rt. 67	24.9 - 19.2	B	Warm Water
Rt. 67 to Warren WWTF	19.2 - 13.1	B	Warm Water
Warren WWTF to confluence with Ware River	13.1 - 0.0	B	Warm Water CSO
Forget-Me-Not Brook			
Source to North Brookfield WWTF	25.0 + 4.9 - 3.3	B	Cold Water High Quality Water

4.06: continued

TABLE 8
CHICOPEE RIVER BASIN (continued)

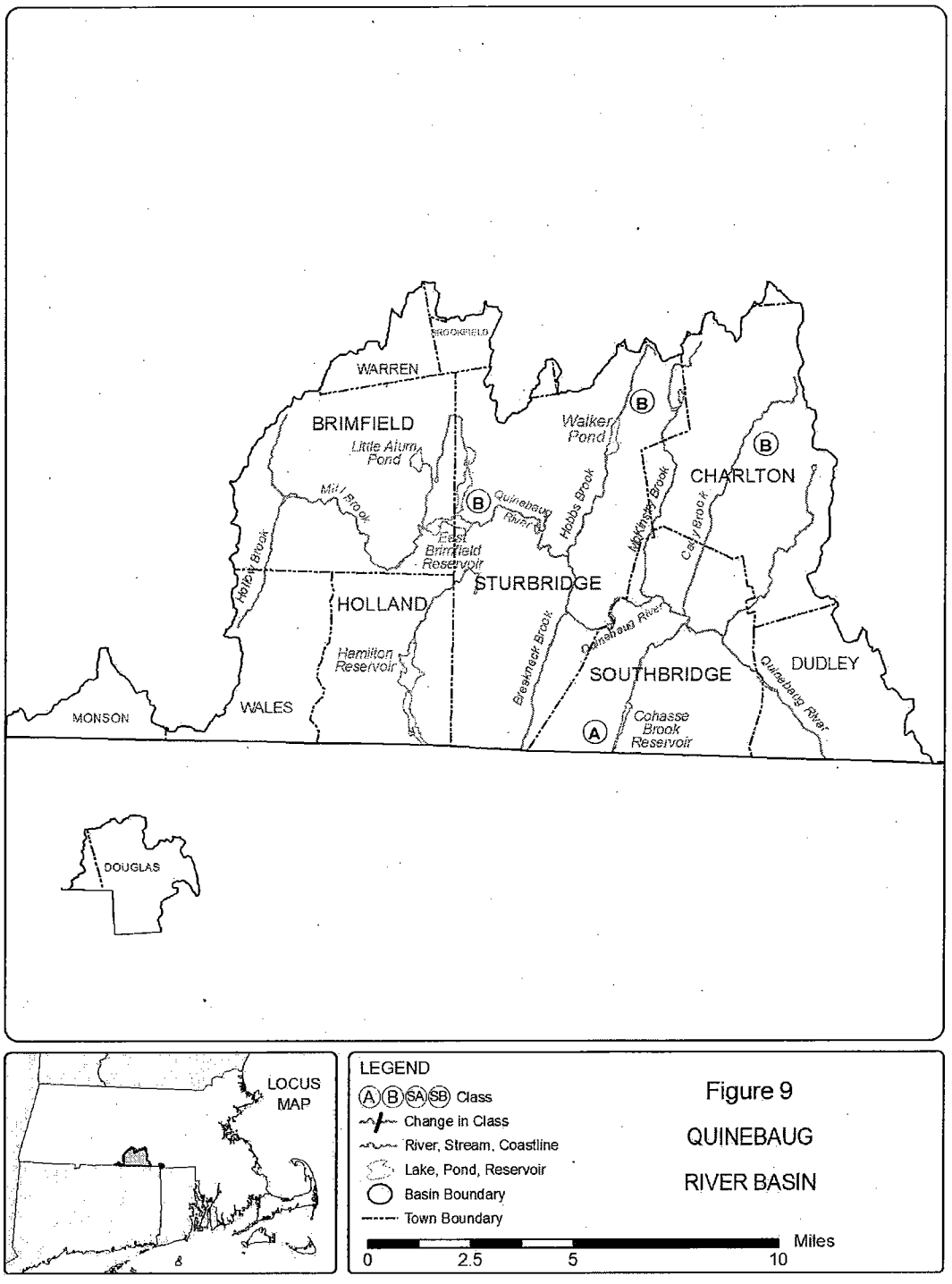
BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Forget-Me-Not and Dunn Brook			
North Brookfield WWTF to confluence with Quaboag River	25.0 + 3.3 - 0.0	B	Warm Water
Chicopee Brook			
Entire Length	4.5 + 7.0 - 0.0	B	Cold Water
Chicopee River			
Confluence of Ware and Quaboag Rivers to confluence with the Connecticut River	17.9 - 0.0	B	Warm Water CSO
Lake Mattawa (North Pond Brook Reservoir)			
Source to outlet in Orange and tributaries thereto	-	A	Public Water Supply
Allen Hill Reservoir (Barre Town Reservoir)			
Source to outlet in Barre and those tributaries thereto	-	A	Public Water Supply
Ludlow Reservoir (Springfield Reservoir)			
Source to outlet in Ludlow and those tributaries thereto	-	A	Public Water Supply
Doane Pond			
Source to outlet in North Brookfield and those tributaries thereto	-	A	Public Water Supply
Horse Pond (North Pond) and tributaries thereto		A	Public Water Supply
Palmer Reservoir (Graves Brook Upper Reservoir)			
Source to outlet in Palmer and those tributaries thereto	-	A	Public Water Supply
Shaw Pond			
Source to outlet in Leicester and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 8
CHICOPEE RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Mare Meadow Reservoir			
Source to outlet in Hubbardston and those tributaries thereto	-	A	Public Water Supply
Bickford Pond			
Source to outlet in Hubbardston and those tributaries thereto	-	A	Public Water Supply
Palmer Reservoir (Unnamed Reservoir Graves Brook Lower Reservoir, Palmer Lower Reservoir)			
Reservoir to outlet in Palmer and those tributaries thereto	-	A	Public Water Supply
Quabbin Reservoir			
Reservoir to outlet in Ware and those tributaries thereto	-	A	Public Water Supply

4.06: continued

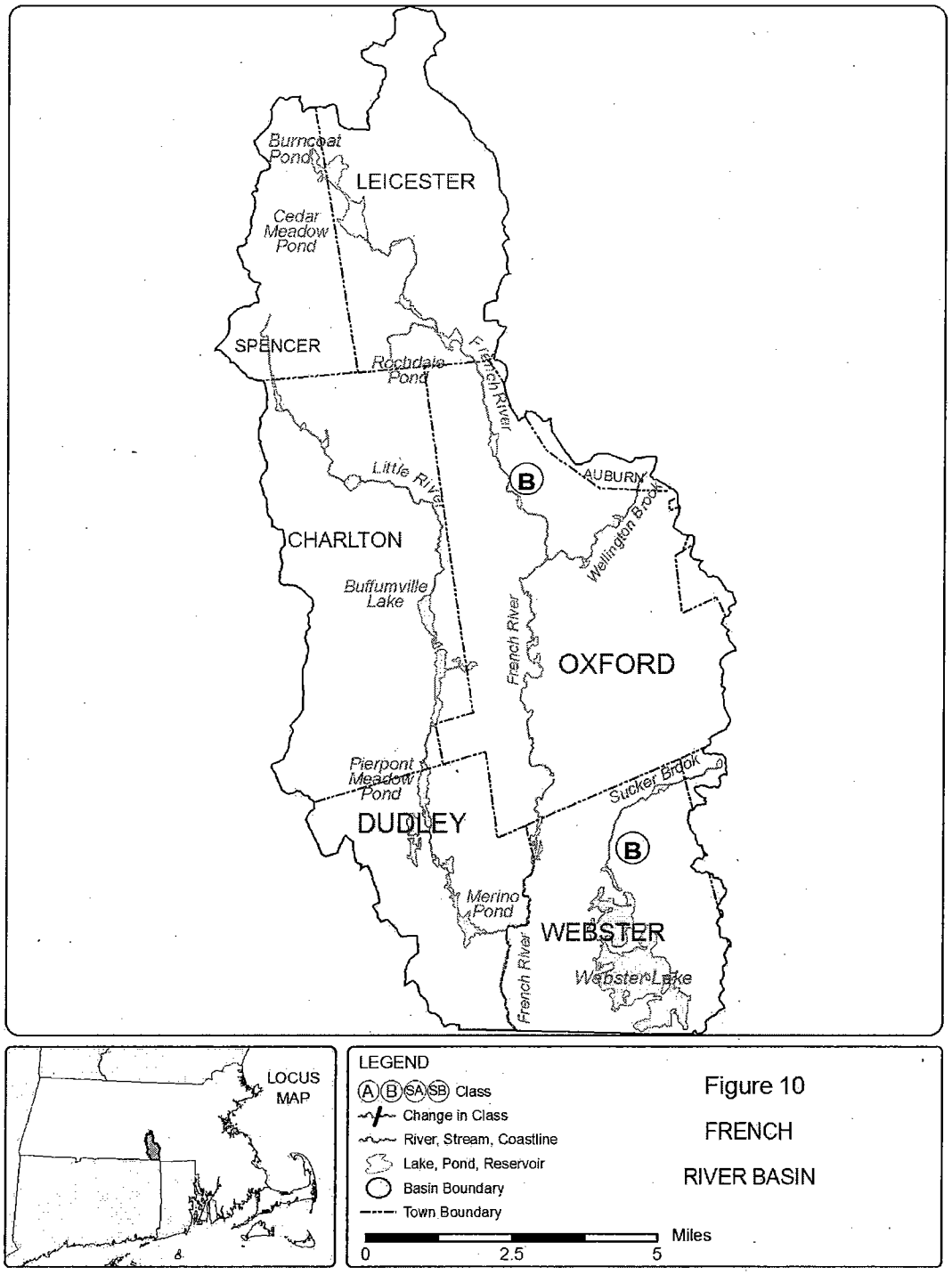


4.06: continued

TABLE 9
QUINEBAUG RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Quinebaug River			
Hamilton Reservoir to Sturbridge WWTF	0.7 - 19.7	B	Cold Water High Quality Water
Sturbridge WWTF to Cady Brook confluence	19.7 - 13.4	B	Cold Water
Cady Brook confluence to Southbridge WWTF	13.4 - 12.2	B	Warm Water
Southbridge WWTF to state line	12.2 - 7.9	B	Warm Water
Cady Brook			
Outlet to Glen Echo Lake to Charlton City WWTF	6.1 - 5.1	B	Warm Water High Quality Water
Charlton City WWTF to confluence with Quinebaug River	5.1 - 0.0	B	Warm Water
Cohasse Brook Reservoir (Lo Cohasse Brook Reservoir)			
Source to outlet in Southbridge and those tributaries thereto	-	A	Public Water Supply
No. 3 Reservoir (Hatchet Brook Reservoir #3)			
Source to outlet in Southbridge and those tributaries thereto	-	A	Public Water Supply
Tufts Branch	entire length		Cold Water

4.06: continued

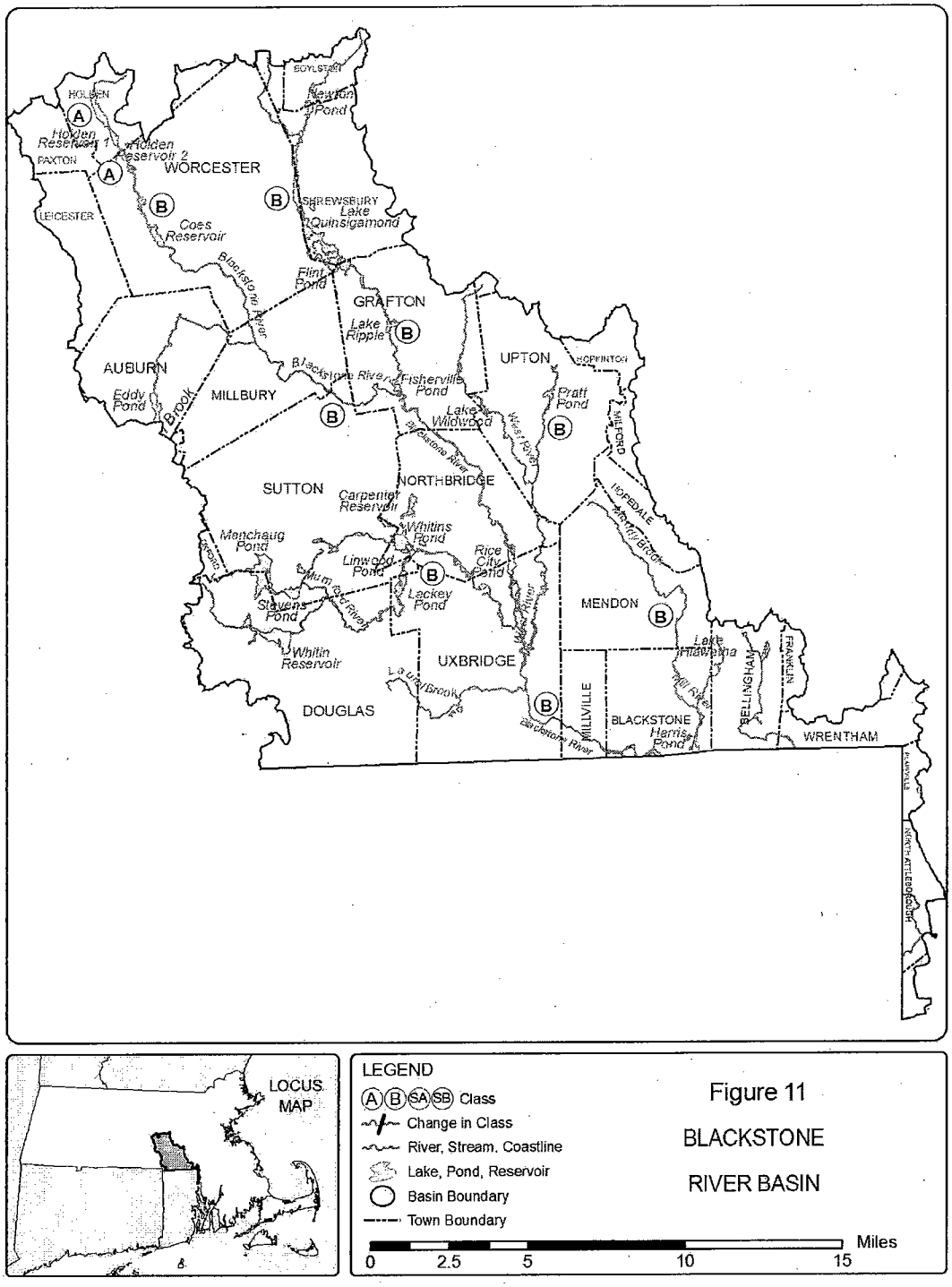


4.06: continued

TABLE 10
FRENCH RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
French River			
Outlet Greenville Pond to Connecticut state line	17.8 – 0.0	B	Warm Water
Unnamed tributary to Town Meadow Brook			
Outlet Sargent Pond to inlet Dutton Pond	0.5 – 0.0	B	Warm Water High Quality Water
Town Meadow Brook			
Outlet Dutton Pond to inlet Greenville Pond	1.9 – 0.0	B	Warm Water
Henshaw Pond			
Source to outlet in Leicester and those tributaries thereto	-	A	Public Water Supply

4.06: continued



4.06: continued

TABLE 11
BLACKSTONE RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Kettle Brook			
Source to dam at Reservoir #1 and tributaries thereto	66.0 - 61.0	A	Public Water Supply
Dam at Reservoir #1 to Waite Pond outlet	61.0 - 59.3	B	Warm Water
Waite Pond to outlet of Curtis Pond	59.3 -51.3	B	Warm Water
Middle River			
Entire Length	51.3 - 48.8	B	Warm Water
Blackstone River			
Source to outlet of Fisherville Pond	48.8 - 39.8	B	Warm Water CSO
Remainder of Massachusetts portion	39.8 - 20.0	B	Warm Water
Mill Brook			
Entire Length	3.0 - 0.0	B	Warm Water CSO
Quinsigamond River			
Entire Length	5.3 - 0.0	B	Warm Water
Mumford River			
Source to Douglas WWTF	14.5 - 9.0	B	Warm Water High Quality Water
Douglas WWTF to confluence with Blackstone River	9.0 - 0.0	B	Warm Water
West River			
Source to Upton WWTF	-	B	Cold Water High Quality Water
Upton WWTF to Blackstone River	8.8 - 0.0	B	Warm Water
Mill River			
Entire Length	11.0 - 0.0	B	Warm Water

4.06: continued

TABLE 11
BLACKSTONE RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Beaver Brook			
Entire Length	3.0 - 0.0	B	Warm Water High Quality Water
Weasel Brook			
Entire Length	3.0 - 0.0	B	Warm Water High Quality Water
Kettle Brook Reservoir Nos. 1-4			
Source to outlets in Leicester and Paxton and those tributaries thereto	-	A	Public Water Supply
Lynde Brook Reservoir			
Source to outlet in Leicester and those tributaries thereto	-	A	Public Water Supply
#2 Holden Reservoir			
Source to outlet in Holden and those tributaries thereto	-	A	Public Water Supply
#1 Holden Reservoir and tributaries thereto		A	Public Water Supply
Warren Brook	entire length		Cold Water
Cold Spring Brook	entire length		Cold Water
Wallum Lake in Douglas		B	Treated Water Supply
Mill River in Blackstone		B	Treated Water Supply
All Interstate surface waters that are public water supply in Rhode Island from 1000 feet upstream of the State Line	-	A	Public Water Supply

4.06: continued

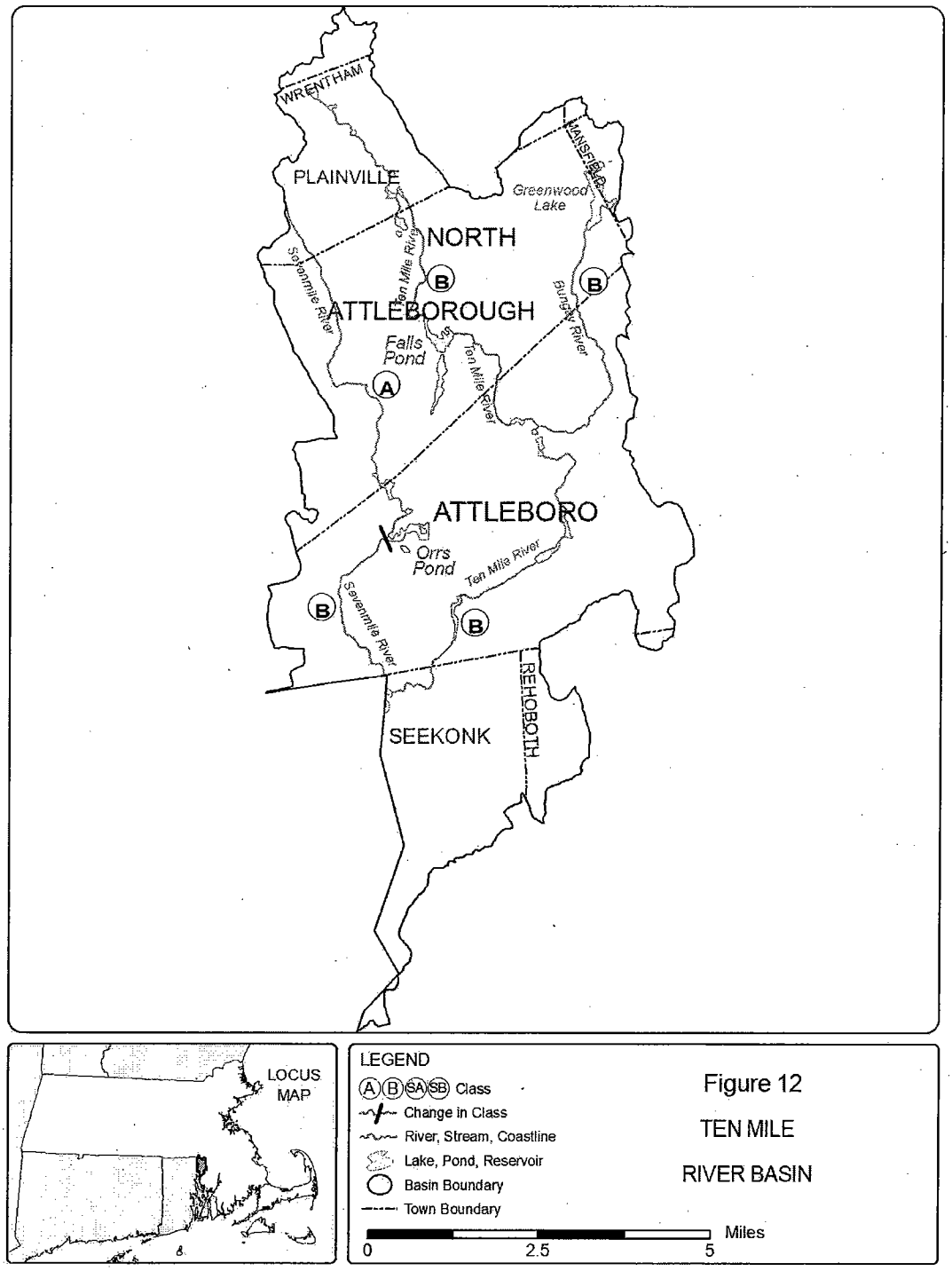


Figure 12

TEN MILE

RIVER BASIN

4.06: continued

TABLE 12
TEN MILE RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Ten Mile River			
Source to Plainville Center	23.1 - 19.9	B	Warm Water High Quality Water
Plainville Center to Whiting Pond Dam	19.9 - 19.3	B	Warm Water High Quality Water
Whiting Pond Dam to state line	19.3 - 0.0	B	Warm Water
Bungay River			
Entire Length	4.5 - 0.0	B	Warm Water
Speedway Brook			
Entire Length	2.0 - 0.0	B	Warm Water
Orrs Pond (Sevenmile River)			
Source to Orrs Pond outlet and tributaries thereto	-	A	Public Water Supply

4.06: continued

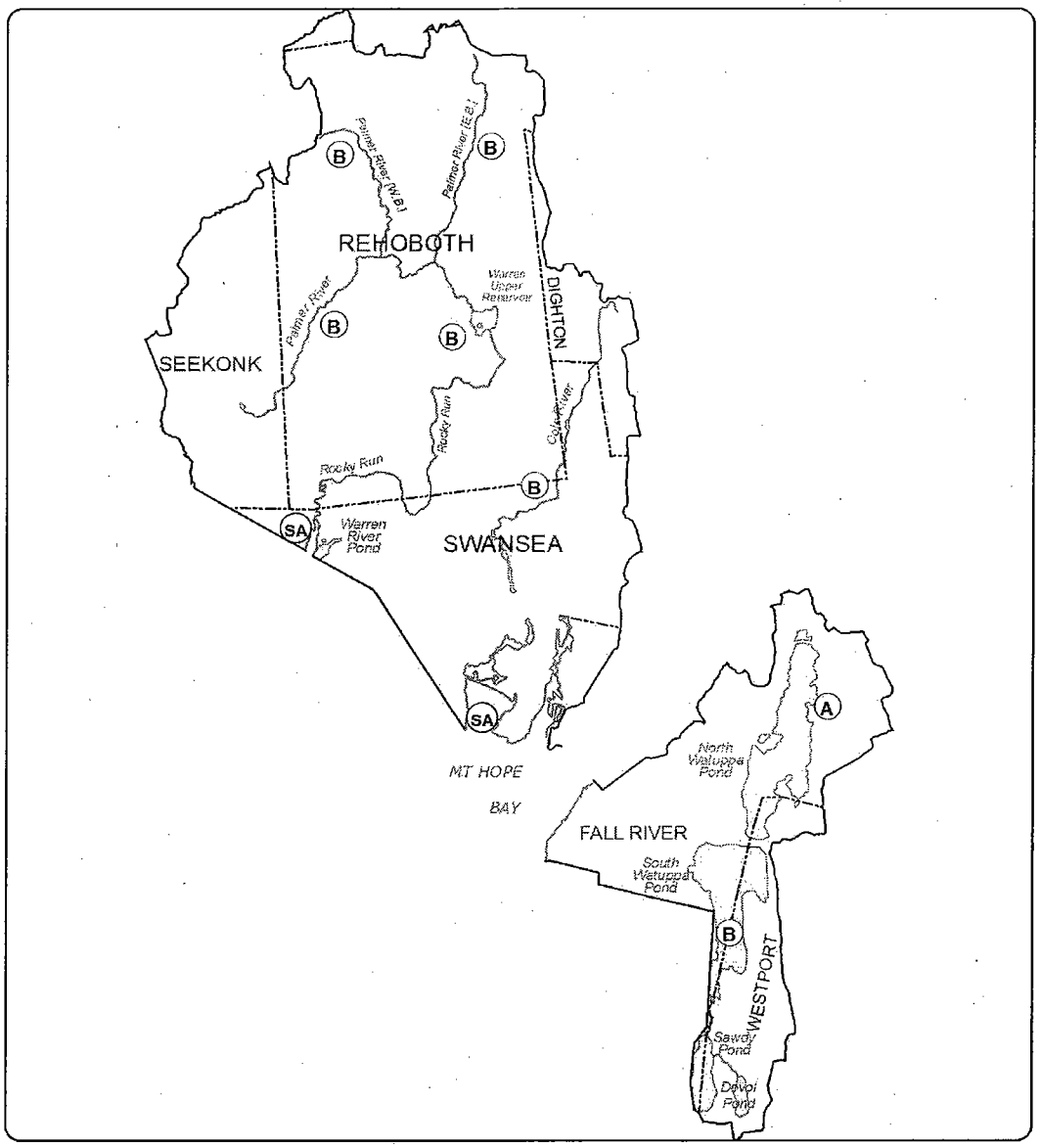


Figure 13

NARRAGANSETT BAY/MT HOPE BAY

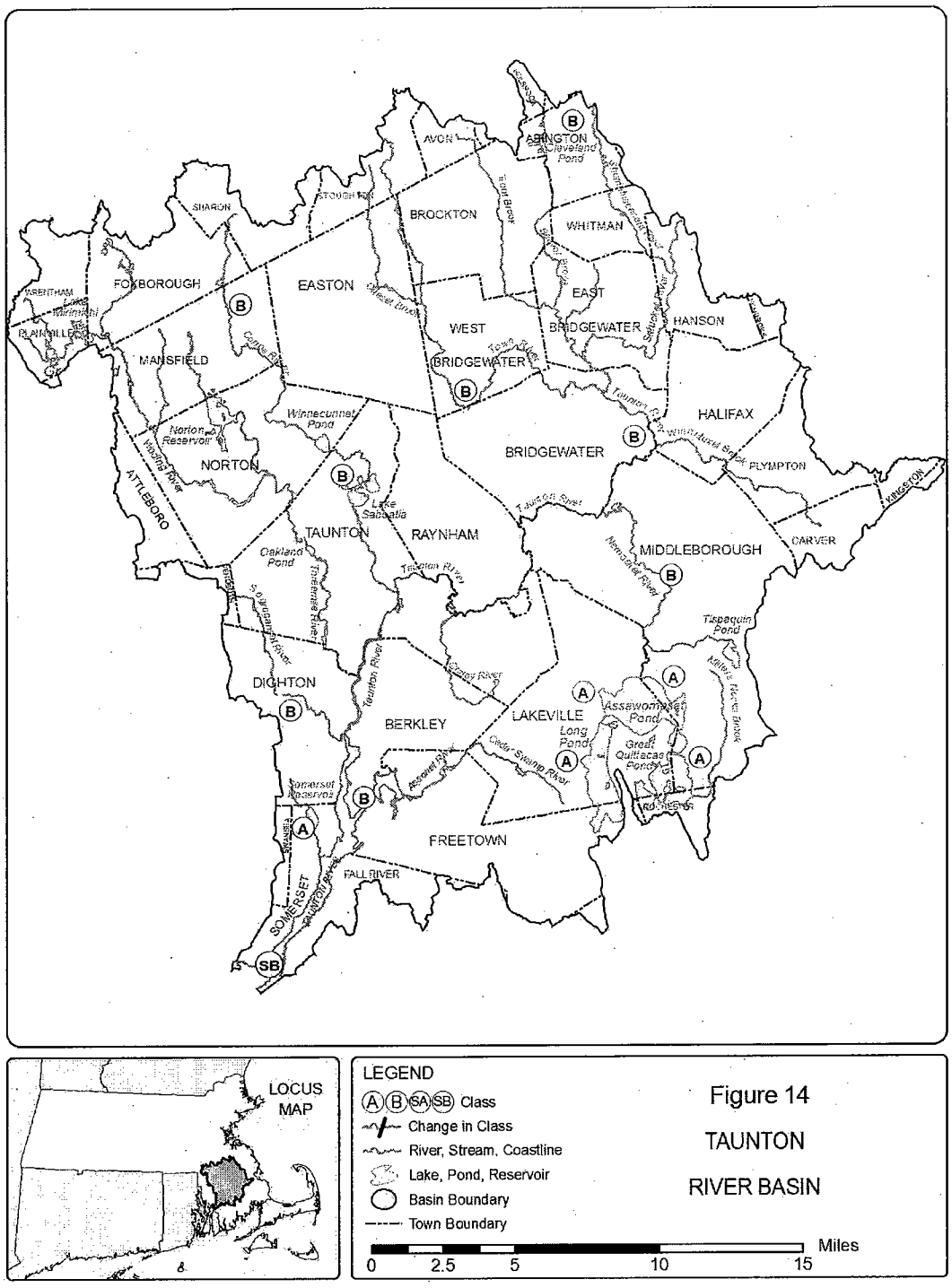
DRAINAGE AREA

4.06: continued

TABLE 13
NARRAGANSETT BAY/MOUNT HOPE BAY DRAINAGE AREA

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Barrington River			
Source to state border	-	SA	Shellfishing
Palmer River			
Source to Shad Factory Pond dam	-	B	Cold Water
Shad Factory Pond dam to state border		SB	Shellfishing
Mount Hope Bay			
East of line from Brayton Point to Buoy 4	-	SB	Shellfishing CSO
West of line from Brayton Point to Buoy 4	-	SA	Shellfishing
Lee and Cole Rivers			
Source to estuary	-	B	Warm Water
Estuary	-	SA	Shellfishing
Quequechan River			
Entire Length	2.5 - 0.0	B	Warm Water CSO
North Watuppa Pond			
Source to outlet in Fall River and those tributaries thereto	-	A	Public Water Supply
Shad Factory Pond Reservoir		B	Treated Water Supply
Anawan Reservoir		B	Treated Water Supply
Swansea Reservoir in Swansea		B	Treated Water Supply

4.06: continued



4.06: continued

TABLE 14
TAUNTON RIVER BASIN

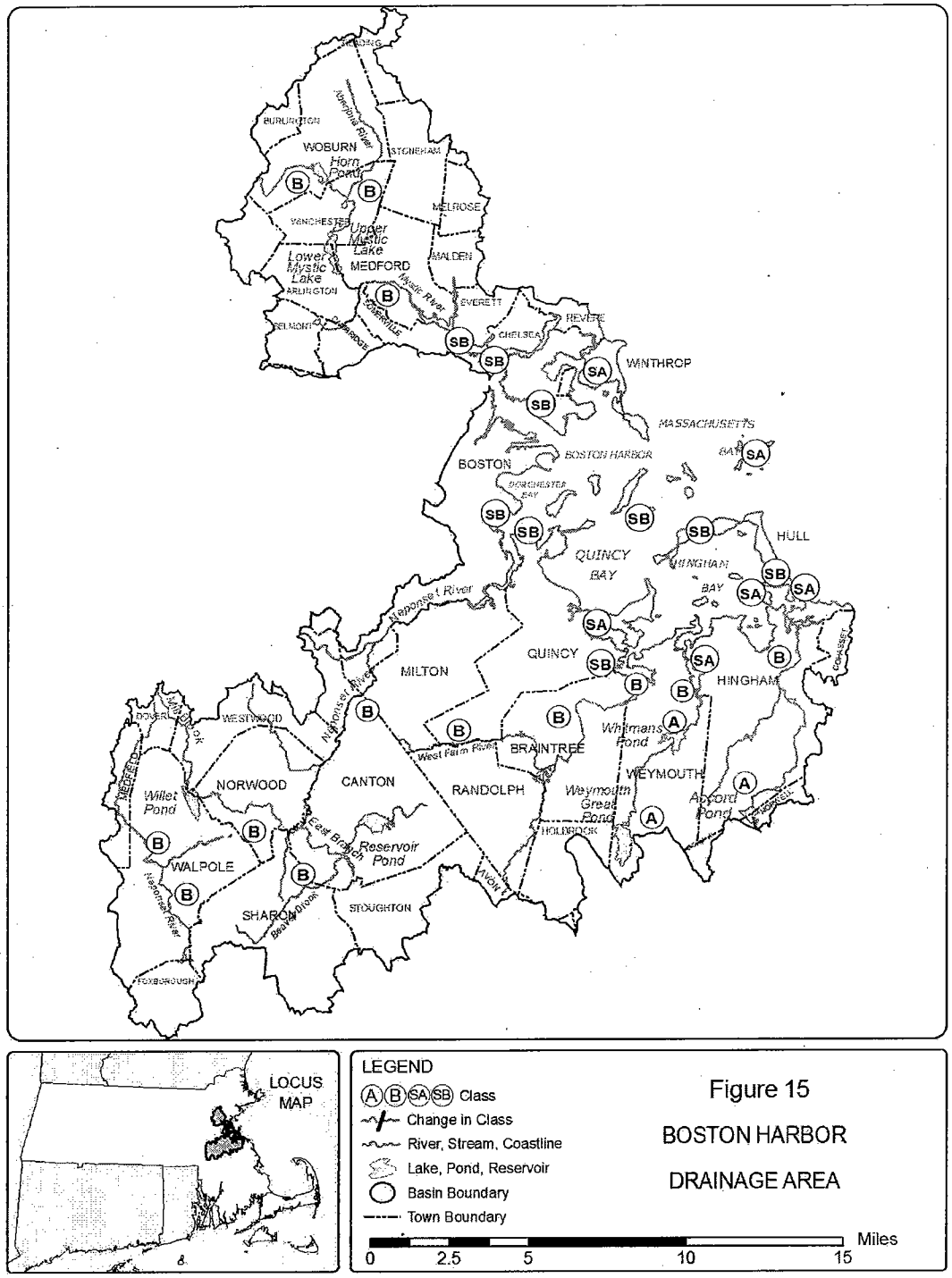
BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Taunton River			
Source to Rt. 24 Bridge	40.8 - 21.2	B	Warm Water
Rt. 24 Bridge to mouth	21.2 - 0.0	SB	Shellfishing CSO
Salisbury Plain & Matfield Rivers			
Brockton WWTF to confluence	-	B	Warm Water
Town River			
Bridgewater WWTF to confluence	2.4 - 0.0	B	Warm Water
Nemasket River			
Middleborough WWTF to confluence	-	B	Warm Water
Saw Mill Brook			
Entire Length	1.5 - 0.0	B	Warm Water
Mill River			
Outlet Lake Sabbatia, Taunton to confluence with Taunton River	3.4 - 0.0	B	Warm Water
Three Mile River			
Source to confluence	15.8 - 0.0	B	Warm Water
Wading River (Attleboro Reservoir)			
Source to water supply intake in Mansfield and tributaries thereto		A	Public Water Supply
From water supply intake, Mansfield to confluence with Three Mile River		B	Warm Water
Assawompset Pond			
Source to outlet in Lakeville and those tributaries thereto	-	A	Public Water Supply
Great Quittacas Pond			
Source to outlet in Lakeville and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 14
TAUNTON RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Little Quittacas Pond			
Source to outlet in Lakeville and those tributaries thereto	-	A	Public Water Supply
Long Pond			
Source to outlet in Lakeville and those tributaries thereto	-	A	Public Water Supply
Pocksha Pond			
Source to outlet in Lakeville and those tributaries thereto	-	A	Public Water Supply
Somerset Reservoir			
Source to outlet in Somerset and those tributaries thereto including Segreganset River from pumping station, Dighton to source	-	A	Public Water Supply
Monponsett Pond			
Source to outlet in Halifax and those tributaries thereto	-	A	Public Water Supply
Elders Pond			
Source to outlet in Lakeville and those tributaries thereto	-	A	Public Water Supply
Brockton Reservoir (Avon Reservoir, Salisbury Brook Reservoir)			
Reservoir to outlet in Avon and those tributaries thereto	-	A	Public Water Supply

4.06: continued



4.06: continued

TABLE 15
BOSTON HARBOR DRAINAGE AREA

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Inside a line from the southerly tip of Deer Island to Boston Lighthouse to Point Allerton in Hull except as denoted below	-	SB	Shellfishing
Boston Inner Harbor westerly inside a line from the southern tip of Governors Island to Fort Independence including the Charles, Mystic, Island End and Chelsea (Creek) Rivers and Reserved, Fort Point and Little Mystic Channels	-	SB(CSO)	
Dorchester Bay	-	SB	Shellfishing CSO
Quincy Bay in Quincy from Bromfield Street near the Wallaston Yacht Club northerly to bouy "C 1" southeasterly to the "Willows", sometimes known as Lord's Point on the northerly shore of Houghs Neck in Quincy	-	SA	Shellfishing
Remainder of Quincy Bay	-	SB	Shellfishing
Hingham Harbor in Hingham inside a line from Crows Point to Worlds End Promontery	-	SA	Shellfishing
Hull Bay	-	SB	Shellfishing
Other coastal and marine waters in the Boston Harbor Drainage Area	-	SB	Shellfishing
Aberjona River			
Source to outlet Mishawum Lake	118.4 - 15.1	B	Warm Water
Outlet Mishawum Lake to inlet Mystic Lake	15.1 - 9.2	B	Warm Water
Upper Mystic Lake	9.2 - 8.1	B	Warm Water
Lower Mystic Lake	8.1 - 7.4	B	Warm Water
Mystic River			
Outlet Lower Mystic Lake to Amelia Earhart Dam	7.4 - 2.0	B	Warm Water CSO
Amelia Earhart Dam to confluence with the Chelsea River	2.0 - 0.0	SB(CSO)	Shellfishing

4.06: continued

TABLE 15
BOSTON HARBOR DRAINAGE AREA (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Malden River			
Entire Length	1.9 - 0.0	B	Warm Water
Alewife Brook			
Entire Length	2.0 - 0.0	B	Warm Water CSO
Horn Pond in Woburn		-	B Warm Water
Belle Isle Inlet and tributaries thereto	-	SA	Shellfishing Outstanding Resource Water
North Reservoir and Middle Reservoir			
Source to outlet in Winchester, Stoneham and Medford and those tributaries thereto	-	A	Public Water Supply
South Reservoir			
Source to outlet in Medford and tributaries thereto		A	Public Water Supply
Fresh Pond			
Source to outlet in Cambridge and those tributaries thereto	-	A	Public Water Supply
Neponset Reservoir			
Upstream of dam at outlet of Crackrock Pond	Above 29.5	B	Warm Water High Quality Water
Neponset River			
Source to Mother Brook	29.5 - 7.9	B	Warm Water
Mother Brook to Milton Lower Falls Dam, Milton/Boston	7.9 - 4.2	B	Warm Water
Tidal Portion	4.2 - 0.0	SB	Shellfishing
Weymouth Fore River	-	SB* B*	Shellfishing Warm Water

4.06: continued

TABLE 15
BOSTON HARBOR DRAINAGE AREA (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Weymouth Back River	-	SA* B*	Shellfishing Warm Water Outstanding Resource Water
Weir River	-	SA* B*	Shellfishing Outstanding Resource Water
Fresh River	-	B	Warm Water
Cranberry Brook	-	B	Outstanding Resource Water
Cranberry Pond			
Source to outlet in Braintree	-	B	Outstanding Resource Water
Bouve Pond and Brewer Pond in Hingham	-	B	Warm Water Outstanding Resource Water
Straits Pond in Hull and Cohasset	-	B	Warm Water Outstanding Resource Water
Great Pond			
Source to outlet in Braintree and tributaries thereto	-	A	Public Water Supply
Upper Reservoir of Great Pond			
Source to outlet in Braintree and tributaries thereto	-	A	Public Water Supply
Whitmans Pond			
Source to outlet in Weymouth and tributaries thereto	-	A	Public Water Supply
Richardi Reservoir			
Source to outlet in Braintree and tributaries thereto	-	A	Public Water Supply
Weymouth Great Pond (Great Pond)			
Source to outlet in Weymouth and tributaries thereto	-	A	Public Water Supply

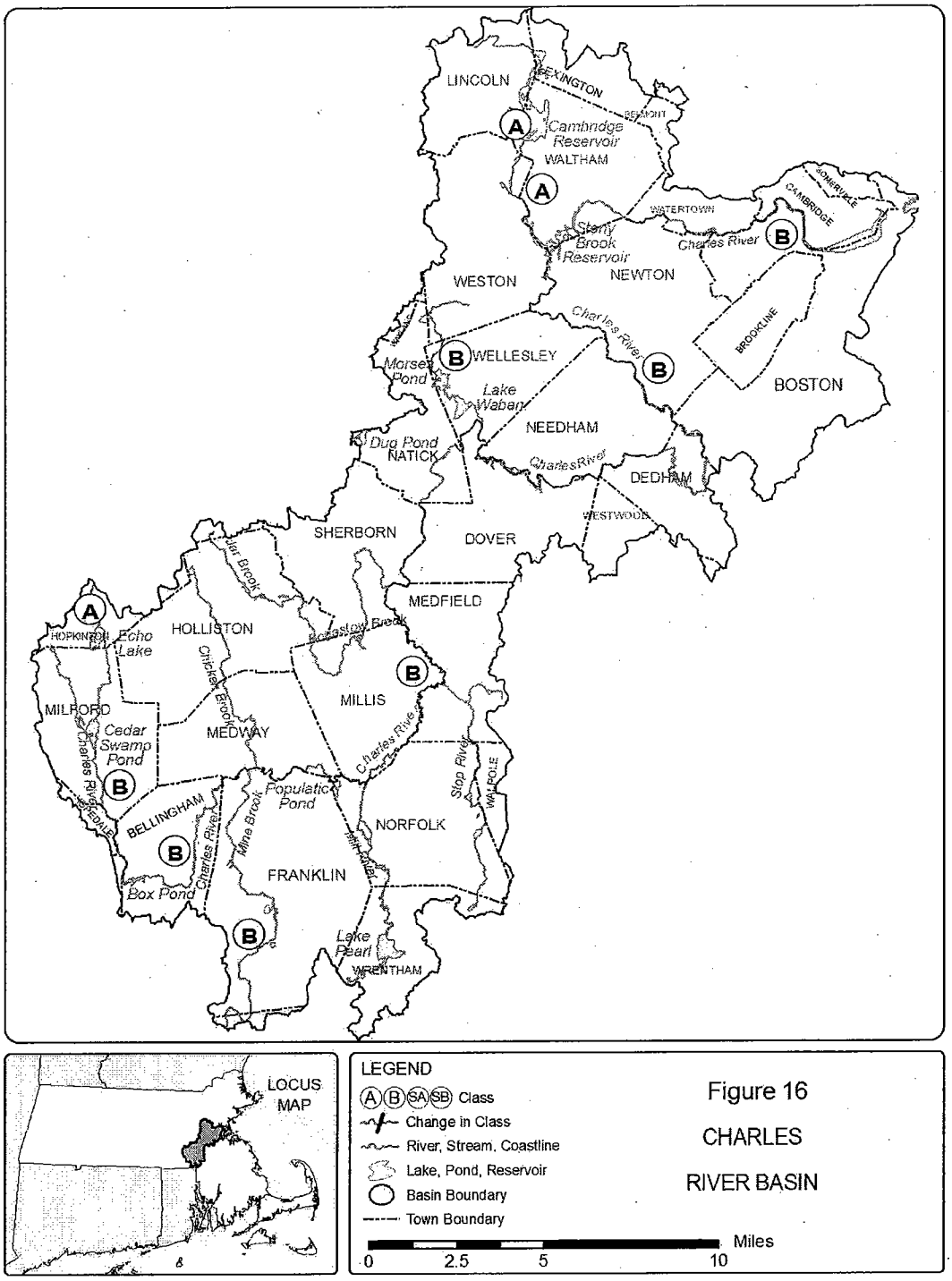
4.06: continued

TABLE 15
BOSTON HARBOR DRAINAGE AREA (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Accord Pond			
Source to outlet in Hingham and tributaries thereto	-	A	Public Water Supply
Accord Brook			
Outlet of Accord Pond to water supply intake and tributaries thereto	-	A	Public Water Supply

* Marine waters Class SA or SB as designated; fresh waters Class B.

4.06: continued



4.06: continued

TABLE 16
CHARLES RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Charles River			
Source to Dilla Street and tributaries thereto	78.9 - 76.5	A	Public Water Supply
Dilla Street to Milford WWTF	76.5 - 73.4	B	Aquatic Life
Milford WWTF to outlet Populatic Pond	73.4 - 58.9	B	Warm Water
Outlet Populatic Pond to South Natick Dam	58.9 - 41.0	B	Warm Water
South Natick Dam to Watertown Dam	41.0 - 9.8	B	Warm Water
Watertown Dam to BU Bridge	9.8 - 3.7	B	Warm Water CSO
Charles Basin			
BU Bridge to New Charles River Dam	3.7 - 0.7	B	Warm Water CSO
Muddy River			
Entire Length	2.7 - 0.0	B(CSO)	Warm Water
Mine Brook			
Source to former Franklin STP	7.2 - 4.0	B	Warm Water High Quality Water
Former Franklin STP to confluence	4.0 - 0.0	B	Warm Water
Unnamed tributary (Sugar Brook)			
Entire Length		B	Warm Water High Quality Water
Stony Brook Reservoir (Turtle Pond)			
Source to outlet in Weston/Waltham and those tributaries thereto	-	A	Public Water Supply
Cambridge Reservoir Hobbs Brook Lower Reservoir)			
Source to outlet in Waltham and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 16
CHARLES RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Sandy Pond (Flint's Pond)			
Source to outlet in Lincoln and those tributaries thereto	-	A	Public Water Supply
Echo Lake			
Source to outlet in Hopkinton and those tributaries thereto	-	A	Public Water Supply
Louisa Lake			
Lake to outlet in Milford and those tributaries thereto	-	A	Public Water Supply

4.06: continued

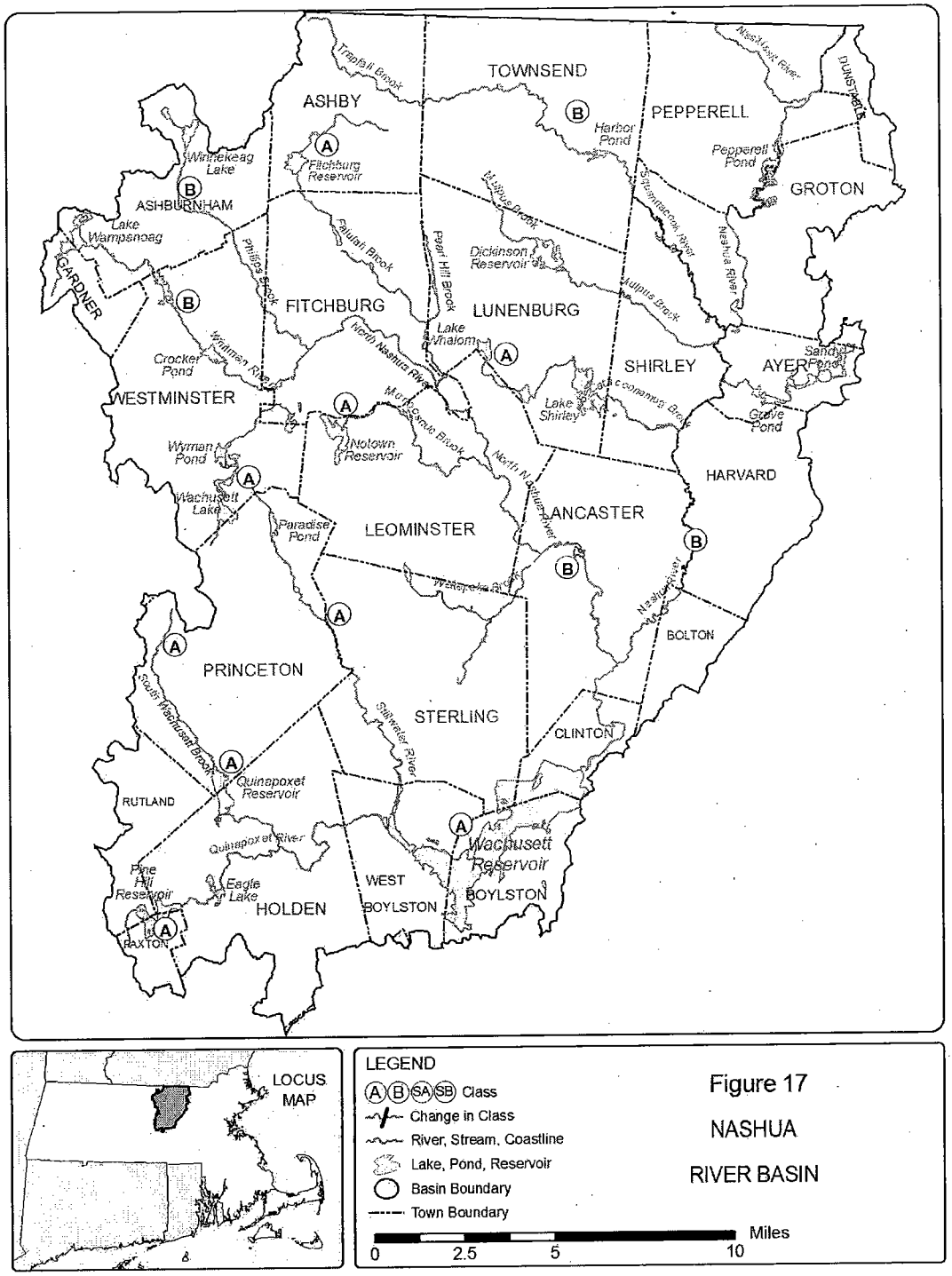


Figure 17

NASHUA

RIVER BASIN

4.06: continued

TABLE 17
NASHUA RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Nashua River			
Outlet Lancaster Millpond to confluence with North Nashua River (South Branch Nashua River)	41.0 - 36.4	B	Warm Water
Confluence with North Nashua River to Pepperell Dam	36.4 - 14.1	B	Warm Water
Pepperell Dam to New Hampshire state line	14.1 - 10.5	B	Warm Water
North Nashua River			
Source to Leominster POTW	54.8 - 48.5	B	Warm Water CSO
Leominster POTW to confluence with the Nashua River	48.5 - 36.5	B	Warm Water
Phillips Brook			
Fitchburg to confluence	1.0 - 0.0	B	Warm Water CSO
Squannacook River			
Source to Hollingsworth & Vose Dam	14.3 – 3.3	B	Cold Water Outstanding Resource Water
Hollingsworth & Vose Dam to confluence with Nashua River	3.3 - 0.0	B	Warm Water
Nissitissit River			
State line to confluence with Nashua River		B	Cold Water Outstanding Resource Water
Baker Brook		B	CSO
Punch Brook		B	CSO
Beaver, Bixby, Locke, Mason, Mine, Pearl Hill, Pumpkin, Stewart, Sucker, Trap Swamp, Trapfall, Trout in Townsend, Walker, Willard, Witch, and Wolf Brook Portion in Squannacook and Nissitissit Rivers Sanctuary			Outstanding Resource Water
Bayberry Hill Brook and Gulf Brook Portion in Squannacook and Nissitissit Rivers Sanctuary			Cold Water Outstanding Resource Water

4.06: continued

TABLE 17
NASHUA RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Lovell Reservoir			
Source to outlet in Fitchburg and those tributaries thereto	-	A	Public Water Supply
Scott Reservoir			
Source to outlet in Fitchburg and those tributaries thereto	-	A	Public Water Supply
Wachusett Lake			
Source to outlet in Westminster and those tributaries thereto	-	A	Public Water Supply
Overlook Reservoir			
Source to outlet in Fitchburg and those tributaries thereto	-	A	Public Water Supply
Falulah Reservoir			
Source to outlet in Fitchburg and those tributaries thereto	-	A	Public Water Supply
Muschopauge Pond (Muschopauge Pond Reservoir)		A	Public Water Supply
Notown Reservoir			
Source to outlet in Leominster and those tributaries thereto	-	A	Public Water Supply
Simonds Pond (Simonds Pond Reservoir)			
Source to outlet in Leominster and those tributaries thereto	-	A	Public Water Supply
Goodfellow Pond			
Source to outlet in Leominster and those tributaries thereto	-	A	Public Water Supply
Haynes Reservoir			
Source to outlet in Leominster and those tributaries thereto	-	A	Public Water Supply
Morse Reservoir			
Source to outlet in Leominster and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 17
NASHUA RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Distributing Reservoir			
Source to outlet in Leominster and those tributaries thereto	-	A	Public Water Supply
Fall Brook Reservoir			
Source to outlet in Leominster and those tributaries thereto	-	A	Public Water Supply
Meetinghouse Pond (Meeting House Reservoir)			
Source to outlet in Westminster and tributaries thereto	-	A	Public Water Supply
Asnebumskit Pond			
Source to outlet in Paxton and those tributaries thereto	-	A	Public Water Supply
Fitchburg Reservoir			
Source to outlet in Ashby and those tributaries thereto	-	A	Public Water Supply
Kendall Reservoir			
Source to outlet in Holden and those tributaries thereto	-	A	Public Water Supply
Pine Hill Reservoir			
Source to outlet in Holden and those tributaries thereto	-	A	Public Water Supply
Quinapoxet Reservoir			
Source to outlet in Holden and those tributaries thereto	-	A	Public Water Supply
Wachusett Reservoir			
Source to its outlet in Clinton and those tributaries thereto	-	A	Public Water Supply
Shattuck Reservoir			
Reservoir to outlet in Fitchburg and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 17
NASHUA RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Bixby Reservoir, and Coon Tree, Damon, Flat, Graves, Harbor, Heald, Pearl Hill Brook, Pork Barrel, Walker, and Wright Pond (Lower Wright Pond & Upper Wright Pond) Portion in Squannacook and Nissitissit Rivers Sancturary			Outstanding Resource Water
Still River			
Source to Rte. 117, Bolton			Cold Water
Reedy Meadow Brook	entire length		Cold Water
Mulpus Brook	entire length		Cold Water
Burnt Mill Pond Brook	entire length		Cold Water
Goodrich Brook	entire length		Cold Water
South Meadow Brook	entire length		Cold Water

4.06: continued

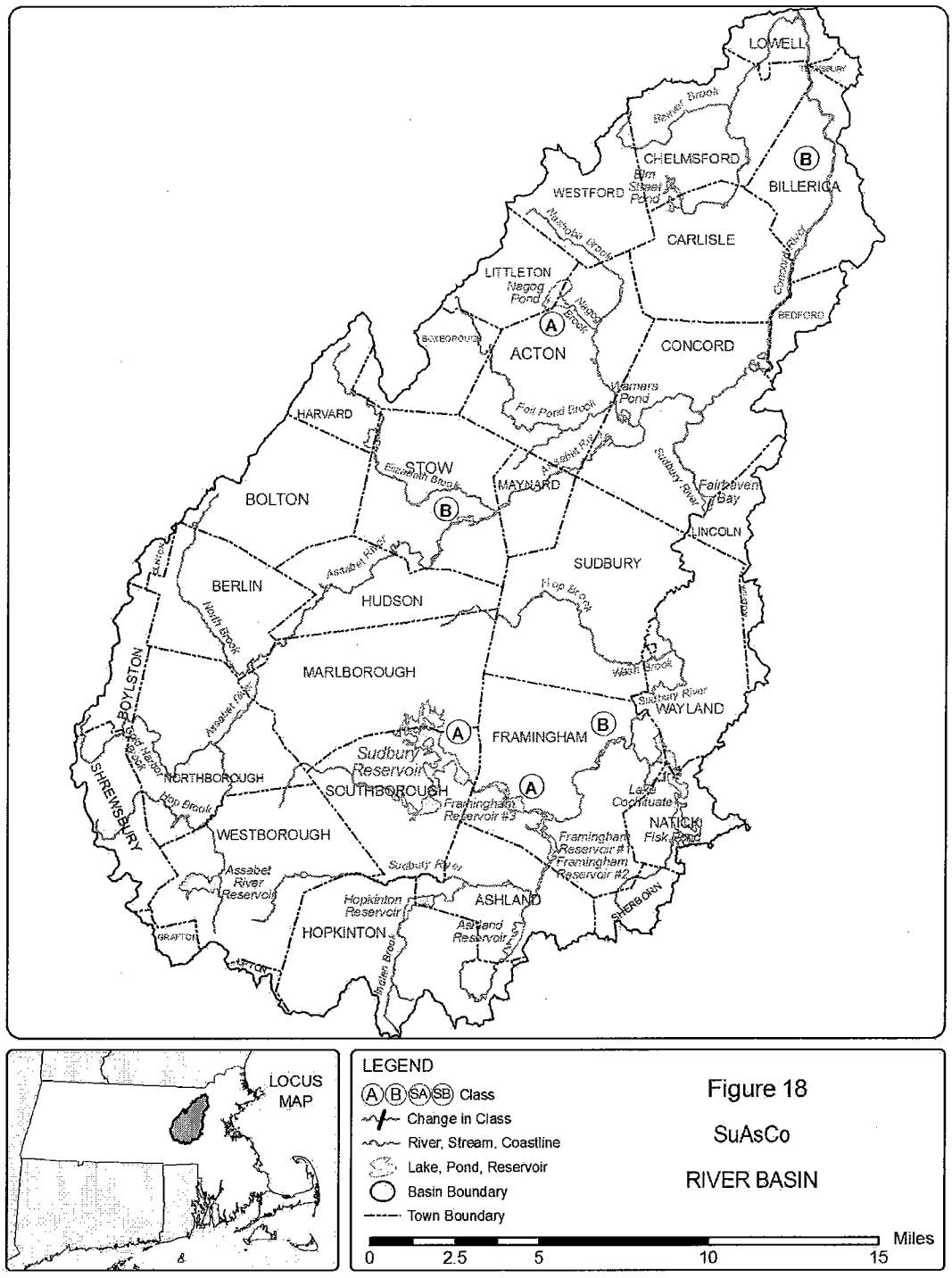


Figure 18

SuAsCo

RIVER BASIN

4.06: continued

TABLE 18
SuAsCo RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Sudbury River			
Source to Fruit Street Bridge in Hopkinton	29.1	B	Warm Water Outstanding Resource Water
Fruit Street Bridge to Outlet to Saxonville Pond	29.1-16.2	B	Warm Water High Quality Water
Outlet Saxonville Pond to Hop Brook confluence	16.2 - 10.6	B	Aquatic Life High Quality Water
Hop Brook confluence to Assabet River confluence	10.6-0.00	B	Aquatic Life
Denney Brook, Jackstraw Brook Picadilly Brook, Rutters Brook and Whitehall Brook	-	B	Outstanding Resource Water
Hop Brook			
Source to Sudbury River confluence	9.7 - 0.0	B	Warm Water
Concord River			
Confluence of Assabet and Sudbury to Billerica Water Supply Intake	15.4 - 5.9	B	Warm Water Treated Water Supply
Billerica Water Supply Intake to Rogers Street	5.9 - 1.0	B	Warm Water
Rogers Street to confluence with Merrimack River	1.0 - 0.0	B	Warm Water CSO
Assabet River			
Source to Westborough WWTF	31.8 - 30.4	B	Warm Water High Quality Water
Westborough WWTF to outlet to Boones Pond (Lake Boon)	30.4 - 12.4	B	Warm Water
Outlet of Boones Pond to confluence with Sudbury River	12.4 - 0.0	B	Warm Water
Nagog Pond			
Source to outlet in Acton and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 18
SuAsCo RIVER BASIN (continued)

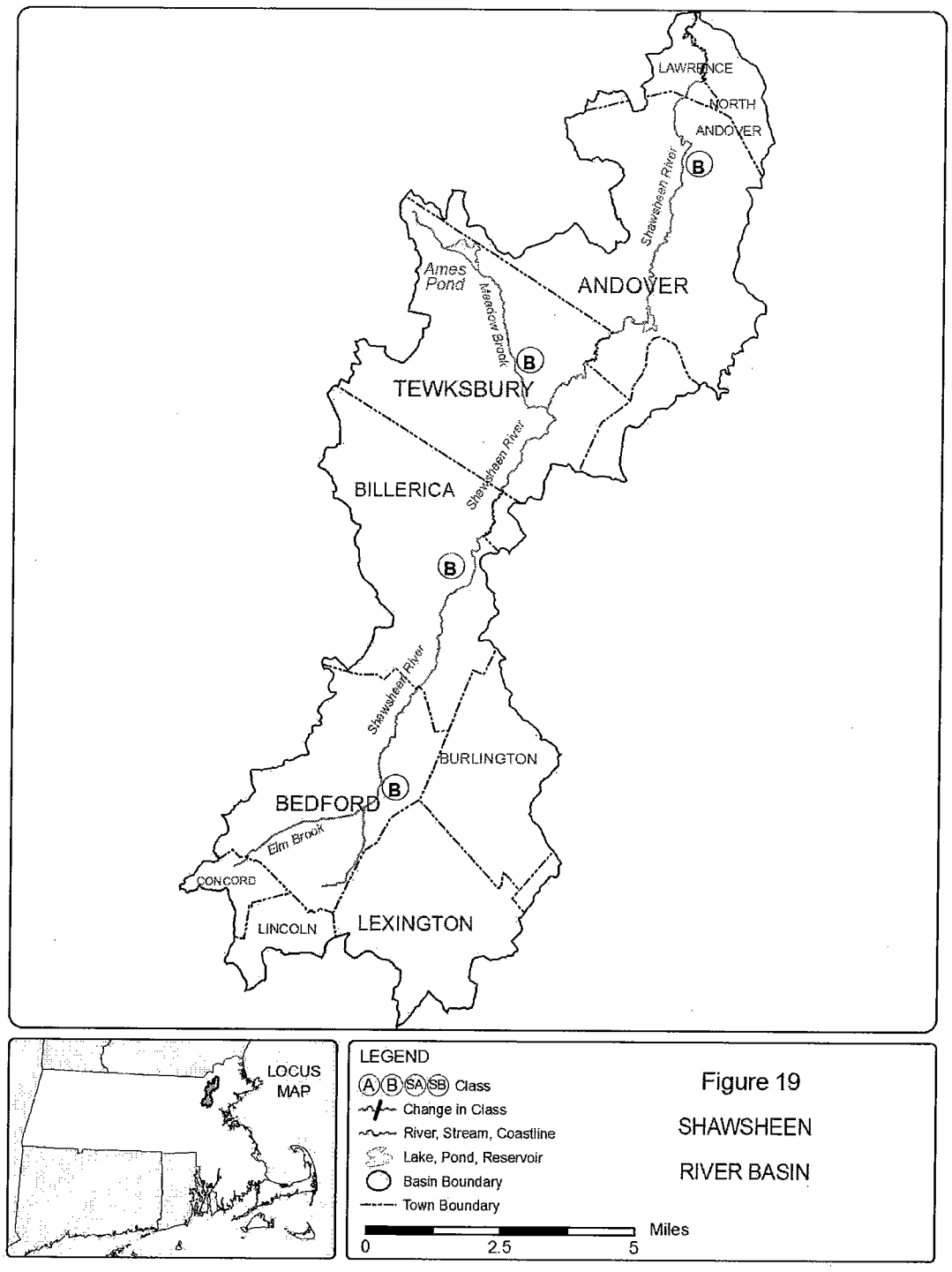
BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Westborough Reservoir (Sandra Pond)			
Source to outlet in Westborough and those tributaries thereto	-	A	Public Water Supply
Gates Pond (Gates Pond Reservoir)			
Source to outlet in Berlin	-	A	Public Water Supply
White Pond			
Source to outlet in Hudson and those tributaries thereto	-	A	Public Water Supply
Millham Reservoir			
Source to outlet in Marlborough and those tributaries	-	A	Public Water Supply
Lake Williams Reservoir (Williams Lake)			
Source to outlet in Marlborough and those tributaries thereto	-	A	Public Water Supply
Sudbury Reservoir			
In Westborough, Marlborough, Southborough, Framingham and those tributaries thereto	-	A	Public Water Supply
MWRA Open Canal (Wachusett Aqueduct)			
Entire length and those tributaries thereto	-	A	Public Water Supply
Framingham Reservoir No. 3			
Reservoir to outlet in Framingham and those tributaries thereto	-	A	Public Water Supply
Cedar Swamp Pond			
Portion in Westborough Cedar Swamp ACEC			Outstanding Resource Water
Unnamed tributary to Assabet River	entire length		Cold Water

4.06: continued

TABLE 18
SuAsCo RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Jacksaw Brook			Cold Water
Source to Upton Rd 1st crossing south of Hopkington Rd.			

4.06: continued

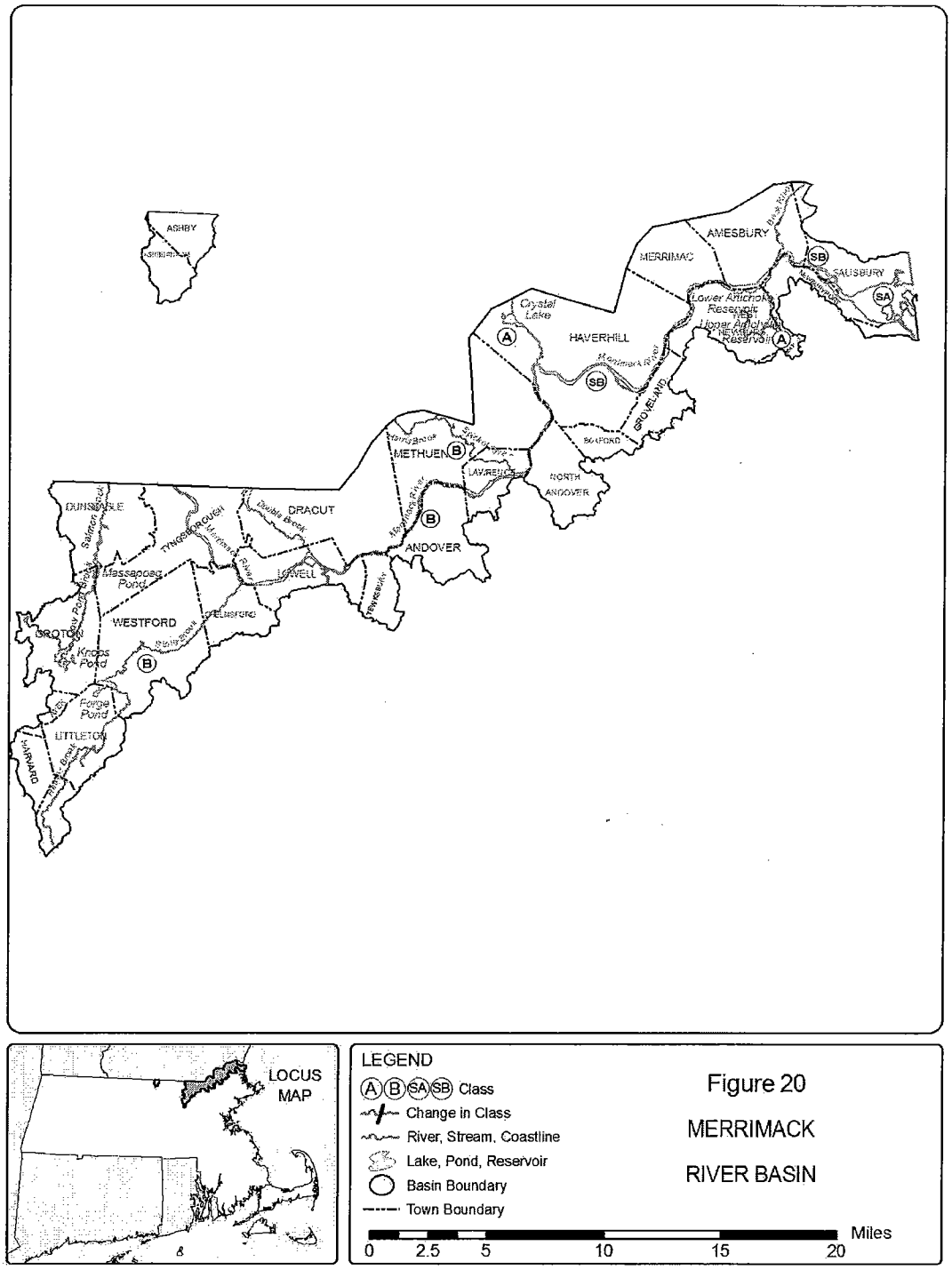


4.06: continued

TABLE 19
SHAWSHEEN RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Shawsheen River			
Source to water withdrawal point in Billerica (approximately Cook Street and Alexander Road)	25.0 - 18.0	B	Treated Water Supply Warm Water
Water withdrawal point in Billerica to confluence with the Merrimack River	18.0 - 0.0	B	Warm Water

4.06: continued



4.06: continued

TABLE 20
MERRIMACK RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Merrimack River			
State line to Pawtucket Dam	49.8 - 40.6	B	Warm Water Treated Water Supply CSO
Pawtucket Dam to Essex Dam, Lawrence	40.6 - 29.0	B	Warm Water Treated Water Supply CSO
Essex Dam, Lawrence to Little River, Haverhill	29.0 - 21.9	B	Warm Water CSO
Little River, Haverhill to Atlantic Ocean	21.9 - 0.0	SB	Shellfishing CSO
The Basin in the Merrimack River Estuary, Newbury and Newburyport	-	SA	Shellfishing
Stony Brook			
Entire Length	10.3 - 0.0	B	Warm Water
Beaver Brook			
State line to confluence with Merrimack River	4.2 - 0.0	B	Cold Water
Spicket River			
State line to confluence with Merrimack River	6.4 -0.0	B	Warm Water
Little River			
State line to confluence with Merrimack River	4.3 - 0.0	B	Warm Water
Cobbler Brook			
Entire Length	3.7 - 0.0	B	Cold Water
Powwow River			
Outlet Lake Gardner to tidal portion	6.4 - 1.3	B	Warm Water
Tidal portion	1.3 - 0.0	SB	Shellfishing
Plum Island River			
North of High Sandy sand bar		SA	Shellfishing Outstanding Resource Water

4.06: continued

TABLE 20
MERRIMACK RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Plumbush Creek		SA* B*	Outstanding Resource Water
Lake Attitash			
Source to outlet in Amesbury and those tributaries thereto	-	A	Public Water Supply
Tuxbury Pond			
Source to outlet in Amesbury and those tributaries thereto	-	A	Public Water Supply
Powwow River			
Outlet of Tuxbury Pond to inlet Lake Gardner and tributaries thereto	-	A	Public Water Supply
Millvale Reservoir			
Source to outlet in Haverhill and tributaries thereto	-	A	Public Water Supply
Kenoza Lake			
Source to outlet in Haverhill and those tributaries thereto	-	A	Public Water Supply
Crystal Lake			
Source to outlet in Haverhill and those tributaries thereto	-	A	Public Water Supply
Haggets Pond			
Source to outlet in Andover and those tributaries thereto	-	A	Public Water Supply
Fish Brook			
Entire length and those tributaries thereto	4.0 - 0.0	A	Public Water Supply
Lake Cochichewick			
Source to outlet in North Andover and those tributaries thereto	-	A	Public Water Supply

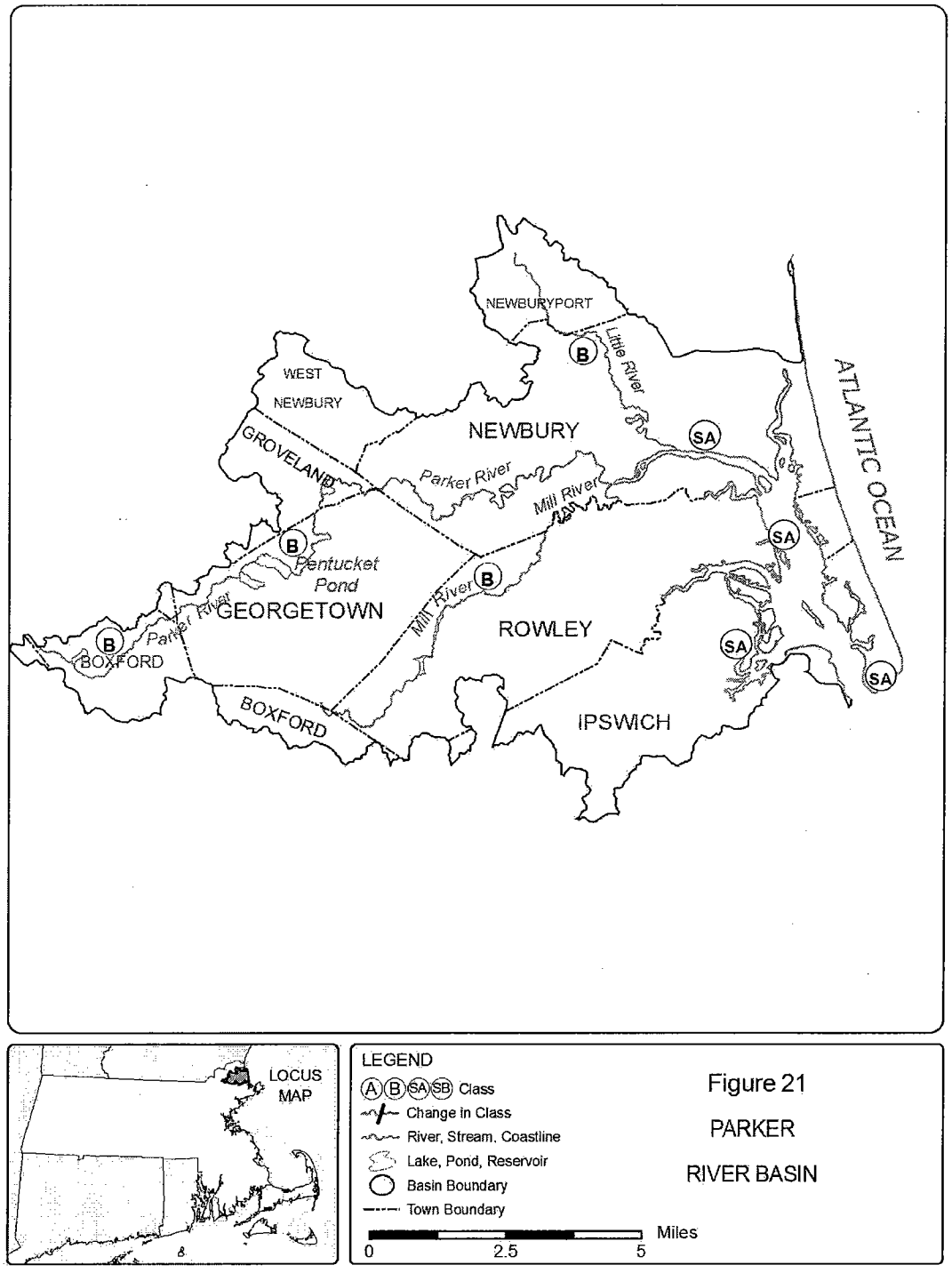
4.06: continued

TABLE 20
MERRIMACK RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Artichoke Reservoir (Upper and Lower Artichoke Reservoir)			
Source to outlet in West Newbury and those tributaries thereto	-	A	Public Water Supply
Unnamed Reservoir (Indian Hill Reservoir)			
Source to outlet in West Newbury and those tributaries thereto	-	A	Public Water Supply
Chadwick Pond (Little Pond)			
Pond to outlet in Haverhill and those tributaries thereto	-	A	Public Water Supply
Hoveys Pond (Mitchell Pond, Johnson Pond)			
Pond to outlet in Boxford and those tributaries thereto	-	A	Public Water Supply
Johnsons Pond			
Pond to outlet in Groveland and those tributaries thereto	-	A	Public Water Supply
Round Pond (Lake Pentucket)			
Lake to outlet in Haverhill and those tributaries thereto	-	A	Public Water Supply

* Marine waters Class SA, fresh water Class B

4.06: continued



4.06: continued

TABLE 21
PARKER RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Parker River			
Source to tidal portion	23.1 - 9.0	B	Warm Water High Quality Water
Tidal portion and tributaries thereto	9.0 - 0.0	SA	Shellfishing Outstanding Resource Water
Mill River			
Source to tidal portion and tributaries thereto	9.6 - 2.3	B	Warm Water Outstanding Resource Water
Tidal portion and tributaries thereto	2.3 - 0.0	SA	Shellfishing Outstanding Resource Water
Eagle Hill River			
Entire length and tributaries thereto	-	SA, B*	Outstanding Resource Water
Third Creek			
Entire Length	-	SA,B*	Outstanding Resource Water
Roger Island River			
Entire length and tributaries thereto	-	SA, B*	Outstanding Resource Water
Rowley River			
Entire length and tributaries thereto	-	SA, B*	Outstanding Resource Water
Egypt River			
Entire Length	-	SA, B*	Outstanding Resource Water
Mud Creek			
Entire length and tributaries thereto	-	SA, B*	Outstanding Resource Water
Bull Brook Reservoir			
Reservoir to outlet in Ipswich and those tributaries thereto	-	A	Public Water Supply

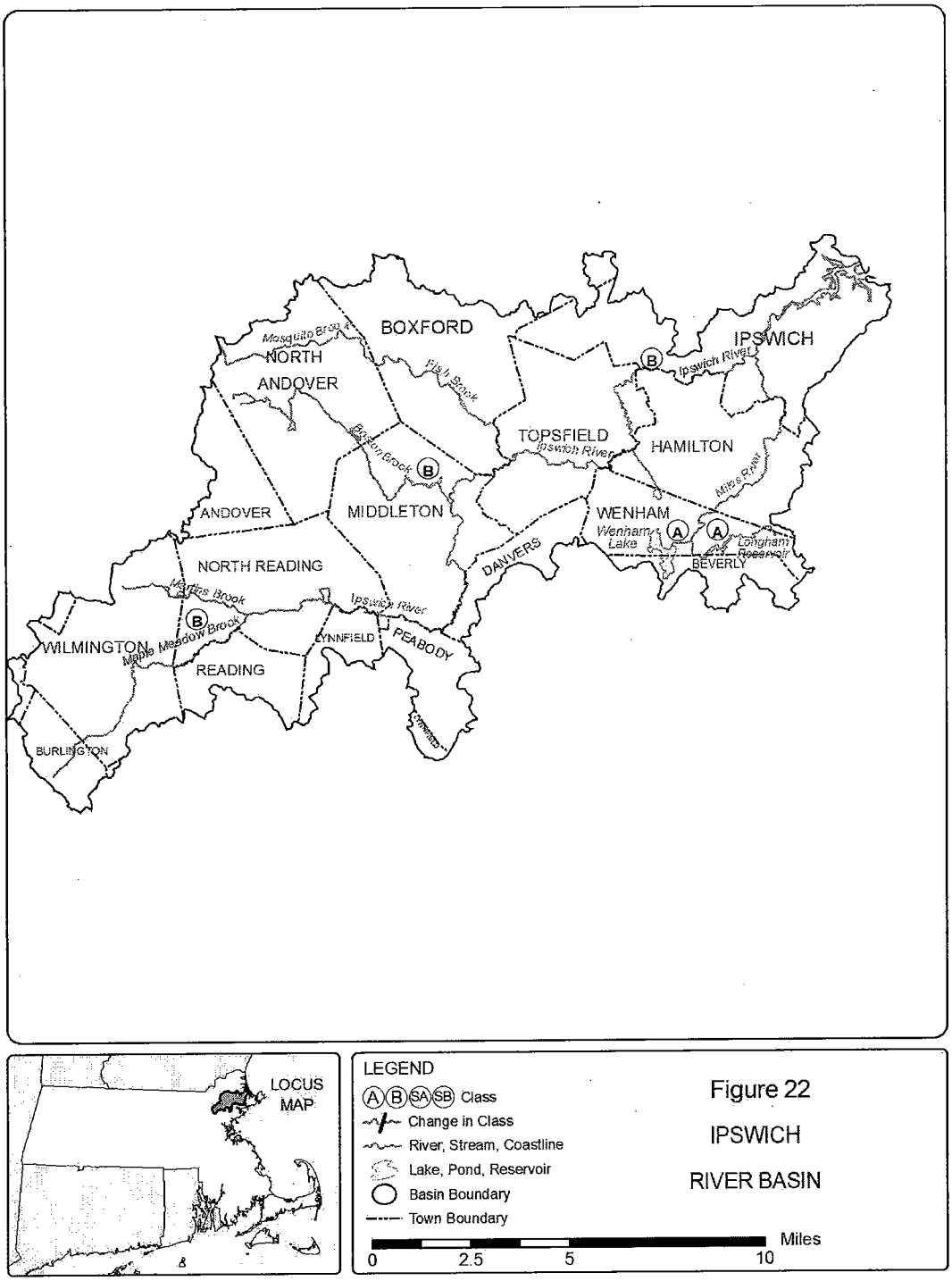
4.06: continued

TABLE 21
PARKER RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Dow Brook Reservoir			
Reservoir to outlet in Ipswich and those tributaries thereto	-	A	Public Water Supply
Plum Island River			
South of High Sandy sand bar to confluence with Plum Island Sound		SA	Shellfishing Outstanding Resource Water
Pine Island Creek, Little Pine Island Creek and Jericho Creek		SA*B*	Outstanding Resource Water
Plum Island Sound		SA	Shellfishing Outstanding Resource Water
Broad, Carolton, Club Head, Laws, Lords, Metcalf, Paine, Sand, Sawyer, Shad, Six Goose, Stacy, and West Creek Portion in Parker River/Essex Bay ACEC			Outstanding Resource Water
Ox Pasture Brook			
Portion in Parker River/Essex Bay ACEC			Outstanding Resource Water

* Marine waters Class SA, fresh waters Class B

4.06: continued



4.06: continued

TABLE 22
IPSWICH RIVER BASIN

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Ipswich River			
Source to Salem Beverly Waterway Canal	41.1 - 16.4	B	Treated Water Supply Warm Water High Quality Water
Salem Beverly Waterway Canal to tidal portion	16.4 - 4.5	B	Warm Water High Quality Water
Tidal portion and tributaries thereto	4.5 - 0.0	SA	Shellfishing
Middleton Pond			
Source to outlet in Middleton and those tributaries thereto	-	A	Public Water Supply
Swan Pond			
Source to outlet in North Reading and those tributaries thereto	-	A	Public Water Supply
Mill Pond Reservoir			
Source to outlet in Burlington and those tributaries thereto	-	A	Public Water Supply
Longham Reservoir			
Source to outlet in Wenham and those tributaries thereto	-	A	Public Water Supply
Wenham Lake			
Source to outlet in Wenham and those tributaries thereto	-	A	Public Water Supply
Putnamville Reservoir			
Source to outlet in Danvers and those tributaries thereto	-	A	Public Water Supply
Suntaug Lake			
Source to outlet in Lynn and Peabody and those tributaries thereto	-	A	Public Water Supply
Winona Pond			
Pond to outlet in Peabody and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 22
IPSWICH RIVER BASIN (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Unnamed Reservoir (Emerson Brook Reservoir)			
Reservoir to outlet in Middleton and those tributaries thereto	-	A	Public Water Supply
Fox Creek, Neck Creek and Treadwell Island Creek Portion in Parker River/Essex Bay ACEC			Outstanding Resource Water

4.06: continued

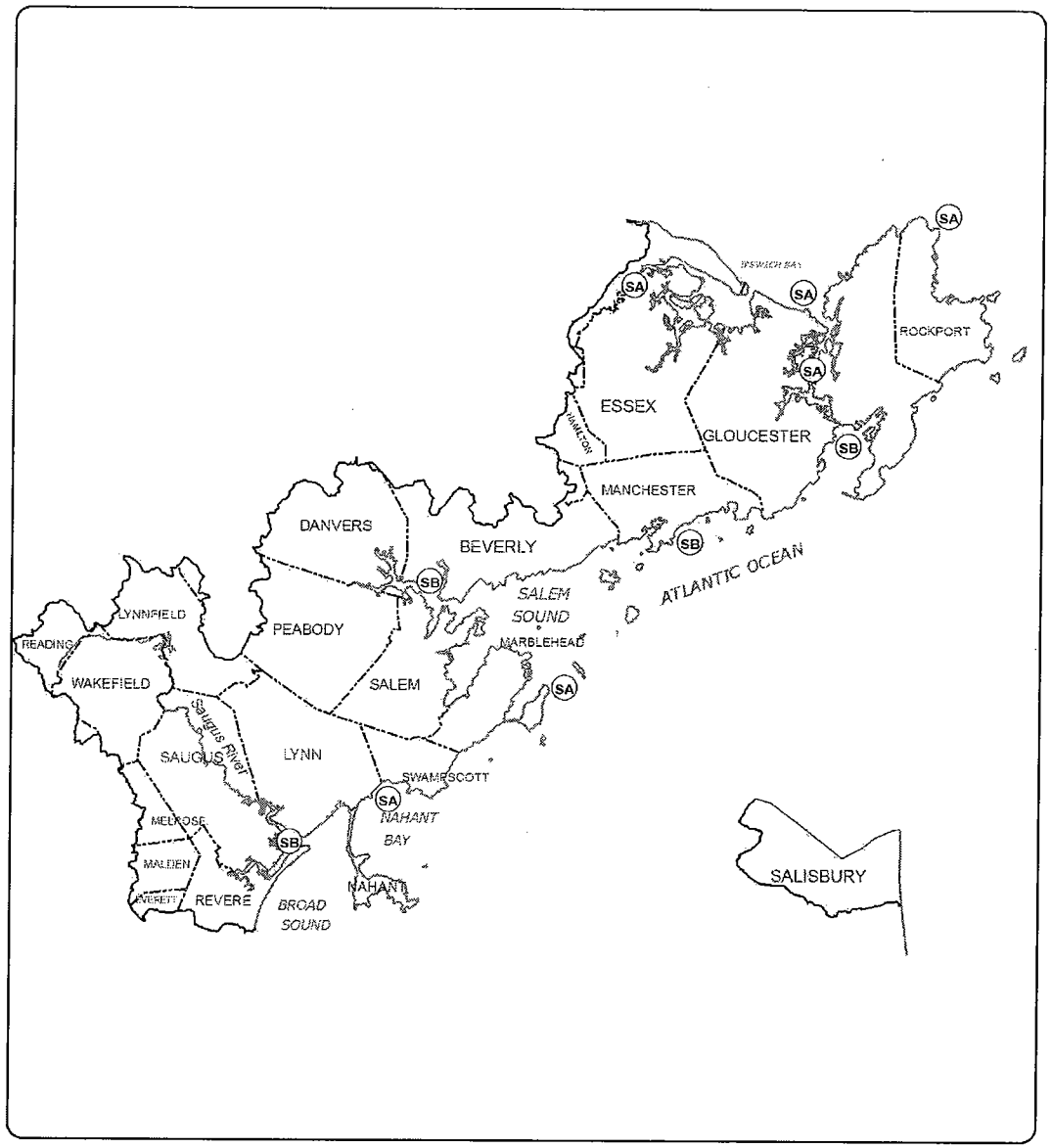


Figure 23

NORTH COASTAL

DRAINAGE AREA

4.06: continued

TABLE 23
NORTH COASTAL DRAINAGE AREA

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
The Essex River and its tributaries in Essex	-	SA*	Shellfishing Outstanding Resource Water
Ebben, Lufkin, and Soginese Creek Portion in Parker River/Essex Bay ACEC		SA	Shellfishing Outstanding Resource Water
Essex Bay	-	SA	Shellfishing Outstanding Resource Water
Castle Neck River Portion in Parker River /Essex Bay ACEC		SA	Shellfishing Outstanding Resource Water
Walker Creek, Lanes Creek and Farm Creek	-	SA	Shellfishing Outstanding Resource Water
Annisquam River	-	SA	Shellfishing
Rockport Harbor	-	SB	Shellfishing
Gloucester Harbor	-	SB	Shellfishing CSO
Manchester Harbor	-	SB	Shellfishing
Beverly Harbor	-	SB	Shellfishing
Salem Harbor	-	SB	Shellfishing
Marblehead Harbor	-	SA	Shellfishing
Massachusetts Bay	-	SA	Shellfishing
Nahant Bay	-	SA	Shellfishing CSO
Lynn Harbor	-	SB	Shellfishing CSO
Saugus River			
Source to canal which discharges into Hawkes Pond	13.6 – 10.5	B	Treated Water Supply
Canal which discharges into Hawkes Pond to Saugus Iron Works/Bridge Street	10.5 – 5.1	B	

* Marine waters Class SA

4.06: continued

TABLE 23
NORTH COASTAL DRAINAGE AREA (continued)

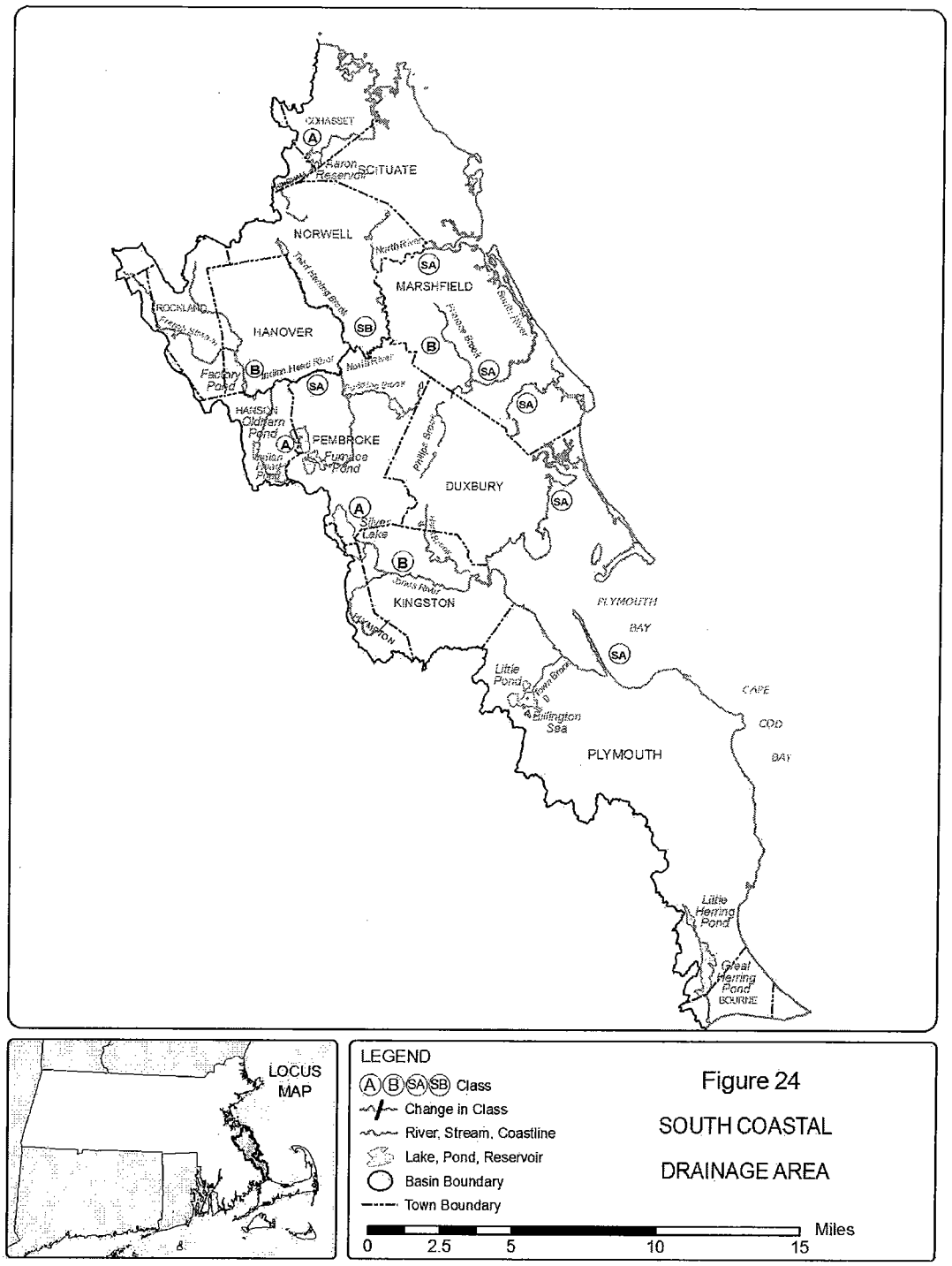
BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Saugus Iron Works/ Bridge Street to Boston Street bridge	5.1 – 3.1	SB	Shellfishing
Boston Street bridge to mouth	3.1 - 0.0	SB	Shellfishing Outstanding Resource Water CSO
Pines River			
Source to mouth		SB	Outstanding Resource Water
Diamond Creek		SA	Outstanding Resource Water
Spring Pond and Griswold Pond			
Source to outlet in Saugus	-	B	Outstanding Resource Water
Babson Reservoir			
Source to outlet in Gloucester and those tributaries thereto	-	A	Public Water Supply
Haskell Pond (Haskell Reservoir)			
Source to outlet in Gloucester and those tributaries thereto	-	A	Public Water Supply
Goose Cove Reservoir			
Source to outlet in Gloucester and those tributaries thereto	-	A	Public Water Supply
Dykes Pond (Dykes Reservoir)			
Source to outlet in Gloucester and those tributaries thereto	-	A	Public Water Supply
Wallace Pond (Wallace Reservoir)			
Source to outlet in Gloucester and those tributaries thereto	-	A	Public Water Supply
Fernwood Lake			
Source to outlet in Gloucester and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 23
NORTH COASTAL DRAINAGE AREA (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Klondike Reservoir (Quarry Reservoir)			
Source to outlet in Gloucester	-	A	Public Water Supply
Hawkes Pond			
Source to outlet in Saugus and those tributaries thereto	-	A	Public Water Supply
Birch Pond			
Source to outlet in Saugus and Lynn and those tributaries thereto	-	A	Public Water Supply
Breeds Pond			
Source to outlet in Lynn and those tributaries thereto	-	A	Public Water Supply
Walden Pond			
Source to outlet in Lynn and those tributaries thereto	-	A	Public Water Supply
Gravelly Pond			
Source to outlet in Hamilton and those tributaries thereto	-	A	Public Water Supply
Spring Pond			
Source to outlet in Peabody and those tributaries thereto	-	A	Public Water Supply
Cape Pond			
Source to outlet in Rockport and tributaries thereto	-	A	Public Water Supply
Quarry Reservoir (Carlson's Quarry)			
Source to outlet in Rockport and those tributaries thereto	-	A	Public Water Supply
Crystal Lake			
Source to outlet in Wakefield and those tributaries thereto	-	A	Public Water Supply

4.06: continued



4.06: continued

TABLE 24
SOUTH COASTAL DRAINAGE AREA

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Cohasset Harbor	-	SA	Shellfishing
Little Harbor	-	SA	Shellfishing
The Gulf	-	SB	Shellfishing
Scituate Harbor	-	SA	Shellfishing
French Stream			
Entire Length	20.6 - 15.7	B	Warm Water
Drinkwater River			
Entire Length	15.7 - 13.9	B	Warm Water
Indian Head River			
Source to Curtis Crossing Dam	-	B	Warm Water
Curtis Crossing Dam to confluence with Herring Brook		B	Warm Water Outstanding Resource Water
North River			
Confluence of Indian Head River and Herring Brook to Third Herring Brook	11.6 - 9.6	SA	Shellfishing Outstanding Resource Water
Third Herring Brook to Main Street, Marshfield	9.6 - 2.0	SA	Shellfishing Outstanding Resource Water
Main Street to Massachusetts Bay	2.0 - 0.0	SA	Shellfishing
South River			
Source to dam at Main Street, Marshfield		B	Outstanding Resource Water
Dam at Main Street, Marshfield to confluence with North River, Marshfield		SA	Shellfishing Outstanding Resource Water
Green Harbor	-	SA	Shellfishing

4.06: continued

TABLE 24
SOUTH COASTAL DRAINAGE AREA (continued)

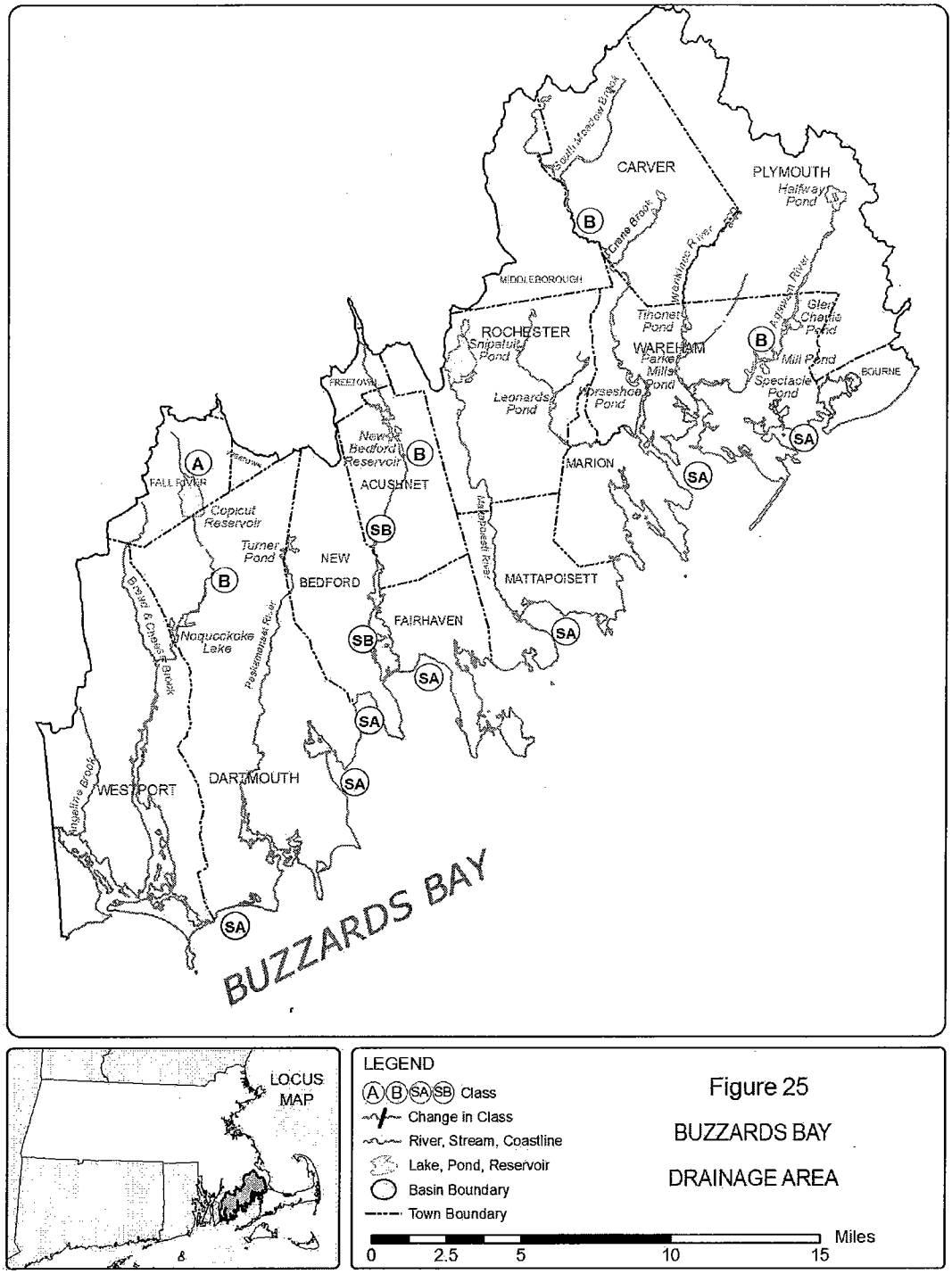
BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Jones River			
Source to Wapping Pond	7.0 - 3.4	B	Warm Water High Quality Water
Wapping Road to Elm Street	3.4 - 2.5	B	Warm Water
Cove, Herring, Iron Mine, Second Herring, Stony, and Third Herring Brook and Robinson Creek Portion in North River Corridor			Outstanding Resource Water
Furnace Pond			
Pond to outlet in Pembroke and those tributaries thereto	-	A	Public Water Supply
Silver Lake			
Lake to outlet in Kingston and tributaries thereto		A	Public Water Supply
Mounce Pond			
Portion in North River Corridor			Outstanding Resource Water
Great Sandy Bottom Pond			
Pond to outlet in Pembroke and those tributaries thereto	-	A	Public Water Supply
Great South Pond	-	A	Public Water Supply
Pond to outlet in Plymouth and those tributaries thereto			
Lily Pond		A	Public Water Supply
Pond to outlet in Cohasset and those tributaries thereto			
Little South Pond (South Pond)			
Pond to outlet in Plymouth and those tributaries thereto	-	A	Public Water Supply
Old Oaken Bucket Pond (Herring Brook Pond)			
Pond to outlet in Scituate and those tributaries thereto	-	A	Public Water Supply

4.06: continued

TABLE 24
SOUTH COASTAL DRAINAGE AREA (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Aaron River Reservoir			
Reservoir to outlet in Cohasset and those tributaries thereto	-	A	Public Water Supply
Abington Rockland Reservoir (Hingham Street Reservoir)			
Reservoir to outlet in Rockland and those tributaries thereto	-	A	Public Water Supply

4.06: continued



4.06: continued

TABLE 25
BUZZARDS BAY COASTAL DRAINAGE AREA

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Cape Cod Canal, Sandwich	-	SB	Shellfishing
Cape Cod Canal, Bourne	-	SB	Shellfishing
Buttermilk Bay		SA	Shellfishing
Onset Bay	-	SA	Shellfishing
Pocasset River	-	SA	Shellfishing Outstanding Resource Water
Agawam River			
Source to Wareham WWTF	Above 2.2	B	Warm Water High Quality Water
Wareham WWTF to confluence	2.2 - 0.0	SB	Shellfishing
Wareham River			
Entire Length	-	SA	Shellfishing High Quality Water
Wewantic River			
Source to inlet of Horseshoe Pond	Above 4.4	B	Warm Water High Quality Water
Outlet of Horseshoe Pond to confluence	4.4 - 0.0	SA	Shellfishing High Quality Water
Sippican River			
Source to County Road, Marion, Wareham	Above 2.1	B	Warm Water High Quality Water
County Road to confluence with Wewantic River	2.1 - 0.0	SA	Shellfishing High Quality Water
Sippican Harbor	-	SA	Shellfishing
Aucoot Cove	-	SA	Shellfishing
Mattapoisett Harbor	-	SA	Shellfishing
Nasketucket Bay	-	SA	Shellfishing
New Bedford Reservoir			
Source to outlet	Above 8.2	B	Warm Water High Quality Water

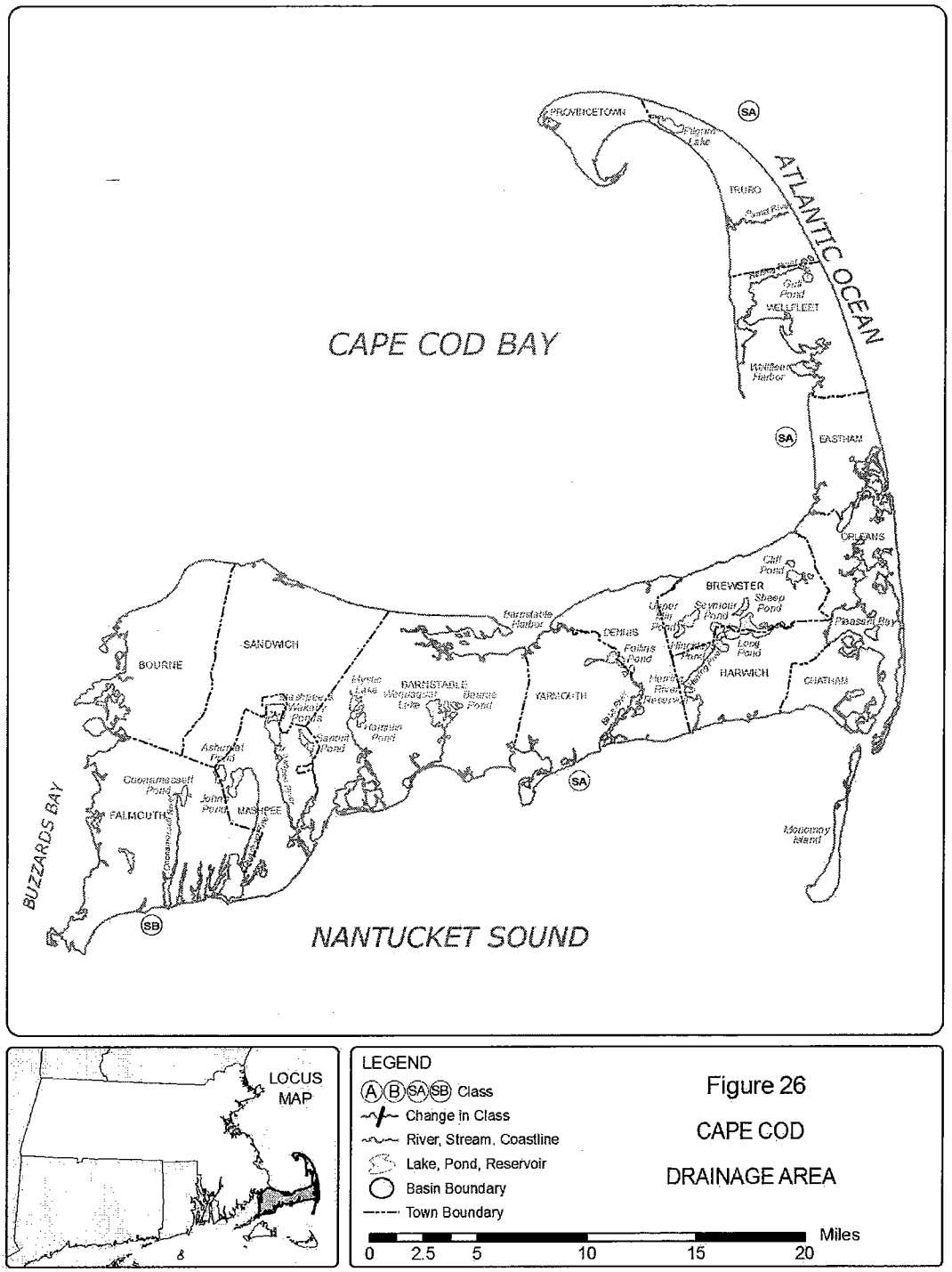
4.06: continued

TABLE 25
BUZZARDS BAY COASTAL DRAINAGE AREA (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Acushnet River			
Outlet of New Bedford Reservoir	8.2 - 4.5	B	Warm Water High Quality Water
Main Street to Rt. 6	4.5 - 1.2	SB	Shellfishing CSO
Inner New Bedford Harbor	1.2 - 0.0	SB	Shellfishing CSO
Outer New Bedford Harbor	-	SA	Shellfishing
Clark Cove, New Bedford/ Dartmouth	-	SA	Shellfishing CSO
Apponagansett Bay, New Bedford/Dartmouth		SA	Shellfishing
Slocums River	-	SA	Shellfishing High Quality Water
Westport River, East Branch			
Outlet Noquochoke Lake to Old County Road, Westport	12.0 - 10.0	B	Warm Water High Quality Water
Old County Road to confluence	10.0 - 0.0	SB	Shellfishing High Quality Water
Westport River, West Branch			
Entire Length	-	SA	Shellfishing High Quality Water
Freeman Pond, Mill Pond, Shop Pond and Upper Pond in Bourne	-	B*	Warm Water Outstanding Resource Water
Copicut Reservoir			
Source to outlet in Fall River and Dartmouth and those tributaries thereto	-	A	Public Water Supply
Sand Pond Reservoir			
Source to outlet in Wareham and those tributaries thereto	-	A	Public Water Supply

* Marine waters Class SA, fresh waters Class B

4.06: continued



4.06: continued

TABLE 26
CAPE COD COASTAL DRAINAGE AREA

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Scorton Harbor	-	SA	Shellfishing
Scorton Creek and tributaries thereto	-	SA	Shellfishing
Barnstable Harbor			
Entire area excluding Freezer Point and the developed marina Water	-	SA	Shellfishing Outstanding Resource
Broad Sound	-	SA	Shellfishing
Bass Creek, Brickyard Creek, Mill Creek and Wells Creek	-	SA	Shellfishing
Namskaket Creek, Little Namskaket Creek, Rock Harbor Creek, Boat Meadow River and Herring River	-	SA	Shellfishing Outstanding Resource Water
Pleasant Bay and tributaries thereto	-	SA	Shellfishing Outstanding Resource Water
Ryder Cove, Bassing Harbor, Frost Fish Creek, and Muddy Creek in Chatham Portion in Pleasant Bay ACEC			Outstanding Resource Water
Round Cove in Harwich Portion in Pleasant Bay ACEC			Outstanding Resource Water
Namequoit River, The River, The Horseshoe, the Narrows, Frostfish Cove, Hog Island Creek, and Broad Creek in Orleans Portion in Pleasant Bay ACEC			Outstanding Resource Water
Waquoit Bay and tributaries thereto	-	SA*	Shellfishing Outstanding Resource Water
Childs River, Quashnet River, and Red Brook Portion in Waquoit Bay ACEC			Outstanding Resource Water
Falmouth Inner Harbor, Falmouth	-	SB	Shellfishing
Herring Pond and Cedar Pond	-	B*	Warm Water Outstanding Resource Water

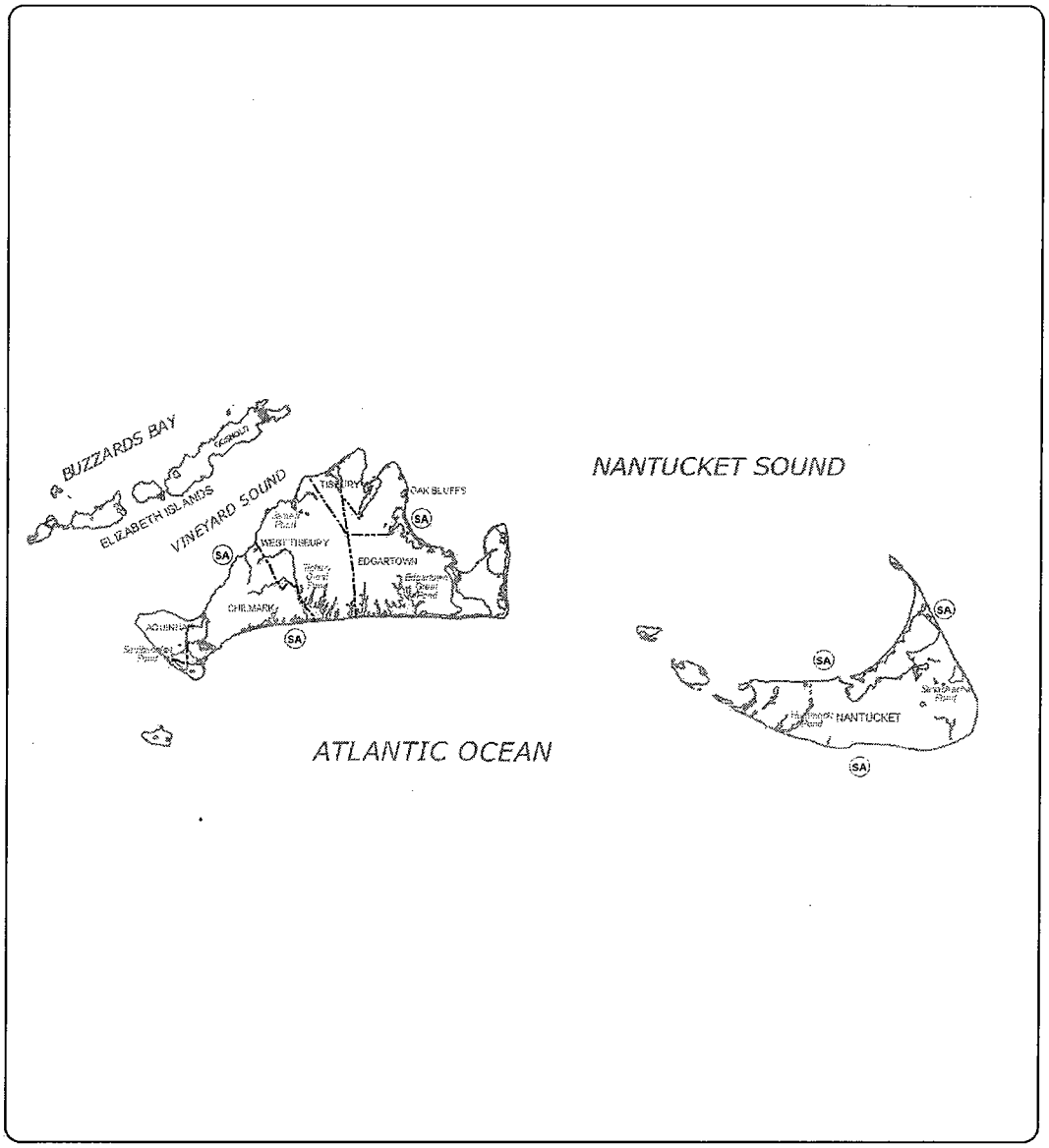
4.06: continued

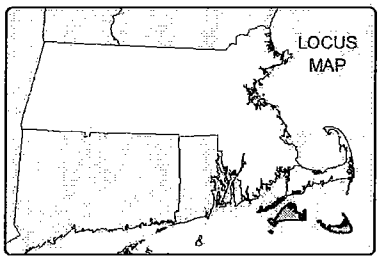
TABLE 26
CAPE COD COASTAL DRAINAGE AREA (continued)

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Stillwater Pond, Lovers Lake, Mill Pond, Ministers Pond and Crows Pond in Chatham	-	B*	Warm Water Outstanding Resource Water
Pilgrim Lake, Quanset Pond, Crystal Lake, Paw Wah Pond, Uncle Seths Pond, Sarahs Pond, Areys Pond, Gould Pond, Kescago Gansett Pond and Meeting House Pond in Orleans	-	B*	Warm Water Outstanding Resource Water
Bourne Pond, Bog Pond, Caleb Pond and Hamblin Pond in Falmouth	-	B*	Warm Water Outstanding Resource Water
Flat Pond, Jehu Pond, Jim Pond, Lily Pond (Little Flat Pond), Sagelot Pond, and Witch Pond in Mashpee	-	B*	Warm Water Outstanding Resource Water
Long Pond (Long Pond Reservoir)			
Source to its outlet in Falmouth and those tributaries thereto	-	A	Public Water Supply
Waters in and adjacent** to the Cape Cod National Seashore	-	SA*	Shellfishing Outstanding Resource Water

* Marine waters Class SA, fresh waters Class B
** Area within 1,000 feet seaward of mean low water

4.06: continued





LEGEND

(A) (B) (SA) (SB) Class

Change in Class

River, Stream, Coastline

Lake, Pond, Reservoir

Basin Boundary

Town Boundary

0 2.5 5 10 15 20 25 30 Miles

Figure 27

ISLANDS

DRAINAGE AREA

4.06: continued

TABLE 27
ISLANDS COASTAL DRAINAGE AREAS

BOUNDARY	MILE POINT	CLASS	QUALIFIERS
Surface waters adjacent* to the Elizabeth Islands subject to the rise and fall of the tide	-	SA	Shellfishing Outstanding Resource Water
All surface waters subject to the rise and fall of the tide of Dukes County and Nantucket Drainage Areas	-	SA	Shellfishing

* Area within 1,000 feet seaward of mean low water.

4.06: continued

TABLE 28
SITE SPECIFIC CRITERIA

BASIN/DRAINAGE AREA & WATERBODY	BOUNDARY OR TOWN	SITE SPECIFIC CRITERIA
BLACKSTONE RIVER BASIN		
Auburn Pond	Auburn	Total Phosphorus 0.025 mg/L
Blackstone River	45.2 to 20.0 (state line)	Copper acute 25.7 chronic 18.1 µg/L
Brierly Pond	Millbury	Total Phosphorus 0.025 mg/L
Curtis Pond North	Worcester	Total Phosphorus 0.025 mg/L
Curtis Pond South	Worcester	Total Phosphorus 0.025 mg/L
Dorothy Pond	Millbury	Total Phosphorus 0.025 mg/L
Eddy Pond	Auburn	Total Phosphorus 0.015 mg/L
Flint Pond	Grafton, Worcester, Shrewsbury	Total Phosphorus 0.012 mg/L
Green Hill Pond	Worcester	Total Phosphorus 0.025 mg/L
Howe Reservoir	Millbury	Total Phosphorus 0.025 mg/L
Indian Lake	Worcester	Total Phosphorus 0.027 mg/L
Jordan Pond	Shrewsbury	Total Phosphorus 0.025 mg/L
Lake Quinsigamond	Worcester, Shrewsbury	Total Phosphorus 0.012 mg/L
Leesville Pond	Auburn, Worcester	Total Phosphorus 0.040 mg/L
Mill Pond	Shrewsbury	Total Phosphorus 0.025 mg/L
Mumford River	9.0 to 0.0 (confluence with Blackstone River)	Copper acute 25.7 chronic 18.1 µg/L
Newton Pond	Shrewsbury	Total Phosphorus 0.025 mg/L
Pondville Pond	Auburn	Total Phosphorus 0.025 mg/L
Salisbury Pond	Worcester	Total Phosphorus 0.0455 mg/L
Shirley Pond	Shrewsbury	Total Phosphorus 0.025 mg/L
Smiths Pond	Leicester	Total Phosphorus 0.020 mg/L
Southwick Pond	Leicester	Total Phosphorus 0.010 mg/L
Stoneville Pond	Auburn	Total Phosphorus 0.025 mg/L
West River	8.8. to 0.0 (confluence with Blackstone River)	Copper acute 25.7 chronic 18.1 µg/L
BUZZARDS BAY DRAINAGE AREA		
Unnamed Brook	0.75 to 0.0 (confluence with Aucoot Cove)	Copper acute 25.7 chronic 18.1 µg/L
CAPE COD DRAINAGE AREA		
Stage Harbor System		
Little Mill Pond	Chatham	Nitrogen 0.38 mg/L
Mill Pond	Chatham	Nitrogen 0.38 mg/L
Mitchell River	Chatham	Nitrogen 0.38 mg/L
Oyster Pond	Chatham	Nitrogen 0.38 mg/L
Oyster River	Chatham	Nitrogen 0.38 mg/L
Stage Harbor	Chatham	Nitrogen 0.38 mg/L
Sulphur Springs System		
Bucks Creek	Chatham	Nitrogen 0.38 mg/L
Cockle Cove Creek	Chatham	Nitrogen 0.38 mg/L
Sulphur Springs	Chatham	Nitrogen 0.38 mg/L
Taylors Pond System		
Mill Creek	Chatham	Nitrogen 0.38 mg/L
Taylors Pond	Chatham	Nitrogen 0.38 mg/L

4.06: continued

TABLE 28
SITE SPECIFIC CRITERIA (continued)

BASIN/DRAINAGE AREA & WATERBODY	BOUNDARY OR TOWN	SITE SPECIFIC CRITERIA
Bassing Harbor System		
Bassing Harbor	Chatham	Nitrogen 0.527-0.552 mg/L*
Crows Pond	Chatham	Nitrogen 0.527-0.552 mg/L*
Frost Fish Creek	Chatham	Nitrogen 0.527-0.552 mg/L*
Ryder Cove	Chatham	Nitrogen 0.527-0.552 mg/L*
Muddy Creek System		
Lower Muddy Creek	Chatham	Nitrogen 0.552 mg/L
Upper Muddy Creek	Chatham	Nitrogen 0.552 mg/L
CHARLES RIVER BASIN		
Charles River	73.4 to 9.8 (new Charles River dam)	Copper acute 25.7 chronic 18.1 µg/L
Stop River	4.4 to 0.0 (confluence with Charles River)	Copper acute 25.7 chronic 18.1 µg/L
CHICOPEE RIVER BASIN		
Browning Pond	Oakham	Total Phosphorus 0.015 mg/L
Long Pond	Springfield	Total Phosphorus 0.030 mg/L
Minechoag Pond	Ludlow	Total Phosphorus 0.030 mg/L
Mona Lake	Springfield	Total Phosphorus 0.030 mg/L
Spectacle Pond	Wilbraham	Total Phosphorus 0.020 mg/L
Sugden Reservoir	Spencer	Total Phosphorus 0.015 mg/L
Wickaboag Pond	West Brookfield	Total Phosphorus 0.015 mg/L
CONNECTICUT RIVER BASIN		
Aldrich Lake East	Granby	Total Phosphorus 0.030 mg/L
Aldrich Lake West	Granby	Total Phosphorus 0.030 mg/L
Bachelor Brook	12.4 to 0.0 (confluence with Connecticut River)	Copper acute 25.7 chronic 18.1 µg/L
Lake Warner	Hadley	Total Phosphorus 0.030 mg/L
Lake Wyola	Shutesbury	Total Phosphorus 0.015 mg/L
Leverett Pond	Leverett	Total Phosphorus 0.015 mg/L
Loon Pond	Springfield	Total Phosphorus 0.030 mg/L
FRENCH RIVER BASIN		
Buffumville Lake	Charlton	Total Phosphorus 0.015 mg/L
Cedar Meadow Pond	Leicester	Total Phosphorus 0.015 mg/L
Dresser Hill Pond	Charlton	Total Phosphorus 0.035 mg/L
Dutton Pond	Leicester	Total Phosphorus 0.025 mg/L
French River	27.3 to 7.0 (state line)	Copper acute 25.7 chronic 18.1 µg/L
Gore Pond	Charlton, Dudley	Total Phosphorus 0.014 mg/L
Granite Reservoir	Charlton	Total Phosphorus 0.015 mg/L
Greenville Pond	Leicester	Total Phosphorus 0.025 mg/L
Hudson Pond	Oxford	Total Phosphorus 0.015 mg/L
Jones Pond	Charlton, Spencer	Total Phosphorus 0.015 mg/L
Larner Pond	Dudley	Total Phosphorus 0.014 mg/L
Lowes Pond	Oxford	Total Phosphorus 0.015 mg/L
McKinstry Pond	Oxford	Total Phosphorus 0.015 mg/L

*The nitrogen criteria for the Bassing Harbor System are interim criteria unless, based on its assessment of Pleasant Bay, the Department determines that the nitrogen criteria for the Bassing Harbor system should remain in effeet.

4.06: continued

TABLE 28
SITE SPECIFIC CRITERIA (continued)

BASIN/DRAINAGE AREA & WATERBODY	BOUNDARY OR TOWN	SITE SPECIFIC CRITERIA
New Pond	Dudley	Total Phosphorus 0.014 mg/L
Peter Pond	Dudley	Total Phosphorus 0.010 mg/L
Pikes Pond	Charlton	Total Phosphorus 0.015 mg/L
Robinson Pond	Oxford	Total Phosphorus 0.012 mg/L
Rochdale Pond	Leicester	Total Phosphorus 0.025 mg/L
Shepherd Pond	Dudley	Total Phosphorus 0.014 mg/L
Texas Pond	Oxford	Total Phosphorus 0.025 mg/L
Tobins (Mosquito) Pond	Dudley	Total Phosphorus 0.014 mg/L
Wallis Pond	Dudley	Total Phosphorus 0.014 mg/L
HUDSON RIVER BASIN		
South Branch	15.4 to 10.3 (state line) (confluence with North Branch)	Copper acute 25.7 chronic 18.1 µg/L
HOUSATONIC RIVER BASIN		
Housatonic River	50.9 to 0.0 (state line)	Copper acute 25.7 chronic 18.1 µg/L
IPSWICH RIVER BASIN		
Greenwood Creek	0.7 to 0.0 (confluence with Ipswich River)	Copper acute 25.7 chronic 18.1 µg/L
MILLERS RIVER BASIN		
Beaver Flowage Pond	Royalston	Total Phosphorus 0.0125 mg/L
Bents Pond	Garnder	Total Phosphorus 0.015 mg/L
Bourne-Hadley Pond	Templeton	Total Phosphorus 0.015 mg/L
Brazell Pond	Templeton	Total Phosphorus 0.015 mg/L
Cowee Pond	Gardner	Total Phosphorus 0.0127 mg/L
Davenport Pond	Petersham, Athol	Total Phosphorus 0.0127 mg/L
Depot Pond	Templeton	Total Phosphorus 0.015 mg/L
Ellis Pond	Athol	Total Phosphorus 0.015 mg/L
Greenwood Pond	Templeton	Total Phosphorus 0.015 mg/L
Greenwood Pond	Westminster	Total Phosphorus 0.0139 mg/L
Hilchey Pond	Gardner	Total Phosphorus 0.019 mg/L
Lake Denison	Winchendon	Total Phosphorus 0.015 mg/L
Lake Monomonac	Winchendon	Total Phosphorus 0.0133 mg/L
Lower Naukeag Lake	Ashburnham	Total Phosphorus 0.0145 mg/L
Minott Pond	Westminster	Total Phosphorus 0.015 mg/L
Minott Pond South	Westminster	Total Phosphorus 0.011 mg/L
Parker Pond	Gardner	Total Phosphorus 0.015 mg/L
Ramsdall Pond	Gardner	Total Phosphorus 0.015 mg/L
Reservoir No. 1	Athol	Total Phosphorus 0.015 mg/L
Reservoir No. 2	Phillipston, Athol	Total Phosphorus 0.0051 mg/L
Riceville Pond	Petersham, Athol	Total Phosphorus 0.015 mg/L
South Athol Pond	Athol	Total Phosphorus 0.015 mg/L
Stoddard Pond	Winchendon	Total Phosphorus 0.015 mg/L
Wallace Pond	Ashburnham	Total Phosphorus 0.0137 mg/L
Ward Pond	Athol	Total Phosphorus 0.015 mg/L
Whites Mill Pond	Winchendon	Total Phosphorus 0.015 mg/L
Whitney Pond	Winchendon	Total Phosphorus 0.015 mg/L
Wrights Reservoir	Gardner, Westminster	Total Phosphorus 0.0135 mg/L

4.06: continued

TABLE 28
SITE SPECIFIC CRITERIA (continued)

BASIN/DRAINAGE AREA & WATERBODY	BOUNDARY OR TOWN	SITE SPECIFIC CRITERIA
NASHUA RIVER BASIN		
Bare Hill Pond	Harvard	Total Phosphorus 0.030 mg/L
North Branch, Nashua River	36.5 to 0.0 (confluence with Nashua River)	Copper acute 25.7 chronic 18.1 µg/L
South Branch, Nashua River	3.3 to 0.0 (confluence with Nashua River)	Copper acute 25.7 chronic 18.1 µg/L
QUINEBAUG RIVER BASIN		
Cady Brook	5.1 to 0.0 (confluence with Quinebaug River)	Copper acute 25.7 chronic 18.1 µg/L
Quinebaug River	19.7 to 7.9 (state line)	Copper acute 25.7 chronic 18.1 µg/L
SOUTH COASTAL DRAINAGE AREA		
French Stream	19.0 to 15.7 (confluence with Drinkwater River)	Copper acute 25.7 chronic 18.1 µg/L
SUASCO RIVER BASIN		
Assabet River	30.4 to 0.0 (confluence with Sudbury River)	Copper acute 25.7 chronic 18.1 µg/L
Lake Boon	Hudson, Stow	Total Phosphorus 0.020 mg/L
TAUNTON RIVER BASIN		
Nemasket River	5.5 to 0.0 (confluence with Taunton River)	Copper acute 25.7 chronic 18.1 µg/L
Salisbury Plain	2.0 to 0.0 (confluence with Taunton River)	Copper acute 25.7 chronic 18.1 µg/L
Three Mile River	6.0 to 0.0 (confluence with Mill River)	Copper acute 25.7 chronic 18.1 µg/L
Town River	2.2 to 0.0 (confluence with Taunton River)	Copper acute 25.7 chronic 18.1 µg/L
TEN MILE RIVER BASIN		
Ten Mile River	14.0 to 0.0	Copper acute 25.7 chronic 18.1 µg/L
WESTFIELD RIVER BASIN		
Westfield River	10.8 to 0.0 (confluence with Connecticut River)	Copper acute 25.7 chronic 18.1 µg/L

REGULATORY AUTHORITY

310 CMR 4.00: M.G.L. c. 21, § 27.