Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

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STREAM FLOW CLASSIFICATIONS & STATEMENT OF REASONS
South Central Coastal River Basin

INTRODUCTION

On May 18, 2015, the Commissioner of the Connecticut Department of Energy & Environmental Protection (the "Commissioner") published a notice of proposed stream flow classifications for the South Central Coastal River Basin (see Appendix I). Notice was provided in accordance with the Regulations of Connecticut State Agencies (RCSA) Section 26-141b-5 in newspapers in the basins, including the Bristol Press, Meriden Record Journal, New Britain Herald, New Haven Register and Waterbury Republican-American. The notice was also mailed and emailed to required parties listed in RCSA Section 26-141b-5 and to other interested parties (see Appendix II), and published on the Department's website. Mapping of the proposed classifications was made available in several formats, including an interactive on-line map (http://ctdeep.maps.arcgis.com/apps/MapSeries/?appid=a2ec9be927244110a56205b2dfe71747). The interactive map allowed an individual to view the factors considered in the classification of each stream segment. Two public information sessions were held, as detailed in the public notice.

Public comments and information for the Commissioner's consideration on the proposed classifications were solicited through the public notice. In accordance with the regulations, comments were solicited pertaining, but not limited to: (i) the factors for consideration in the regulations; (ii) the impact of the proposed classification on any prior investment made to develop a permitted or registered diversion and the alternatives, if any, to the diversion including cost factors and feasibility of such alternatives; (iii) the relationship of an existing or proposed diversion to economic development or jobs; and (iv) the practicality of, and potential for, achieving ecological benefit from restoring stream flow to the specific river or stream system. Comments were accepted by email and hard copy, and a total of seven comment letters were received. The list of individuals and organizations who submitted comment letters on the proposed regulations is included as Appendix III.

This report summarizes the principal reasons in support of the classifications, the principal considerations raised in opposition to the classifications and the reasons for rejecting or modifying a proposed classification.

ADMINISTRATIVE REQUIREMENTS

RCSA Sec. 26-141b-5 required a minimum 90 day public notice period for public comment on proposed classifications. The Commissioner, in consultation with the Commissioner of Public

Health and with technical assistance from the Office of Policy and Management, Department of Economic and Community Development, and the Department of Agriculture: (1) considered such comments and adopted classifications for the river or stream segment thereof as identified in the public notice; and (2) prepared a document summarizing the principal reasons in support of the classifications, the principal considerations raised in opposition to the classifications and the reasons for rejecting or modifying a proposed classification. Notice of the adopted classifications shall be published in the Connecticut Law Journal upon issuance of this report.

BACKGROUND

The Connecticut Stream Flow Standards and Regulations, RCSA Sections 26-141b-1 to 26-141b-8, inclusive, became effective December 12, 2011. The regulations apply to all rivers and streams in the state. They establish stream flow standards that preserve and protect aquatic life, fish, and wildlife dependent on flow; promote public recreation; are based to the maximum extent practicable on natural variations of flow while meeting societal needs; and are based on the best available science.

The regulations require two separate but related activities: First, they require that all rivers and streams be classified into stream flow classes. Each stream flow class represents a balancing of human use and ecological conditions appropriate to the respective class. The regulations establish the public process for classifying streams and identify the human use and ecological considerations for determining the classification appropriate to specific waters. Second, they require owners or operators of dams that control stream flow to comply with release rules that apply to a stream once it has been classified. The releases are required to begin no later than ten years from classification to allow current users time to adjust their operations to comply with the new regulations without unduly disrupting the supply of water available for human use.

In accordance with the RCSA Sec. 26-141b-5, the Commissioner, after consultation with the Commissioner of Public Health, prepared mapping of proposed classifications indicative of the degree of human alteration of natural stream flow for the streams in the South Central Coastal River Basin. The proposed stream flow classification of a stream or river segment was based on ecological conditions and human use characteristics. These included factors such as location, size and use of dams; existing registered or permitted withdrawals; existing and potential use of the water for public water supply; land use and land cover within the watershed; habitat indicators and other conditions. The complete list of factors and considerations can be found in Appendix IV.

The Commissioner utilized the best available data sources related to the factors and the state's Geographic Information System (GIS) for the analyses and to propose the initial stream flow classifications. The methodology for establishing the proposed classifications is attached as Appendix V. This methodology was developed in conjunction with the Science & Technical Work Group formed during development of the regulations and was well received by water professionals in demonstrations and presentations. Minor edits have been made to the methodology to clarify the process as a result of comments, as noted below.

The Department shared and solicited comment on the proposed initial classifications from the

Connecticut Department of Public Health (DPH) on a preliminary basis in December, 2014, and held a formal consultation with DPH in March, 2015. DPH provided comment and information on potential future public water supplies, which was then incorporated into the proposed classifications to the extent possible prior to issuance of the public notice. The Department also solicited information on future potential sources with significant investment from each of the large water companies in the basin in November, 2014. These water companies included Bristol Water Department, Connecticut Water Company, Meriden Water Division, South Central Regional Water Authority, Southington Water Department, Valley Water Systems, and Wallingford Water Department.

The Department recognizes that while it used the best available data for the proposed initial classifications, the data could be supplemented at the local level. The public notice and comment period allowed the public to provide additional or more accurate segment-specific data so that the proposed classifications could be modified as appropriate in accordance with the factors for consideration.

CONSIDERATION OF PUBLIC COMMENT

Seven comment letters were received (see Appendix III). The full comment letters, as submitted, can be obtained online at www.ct.gov/deep/streamflow . In general, the comments were focused on providing additional data on specific stream segments for consideration in the classification of that segment. All the segment-specific data provided were evaluated and factored into the proposed classification for that segment where appropriate. The comments discussed below are paraphrased for brevity; however, every effort has been made to preserve the original intent of the comment. Comments focused on similar issues and common themes are grouped together. The comment letter numbers from Appendix III are listed in parentheses at the end of each comment to identify the commenter.

GENERAL COMMENTS

1. Comment: Two commenters expressed the desire for the classifications to be flexible as conditions change in the future. Both as restoration efforts through recent watershed based plans for the Quinnipiac and West Rivers are implemented to elevate segments to higher classes (Letter #3); and as future water supply sources are developed, that segments are re-classified to Class 3 to reflect this (Letter #5).
Response: The regulations provide two processes to change the stream flow classification after the initial classifications are complete: (1) a petition process that anyone can initiate under RCSA Section 26-141b-5(d), and (2) an update of the mapping by the Commissioner under RCSA Section 26-141b-5(e). Both of the options allow the stream flow classifications to be modified in response to changing environmental or water use conditions.

2. Comment: The classifications, stream locations, aquifer locations, etc., are unverifiable by the public. The public needs to be able to see all the data layers that went into the map, for example, an overlay of the Aquifer Protection Areas, and better locational data, like Google Earth landmarks. It is very difficult to navigate and to check the accuracy of the data from the information provided. (Letter #6).

Response: The DEEP web mapping application, maps, and displayed classification factors provide a very transparent process. The classification and data for thousands of stream segments can be reviewed as you zoom in. All of the 18 classification factors consistent with the regulations are shown and the supporting map sources used are described in the methodology for determining classification (Appendix V). The map application instructions are provided to start, find and zoom in to areas of detailed interest. DEEP offers an informational session as well as paper maps if requested to make the mapping as accessible as possible. However, DEEP will continue to look at possible improvements to the base maps, displaying resource areas, navigation features, and instructions. (Also see responses to comments 3, 6 and 7)

3. Comment: DEEP should indicate uncertainty for those classifications based on unverified information. This includes cases in which DEEP has the data used to verify information on the map and could review the conclusions and provide this data to the public, reports or data that is being withheld for security reasons, and cases in which a proposed water supply development conflicts with other state goals, such as protection of unique habitat. The outcome of conflicts may affect a classification, but the outcome is not known. (Letter #6)
Response: The DEEP web mapping application, shows all proposed classifications and indicates all 18 classification factors in the stream flow regulations that are applicable to each classification in a transparent process. The data and mapping sources for each factor used are described in the methodology for determining classification (Appendix V) and many of those mapping sources are available to the public in paper and electronic format. All other information and reports used are available to the public except those specific limited data related to security which are restricted under the Freedom of Information Act. In cases where proposed water supply development conflicts with other state goals, all 18 classification factors are used in accordance with the stream flow regulations to balance conflicting values. The Statement of Reasons report also provides the explanation for the use of any new or additional data submitted as part the public comments. (Also see background section and responses to comments 2, 6, and 7)

4. Comment: Recommend that DEEP post comments to the website as they come in so that others may respond if needed, and that the mapping application be updated as the comments come in so multiple people don't need to comment on the same issue. (Letter #6)
Response: It is not feasible for the Department to commit to continual updates during the public comment period. As required under the regulations, a summary of the comments and responses are provided herein. It should also be noted that we have received few duplicative comments to date.

5. Comment: The Natural Diversity Database and Wildlife Action Plan should be taken into account in the classifications. (Letter #6)
Response: These are not listed in the regulations as factors for consideration in classification. However, if there is specific information provided for particular segments that are pertinent to stream flow, the Department can take that into consideration under "Other factors".

6. Comment: The Aquifer Protection Areas need to be shown on the map so that the exact boundaries of where the Aquifer Protection Areas and streams intersect are clear. (Letter #6)
Response: Please note that if the Aquifer Protection Area intersects a stream segment, then the entire segment (as defined in the methodology in Appendix V), becomes Class 3, not just the

portion of the stream segment within the Aquifer Protection Area. The methodology (Appendix V) has been updated to clarify this. (Also see response to comment #2 above).

7. Comment: Recommend that any standard of criterion in the classification that is not based on publically-accessible data be dropped from the classification process. (Letter #6)
Response: The regulations dictate the data that is to be taken into consideration in the methodology, and some of the critical data that affect stream flow is not publically available due to security concerns. DEEP has summarized and provided data to the extent possible given the security restrictions under CGS Section 1-210(b)(19).

8. Comment: It is noted that in review of the previously classified Thames, Pawcatuck, & Southeastern Coastal Basins, the final mapping was updated in response to comment on public water supplies. The classifications of interest were updated to Class 3, however, they are not shown as "automatic 3s". (Letter #4)
Response: The "automatic" class 3 designation is used only during the public review to facilitate a visual of the classification methodology. The final mapping will not distinguish these from other class 3 segments as automatic class 3 is not a stream flow class in the Stream Flow Regulations. DEEP is developing a map of all the final classifications as each basin is completed that will show stream flow classes 1, 2, 3 and 4. DEEP anticipates this final map, which will currently include the Thames, Pawcatuck, Southeastern Coastal and South Central Coastal Basins, will be published to the DEEP website by August, 2016.

9. Comment: The DPH was concerned that all future sources of drinking water were not identified and used in the proposed classifications, requested further information on significant investment, and suggested a streamlined off-ramp for future sources. (Letter #7)
Response: Identified future drinking water sources were considered in accordance with the stream flow regulations. The detailed process for considering the sources of information is described in the methodology for determining classification and additional clarifications have been added (See Appendix V). DEEP shared and solicited comment on the proposed initial classifications from the DPH in December, 2014 and again in March 2015. DPH provided comment and information on potential future public water supplies, which was then incorporated into the proposed classifications to the extent applicable. Specific locational information is necessary to assign factors to stream segments, so a future source identified only by basin is too general to consider in the classifications. DEEP also solicited information from each of the large water companies in the basin on future potential sources with significant investment in November, 2014. Concerning a streamlined off ramp, the regulations do have off-ramps to preserve margin of safety provided in RSCA Sec. 26-141b-6 and include: automatic drought release reductions and 50% release reductions for ten years if margin of safety is low, and allowances to reduce releases by more than 50% and for more than ten years with approval. These off-ramps are in addition to the exemptions already provided in RSCA Sec. 26-141b-3(c), variances and the ten-year compliance schedule to plan for a new source if necessary. Finally, a petition process is available to change a classification if conditions change.

PRINCIPAL REASONS IN SUPPORT

No comments in support of specific classifications were provided. However, acknowledgment

was made of the "major effort" by the Department in proposing the classifications (Letter #6) and comment that in general, the preliminary classifications appear to be fairly accurate (Letter #4).

PRINCIPAL CONCERNS OR CONSIDERATIONS RAISED IN OPPOSITION

A number of commenters provided new or revised data for consideration on specific stream segments. The data were evaluated and factored into the proposed classification for that segment where applicable, in many cases resulting in a change to the proposed classification. A table listing the segment-specific comments and response to them can be found in Appendix VI. (Letters #1 - 5)

FINALIZATION OF CLASSIFICATIONS

This Statement of Reasons document was submitted in draft form to the Commissioners of Public Health, Agriculture and Economic & Community Development and to the Secretary of the Office of Policy & Management for review and comment. Only the DPH commented; and below are the comments and responses:

A. Comment: DPH recommends that any potential future water supply without a specific stream segment linkage or significant investment that is listed pursuant to CGS Section 25-33q be given a streamlined 'off-ramp' if, in the future, its use becomes necessary.
Response: It is unclear what sort of off-ramp is envisioned in this comment. Development of a future source will require a diversion permit, which will establish release requirements appropriate to the resources and needs, and would be exempted from the release requirements in the stream flow regulations. This comment and response is further covered above under Comment #9 above.

B. Comment: Identify the criteria that are involved in determining whether significant investment has been demonstrated. The DPH is concerned that disregarding future sources due to perceived lack of evidence will eliminate the potential use of high quality sources in the future due to a class 1 or 2 designation.
Response: The discussion of significant investment is covered in the classification methodology (Appendix V, page 21 of this document), which has been expanded to clarify what is considered significant investment.

C. Comment: Quantification of the overall impact to public water systems may be warranted given the loss of existing current safe daily yield and future sources of supply. It is suggested that this information be gathered and shared so that the entire planning, economic and financial impact to public drinking water statewide is understood.
Response: While such an analysis would be useful, it is not required under the Streamflow Regulations. It should be noted that the regulations adoption process included a broad economic impact analysis. In addition, the Stream Flow Regulations have many alternatives built in to balance public water supply needs with ecological health. Also see response to Comment #9 above.

Taking into consideration comments from the Department of Public Health, the report was then finalized and final changes were made to the classification maps, as detailed in the table in Appendix VI of this document. The maps will continue to be available on the Department web site at www.ct.gov/deep/streamflow.

CONCLUSIONS

The Commissioner, after consultation with the Commissioner of Public Health and consideration of the factors listed in RCSA Sec. 26-141b-5, prepared a map of proposed classification indicative of the degree of human alteration of natural stream flow for the South Central Coastal River Basin. The proposed classifications were public noticed as required and an interactive map of the proposed classifications was made available online. Submitted public comments were subsequently considered, and a number of classifications were modified as a result of the information provided. The final mapping will be made available through the Department web site at www.ct.gov/deep/streamflow and notification of the availability of the adopted classifications will be published in the Connecticut Law Journal. Regulated dam owners will be required to begin making releases in accordance with RCSA Sec. 26-141b-6 ten years after notice of the final classifications is published in the Connecticut Law Journal.

August 2, 2016

Date

Michael Sullivan
Deputy Commissioner

APPENDIX I

PUBLIC NOTICE OF PROPOSED STREAM FLOW CLASSIFICATIONS
SOUTH CENTRAL COASTAL RIVER BASIN

In accordance with the Connecticut Regulations of Connecticut State Agencies Section 26-141b-5, the Commissioner of the Connecticut Department of Energy and Environmental Protection hereby gives notice that the Department, through consideration of the factors required by the regulations, has prepared maps of proposed Stream Flow Classifications for the South Central Coastal River Basins.

The maps are available on-line at www.ct.gov/deep/streamflow. Such maps include river and stream segments in the following towns: Ansonia, Berlin, Bethany, Branford, Bristol, Cheshire, Chester, Clinton, Deep River, Derby, Durham, East Haven, Essex, Guilford, Haddam, Hamden, Killingworth, Madison, Meriden, Middlefield, Middletown, Milford, New Britain, New Haven, North Branford, North Haven, Old Saybrook, Orange, Plainville, Prospect, Southington, Wallingford, Westbrook, West Haven, Wolcott, and Woodbridge.

Public information sessions will be held, as follows:

South Central Regional Council of Governments
127 Washington Avenue, 4th Floor West
North Haven, CT 06473
Tuesday, June 9, 2015

2 sessions: 2:00 – 4:00 pm and 6:00 – 8:00 pm

A short presentation on how the Stream Flow Classification maps were developed will be given, copies of the maps will be available for inspection, and Department staff will be on hand to answer questions at these information sessions.

The proposed Stream Flow Classification of a stream or river segment is based on ecological conditions and human use characteristics, and determines flow management goals and applicable flow standards for that segment. Proposed Stream Flow Classifications were developed using known information on factors indicative of the degree of human alteration of natural stream flow, environmental flow needs and existing and future needs for public water supply.

The public may submit additional information or comments for the Commissioner's consideration on the proposed classification of a specific river or stream system pertaining to, but not limited to: (i) the factors for consideration in the regulations; (ii) the impact of the proposed classification on any prior investment made to develop a permitted or registered diversion and the alternatives, if any, to the diversion including cost factors and feasibility of such alternatives; (iii) the relationship of an existing or proposed diversion to economic development or jobs; and (iv) the practicality of, and potential for, achieving ecological benefit from restoring streamflow to the specific river or stream system. Written comments may be submitted by email to deep.streamflowclass@ct.gov, or may be mailed to Robert Hust, Department of Energy & Environmental Protection, Bureau of Water Protection and Land Reuse, 79 Elm Street, Hartford,

Connecticut, 06106-5127. The Department is accepting additional information or written comments on the proposed Stream Flow Classifications until Friday, August 21, 2015.

Additional information on the Stream Flow Standards and Classifications is available on the Department's website at: www.ct.gov/deep/streamflow . Anyone requiring more information may contact the Department by email at deep.streamflowclass@ct.gov or by phone at 860-424-3020.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action and Equal Opportunity Employer that is committed to complying with the Americans with Disabilities Act. To request an accommodation contact us at 860-418-5910 or email deep.accommodations@ct.gov.

APPENDIX II

Mailing List for Public Notice of Proposed Stream Flow Classifications – Southeast Coastal, Pawcatuck & Thames Major River Basins
Mailed May 14, 2015

The Honorable David T. Cassetti, Mayor
City of Ansonia
253 Main Street
Ansonia CT 06401

The Honorable Rachel Rochette, Mayor
Town of Berlin
240 Kensington Road
Berlin CT 06037

Ms. Denise McNair, Town Manager
Town of Berlin
240 Kensington Road
Berlin CT 06037

The Honorable Derrylyn Gorski, First Selectman
Town of Bethany
40 Peck Road
Bethany CT 06524-3338

The Honorable Jamie S Cosgrove, First Selectman
Town of Branford
1019 Main Street
P O Box 150
Branford CT 06405-0150

The Honorable Ken Cockayne, Mayor
City of Bristol
111 North Main Street
Bristol CT 06010

Mr. Michael Milone, Town Manager
Town of Cheshire
84 South Main Street
Cheshire CT 06410

The Honorable Timothy Slocum, Mayor
Town of Cheshire
84 South Main Street
Cheshire CT 06410

The Honorable Edmund Meehan, First Selectman
Town of Chester
203 Middlesex Avenue
Chester CT 06412-0218

The Honorable William W Fritz Jr., First Selectman
Town of Clinton
54 East Main Street
Clinton CT 06413

The Honorable Richard H. Smith, First Selectman
Town of Deep River
174 Main Street
Deep River CT 06417

The Honorable Anita Dugatto, Mayor
City of Derby
1 Elizabeth Street
Derby CT 06418

The Honorable Laura L. Francis, First Selectman
Town of Durham
35 Town House Road
P O Box 428
Durham CT 06422-0428

The Honorable Norman Needleman, First Selectman
Town of Essex
29 West Avenue
Essex CT 06426

The Honorable Joseph S Mazza, First Selectman
Town of Guilford
31 Park Street
Guilford CT 06437

The Honorable Melissa J. Schlag, First Selectman
Town of Haddam
Town Office Building
30 Field Park Drive
Haddam CT 06438

The Honorable Scott D. Jackson, Mayor
Town of Hamden
2750 Dixwell Avenue-Hamden Government Center
Hamden CT 06518

The Honorable Catherine Iino, First Selectman
Town of Killingworth
323 Route 81
Killingworth CT 06417

The Honorable Filmore Mcpherson, First Selectman
Town of Madison
8 Campus Drive
Madison CT 06443-2563

The Honorable Manuel A. Santos, Mayor
City of Meriden
142 East Main Street
Room 124
Meriden CT 06450

Mr Lawrence J. Kendzior, City Manager
City of Meriden
142 East Main Street
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The Honorable Jon A. Brayshaw, First Selectman
Town of Middlefield
393 Jackson Hill Road
P O Box 179
Middlefield CT 06455-0179

The Honorable Daniel T. Drew, Mayor
City of Middletown
245 Dekoven Drive
Middletown CT 06457

The Honorable Benjamin G. Blake, Mayor
City of Milford
110 River Street
Milford CT 06460

The Honorable Erin Stewart, Mayor
City of New Britain
27 West Main Street
New Britain CT 06051

The Honorable Toni Harp, Mayor
City of New Haven
165 Church Street
New Haven CT 06510

Mr. Michael T. Paulhus, Town Manager
Town of North Branford
909 Foxon Road
P O Box 287
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The Honorable Michael J. Freda, First Selectman
Town of North Haven
18 Church Street
North Haven CT 06473

The Honorable Carl P. Fortuna, Jr., First Selectman
Town of Old Saybrook
302 Main Street
Old Saybrook CT 06475

The Honorable James M. Zeoli, First Selectman
Town of Orange
617 Orange Center Road
Orange CT 06477

Mr. Robert E. Lee, Town Manager
Town of Plainville
1 Central Square
Plainville CT 06062

The Honorable Katherine M. Pugliese, Chairwoman
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Town of Plainville
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The Honorable Robert J. Chatfield, Mayor
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Prospect CT 06712

The Honorable Michael A. Riccio, Chairman Town Council
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Mr. Gary Brumback, Town Manager
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The Honorable William W. Dickinson, Jr., Mayor
Town of Wallingford
45 South Main Street
Wallingford CT 06492-0383

The Honorable Noel Bishop, First Selectman
Town of Westbrook
866 Boston Post Road
Westbrook CT 06498

The Honorable Edward M. O'Brien, Mayor
City of West Haven
355 Main Street
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The Honorable Thomas G. Dunn, Mayor
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10 Kenea Avenue
Wolcott CT 06716

The Honorable Ellen Scalettar, First Selectman
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11 Meetinghouse Lane
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37 Northwest Drive
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195 Long Hill Road
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Edward Bowman
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Bowman
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APPENDIX III

List of Individuals Who Submitted Comment Letters

Letter[1]	Submitted by
1	Frank DeLeo, Chair, West River Restoration and Flood Mitigation Committee, Woodbridge
2	John Hudak, South Central Connecticut Regional Water Authority, New Haven
3	Mary M. Mushinsky, State Representative, 85th District, Hartford
4	David L. Radka, Connecticut Water Company, Clinton
5	Erik A. Krueger, Town of Wallingford Water Division, Wallingford
6	Margaret Miner, Rivers Alliance of Connecticut, Litchfield
7	Ellen Blaschinski, Branch Chief, Regulatory Services Branch, CT Department of Public Health

[1] The full text of the letters can be found at www.ct.gov/deep/streamflow.

APPENDIX IV

List of Factors for Consideration in Classification
Excerpt from the Stream Flow Standards and Regulations

RCSA Sec. 26-141b-5. Adoption of river or stream system classifications.

(a) The commissioner, after consultation with the Commissioner of Public Health, shall prepare a map of proposed classifications indicative of the degree of human alteration of natural stream flow after consideration of the following factors:

(1) A river or stream segment that is immediately downstream of an existing dam that impounds a public water supply source registered or permitted in accordance with section 22a-365 to 22a-378a of the Connecticut General Statutes, or that intersects a Level A aquifer protection area as approved by the Commissioner pursuant to section 22a-354d of the Connecticut General Statutes shall not be classified as Class 1 or 2;

(2) A river or stream segment that is immediately downstream of an existing dam that impounds a water supply source registered or permitted in accordance with section 22a-365 to 22a-378a of the Connecticut General Statutes, other than a public water supply, shall not be classified as Class 1 or 2;

(3) Size and location of permitted and registered diversions within the watershed, to the extent that these diversions, if operated to the maximum extent allowed in accordance with the provisions of the permit or registration, may affect the physical characteristics of flow, volume or velocity of water in the stream channel or may alter the daily, seasonal or inter-annual flow characteristics of the river or stream system;

(4) Size and location of dams, reservoirs and other impoundments within the watershed, to the extent that these dams, reservoirs and other impoundments may affect the physical characteristics of flow, volume or velocity of water in the stream channel or may alter the daily, seasonal or inter-annual flow characteristics of the river or stream system;

(5) Size and location of return flows of water within the watershed, to the extent that these return flows may affect the physical characteristics of flow, volume or velocity of water in the stream channel or may alter the daily, seasonal or inter-annual flow characteristics of the river or stream system;

(6) Existing land cover in the upstream watershed, to the extent that human development and associated impervious land cover may affect the physical characteristics of flow, volume or velocity of water in the stream channel or may alter the daily, seasonal or inter-annual flow characteristics of the river or stream system;

(7) Planned land use in the upstream watershed, as contained in an applicable local or state plan, including the state plan of conservation and development, to the extent that future human development and associated impervious land cover may affect the physical characteristics of flow, volume or velocity of water in the stream channel or may alter the daily, seasonal or inter-

annual flow characteristics of the river or stream system;

(8) Available data related to the distribution and abundance of plant and animal species, such as wild trout, which are dependent upon stream and riparian habitat;

(9) Available data related to the presence of anadromous fish runs or where anadromous fish are actively being restored or are targeted for restoration;

(10) Existence of trout management areas and other recreational resources;

(11) The location of stream gages operated and maintained by the U.S. Geological Survey that have been identified by the commissioner in consultation with the U.S. Geological Survey as hydrologic index reference gages;

(12) Wild or scenic water designation by the state or federal government, or waters predominately within state forests, wildlife management areas, natural heritage areas or other large contiguous areas protected for conservation purposes, including protection for public water supply purposes;

(13) River or stream systems or segments that are identified as a potential source of water supply in an approved coordinated water system plan prepared in accordance with section 25-33h of the Connecticut General Statutes or a water supply plan in effect as of the date of such mapping, to the extent that these potential water supply sources, if developed, may affect the physical characteristics of flow, volume or velocity of water in the stream channel or may alter the daily, seasonal or inter-annual flow characteristics of the river or stream system;

(14) River or stream systems or segments that are identified as a potential source of water supply in an approved coordinated water system plan prepared in accordance with section 25-33h of the Connecticut General Statutes or a water supply plan in effect as of the date of such mapping and where there has been a significant investment toward development of such potential source, including but not limited to capital expenditures, scientific or engineering studies or land acquisition cost, shall not be classified as Class 1 or 2;

(15) River or stream systems or segments that are identified by the Commissioner of Public Health pursuant to Section 59 of Public Act 11-242;

(16) Practicality of, and potential for, restoring stream flow patterns to achieve consistency with the Stream Flow Standards and Regulations due to the extent of prior channel modification or the impact of development and impervious cover in the watershed as of the date of such mapping;

(17) Publicly available data regarding the impact of stream classification on a community water supply's margin of safety; and

(18) Any other factor indicative of the degree of human alteration of natural stream flow.

APPENDIX V

METHODOLOGY FOR DEFINING PRELIMINARY STREAM FLOW CLASSIFICATIONS PURSUANT TO SECTIONS 26-141B-1 TO 26-141B-8 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES

Revised: 2 May 2016

INTRODUCTION

The State of Connecticut Stream Flow Standards and Regulations (*Sections 26-141b-1 to 26-141b-8 of the Regulations of Connecticut State Agencies*) require that the Department of Energy and Environmental Protection (CT DEEP) in consultation with the Department of Public Health (DPH) prepare a State-wide map of proposed classifications indicative of the degree of human alteration of natural stream flow. The regulations define four stream flow class standards (See Table 1). The regulations include consideration of 18 factors when adopting river or stream system classifications (***Sections 26-141b-5 Adoption of river or stream system classifications*).**

The process described below represents the data and methodology used to evaluate those 18 factors to assign stream segments a proposed stream flow class for public comment. The numbers in parentheses below reflect the stream flow classification factor listed under Sec. 26-141b-5(a). Sec. 26-141b-2 defines a stream segment as a discrete, contiguous reach of river or stream channel for which a uniform classification has been adopted. For the purposes of proposing classifications, stream segments were derived from the National Hydrography Dataset (NHD) developed at a 1:24,000 scale (1 inch = 2000ft) by USGS for the State of Connecticut using Wrap Hydro tools (http://www.crwr.utexas.edu/gis/gishydro03/WRAPhydro/WRAPhydro.htm), an extension for ArcGIS. There are approximately 36,000 stream segments in the State. The average length of the stream segments is approximately 0.3 miles long.

Stream flow Class	Stream Condition	Narrative Standard
1	Free Flowing Stream	Maintain stream flow and water levels to support and maintain habitat conditions supportive of an aquatic, biological community characteristic typically of free-flowing stream systems
2	Minimally Altered	Maintain stream flow and water levels to support and maintain habitat conditions supportive of an aquatic, biological community characteristic minimally altered from that of typically of free-flowing stream systems
3	Moderately Altered	Maintain stream flow and water levels to support and maintain habitat conditions supportive of an aquatic, biological community characteristic moderately altered from that of typically of free-flowing stream systems
4	Altered	Exhibit substantially altered stream flow conditions caused by human activities to provide for societal needs

Table 1: Narrative Standard for Each Stream flow Class

This process will provide all stream segments throughout the state with a class of 1, 2, or 3 designation. CTDEEP is not initially proposing any Class 4 designations; as such designation requires specific information on societal needs, economic costs and environmental impacts that will be considered on a case by case basis.

The process described below entails three steps. The first is to target streams identified in the regulations that shall not be classified as Class 1 or 2. These streams are classified as a Class 3 in this process. Steps 2 and 3 are then used to assign proposed classifications to the remaining streams. The second step involves assigning the remaining streams a classification value based on an index that characterizes current stream flow conditions. The third involves modifying (increasing or decreasing) a stream flow classification based on the additional factors for consideration which describe unique ecological attributes or goals for a particular stream segment.

STEP 1: CLASS 3 FACTORS

Description: *Any streams meeting the criteria for the factors described below are assigned a Class 3 designation.*

(1) A river or stream immediately downstream of an existing dam that impounds a public water supply source or intersects a Level A aquifer protection area.

A public water supply source is a water body listed as reservoir in the State of Connecticut DPH database. Immediately downstream of a dam is defined as the stream segments below the reservoir where the annual Q99 flow is less than two times the annual Q99 flow going into the reservoir. The annual Q99 flow is a very low flow where the naturally occurring daily stream flow that is predicted to equal or exceeded on 99 percent of the days in a year. The annual Q99 stream flow is estimated using methods developed by the United States Geological Survey (USGS) (Ahern 2010).

Level A Aquifer Protection Areas for a public water supply well are delineated in accordance with Connecticut General Statutes (CGS) Section 22a-354c or 22a-354z. If the Level A area intersects a portion of a stream segment, the full segment is designation Class 3.

(2) A river or stream immediately downstream of an existing dam.

Dams are defined as consumptive diversions identified as an impoundment in the CT DEEP diversion spatial dataset. Immediately downstream of an existing dam is defined in the same way as in factor (1), see above.

(14) River or stream identified as potential source of water supply with significant investment.

Water supply Plans prepared in accordance with CGS Section 25-32d and 25-33h, as well as the DPH "High Quality Source" list compiled under CGS 25-33q, were reviewed in detail for

potential future sources of public water supply. In order to consider a potential source, a specific location had to be available to associate the potential source with a specific stream segment. Locations for the proposed sources were identified in the referenced planning documents and mapped in ArcGIS for consideration in the classification system. Information on significant investment was also solicited from the DPH and the water companies within the basin of consideration because the Water Supply Plans do not typically contain documentation of investment in the future sources.

To determine which of the proposed sources had a "significant investment", CT DEEP used any available information on diversion permitting status, capital expenditures, scientific or engineering studies and land acquisition by the water system. In addition to the sources identified by such information, the timeframe within which the proposed source was needed was considered, and even if there was no information on permitting status, etc., it was assumed that sources proposed within the five-year planning period likely had "significant investment", as use was imminent. Proposed sources with "significant investment" were then given a Class 3 designation under section 26-141b-5(a)(14). The only exception to this were proposed sources that were small (< 0.05 mgd) bedrock wells. These are below the threshold for a diversion permit and are considered unlikely to have a significant impact on stream flow. The proposed sources for which the planning period is further out than five years or for which no information on investment status was available are given consideration in the classification system under the "Other Factors" discussed below in Step 3 of the process.

STEP 2: HYDROLOGIC STRESSOR INDEX (HSI) FACTORS

Description: *For all remaining unassigned stream segments (i.e. those not assigned to stream flow class 3 in step 1), a class is assigned based on an index that combines the four factors below. Each factor is given a metric value of 1, 2 or 3. Metric values are assigned based on the potential degree of alteration to natural stream flow conditions. A '1' indicates little or no stress to natural stream flow conditions, a '2' indicates minimally altered stream flow conditions and a '3' indicate high stress and alteration from natural stream flow conditions. The values for each of the four metrics are added together to obtain a Hydrologic Stressor Index (HSI) value. The HSI values ranges from 4 to 12. Analogous to the metrics, lower HSI values indicate that in-stream and surrounding drainage area conditions do not stress or alter natural stream flow, whereas higher index values indicate that conditions significantly stress and alter stream flow. HSI values are partitioned into three groups corresponding to a preliminary stream class. An HSI value of 4 - 5 represents Class 1 or 'natural conditions', values of 6 - 8 represent Class 2 or 'near natural conditions', and values of 9 - 12 represent Class 3 of 'altered conditions.' A description of how each metric was defined and calculated is provided below.*

(3) Size and location of permitted and registered diversions within the watershed.

Registered diversions listed in CT DEEP diversion spatial data layer as 'consumptive' and permitted diversion listed as 'consumptive' and 'active' were included in the analysis. Calculated the maximum withdrawal amount and divided by the annual Q99 to calculate the percent of Q99 flows withdrawn.

Metric Value	Maximum Withdrawal / Q99
1	0
2	0 – 100%
3	>100%

(4) Size and location of dams, reservoirs and other impoundments within the watershed.

Large dams using a combined spatial dataset that included information from CT DEEP database and National Inventory of Dams. Large dams were defined as those that were greater or equal to 15 ft in height or having a storage capacity greater than or equal to 15 acre-feet. The number of large dams was divided by the total number of upstream stream miles.

Metric Value	# of Dams / Stream Mile
1	0
2	> 0 – 0.1
3	> 0.1

(5) Size and location of return flows of water within the watershed.

Only municipal NPDES discharges were included in the analysis. Calculated the design flow of the sewage treatment plant divided by annual Q99 to calculate the percent return flow greater than Q99 flows.

Metric Value	Return Flow / Annual Q99
1	0
2	0 – 75%
3	>75%

(6) Existing development and impervious cover in the upstream watershed.

2006 Impervious Cover dataset from the National Land Cover Dataset. Calculated the percent impervious cover in the upstream watershed.

Metric Value	Percent IC
1	0 – 2%
2	2 – 5%
3	> 5 %

STEP 3: ADDITIONAL FACTORS

Description: *Applies to streams that were not classified as a Class 3 in step 1. Includes additional factors in the regulation that can modify (increase the stream flow class (i.e. 1 to 2) or decrease the stream flow class (i.e. 2 to 1)) the classification value calculated using the HSI. The other factors primarily represent a present or future goal for a stream segment or a unique ecological attribute. Each factor is defined as an increaser or decreaser. The total number of increasers and decreasers were added for each stream segment. If there were more increasers than decreasers present in a stream segment than the stream class was increased up by one class (i.e. 2 to 3). If there were more decreasers present in a stream segment than the stream class was decreased by one class (i.e. 2 to 1). Note that the regulations did not provide for any weighting of the factors, so all were given equal weight.*

(7) Planned land use in the upstream watershed for future development. (↑ Increaser)

Stream segment that intersects a growth area defined in the Connecticut Plan of Conservation and Development.

(8) Available data on species that are dependent upon stream and riparian habitat. (↓ Decreaser)

These were defined as stream segments that where high densities of wild brook trout (> 73 wild brook trout/ hectare) have been sampled.

(9) Available data related to the presence or restoration of anadromous fish runs. (↓ Decreaser)

Stream segments that have been identified by CT DEEP where anadromous fish runs occur or are being actively restored or targeted for restoration.

(10) Existence of trout management areas. (↓ Decreaser)

Stream segments that have been identified by CT DEEP as trout management areas.

(11) The location of stream gages operated by USGS that have been identified as an index station. (↓ Decreaser)

Stream segments within the watershed upstream of USGS gages identified as an index station in Ahern 2007.

(12) Areas designated as protected for conservation purposes. (↓ Decreaser)

Stream segments that intersect with the most recent CT DEEP protected open space mapping (POSM) spatial dataset or State conservation area identified in the CT DEEP property spatial dataset.

(13) River or stream segments identified as a potential source of water supply; and **(15)** River or stream segments identified by the DPH pursuant to Section 59 of Public Act 11-242. (↑ Increaser)

Stream segments containing a potential source identified in a Water Supply Plan or on the "High Quality Source" list by the CT DPH in accordance with CGS 25-33q, and planned for development beyond the five-year planning period. (Sources proposed for development within the five-year planning period were considered a Class 3 under Step 1 above).

(16) Practicality and / or potential for restoring stream flow patterns to achieve consistency with the Stream Flow Standards and Regulations due to the extent of prior channel modification or the impact of development and impervious cover in the watershed as of the date of such mapping. (↓ Decreaser or ↑ Increaser)

Factor number 16 will be evaluated by the Department when adopting classifications on a case by case basis.

(17) Publically available data regarding the impact of stream classification on a community's water supply's margin of safety. (↑ Increaser)

Factor number 17 will be evaluated by the Department when adopting classifications on a case by case basis. However, numerous off-ramps to reduce releases when margin of safety is impacted were provided in the regulations to assist water companies, so this has little impact on the stream flow classifications.

(18) Any other factor indicative of the degree of human alteration of natural stream flow. (↓ Decreaser or ↑ Increaser)

Factor number 18 will be evaluated by the Department when adopting classifications on a case by case basis.

LITERATURE CITED

Ahearn, E.A., 2007, Flow durations, low-flow frequencies, and monthly median flows for selected streams in Connecticut through 2005: U.S. Geological Survey Scientific Investigations Report 2007–5270, 33 p.

APPENDIX VI
TABLE OF SEGMENT-SPECIFIC COMMENTS OR DATA AND RESPONSE

Segment	Stream	Town	Comment	Response	Letter
104001161	West River	Woodbridge	Documentation provided of presence of native Brook Trout. In addition, removal of the Pond Lily dam would improve migratory fish and trout habitat.	Segment remains Class 3 because of upstream public water supply reservoir, in accordance with the regulations. However, presence of wild brook trout will be noted in the metrics.	1
104001305	Branford River	North Branford	The location of the segment needs to be adjusted. The actual stream channel proceeds northward from where the bend begins to the existing waterworks for making water releases as evidenced by the topographic contours. The eastern 3,000 +/- foot section shown after the eastward bend is actually a spillway overflow channel that is dry except during typically infrequent occasions when the reservoir is spilling. This section of the segment is not a stream and should not be classified.	Comments provided support adjustment of the stream segment location.	2
104000560	Farm River	North Branford	Segment is downstream of a diversion dam utilized for public water supply and is misclassified as Class 2.	This structure was not in DEEP's dam layer - Data provided support a Class 3 designation.	2
104000644	Unamed trib	North Branford	Segment is downstream of a diversion dam utilized for public water supply and is misclassified as Class 1.	This structure was not in DEEP's dam layer - Data provided support a Class 3 designation.	2
104000763	Gulf Brook	North Branford	Segment is downstream of a diversion dam utilized for public water supply and is misclassified as Class 1.	This structure was not in DEEP's dam layer - Data provided support a Class 3 designation.	2
104000995	Little Meadow Brook	Guilford	Segment is downstream of a diversion dam utilized for public water supply and is misclassified as Class 1.	This structure was not in DEEP's dam layer - Data provided support a Class 3 designation.	2
104001480	Farm River	East Haven	Segment is downstream of a diversion dam utilized for public water supply and is misclassified as Class 2.	This structure was not in DEEP's dam layer - Data provided support a Class 3 designation.	2
104001646	Farm River	East Haven	Segment is downstream of a diversion dam utilized for public water supply and is misclassified as Class 2.	This structure was not in DEEP's dam layer - Data provided support a Class 3 designation.	2

104000784	Sargent River	Woodbridge	Presents detailed case for Class 4 segment	The comments provide evidence to support change to a Class 4 in accordance with the considerations in RCSA Sec. 26-141b-4(d). Change to Class 4.	2
104001687	Maltby Lakes/Cove River	West Haven	A portion of this segment immediately adjacent to a reservoir in West Haven is proposed as "Automatic 3". This segment is bisected by a watershed divide that is not apparent on the map topographic contours. The segment portion immediately adjacent to the reservoir is tributary to the reservoir. Therefore this segment is not subject to an "automatic" designation and should be reclassified in accordance with DEEP's methodology;	The comments provided support splitting this segment into two sections and support a Class 2 designation.	2
104001546	Maltby Lakes/Cove River	West Haven	Presents detailed case for Class 4 segment	The comments provide evidence to support change to Class 4 in accordance with the considerations in RCSA Sec. 26-141b-4(d). Change to Class 4.	2
104001576; 104001556	Maltby Lakes/Cove River	West Haven	The portions of Segments 104001576 and 104001556 that lie between reservoirs in this three reservoir system are manmade spillway conveyance channels that carry reservoir overflows to the terminal reservoir. These segment portions should not be classified as they are not streams.	The comments provided support removing these segments from consideration.	2
104001754	Trout Brook	Orange	A small dam in combination with a network of ditches, pipes, and other structures is designed to divert water from Segment 104001754 in Orange (Trout Brook) into an underground aqueduct that diverts water to a reservoir system in West Haven; Should be reclassified to reflect public water supply reservoir.	This structure was not in DEEP's dam layer - Data provided support a Class 3 designation.	2
104000274	West Brook	Prospect	A portion of Segment 104000274 is immediately downstream of a reservoir for a two reservoir system in Prospect, should be reclassified to reflect public water supply reservoir.	This reservoir was not identified in DEEP's reservoir layer – Data provided support a Class 3 designation.	2

104000265	Mixville Brook	Prospect	Prior to 1981 this portion of the segment was relocated and the location is no longer as shown on the classifications map. Rather than flowing to the terminal reservoir in the system, it merges with Segment 104000265 north and downstream of the terminal reservoir.	Thank you for the information, however as this doesn't impact release requirements, it is not necessary to create a new stream segment outside of the National Hydrography Dataset.	2
104001078; 104001110; 104001111; 104001149	Mill River & tributaries	Hamden	DEEP proposed an "Automatic 3" designation to Segment 104001078 adjacent to a potential ground water source in Hamden . A description of significant investments and recent numerical modeling of the AOC, both submitted to the Department, also supports by regulation an "Automatic 3" or Class 4 designation for additional segments.	The test wells and modeling for this well field represent significant investment for this future source. However, Until the well field is developed and the more detailed Level A Aquifer Protection Area mapping is completed, only those segments in the immediate vicinity of the proposed wells will be changed to Class 3. For this well field, that includes segments 04001078; 104001111; and 104001149.	2
104000726; 104000657; 104000793; 104000856	Muddy River, & tributaries	North Haven	DEEP proposed an "Automatic 3" designation to Segment 104000726 adjacent to a potential ground water source in North Haven. A description of significant investments and recent numerical modeling of the AOC, both submitted to the Department , supports by regulation an "Automatic 3" or Class 4 designation for additional segments.	The test wells and modeling for this well field represent significant investment for this future source. However, Until the well field is developed and the more detailed Level A Aquifer Protection Area mapping is completed, only those segments in the immediate vicinity of the proposed wells will be changed to Class 3. For this well field, that includes segments 104000726 and 104000856.	2
104000727; 104000644; 104000645; 104000677; 104000678; 104000682; 104000685; 104000763; 104001005	Farm River, tributaries, and Gulf Brook	North Branford	DEEP proposed an "Automatic 3" designation to Segment 104000727 adjacent to a potential ground water source in North Branford. A description of significant investments and recent numerical modeling of the AOC, both submitted to the Department, also supports by regulation an "Automatic 3" or Class 4 designation for additional segments.	The test wells and modeling for this well field represent significant investment for this future source. However, Until the well field is developed and the more detailed Level A Aquifer Protection Area mapping is completed, only those segments in the immediate vicinity of the proposed wells will be changed to Class 3. For this well field, that includes segments 104000727 and 104000763	2

104001047; 104000854; 104001082	Iron Stream, Dodd Hollow Brk & Tributary	Madison	These are two future sources for which approximately 1250 acres of land is being retained, which constitutes significant investment, and should be reclassified to Class 3.	Reasonable to consider as evidence of significant investment in a future water supply source. Change to Class 3.	2
104000539: 104000631; 104000880; 104000887	Muddy River	Wallingford	Does the designation of class 3 for water supply need to include such a long reach of the Muddy River, which initially passes through the heavily forested Tyler Mill Preserve in Wallingford and would be capable of restoration of a trout fishery if sufficient stream flow were allocated?	The length of the segment classified is based on a calculation of two times the calculated Q99 for the stream. Please see the methodology developed and vetted through the Technical Workgroup.	3
104000172; 104001824; 104000371; 104000325; 104000384; 104000463	Trib to Judd Brk; Trib to Quinnipiac; Trib to Wharton; Trib to Wharton; Patchogue R; Quinnipiac R	Cheshire/ Meriden	Segments classified as Class 3 due to local conditions (not due to water supply use) are a concern. Has CT DEEP decided that impervious cover cannot be reversed in these cases? I hope the agency is flexible enough to encourage citizens to build or restore streamside buffers so they may then petition DEEP to upgrade these segments to class 2.	Class 3 is consistent with current conditions for these segments due to diversion, high impervious cover and identification as potential growth areas. As mentioned, if conditions improve, DEEP can consider upgrading the classification using the petition process in accordance with RCSA Section 26-141b-5(d) or -5(e).	3
104000955	Quinnipiac River	North Haven	Unclear why this segment is Class 3, as segments above and below ranked higher	Proposed Class 3 was incorrect, as anadromous fish passage was not identified properly. Change to Class 2.	3
104001639; 104001614; 104001619; 104001610; 104001611; 104001686	Patchogue River; Trout Brook; Spring Lot Brook; Trib to Spring Lot; Spring Lot Brook; Burdicks Brook	Westbrook	Segments adjacent to Westbrook well appear improperly classified as other than 3 or 4	The Level A mapping for this well has not been completed, so the stream segments immediately adjacent to the well will be classified as Class 3 at this time (Segments 104001639, 104001614 and 104001619). Once Level A mapping is completed, the segments intersecting that area will be revised to Class 3.	4
104001696; 104001700; 104001721	Indian River & trib to Indian River	Clinton	Segments adjacent to Clinton well appear improperly classified as other than 3 or 4	The Level A mapping for this well was not captured in the draft classifications. Segments 104001700 and 104001721 intersect the Level A area and will be revised to Class 3. Segment 104001696 is outside the Level A, so will remain as is.	4

104001478; 104001475; 104001473	Hammonassett River & Trib	Killingworth / Madison	Segments adjacent to Gustafson well appears improperly classified as other than 3 or 4	The Gustafson well is an existing well held for future use. The segment adjacent to the well (104001478) will therefore be reclassified to Class 3.	4
104001745; 104001628	Hammonassett R	Madison	Segments between Rettich & Five Fields Well fields lie outside Level A or are not associated with the wells, and are improperly classified auto level 3.	If the Level A intersects a stream segment, the entire segment is assigned Class 3, not just the portion within the Level A area. No change. (The classification methodology has been updated to clarify this)	4
104000797	Trib to Menunketesuck R	Killingworth	The segment near Jensen's Beechwood system (3 bedrock wells, < 0.05 MGD) bedrock well is incorrectly classified. The diversion metric (1) should be revised to accurately reflect the wells' presence.	These wells are below the threshold requirement to obtain a diversion permit, therefore expected stream flow impact would be minimal, no change to classifications.	4
104001503	Oil Mill Brk	Madison	The segment adjacent to Green Springs system (3 bedrock wells, 0.04 MGD) has a preliminary metric of 1 that does not appear to reflect the wells' diversion.	These wells are below the threshold requirement to obtain a diversion permit, therefore expected stream flow impact would be minimal, no change to classifications.	4
104001259; 104001284	Trib to Hammonnassett R & Hog Pond Brk	Madison	The classifications do not reflect the presence of the Legend Hill public water system (3 wells, < 0.05 MGD), revise downstream metric.	These wells are below the threshold requirement to obtain a diversion permit, therefore expected stream flow impact would be minimal, no change to classifications.	4
104000458	Unamed trib to Muddy River	Wallingford	The dam has more than one stream immediately downstream of the existing dam, one at the spillway and one below the emergency spillway - shouldn't both streams be classified as class 3?	There is no natural stream downstream of the emergency spillway to classify, so no releases need to be made, no change.	5
104000365; 104000358	Trib to Spring Brook	Wallingford	The dam has more than one stream immediately downstream of the existing dam, shouldn't both streams be classified as class 3?	Spring Brook is the ultimate discharge point for both the primary spillway and the blow off, so the streams below each spillway will be changed to Class 3.	5
104000596	Unamed trib to Farm River	Wallingford	During extreme rainfall events, water from Lanes Pond may be released to the northwest over land to an unnamed tributary of the Farm River. This segment should therefore be Class 3.	There is no dam or controlled discharge from the reservoir to this segment - releases from the reservoir would be made instead to the tributary to the Branch River.	5

				The Branch River is therefore Class 3, and this tributary remains Class 1.	