



Rivers Alliance of Connecticut
Comments on CT DEEP Streamflow Classification
Pursuant to Connecticut Streamflow Standards and Regulations
[Section 26-141b-5 of the Regulations:](#)

December 31, 2013

The detailed and sophisticated work done to prepare the map of the first region for flow classification provides a framework for assessing whether the stream classifications are correct under the regulations, and also for assessing the strengths and weaknesses of the regulations.

The regulations themselves contain many imprecisely defined terms. Ideally, the data and criteria used for classification would illuminate how DEEP is interpreting these terms. Unfortunately much of that information is not in the released material for comment.

“Significant Investment”

For example, a stream or stream segment, no matter how healthy its present flow and quality, must automatically be classified as a sub-healthy class 3 stream if there has been a “significant investment” toward developing the stream. “Significant” is not defined, and there are other uncertain variables. The language prohibits a high-grade rating for:

(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;

Such an automatic low ranking would make sense in, say, a DPH-and-DEEP approved water supply plan for a surface water diversion on land owned by a utility with diversion infrastructure already budgeted to answer an immediate need. It would make less sense if the source was identified by a small water supplier for possible use 50 years out and the investment was \$5,000 to research a right of way.

How is the public to know whether a stream is truly needed for supply or is just a distant prospect, identified perhaps more as a defensive measure than because of any actual intention to develop the source? It would be helpful if the map would indicate whether the identification of the source is in an approved WUUC plan or a system's water supply plan by citing the plan, page (and/or map), and date.

If the stream is in a plan of one sort or another, the key to whether the class 3 designation is appropriate is whether or not the investment has been significant. To check this, the viewer needs information on the investment.

We urge that no Class 3 designation be imposed on the basis of significant investment unless the need for that designation is demonstrated by specific, publicly accessible information. Such information should include who has made the investment, the level of investment, the type of investment, and whether the development of the designated stream or stream segment is referenced consistently in relevant plans.

Presumably DEEP had much of this information while creating the map. While it might be burdensome for DEEP to determine if information from a water supply plan is consistent with a regional or state plan, the information could be made available by reference. This would incidentally be helpful in statewide water planning.

Mystery Factors

We believe that, if there is no compelling reason for a stream to be a 3, it should be a 1 or 2. But frequently in the mapped classifications, it is hard to say whether a reason or factor given is compelling or not. For example, in the segment cited below, there are no certainty factors requiring the Class 3 designation.

Connecticut Stream Flow Classification for Stream Segment: 109,003,510

Stream Flow Class: 3

Certainty Factors for Class 3

(No / Yes)

Public Water Supply Dam: **No**

Level A Aquifer Protection: **No**

Future Water Supply with Investment: **No**

Hydrologic Stressors

(1=Low, 2 = Moderate, 3= High)

Impervious Cover Metric: **2**

Dam Metric: **2**

Diversion Metric: **3**

Return Flow Metric: **2**

Hydrologic Stressor Total: **3**

Additional Factors

(No / Yes)

Wild Brook Trout Present: **No**

Trout Management Area: **No**

Anadromous Fish Run: **Yes**

USGS Index Gage: **No**

Protected Open Space: **Yes**

C&D Plan Growth Area: **No**

Potential Public Water Supply: **No**

Identified by CT DPH: **No**

Restoration Potential: **No**

Concerns with Margin of Safety: **No**

Other Factors (See Note): **Yes**

Note: **Known Severe Hydrologic Alteration - Altered Hydrograph**

Class Change Due to Additional Factors: No

The problem seems to be existing hydrologic alteration (a dam?), evidently with a conclusion that restoration is impossible. This may be true, but severely altered hydrology can often be cured. It is not clear on the basis of the information here that this stream and others of the same type should be delegated to a low-quality classification. There is evidently no interest in using the water for supply, so it might as well be a candidate for conservation in its present state, with the hope of improvement in the future.

We urge that no stream or stream segment be delegated to a class 3 category on the basis of non-flow conditions that could be mitigated in the future.

Maybe what is needed in such cases is a class 3/class 2 designation. Even for water suppliers, there seems to be no environmental, social, or economic advantage to delegating a borderline class 2/3 stream, as class 3, especially when the stream has not been identified as having source-water potential.

Groundwater Rules

In the negotiation of the regulation with utilities and the General Assembly, DEEP was forced to delete rules for groundwater pumping. Almost all

involved recognized that pumping an aquifer that was part of a river system would draw down the river. But the case was made that groundwater withdrawals should be covered at some later date in separate legislation. Nevertheless, very late in the process, a groundwater rule was inserted in the proposed regulation. The language reads as shown below (with the insert underlined):

(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;

One example of this automatic downgrading of a stream is:

Connecticut Stream Flow Classification for Stream Segment: 107,001,885

Stream Flow Class: Automatic 3

Certainty Factors for Class 3

(No / Yes)

Public Water Supply Dam: **No**

Level A Aquifer Protection: **Yes**

Future Water Supply with Investment: **No**

Hydrologic Stressors

(1=Low, 2 = Moderate, 3= High)

Impervious Cover Metric: **1**

Dam Metric: **3**

Diversion Metric: **3**

Return Flow Metric: **2**

Hydrologic Stressor Total: **3**

Additional Factors

(No / Yes)

Wild Brook Trout Present: **No**

Trout Management Area: **No**

Anadromous Fish Run: **Yes**

USGS Index Gage: **No**

Protected Open Space: **Yes**

C&D Plan Growth Area: **No**

Potential Public Water Supply: **No**

Identified by CT DPH: **No**

Restoration Potential: **No**

Concerns with Margin of Safety: **No**

Other Factors (See Note): **No**

Class Change Due to Additional Factors: No

So here is a stream downgraded to a 3 because it intersects a level A aquifer area in protected open space with no interest or investment for use for water supply. Even in cases where a utility may have expressed interest in drawing down the stream at some point in the future, downgrading the stream makes little sense. It is in everyone's interest to keep the stream as healthy as possible whether for fish or human consumption.

The problem is with the statute, which requires an automatic 3 ranking. We urge DEEP to consult with stakeholders with the aim of amending this rule. Moreover, it would be timely now to take up the several promises by legislators and others to revisit limits on pumping down rivers from wells in the river-recharge zones.

Counting Factors for Consideration

The question arose in the course of informational meetings as to whether simply adding and subtracting factors for consideration predictably yields good results. For example, on the plus side, a true native trout habitat should get more than one point. On the negative side, references to an identification

by DPH or a state POCD growth area, seem to outweigh numerous positive factors. I am sure the map preparers have many more examples in their minds where the algorithm was unsatisfactory.

A review of this algorithm is important to getting better results. In some cases, OPM and DPH might feel that it was actually an advantage to maintain a stream with a healthy flow rather than setting it up for flow reduction, which might happen well before the development or supply need becomes actual (if it ever does).

More detail and a site-specific evaluation would be helpful. In some cases, an additional layer of data is needed to clarify the classification. It is hard to say whether a factor such as DPH identification is a valid reason or not for lowering stream protections. On what basis is there a DPH identification?

Finally, we support the remarks of The Nature Conservancy, including the request for a more manageable map. It is very difficult to locate a site by segment number. We also join them in appreciating the rapid and admirable mapping work.

We hope that DEEP and other stakeholders will have a little more time to evaluate the classifications. In general, we do not support a Class 3 designation for a river, when the reasons are not clear. This situation arises primarily in the discretionary Class 3 designations.

Thanks and Happy New Year,

Margaret Miner, Executive Director