FOR THE ENVIRONMENT COMMITTEE
PUBLIC HEARING TESTIMONY OF RIVERS ALLIANCE OF CONNECTICUT
February 22, 2017

RE: HB 6332 AAC Concerning Funding for Alternative Treatment Septic Systems
(Oppose as written)

And Honorable Members of the Committee:

Rivers Alliance of Connecticut is a statewide, non-profit coalition of river organizations, individuals, and businesses formed to protect Connecticut’s waters by promoting sound water policies, uniting and strengthening the state's many river groups, and providing education on water stewardship.

Bill HB 6332 addresses the longstanding problems with permitting and funding alternative treatment systems (ATS) for wastewater. We agree that there is regulatory confusion that should be cleared up. However, the bill seems to imply that ATS are not being approved, but that is not the case.

ATS replicate the technology used in most Connecticut municipal wastewater treatment plants. This is offsite treatment, with the biological action that breaks down the waste taking place in closed containers. The resulting effluent is required to be clean enough for safe discharge to open water, usually a river or L.I. Sound. By contrast, in traditional onsite septic systems, there is interaction between the materials in the waste and organisms in the soil, with the soil itself also acting a natural filter. A relatively large land tract is needed for a leaching field, with a requirement that the effluent is clean before reaching groundwater or surface water.

The advantage of ATS are that they can be used in places where there is not enough space for a traditional system and where sewers are either not wanted or too expensive. ATS can be used to support development denser than would be permitted using a traditional system. The disadvantage of ATS is that it is difficult and expensive to maintain. Natural processes in soil are replaced by mechanized control of biological reactions. A lot can go wrong. The “good bugs” (microbes, bacteria) in ATS are sensitive to varying flows, contaminants (such as harsh cleansers), acidity levels, temperature, and so forth; if power is cut off, the systems stall. ATS require regular monitoring and adjustment to perform well.
In 2007, Rivers Alliance, The Nature Conservancy (TNC), Connecticut Fund for the Environment researched ATS. Nature Conservancy published a white paper that is still an excellent reference; it is *On-Site Sewage Treatments Systems: Watershed Implications*. The coalition of partners also published a larger study, *On-Site Wastewater Management in Connecticut; The Role of Advanced Treatment Systems (ATS)*, funded by the Geoffrey C. Hughes Foundation. Until approximately that time, the Department of Environmental Protection (DEP, as it was named then, DEEP now) had permitted relatively few ATS, none residential. But interest in the use of ATS had been growing for about five years. Many projects were controversial, including those proposed in arrangements between DEP and Old Saybrook for a decentralized wastewater district that would include a couple of hundred residential ATS.

ATS legislation has come before you before. In 2002 (PA 02-129), the legislature banned ATS in drinking-water watersheds because of the unreliable performance of the systems; public schools (oddly) and remediation projects were exempted. Some five years later, a number of bills were proposed, including a moratorium on new ATS, but only one passed. This was PA 07-231.

PA 07-231 had several good features. It sought to transfer authority for small, usually residential ATS under 5,000 gpd to the Department of Public Health, which has charge of small, traditional septic systems. Most important, it called for evaluation of the cumulative impacts of multiple ATS. **We recommend that this law be implemented or amended and implemented rather than passing a new law on the same theme.** Unfortunately the 2007 law has languished because DPH stated that it did not have the resources to write and carry out new regulations (although they had developed some excellent criteria). So, there are no new, specific regulations for ATS. DEEP is the official ATS permitter, and we have found their approach somewhat unpredictable and contradictory. There is a lack of field evidence that proposed systems will actually work, and very little in the way of oversight or enforcement penalties if the facilities fall short.

One of the major reasons for ATS controversy is their poor performance. One cannot be sure of getting the results promised in permits. ATS can work well, but only with much stricter construction and maintenance rules than Connecticut has now. When operations exceed permit limits, someone in government should respond (which is not generally what happens today). Good rules are especially difficult to enforce in residences. Often home owners or renters don’t know what kind of septic is installed, don’t know that the advanced system cannot deal with certain cleaners and solvents, and may simply turn off the ATS because they are expensive to run or noisy. The safest ATS are probably large units, say for an entire community, that are well-capitalized and with a reliable revenue (plus an escrow account) for maintenance. Better to have one engineer looking after one large system than one or several engineers looking after numerous small systems in different locations.
As the bill before you, 6332, suggests, funding is a central problem. This may mean a lethal fiscal note. However, a variety of approaches to funding have been suggested. I believe that The Nature Conservancy has done some good work in this area.

Thank you for your attention. We would be pleased to answer questions. Our ATS study (which includes law and policy) is on our website www.riversalliance.org; we also have a limited number of hard copies.

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