

## Fresh Creek Tops 100 Units - And Still Growing

Fresh Creek Technologies, Inc. delivered its 100th Netting TrashTrap® system in July, a significant milestone that will shortly be little more than a numerical curiosity as many more systems are currently in design or production.

Reaching the century mark is cause for reflection on the utility of netting systems for removing trash and floatables from waste water flows. Netting TrashTrap® systems have for several years been recognized as an ideal solution to the floatables control requirement in the Combined Sewer Overflow policy. Compared to lengthy and capital intensive sewer separation or holding tank approaches, netting systems can be installed quickly and economically and begin capturing floatables immediately. More recently, Netting TrashTrap® systems are being utilized in stormwater systems where, for example, it is necessary to capture and remove floatable trash to protect the ambiance of beaches or recreational waters. Netting technology can also be an effective front end of a "treatment train" since removing trash and debris is typically task one.

Fresh Creek estimates that Netting TrashTrap® systems each year capture 2,000,000 pounds of trash and debris that would otherwise foul the nation's waters and beaches.



## Design Improvements lead to patents and better system performance

Fresh Creek Technologies' product enhancement program has yielded several design improvements that allow Netting TrashTrap® systems to better handle difficult waste water flows.

The Velocity brake is a plow-shaped device which is attached to the chamber to absorb or dissipate high velocity flows. This innovation was awarded a patent by the U.S Patent Office in 2002.

*(Continued on back page)*

## North Bergen, NJ and Narragansett Bay Report on Fresh Creek Performance

Two major Netting TrashTrap® installation and performance reports were presented recently and the experience of these satisfied customers is now available for review and reference.

Bob Fischer, former Executive Director of the North Bergen, NJ MUA, and current Executive Director of Bayshore Regional Sewer Authority, reviewed their experience with netting systems at the WEF Specialty Conference on Floatables in San Francisco. North Bergen was one of the early municipalities to adopt the Netting TrashTrap® as their solution to the floatables control

requirement of the Combined Sewer Overflow policy. North Bergen installed nine systems in 1998/1999 and they have now accumulated extensive operating experience. Fischer candidly discussed the initial growing pains incurred as an early adopter and the details of ongoing operations and maintenance. He reported the units are capturing nearly 50 tons of trash and floatables each year.



A synopsis of the paper can be viewed at our web site, click on "Resources". The paper is also the basis for the article "A Good Haul" which appeared in the April 2003 issue of WE&T Journal.

Narragansett Bay Commission's experience with their large Netting TrashTrap® system at the high velocity Bucklin Brook CSO outfall was presented at the New England WEA Collection Systems show by Chris Feeney of Louis Berger Group, Inc. and Tom Brueckner at NBC. Challenging design parameters for peak flow and peak velocity (peak flow - 294 CFS, peak velocity - 18.3 ft/sec) make this large 10-net system particularly noteworthy.

A video of an overflow event can be viewed on the Fresh Creek website. This single large netting system is capturing 40 tons of trash and floatables annually. ✧

[www.freshcreek.com](http://www.freshcreek.com)

Your gateway to up-to-date information about Stormwater, CSO's and Floatables Control

## The Great Water Infrastructure Debate

Cleaning up the nation's water and assuring a continued supply of safe drinking water is going to cost a staggering amount of money, more than previously estimated, and there is no consensus about whether it can be afforded or who will pay for it. That's the message coming from a rising chorus of concern about the challenges faced by our water infrastructure.

In this 30th year of the Clean Water Act the goal is nowhere near in sight and it is not even certain that at the current pace we are doing more than treading water.

Since 1972 EPA has assembled and submitted a bi-annual Clean Water Needs Survey (CWNS) to Congress detailing the estimated cost of implementing the CWA in the upcoming 20 year period. The last such report, for 1996, projected CWA expenditures of \$139.5 over the 20 years to 2016, a figure that now looks pretty benign in hindsight. EPA skipped the 1998 report (the 2000 CWNS is in progress and scheduled to be issued in the near future) but last year they updated their numbers to 2001 cost levels and added estimates for major emerging requirements never before counted. The \$139.5 estimate has now grown to \$237.4 billion and may well rise further. Drinking water adds another major infrastructure component, with projected capital requirements of over \$200 billion over the next 20 years.

The Water Infrastructure Network (WIN), a broad-based coalition of heavy hitters with interests in clean water and drinking water, points out that our water infrastructure has deteriorated significantly, primarily due to age. Many sewer systems built in the early 20th century are at the end of their useful life and operating and maintenance costs have skyrocketed. Many more built in the post World War 2 era are entering their high maintenance phase and the surge of treatment facilities built in the early years of the CWA have come of age for maintenance. Thus the aging and deteriorating condition of the water infrastructure will bewith us for decades to come. WIN estimates that the total

cost including capital, O&M, and interest will be nearly \$2 trillion in the coming 20 years, \$23 billion per year higher than the current level. They urge Congress to fund half of this in an initiative reminiscent of the program that established the Interstate highway system. Otherwise the necessary rate increases, in their view, will be unaffordable.

Of course, not everyone is enthusiastic about a major new Federal spending initiative. The Congressional Budget Office (CBO) in an independent assessment of the issue, points out that ultimately society pays 100% of the cost either through ratepayers' bills or through federal, state, or local taxes. While CBO accepts that the costs are likely to be steep, they point out that nobody really knows just how steep. Water resources are diverse and far flung (there are 54,000 separate community drinking water systems, for example) and there is no accessible inventory of the age and condition of pipes, even for large systems. CBO's projections are only in wide ranges of values, with the upper end of the range approaching the WIN estimates, but with low-end estimates as much as 40% lower. There is also room for discussion of just what level is "affordable". EPA notes that the average household spends \$474 per year on water and wastewater charges, compared to \$707 per year on soft drinks and similar beverages.

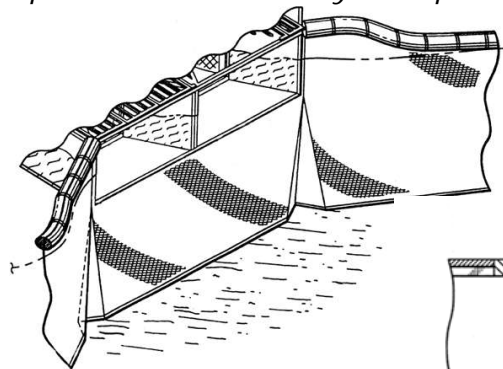
In spite of many questions, it is certain that the state of our water infrastructure is a serious issue that will be with us for a long time. The nation needs to grapple with the major economic ramifications, and a reasoned dialogue is vital. But there's more to it than economics and whether it's affordable and who will pay. Given the magnitude of the problem we need more creativity and innovation, and sharper management. The dialogue can not be just about finding \$2 trillion. We also need to explore approaches and solutions that deliver clean water sooner and at lower cost.

All the reports used to prepare this article can be accessed via Fresh Creek Technologies' website. Go to [www.freshcreek.com](http://www.freshcreek.com) and click on "Resources". ✨

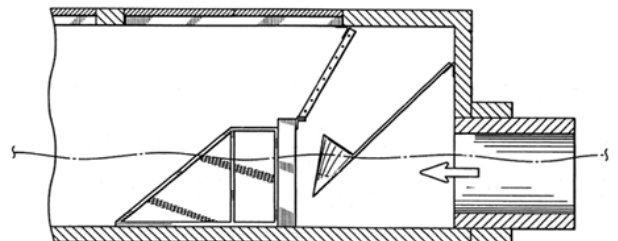
## Design Improvements lead to patents and better system performance (Continued)

A unique Flow Through Curtain is designed to protect the floating system structure under conditions of extreme hydraulic pressure. The design was awarded a patent in 2003.

Additional product improvements are under development with patents pending. ✨



Flow Through Curtain



Velocity Brake

## FRESH CREEK TECHNOLOGIES, INC.