Phase II Storm Water Program

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Trash Interceptors

Recently published research by Science Advances magazine suggests that the majority of trash carried to the world's oceans is carried there by pollution of small rivers that flow through densely populated urban areas. The most common of these pollutants are cigarette butts, plastic bottles, plastic bags, food containers, and aluminum cans. These items are commonly washed into municipal separate storm sewer systems during rainfall and are carried into nearby waterbodies. A recent innovation to capture these pollutants is by the installation of trash interceptors.

A trash interceptor is a device strategically placed within a river designed to collect and remove floating debris. These devices work by using barriers and the current of the river to guide waste into the interceptor where it can be removed. Some interceptors automatically remove trash from rivers by using water wheels, solar panels and conveyor belts. The optimal design for removing pollutants is different for each location.

It is currently estimated that the mass of plastic in the oceans that has accumulated in the past 75 years may be as high as 110,000,000 tons. The cost of marine plastic cleanup is estimated to be between $6-19bn USD. This cost does not include long term marine ecosystem impact or impact on human health. In cost alone pollution prevention has been determined to be a cheaper solution than pollution cleanup and trash interceptors are currently one of the most efficient methods of river cleanup.

Sources: dezeen magazine, the oceancleanup