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Ecological Economics. 2018. Estimating the Economic Impact of Stormwater Runoff in the Allen Creek Watershed.

<https://people.umass.edu/khellman/pdfs/Hellman-Estimating%20the%20Economic%20Impact%20of%20Runoff.pdf>

Found that \$11,994 in economic damages to downstream properties for every additional 10,000 cf of runoff generated

Damages from water quality impacts:

<https://www.sciencedirect.com/science/article/abs/pii/S0095069699910963>

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American Recovery and Reinvestment Act of 2009.

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\$4.6 billion for the Army Corps of Engineers for environmental restoration, flood protection, hydropower, and navigation infrastructure projects

\$4 billion for the Clean Water State Revolving Fund wastewater treatment infrastructure improvements (EPA)

American Society of Civil Engineers. 2017. Infrastructure Report Card: Wastewater

<https://www.infrastructurereportcard.org/wp-content/uploads/2017/01/Wastewater-Final.pdf>

It is estimated local governments spend \$20 billion a year on capital sewer expenditures and \$30 billion annually on O&M. 75% would go toward treatment plant improvements, conveyance system repairs, new conveyance systems, and recycled water distribution (\$37.5 billion); 18% to CSO correction; and about 7% to stormwater management (\$12.5 billion).

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Public Spending on Transportation and Water Infrastructure, 1956 to 2017

<https://www.cbo.gov/publication/54539>

Climate Central. 2018. Heavy Rainfall Trends Across the U.S.

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Excluding tropical cyclones, individual billion-dollar flooding events in the U.S. have added up to \$39 billion in losses since 2010.

Climate Science Special Report. 2018.

https://science2017.globalchange.gov/downloads/CSSR2017_FullReport.pdf

- Since 1980, the cost of extreme events for the United States has exceeded \$1.1 trillion; therefore, better understanding of the frequency and severity of these events in the context of a changing climate is warranted.
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Smart Data Infrastructure for Wet Weather Control and Decision Support. 2018.

https://www.epa.gov/sites/production/files/2018-08/documents/smart_data_infrastructure_for_wet_weather_control_and_decision_support_-_final_-_august_2018.pdf

Consolidating monitoring, data analytics, automation, and control could potentially generate up to \$320 billion in cost savings from the total expected capital expenditures and operating expenses for different water and wastewater utilities between 2016 and 2020.

Data feeds and cognitive computing could significantly assist system managers by providing near-instantaneous support information for many of the routine and immediate response decisions that must be made in the municipal and industrial sectors.

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Sanitary Sewer Overflows: What Are They and How Can We Reduce Them?

<https://www3.epa.gov/npdes/pubs/ssodesc.pdf>

Clean Watersheds Needs Survey 2000 Report to Congress.

https://www.epa.gov/sites/production/files/2015-06/documents/2003_8_28_mtb_cwns_2000rtc_cwns2000-chapter-4.pdf

The estimated costs to reduce SSOs to 1 event every 5 years is \$88.5 billion nationwide. And it's worth it.

Acquisition Info:

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http://www.annualreports.com/HostedData/AnnualReports/PDF/NYSE_DHR_2017.pdf

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http://www.artemis.bm/deal_directory/cat_bond_ils_issuance_banks_brokers.html

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