

Poor People's Moral Budget: Everybody Has the Right to Live
Appendix: Access to Clean Water

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This section addresses the required public investment to address the following Poor People's Campaign demand, and the resulting social and economic benefits:

We demand a fully funded public water and sanitation infrastructure that keeps these utilities and services under public control; that prioritize poor, rural and Native communities that have been harmed by polluting and extractive industries; that provide consistent, safe, reliable, and affordable water and sanitation; and do not leach lead or other toxins into the water.

Required Public Investment

We estimate public investment needed to address this demand is at least \$38 billion annually, based on data from two different EPA surveys.

This consists of the following two components:

- **\$472.6 billion** over 20 years¹ for water supply infrastructure, which includes installing, maintaining, upgrading, or replacing drinking water storage, intake, and purification facilities, and transmission and distribution infrastructure.
- \$271 billion over 20 years² for wastewater and stormwater infrastructure, which includes installing, maintaining, upgrading, or replacing sewage conveyance infrastructure, sewage treatment facilities, and stormwater infrastructure, as well as combined sewer overflow (CSO) correction.³ This survey, however, excludes wastewater and stormwater infrastructure needs on Native American and Alaska Native lands.⁴ The required expenditure, therefore, includes an undetermined amount for wastewater and stormwater infrastructure needs on Native American and Alaska Native lands, which is why we have described the costs as being *at least* \$38 billion annually. Also, these data are for 2012, so we have adjusted for inflation to determine a current cost of **\$284.9 billion**.⁵

¹ U.S. Environmental Protection Agency (EPA), Office of Water, "Drinking Water Infrastructure Needs Survey and Assessment: Sixth Report to Congress," Report EPA 816-K-17-002, March 2018, available at:

https://www.epa.gov/sites/production/files/2018-10/documents/corrected_sixth_drinking_water_infrastructure_needs_survey_and_assessment.pdf

² U.S. Environmental Protection Agency (EPA), Office of Water, "Clean Watersheds Needs Survey 2012: Report to Congress," Report EPA-830-R-15005, January 2016, available at: https://www.epa.gov/sites/production/files/2015-12/documents/cwns_2012_report_to_congress-508-opt.pdf

³ Almost 860 legacy wastewater and stormwater systems combine discharges from domestic sewage, industrial effluent, and runoff from precipitation into a single stream. When excess precipitation occurs, the volume of combined wastewater and stormwater can overwhelm a system, causing untreated or partially treated sewage to be discharged into rivers and lakes. These incidents are called combined sewer overflows (CSOs). For details, see <https://www.epa.gov/npdes/combined-sewer-overflows-csos>

⁴ EPA, "Clean Watersheds Needs Survey 2012: Report to Congress," p. 5.

⁵ Using price index obtained from U.S. Bureau of Labor Statistics, Producer Price Index by Commodity for Final Demand: Total Government Purchased Capital Investment (Goods, Services, and Construction) [WPSFD49404], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/WPSFD49404>, December 10, 2018.



The numbers cited are solely for capital costs such as engineering and design, procurement of construction materials and equipment, construction labor, and inspection. They exclude operation and maintenance costs.

Combining the two numbers, we get a total of at least \$758 billion over 20 years, or at least **\$38 billion annually**.

Benefits

Food and Water Watch estimates that governmental investment of \$37.2 billion a year in water infrastructure (which is slightly lower than the \$38 billion we recommend – see above) would create between 700,000 to 945,000 jobs across the economy.⁶

Another benefit is the boost to GDP from infrastructure spending from increased demand for goods and services in the supply chain for water infrastructure, and increased demand for consumer goods and services from the increased jobs. A 2016 study recommends using a multiplier of 2.95 to calculate economy-wide benefits from investing in water infrastructure.⁷ Applying this multiplier to our proposed infrastructure investment of \$38 billion, we estimate a GDP boost of \$112 billion a year.

Hospitalization costs for the most common waterborne diseases in the U.S. are of the order of \$539 million annually.⁸

Combining the two numbers (economic stimulus impact and health care cost savings), we estimate annual economic benefit of **\$112.3 billion** from proposed annual water infrastructure investment of about **\$38 billion**, or net benefit of more than **\$74 billion** a year.

Additional benefits of investment in water infrastructure that are harder to quantify as a dollar amount include indirect benefits of the resulting reduction in utility bills, such as reduction in homelessness, better school attendance and educational outcomes, and improved worker productivity⁹.

⁶ Food and Water Watch fact sheet, "Water. Jobs. Justice. The Case for the Water Affordability, Transparency, Equity, and Reliability Act," February 2019, available at:

https://www.foodandwaterwatch.org/sites/default/files/fs_1902_waterjobsjustice-wateractupd2-web.pdf

⁷ Water Environment Federation and WaterReuse, "The Economic, Job Creation, and Federal Tax Revenue Benefits of Increased Funding for the State Revolving Fund Programs," April 2016, available at:

<https://www.wef.org/globalassets/assets-wef/5---advocacy/wef-wra-srf-economic-impact-study-report-april-29-2016.pdf>

⁸ Centers for Disease Control and Prevention (CDC), "Waterborne Diseases Could Cost over \$500 Million Annually in U.S.," press release, 7/14/2010, available at: <https://www.cdc.gov/media/pressrel/2010/r100714.htm>

⁹ Colton, Roger, Principal, Fisher, Sheehan and Colton Public Finance and General Economics, testimony to Philadelphia City Council at hearing on water bill affordability, 4/9/2015, available at:

<http://povertylaw.org/files/docs/Colton%20City%20Council%20comments--April%208%202015--Final.pdf>