SEWAGE OVERLOAD SOLUTIONS (S.O.S) – 2015 UPDATE*
NOW IT'S ALCOSAN'S TURN

A PUBLIC SERVICE ADVISORY from The Churchill Area Environmental Council
2300 Wm. Penn Highway, Pittsburgh PA 15235

The Wilkinsburg-Penn Joint Water Authority
2200 ROBINSON BLVD. - WILKINSBURG, PA 15221-1112

Description Of Charges	Amount
WC WATER BILLED CCF	69.38
SC SEWAGE FEE CCF	73.18

7.14

BACKGROUND

Recently we have all been asking, "*Why is my water bill getting so expensive?*" Analysis shows that **water** rates have increased only minimally, and will not go up at all in 2015. It's the rate we pay for sanitary **sewage** conveyance, treatment, and disposal that has increased significantly over the past ten years with 11% increases in each of the past two years and continuing at that rate in each of the next two years. The "Sewage Fee" line on your quarterly bill from The Wilkinsburg-Penn Joint Water Authority reflects these sharp increases.

Municipalities and Water/Sewage Authorities throughout the United States have had to enter into "Consent Decrees" (contractual agreements) with the federal Environmental Protection Agency (EPA) requiring compliance with the Clean Water Act's prohibition of sewage discharge onto open lands and into waterways. The primary purpose of the Clean Water Act is to improve water quality by protecting waterways needed for drinking, recreation, and aquatic life. The steps needed to reach compliance with the Act can be very expensive, especially in areas like ours where sewer lines are old, leaky, and easily invaded by fast flowing storm water during wet weather. In addition, it has been determined that present infrastructure lacks enough capacity to handle even average rainfall volumes without triggering some overflows.

The Allegheny County Sanitary Authority (ALCOSAN) and the 83 municipalities within its Service area (including Chalfant, Churchill, Forest Hills, and Wilkins) each has a mandated Consent Decree with the EPA. These agreements are being administered for the federal agency by the Pennsylvania Department of Environmental Protection (PA DEP) and the Allegheny County Health Department (ACHD). ALCOSAN and all municipalities affected by these consent agreements have had to develop Long Term Plans identifying wastewater and infrastructure needs through 2046, determining the costs associated with compliance, establishing a budget, and setting water use charges to meet projected costs. A significant portion of the long-term improvements are required to be completed by September, 2026, with manageable goals and steps set for each intervening year.

ALCOSAN is raising their sewage fee by (11%) which will increase the sewage portion of your bill if WPJWA is providing sewage billing services for your community.

SERVICE PERIOD 9/22/14 To 12/22/14 # OF DAYS 91

We are happy to inform you that WPJWA is not raising water rates for 2015.

CURRENT STATUS

Municipalities with consent agreements have been working for more than a decade to identify and correct their sewer line deficiencies through:

- Total sewer system inventories and physical surveys to update records.
- Camera visualization, flow monitoring, and other methods of locating breaks and other structural deficiencies in sewer pipelines, followed by repairs and/or replacements.
- Dye tests and physical separation of combined sanitary and storm drains (where present illegally) to reduce the water volume flowing into ALCOSAN lines. The city of Pittsburgh (which has its own Water and Sewer Authority) has the greatest percentage of combined drains. Uncoupling storm water connections (e.g. downspouts) from sanitary sewers is mandatory in most of our area before a property can be sold.

A **2015 survey** of our CAEC member municipalities (Chalfant, Churchill, Forest Hills, and Wilkins) revealed:

- Municipal sewage surcharges ranging from $2.50 - $4.50 per 1,000 gallons of water use.
- Compliance to date with Consent Decree goals varies from 75% to 100%.
- Money spent to date in meeting Consent Decree goals ranges from $650,000 to $2,100,000. Note that our Churchill area municipalities vary from 0.17 to 2.75 square miles in size and have a range of about 800 to over 6,500 residents.

Now that municipalities are well into a second decade of compliance with their EPA mandates, it is ALCOSAN's turn to increase its planning, design, construction, operation, and permitting procedures in order to:

- Eliminate Sanitary Sewer Overflows (SSOs) which occur where there are separate pipes for sewage and storm water), and treat ALL sanitary sewage flows.
- Address Combined Sewer Overflows (CSOs) from old systems that carry both sewage and storm water within one common conveyance line, and ensure they can
    1) transport and treat all dry weather flows
    2) capture and treat not less than 85% of all wet weather flows.

Meeting the requirements above will create the largest and most expensive project of its kind in the history of Allegheny County. ALCOSAN has proposed a plan to build larger collector pipes, expanded treatment facilities, and several huge, concrete tunnels underneath low points in the area. Wet weather flows would be stored in the tunnels and pumped up for treatment at a later time. A similar project in Narragansett RI has exceeded performance expectations.** There is little, if any, government money available for massive projects like these (or for the municipal-level projects outlined above). ALCOSAN's plan alone is expected to cost more than two billion dollars and would still be deficient according to the EPA (not meeting the water quality goals of ALCOSAN's 2008 Consent Order). That explains why sewage rates have increased 11% annually over the past two years, and will continue to increase by that same amount over each of the next two years. In addition, expenditures by the municipalities are projected to total about a billion dollars, so local surcharges per thousand gallons of water used (included on the "Sewage Fee" line of your bill) may increase to pay for ongoing maintenance and future capital improvements as needed. The cost of clean (treated) water will be getting increasingly expensive.

WHAT CAN WE DO about water flows that contaminate our rivers and streams, exceed carrying and treatment capacities, and increase our sewage rates and local surcharges?

- Aside from conserving water used indoors, individuals, businesses, and municipalities can use "green infrastructure" to manage storm water better. Examples would be planting more trees and shrubs, conserving open spaces, installing properly engineered "green roofs," creating porous bio-swales at curb edges, and using permeable pavement on new driveways, parking lots, and roads. All these measures will help the ground soak up rainwater where it falls, making it useful to plants, and getting it back into the atmosphere through evapo-transpiration, rather than letting it flow into over-loaded storm water drains. Collectively these actions have a proven ability to reduce significantly the impact of wet weather on municipal and ALCOSAN systems. ALCOSAN is, in fact, considering "green components" to reduce its plan deficiencies as noted by the EPA.
- Homeowners can capture water that runs off the roof by connecting a **rain barrel** to each downspout. A good one can be purchased at garden centers for about $100 (e.g. the 48-gallon Fiskar with a mosquito-proof and a spigot near the base for attaching a hose). Another option is a **rain garden** – basically a vegetated ditch on a slight slope and with a berm along the lower edge. Water trapped by the depression must evaporate or be absorbed within three days to avoid breeding mosquitoes. Because of implications for the house foundation, utility lines, and tree roots, designing a rain garden is best left to professionals. See a functioning rain garden at Beechwood Farm reserve in Fox Chapel.

RAIN BARREL Collect rainwater for the garden and other purposes with a barrel (Fiskars Holden 48-gallon barrel, $70).

FOR MORE INFORMATION ON:

ALCOSAN's Consent Decree or Long Term Wet Weather Plan – <www.alcosan.org>
Green Infrastructure – 3 Rivers Wet Weather <http://www.3riverswetweather.org/storm-water-green-solutions>; Nine Mile Run Watershed Association <http://ninemilerun.org/our-work/green-infrastructure/>; Allegheny and Westmoreland Counties Conservation Districts <http://www.accdpa.org/conservation-solution-center/> *and* <http://wcdpa.com/education/learning-resources>; Clean Rivers Campaign <http://cleanriverscampaign.org/green-solutions/>; Three Rivers Rain Garden Alliance <www.raingardenalliance.org>

* Past CAEC advisories on this subject are free and available at your municipal office or at the CAEC website <churchillborough.com>. "Sewage Overload Solutions (SOS)" 1997-1998 and "Water: Use Less, Pay Less" 2008.

** www.hummelreport.org/Stories/4.21.2011.sewer.html