
Glossary

Alternatives	Four identified, distinct I/I program approaches.
Assumptions	Factors that are used in the modeling efforts. They are divided into “planning assumptions” and “I/I reduction assumptions.” Planning assumptions are used for determining regional facility needs and upgrades, while I/I reduction assumptions are used in identifying potential I/I reduction projects.
average wet-weather flow (AWWF)	The average flow between November 1 and April 30 on days when no rainfall has occurred on the previous day. Composed of the average base flow and the average infiltration/inflow (I/I).
base flow	Wastewater flow (not including inflow and infiltration) originating from residential, commercial, and industrial sources. Base flow can also refer to the portion of streamflow contributed by groundwater as opposed to runoff.
components	Specific elements that have been identified as parts of an I/I control program.
conveyance system	A system, consisting of trunks, interceptors, force mains, pump stations, and other facilities which move wastewater from one place to another.
cost effectiveness analysis	An analysis that is used to determine if an I/I reduction project provides more County regional facility benefits and cost savings than it costs to construct the I/I reduction project.
cured-in-place (CIP)	Process of curing a resin that has been saturated in a fabric. The fabric is typically formed within an existing structure and will provide a rigid lining when the resin has fully cured.
cured-in-place pipe (CIPP)	Cured-in-place liner cured within a host pipe.
degradation	Degradation is the slow change in a sewer collection system’s condition that allows an increase in I/I flows. Degradation is due to cracks in the pipe, pulled joints, connections at manholes, construction damage, traffic damage to manholes, etc.
direct connections	Connections to the sewer system, usually located on private property, that allow rain and stormwater to flow into the sanitary sewer (for example, roof gutter drains, catch basins, sump pumps, and foundation drains).
Earth Tech Team (ETT)	A collection of firms, led by Earth Tech, that are providing consulting services to King County on the Regional I/I Control Program. The firms include Tetra Tech/KCM, HDR Engineering, Cosmopolitan Engineering Group, RoseWater Engineering, ADS Environmental Services, Financial Consulting Solutions Group, Shannon and Wilson, and Triangle Associates.

Endangered Species Act of 1973, as amended (ESA)	Federal statute that provides protection for species of fish, wildlife, and plants that are listed as threatened or endangered.
Engineering and Planning Subcommittee (E&P)	A subcommittee of MWPAAC that was assigned the role of working with County staff and the Earth Tech Team in developing the <i>Alternatives/Options Report</i> and various other I/I control program products.
fast response to rainfall	The water that quickly enters a wastewater conveyance system in response to rainfall. Typically this may be from pipe connections from storm sewers or combined sewers, catch basins, downspouts, and/or other surface runoff.
flow monitoring	A sewer flow project that measured flows in the region and in local agencies to better define the amount of peak flows related to I/I.
groundwater	Water that infiltrates into the earth and is stored in the soil and rock within the zone of saturation below the earth's surface. Groundwater is created by rain, which soaks into the ground and flows down until it is collected at a point where the ground is not permeable. Groundwater then usually flows laterally toward a river, lake, or ocean. It is often used for supplying wells and springs.
groundwater table	The upper limit in the soil of underlying material permanently saturated with water.
Growth Management Act (GMA)	A Washington state law (Chapter 36.70A RCW), guided by procedural criteria and adopted by the Washington State Department of Community Development, that provides a legal framework and guidance for the preparation of comprehensive plans, development regulations, and other land use planning for local governments.
hydrologic analysis	The study of the intensity and frequency of rainfall and the subsequent distribution and magnitude of flow into the wastewater conveyance system.
infiltration	The water that enters a wastewater conveyance system from the ground through means such as corroded or broken pipes, pipe joints, foundation drains, etc.
infiltration/inflow (I/I)	The total quantity of water from both infiltration and inflow without distinguishing the source.
I/I control	Measures that can be taken to address I/I concerns over an extended time period.
I/I reduction	A sewer system project that is constructed with the intent of reducing I/I in the sewer system.
inflow	The water discharged into a wastewater system from sources such as roof leaders, yard and area drains, foundation drains, cooling water discharges, drains from springs and swampy areas, manhole covers, cross connections from storm sewers and combined sewers, catch basins, surface runoff, and street wash waters.

lateral	The portion of the private sewer service pipe on public right-of-way. Where the sewer service pipe is on private property, it is called a side sewer. See also “side sewer”.
local agencies	Municipalities (Cities) and water and sewer districts that provide local sewer service and receive wholesale wastewater services from King County.
manhole	A vertical shaft covered by a lid at ground level that provides access for maintenance of an underground pipe.
Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC)	MWPAAC advises the King County Council and Executive on matters related to water pollution abatement. It was created by state law and consists of representatives from the cities and sewer districts that operate sewer systems in King County. Most of these cities and sewer districts deliver their sewage to King County for treatment and disposal.
mini-basin	Drainage basins that were delineated as part of the 2000-2001 and 2001-2002 flow monitoring seasons. These basins were divided based on approximately 20,000 linear feet of sewer main within the basin.
mitigation	Avoidance of an adverse impact by not taking a certain action or parts of an action; minimizing adverse impacts by limiting the degree or magnitude of the action and its implementation; rectifying an adverse impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating an adverse impact over time by preservation and maintenance operations during the life of the action; compensating for adverse impacts by replacing or providing substitute resources or environments.
model	A computerized program that mimics the actual flow and conditions of the sewer system and that can be used to determine the cost effectiveness of I/I reduction projects.
options	Choices that are under consideration for each of the I/I control program components.
packer	An inflatable plug that is placed inside a pipe and expanded with air pressure.
peak flow	The highest base flow and infiltration/inflow expected to enter a wastewater system during wet weather at a given frequency that the treatment plant is designed to accommodate.
pilot basin	That portion of a mini-basin that was selected as a pilot project where rehabilitation work was actually performed for the pilot projects.
pilot project	Mini-basin that was selected as a demonstration rehabilitation project for the King County I/I Control Program.
pre-1961 pipe	Sewer system pipe that was in place prior to 1961. County/local agency contracts indicate that the County will accept flows from these pipes.

private property	Property owned by a private individual or entity that includes the side sewer and in some cases the lateral that connects the side sewer to the publicly owned sewer main.
rates, incentives, and surcharges	These are methods available for generating funding for I/I control program implementation and provide one approach for ensuring that local agencies address I/I concerns.
Regional Wastewater Services Plan (RWSP)	A capital improvement program adopted by the King County Council in December 1999 (through King County Ordinance Number 13680) to provide wastewater services to the County service area through 2030.
Revised Code of Washington (RCW)	A compilation of laws of the State of Washington published by the Statute Law Committee.
sanitary sewer	A pipeline that carries household, industrial, and commercial wastewater.
sewage	See wastewater.
sewer	A pipe that carries wastewater and/or stormwater runoff from the source to a treatment plant or receiving water. Sanitary sewers carry household, industrial, and commercial wastewater. Storm sewers carry runoff from rain or snow. Combined sewers are used for both purposes.
shoring	Props or posts of timber or other material in compression used for temporary support of excavations, formwork, or unsafe structures.
side sewer	The portion of the private sewer service pipe on private property. Where the sewer service pipe is on public right-of-way it is called a lateral. Also see “lateral”.
Side Sewer Evaluation Survey (SSES)	A technical and engineering evaluation of a sewer system that is intended to determine sewer system defects, and specifically for this I/I program to focus on I/I sources and volumes.
slow infiltration	Infiltration into a wastewater conveyance system that is characterized by a slow increase in flow during a rainfall event. This increased flow may take several days or weeks after a storm to decline.
sole source	Specifying a product that only one manufacturer provides.
Standards, Procedures, and Policies	These are a set of standards, guidelines, procedures and policies that are to be used or considered when planning, designing, and constructing I/I reduction projects. These were used in constructing the pilot projects and are included as a final draft appendix to this Report.
State Environmental Policy Act (SEPA)	A Washington state law (Chapter 43.21C RCW) that requires state agencies and local governments to consider environmental impacts when making decisions regarding certain activities, such as development proposals over a certain size, and comprehensive plans. As part of this process, environmental impacts are documented and opportunities for public comment are provided.

storm drain	A system of gutters, pipes, or ditches used to carry stormwater from surrounding lands to streams, lakes, or other receiving water. Also refers to the end of the pipe where the stormwater is discharged.
stormwater	The portion of precipitation that does not percolate into the ground or evaporate. Stormwater flows across the ground surface in channels or ditches, or flows within pipes.
surcharge	The process of filling a conveyance pipe as a means to control sanitary sewer overflows.
surface water	Any water, including fresh water and salt water, on the surface of the earth.
threshold	A realistic, enforceable limit on I/I for local agencies.
trenchless technology	Construction techniques that require little or no trenching to construct the improvements.
wastewater	The water and wastes from homes and businesses that enter pipes and are transported to treatment plants for treatment and disposal.
wetland	Land with saturated soils that are at least periodically inundated and that under normal conditions support vegetation suited to such environments. Wetlands include swamps, marshes, and bogs.