

MWPAAC RWSP Policy Review Task Force  
Discussion/Proposed Amendments  
Infiltration/Inflow Policies  
WORKING DRAFT

Existing Infiltration/Inflow Policies K.C.C. 28.86.070	Task Force Proposed Amendments as of December 29, 2014	Comments/Discussion at MWPAAC RWSP Policy Review Task Force Meetings	Sub-committee and full MWPAAC Comments
<p>A. Explanatory material. The I/I policies are intended to guide the county in working cooperatively with component agencies to reduce the amount of I/I that flows into component agencies’ local collection systems, thereby reducing the impact of I/I on the regional system’s capacity. This cooperative process will assess levels of I/I in local conveyance systems and construct pilot projects and will evaluate the cost-effectiveness and environmental costs and benefits of local collection system rehabilitation. The executive will develop and recommend long-term measures to reduce existing and future levels of I/I into local collection systems. Incentives for component agencies to meet the adopted target for I/I reduction may include a surcharge.</p>	<p>A. Explanatory material. The <u>infiltration and inflow (I/I)</u> policies are intended to guide the county in working cooperatively with component agencies to <u>review and update the county’s I/I reduction program. The goal of the program is to delay or defer the need for identified future regional conveyance system improvements.</u> <del>reduce the amount of I/I that flows into component agencies’ local collection systems</del> <u>The county and the agencies have been working collaboratively to reduce I/I in local agency systems and reduce the amount of I/I that enters the county’s regional conveyance system. From 2000 through 2014, activities included: (1) extensive flow monitoring and modeling to define levels of I/I for each local agency tributary to the regional system; (2) ten pilot projects to test various technologies and gain cost information; (3) development of draft standards, procedures, policies, and guidelines for use by local agencies to reduce I/I in their systems; and (4) completion of one larger I/I reduction project to test cost-effectiveness of I/I reduction on a scale large enough to offset the need for a planned regional conveyance project.</u> <del>thereby reducing the impact of I/I on the regional system’s capacity</del></p> <ul style="list-style-type: none"><li>This cooperative process will assess levels of I/I in local conveyance systems and construct pilot projects and will evaluate the cost-effectiveness and environmental costs and benefits of local collection system rehabilitation. The executive will develop and recommend long-term measures to reduce existing and future levels of I/I into local collection systems. ((Incentives for component agencies to meet the adopted target for I/I reduction may include a surcharge.))</li></ul>	<p><i>December 29, 2014:</i> The policies were sent to Task Force members for final review. WTD staff suggested a word change in the last sentence from the Dec. 2 version. Task Force members concurred.</p> <p><i>December 2, 2014 discussion:</i> There were comments to consider putting more information in the explanatory material that shows what has occurred over the past 14 years. The revised language is an attempt to provide such information.</p> <p>*****</p> <p><i>November 13, 2014 discussion:</i></p> <ul style="list-style-type: none"><li>There was discussion that the nuance of delaying/deferring CSI projects is missing in the explanatory statement. <i>A sentence has been added in an attempt to capture this.</i></li><li>There were comments that it would be helpful to think about what have we learned to date, and how do we want the policies to guide further discussion. <i>Information has been provided in the second column for the corresponding policy.</i></li><li>There was a comment that if we continue to maintain the I/I program as regional-focused only, no one will deal with the I/I coming from private property.</li><li>It was noted that the way they policies are written, there is no incentive for local agencies to do something with I/I coming from private properties; would it be by ordinance?</li><li>There was discussion about developing policy and or regulations about new construction; could King County adopt regulations about pressure testing and some authority to have a local jurisdiction fix new construction if doesn’t pass the pressure test?</li><li>The high costs for the County to monitor and track where I/I comes from was noted. There was a suggestion that we need to think more broadly; if the County feels I/I is coming from a certain jurisdiction/agency, rather than the County try to prove that it is, have the jurisdiction/agency prove that it isn’t.</li></ul> <p>*****</p> <p><i>October 30, 2014 discussion:</i> The explanatory materials need to be re-written once recommendations for policy amendments are made.</p>	<p><i>Full MWPAAC approved the Task Force amendments at its April 22, 2015 meeting.</i></p> <p><i>There were no comment made at the February 5, 2015 Rates and Finance subcommittee meeting.</i></p>

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		<p>There should be processes in place to deal with poor construction, and if we are trying to solve new construction, that should be the focus. The construction should be dealt with through an inspection program.</p> <p>Before we can use the Skyway project as an indicator of success or non-success of dealing with I/I on a large-scale basis, we need to know what the results would have been if the portion that wasn't accounted for was included in the project; or what would the results look like if that portion hadn't entered into the basin.</p>	
I/IP-1: King County is committed to controlling I/I within its regional conveyance system and shall rehabilitate portions of its regional conveyance system to reduce I/I whenever the cost of rehabilitation is less than the costs of conveying and treating that flow or when rehabilitation provides significant environmental benefits to water quantity, water quality, stream flows, wetlands or habitat for species listed under the ESA.	No changes are proposed for this policy.	<p><i>December 29, 2014:</i> The policies were distributed for a final review. One member noted that the words added be taken out as it would allow for an I/I project to proceed simply if a capacity constraint existed in a facility that could result in an overflow, and not need to meet the cost effective test. The task force agreed to keep the language in its original form.</p> <p><i>December 2, 2014 discussion:</i> There was a suggestion to add the words “prevents overflows or” after “when rehabilitation” and before “provides” to the policy.</p>	<p><i>January 8, 2015, Engineering and Planning Subcommittee discussion:</i> There was discussion about given the uncertainty of costs, how do you determine whether I/I will cost less? One member commented that the Skyway I/I initial project gave us construction cost estimates and how much I/I was removed. This would be the basis of future work by WTD and a part of the E&amp;P's workplan.</p>
I/IP-2: King County shall work cooperatively with component agencies to reduce I/I in local conveyance systems utilizing and evaluating I/I pilot rehabilitation projects, and developing draft local conveyance systems' design guidelines, procedures and policies, including inspection and enforcement standards. Evaluations of the pilot rehabilitation projects and a regional needs assessment of the conveyance system and assessments of I/I levels in each of the local sewer systems will form the basis for identifying and reporting on the options and the associated cost of removing I/I and preventing future increases. The executive shall submit to the council a report on the options, capital costs and environmental costs and benefits including but not limited to those related to water quality, groundwater inception, stream flows and wetlands, and habitat of species listed under the ESA. No later than December 31, 2005, utilizing the prior assessments and reports the executive shall recommend target levels for I/I reduction in	<p><u>I/IP2 NEW: The county shall work with the local agencies to review and update the regional I/I reduction program. The review shall consider, but not be limited to the following:</u></p> <ul style="list-style-type: none"> <li>• <u>Past regional I/I efforts</u></li> <li>• <u>Changes to existing code and contract language that provide direction on I/I allowances</u></li> <li>• <u>Policy guidance related to inspection programs for new construction</u></li> <li>• <u>Incentives for local agencies to reduce I/I from entering their local systems</u></li> <li>• <u>Incentives to private property owners for inspection and repair of side sewers</u></li> <li>• <u>Comprehensive list of tools or actions associated with reduction of I/I</u></li> </ul> <p><u>The executive shall provide progress reports on the I/I program review as outlined in the reporting policies (K.C.C. 28.86.165).</u></p>	<p><i>December 2, 2014 discussion</i> There was discussion that the new policy (in red) should replace old I/IP-2. There was a suggestion that progress reports be made in accordance with the reporting policies in place of putting an arbitrary date for completion of the review.</p> <p>There was also discussion on whether there should be another policy that talks about holistic approaches. Is there a way to more clearly identify what we want from a program, and then discuss the tools and approaches needed to achieve that goal. <i>The addition of the last bullet to the new I/IP-2 is an attempt to capture this discussion.</i> *****</p> <p><i>November 13, 2014 discussion:</i> There was discussion that a new policy be developed to continue the I/I study process, and conduct a review of the various topics that were discussed, such as inspections. <i>The policy is WTD's staff attempt at capturing the discussion.</i></p> <p><i>October 30, 2014 discussion:</i> There was discussion on why the 30 percent goal – what was the rationale. If we are going to have a target goal, there needs to be</p>	<p><i>January 8, 2015, Engineering and Planning Subcommittee discussion:</i> There was a recommendation to add the following bullet to I/I Policy 2 (NEW):</p> <ul style="list-style-type: none"> <li>• “Updated cost assumptions and estimated reduction efficiencies.”</li> </ul> <p>There was discussion about the importance of tracking efficiencies and showing how I/I removal is or isn't efficient.</p>

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local collection systems and propose long-term measures to meet the targets. These measures shall include, but not be limited to, establishing new local conveyance systems design standards, implementing an enforcement program, developing an incentive based cost sharing program and establishing a surcharge program. The overall goal for peak I/I reduction in the service area should be thirty percent from the peak twenty-year level identified in the report. The county shall pay one hundred percent of the cost of the assessments and pilot projects.		<p>rationale for that. One member noted that it was just a number that was suggested way back when.</p> <p><i>WTD staff reviewed old documents, and in the Executive’s Recommended Program the goal of 30 percent was evaluated, the following is noted in that report:</i> “The benefit-cost analysis for the third alternative evaluated the cost of removing 135 mgd of I/I from the regional collection system, which is 30 percent of the region’s total estimated 450 mgd of I/I. The total cost to achieve this level of I/I reduction was calculated at approximately \$398 million and would result in a savings in capital CSI project costs of \$116 million. For this alternative, the benefit (\$116 million) to cost (\$398 million) ratio for achieving 30 percent I/I reduction would be 0.29, which is below the standard set for cost-effectiveness.” Because of this, the report noted that this alternative “was deemed infeasible”.</p> <p>There was a comment that this policy should be taken apart based on what was accomplished and what should be done. There was also a question on the words “groundwater inception” (highlighted in yellow). <i>WTD checked the King County Code, and the word “inception” is in the Code.</i></p>	
I/IP-3: King County shall consider an I/I surcharge, no later than June 30, 2006, on component agencies that do not meet the adopted target levels for I/I reduction in local collection systems. The I/I surcharge should be specifically designed to ensure the component agencies’ compliance with the adopted target levels. King County shall pursue changes to component agency contracts if necessary or implement other strategies in order to levy an I/I surcharge.	<del>((I/IP-3: King County shall consider an I/I surcharge, no later than June 30, 2006, on component agencies that do not meet the adopted target levels for I/I reduction in local collection systems. The I/I surcharge should be specifically designed to ensure the component agencies’ compliance with the adopted target levels. King County shall pursue changes to component agency contracts if necessary or implement other strategies in order to levy an I/I surcharge.))</del>	<p><i>December 2, 2014 discussion:</i> Based on previous discussions, there is general agreement to delete this policy.</p> <p>It was noted that regarding an I/I surcharge, from the recommendation section for long-term I/I control of the Executive’s Recommended Program completed in 2005: “Do not implement a surcharge on local agencies for flows that exceed targeted I/I reduction levels already established in the King County Code. The County and local agencies found that implementing a surcharge, as contemplated in the King County Code, would be costly to administer and would pose difficulties in verifying violations.”</p> <p><i>October 30 discussion:</i> If there is no incentive to do investigation and resolve the I/I, what would support an I/I reduction program? It was noted that not providing for a surcharge allows others to not do anything.</p> <p>If the surcharge is go away in these policies, than the policy needs to be revised with incentives.</p> <p>The way the contracts read about pre-1961 pipes allows leakage</p>	

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		<p>and contributes to regional costs. Is there a way to normalize flows and see what would exceed the amount anticipated.</p> <p>The essence of what needs to be resolved is what is most cost-effective – to build the conveyance or fix I/I.</p> <p>A complication is the majority of I/I comes from private side sewers. We might want to look at Tacoma’s mechanisms.</p> <p>To re-energize the I/I program, perhaps there should be an end date to reach some conclusion.</p> <p>Would it make sense to have an inspection oversight group? It doesn’t seem like any of the upcoming CSI projects are projects that I/I reduction would have helped. Will we reapply how I/I reduction would help to eliminate or delay a needed CSI project?</p>	