King County Auditor's Office

Kymber Waltmunson, King County Auditor



- TO: Metropolitan King County Councilmembers
- FROM: Kymber Waltmunson, King County Auditor

SUBJECT: Follow-up on the 2014 Georgetown Combined Sewer Overflow Project Audit

The Wastewater Treatment Division (WTD) has fully implemented three of our recommendations, resulting in increased transparency of cost information to County Council and development of a structured plan for how the County can act on opportunities to renegotiate the consent decree. WTD has made progress in other key areas, and additional actions are needed to fully implement three of our remaining audit recommendations.

We are closing one recommendation as unimplemented, as the time for addressing the recommendation has passed. While WTD did hire an independent consultant to consider alternatives to the selected wet weather treatment station option for the Brandon and Michigan basins, it did not bring any alternative forward for further development to a point where greater certainty could be reached on life cycle costs.

Similarly, our recommendation that WTD should revisit alternatives for the other projects in the 2012 Combined Sewer Overflow Control Plan remains open. WTD does not plan to develop multiple alternatives to a sufficient level of cost certainty before selecting a single approach. Given that WTD now states it is unable to put any range of cost certainty around planning level estimates, it is selecting a single project alternative to move forward without any level of cost certainty at all. See below for steps WTD can take to implement this recommendation.

DONE	DONE 3 Recommendations have been fully implemented Auditor will no longer monitor	
DROCDESS 3 Recommendations are in progress or partially implem		Recommendations are in progress or partially implemented Auditor will continue to monitor
OPEN1Recommendation remains unresolved Auditor will continue to monitorCLOSED1Recommendation is no longer applicable Auditor will no longer monitor		

Of the eight audit recommendations:

Please see below for details on the implementation status of these recommendations.

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Implementation Status as of January 2016

#	Quick Status	Recommendation	Status Detail
1	DONE	The Wastewater Treatment Division (WTD) should develop metrics and monitor information on the agency's final costs for projects relative to cost estimates used for County Council decision-making. WTD should work in conjunction with the County Council to determine a regular schedule for reporting on this information, such as including information on project costs in relation to planning-level cost estimates in funding requests.	WTD compares final project costs to conceptual estimates and has begun including this information in the fourth quarter capital improvement plan, which is transmitted to County Council staff in January of each year. Implementation of this recommendation has increased the transparency of this information to County Council.
2	PROGRESS	 The Wastewater Treatment Division (WTD) should continue to take steps to improve the quality of its planning-level cost estimates, including: a) continuing to apply changes to WTD's contingency policy in its cost estimates b) continuing to work with a consultant to identify and implement methods to improve planning-level cost estimates c) developing planning-level cost estimation guidelines d) developing techniques to use historical information to inform estimates of likely costs of projects e) employing independent validation of early cost estimates. 	 WTD has taken a number of steps to implement this recommendation and plans to continue this work throughout 2016. WTD is conducting a pilot project of changes to the contingency policy on 40 projects during the 2015-16 budget cycle. WTD is working with a consultant, Value Management Strategies, to improve planning-level cost estimates. WTD has set up a technical work group to work through various issues related to cost estimation as noted in all portions of our recommendation. To fully implement this recommendation, WTD should finish applying the changes to the contingency policy to all projects and implement any recommendations developed by the consultant or technical work group in relation to planning-level cost estimates.

#	Quick Status	Recommendation	Status Detail
3	PROGRESS	The Wastewater Treatment Division should further develop performance appraisal criteria for project managers, including more specific criteria applicable to management of scope, schedule, budget, and project quality during preliminary design phase work.	 WTD has developed performance appraisal criteria for project managers to use during the early phases of projects (pre-baseline), as well as guidance and training for applying these criteria. WTD plans to roll out this effort to more projects in greater detail during 2016. To fully implement this recommendation, WTD should continue rolling out these new criteria on future projects and document that project managers have been trained on how to apply the new criteria.
4	PROGRESS	The Wastewater Treatment Division should increase management and monitoring of consultant contracts in order to minimize project scope and cost growth prior to project baseline.	WTD has revised the Change Review Board charter to include quarterly reporting and review of architectural and engineering contracts that meet certain thresholds, as well as a process to identify which contracts may need additional management oversight. Quarterly reporting is scheduled to begin in the first quarter of 2016. To fully implement this recommendation, WTD should ensure that data is tracked in a way that facilitates management oversight of consultant contracts.

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#	Quick Status	Recommendation	Status Detail
5	DONE	The Wastewater Treatment Division should assess the efficacy of oversight structures intended to control project scope, schedule, and budget, including the Capital Systems Team and the Change Review Board. The assessment should include a targeted examination of how effective these bodies are at controlling changes to scope, schedule, and budget proposed during early project phases and WTD should report to County Council on its findings.	 WTD hired an independent consultant to evaluate the effectiveness of management oversight structures. The consultant generally found that WTD's oversight structures perform as intended and are effective in controlling project scope, schedule, and budget. The consultant developed a report with findings related to each oversight mechanism and WTD identified actions to address these issues. Implementation of this recommendation has helped identify ways to improve both the efficiency and effectiveness of WTD's project management oversight structures, including removal of redundancies and clarification of oversight responsibility.
6	CLOSED	The Wastewater Treatment Division (WTD) should analyze alternatives to the selected wet weather treatment option for the Georgetown project and bring one or more alternatives forward for further development, thus allowing WTD to decide which alternative to pursue after it achieves greater certainty about the final life cycle costs of more than one alternative.	WTD has not implemented this recommendation. While WTD did hire an independent consultant to consider alternatives to the selected Georgetown Wet Weather Treatment Station alternative for the Brandon and Michigan basins, it did not bring any alternative forward for further development to a point where greater certainty could be reached on life cycle costs. Since the Georgetown project has progressed beyond the point of developing alternatives, the Auditor's Office will no longer monitor this recommendation.

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#	Quick Status	Recommendation	Status Detail
7	Quick Status	Recommendation The Wastewater Treatment Division should revisit the alternatives selected for the other eight combined sewer overflow (CSO) control projects in the 2012 CSO Control Plan and, for each project, should develop one or more alternatives to a sufficient level of cost certainty before selecting which alternative to construct.	Status DetailThe intent of the recommendation was for WTD to develop more than one alternative approach to a sufficient level of cost certainty before selecting a single project option to move forward. WTD has done some work related to this recommendation as part of its Long Term CSO Control Plan Update. WTD planning staff is identifying multiple alternatives for most projects in the plan, and is working with a consultant to bring those alternatives through a decision model.However, WTD does not plan to develop multiple alternatives beyond the 0-2 percent level of design that occurs during planning. Instead, WTD plans to identify one preferred alternative at this early level of design that will then be included in the control plan. In addition, WTD stated that cost estimates at the planning phase will have greater uncertainty than the -50 to +100 percent uncertainty around its planning level estimates.In order to implement this recommendation, WTD should continue the work it has laid out for updating the CSO Control Plan. In addition, WTD should bring forward more than one project approach to a "sufficient level of cost certainty" (i.e., a level with a defined range of uncertainty that could be communicated to decision-makers,

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#	Quick Status	Recommendation	Status Detail
8	DONE	In consultation with the County Council, the Wastewater Treatment Division should develop a decision-making framework to use in determining the circumstances under which additional information developed on CSO project alternatives is sufficient to warrant renegotiation or modification of the county's consent decree. For example, a framework might set parameters such that if WTD brings another alternative to 15 percent design and that alternative is at least 30 percent less expensive than the wet weather treatment alternative currently planned for the Georgetown project, the County should initiate the process to modify its consent decree.	WTD worked with council staff to develop a plan and criteria for amending the consent decree. The plan was finalized on January 6, 2016. Implementation of this recommendation has resulted in a structured way for the County to act on opportunities to renegotiate the consent decree.

Brooke Leary, Senior Principal Management Auditor, and Peter Heineccius, Senior Management Auditor, conducted this review. Kymber Waltmunson, King County Auditor, was the project supervisor. Please contact Peter at 206-477-0077 if you have any questions about the issues discussed in this letter.

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