

	<b>AGENDA ITEM EXECUTIVE SUMMARY</b>				
	Title:	Presentation of Phosphorus Removal Project at Main Wastewater Treatment Plant – Information Only			
	Presenter:	John Lamb			
<i>Please check appropriate box:</i>					
	Government Operations		X	Government Services 10.26.15	
	Planning & Development			City Council	
Estimated Cost:		Budgeted:	YES		NO
If NO, please explain how item will be funded:					
<b>Executive Summary:</b>					
<p>In December 2014 the City received a renewal of its EPA Permit for the Main Wastewater Treatment Plant. In addition to standard permit limits there are special conditions that require additional reporting, plant modifications or new regulations, limits. The latest permit has a special condition that requires the City to remove phosphorus in the wastewater. This will involve construction and modification of the existing facility.</p> <p>The condition also has a compliance schedule and requires a Feasibility Report to investigate how the phosphorus removal would meet proposed limits and what process would be recommended. Actual construction of the project is to start in May 2017 and be completed June 2018. Design of the project still needs to be done.</p> <p>Staff retained the engineering services of Trotter &amp; Associates to perform the Feasibility Report. The report involved research into different methods of phosphorus removal and extensive modeling of these alternatives. Of all the methods studied two methods were reasonable for consideration. The first method is biological and the second is chemical. The biological process involves more capital improvements; however the chemical process requires higher annual operational costs over the life of the system. Evaluation of both systems over a span of 20 years suggests that the two projects are similar in cost. Also the difference in the debt service of the project is minimal over the same time period.</p> <p>Both amounts were reviewed for potential impact on user rates by Trotter &amp; Associates and the Finance Department. The difference in rates was determined to be minimal. Several meetings were held with Trotter, Public Works, Finance and the City Administrator to discuss financial and non-financial factors of the alternatives. A matrix was developed scoring eighteen of these factors. The results of this matrix favored the biological process over the chemical process by 56 points.</p> <p>In conclusion, the recommendation of staff is to implement the biological process. Although this process has higher costs up front it is still both a fiscally and environmentally responsible decision. The project would be budgeted in the 2016/17 Fiscal Year and would be funded through an Illinois EPA Low Interest Loan.</p>					
<b>Attachments:</b> <i>(please list)</i>					
None					
<b>Recommendation / Suggested Action</b> <i>(briefly explain):</i>					
For information only.					
<i>For office use only</i>		<i>Agenda Item Number: 4.e</i>			