

In June 2018, the City Sewer and Storm Water Utilities completed a draft of their Integrated Management Plan (IMP). The IMP uses the Environmental Protection Agency's (EPA) integrated planning framework to identify adaptable and long-term recommendations to affordably address the City's wastewater and stormwater infrastructure needs and Clean Water Act obligations. The City solicited public comments on the draft IMP during a 45-day comment period which closed on July 13, 2018. The City received comment form submissions from 11 individuals and written comments from the Boone County Regional Sewer District during the public notice period. The City thanks the commenters for the time and effort spent reviewing the report documents and preparing comments. A summary of each comment, as well as the City's response, is included below.

**Timestamp 6/25/18 06:20:42**

**Comment Summary:** The commenter indicated that they reviewed the IMP and believe it and the 5-Year Action Plan adequately address the project objectives and is a process the City should continue to use going forward. Specifically, the commenter suggested that clarification is needed regarding which watersheds are included in the IMP.

**City Response:** With respect to applicable watersheds, the City notes that all watersheds within or adjacent to the municipal boundaries were considered in development of the plan. For more information regarding how specific watersheds were assessed and prioritized, please refer to report Attachments E and J.

**Timestamp 7/5/18 14:17:54**

**Comment Summary:** The commenter indicated that the project events were too long.

**City Response:** Conducting effective and meaningful community outreach is an essential step in the integrated planning process outlined by the Environmental Protection Agency (EPA). For the IMP, the City held four, two-hour long workshops between 2016 and 2017 to gain public input that helped to identify and prioritize project goals, system needs, and desired outcomes over time. Results from these workshops are described in Attachment J and used to prioritize projects in Attachment N. The slides and handouts presented at each workshop are also available at the project website <https://www.como.gov/utilities/sewer/imp/>.

**Timestamp 7/5/18 14:47:05**

**Comment Summary:** The commenter indicated that the IMP and 5-Year Action Plan do not adequately address the project objectives but endorsed the City's continued use of integrated planning going forward. Specifically, the commenter cited run off issues from the Willow Falls development as an item that needed to be addressed more fully.

**City Response:** The City regulates stormwater runoff control in accordance with our municipal separate storm sewer system (MS4) discharge permit and accompanying stormwater management program. Minimum control measures (MCM) #4 and #5 in the MS4 permit address construction and post-construction runoff control requirements, respectively. Currently, the City complies with the MS4 permit by implementing these MCMs through a combination of ordinances, planning requirements, and inspections. For the Willow Falls development specifically, the City notes that development plans were prepared in accordance with City requirements and site is inspected regularly by the Community Development Department.

The recommended suite of IMP alternatives includes enhancements to the City's MS4 program. Specifically, the alternatives include an expansion of the current construction site inspection program

(MCM #4). The City believes that these enhancements will make our existing program more effective in reducing sediment from construction runoff and result in improved stream water quality.

**Timestamp 7/6/18 9:21:34**

**Comment Summary:** The commenter indicated that they reviewed the IMP but do not believe it and the 5-Year Action Plan adequately address the project objectives. Further, the commenter indicated that the City should not use the integrated planning process going forward. Specifically, the commenter suggested that more comprehensive information is needed on reducing residential flooding and indicated that the City should focus on maintaining existing infrastructure at affordable rates.

**City Response:** Resolving stormwater related flooding issues is an important need that was identified by the community early in the IMP process. As discussed in Attachment H, the City has tracked and mapped storm drainage and flooding issues since the early 1970's. Many of the identified flooding issues impact yards, streets, and structures. Using these data, the City has identified approximately \$23 million of immediate flood reduction needs, and anticipates that up to \$40 million in additional flood reduction projects may be necessary. However, funding is not currently available to address all of these needs in a timely manner. Additionally, some structures were constructed prior to floodplain development regulations and are cost-prohibitive to retrofit a stormwater management solution.

The proposed suite of IMP alternatives recommends that the City implement up to \$30 million of flood reduction projects over the 20-year implementation period. It also recommends that the City move forward with comprehensive stormwater master planning efforts to more efficiently and effectively resolve stormwater conveyance issues across the City. However, these recommended improvements would require that additional funding be raised through a voter-approved stormwater rate increase after the year 2020.

The City agrees that existing stormwater infrastructure must be maintained at an affordable cost to ratepayers. A majority of the recommended stormwater actions are focused on more efficiently and effectively managing and protecting existing stormwater assets. More detailed information on each of these actions is presented in Attachment H. The analysis presented in Attachment O demonstrates that that these recommended stormwater improvements will be implemented in a way that maintains affordability for ratepayers.

**Timestamp 7/10/18 16:47:38**

**Comment Summary:** The Osage Group of the Sierra Club indicated their support for the IMP and recommended suite of alternatives. The commenter also suggested that the City emphasize addressing sewer issues in the central city, fund additional inflow and infiltration (I/I) reduction and backflow prevention, increase stormwater management and Collaborative Adaptive Management funding, and coordinate with the Columbia Climate Change and Adaptation Task Force.

**City Response:** The initial set of activities identified in the 5-Year Action Plans represent the early actions that are needed to both implement the highest priority, near-term projects and also collect critical data needed to more precisely forecast future needs. Many of the near-term projects that have been outlined in the IMP emphasize funding I/I reduction, building backup prevention, and rehabilitation of old systems to address issues in older parts of the system, which include the central neighborhoods. If new data indicate IMP modifications are necessary, the City will reevaluate the proposed suite of recommended alternatives during the next planned update to more efficiently and effectively address identified infrastructure, public health, and environmental needs.

In the context of EPA's integrated planning framework, public participation is ongoing process that should be used to inform and refine IMP goals and outcomes. The City expects that future IMP activities will be reviewed through outreach activities with the public. We encourage the Osage Group of the Sierra Club, task force members, and other interested citizens and stakeholders to continue participating in the planning process as the IMP is implemented and reevaluated over time.

**Timestamp 7/11/18 14:53:26**

**Comment Summary:** This commenter expressed support for the IMP and selected alternatives. As a point of clarification, the commenter asked for additional details regarding burdens on developers and property owners.

**City Response:** As part of the alternatives identification and selection process, the City quantified all anticipated costs and consumer rate impacts based on the information currently available (see Attachments N and O for more detailed information). Based on our analysis, the proposed suite of projects will allow the City to address critical infrastructure, public health, and environmental needs while maintaining affordable user rates. Other than the potential rate impacts, the IMP is not expected to result in any new or significant burdens on developers or property owners. If additional costs or burdens are identified as the IMP is implemented over time, user affordability will be reevaluated.

**Timestamp 7/13/18 14:53:26**

**Comment Summary:** The commenter indicated that the IMP and 5-Year Action Plan do not adequately address the project objectives but endorsed the City's continued use of integrated planning going forward. The commenter indicated that they would like the City to focus on address building backups in the plan.

**City Response:** The City is aware that there are a number of buildings that experience repeated building backups during wet weather. These backups are an important public health concern and alleviating them is a priority of the IMP. Usually there are site-specific factors that can cause backups, and the issues cannot be cost-effectively addressed through capacity enhancements in the public sewer system and must be addressed through building plumbing improvements by the property owners. As the IMP was in the process of being developed, the City Council approved a cost-reimbursement program to assist homeowners in making these improvements. Citizens who experience backups and are interested in participating in the reimbursement program are encouraged to contact the Sewer Utility for more information.

**Timestamp 7/13/18 15:38:44**

**Comment Summary:** The commenter indicated that they reviewed the IMP, as well as supporting guidance developed by EPA. The commenter indicated that the IMP and the 5-Year Action Plan adequately address the stated project objectives and is a process the City should continue to use going forward. A number of detailed comments and recommendations were also provided:

**City Response:** Each of the comments and the City's response is included below.

**Comment 1.** On page 4, it is recommended that the Final Report from the MTFI be referenced by https: at the bottom of the page.

Response – The IMP webpage has been included in the final paragraph on page 4.

**Comment 2.** It is easy for the general public to confuse water quality of streams with the water quality of potable water. It is recommended that a general clarification statement be made in Section 2 to distinguish the two water qualities and that this study does not address potable water quality or drinking water standards.

Response – We have added a footnote on page 3 to indicate that the term “water quality” refers to surface water quality throughout the report.

**Comment 3.** Does there need to be an acronym page somewhere in the report?

Response – All acronyms that appear in the IMP reports and attachments were defined the first time they were used in each document.

**Comment 4.** On page 10, should there be more historical explanation of the CRWWTP and that it is a regional wastewater treatment plant and not exclusive to Columbia. What region does it cover?

Response – On page 10 and in Attachment G, the report discusses the importance of Columbia Regional Wastewater Treatment Plant as a regional asset and briefly explains that more than 100 small treatment systems in and around the City have been eliminated since its construction. Additional information on the history of wastewater treatment in Columbia is available at the following website <https://www.como.gov/utilities/sewer/sewer-facility-operations/>.

**Comment 5.** Should there be an explanation of the MS4 permitting system?

Response – The MS4 permitting system and the City’s joint stormwater management program is explained in detail in Section 3.3 of Attachment H.

**Comment 6.** Additionally, under this section of the report it explains the current restraints of financing stormwater projects. The MTFI recommendation for stormwater financing should be considered. That recommendation was that the City should collaborate with interested parties to lobby the Missouri General Assembly to enact a "Storm Water Revenue Bond Statue" for municipalities. The interested parties would be the City, City's bond Counsel, Chamber, MML other municipalities in the state that have created a Storm Water Utility and local legislators. This would be a great financing tool similar to what is used by all utilities. A substantial amount of projects could be expedited. The utility would no longer be constrained to have voter approval for rate increases.

Response – Identifying specific wastewater and stormwater financing strategies and recommendations are beyond the scope of this project.

**Comment 7.** There are numerous references to a 20 year Planning Period. If bonds are issued to finance the capital projects will they be limited to a term of 20 years? Given the magnitude of the needed investment, it would not be out of order to use 25 year or 30 year bond terms.

Response – The City assumed that 30-year bonds would be used to finance capital wastewater improvements in order to estimate residential billing impacts in the IMP report. As the IMP is implemented over time, these assumptions will be reevaluated and updated, as necessary.

**Comment 8.** The three level funding scenarios is a very good idea and approach.

Response – The City appreciates the support for this approach.

**Comment 9.** Should it be recommended that a Cost of Service Study be completed just for the contractual relationship between the city and the BCRSD? This has its complexities and should be uniform throughout its application to each connection point.

Response – Analyses and recommendations regarding the coordination of rate development and implementation strategies between the City and BCRSD were beyond the scope of this project.

**Comment 10.** On page 21 or somewhere in the report, the existing sewer rates and stormwater rates should be revealed.

Response – The existing sewer and storm rate structures are available on the Sewer and Storm Water Utility web pages. Alternative rate structures were not evaluated for the IMP. In the IMP, the City chose to present customer impacts in terms of average monthly bills because it is a more easily understood measure of cost. The existing bills and their projections in the absence of implementing the IMP recommendations are presented as the orange line in the graph on page 22. Existing sewer and stormwater bills are also discussed in Attachment O.

**Comment 11.** On page 22, it is recommended that this graph be broken down separately for sewer and stormwater. The 2% MHI does not relate to Stormwater.

Response – EPA's 2% MHI threshold applies to all Clean Water Act compliance-related costs, which include both wastewater and stormwater costs.

**Comment 12.** On page 23, it is an understatement that the forecasted annual expenditures will increase gradually over time. Both graphs have steep slopes and is not gradual.

Response – The statement on page 23 refers to billing increases in the Census Tracts that make up the central neighborhood of Columbia and not the community-wide results. As depicted in Figure 9 in Attachment O, bills in those central neighborhood tracts do not reach 2% of MHI until approximately 2028. The City has modified this section to make this distinction more clear.

**Comment 13.** Somewhere in the study, a typical year income and expense statement should be represented for the sewer utility and stormwater utility.

Response – Detailed information regarding the current and historical Sewer and Storm Water Utility finances are available at the following website: <https://www.como.gov/finance/accounting/financial-reports/>

**Comment 14.** Page 28 under Building Backup Reduction (Wastewater Collection) – reference the actual city ordinance that was passed. As a note, this was a recommendation from the MTFI.

Response – A reference to Chapter 22, Article II, Section 22-254 has been added.

**Comment 15.** Page 38, reference the I&I Study at the bottom of the page.

Response – A link to the City's website that explains I/I issues and historical sanitary sewer evaluation study efforts has been added.

**Comment 16.** Thank you for including the MTFI Functional Sewer Utility Recommendations in the study!!!!

Response – Effective integrated plans should incorporate the results of all previous, relevant planning efforts. The City’s IMP draws from the our 2004 wastewater master planning study, 2008 stormwater assessment, 2014 stormwater rate study, and Mayor’s Task Force on Infrastructure (MTFI) recommendations as a basis for determining system-wide needs and solutions. Many of the MTFI sewer and stormwater functional recommendations are important for ensuring the appropriate operation and maintenance of our existing systems.

**Comment 17.** I think the level of \$100,000 should be mentioned that the council approved.

Response – The Council-approved funding level for the building backup reduction program is included in the 5-Year Action Plan.

**Comment 18.** To have ongoing Stakeholder participation, should there be some mention of establishing an Advisory Board for the Wastewater Utility as well as the Stormwater Utility?

Response – Because the City anticipates only needing to revise and update the IMP recommendations periodically (most likely every five years), future outreach will likely be conducted through public hearings and Columbia City Council meetings. The City also has a regular public improvement process for all Capital Improvement Projects, which includes interested party meetings and public hearings. This process provides additional opportunity for stakeholder input and participation.

**Comment 19.** In Attachment D, on page 7 reference a link to the Final Integrated Water Resource Plan report.

Response – Attachment D was prepared in August 2016 and serves as a summary of the IMP Visioning Workshop that was held in early 2016. The Integrated Water Resource Plan (IWRP) report developed for the Water and Light Department was not referenced in that summary document because it was not finalized until February 2017. The final IWRP can be accessed here:  
[https://www.comowater.org/uploads/2/0/1/3/20131535/columbia\\_iwrp\\_proposed\\_draft.pdf](https://www.comowater.org/uploads/2/0/1/3/20131535/columbia_iwrp_proposed_draft.pdf)

**Comment 20.** Page 31 of the “Columbia 5 – Year IMP Action Plan has a number of misspelled words in the Stormwater Management section in the middle column.

Response – Thank you for the comment. These items have been addressed.

**Comment 21.** I think the best indicator of the ability to pay or range of higher monthly user bills is indicated by the monthly cost of what the Boone County Regional Sewer District customers pay. How is the demographic makeup of the Columbia customer profile any different the BCRSD customer?

Response – As described on page 20 of the report and in Attachment O, sufficiently detailed socioeconomic data specific to BCRSD customers are not readily available. Therefore, it is not possible to determine how the demographics or customer profiles compare to City residents.

**Comment 22.** The Missouri Municipal League may have a similar publication as MPAU for rates or average monthly user costs and create another comparative analysis.

Response – We are not aware of similar studies or rate compilations in Missouri. The Missouri Public Utility Alliance (MPUA) updates their water and wastewater rate surveys regularly and they serve as a useful source of information for comparing billing impacts. If other comparable sources of information are available from the Missouri Municipal League (MML) or other organizations in Missouri and can be provided to the City, the City will eagerly consider them in future iterations of the IMP.

**Comment 23.** The Median Household Income is a gross income statistic and should be “derated” to net income by application of the income tax bracket for the city’s MHI. We all pay our bills from our net income!! Providing a definition of MHI might be helpful.

Response – EPA’s 2% affordability threshold was determined based on an evaluation of the “gross” median household income (MHI) statistic as reported by the Census Bureau. If gross MHI were adjusted downward to reflect net income or some other income statistic, the 2% threshold would have to be adjusted similarly to facilitate an appropriate comparison. The City notes that the 2% affordability threshold and MHI evaluation are screening approaches and do not fully characterize potential impacts on the community. In particular, these approaches do not adequately consider impacts on disadvantaged populations that may be disproportionately impacted by increased sewer and stormwater bills. For these reasons, the City conducted extensive financial and socioeconomic analyses to identify potential affordability issues that could arise from implementing the IMP alternatives (see Attachment O). These included evaluations of population, income, poverty, and billing impacts at both a city-wide and census tract scale. Results of the evaluation suggest that the proposed alternative is affordable to residential ratepayers.

**Comment 24.** The study does not provide any analysis of the sewer customer increase over time.

Response – In the underlying rate projections, the City assumed 1% customer growth per year over the 20-year planning period. This growth rate approximates the historical average.

**Comment 25.** In Technical Memorandum 10 on Page 15 a table may be more useful to interpret the data point for the different years and monthly bills or have both.

Response – A table has been added as Attachment C in Technical Memorandum 10.

**Comment 26.** On page 20 under Residential Billing Impacts – the output data from the City’s application of their existing stormwater and wastewater rate models to forecast future residential user rates and bills based on 20 year cash flows develop for each funding level alternative should be summarized in a table(s).

Response – Rate model outputs for the IMP scenarios are available to interested parties upon request. Please contact the Sewer Utility for more information.

**Comment 27.** As a future strategy for affordability, the city may want to consider some affordability programs offered by the electric and telecommunications sectors now underway in California.

Response – The identification of alternative rate structures or funding strategies was beyond the scope of the current project but may be reevaluated during future iterations of the IMP, if appropriate. Nationally, there are legislative efforts to develop low income assistance programs. The benefits of these efforts will be more apparent as they develop over time.

**Timestamp 7/13/18 15:38:44**

**Comment Summary:** The commenter indicated that they reviewed the IMP believe it and the 5-Year Action Plan adequately address the stated project objectives and is a process the City should continue to use going forward. The commenter indicated that they support the City going beyond the optimized level of funding in order to address existing issues more proactively and fund additional system expansion.

**City Response:** The proposed optimized funding level was developed based on currently available information, community input, and our understanding of existing needs in the sewer and storm systems. Maintaining affordable rates was also a key component of selecting the optimized funding level. As the IMP is implemented, the City will be collecting additional data that will be used to more precisely forecast future needs. If these additional data indicate that IMP modifications are necessary, the City will reevaluate the proposed suite of recommended alternatives to more efficiently and effectively address identified infrastructure, public health, and environmental needs.

**Timestamp 7/13/18 15:42:21**

**Comment Summary:** The commenter indicated that they reviewed the IMP and do not believe it and the 5-Year Action Plan adequately address the stated project objectives. However, the commenter indicated that the City should continue to use the integrated planning process going forward. The commenter noted that affordability was not addressed in the IMP but did not provide specific comments.

**City Response:** We note that the maintaining community affordability is a key goal of the integrated planning process. Affordability is also related to the issue of social equity and environmental justice. In Columbia, one of the City's 2016-2019 Strategic Planning goals is to improve social equity across the community. For the IMP, the City conducted extensive financial and socioeconomic analyses to identify potential affordability issues that could arise from implementing the IMP alternatives (see Attachment O). These included evaluations of population, income, poverty, and billing impacts at both a city-wide and census tract scale. Results of the evaluation suggest that the proposed alternative is affordable to residential ratepayers.

**Boone County Regional Sewer District written comments**

**Comment Summary:** The sewer district indicates that two classes of customer were neglected in the affordability analysis. Specifically, City customers outside the City limits that are charged at 150% of the rate charged customers inside the City limits and Boone County Regional Sewer District customers. It is indicated the plan is not affordable if these two classes of customers have rates in excess of 2% of the MHI. In addition, the sewer district recommends that plan include establishment of criteria for excessive inflow and infiltration.

**City Response:** Maintaining community affordability is a key goal of the integrated planning process. Affordability is also related to the issue of social equity and environmental justice. In Columbia, one of the City's 2016-2019 Strategic Planning goals is to improve social equity across the community. For the IMP, the City conducted extensive financial and socioeconomic analyses to identify potential affordability issues that could arise from implementing the IMP alternatives (see Attachment O). These included evaluations of population, income, poverty, and billing impacts at both a city-wide and census tract scale. Results of the evaluation suggest that the proposed alternative is affordable to the community for at least the first 10 years of IMP implementation. The projections are based on planning level cost estimates that are likely to change as additional information is gathered during IMP implementation. Additionally, changes in regulatory requirements, program needs and socioeconomic conditions across the City will also influence future affordability projections. It is understood the importance of refining the projected



sewer and stormwater program needs, costs and billing impacts every 5 to 10 years during IMP implementation to ensure affordability is maintained for the community going forward.

The United States Environmental Protection Agency (USEPA) currently has well defined criteria for excessive inflow and infiltration in a sanitary sewer system. This is the appropriate criteria that should be used to determine if the City's system experiences excessive inflow and infiltration as it is the criteria that will ultimately be used by the regulatory agencies in evaluation of the City's system.