

RATE RECOMMENDATION REPORT

of

**THE RATE COMMISSION OF THE
METROPOLITAN ST. LOUIS SEWER DISTRICT**

to the

**BOARD OF TRUSTEES OF THE
METROPOLITAN ST. LOUIS SEWER DISTRICT**

upon the

WASTEWATER AND STORMWATER RATE CHANGE PROPOSAL

JULY 30, 2015

**BLACK & VEATCH CORPORATION, RATE CONSULTANT,
AND LASHLY & BAER, P.C., LEGAL COUNSEL,
TO THE RATE COMMISSION OF THE
METROPOLITAN ST. LOUIS SEWER DISTRICT**

**THIS IS THE REPORT REQUIRED BY THE CHARTER PLAN
AND HAS BEEN ADOPTED BY A MAJORITY OF THE RATE
COMMISSION DELEGATES IN ACCORDANCE WITH
CHARTER PLAN, § 7.280(f).**

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INTRODUCTION

The Wastewater and Stormwater Rate Change Proposal of the Metropolitan St. Louis Sewer District (the “District”) was presented to the Rate Commission on February 26, 2015.

The Rate Commission initiated certain proceedings in order to provide for the advance submission of written testimony, the conduct of three technical conferences, a prehearing conference, discovery procedures, public hearings, and the filing of post-hearing briefs with procedural fairness to the parties. See Charter Plan of the Metropolitan St. Louis Sewer District (hereinafter “Charter Plan”), § 7.280. Home Builders Association of St. Louis & Eastern Missouri and Missouri Industrial Energy Consumers intervened and participated in these proceedings. The record of these proceedings may be found at <http://www.stlmsd.com/our-organization/organization-overview/rate-commission-and-rate-proposal-information>. All of the written testimony, exhibits, document requests and responses, transcripts of testimony, legal memoranda, and other materials contained therein have been admitted into evidence discussed and considered by the Rate Commission Delegates for the purpose of making the findings and determinations contained in this Report. These proceedings (the “Proceedings”) are incorporated herein by reference.

The Rate Commission’s Report to the Board of Trustees (the “Board”) of the District is due within 120 days of receipt of the Rate Change Proposal, or June 26, 2015, unless the Board of Trustees shall upon application of the Rate Commission extend the period for one additional 45-day period. The Rate Commission submitted a request for such an extension on April 17, 2015, and on May 14, 2015, the Board of Trustees approved an extension of the period to August 10, 2015. See Charter Plan, § 7.290(f).

This is the Report required by the Charter Plan and has been adopted by a majority of the Rate Commission Delegates. See Charter Plan, § 7.280(f).

EXECUTIVE SUMMARY

The District's Rate Change Proposal¹ was presented to the Rate Commission on February 26, 2015. The Rate Change Proposal presents the District's proposed use of \$900,000,000 in bond financing and \$440,000,000 in cash financing to fund its Capital Improvement and Repairs Program (CIRP) from FY2017 through FY2020; to provide the funds needed to comply with regulatory requirements relating to deficiencies in the District's wastewater system, including sewers, pump stations, and treatment plants; and to satisfy the requirements of the Consent Decree in the matter captioned United States of America, the State of Missouri and the Missouri Coalition for the Environment Foundation vs. the Metropolitan St. Louis Sewer District. On July 15, 2011, the District entered into a Consent Decree program with the United States Environmental Protection Agency, the State of Missouri and the Missouri Coalition for the Environment Foundation obligating the District to invest \$4.7 billion for a 23-year period in activities described in the Consent Decree. See Ex. MSD 47, MSD Consent Decree.

The District proposes to finance the required capital improvements by a combination of wastewater user charge revenues, available fund balances, revenue bond proceeds, Missouri Clean Water State Revolving Fund loan proceeds, potential commercial paper proceeds, grants and contributions, other operating revenues, and interest income. The impact of the Rate Change Proposal upon wastewater rates, if principally funded by bond financing, is described in Ex. MSD 1, Rate Change Proposal, Wastewater Financial Plan, Table 4-10.

¹ This summary of the Rate Setting Documents does not purport to be complete and reference is made to the full text of the Rate Setting Documents or a complete recital of the terms of the rate changes proposed by the District.

In the event that the voters of the District do not approve bond financing for the CIRP, the District proposes cash financing in order to comply with the terms of the Consent Decree. The impact of the Rate Change Proposal upon wastewater rates, if principally funded by cash financing, is described in Ex. MSD 1, Rate Change Proposal, Alternative Proposed Wastewater Rates, § 4.11.

First Criteria: Whether the Rate Change Proposal is necessary to pay interest and principal falling due on bonds issued to finance assets of the District. See Charter Plan, § 7.040.

The Rate Commission, after discussion and consideration of all of the facts and circumstances disclosed in these proceedings, finds and determines that the rate change proposal to fund the capital improvement and replacement program with a combination of bond and cash financing provides for the funds necessary to pay principal and interest falling due on revenue bonds previously authorized and the additional \$900 million revenue bonds proposed to be issued.

Alternatively, if voter approval is not obtained for future bond financing, the Rate Commission after consideration of all of the facts and circumstances disclosed in these proceedings finds and determines that the rate change proposal to fund the capital improvement and replacement program with a combination of bond and cash financing provides for the funds necessary to pay principal and interest falling due on the revenue bonds previously issued as authorized in prior proceedings to finance the capital improvement and replacement program.

Second Criteria: Whether the Rate Change Proposal is necessary to pay the costs of operation and maintenance. See Charter Plan, § 7.040.

The Rate Commission, after discussion and consideration of all of the facts and circumstances disclosed in these proceedings, finds and determines that the rate change proposal provides the funds necessary to pay the costs of operation and maintenance for wastewater services.

The Rate Commission, after discussion and consideration of all of the facts and circumstances disclosed in these proceedings, finds and determines that the rate change proposal provides the funds necessary to pay the costs of operation and maintenance for stormwater services.

Third Criteria: Whether the Rate Change Proposal provides for funds in such amounts to cover emergencies and anticipated delinquencies. See Charter Plan, § 7.040.

The Rate Commission, after discussion and consideration of all of the facts and circumstances disclosed in these proceedings, finds and determines that the rate change proposal provides for funds in such amounts as may be required to cover emergencies and anticipated delinquencies for wastewater services.

The Rate Commission, after discussion and consideration of all of the facts and circumstances disclosed in these proceedings, finds and determines that the rate change proposal provides for funds in such amounts as may be required to cover emergencies and anticipated delinquencies for stormwater services.

First Factor: “Is *consistent with constitutional, statutory or common law as amended* from time to time. See Charter Plan, § 7.240.

The Rate Commission, after discussion and consideration of all of the facts and circumstances disclosed in these proceedings, finds and determines that the rate change proposal is consistent with constitutional, statutory or common law as amended from time to time.

Second Factor: Whether the Rate Change Proposal “*Enhances the District’s ability to provide adequate sewer and drainage systems and facilities, or related services.*” See Charter Plan, § 7.240.

The Rate Commission, after discussion and consideration of all of the facts and circumstances disclosed in these proceedings, finds and determines that the rate change proposal enhances the District’s ability to provide adequate sewer and drainage facilities or related services for wastewater services.

The Rate Commission, after discussion and consideration of all of the facts and circumstances disclosed in these proceedings, finds and determines that the rate change proposal enhances the District’s ability to provide adequate sewer and drainage facilities or related services for stormwater services.

Third Factor: Whether the Rate Change Proposal for Wastewater Services “Is *consistent with and not in violation of any covenant or provision relating to any outstanding bonds or indebtedness of the District.*” See Charter Plan, § 7.240.

The Rate Commission, after consideration of all of the facts and circumstances disclosed in these proceedings, finds and determines that the rate change proposal to fund the CIRP with

the use of \$900,000,000 in revenue bonds and \$440,000,000 in cash financing is consistent with and not in violation of any covenant or provision relating to any outstanding bonds or indebtedness of the District.

Alternatively, if voter approval is not obtained for future bond financing, the Rate Commission, after consideration of all of the facts and circumstances described in these proceedings, finds and determines that the proposed rate change proposal to fund the CIRP through cash basis financing is consistent with and not in violation of any covenant or provision relating to any outstanding bonds or indebtedness of the District.

Fourth Factor: “Does not *impair* the ability of the District to comply with applicable *Federal or State laws or regulations as amended from time to time*” See Charter Plan, § 7.240.

The Rate Commission, after discussion and consideration of all of the facts and circumstances disclosed in these proceedings, finds and determines that the rate change proposal does not impair the ability of the District to comply with applicable federal and state laws or regulations as amended from time to time.

Fifth Factor: “Imposes a *fair and reasonable* burden on all classes of ratepayers.” See Charter Plan, § 7.240.

The Rate Commission, after discussion and consideration of all facts and circumstances disclosed in these proceedings, finds and determines that a wastewater rate change proposal which projects (i) late charge revenues of 1% per year, and (ii) a utility expense escalation at 5.5% a year, does not impose a fair and reasonable burden on all classes of ratepayers.

The Rate Commission, after discussion and consideration of all facts and circumstances disclosed in these proceedings, finds and determines that a wastewater rate change proposal which projects (i) a late charge revenue increase in accordance with the increase in projected customer bills, and (ii) a utility expense escalation at 3% every other year, does impose a fair and reasonable burden on all classes of ratepayers.

The Rate Commission, after discussion and consideration of all facts and circumstances disclosed in these proceedings, finds and determines that a stormwater rate change proposal which imposes a \$0.10 per hundred ad valorem property tax to fund stormwater operations does impose a fair and reasonable burden on all classes of ratepayers.

The Rate Commission, after discussion and consideration of all facts and circumstances disclosed in these proceedings, finds and determines that a stormwater rate change proposal which charges customers an established rate times the quantity of impervious area of their property to fund stormwater operations does impose a fair and reasonable burden on all classes of ratepayers.

BACKGROUND

Metropolitan St. Louis Sewer District

Article VI § 30(a) of the Missouri Constitution has authorized “The people of the city of St. Louis and the people of the county of St. Louis . . . to establish a metropolitan district or districts for the functional administration of services common to the area included therein” Mo. Const. art. VI, § 30(a). At a special election on February 9, 1954, the freeholders adopted and the voters of the City of St. Louis and St. Louis County approved the Charter Plan (as amended on November 7, 2000) creating the Metropolitan St. Louis Sewer District. The Charter Plan establishing the District has been held to be constitutional. State on inf. Dalton v. Metro. St. Louis Sewer Dist., 275 S.W.2d 225 (Mo. 1955) (en banc).

The District is a body corporate, a municipal corporation, and a political subdivision of the state, with power to . . . act as a public corporation within the purview of the Plan, and shall have the powers, duties, and functions as herein described. Charter Plan, § 1.010. The Missouri Constitution provides that upon the adoption of the Charter Plan, it “shall become the organic law of the territory therein defined, and shall take the place of and supersede all laws, charter provisions and ordinances inconsistent therewith relating to said territory.” Mo. Const. art. VI, § 30(b). As explained by the Missouri Supreme Court, “[t]he apparent intent is to give the freeholders, with the approval of the voters, power to do whatever the Legislature could ordinarily do with respect to the creation, organization and authority of such a district.” Dalton, 275 S.W.2d at 228.

As such, the Charter Plan is similar to legislation, and thus, the District has only such powers as are delegated to it by the Charter Plan, or as may properly be implied from the nature

of the duties imposed. State on inf. McKittrick v. Wymore, 132 S.W.2d 979, 987-88 (Mo. 1939) (en banc).

To determine whether a certain action of the District is authorized by the Charter Plan, it must be construed to further the intent of the voters. Centerre Bank of Crane v. Dir. of Revenue, 744 S.W.2d 754, 759 (Mo. 1988) (en banc). Intent must be ascertained by examining the plain language of the Charter Plan reviewed as a whole. Staley v. Dir. of Revenue, 623 S.W.2d 246, 248 (Mo. 1981) (en banc).

It is clear that authorization was provided to residents in St. Louis City and County to establish a metropolitan sewer district, Mo. Const. art. VI, § 30(a), and that authorization was provided by the voters of St. Louis City and County to authorize the activities which carry out the intent expressed and implied from the Charter Plan, including the establishment of the Rate Commission.

The Rate Commission

The Rate Commission was established by the amendments to the Charter Plan approved by the voters at a general election on November 7, 2000, to represent commercial-industrial users, residential users and other organizations interested in the operation of the District, including by way of example but not by way of limitation, organizations focusing on environmental issues, labor issues, socio-economic issues, community-neighborhood organizations and other nonprofit organizations. See Charter Plan § 7.230. The Rate Commission shall review and make recommendations to the Board regarding proposed changes in wastewater, stormwater rates, and tax rates. Specifically, upon receipt of a Rate Change Notice from the District, the Rate Commission is to recommend to the Board changes in a wastewater, stormwater, or tax rate necessary to pay (i) interest and principal falling due on

bonds issued to finance assets of the District; (ii) the costs of operation and maintenance; and (iii) such amounts as may be required to cover emergencies and anticipated delinquencies. See Charter Plan, § 7.040.

Any change in a rate recommended to the Board by the Rate Commission pursuant to § 7.270 of the Charter Plan is to be accompanied by a statement of the Rate Commission that the proposed rate change (i) is consistent with constitutional, statutory, or common law as amended from time to time; (ii) enhances the District's ability to provide adequate sewer and drainage systems and facilities, or related services; (iii) is consistent with and not in violation of any covenant or provision relating to any outstanding bonds or indebtedness of the District; (iv) does not impair the ability of the District to comply with applicable Federal or State laws or regulations as amended from time to time; and (v) imposes a fair and reasonable burden on all classes of ratepayers.

Appointment

On September 11, 2014, the District enacted Board Ordinance No. 13978, as required by § 7.230 of the Charter Plan, and designated the Rate Commission Representative Organizations. The Ordinance designated: Associated General Contractors of St. Louis, Cooperating School Districts, Education Plus, The Engineers' Club of St. Louis, Greater St. Louis Labor Council, League of Women Voters, Lutheran Senior Services, Missouri Botanical Garden, Missouri Coalition for the Environment, Missouri Industrial Energy Consumers, Mound City Bar Association, North County Incorporated, Regional Chamber & Growth Association, St. Louis Council of Construction Consumers, St. Louis County Municipal League, and West County Chamber of Commerce. Each of these Organizations designated an individual to serve as a Rate

Commission Delegate and notified the Rate Commission. The Delegates currently comprising the Rate Commission are:

Commission Delegates	Representing
Steven Chodes	Education Plus
Nancy Bowser	League of Women Voters of Saint Louis
Paul Brockmann	Missouri Botanical Garden
Otis Williams	St. Louis Council of Construction Consumers
Chan Mahanta	North County Incorporated
Leonard Toenjes	Associated General Contractors (AGC)
Eric Schneider	St. Louis Regional Chamber
Lori A. Kelling	West St. Louis County Chamber of Commerce
Mike O'Connell III	Greater St. Louis Labor Council
George D. Tomazi	The Engineers' Club of St. Louis
Kennard Jones	Mound City Bar Association
John L. Stein	Missouri Industrial Energy Consumers
Steve Mahfood	Missouri Coalition for the Environment
Mark Schoedel	Lutheran Senior Services
Russell Hawes	St. Louis County Municipal League

Under the Charter Plan, the Board is to identify the Rate Commission Representative Organizations for a term of years determined by the Board. Charter Plan, § 7.230. Each Rate Commission Representative Organization selected by the Board shall have the right to designate a Rate Commission Delegate to the Rate Commission for a term of six years or the completion of

any unexpired terms. Id. at § 7.240. This section continues, “Prior to the expiration of a Rate Commission Representative Organization’s term, the Board of Trustees shall designate organizations within the District to succeed such Rate Commission Representative Organization.” Id. at § 7.240. Nothing bars a Rate Commission Organization from being named to successive terms. Id.

Rate Commission’s Operational Rules

On August 16, 2001, and under the authority of §§ 7.250 and 7.280(e) of the Charter Plan, the Rate Commission adopted Operational Rules, Regulations and Procedures as amended on March 21, 2002, April 16, 2003, March 2, 2007, January 18, 2008, March 7, 2011, and March 4, 2015, to govern the activities of the Rate Commission.

Rate Commission’s Procedural Schedule

On March 4, 2015, the Rate Commission, under the authority of § 7.280(e) of the Plan and pursuant to § 3(3) of the Operational Rules, adopted a Procedural Schedule for the Consideration of a Wastewater and Stormwater Rate Change Notice. The Rate Commission adopted a Revised Procedural Schedule on May 20, 2015.

Under the Charter Plan, the Rate Commission must issue its Rate Recommendation Report to the Board and the public no later than 120 days after receipt of a Rate Change Notice. Charter Plan, § 7.280(f). As a result, the Recommendation Report for the Wastewater Rate Change would be due June 26, 2015. Section 7.280(f), however, allows the Board, upon application of the Rate Commission, to extend the period of time for the issuance of the Rate Commission Report for one additional 45 day period. By correspondence dated April 17, 2015, the Rate Commission made such application to the Board, asking the deadline to be extended

until August 10, 2015. The Board granted the request for an extension on May 14, 2015, and the Rate Commission Report is now due August 10, 2015.

Rate Commission's Proceedings

Under procedural rules adopted by the Rate Commission, any person who would be affected by the Wastewater and Stormwater Rate Change Proposal has an opportunity to submit an application to intervene in the rate change proceedings. Applications to intervene were granted for: (i) Home Builders Association of St. Louis & Eastern Missouri (“HBA”); and (ii) Missouri Industrial Energy Consumers (“MIEC”).

On March 3, 2015, the District submitted to the Rate Commission prepared Direct Testimony of Susan M. Myers, Brian L. Hoelscher, Jonathan Sprague, Richard Unverveth, Tim Snoke, Bethany Pugh, Theresa Bellville and William Stannard.

On March 17, 2015, the Rate Commission submitted its First Discovery Request to the District. On March 27, 2015, the District filed its Responses.

On March 30, 2015, the Rate Commission submitted its Second Discovery Request to the District, which the District responded to on April 7, 2015.

On April 3, 2015, the Rate Commission submitted its Third Discovery Request to the District, to which the District responded on April 13, 2015.

On April 8, 2015, a Technical Conference was held on the record regarding the Rate Setting Documents and the Direct Testimony filed with the Rate Commission by the District. The purpose of the Technical Conference was to provide the District an opportunity to answer questions propounded by members of the Rate Commission; then by any Intervenor; and finally by Lashly & Baer, Legal Counsel to the Rate Commission.

On April 10, 2015, Intervenor Missouri Industrial Energy Consumers submitted its First Discovery Request to the District, to which the District responded on April 20, 2015.

On April 27, 2015, the Rate Commission submitted its Fourth Discovery Request to the District, which the District responded to on May 7, 2015.

On April 27, 2015, Intervenor Missouri Industrial Energy Consumers submitted its Second Discovery Request to the District, which the District responded to on May 7, 2015.

On April 30, 2015, Intervenor Home Builders Association submitted its First Discovery Request to the District, to which the District responded on May 13, 2015.

On May 12, 2015, the Rate Commission Consultant and Intervenor Missouri Industrial Energy Consumers submitted Rebuttal Testimony. On May 13, 2015, Intervenor Home Builders Association submitted Rebuttal Testimony.

On May 18, 2015, the District submitted its First Discovery Request to Intervenor Missouri Industrial Energy Consumers, and on May 28, 2015, Intervenor Missouri Industrial Energy Consumers submitted its response.

On May 20, 2015, a Technical Conference was held on the record regarding the Rebuttal Testimony. The purpose of the Technical Conference was to provide the Consultants to the Intervenors and the Rate Commission to respond to questions propounded by members of the Rate Commission, the District, the other Intervenors, and Legal Counsel.

On May 21, 2015, the District submitted its First Discovery Request to Intervenor Home Builders Association, and on June 2, 2015, Intervenor Home Builders Association submitted its response.

On June 3, 2015, the Rate Commission submitted its Fifth Discovery Request to the District, and on June 15, 2015, the District submitted its response.

On June 5, 2015, the District submitted Surrebuttal Testimony.

On June 17, 2015, a Technical Conference was held on the record regarding the Surrebuttal Testimony. The purpose of the Technical Conference was to provide the Consultants to the Intervenors and the Rate Commission to respond to questions propounded by members of the Rate Commission, the District, the other Intervenors, and Legal Counsel.

On June 26, 2015, a Prehearing Conference was held on the record to provide statements of the District, Intervenors and Counsel to the Rate Commission and to answer questions of the Rate Commissioners.

On July 8, 2015, Prehearing Conference Reports were submitted by the District, the Rate Commission and Intervenor Missouri Industrial Energy Consumers.

Ratepayers who did not wish to intervene were permitted to participate in a series of on-the-record public hearings conducted in eight sessions beginning on May 11, 2015, and concluding on July 10, 2015. A Public Notice regarding these Proceedings was published in the *St. Louis Post-Dispatch* and in the *St. Louis American*. These Notices contained the time, dates and location of each of these conferences and hearings.

Public Notice regarding the Rate Change Proposal was published by the District in the *St. Louis Business Journal* on February 27, 2015, in the *St. Louis Post-Dispatch* on February 27 – March 1, 2015, and in the *St. Louis American* on March 5, 2015. The District also published the Public Notice in several other St. Louis area local papers. The Public Notice contained the time, dates and location of each of the technical conferences and hearings.

Similarly, Public Notice regarding these Proceedings was published in the *St. Louis Post-Dispatch* on March 14, 16, and 18, 2015, and in the *St. Louis American* on March 12, 19 and 26,

2015, by the Rate Commission. This Notice contained the time, dates and location of each of the conferences and hearings.

The public hearing session was held on July 10, 2015, for the purpose of (1) receiving into evidence any prepared testimony previously submitted to the Commission subject to any valid objections, together with the discovery responses and transcripts of the technical conferences; (2) permitting the Rate Commission members or those designated by the Rate Commission to ask questions regarding any issue addressed by the prepared testimony or any other element of the Proposed Rate Change; and (3) permitting closing statements by the District, any person who has been permitted to intervene, and Legal Counsel for the Rate Commission.

During the Proceedings, Exhibits and Discovery Requests and Discovery Request Responses were introduced and on July 10, 2015, were admitted into evidence. These documents, together with the transcripts of testimony, written testimony, and certain other materials, may be found at <http://www.stlmsd.com/our-organization/organization-overview/rate-commission-and-rate-proposal-information> and the Proceedings Index may be found at the end of the Report.

The findings and determinations contained in this Report were considered at public meetings of the Rate Commission on July 13, 16, 27 and 30, 2015, and adopted by Resolution of the Rate Commission on July 30, 2015.

Statutory Construction

The primary rule of construction of terms found in the Charter Plan is to ascertain the intent from the language used, to give effect to that intent if possible, and to consider the words used in their plain and ordinary meaning. Hampton v. Hampton, 17 S.W.3d 599, 602 (Mo. Ct. App. 2000). Under traditional rules of statutory construction, the word's dictionary definition supplies its plain and ordinary meaning. Hoffman v. Van Pak Corp., 16 S.W.3d 684, 688 (Mo. Ct. App. 2000). The courts are without authority to read into a statute an interpretation that is contrary to the intent made evident by giving the language employed in the statute its plain and ordinary meaning. Mo. Dept. of Pub. Safety v. Murr, 11 S.W.3d 91, 96 (Mo. Ct. App. 2000). Only when the statute is ambiguous, or when it leads to an illogical result, may courts look past the plain and ordinary meaning of the statute. Id. To determine if a statute is unambiguous, "the standard is whether the statute's terms are plain and clear to one of ordinary intelligence." Wolff Shoe Co. v. Dir. of Revenue, 762 S.W.2d 29, 31 (Mo. 1988) (en banc).

STATEMENT OF RATE COMMISSION ON RATE INCREASE

The District's Rate Change Proposal requires substantial additional debt to be incurred over a short period of time, with continued issuance of debt in FY2021 through FY2024 and beyond in order to continue to fund the projects required by the Consent Decree. The District's total outstanding debt is expected to increase from \$1,126,611,100 in FY2015 to \$2,821,292,412, an increase of 250% over the nine-year period. This results in an overall Debt Per Capita level that increases from \$854 in FY2015 to \$2,139 in FY2024. Bond rating agencies consider the overall debt burden of a utility of \$600 or greater as a "Weaker" credit. While no single criteria drives a utility's credit rating, the high level of debt required by the District to complete the Capital Improvement and Replacement Program ("CIRP") is a concern.

Annual debt service, as a percent of the District's total operating budget, is projected to increase from 27.9% in FY2015 to 50.3% in FY2024. The higher the District's debt service requirements, the less ability it has in reducing costs if revenues decline. Additionally, it is more difficult to maintain desired debt service coverage levels. Based on the District's debt service schedule for existing and proposed debt issuances through FY2024, the level of annual debt service is not anticipated to drop substantially until many years after FY2024, which means that additional bond issuances to finance the remainder of the CIRP will result in a further increase in the overall debt burden of the District.

The Rate Change Proposal is designed to generate debt service coverages net revenues for proposed revenue bonds consistent with rating agencies' expectations for AA rated large metropolitan wastewater systems.

The District has projected: (i) senior lien bond debt service coverage projected at 3.06x in FY2015 while total debt service coverage is projected at 1.88x; (ii) minimum projected debt service coverage on senior lien debt of 2.76x and on all outstanding debt of 1.81x in FY2017; (iii) minimum debt service coverage on senior and total debt in FY 2020 to be 2.52x and 1.86x, respectively; (iv) net revenues of at least \$360 million for the annual rate covenant debt service requirement in FY2020; (v) days cash on hand; and (vi) a wastewater operating reserve. The District's projections for each of these criteria exceed the rating agencies' expectations for an AA rating.

The District has acknowledged that its projections for rating agency requirements are based on conservative and optimistic economic assumptions which may result in receipt of revenue in excess of forecasts.

The District has also acknowledged that its projections of revenue requirements are based on conservative and optimistic economic assumptions which may result in receipt of revenue in excess of forecasts.

The District has represented to the Rate Commission that since FY2009, if actual annual spending within a fiscal year is below the projections for revenue requirements or rating agency requirements, the remaining funds will be used to accelerate capital projects. Any remaining funds within a given fiscal year are carried over to the following year for future CIRP projects.

Customers will necessarily pay more for wastewater service each year under the Rate Change Proposal. As a frame of reference, the Environmental Protection Agency considers 2 percent of Median House Income ("MHI") as a threshold beyond which it considers a utility "heavily burdened."

- The District's rates for FY2015 result in a typical annual residential customer bill which is 1.00% of MHI.
- On July 1, 2017, the bill would be 1.00% of MHI with voter-approved bonds and 1.65% of MHI without.
- On June 30, 2020, the bill would be 1.36% of MHI with bonds and 2.14% of MHI without.

The anticipated double digit increases in rates in all but one year result in a cumulative increase of 88.1% at the end of FY2020, and nearly 181% by FY2024. This rate of increase can be expected to be difficult for low income and lower middle class income families to absorb. A typical residential wastewater bill in 2011 was \$27.56 and in 2014 was \$32.35. The Rate Change Proposal projections for a residential wastewater bill for FY2020 is \$60.86 with voter approved bonds and \$96 without such bonds. While certain low income customers will have access to the District's Customer Assistance Program, customers who are not eligible for the program will have difficulty paying their bills over time, as overall rates and monthly bills continue to increase.

The District has argued that since no person can precisely predict future economic trends, it is likely that some mixture of conservative and optimistic economic assumptions will represent reality. The District has represented that if in the aggregate the District collects revenue in excess of its forecasts, the District will move forward and expedite the Federal Consent Decree compliance related work or continue with reduced use of debt, which would then allow additional debt to be available for other projects in future years. The District believes that overall the ratepayer is better served if the capital program is slightly overfunded as opposed to underfunded.

The District, however, is in compliance with the Consent Decree. It is not necessary to spend funds collected in excess of revenue requirements to expedite performance of the obligations of the District for the Consent Decree.

Since the average annual rate increase for the four years beginning July 1, 2016, is 10.6% a year and for the four years beginning July 1, 2020 is 10.5% a year, the base rate from which a new rate change proposal might be considered for July 1, 2024, would be \$90.88, assuming an additional bond authorization in FY2021, the increase in rates is quite significant.

While conservative and optimistic economic projections for operations and maintenance expenses and to maintain debt service reserve funds, daily cash on hand and operating reserves in excess of those required to maintain an AA rating may be prudent, the appropriation of funds in excess of operational or capital requirements without regard to the increase in cost to ratepayers seems unwise and may jeopardize future rate change procedures.

The Rate Commission therefore recommends that to the extent feasible, unexpended and unencumbered funds at the end of each fiscal year be applied to appropriation accounts which will reduce the levy of rates.

STATEMENT OF RATE COMMISSION ON FUNDING FOR STORMWATER SERVICES

Impervious Area Fee. In the 2007 Rate Change Proposal, the District recommended a new stormwater fee be implemented to support the stormwater program revenue requirements based upon charging individual customers an established rate times the quantity of impervious area on their property. Impervious area was initially determined from 1996 aerial photography and updated from 2000 aerial photography. In addition to the recommendation for a stormwater impervious area charge, there were also changes proposed for the Operation and Maintenance and Capital Improvement (“OMCI”) revenues. OMCI projects were to continue to be financed by taxes initially levied some years ago. The District also proposed a reconfiguration of the existing 23 OMCI Subdistricts into five watershed based subdistricts as a means to provide enhanced stormwater services as determined by a vote of each subdistrict’s ratepayers.

Ad Valorem Taxes. The current Rate Change Proposal is an ad valorem property tax used to operate and maintain the public stormwater system within the District which the District believes is fair and equitable because (i) the use of property taxes to fund services and the maintenance of infrastructure is allowed under the Missouri Constitution and is used by the District and other municipal entities in the area to pay for these kinds of services; (ii) the use of an impervious area method would cost more to operate and maintain than an ad valorem taxing method; and (iii) the use of an impervious area method may result in fewer people participating in funding these services compared to an ad valorem taxing method based on recent Missouri Supreme Court decisions and state legislation.

We acknowledge that the levy of the property tax is uniform throughout the District and that other districts fund municipal services in this fashion. We believe, however, that a fair and reasonable rate structure would be linked to the cost of providing stormwater services.

We further believe that the most appropriate stormwater rate structure links demand for service to cost causation. Impervious area rate structures have been used very frequently because an impervious area basis reflects cost drivers, it is very fair, and is relatively easy to understand.

The Black & Veatch survey found that 90% of the respondents based the fee on gross and/or impervious area and 79% calculated stormwater user fees on impervious area.

We believe that imposing stormwater charges in a way that better reflects the District's actual cost of providing stormwater service is a more equitable and balanced method for charging for infrastructure development and maintenance costs. The District's proposal to impose a uniform tax based on property value across its District has no cost-causation basis, and therefore does not equitably spread its proposed stormwater costs across its customers within the District.

We are mindful that nonprofit entities would be subject to an impervious charge but not an ad valorem tax. The impact of the nonprofit entity infrastructure on the cost of providing stormwater service on the major nonprofits which certainly have the resources to assume their fair share is not de minimis. Five of the top 10 major employers and nine of the top 20 are located within the District: BJC HealthCare, Washington University in St. Louis, Mercy Health, SSM Health Care, Archdiocese of St. Louis, Saint Louis University, Special School District of St. Louis County, St. Louis Community College District, and Tenet Healthsystem Medical Inc.²

² See St. Louis Regional Chamber Major Employers – St. Louis, MO-IL MSA.

We are also aware that other districts in Missouri use an impervious charge to fund stormwater services, including Kansas City, City of Columbia/Boone County, City of Arnold, and City of Wentzville.

The Missouri Supreme Court's opinion in Zweig raises a concern as to whether such a method is permissible under Missouri law. It is not clear whether the Zweig footnote was actually alluding to the possibility that the stormwater charge is unauthorized under the Missouri Constitution. However, given the court's characterization of the stormwater charge as a property tax, there is a concern that the stormwater charge is based on the amount of impervious area, not on value of the property as required by Article X, Section 4(b) of the Missouri Constitution.

We believe that an impervious area charge satisfies the requirements of the Charter for a fair and reasonable rate. As a result, we encourage the Board of Trustees to conduct a full legal examination of the issue, including the possibility of pursuing legislation, a declaratory judgment action in court, or a constitutional amendment.

For the present, to avoid a potential legal challenge and in order to fund much needed stormwater services, a majority of the Commission has found that a uniformly levied ad valorem property tax satisfies the fair and reasonable standard of the Charter.

Credits and Incentives. Although the Rate Commission does not support the credit program as presented by Intervenor Home Builders Association, the Rate Commission supports the District's consideration and use of incentives generally.

CRITERIA FOR RECOMMENDATION

The Rate Commission is to review and make recommendations to the Board regarding proposed changes in wastewater, stormwater or tax rates necessary to pay (i) interest and principal falling due on bonds issued to finance assets of the District; (ii) the costs of operation and maintenance; and (iii) such amounts as may be required to cover emergencies and anticipated delinquencies. See Charter Plan, Section 7.040.

First Criteria: Whether the Rate Change Proposal is necessary to pay interest and principal falling due on bonds issued to finance assets of the District.

RATE CHANGE PROPOSAL

WASTEWATER

The Rate Change Proposal presents the District's proposed use of \$900 million in bond financing and \$440 million in cash financing to fund its Capital Improvement and Replacement Program from FY2017 through FY2020 to provide the funds needed to comply with regulatory requirements relating to deficiencies in the District's wastewater system including sewers, pump stations and treatment plants and to satisfy the requirements of the Consent Decree.³

The District proposes to finance the required capital improvements by a combination of wastewater user charge revenues, available fund balances, revenue bond proceeds, Missouri Clean Water State Revolving Fund loan proceeds, grants and contributions, other operating revenues, and interest income. See Ex. MSD 1, Rate Change Proposal, § 4.6.1.

Wastewater Major Capital Improvement and Replacement Program. The District executed on July 15, 2011, a 23-year, \$4.7 billion Consent Decree program with the United States Environmental Protection Agency, the State of Missouri, and the Missouri Coalition for the Environment Foundation. See Ex. MSD 47. This program requires the District to make investments in the wastewater system to eliminate sanitary sewer overflows, combined sewer overflows, and help reduce the risk of flooding customer properties. The current estimated Capital Improvement and Replacement Program needs are presented in Figure 4-3 and Table 4-7 of Exhibit MSD 1 for FY2015 through FY2020. The total Capital Improvement and

³ The Rate Change Proposal relies upon certain assumptions with respect to conditions, events, and circumstances that may occur in the future. Although considered reasonable, some of these anticipated conditions, events and circumstances may not occur resulting in potential differences in revenues and costs than currently projected.

Replacement Program project cost for this six-year period is projected to be \$1.975 billion. The largest component of the Capital Improvement and Replacement Program over the next six years will be capital investments related to mitigating sanitary sewer overflows throughout the wastewater system. Additional needs include other improvements to comply with regulatory requirements outside of the Consent Decree and the rehabilitation and replacement of existing system assets. Combined sewer overflows projects begin to substantially impact the Capital Improvement and Replacement Program as this component reaches \$158.3 million in FY2020. Table 4-7 of Exhibit MSD 1 presents the summary Capital Improvement and Replacement Program needs throughout the four-year proposed rate cycle. See Ex. MSD 94A, Response to Questions 1, 2, 3, 4, 5, 6, 8, and 18 of MSD Response to First Discovery Request of Intervenor MIEC.

Revenue Bonds. The District was formed on February 9, 1954, when voters in the City of St. Louis and a portion of St. Louis County approved the Charter Plan to provide a metropolitan-wide system of stormwater treatment and facilities for the collection, treatment, and disposal of sewage. The Charter Plan was amended on November 7, 2000, and further amended on June 5, 2012.

SECTION 3.020. Powers of the District. — the District established under the provisions of this Plan shall have power:

* * *

To meet the cost of acquiring, constructing, improving, or extending all or any part of the sewer or drainage systems: (a) through the expenditure of any funds available for that purpose; (b) through the issuance of bonds for that purpose, payable from taxes to be levied and collected by the District; (c) through the issuance of bonds for that purpose, payable from special benefit assessments levied and collected by the District; (d) from the proceeds of special benefit assessments or bills evidencing such assessments; (e) from any other funds which may be obtained under any law of the state or of the United States for that purpose; (f) from the proceeds of revenue bonds, payable from the revenues to be

derived from the operation of sewerage and drainage facilities and systems of the entire District . . . as may be set forth in propositions submitted at elections in the District . . . from time to time called and held to authorize the issuance of such revenue bonds; or (g) from any combination of any or all such methods of providing funds.

* * *

See Charter Plan, Section 3.020(15) (emphasis added).

The Charter Plan requires an annual budget, an explanatory budget message, and a general appropriation ordinance conforming with the budget. The budget shall provide a complete financial plan for the budget year for all District and subdistrict funds, and shall include the following:

- (1) Estimated revenues to be actually received from all sources during the budget year, together with a comparative statement of revenues for the two years next preceding, itemized by year, fund, and source.
- (2) Proposed expenditures, including projected expenses included in the Rate Commission's budget as provided in Section 7.260, recommended by the Executive Director for the budget year, together with a comparative statement of expenditures for the two years next preceding, itemized by year, fund, activity, and object.
- (3) The amount required for the payment of interest, amortization, and redemption charges on the debt of the District or any subdistrict.
- (4) A general budget summary.
- (5) A list of capital projects.

In no event shall the total amount of proposed expenditures for the budget year from any fund exceed the estimated revenues to be actually received plus any unencumbered balance or less any deficit estimated for the beginning of the budget year.

See Charter Plan, Section 7.130 (emphasis added). Subject to these restrictions, the District has the authority to issue revenue bonds.

At the end of each fiscal year, the unexpended and unencumbered parts of all appropriations shall revert to the funds from which appropriated. See Ex. MSD 88, Section 7.050. Upon approval by the Board of Trustees, the Executive Director may transfer any unencumbered appropriation balances or portion thereof from one classification of expenditure to another. See Ex. RC 88, Section 7.150.

The District's authority to issue revenue bonds requires the approval of the voters of the District. Specifically, the Charter Plan provides:

No general obligation bonds, except bonds for refunding, advance refunding, extending, or unifying the whole or any part of valid bonded indebtedness, shall be issued without the assent of the voters of the District . . . in the number required by Article VI, § 26(b) of the Constitution of Missouri (as amended from time to time), voting at an election to be held for that purpose. No revenue bonds payable from the revenues to be derived from the operation of any or all sewer and drainage systems and facilities of the District . . . except bonds for refunding, advance refunding, extending, or unifying the whole or any part of revenue bonds, shall be issued without the assent of a simple majority of the voters of the District . . . voting at an election to be held for that purpose. Notwithstanding anything herein to the contrary, the District is expressly authorized to issue District-wide general obligation and revenue bonds.

See Charter Plan, Section 7.170 (emphasis added).

The Missouri Supreme Court has expressly recognized this authority, stating, "The other powers objected to, namely, . . . incurring debts, . . . issuance of tax anticipation warrants, . . . and issuance of bonds, . . . are essential powers of such district." State on inf. Dalton v. Metro. St. Louis Sewer Dist., 275 S.W.2d 225, 231 (Mo. banc 1955). The court continued, "[w]ithout the power to incur debts and issue bonds, adequate drains, sewers and disposal plants could not be constructed. However, in the exercise of this power, the District is subject to the financial limitations imposed by the Constitution on all government subdivisions." Id.

Outstanding Revenue Bonds. Revenue bonds do not rely upon the general credit or tax money of the District and do not constitute indebtedness of the District within the limitations of

Charter Plan Section 7.190 or Article VI, § 26(b) of the Missouri Constitution. Under the authority of Mo. Rev. Stat. § 250.120.1 (2014), once the voters have approved revenue bonds, the District has authority to raise wastewater and stormwater rates to pay principal and interest on the bonds and to meet the costs of maintenance and operation of the facilities.

On April 22, 2004, the Board of Trustees issued its first revenue bonds under the terms of a Master Bond Ordinance.

Section 6.1 of the Bond Ordinance requires the District to operate the System on a revenue producing basis and at all times to prescribe, fix, maintain, and collect rates, fees, and other charges for the services, facilities, and commodities furnished by the System fully sufficient at all times to pay annual operation and maintenance expense, provide a reasonable operating reserve, produce net revenues in each fiscal year equal to at least 1.25 times the Debt Service Requirement on all Senior Bonds currently outstanding and 1.15 times the Debt Service Requirement on all Bonds then outstanding and accumulate sufficient funds to meet the costs of major renewals, replacements, repairs, additions, betterments, and improvements to the System to keep it in good working condition. See Ex. MSD 27, Bond Master Ordinance, Section 6.1.

Additional senior revenue bonds have been issued in 2006, 2008, 2010, 2011, 2012, and 2013. See Ex. MSD 84A, Response to Question 25 of the First Discovery Request of the Rate Commission. Supplemental Bond Ordinances authorized by the Board of Trustees relating to additional revenue bond issues include the same covenants. See Exs. MSD 28 through 41. The principal remaining on all of the District's senior revenue bonds issued to date is \$740.7 million as of December 31, 2014. The District has also participated in multiple subordinate series of revenue bonds issued under the Missouri State Revolving Fund loan program. The total amount of principal remaining on all of the District's State Revolving Fund Loans issued to date is

approximately \$315.4 million as of December 31, 2014. See Ex. MSD 1, Rate Change Proposal, § 4.6.2. See also Ex. MSD 99A, Response to Questions 4, 6, 7, 8, 9, and 10 of the Fourth Discovery Request of the Rate Commission.

A consideration in measuring the adequacy of District revenues is the provision of sufficient debt service coverage to meet the actual debt service paid to the bondholders on the senior revenue bonds and on the State Revolving Fund loans. The debt service coverage of the senior revenue bond debt service, i.e., the ratio of net revenue to total senior revenue bond debt service for each year of the study period shows the debt service coverage of the combined senior revenue bond and State Revolving Fund debt service (i.e., the ratio of net revenue to total debt service for each year of the study period). Current wastewater revenue bond covenants require the District to provide debt service coverage equal to at least 125% (>1.25x) of the annual principal and interest payment on all senior revenue bonds and 115% (>1.15x) of the combined annual principal and interest payment on all wastewater senior revenue bonds and all State Revolving Fund loans. See Ex. MSD 1, Rate Change Proposal, § 4.8.

Moody's Investors Services assigned a credit rating of Aa1 to the District's 2013B revenue bond obligations on November 19, 2013. See Ex. MSD 49, Moody's Credit Rating Report. Fitch Ratings assigned a rating of AA+ on November 18, 2013, to the District's Series 2013B revenue bond obligations. See Ex. MSD 50, Fitch Credit Rating Report. Standard & Poor's Ratings Service assigned a rating of AAA on November 15, 2013, to the District's Series 2013B revenue bond obligations. See Ex. MSD 48, S&P Credit Rating Report.

The rating agencies have each noted that the District's current credit rating could be compromised if projected senior debt service coverage fell below the 2.4x to 2.9x range and projected total debt coverage fell below the 1.6x to 1.8x range. The Rate Proposal is designed to

maintain a senior debt service coverage ratio of at least 2.50x over the Rate Proposal period. See Ex. MSD 3F, Direct Testimony of Bethany Pugh, p. 5, ll. 8-12. See also Ex. MSD 96, Transcript for Technical Conference on Direct Testimony, April 8, 2015; Testimony of Tim R. Snoke, p. 76, ll. 4-25; p. 77, ll. 1-23; See also Ex. MSD 84A, Response to Questions 27 and 33 of the First Discovery Request of the Rate Commission.

Proposed Revenue Bonds. The Rate Change Proposal is designed to generate debt service coverages for proposed revenue bonds consistent with rating agencies' expectations for "AA" rated large metropolitan wastewater systems. See Ex. MSD 3F, Direct Testimony of Bethany Pugh, p. 4, ll. 1-19.

The District's Capital Improvement and Replacement Program projects are primarily funded by the issuance of senior revenue bonds and State Revolving Fund loans while the smaller remaining work is on a cash-funded basis (Pay As You Go). Debt financing of the majority of the Capital Improvement and Replacement Program allows the financing burden to be appropriately shared by both present and future users benefiting from the wastewater system improvements. Capital improvements routinely incurred each year as determined by the District's comprehensive asset management program are more appropriately financed with Pay As You Go revenue generated from annual wastewater service revenue. See Ex. MSD 1, Rate Change Proposal, § 4.6.1; See also Ex. MSD 3E, Direct Testimony of Tim R. Snoke, p. 3, ll. 10-12; p. 4, ll. 1-24.

New senior revenue bonds with a total par value of \$1.07 billion and \$180 million in additional State Revolving Fund loans are expected to be issued between FY2015 and FY2020 to provide this funding. At the end of FY2016, it is estimated the District will have issued approximately 70% of its current debt authorization of \$945 million. This will require the

District to obtain voter approval for authorization of \$900 million of additional debt financing prior to FY2018. The District plans to take advantage of the State Revolving Fund loan program but expects to be limited to \$25 million each year from FY2017 through FY2020. In total, cash financing is expected to fund 26.3% of the total Capital Improvement and Replacement Program between FY2015 and FY2020. See Ex. MSD 1, Rate Change Proposal, § 4.6.1.

The District anticipates receiving grants and contributions of \$3.5 million between FY2015 and FY2020. Id.

The projected amortization of future revenue bond issues determined by PFM, the District's financial advisor, is based on current market conditions and certain assumptions regarding future market conditions. Proposed revenue bond issues will be governed by supplemental bond ordinances incorporating the bond covenants set forth in the Master Bond Ordinance. Generally, future senior revenue bonds are assumed to have a 30-year term and annual coupon rates between 5.0% and 5.5%. Future State Revolving Fund loans issued to fund the Capital Improvement and Replacement Program are expected to have 20-year terms and a net effective annual interest and administration cost of about 3% per year. In addition to the interest cost of future debt, the District will incur issuance costs with each senior revenue bond issue and State Revolving Fund loan, and be required to maintain a debt service reserve fund for the senior revenue bonds. The issuance costs for senior revenue bonds are estimated at 1.0% of the total issuance amount. Issuance costs for State Revolving Fund loans are expected to be 0.65% of the total State Revolving Fund loan amount. A Debt Service Reserve Fund will be established in an amount equal to the lesser of (i) the maximum amount of principal or on interest due in any District fiscal year on all outstanding senior revenue bonds; (ii) 125% of the

average annual debt service on outstanding senior revenue bonds; or (iii) an amount not in excess of 10% of the par value of the outstanding senior revenue bonds. Id. at § 4.6.2.

Based on these assumptions, the total annual debt service during the forecast period for existing debt and future proposed debt is expected to increase from \$65.5 million in FY2015 to \$146.1 million in FY2020. Id.

The Missouri Supreme Court has specifically held that the issuer of revenue bonds for the operation and maintenance of a sewage system had the authority to raise water and sewage rates, not only to pay principal and interest in revenue bonds issued for the purpose of construction of a water treatment plant and water transmission lines, but also to meet the cost of maintenance and operation of the physical plan itself. Oswald v. City of Blue Springs, 635 S.W.2d 332 (Mo. banc 1982), 333-34. Moreover, once the voters have approved the bonds, such increases may be made without again submitting the increase to the voters. Id. at 334. Under Oswald, approval of the Rate Change Proposal is not required to meet existing bond covenant requirements on revenue bonds previously authorized by the voters.

Missouri State Revolving Fund. The "Missouri Clean Water Law" is designed to meet the requirements of the Federal Clean Water Act of 1987 (the "Act"). 33 U.S.C. §§ 125-1376. See Mo. Rev. Stat. § 644.011 (2014). It also establishes the Missouri Clean Water Commission (the "Commission"), which is required to adopt rules and regulations to enforce the powers and duties of Chapter 644 and the Act. Mo. Rev. Stat. §§ 644.021, 644.026 (2014). The Missouri Code of State Regulations sets forth the general requirements for the implementation of Title VI of the Act, which authorizes the administrator of the Environmental Protection Agency (the "EPA") to make capitalization grants to states to fund financial assistance programs authorized by Title VI of the Act. See 10 CSR 20-4.021.

The Missouri State Revolving Fund Program is a partnership between the EPA and the Missouri Department of Natural Resources (the "Department"), and provides subsidized low interest rate loans to qualifying applicants.

In Missouri, the Clean Water State Revolving Fund Program consists of the Water and Wastewater Loan Fund ("WWLF") and the Water and Wastewater Revolving Loan Fund ("WWRLF") and those accounts secured by funds from the WWLF and the WWRLF. 10 CSR 20-4.040(2)(P). The State Revolving Fund is subject to the requirements, restrictions, and eligibilities placed on the State Revolving Fund by the Act. Id. The State Revolving Fund also funds the State Direct Loan Program ("Direct Loans"). 10 CSR 20-4.041.

The Department may make Direct Loans by purchasing the general obligation bonds, revenue bonds, short-term notes or other acceptable obligations of any qualified applicant for the planning, design, and/or construction of an eligible project. 10 CSR 20-4.041(1). These loans shall not exceed the total eligible project cost. Id.

Direct Loans are funded from State Revolving Fund loan repayments of federal capitalization grants. 10 CSR 20-4.041(3). The Department purchases the revenue bonds, general obligation bonds, or other acceptable debt obligations from the recipient no later than six months following the initial operation of the facilities constructed by the project or by the closing deadline contained in the construction loan agreement, whichever is earlier. 10 CSR 20-4.041(8). In addition, the Department may require the recipient to include those assurances and clauses in the loan agreements and bond resolutions as deemed necessary to protect the interest of the state. Id.

Under the Direct Loan Program, the bonds, notes or other debt obligations shall be fully amortized in no more than 20 years after initiation of operation and the payment frequency shall

be no less than annually with the first payment no later than one year after the initiation of operation. 10 CSR 20-4.041(9). Repayment of principal shall begin no later than one year after initiation of operation and if at any time during the loan period the facility financed through a Direct Loan is sold, either outright or on contract for deed, to an entity other than a political subdivision of the state, the loan becomes due and payable upon transfer. Id.

The Fiscal Year 2015 Clean Water State Revolving Fund Intended Use Plan, as amended, for the Missouri State Revolving Fund Program has been approved. See Ex. MSD 99G, Original Fiscal Year 2015 Clean Water SRF Intended Use Plan, and Ex. MSD 99H, Amended Fiscal Year 2015 Clean Water SRF Intended Use Plan. The Clean Water State Revolving Fund Loan section defines the terms for the State Revolving Fund program. While the Federal government has reduced the funding for all State Revolving Fund state programs, the District anticipates receiving a \$25 million share of Missouri State Revolving Fund funds on an annual basis. See Ex. MSD 1, Rate Change Proposal, § 4.6.1. Proposed State Revolving Fund loans are assumed to have an interest/administration fee of 2.5% with 20-year maturities. Issuance costs are estimated to be 0.65% of the principal amount. See Id. § 4.6.2.

The most recent due diligence questionnaire from the Missouri Department of Natural Resources dated September 5, 2013, is provided as Exhibit MSD 66. Question III of the Exhibit details the project and financial structure of a direct State Revolving Fund Loan.

The level of cash balances and bond coverage ratios reflected in the Rate Change Proposal are based on guidance provided by PFM. The District's debt service obligations are determined by existing bond ordinances and future use of debt based on the structure of these ordinances. See Ex. MSD 84A, Response to Question 27 of the First Discovery Request of the Rate Commission; Ex. MSD 94A, Responses to Questions 9 and 10 of the First Discovery

Request of Missouri Industrial Energy Consumers; Ex. MSD 98A, Responses to Questions 1-7 of the Second Discovery Request of Missouri Industrial Energy Consumers; Ex. MSD 99A, Response to Questions 7, 8, 9, and 11 of the Fourth Discovery Request of the Rate Commission.

Effect on Rate Change Proposal. It is the District's position that the proposed rate change is necessary to reflect: (i) the level of cash balances and resulting bond coverage ratios required through FY2020 to minimize a possible deterioration in the District's bond rating; (ii) the generation of sufficient revenue to fund the Capital Improvement and Replacement Program required to address the Consent Decree; and (iii) the District's debt service obligations.

The District's senior lien bond debt service coverage is projected at 3.06x in FY2017 while total debt service coverage is projected at 1.88x. Pledged revenues for FY2017 will provide adequate coverage of projected maximum senior lien debt service and adequate coverage of projected maximum total debt service. The District has projected ratios for minimum projected debt service coverage on senior lien debt of 2.76x and on all outstanding debt of 1.81x in FY2017. See Ex. MSD 1, Rate Change Proposal, Table 4-10, page 4-22.

In FY2020, minimum debt service coverage on senior and total is projected to be 2.52x and 1.86x, respectively. This compares to bond covenant minimum debt service requirements of 1.25 and 1.15 above net annual revenues respectively. Id.; and see Ex. MSD 11K, Master Bond Ordinance, § 6.1. The projected debt service coverage meets the District's objective to maintain senior debt service coverage above 2.50x, which is in line with comments provided by rating agencies during the District's last bond issuance, related to expectations for debt service coverage in order to maintain ratings.

A minimum level of net revenues is also required to comply with the Maximum Annual Debt Service Requirement (Additional Bonds Test) and Debt Service Requirement (annual rate covenant debt service coverage). See Ex. MSD 27, Master Bond Ordinance, §§ 5.3.1 and 6.1.2 respectively. The District's projections to meet the minimum debt service requirements in FY2020 require net revenues to be at least \$360 million for the annual rate covenant debt service requirement. Net revenue for FY2020 under the FY2020 proposed rates, however, is higher than the minimum required, to allow for full funding of other costs, including PAYGO capital financing. See Ex. MSD 99A, MSD Response to Fourth Discovery Request of the Rate Commission, page 6.

By the end of FY2016, the District intends to have issued approximately 70% of its current debt authorization of \$945 million in revenue bonds. The District expects to require voter approval for an additional authorization of \$900 million prior to FY2018. Total debt financing for FY2017 to FY2020 is expected to include \$918,645,000 in revenue bonds and \$100 million in state revolving loan proceeds, resulting in planned use of the remaining current authorization and approximately 86% of the new bond authorization. Cumulative cash financing will be approximately \$360 million for FY2017 to FY2020. The resulting cumulative debt financing percentage is projected to be 69% of total capital financing for FY2015 to FY2020. See Ex. MSD 1, Rate Commission Proposal, pages 4-16 and 4-17.

The District ratios compared to the Fitch 2014 Median relative to an AA rating category are as follows:

	July 1, 2016 ¹	June 30, 2020	Fitch
Annual Debt Service Coverage	1.79	1.86	2.0
Total outstanding long-term debt per customer	\$2,968	\$4,972	\$1,812
Total outstanding long-term debt per capita	\$953	\$1,586	\$514
Projected debt per customer (4 years out), bonding FY21-24 ²	\$4,972	\$6,605	\$1,973
Projected debt per customer (4 years out), no bonding FY21-24 ²	\$4,972	\$4,700	\$1,973
Projected debt per capita (4 years out), bonding FY21-24 ²	\$1,586	\$2,097	\$558
Projected debt per capita (4 years out), no bonding FY21-24 ²	\$1,586	\$1,492	\$558
Days of cash on hand	600	550	\$398
Days of working capital ³	Unavailable	Unavailable	410
Individual average monthly bill	\$44.72	\$60.86	\$35
Individual average annual bill as a % of Median Household Income, bonding ⁴	1.0%	1.4%	0.9%
Individual average annual bill as a % of Median Household Income, no bonding ⁴	1.0%	2.1%	0.9%
Average annual projected rate increases (%) next 4 years, bonding FY21-24 ⁴	10.6%	10.5%	3.7%
Average annual projected rate increases (%) next 4 years, no bonding FY21-24	10.6%	17.6%	3.7%

¹ Based on the full 12-month period prior to July 1, 2016.

² District based upon five years.

³ Working capital is generally defined as current unrestricted assets minus current liabilities payable from unrestricted assets, divided by operating expenses less depreciation, divided by 365. The District does not create long-term projections for current assets and current liabilities, so does not have a working capital projection to provide.

⁴ Fitch annual rate increase based upon projections divided by years included in projections.

See Ex. MSD 90, Fitch Rating 2014 Water and Sewer Medians; Ex. MSD 114A, Response to Question 5 of the Fifth Discovery Request of the Rate Commission.

The District's current outstanding debt is \$1,065,223,900. See Ex. MSD 94M, Summary of Outstanding Bond Issues. The District is also planning for the issuance of an additional \$1,248,645,000 during the period fiscal year 2015 through 2020. At the end of FY2020, total

outstanding debt is projected to be \$2,148,370,000. The annual debt service requirement resulting from existing and proposed debt is expected to increase from \$65.5 million in FY2015 to \$146.1 million in FY2020. See Ex. MSD 1, Rate Change Proposal, page 4-22, Table 4-10.

The District's Rate Proposal will necessarily result in a significant increase in debt. The District does not have a statutory debt limit; however, it is constrained by funding limits.

The District's current rates (FY2015) result in a typical annual residential customer bill, assuming 7 Ccf per month, of 1.00% of the weighted average median household income (MHI) for St. Louis County and the City of St. Louis. Upon implementation of the FY2020 rate increase, the typical annual residential bill is estimated to be 1.36% of the weighted average MHI, assuming no change in MHI. See Ex. MSD 101, Rebuttal Testimony of Pamela Lemoine, page 17, ll. 10-18; p. 18, Ex. PRL3.

Additional rate increases are expected beyond the Rate Proposal period in order to continue to finance future CIRP associated with the Consent Decree. Such rate increases will reduce affordability for future customers ("planned rate hikes will reduce overall affordability") See Ex. MSD 50, Fitch Rating Report.

By using revenue bond financing for a portion of the major capital improvements that are of a non-recurring nature, the financing burden is appropriately shared by both present and future users of the facilities who will benefit from the improvements. For those capital improvements that tend to be routinely incurred each year for nominal replacements (i.e., extensions and minor improvements), these costs are reasonably financed annually from current wastewater service revenue.

Utilization of revenue bond financing allows the District to fund large near term capital improvements while moderating the rate increases imposed on customers. In contrast, use of

cash financing would require significantly higher rate increases during FY2017 to FY2020. See Ex. MSD 1, Rate Change Proposal, § 4.11.

Revenue bond financing, while more expensive than Pay As You Go because of the interest component of the annual debt service payment, allows for a reasonable alignment of costs across generations, i.e., more of those benefiting from or using the asset to pay the cost. In addition to improving equity between generations of ratepayers, revenue bond funding may allow for the construction of assets sooner than would occur if all of the cash had to be accumulated before beginning construction. See Ex. MSD 96, Transcript for Technical Conference for Direct Testimony, April 8, 2015, p. 33, ll. 2-6.

Cash Financing. In the event that the voters of the District do not approve \$900 million in bond financing for a portion of the Capital Improvement and Replacement Program, the District proposes cash financing in order to comply with the terms of the Consent Decree.

Table 6-2 in the Rate Change Proposal presents projected wastewater bills based on the authorization of \$900 million in revenue bonds. The typical customer bill of 7 Ccf per month is shown on line 3, with the annual percentage change on line 4. Table 4-25 presents the same information with the assumption of no further bond authorization.

The alternative rates to finance the entire Capital Improvement and Replacement Program are presented by Table 4-7 of Ex. MSD 1, Rate Change Proposal. The resulting rate components change to those shown in Table 4.24 of Ex. MSD 1, Rate Change Proposal. This change results in a 9.8% increase in the FY2017 average single family residential monthly bill, a 65.0% increase in FY2018, a 13.1% increase in FY2019 and a 15.0% increase in FY2020. The typical single family customer bill throughout the Rate Proposal timeframe is presented in Figure 4-9 of Ex. MSD 1, Rate Change Proposal, and shows the impact of not using debt financing for

the Capital Improvement and Replacement Program beyond what has already been authorized. See also Ex. MSD 96, Transcript for Technical Conference for Direct Testimony, April 8, 2015, p. 32, ll. 20-25; p. 33, l. 1.

MISSOURI INDUSTRIAL ENERGY CONSUMERS POSITION

Michael P. Gorman, testifying on behalf of Missouri Industrial Energy Consumers, recommends a modification to the amount of cash or Pay As You Go funding for the District's Capital Improvement and Replacement Program during the four-year period FY2020-FY2023 which represents four of the highest projected capital spend years in the Consent Decree compliance period. He recommends increasing the amount of Capital Improvement and Replacement Program funded by debt to at least 80% which is higher than the District target of 75% debt. After the FY2020-FY2023 peak period Capital Improvement and Replacement Program, he believes it would be reasonable to set the Pay As You Go percentage based on what is required to produce target debt service coverage ratios and manage rate impacts. See Ex. MSD 102, Rebuttal Testimony of Michael P. Gorman, p. 5, ll. 11-21; Ex. MSD 121, Transcript of the Second Technical Conference, May 20, 2015 Rebuttal, p. 35, ll. 16-25; p. 36, ll. 1-25; p. 37; ll. 1-25; p. 38, ll. 1-8.

Based on Mr. Gorman's projected revised cost of service and financial outlook, the District will maintain total debt service coverage of at least 1.8x, and senior debt coverage exceeding 2.45x. Further, he states that the District will always maintain considerably more cash on hand than needed to meet 60 days of next year's Operation & Maintenance expenses and the cash reserve target for the District. With these credit metrics, he believes the proposed revised rates will support the District's Aa1/AAA/AA+ bond ratings from Moody's, Standard & Poor's, and Fitch, respectively, and continued access to low cost revenue bond funds needed to support

the District's major Capital Improvement and Replacement Program user rates. Id. at p. 8, ll. 9-13.

RATE CONSULTANT ANALYSIS

Pamela R. Lemoine, Rate Consultant to the Commission, believes that the Capital Improvement and Replacement Program and the District's long-term control plan are consistent with that agreed to by other major wastewater systems throughout the United States. See Ex. MSD 101, Rebuttal Testimony of Pamela R. Lemoine, p. 9, ll. 9-14.

She further states that (i) the District's proposed issuance of revenue bonds and state revolving loan bonds to finance a substantial portion of the Capital Improvement and Replacement Program is a sound capital financing approach; and (ii) financing the Capital Improvement and Replacement Program from a mix of long-term debt and cash financing is reasonable, and helps spread the cost of improvements to help pay for the improvements. In addition, bond rating agencies favorably view a meaningful amount of cash financing of a utility's capital program. Ms. Lemoine believes that the District's policy of 30% cash financing provides for a reasonable mix of cash and debt financing, and is consistent with the policies of other similar utilities. The District's proposed financing plan, assuming that voters authorize the District to issue additional bonds, will help minimize the impact of the Capital Improvement and Replacement Program on wastewater rates during the projected four-year planning period. Id. at p. 10, ll. 12-22.

Ms. Lemoine observes that the District's rate proposal requires substantial additional debt to be incurred over a short period of time, with continued issuance of debt in FY2021 through FY2024 and beyond in order to continue to fund the projects required by the Consent Decree. As shown in Exhibit PRL2, the District's total outstanding debt, as outlined in the District's Rate

Model (MSD 79), is expected to increase from \$1,126,611,100 in FY2015 to \$2,821,292,412, an increase of 250 percent over the nine-year period. This results in an overall Debt Per Capita level that increases from \$854 in FY2015 to \$2,139 in FY2024. Bond rating agencies consider the overall debt burden of a utility as one of several factors when determining a utility's debt rating. As an example, Fitch issued its updated rating criteria on July 31, 2013, in which it categorizes various criteria as "Stronger," "Midrange," or "Weaker." Fitch considers debt per capita of \$500 or less to be "Stronger," around \$550 as "Midrange" and \$600 or greater as "Weaker." While no single criteria drives a utility's credit rating, the high level of debt required by the District to complete the Capital Improvement and Replacement Program is a concern. It is recommended that the high level of debt be balanced with strong ratings in other important criteria, such as debt service coverage and liquidity (cash on hand). Id. at p. 11, ll. 10-24; p. 12, ll. 1-2.

Ms. Lemoine expresses concern that annual debt service, as a percent of the District's total operating budget (Operation & Maintenance expenses plus Debt Service, excluding cash financed capital), is projected to increase from 27.9 percent in FY2015 to 50.3 percent in FY2024, as shown in Exhibit PRL3. The higher the District's debt service requirements, the less ability it has in reducing costs if revenues decline. Additionally, it is more difficult to maintain desired debt service coverage levels. Based on the District's debt service schedule for existing and proposed debt issuances through FY2024, as summarized in the District's Rate Model, the level of annual debt service is not anticipated to drop substantially until many years after FY2024, which means that additional bond issuances to finance the remainder of the Capital Improvement and Replacement Program will result in a further increase in the overall debt burden of the District. Id. at p. 12, ll. 4-11; p. 13, ll. 1-6.

She expresses even greater concern given the remainder of requirements the District is expected to incur beyond FY2024, including additional storage projects and nutrient removal projects, along with continued, ongoing capital projects that the District can be expected to incur related to ongoing system renewal and replacement. See Ex. MSD 121, Transcript of the Second Technical Conference, May 20, 2015 Rebuttal, p. 62, ll. 23-25; p. 63, ll. 1-18.

Because the District is required, under the Consent Decree, to complete the projects within the schedule outlined in the Consent Decree, there is little the District can do, in the short-run, to mitigate the impact of the Capital Improvement and Replacement Program on debt and rates. However, Ms. Lemoine recommends that the District consider evaluating the potential for relief in terms of schedule and/or program components, by working with the EPA, the Department, and the Missouri Coalition for the Environment Foundation to allow incorporation of the concepts outlined in the Integrated Planning Framework memorandum, released in June 2012, and the US EPA Financial Capability Framework, released in December 2014. The integrated planning approach, complemented by the expanded financial capability framework, provides a framework to better recognize the impact that long-term control programs such as that required by the District have on ratepayers. The integrated planning framework would allow the District to evaluate all requirements under the Clean Water Act, including both wastewater and stormwater requirements, in such a way that ensures continued investment in the basic infrastructure serving the community while prioritizing limited financial resources to maximize improvements to water quality. Other utilities that have, or are undertaking this approach include Baltimore, MD; Philadelphia, PA; Seattle, WA; Springfield, MO; Lynchburg, VA; and Lima, OH. See Ex. MSD 101, Rate Commission Rebuttal Testimony of Pamela Lemoine, at p.

13, ll. 10-12; p. 14, ll. 1-12; and see Ex. MSD 121, Transcript of the Second Technical Conference, p. 66, ll. 18-25; p. 67, ll. 1-5.

Ms. Lemoine believes that the District's policy to maintain senior debt service coverage of 2.5 times or greater and total debt service coverage of 1.6 times or greater is a valid and important metric, particularly in light of the District's current and anticipated future heavy debt profile. See Ex. MSD 101 at p. 19, ll. 10-12.

Available cash balances are a very important element of a wastewater utility's financial plan. Adequate fund balances are necessary to ensure adequate working capital and funds for unanticipated events. Table 4-10 of the District's Rate Proposal (MSD 1, page 4-22, line 23) presents the District's forecasted combined operating reserve. As shown, the District projects that at the end of FY2020 there will be a balance of \$40,752,786 in Combined Operating Reserves, equating to approximately 77 days of operation and maintenance expenses. This is consistent with the targets of other wastewater utilities and provides the District with adequate working capital to provide for any unanticipated expenditures or emergencies. Id. at p. 19, ll. 1-8.

STORMWATER

There are no outstanding bonds to fund stormwater operations and none are proposed.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE RATE CHANGE PROPOSAL TO FUND THE CAPITAL IMPROVEMENT AND REPLACEMENT PROGRAM WITH A COMBINATION OF BOND AND CASH FINANCING PROVIDES FOR THE FUNDS NECESSARY TO PAY PRINCIPAL AND INTEREST FALLING DUE ON REVENUE BONDS PREVIOUSLY AUTHORIZED AND THE ADDITIONAL \$900 MILLION REVENUE BONDS PROPOSED TO BE ISSUED.

ALTERNATIVELY, IF VOTER APPROVAL IS NOT OBTAINED FOR FUTURE BOND FINANCING, THE RATE COMMISSION, AFTER CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE RATE CHANGE PROPOSAL TO FUND THE CAPITAL IMPROVEMENT AND REPLACEMENT PROGRAM WITH A COMBINATION OF BOND AND CASH FINANCING PROVIDES FOR THE FUNDS NECESSARY TO PAY PRINCIPAL AND INTEREST FALLING DUE ON THE REVENUE BONDS PREVIOUSLY ISSUED AS AUTHORIZED IN PRIOR PROCEEDINGS TO FINANCE THE CAPITAL IMPROVEMENT AND REPLACEMENT PROGRAM.

Second Criteria: Whether the Rate Change Proposal is necessary to pay the costs of operation and maintenance.

RATE CHANGE PROPOSAL

WASTEWATER

Wastewater Funding. The District's current wastewater rate structure consists of monthly service charges and volume charges applicable to all District customers. All non-residential customers are also assessed a compliance charge and extra strength charges where applicable. The monthly service charges include a billing and collection charge and a system availability charge. A volume charge is assessed to all customers based on their respective water usage. Water usage information is provided by customers' respective water provider on either a metered or unmetered basis. Non-residential customers are also assessed one of five tiered compliance charges based on the amount of inspection and testing of wastewater needed to comply with current regulations. Extra strength surcharges are applied to monitored non-residential customers generating excess biochemical oxygen demand, chemical oxygen demand, and total suspended solids. Ex. MSD 1, Rate Change Proposal, § 4.1.

A summary of the financial plan showing projected wastewater revenues and wastewater revenue requirements for the District during the forecast period is presented in Table 4-10 of Exhibit MSD 1 which shows projected wastewater user charge revenue that is required in order to balance the revenue requirements through FY2020. The increase shown for each year was selected based on consideration of three principal criteria:

- (i) Total revenue necessary to meet cash requirements for normal wastewater operations. This includes consideration of a one-month lag in the receipt of additional user charge revenue from increased rates;
- (ii) Annual increases in wastewater revenues available to cash finance a portion of the wastewater utility related major capital improvements; and

- (iii) Wastewater revenue required to meet certain financial metrics, based on comments from the District's rating agencies, including debt service coverage levels and strong liquidity position over the Rate Proposal period.

See Ex. MSD 1, Rate Change Proposal, § 4.8. Total revenue is projected to be \$286.5 million in FY2015 and increase to \$459.1 million in FY2020. This represents an overall annual compound increase of 9.6% during this time period. Id.⁴

Table 4-10 shows the estimated net revenue remaining after deducting wastewater Operations and Maintenance expenses from total wastewater revenues. Anticipated debt service requirements on senior revenue bonds and State Revolving Fund loans will require the District to obtain additional revenue bond authorization in the amount of \$900 million before the start of FY2018. Id.

The District's existing wastewater rates have been in effect since July 1, 2014, and the approved rates for FY2016 will go into effect on July 1, 2015. See Table 4-1 of Ex. MSD 1; Response to Question 2 of the First Discovery Request of the Rate Commission.

Wastewater Operating Reserve. The operating reserve is a balance maintained to accommodate fluctuations in annual revenues and expenditures. The District has a minimum operating reserve target equal to 60 days of annual operating expenses. The existing revenue bond covenants require the District to maintain a minimum balance equal to 45 days of Operation and Maintenance expense. The self-imposed 60-day minimum provides a buffer to allow for potential timing issues involved with funding requirements, provide increased operational flexibility, and helps support future bond ratings. The wastewater operating reserve

⁴ The Rate Change Proposal relies upon certain assumptions with respect to conditions, events, and circumstances that may occur in the future. Although considered reasonable, some of these anticipated conditions, events and circumstances may not occur resulting in potential differences in revenues and costs than currently projected.

is projected to exceed the minimum balance during the period FY2015 to FY2020. Figure 4-5 presents the estimated balance in the wastewater operating reserve throughout the forecast period. Ex. MSD 1, § 4.7; Ex. MSD 3H, Direct Testimony of William Stannard, p. 10, ll. 20-24; p. 11, ll. 1-3.

Customer Accounts. The District's ratepayers are classified into three customer classes: single family, multi-family and non-residential. The District's wastewater revenue reflects the assessment of the specific rate components for each customer class. See Ex. MSD 1, Rate Change Proposal, § 4.2.

The historical and projected average numbers of wastewater customers served by the District are provided in Figure 4-1 and Table 4-2 of Exhibit MSD 1. The projected change in the number of customers is based on a 10-year average historical trend using a US Census based cohort-component methodology. As indicated in Table 4-2, the number of total customer accounts declined by an average of 0.26% annually between FY2011 and FY2014. Based on this trend, the number of customer accounts is projected by the District to decline by 0.1% annually throughout the forecast. Id.

Contributed Volume. Billed wastewater volume is the estimated amount of water volume contributed to the sewer system by District customers. This volume is measured on either a metered or unmetered basis. The amount of contributed wastewater volume from metered customers is measured in Ccf (100 cubic feet). The volume from unmetered residential customers is determined based upon estimates of indoor water usage per fixture and the number of rooms within these properties. Id. at § 4.3.

Billable wastewater volumes for all metered residential customers are determined based on water used during the period best equated to contributed wastewater volume. The District

defines its best equated period as a 90 to 92-day period of water usage between November and April of the preceding winter period. Id.

The contributed wastewater volume of all non-residential customers is measured on a metered basis and billed based on actual quarterly usage less applicable exemption allowances for any water that does not enter the sewer system. Metered multi-family customers are either billed based on actual annual water usage or the average annual water usage established during the best equated period, depending on the billing method selected by each multi-family customer. The selected billing basis is permanent and cannot be changed. Id.

The projections of contributed volumes are based on the historical trends in billed volumes and number of customers per customer class. Since FY2006, the District has experienced annual reductions in total billed volumes of approximately 3.0%, which is a cumulative 24% reduction. The decrease in billed wastewater volume is due in part to conservation measures, increased efficiency of appliances and fixtures and the impact of the national economy. Future billable wastewater volumes are expected to gradually decrease from FY2015 volumes by an overall average of 0.91% annually. Id.

Resistance Factor. A resistance factor recognizes that some metered customers can reasonably be expected to react to the higher wastewater charges by cutting back on their level of water use and thus wastewater service. Wastewater charges are typically designed for the full rate increase indicated but with the expectation that actual revenue received will be less than projected billed revenue due to the potential customer reactions. The resistance factor provides a compensating revenue adjustment for these potential reactions. See Ex. MSD 7, 2008 Rate Proposal, p. 64.

The District did not consider a resistance factor for the Rate Change Proposal. The financial advisors of the District, however, did recommend application of a Bad Debt provision of 1.5% to future revenue projections so that higher cash balances be maintained to enhance the District's bond rating. See Ex. MSD 3G, Direct Testimony of Teresa A. Bellville, p. 5, ll. 2-5; and see Ex. MSD 84A, Response to Question 24 of the First Discovery Request of the Rate Commission.

Compliance Charge. Costs incurred by the District to monitor the quality of wastewater volume from non-residential customers had historically been recovered by a single monthly compliance charge applied uniformly to all non-residential customers. To provide greater cost recovery equity, a 5-tier structure of compliance charges was implemented as part of the last Rate Commission Proceeding adopted by the Board of Trustees in 2012. This tiered system allocates costs to customers in proportion to the number of inspections and sophistication of monitoring required. See Ex. MSD 1, Rate Change Proposal, § 4.10.5.

Projected Wastewater Revenues. Estimated revenues for FY2017 through FY2020 use FY2016 approved rates. The District's historical wastewater revenue for FY2013 and FY2014 is based on actual rates, customer account and usage data. Projected revenue from wastewater user charges is based on projected customer demands and the rates approved through FY2016 (revenue in FY2017-FY2020 assumes no changes in the approved rates for FY2016). The wastewater user charge revenue under existing rates increased from \$236.1 million in FY2013 to a projected \$313.6 million in FY2016. This change is due to a combination of key factors: approved rate increases, the impact of economic conditions, projected fluctuations in excess strength wastewater revenue due to more extensive pre-treatment programs and projected decreases in wastewater volume consistent with historical trends. As customer volumes

continue to decline over the projection period, the revenue would be expected to decline as well. See Ex. MSD 1, Rate Change Proposal, § 4.4.

Wastewater billing adjustments are determined based on current budget estimates and projected based on historical trends. These adjustments include late charges, refunds and other adjustments. The provision for bad debt has steadily declined over the last several years and is projected at 1.5% of total wastewater user charge revenue throughout the forecast. This projection is based on predicting the propensity to pay for District customers with account balances delinquent greater than 30 days. The change to this calculation resulted in a net revenue, rather than expense, for bad debt in FY2014 of \$7.2 million. Total other operating wastewater revenue is forecasted to decline from a budgeted amount of \$5.7 million in FY2015 to \$1.6 million in FY2020. The reduction is primarily due to the increases in the bad debt provision as wastewater user charge revenue increases. Id.

Wastewater Operation and Maintenance Expense. On April 22, 2004, the Board of Trustees issued revenue bonds under the terms of a Master Bond Ordinance which obligated the District to provide revenues sufficient to fund 100% of the expenses of operation and maintenance and for the accumulation of a reasonable operating reserve. See Ex. MSD 27, Master Bond Ordinance, § 6.1.1.

The revenue needed to support the Operations wastewater system must be sufficient to meet its cash requirements. The District's operating revenue requirements consist of the following: (i) total wastewater system Operations and Maintenance expenses; (ii) expenditures for routine capital improvements; (iii) components of the CIRP funded directly from revenues; (iv) wastewater revenue bond debt service; and (v) a minimum 60-day operating reserve. See Ex. MSD 1, Rate Change Proposal, § 4.5.

A summary of projected wastewater Operations and Maintenance for FY2015 through FY2020 is presented in Table 4-6 of Exhibit MSD 1. See also Ex. MSD 84A, Response to Questions 16 and 17 of the First Discovery Request of the Rate Commission; Ex. MSD 86A, Response to Questions 2, 3, 4, 5, 6, 7, and 8 of the Third Discovery Request of the Rate Commission.

Inflation Assumptions. Appendix 7.1.1 of the Rate Change Proposal (Exhibit MSD 1), describes the sources for developing the inflation assumptions. Most accounts were inflated using the Core PCE Price Index as published by the Congressional Budget Office's The Budget and Economic Outlook: 2014 to 2024. The Bureau of Economic Analysis defines Core PCE Price Index as:

. . . personal consumption expenditures (PCE) prices excluding food and energy prices. The core PCE price index measures the prices paid by consumers for goods and services without the volatility caused by movements in food and energy prices to reveal underlying inflation trends.

Appendix 7.1.1 of the Rate Change Proposal also describes the inflation factor calculation for salary increases, and notes the source of information for Group Insurance assumptions. Inflation factors for utilities and Bond & Liability Insurance were based on management's estimates. See Ex. MSD 99A, Response to Question 19 of the Fourth Discovery Request of the Rate Commission.

Inflation assumptions are used in the Rate Model to account for anticipated price increases for the goods and services for operating and maintenance expenses as well as the construction, improvement, and replacement program expenses. See Ex. MSD 1, Rate Change Proposal, Appendix 7.1.1; and Ex. MSD 3G, Direct Testimony of Teresa A. Bellville, p. 7, ll. 7-9.

The Budget and Economic Outlook: 2014 to 2024, published by the Congressional Budget Office of the Congress of the United States (CBO), was a source for inflation rates related to operations and maintenance expenses. Published in February of 2014, this document provided a 10-year forecast that best matched the District's rate model time horizon. Table G-1 was used as the basis for projected salary increases ranging from 2.9% to 3.2% over the eight-year period ending June 30, 2024. Group insurance was inflated at rates ranging from 8% to 10% based on projections provided by the District's insurance consultant, Arthur J. Gallagher & Company. Id. See Ex. MSD 3H, Direct Testimony of William Stannard, p. 9, ll. 8-18. See also Ex. MSD 99A, Response to Question 19 of the Fourth Discovery Request of the Rate Commission.

The District analysis to estimate pension costs was combined to include both the Defined Benefit and Defined Contribution plans. The Defined Benefit Plan was closed to new participants in 2011 and has shown steady declines each year after. The assumption was made that continued decreases in the Defined Benefit Plan will be offset by future cost increases in the Defined Contribution Plan due to increased participation. Id.

The Bureau of Labor Statistics Reports issued in February and August of each of calendar years 2013, 2014, and 2015 for the St. Louis Metropolitan Region are generally consistent with the projected inflation rates contained in the Rate Change Proposal. See Exs. MSD 91A-F, Bureau of Labor Statistics 2012-2015.

Routine Capital Improvements. Expenditures for routine annual capital improvements include those costs that tend to be routinely incurred each year for normal replacements such as vehicles, office equipment and minor improvement or repairs. Since the costs of these improvements are a continuing expense to be met each year, the District finances these

expenditures from current wastewater revenues. These expenses are included in the District's annual budgets as capital outlay costs. See Ex. MSD 1, Rate Change Proposal, § 4.5.2.

Capital projects funded in the Operations and Maintenance budget typically consist of expenditures that do not result in a new District asset. In general these projects include infrastructure repairs, watershed planning, rainfall data gathering and streamflow sampling which are all required to maintain existing assets. The District also funds capital improvements to computer software and hardware out of the Operations and Maintenance budget. Due to the nature of these projects, they are ineligible for bond or State Revolving Fund funding; therefore they are budgeted as operating expenses. See Ex. MSD 1, Rate Change Proposal, § 4.5.3.

Wastewater Major Capital Improvement and Replacement Program. The implementation of a Major Capital Improvements Program has a significant impact upon the ability to manage operations and maintenance. See Ex. MSD 96, Transcript of First Technical Conference, April 8, 2015, p. 55, ll. 16-22. The resources of the District on the engineering and construction management side are part of the annual operation budget and are accommodated through an annual budget process. The current capital expenditure is around \$250 million in FY2014 up to about \$450 million in FY2020, and the peak of the number of projects will be in FY2016, FY2017, and FY2018, and less projects but more expensive large projects in FY2018 and FY2019 during the second half of this rate cycle. Id. at p. 56, ll. 1-7.

The District proposes to finance the required capital improvements by a combination of wastewater user charge revenues, available fund balances, revenue bond proceeds, Missouri Clean Water State Revolving Fund loan proceeds, grants and contributions, other operating revenues, and interest income. See Ex. MSD 1, Rate Change Proposal, § 4.6.1.

The District will ensure that if actual annual spending within a fiscal year is below the projections, remaining funds will be used to accelerate projects. Within a given fiscal year, construction projects, when bid, may come in under budget. As well, projects may be delayed due to permitting, easement acquisition or other unknown issues. When this occurs, there is unused funding in the Capital Program. This unused funding can be reallocated to allow additional construction projects to proceed during the fiscal year, if other projects planned in future fiscal years are ready to be bid. These potential projects are identified in the annual capital improvement budget as Contingency Projects and are approved and adopted by the MSD Board of Trustees as part of the annual budget process. The District has been performing this procedure since the 2009 budget year. Regardless of project acceleration, any remaining funds within a given fiscal year are carried over to the following year for future projects. See Ex. MSD 94A, Response to Question 10 of the First Discovery Request of Intervenor MIEC.

The District executed on July 15, 2011, a 23-year, \$4.7 billion Consent Decree program with the United States Environmental Protection Agency and the Missouri Coalition for the Environment Foundation. See Ex. MSD 47, MSD Consent Decree. This program requires the District to make investments in the wastewater system to eliminate sanitary sewer overflows, combined sewer overflows, and help reduce the risk of flooding customer properties. The current estimated Capital Improvement and Replacement Program needs are presented in Figure 4-3 and Table 4-7 of Exhibit MSD 1 for FY2015 through FY2020. The total Capital Improvement and Replacement Program project cost for this six-year period is projected to be \$1.975 billion. The largest component of the Capital Improvement and Replacement Program over the next six years will be capital investments related to mitigating sanitary sewer overflows throughout the wastewater system. Additional needs include other improvements to

comply with regulatory requirements outside of the Consent Decree and the rehabilitation and replacement of existing system assets. Combined sewer overflows projects begin to substantially impact the Capital Improvement and Replacement Program as this component reaches \$158.3 million in FY2020. Table 4-7 of Exhibit MSD 1 presents the summary Capital Improvement and Replacement Program needs throughout the four-year proposed rate cycle. See also Ex. MSD 84A, Response to Question 3 of the First Discovery Request of the Rate Commission.

Salary Projections. The Rate Change Proposal contemplates 3% pay increases for employees over the rate period for wages, salaries and overtime. See Ex. MSD 3H, Direct Testimony of William Stannard, p. 9, ll. 9-13. An examination of the agreements with its employees reveals that the District does not have a contractual obligation to increase pay of its employees. Each of the Collateral Bargaining Agreements with the United Wastewater Workers Association, a division of Service Employees International Union Local 1, and the American Federation of State, County & Municipal Employees (Local 410) for a term ending June 24, 2016, and the Bricklayers Local 1 of Missouri, the Electricians Local No. 1, the International Union of Operating Engineers Hoisting Local No. 513, and Machinists District No. 9 for a term ending June 30, 2013; providing that (i) incremental pay increases are not guaranteed; (ii) pay increases are subject to changes in the Collective Bargaining Agreement; and (iii) the District reserves the right to make changes to the pay plan and incremental pay increases as outlined in Civil Service Rules and Regulations and as directed by the Board. See Articles XXXV and XXXVI of Ex. MSD 45, Collective Bargaining Agreement between the District and United Wastewater Workers Association, a division of Service Employees International Union Local 1, the American Federation of State, County & Municipal Employees Local 410; and see Article

XXXI of Ex. MSD 46, Collective Bargaining Agreement Between the District and Bricklayers Local 1 of Missouri, the Electricians Local No. 1, the International Union of Operating Engineers (Hoisting) Local No. 513 and Machinists District No. 9.

Infiltration/Inflow. Infiltration/Inflow includes flow entering the sewer system from illegal roof and foundation drains, groundwater infiltration through sewer service pipe and main joints and stormwater runoff or inflow from the combined sewer system. District-wide Infiltration/Inflow is approximately 50% of the total wastewater flow reaching the treatment plants on an annual basis. See Ex. MSD 1, Rate Change Proposal, § 4.9.4.

Each customer class should bear its proportionate share of the costs associated with Infiltration/Inflow, as the wastewater system must be adequate to convey and process the total wastewater flow. The amount of Infiltration/Inflow to be recovered directly from wastewater service charges is assigned to customer classes on the premise that 40% of the total is distributed on the basis of the number of customers within each class, with the remaining 60% allocated on the basis of contributed wastewater volume. Id.; see also Ex. MSD 3H, Direct Testimony of William Stannard, p. 15, ll. 15-24; p. 16, ll. 1-11.

Wastewater Revenues Inadequate. Under the previously approved Rate Change Proposals, the wastewater rates are inadequate to meet the total revenue requirements.

Wastewater revenues must be at least sufficient to finance the District's Operations and Maintenance expense, routine annual capital improvements and debt service costs on existing and proposed senior revenue bonds and State Revolving Fund loans while maintaining an adequate operating reserve and complying with all revenue bond debt service coverage requirements. Annual revenues or existing reserve refunds can also be used to finance the wastewater utility's major capital improvement program. Figure 4-6 of Exhibit MSD 1 presents

the estimated financial plan of the wastewater enterprise which shows that annual wastewater revenues under existing rates are not sufficient to meet the total revenue requirements of the wastewater utility during the forecast period without future revenue increases. See Ex. MSD 1, Rate Change Proposal, § 4.8.

Certain assumptions have been applied to the District's Operations and Maintenance from its FY2015 budget estimates through the proposed four-year rate cycle ending in FY2020. Inflation percentages vary by expense type. Salary expenses and other related lines are inflated annually at rates between 3.1% and 3.2% for the years FY2017 to FY2020. Health Insurance expense is projected to increase annually at rates between 8.1% and 9.6%, while general supplies and contractual services are expected to increase annually between 1.9% and 2.0% over the same four-year period. Future wastewater Operations and Maintenance expense is projected to increase from \$169.4 million in FY2015 to \$193.1 million in FY2020. Id. at § 4.5.1.

The proposed wastewater volume charges shown in Table 4-19 of Exhibit MSD 1 are designed to recover costs for volume associated with normal strength contributed wastewater. To provide for the recovery of costs associated with above average strength contributions, an extra strength surcharge rate is applied to wastewater loadings that exceed normal strength limits. Cost of service based rates for excess strength wastewater are equal to the unit costs shown on lines 15-17 of Table 4-19 of Exhibit MSD 1 and are expressed on a cost per ton basis. Id. at § 4.5.4.

The District asserts that recommended rates presented in Table 4-18 adequately recover the total cost of service, and equitably recover the allocated cost of service from each customer class.

MISSOURI INDUSTRIAL ENERGY CONSUMERS POSITION

Michael P. Gorman, testifying on behalf of Missouri Industrial Energy Consumers, believes that the District's proposed increases in its wastewater rates are unreasonable. He believes the District appears to have made an error in recording the wastewater user charges listed in its Rate Change Proposal and the wastewater user charges used to produce its Wastewater Financial Plan forecast because the proposed wastewater user charges shown in Exhibit MSD 1, Table ES-2 are higher than the rates used in the financial plan. A comparison prepared by Mr. Gorman of the wastewater user charges listed in Exhibit MSD 1, Table ES-2 and those used to forecast wastewater revenue in MSD's financial plan is shown on Schedule MPG-1.

It is Mr. Gorman's opinion that the District's proposed wastewater charges are unreasonable because they are based on imbalanced or unreasonable assumptions. The District financial forecast summarized on Table 4-10, page 4-22 of Exhibit MSD 1, understates revenue at current rates because it reflects a decrease in number of customer accounts, and an unreasonably large projected continued decline to volume use per customer concerning wastewater volume sales. This wastewater volume sales understatement also results in an inflated wastewater volume charge because the District is proposing to spread its cost of service over an unreasonably low estimate of its wastewater volume sales. See Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman, p. 4, ll. 1-14; p. 5, ll. 1-10. See also Ex. MSD 121, Testimony of Michael P. Gorman during Second Technical Conference, p. 29, ll. 2-25; p. 30, ll. 1-12; and Ex. MSD 127, Testimony of Teresa Bellville, Third Technical Conference, p. 96, ll. 17-25 to p. 101.

Mr. Gorman expresses concern regarding MSD's projections which shift more wastewater cost allotted on volume to metered customers from nonmetered customers. He testified:

The shift could result in MSD collecting more revenue if its projection of volume to metered customers [in St. Louis County] understated accurate meter billable volume. By understating billable metered customers, MSD has the opportunity to collect more waste water revenue over forecasted period. In contrast, by [understating] the amount of volume for nonmetered customers [in the City of St. Louis], MSD does not have the same opportunities as nonmetered customers are charged a fixed rate. That is nonmetered customers are not impacted by actual waste water volume....

Mr. Gorman believes they understated the volume component for unmetered customers. Ex. MSD 121, Testimony of Michael P. Gorman, Second Technical Conference, p. 43, l. 15 – p. 44, l. 20.

Mr. Gorman believes the District's projected revenue from Late Charges should increase in accordance with the increase in its projected customer bills. The Late Charge rate is based on the principal amount of late payments. He revised the District's projected escalation of its Late Charge Revenue from 1.0% per year as proposed by the District up to the projected increase in its proposed wastewater user charges over the forecast period. See Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman at p. 6, ll. 13-18; see also Ex. MSD 127, Transcript of Third Technical Conference, June 17, 2015, Surrebuttal Testimony, pp. 93-94.

Mr. Gorman believes Waste Hauler Permit revenues from the District's projected level of \$670,000 per year over the forecast period should be increased to \$1.4 million—the average of the actual amount of other revenues incurred during 2010-2015 (excluding 2014 because it appeared to be an outlier year). See Ex. MIEC 102, at p. 6, ll. 19-24.

It is his opinion that the utility expense escalation rate of 5.5% a year should be decreased to 3.0% every two years, starting in FY2016 and utility expense escalation rate be based on

Ameren Missouri's projected increase in its electric utility rates, and consider offsets to utility expense caused by declining volume sales by the District. This adjustment also recognizes utilities' typical adjusted prices over two years rather than every year. Id. at p. 7, ll. 1-12.

RATE CONSULTANT ANALYSIS

Pamela R. Lemoine, Rate Consultant to the Commission, believes that the District's projected costs to provide wastewater service and complete anticipated capital projects required under the Consent Decree over the Rate Proposal period appear to be reasonable and are projected to provide the District with adequate funding to maintain the financial health of the utility. The District has calculated proposed wastewater rates based on cost of service principles that are commonly used in the industry, as outlined in the Water Environment Federation's Manual of Practice No. 27, "Financing and Charges for Wastewater Systems." See Ex. MSD 101, Rate Commission Rebuttal Testimony of Pamela R. Lemoine, p. 8, ll. 7-13.

Ms. Lemoine states that the District charges its customers based on metered water consumption for most customers within the District's service area. Residential customers outside the City of St. Louis are billed based on a Winter Quarter Average, which is the average actual water consumption for a 90-92 day period between November and April of the preceding winter period. This is common practice in wastewater rate setting, as it reflects the amount of wastewater entering the District's system, and avoids including outdoor water usage during the summer months. Residential customers within the City of St. Louis are billed on the basis of Fixture Units (number of rooms, water closets, baths and separate showers), as such customers do not have water meters. Id. at p. 14, ll. 14-22; p. 15, ll. 1-3.

The results of the District analysis outlined in Appendix 7.1.2 of Exhibit MSD 1 provide the basis for the District's projected contributed wastewater volume by customer class, as

summarized in Table 4-3 of the District's Rate Change Proposal (Ex. MSD 1). The analysis reflects the fact that the District has experienced declining wastewater volume that is expected to continue throughout the Rate Proposal period. See MSD 1, Appendix 7.1.3, Graph 1.1. Ms. Lemoine observes that this is a phenomena being experienced across the country, and is due to a number of factors, including installation of high efficiency appliances, faucets, toilets, etc., as well as other potential factors such as economic conditions and environmental awareness. Ex. MSD 101, at p. 15, ll. 4-12.

The District's experience of declining contributed wastewater volume (per customer) is consistent with wastewater utilities across the United States. This decline is due to several factors, including enhanced efficiency of appliances and plumbing fixtures, economic conditions, and general awareness regarding the efficient use of water (conservation). Based upon Ms. Lemoine's review, it is her opinion that the District's forecast of continued decline in wastewater volume throughout the Rate Proposal period is reasonable. Id. at p. 15, ll. 13-20.

Ms. Lemoine acknowledges that residential customers will necessarily pay more for wastewater service each year of the study period and beyond. Exhibit PRL4 summarizes the projected annual bill for an average residential customer (7 CcF/month). Based on the weighted median household income for the Service Area, as estimated by the District, an average residential customer is anticipated to pay 1.36 percent of Median Household Income (MHI) by FY2020, and just over 2 percent by FY2024. As a frame of reference, the EPA considers 2 percent of MHI as a threshold beyond which it considers a utility "heavily burdened." In addition, the anticipated double digit increases in all but one year result in a cumulative increase of 88.1 percent at the end of the Rate Proposal Period (FY2020), and nearly 181 percent by FY2024. This rate of increase can be expected to be difficult for low income and lower middle

class income families to absorb. While certain low income customers will have access to the District's Customer Assistance Program, customers who are not eligible for the program will have difficulty paying their bills over time, as overall rates and monthly bills increase. Ex. MSD 101, at p. 17, ll. 12-18; p. 18, ll. 2-8.

In response to Question 16 of the Fourth Discovery Request of the Rate Commission, the District states:

The US Census Bureau reports that the MHI (Median Household Income) for St. Louis City (2009-2013) is \$34,582 and St. Louis County (2009-2013) is \$58,910. Approximately 21% of MSD customers live in the City and 79% live in the County. These data correspond to a weighted average MHI of \$53,801 for the MSD service area. Assuming no increase in these MHI values, the wastewater bills as a percentage of MHI on July 1, 2017, would be 1.11% if the \$900 million bonds were authorized and 1.65% without bond authorization.

Ex. MSD 99A. The District states that the average wastewater bill as a percentage of MHI on June 30, 2020 is (a) 1.36% if the \$900 million bonds were authorized; and (b) 2.14% if the \$900 million bonds were not authorized. See Ex. MSD 114A, Response to Question 5 of the Fifth Discovery Request of the Rate Commission.

Ms. Lemoine reviewed the District's assumptions regarding the escalation of various cost categories, as summarized in William Stannard's direct testimony (Ex. MSD 3H, p. 9, l. 13), as well as historical rates of change as presented in Exhibit MSD 99I. Historically, total spending under the certain categories presented has varied substantially, due to not only inflation but for many other operational reasons. She believes the variation in operational needs year over year, as well as uncertainty regarding the overall economy in the future, makes it difficult to forecast actual future escalation rates. Therefore, it is important, particularly for utilities that establish a multi-year rate schedule, to be somewhat conservative in projecting future costs. In the event that costs do not escalate as planned, the rates adopted would provide for better debt service

coverage, additional cash to improve liquidity (cash on hand), both of which would help maintain the District's financial health, and/or provide additional cash funding of capital projects, which would help to reduce the District's debt profile. For these reasons, she believes that the escalation rates are reasonable.

Ms. Lemoine further explained:

Available cash balances are a very important element of a wastewater utility's financial plan. Adequate fund balances are necessary to ensure adequate working capital and funds for unanticipated events. Table 4-10 of the District's Rate Proposal (Ex. MSD 1) presents the District's forecasted combined operating reserve. As shown, the District projects that at the end of FY2020 there will be a balance of \$40,752,786 in Combined Operating Reserves, equating to approximately 77 days of operation and maintenance expenses. This is consistent with the targets of other wastewater utilities and provides the District with adequate working capital to provide for any unanticipated expenditures or emergencies.

Ex. MSD 101, at p. 19, ll. 1-8.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE RATE CHANGE PROPOSAL PROVIDES THE FUNDS NECESSARY TO PAY THE COSTS OF OPERATION AND MAINTENANCE FOR WASTEWATER SERVICES.

STORMWATER

Stormwater Funding. The District proposes the use of a District-wide tax structure to replace the multi-layered subdistrict taxes now assessed on the real estate value of ratepayers' property. This proposed funding is designed to cover the cost of stormwater maintenance services, capital projects and associated Operations and Maintenance.⁵

The District is partnering with 58 municipalities (co-permittees) and St. Louis County to comply with stormwater permit requirements for the St. Louis Metropolitan Small Municipal Separate Storm Sewer System. The District actively works to reduce pollutants that stormwater picks up and carries into local bodies of water through the St. Louis County Phase II Stormwater Management Plan. The District maintains public storm sewers, plans and designs improvements to stormwater infrastructure, regulates stormwater drainage and floodplain impact related to development projects, and helps coordinate regional efforts to address pollution carried in or caused by stormwater runoff. See Ex. MSD 1, Rate Change Proposal, § 5.1; and MSD Ex. 84A, Response to Question 19 of the First Discovery Request of the Rate Commission.

Existing Stormwater Rates and Taxes. District stormwater revenue is now derived principally from subdistrict ad valorem taxes. Existing stormwater rates and taxes levied by the District are presented in Table 5-1 of Exhibit MSD 1. On March 8, 1988, a majority of the voters approved stormwater service charges pursuant to Ordinance No. 7358, adopted December 23, 1987. In addition, flat rate charges of .24 cents per month for residential and non-residential properties and .18 cents per unit for multi-residential were also approved. See Ex.

⁵ The Rate Change Proposal relies upon certain assumptions with respect to conditions, events, and circumstances that may occur in the future. Although considered reasonable, some of these anticipated conditions, events and circumstances may not occur resulting in potential differences in revenues and costs than currently projected.

MSD 1, § 5.2; Ex. MSD 3D, Direct Testimony of Jonathan C. Sprague, p. 5, ll. 18-23; p. 6, ll. 1-14.

The current stormwater charges and taxes postpone needed improvements and contribute to a deterioration of the stormwater system resulting from inadequate maintenance and delayed improvements. Id.

Stormwater revenues consist of monthly flat rate user charges and ad valorem taxes for District-wide stormwater costs as well as other subdistrict specific taxes which fund capital projects and Operations and Maintenance activities specific to each subdistrict's service area. The application of stormwater ad valorem taxes varies by service area. All wastewater customers are charged the flat rate user charges. All property in the District service area is charged \$0.0197 per \$100 of assessed value District-wide tax. Only customers within the District's original service area are charged the additional \$0.0682 stormwater Operations and Maintenance tax. Operations, Maintenance and Capital Improvement taxes are levied for specific subdistricts within the original service area and range from \$0.05 to \$0.10 per \$100 of assessed property value. Id. See also Ex. MSD 3C, Direct Testimony of Richard L. Unverferth, p. 8, ll. 4-14.

The subdistrict funding results in varying levels of stormwater services. Customers paying only the District-wide tax receive only the minimal stormwater service needed to comply with regulatory requirements. Customers paying both the District-wide and Stormwater Operations and Maintenance tax receive regulatory services and a level of maintenance up to the limits of the revenue generated by these stormwater taxes. Those customers paying specific Operations, Maintenance and Capital Improvement taxes in addition to the District-wide and Stormwater Operations and Maintenance taxes receive the highest level of stormwater services.

Id. See also Ex. MSD 84A, Response to Questions 5 and 6 of the First Discovery Request of the Rate Commission; and Ex. MSD 85A, Response to Questions 1 and 2(a) of the Second Discovery Request of the Rate Commission.

Stormwater Revenue Requirements. The revenue required to provide for the continued and expanding operations of the District's stormwater utility must be sufficient to meet its cash requirements for system operation. Revenue requirements include (i) total stormwater system Operation and Maintenance and Regulatory expenses; (ii) expenditures for routine and any major capital improvements; and (iii) provision for an adequate operating reserve. See Ex. MSD 1, Rate Change Proposal, § 5.3. Table 5-5 of Exhibit MSD 1 presents a summary comparison of all existing and proposed stormwater revenues under existing rates and taxes with projected revenue requirements for FY2015 through FY2020. See Ex. MSD 99A, Response to Question 5 of the Fourth Discovery Request of the Rate Commission; see also Ex. MSD 84A, Response to Question 23 of the First Discovery Request of the Rate Commission; Ex. MSD 85A, Response to Question 3 of the Second Discovery Request of the Rate Commission; Ex. MSD 86A, Response to Questions 10, 13 and 14 of the Third Discovery Request of the Rate Commission.

Operations and Maintenance. Operations and Maintenance expense is presented in Table 5-2 of Exhibit MSD 1 and shows the portion of operations that are tied directly to regulatory requirements and the cash financing available for major stormwater capital improvements which are planned to begin in FY2017. The Operations, Maintenance and Capital Improvements Capital Projects have been identified for each of the subdistricts and will be completed to fully utilize the investments made by each subdistrict. Capital spending in the Operations, Maintenance and Capital Improvements funds will be \$23.9 million from FY2017

through FY2020. During this same time period, capital spending in the stormwater Operations and Maintenance Fund and the proposed District-wide stormwater fund is projected to be \$46.9 million. Capital funding in the District-wide stormwater fund is made up of \$.012 of the proposed \$.10 per \$100 assessed value tax levy. Id.

While revenue collected from the existing stormwater user charge and ad valorem taxes is available to fund stormwater related Operations and Maintenance expenditures, these revenue sources are not sufficient. The majority of stormwater Operations and Maintenance activities are the result of failures in the existing collection and conveyance system or as a reaction to customer complaints. These activities include removing blockages, open channel cleaning, repair of storm sewer line failures, and limited inlet inspections and cleanings. See Ex. MSD 1, § 5.3.1.

Levee Districts. The area comprising the District includes six levee districts, to-wit: Earth City Levee District; Missouri Bottoms Levee District – Bridgeton Subdistrict; Missouri Bottoms Levee District – Hazelwood Subdistrict; Riverport Levee District; Howard Bend Levee District; and Monarch – Chesterfield Levee District. See Ex. MSD 99A, Response to Question 3 of the Fourth Discovery Request of the Rate Commission.

The stormwater regulatory tax will be collected from the levee districts and the funds collected will be sufficient to provide the District with resources to perform the regulatory services within the levee districts during the next rate cycle. The District has no obligation to perform operation or maintenance service within the Levee Districts. See Ex. MSD 96, Transcript of Technical Conference for Direct Testimony, April 8, 2015; Testimony of Richard C. Unverferth, p. 61, ll. 24-25; p. 62, ll. 1-9. See also Ex. MSD 84A, Response to Question 21 of the First Discovery Request of the Rate Commission.

Major Capital Improvement Program. The proposed stormwater Capital Improvement and Replacement Program is comprised of two major components. The first are capital projects within the Operations, Maintenance and Capital Improvements subdistricts to complete the investments that those customers have supported through specific subdistrict taxes. The second are infrastructure rehabilitation projects that will be performed throughout the District and will be funded with a new, proposed District-wide tax. The estimated level of stormwater Capital Improvement and Replacement Program needs is presented in Figure 5-2. See Ex. MSD 1, § 5.3.3.

Stormwater improvements to the public system would consist of asset renewal and/or small additions that would improve the life and/or functionality of a stormwater system. Examples would include such things as storm sewer rehabilitation or adding an additional inlet and/or piping to improve drainage within a system. In addition, improvements can be made to the stormwater system as a whole to protect structures and property from flooding or erosion. Examples would include such things as the construction of new storm sewer systems, providing increased capacity to storm sewer systems, channel rehabilitation, and channel stabilization to provide erosion protection. See Ex. MSD 86A, Response to Question 14 of the Third Discovery Request of the Rate Commission.

Stormwater Regulatory Services. The District has certain regulatory obligations it must comply with to meet stormwater quality requirements outlined by Missouri Department of Natural Resources. The District is a co-permittee in a State-issued Municipal Separate Storm Sewer System (MS4) permit. Under this permit, the District must implement Best Management Practices to address stormwater quality issues. Under the new tax structure and Rate Proposal, this tax will remain in place to maintain these services. The District-wide ad valorem tax of

\$.0197 per \$100 Assessed Value levied by the District provides adequate funding to meet current regulatory obligations. See Ex. MSD 1, § 5.3.4. See also Ex. MSD 84A, Response to Questions 20 and 22 of the First Discovery Request of the Rate Commission.

The FY2015 adopted budget is the basis for projecting existing stormwater Operations and Maintenance expenses and is adjusted for the same inflation and growth factors as wastewater. Table 5-2 of Exhibit MSD 1 shows FY2015 Stormwater Operations and Maintenance expenses to be \$15.0 million.

Proposed Funding Methods. The District believes that an ad valorem property tax used to operate and maintain the public stormwater system within its municipal boundaries is fair and equitable because (i) the use of property taxes to fund services and the maintenance of infrastructure is allowed under the Missouri Constitution and is used by the District and other municipal entities in the area to pay for these kinds of services; (ii) the use of an impervious area method would cost the ratepayers approximately \$950 thousand/per year more to operate and maintain than an ad valorem taxing method; and (iii) the use of an impervious area method may result in fewer people participating in funding these services compared to an ad valorem taxing method based on recent Missouri Supreme Court decisions and state legislation. See Ex. MSD 100A, Response to Question 7 of First Discovery Request of Intervenor Home Builders Association.

The District is proposing to seek voter approval to assess a District-wide stormwater tax to replace the current stormwater Operations and Maintenance Tax and flat rate charges. The proposed District-wide tax rate is \$0.10 per \$100 of assessed property value.

The subdistrict specific Operations, Maintenance and Capital Improvements taxes will be eliminated. The ad valorem tax of \$0.197 per assessed valuation will remain in place to provide the District with the necessary funding to meet regulatory requirements.

A new stormwater District-wide Tax of \$0.10 per \$100 assessed valuation will provide the District with the necessary funding to meet the operating requirements of the expanded service levels. See Ex. MSD 1, § 5.4. The District has rewritten Section 5.4, Proposed Funding Methods, p. 5-9, Ex. MSD 1, to clarify the administrative approach associated with setting the OMCI tax rate to zero dollars:

Meeting the proposed increased level of SW service beginning in FY17 requires that the District develop a more equitable and consolidated SW charge. The District is proposing to seek voter approval to assess a District-wide SW tax to replace the current SW O&M Tax and flat rate charges. The proposed District-wide tax rate is \$0.10 per \$100 of assessed property value. The subdistrict specific OMCI taxes will be set to \$0.00 as part of this Rate Proposal as well; however, the regulatory tax will remain in place. Charging this new SW District-wide Tax will provide the District with the necessary funding to meet the operating requirements of the expanded service levels. Additionally, this proposed structure will eliminate the disjointed revenue sources and provide a funding source that allows for a cohesive plan across the entire District.

Ex. MSD 114A, Response to Question 6 of the Fifth Discovery Request of the Rate Commission.

The taxable base for the District-wide Tax of \$0.10 per \$100 assessed valuation assumes a 0.5% increase in the assessed valuation of the City of St. Louis and St. Louis County. See Ex. MSD 3G, Direct Testimony of Teresa A. Bellville, p. 7, 11. 16-23. From December 31, 2012, to December 31, 2014, however, the assessed valuation of the City of St. Louis declined by \$166,885,120 or 5%, and in St. Louis County declined by \$666,565,250 or 3%. Exs. RC 92 and RC 93.

The Charter Plan provides the District the power:

To levy, assess, and collect taxes on all taxable property within the District or a subdistrict, as the case may be; provided, that the rate of taxation for purposes of

operation and maintenance shall not exceed ten cents on the hundred dollars assessed valuation.

See Ex. MSD 88, Charter Plan as of June 5, 2012 Amendments, Section § 3.020(15). Both taxes must be approved by the voters of the District. On March 8, 1988, a majority of the voters approved stormwater service charges pursuant to Ordinance No. 7358, adopted December 23, 1987. In addition, flat rate charges of .24 cents per month for residential and non-residential properties and .18 cents per unit for multi-residential were also approved. See Ex. MSD 1, § 5.2; Ex. MSD 3D, Direct Testimony of Jonathan C. Sprague, p. 5, ll. 18-23; p. 6, ll. 1-14. The approval of the imposition of ad valorem taxes of \$0.10 per \$100 assessed valuation may be submitted to the voters on the first Tuesday after the first Monday in April, August or November. See Mo. Rev. Stat. § 115.123.1. Notice under Section 7.310 of the Charter Plan to the Board of Aldermen, Comptroller, License Collector, and Collector of the City of St. Louis, the County Council and Collector of St. Louis County of ad valorem taxes to be levied by the District upon real property as of January 1, 2016, must be fixed not later than October first for entry in the tax books for calendar year 2016. See Mo. Rev. Stat. § 67.110.1. No action by the Board of Trustees to effect a change in the rate may occur prior to 45 days after the date upon which the report is received. See § 7.300 of the Charter Plan. Any proposition to impose an ad valorem tax may be considered by the Board of Trustees only after a public hearing conducted in accordance with the provisions of Section 7.320 of the Charter Plan. In order to submit the proposal to the voters at the election conducted on the first Tuesday after the first Monday in April, notice to the Board of Election Commissioners of the City of St. Louis and of St. Louis County is required by January 22, 2016, in order to satisfy the 10-week notice requirement to the election authorities. See Mo. Rev. Stat. § 115.125.

The District states that an ad valorem property tax used to operate and maintain the public stormwater system within its municipal boundaries is fair and equitable because the use of property taxes to fund services and the maintenance of infrastructure is allowed under the Missouri Constitution and is used by MSD and other municipal entities in the area to pay for these kinds of services. See Ex. MSD 100, Response to Question 7 of the First Discovery Request of Intervenor Home Builders Association.

In the 2007 Rate Change Proposal, the District recommended a new stormwater fee be implemented to provide sufficient funding to support the projected basic stormwater program revenue requirements based upon charging individual customers an established rate times the quantity of impervious area on their property. Impervious area was initially determined from 1996 aerial photography and updated from 2000 aerial photography. See Ex. MSD 5, 2007 Rate Proposal, Section 4.5, p. 4-9.

In addition to the recommendation for a stormwater impervious area charge, there were also changes proposed for the OMCI revenues. OMCI projects were planned to continue to be financed by OMCI taxes and were identified from those projects to be funded by impervious area charges. The District proposed a reconfiguration of the existing 23 OMCI subdistricts into five watershed based subdistricts as a means to provide enhanced stormwater services as determined by a vote of each subdistrict's customers. A survey undertaken by Black & Veatch in 2014 to assess stormwater financing and management elicited response from more than 75 utilities including the District. Ninety percent of the respondents calculated the fee on gross and/or impervious area and 79 percent calculated stormwater user fees on impervious area. See Ex. MSD 84G, 2014 Stormwater Utility Survey, Figures 19 and 20. See also Ex. MSD 127,

Testimony of Mr. William Stannard at the Third Technical Conference, p. 116, ll. 12-15; p. 117, ll. 1-7.

The Black & Veatch 2014 Stormwater Survey notes that:

The risk of legal challenges could be a potential barrier to establishing stormwater user fees. Seventy-eight percent of the utilities that responded in this survey had not faced any legal challenges to their fees. Of those that faced a legal challenge, the challenge primarily seems to have been either due to lack of authority to assess fees or on the grounds of constitutionality.

Ex. MSD 84G, p. 12.

The District is unsure that not-for-profit entities would participate in a voted-on impervious fee, since Mo. Rev. Stat. § 204.700 exempted approximately 3,500 customers from participating in the impervious fee since the customers were residents not receiving wastewater or stormwater services. Ex. MSD 127, Testimony of Brian Hoelscher, Third Technical Conference, p. 42, ll. 16-18; p. 43, ll. 17-24. The District believes that further legislation may exempt nonprofit entities and even more ratepayers for similar reasons. The levy of a property tax, however, would be protected from such legislation by the Missouri Constitution. Id. p. 44, ll. 1-5; Ex. MSD 114A, Response to Question 11 of the Fifth Discovery Request of the Rate Commission.

Article X, Section 1 of the Missouri Constitution limits the taxing power of political subdivisions to those entities authorized by statute. The Missouri Supreme Court held in Dalton v. The Metropolitan St. Louis Sewer District, 275 S.W.2d 225 (1955) that (i) Article VI, Section 30(b) of the Missouri Constitution, which authorized establishment of the District and (ii) the Charter Plan, included a grant of legislative power to “provide for taxation of all tangible property for general purposes and obligations of the district.” Ex. RC 126; Ex. MSD 114A, Response to Question 10 of the Fifth Discovery Request of the Rate Commission.

Article VI, Section 30(b) of the Missouri Constitution provides that the District's Charter Plan "shall provide for the assessment and taxation of real estate in accordance with the use to which it is being put at the time of assessment, whether agricultural, industrial or other use, giving due regard to the other provisions of this constitution." The District derives its power to tax from the Constitution and, therefore, does not need to rely on a statute for taxing authority. Id.

Mr. Stannard read from "Expanding Financing and Pricing Concepts into Stormwater" of *Water & Wastewater Finance and Pricing*, Fourth Edition, Copyright 2015, which states that the most appropriate stormwater rate structure links demand for service to the rate structure. Total runoff volume, a cost causation factor, is influenced by size of the parcel, vegetation, slope, soils, and the amount of roof top and pavement (impervious area where water cannot readily percolate into the earth). All these influence the [estimated] runoff volume and thus the demand from the property. The paramount variable is the amount of the impervious area. See Ex. MSD 127, Testimony of William Stannard, Third Technical Conference, pp. 105-110.

Impervious area rate structures have been used very frequently to date by jurisdictions because an impervious area basis reflects cost drivers, it is very fair, and is relatively easy to understand.

Mr. Stannard testified that a critical step in the rate development process is to use the cost of service process to allocate the total revenue requirements and calculate fair and equitable rates. See Ex. MSD 127, Testimony of William Stannard, Third Technical Conference, p. 114, ll. 7-10; Ex. MSD 84G, Response to Questions 8, 9, and 10 of the First Discovery Request of the Rate Commission.

Stormwater Subdistricts. Ordinance No. 13856, adopted June 12, 2014, approved the current tax rates for general administration that is used for regulatory compliance (Section Two), operation and maintenance of existing public stormwater facilities (Section Three), and for the OMCI subdistricts (Sections Four through Twenty-One).

Stormwater improvement projects identified within the Rate Change Proposal and within each zone (Red, Yellow, Green) were prioritized by planning the projects with the highest benefit cost ratio project within each Zone independently based on funding availability. Generally the projects identified in Green and Yellow zones have equal benefit cost ratios. Generally the projects within the Red Zone have a higher benefit cost ratio than those being done in the Green and Yellow zones. There are no projects to be completed in the Red zone with a lower benefit cost ratio than the Green and Yellow zones. See Ex. MSD 114A, Response to Questions 1 and 2 of the Fifth Discovery Response of the Rate Commission; Ex. MSD 127, Testimony of Richard Unverforth, Third Technical Conference, pp. 74-84.

Stormwater Operating Reserve. The stormwater operating reserve is designed to add a layer of protection for unplanned expenses. Under the proposed funding mechanism, stormwater revenues will be collected from ad valorem taxes which are collected annually in the City and County. Due to this annual revenue collection schedule, it is necessary for the stormwater fund to maintain a reserve balance that provides sufficient working capital to meet the regular operating and capital expenses in the first six months of a fiscal year after which a new year's revenues will be collected. An operating reserve equal to 240 days of stormwater Operations and Maintenance expense is reflected in this Rate Proposal. See Ex. MSD 1, Rate Change Proposal § 5.3.5; Ex. MSD 3H, Direct Testimony of William Stannard, p. 19, ll. 1-11.

Because the voters will not be asked to approve the ad valorem tax until April 2016, the new tax rate will not be fixed until October 1st. Collections of the new tax rate will begin in late November 2016 with substantial payments by December 2016. The operating reserve may not be funded until the sixth or seventh month of FY2016.

A summary of stormwater revenues under existing and proposed rates and taxes is presented in Table 5-3 of Exhibit MSD 1 for the period FY2015 through FY2020 provided by District staff. Projected stormwater tax revenues shown in Table 5-3 through FY2016 are based on staff projections developed for the District's FY15 budget. This budget was approved on June 11, 2014. Table 5-1 also presents the proposed new Stormwater Tax which will be assessed to all customers of the District. Id.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE RATE CHANGE PROPOSAL PROVIDES THE FUNDS NECESSARY TO PAY THE COSTS OF OPERATION AND MAINTENANCE FOR STORMWATER SERVICES.

Third Criteria: Whether the Rate Change Proposal provides for funds in such amounts to cover emergencies and anticipated delinquencies.

RATE CHANGE PROPOSAL

WASTEWATER

Proposed Wastewater Capital Funding. The Rate Change Proposal presents the District's proposed use of \$900 Million in bond financing and \$440 million in cash financing to fund its Wastewater Capital Improvement and Replacement Program through FY2020 to provide the funds needed to comply with regulatory requirements relating to deficiencies in the District's wastewater system including sewers, pump stations and treatment plants and to satisfy the requirements of the Consent Decree.⁶

The District proposes to finance the required capital improvements by a combination of wastewater user charge revenues, available fund balances, revenue bond proceeds, Missouri Clean Water State Revolving Fund loan proceeds, potential commercial paper proceeds, grants and contributions, other operating revenues, and interest income. See Ex. MSD 1, Rate Change Proposal.

Proposed Wastewater Operations & Maintenance Funding. The District's current wastewater rate structure consists of monthly service charges and volume charges applicable to all District customers. All non-residential customers are also assessed a compliance charge and extra strength charges where applicable. The monthly service charges include a billing and collection charge and a system availability charge. A volume charge is assessed to all customers based on their respective water usage. Water usage information is provided by customers'

⁶ The Rate Change Proposal relies upon certain assumptions with respect to conditions, events, and circumstances that may occur in the future. Although considered reasonable, some of these anticipated conditions, events and circumstances may not occur resulting in potential differences in revenues and costs than currently projected.

respective water provider on either a metered or unmetered basis. Non-residential customers are also assessed one of five tiered compliance charges based on the amount of inspection and testing of wastewater needed to comply with current regulations. Extra strength surcharges are applied to monitored non-residential customers generating excess biochemical oxygen demand, chemical oxygen demand, and total suspended solids. See Ex. MSD 1, Rate Change Proposal, § 4.1. The District asserts that recommended rates presented in Table 4-18 adequately recover the total cost of service, and equitably recover the allocated cost of service from each customer class.

Customer Billing. Currently it is District policy to bill one month in arrears for wastewater services. The practice of billing in arrears results in less than a full 12 months of billings under new rates in a given 12-month period following the effective date of the rate increase.

Billing lag is the delay in the receipt of increased revenues attributable to a rate increase. A one month billing lag (1/12 or 8.3 percent) is assumed in the Rate Change Proposal. See Ex. MSD 1, Rate Change Proposal, § 4.8.

Days Cash on Hand. Days Cash on Hand is a liquidity metric that measures an entity's ability to meet short-term needs and contingencies. See MSD 3F, Direct Testimony of Bethany Pugh, Q11, page 6-7. The median number of Days Cash on Hand for utilities with an AA bond rating is 398 days. See Ex. RC 90. As of June 15, 2015, Days Cash on Hand is estimated at 600 days. See Ex. MSD 114A, page 8. The availability of this cash provides some security for possible customer resistance. If billable wastewater volume decreases due to customer resistance, these funds could be available to bridge revenue shortfalls at the potential consequence of lower bond ratings and higher debt costs on future bond issues. See Ex. MSD 43, District's Debt

Management Policy, p. 14, which allows for periodic adjustments of cash on hand for liquidity purposes.

Total Days Cash on Hand is projected to be 600 days at June 30, 2016, and 550 days at June 30, 2020. See Exhibit MSD 114A, MSD Response to Fifth Discovery Request of the Rate Commission. While the projections indicate a decrease from current levels, the decline is not precipitous, and is projected to remain in excess of the current Fitch median of 398 days for AA rated utilities.

For FY2017 operating costs of \$176,389,110 (Ex. MSD 1, Rate Change Proposal, Table 4-10, Line 7), the District would require total Days Cash on Hand of \$192,336,619 to match the median number of Days Cash on Hand for an AA bond rating.

Table 4-10, line 23, presents the forecasted operating reserve fund balance for each year of the Rate Period. The District's rate proposal forecasts that at the end of FY2017 there will be a balance of \$44,856,428 in the Operating Reserve Fund. In terms of days of operation and maintenance expenses, this total is equivalent to about 91 days and a number that is consistent with the targets of other wastewater utilities and the metrics used by the bond rating agencies. See Ex. MSD 1, Rate Change Proposal, page 4-22, Table 4-10.

Wastewater Operating Reserve. The Rate Change Proposal assumes an operating reserve equal to 60 days of operating costs, for operation and maintenance expenses (general ledger accounts 100-400) and routine annual capital costs (general ledger account 500). An allowance for capital outlays or routine annual capital costs is included because these costs are also an annual operating expense funded from annual revenues. See Ex. MSD 1, Rate Change Proposal, § 4.7.

The operating reserve is a balance maintained to accommodate fluctuations in annual revenues and expenditures. The District has a minimum operating reserve target equal to 60 days of annual operating expenses. The existing revenue bond covenants require the District to maintain a minimum balance equal to 45 days of Operations and Maintenance expense. The self-imposed 60 days minimum provides a buffer to allow for potential timing issues involved with funding requirements, provide increased operational flexibility, and helps support future bond ratings. Id.

Wastewater Cash Balances. Available cash balances are a very important element of a wastewater utility's financial plan. Adequate fund balances are necessary to ensure adequate working capital and funds for unanticipated events. Table 4-10 of the District's Rate Proposal (MSD1, page 4-22, line 23) presents the District's forecasted combined operating reserve. As shown, the District projects that at the end of FY2020 there will be a balance of \$40,752,786 in Combined Operating Reserves, equating to approximately 77 days of operation and maintenance expenses. This is consistent with the targets of other wastewater utilities and provides the District with adequate working capital to provide for any unanticipated expenditures or emergencies. See Ex. RC 101, Rebuttal Testimony of Pamela R. Lemoine at p. 19, ll. 1-8.

Collection of Unpaid Wastewater Charges. The District, as a public sewer district created and authorized pursuant to constitutional authority, may discontinue service and place a lien upon a customer's property for unpaid sewer charges. This lien will have priority and be enforced in the same way as taxes are levied for state and county purposes. Mo. Rev. Stat. § 249.255 (2014).

The District may "establish by ordinance a schedule or schedule of rates, rentals, and other charges, to be collected from all the real property served by the sewer facilities of the

District . . . and to collect or enforce collection of all such charges." See Charter Plan, § 3.020 (16).

In 1957, the Board of Trustees of the District adopted an Ordinance providing that:

Whenever a sewer service charge has been delinquent for more than sixty days the Executive Director may cause a notice of lien for non-payment thereof to be filed in the Office of the Recorder of Deeds within and for the City of St. Louis or St. Louis County, as the case may be. Such notice of lien shall state the amount of the delinquent sewer service charge, and shall properly describe the property against which such lien is asserted. Upon the filing of such notice, such sewer service charge shall be and become a lien upon the real property served to the amount of such delinquent bill, and shall have priority over all other liens except taxes, deeds of trust then of record, and prior judgments.

District Ordinance 138 (June 24, 1957).

Commercial and residential accounts are referred to one of three collection agencies or two placement agencies when such accounts become delinquent. Accounts are referred to one of three law firms if the accounts are greater than 550 days delinquent. See Ex. MSD 84A, Response to the First Discovery Request of the Rate Commission, Question 24; and Ex. MSD 3G, Direct Testimony of Teresa A. Bellville p. 5, ll. 2-5. See also Ex. MSD 56, Contracts with John G. Heimos, Attorney at Law; Ex. MSD 57, Contract with The Gusdorf Law Firm; Ex. MSD 58, Contract with Kramer and Frank, PC; Ex. MSD 60, Settlement Guidelines. See Ex. MSD 65, Lien Placements by Month FY2009 and FY2010. The District has the authority to impose and enforce a lien upon the real property of a customer for the failure to pay sewer charges. See St. Louis Inv. Prop., Inc. v. Metro. St. Louis Sewer Dist., 873 S.W.2d 303 (Mo. App. E.D. 1994). The Missouri Revised Statutes provides that should a public sewer district place a lien upon a customer's property for unpaid sewer charges, the lien shall have priority and be enforced in the same manner as taxes levied for state and county purposes. Mo. Rev. Stat. § 249.255.1 (2000). Prior to 1991 and the enactment of Section 249.255, no Missouri

Statute or MSD ordinance gave MSD sewer liens priority over deeds of trust. St. Louis Inv. Prop., Inc., 873 S.W.2d at 307. Pursuant to Section 249.255, MSD liens are applied prospectively and do not have priority over deeds of trust recorded prior to the enactment of Mo. Rev. Stat. § 249.255.1 (2000) on May 29, 1991. See Gershman Inv. Corp. v. Duckett Creek Sewer Dist., 851 S.W.2d 765, 769 (Mo. App. E.D. 1993). However, any liens imposed after 1991 have the same priority and are enforced in the same manner as taxes levied for state and county purposes. See Mo. Rev. Stat. § 249.255.1 (2000).

The District has exercised its authority to file liens on properties with accounts greater than 90 days delinquent. See Ex. MSD 59, Ordinance 13402. See also Ex. MSD 65, Lien Placements for FY2011 to FY2014.

The District has no authority to implement shut-off cooperation with the region's water providers, Writs of Execution, Lien Sales, Foreclosures, Cash Box Levies, or Credit Reporting and Inclusion of delinquent balances on annual Real Estate Tax bills.

Consumer Assistance Program. The District provides a 50% discount on wastewater service charges for low-income residential customers participating in the District Customer Assistance Program (“CAP”) based on established District policy. The current customer participation is approximately 2,200 customer accounts or 0.61% of the District's total number of single family and multi-family (up to 6 units) ratepayers. Figure 4-8 of Exhibit MSD 1 shows the historical 5-year trend in the program. See Ex. MSD 1, Rate Change Proposal, § 4.10.3; Ex. MSD 44, Ordinance 13826.

The first Customer Assistance Program rate was adopted by the Board of Trustees in 1993 by Ordinance 9031. Since that time numerous changes have been made to the program to remain current with the changing demographics of District ratepayers. Current policy defines

Customer Assistance Program eligibility as residential customers with household income for the previous year less than 200% of the most recent Health and Human Services poverty guidelines by household size and less than 250% for disabled individuals or those ages 65 or older. The District recently expended the eligibility criteria to include Multi-Family residential customers residing in Multi-Family housing consisting of six units or less. In November 2014, the District Board of Trustees approved a one-time 50% reduction in any outstanding service charges for those accepted into the program. These changes were made to assist the District's continued efforts to increase the number of customers participating in the program. Considerable focused outreach efforts are also a significant component of promoting the Customer Assistance Program. Id.

The cost impact of the District's current Customer Assistance Program on a typical single family residential customer not eligible for assistance and discharging 7 Ccf per month of wastewater is expected to be about \$0.18, or 0.42% per month of the District's FY2016 wastewater service charge revenue. The impact of the change in eligibility requirements is expected to increase participation in subsequent years as the District continues to actively promote this program and increase the number of qualified low-income customers. Id. See also Ex. MSD 86A, Response to Question 1 of the Second Discovery Request of the Rate Commission; Ex. MSD 99A, Response to Question 18 of the Fourth Discovery Request of the Rate Commission.

Over the years the District has made a number of changes to the CAP eligibility requirements. Typically, there is an initial growth phase before the number of CAP customers stabilizes. The growth rate presented in the model is forecasting a similar reaction by showing a steady increase over time and then leveling off. The District has set an internal goal of reaching

this level of CAP customers during this proposed rate cycle. It will continue to be re-evaluated in the future. See Ex. MSD 86A, Response to Question 1, Third Discovery Request of Rate Commission.

In 2014, 30,719 customers (or 9.6% of District customers) met the criteria for Low Income customers and 38,982 customers (or 12.2%) qualify for CAP. Ex. MSD 1, Appendix 7.4.

Median means a value in an ordered set of values below and above which there is an equal number of values. *Merriam-Webster Dictionary*, <http://www.merriam-webster.com>.

The median home value in the City of St. Louis is \$119,200 and in the County of St. Louis is \$174,500. Ex. RC 129, Ex. RC 130, Quick Facts from U.S. Census Bureau. Approximately 85% of the land area in St. Louis County is contained within the District. See Ex. MSD 139, MSD's Response to Evidence Submitted After June 22, 2015. The median household income in the City of St. Louis is \$34,582 and in the County of St. Louis is \$58,910. Ex. RC 129, Ex. RC 130, Quick Facts from U.S. Census Bureau.

The percentage of persons below the poverty level in the City of St. Louis is 27.4% and in the County of St. Louis is 10.9%. Id.

Bad Debt Allowances. The District issues a monthly bill to approximately 424,000 commercial and residential accounts. The bill has a Wastewater User Charge which includes a base charge and a volume charge based on either the amount of water used at an address or, if no water meter is in use, the number of rooms, baths, water closets, and showers in the building. Commercial properties are also billed a Compliance Charge based on the type of wastewater discharged to the public sewer system. The District policy to bill customers for services

provided in the previous month can be found in the Wastewater User Charge Ordinance which is included in Exhibit MSD 19, p. 348; § 6.

Since June 30, 2014, the District has determined the Bad Debt Reserve by using billed revenue to record the reserve. The District changed the allowance calculation using 2.15% of the wastewater sewer service billed revenue. The collection trend demonstrated that 98% of the billings were collected within five years. Some examples of the results to make the determination on the rate to use are as follows:

<u>Years</u>	<u>Billings</u>	<u>Collections</u>	<u>Rate</u>
1981 to 2014	\$2,390,617,668	97.20%	2.80%
2009 (5 years ago, only one year)	222,679,265	97.90%	2.10%
2008, 2009, 2010	655,508,870	97.90%	2.10%
2006, 2007, 2008, 2009, 2010	1,059,434,618	98.30%	1.70%

The District made an adjustment for years 2006 through June 2014 billing cycle using 2.15% for the billings on wastewater sewer service charges. In addition, for the years 1981 to 2005, the District chose to record the uncollected balance which was less than the 2.15%.⁷ See Ex. MSD 1, Rate Change Proposal, Appendix § 7.3.

The District's actual bad debt expense, write-offs, year-end balances, actual expenses, delinquency aging, and Remediation Plan for FY2010-FY2014 is shown on Ex. MSD 840, Collection Process and Bad Debt Expense.

MIEC POSITION

Michael P. Gorman testifying on behalf of Missouri Industrial Energy Consumers states that historically, the District's bad debt provision has been approximately equal to 1.0% of its

⁷ In FY2020, the Stormwater service charge will be adjusted using the same process to calculate the reserve balance. This adjustment is planned to be made in December FY2015. See Ex. MSD 1, Appendix § 7.3.

wastewater usage charges. For the forecast period, however, the District assumed that the bad debt provision as a percentage of wastewater charges would increase to 1.5%. This significantly increases the bad debt provision. He recommends maintaining the bad debt provision equal to 1.0% of wastewater bills, consistent with historical actual costs. See Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman, at p. 6, ll. 1-12.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE RATE CHANGE PROPOSAL PROVIDES FOR FUNDS IN SUCH AMOUNTS AS MAY BE REQUIRED TO COVER EMERGENCIES AND ANTICIPATED DELINQUENCIES FOR WASTEWATER SERVICES.

STORMWATER

Proposed Stormwater Funding. The District is proposing to seek voter approval to assess a District-wide stormwater tax to replace the current stormwater Operations and Maintenance Tax and flat rate charges. The proposed District-wide tax rate is \$0.10 per \$100 of assessed property value. The subdistrict specific Operations, Maintenance and Capital Improvements taxes will be eliminated. The regulatory tax will remain in place. Voter approval of this new stormwater District-wide ad valorem tax will provide the District with the necessary funding to meet the operating requirements of the expanded service levels. See Ex. MSD 1, Rate Change Proposal, § 5.4.

Stormwater Operating Reserve. The stormwater operating reserve is designed to add a layer of protection for unplanned expenses. Under the proposed funding mechanism, stormwater revenues will be collected from Ad Valorem Taxes which are collected annually in the City and County. Due to this annual revenue collection schedule, it is necessary for the stormwater fund to maintain a reserve balance that provides sufficient working capital to meet the regular operating and capital expenses in the first six months of a fiscal year after which a new year's revenues will be collected. An operating reserve equal to 240 days of stormwater Operations and Maintenance expense is reflected in this Rate Change Proposal. See Ex. MSD 1, Rate Change Proposal, § 5.3.5. See also Ex. MSD 3H, Direct Testimony of William Stannard, p. 19, ll. 1-11.

Assessed Valuation. The taxable base for the District-wide Tax of \$0.10 per \$100 assessed valuation assumes a 0.5% increase in the assessed valuation of the City of St. Louis and St. Louis County. See Ex. MSD 3G, Direct Testimony of Teresa A. Bellville, p. 7, ll. 16-23. From December 31, 2012, to December 31, 2014, however, the assessed valuation of the City of

St. Louis declined by \$166,885,120 or 5%, and in St. Louis County declined by \$666,565,250 or 3%. See Exs. RC 92 and RC 93.

Brian Hoelscher testified that if the proceeds of the regulatory tax were insufficient, the District would seek approval of an additional level of taxation or seek a fee based on an impervious area.

We would have to ask for additional level of taxing for the regulatory by a vote of the people. Well, now let me say this, we would have to collect additional revenue somehow for this proposal, we are looking for ad valorem property taxes, future revenues to address issue, even if they are additional cost to existing programs, I would put to you is probably wide open in any kind of methodology, could be a voted on impervious fee, could be any myriad of methods of collection, so my answer was if we decide to use exactly the same method of collect revenue, if we're going to do something else, we could assume or consider many types of ways to collect.

See Ex. MSD 96, Transcript of First Technical Conference, April 8, 2015, p. 29, ll. 14-24.

Richard L. Unverferth testified that if the proceeds of the \$0.10 per \$100 ad valorem tax were insufficient to permit the plan, design and construct (the stormwater CIRP) within the four year period,

We would simply design to the available funds that we've outlined in the rate, still not sure if it's insufficient, in other words, we don't design, plan, design or construct any more than the money that's available, I'm not sure –

See Ex. MSD 96, Transcript of First Technical Conference, April 8, 2015, p. 63, ll. 14-21.

Receipt of FY2015 Ad Valorem Tax Proceeds. The approval of the imposition of ad valorem taxes of \$0.10 per \$100 assessed valuation may be submitted to the voters on the first Tuesday after the first Monday in April, August or November. See Mo. Rev. Stat. § 115.123.1. Notice under Section 7.310 of the Charter Plan to the Board of Aldermen, Comptroller, License Collector, and Collector of the City of St. Louis, the County Council and Collector of St. Louis County of ad valorem taxes to be levied by the District upon real property as of January 1,

2016, must be fixed not later than October first for entry in the tax books for calendar year 2016. See Mo. Rev. Stat. § 67.110.1. No action by the Board of Trustees to effect a change in the rate may occur prior to 45 days after the date upon which the report is received. See § 7.300 of the Charter Plan. Any proposition to impose an ad valorem tax may be considered by the Board of Trustees only after a public hearing conducted in accordance with the provisions of § 7.320 of the Charter Plan. In order to submit the proposal to the voters at the election conducted on the first Tuesday after the first Monday in April, notice to the Board of Election Commissioners of the City of St. Louis and of St. Louis County is required by January 22, 2016, in order to satisfy the 10-week notice requirement to the election authorities. See Mo. Rev. Stat. § 115.125. Because the new tax rate will not be fixed until October 1, 2016, collections of the new tax rate will not begin until late November 2016 with substantial payments by December 31, 2016. As a result, the operating reserve may not be funded until the sixth or seventh month of FY2016.

Short-Term Debt. In the event the respective working capital and reserve accounts are inadequate, and under the authority of § 3.020(13) of the Charter Plan, the Board has specific authority to incur debts by borrowing money or otherwise and to give appropriate evidence thereof. If the debt is short term and does not exceed 90% of annual revenues and does not affect the rate levied, no further action is required.

Tax Anticipation Notes. In the event the respective working capital and reserve accounts are inadequate, under the authority of § 3.020(14) of the Charter Plan, the Board also has specific authority to issue tax anticipation notes.

Specifically, § 3.020(14) of the Charter Plan provides:

To provide for the borrowing of money in anticipation of the collection of taxes and revenues for the fiscal year. The amount of such loans shall at no time exceed

ninety per cent of the estimated collectible taxes and revenues for the year yet uncollected. The Board shall determine by ordinance the amount and terms of such loans, and the Executive Director shall execute and issue warrants of the District for all money so borrowed to the lenders thereof as evidence of such loans and of the terms of the District's obligation to repay the same. Immediately before their delivery to such lenders, such warrants shall be registered in the office of the Director of Finance of the District and, upon delivery, shall also be registered in the office of the Secretary-Treasurer of the District. Such warrants so issued and registered in connection with such loans shall have preferences and priority in payment from the date of their registration by the Secretary-Treasurer over all warrants subsequently issued.

Charter Plan, § 3.020(14) (emphasis added).

If the notes are to be paid from specific taxes due in the near future, they usually are called tax anticipation notes (TANs). If expected repayment is from anticipated intergovernmental revenue, they are referred to as revenue anticipation notes (RANs). They are often grouped together and referred to as tax and revenue anticipation notes (TRANs).

TRANs finance short-term cash flow deficits that occur due to irregular receipt of tax or revenues, and help fund working capital requirements for operating expenses.

Treasury Regulations, including Reg. § 1.148-2 and Proposed Regulations issued on November 4, 2013, REG-148659-07, I.R.B. 2013-45, govern the issuance of TRANs. The Proposed Regulations although not yet issued in final, may be applied to instruments issued after September 16, 2013.

Tax-exempt bonds bear interest at a lower rate than comparable taxable securities. This enables the District (in normal market conditions) to issue tax-exempt bonds, take the bond proceeds, and invest them in higher yielding taxable securities. This profit is called "arbitrage." The Internal Revenue Service has two primary mechanisms to limit arbitrage: "temporary periods" and "rebate." A local government is permitted to earn arbitrage only during a "temporary period"; once the temporary period ends, generally bond proceeds may not be

invested at a rate in excess of the bond yield. Arbitrage earnings are subject to rebate during and after a temporary period unless a rebate exception applies. Rebate is the payment to the Internal Revenue Service that must be made on bonds earning arbitrage.

The District may not borrow more than its projected cash-flow deficit as defined in the Regulations. Detailed cash flows and accurate projections are essential. The documentation should be substantial. The District should be prepared to develop detailed cash flow projections and to provide comprehensive documentation. The Internal Revenue Service has recently instituted a compliance test to determine that the amount borrowed can be reconciled with the actual maximum cash flow deficit amount borrowed. If the test is not met, the issue may violate arbitrage rules. Intentionally over-issued bonds could lose their tax-exempt status.

Collection of Protested or Disputed Stormwater Taxes. The District may apply to the circuit court of the County of St. Louis or City of St. Louis when the Collector of Revenue has impounded protested or disputed taxes and, upon a satisfactory showing that the District would receive such impounded tax funds if they were not the subject of a protest or dispute and that has the financial ability and legal capacity to repay such impounded tax funds in the event a decision ordering a refund to the taxpayer is subsequently made, the circuit court shall order, pendente lite, the disbursement of all or any part of such impounded tax funds to the District. See Mo. Rev. Stat. § 139.031.8.

A pleading entitled “Application for Order to Disburse Impounded Protested Taxes” would be drafted. Generally, this is filed as a non-adversarial proceeding against the Collector of Revenue. An order is jointly prepared by the attorneys for the Collector and the District, providing for disbursing the taxes. The District must be prepared to show the Collector and the Court that it has the capacity to repay if the taxpayers are successful in their appeals. As a matter

of practice, the order provides that when a taxpayer is successful and a refund is due, the Collector will refund the taxpayer out of current taxes owed to the District instead of seeking payment from the District.

Collection of Delinquent Taxes. Recovery of delinquent real estate tax is handled pursuant to procedures established by Missouri Statutes. This summary of those procedures focuses solely on the collection process and does not address owner redemption rights or the quality of title ownership in purchasers.

In St. Louis County the procedure established under Missouri Revised Statutes, Chapter 140, known as the Jones-Munger Act, is used to foreclose tax liens. It is a non-judicial process. The Collector of Revenue for the County conducts the tax lien sale annually on the fourth Monday in August. Mo. Rev. Stat. § 140.150. The Collector has discretion as to when tax liens are offered for sale. Therefore, the first offer tax liens for sale may be after real estate taxes have been delinquent for more than one year. The Collector must publish notice of the tax sale each week for three consecutive weeks before the sale. Mo. Rev. Stat. § 140.170.1. Other pre-tax sale notices must be provided to satisfy due process. Mo. Rev. Stat. § 140.150.2. Successful bidders must immediately pay the bid amount to the Collector. Mo. Rev. Stat. § 140.280.1. A purchaser who fails to do so must pay a penalty equal to 25% of the bid and loses all rights to the property. Mo. Rev. Stat. § 140.280.2. Chapter 140 provides procedures for delinquent properties to be offered for first, second and third attempts at sale. All offerings require a minimum bid of an amount equal to the delinquent taxes on the property plus all interest, penalties and costs. Mo. Rev. Stat. §§ 140.190, 140.250.1, 140.240.1. If there is no purchase after the third tax sale and are not bid upon by the County, the property shall held by the Collector as post-third sale offerings. Mo. Rev. Stat. § 140.250.3.

In the City of St. Louis, pursuant to City of St. Louis Code § 508.040, the City has elected to adopt the procedures for collection of delinquent real estate taxes pursuant to the Municipal Land Reutilization Law, Mo. Rev. Stat. § 92.700 to § 92.980 et seq. (the “MLRL”). The MLRL involves judicial foreclosure. The City Collector of Revenue and the City Sheriff conduct the process. The MLRL requires three events to take place: (1) a petition is filed in Court by the Collector and a judgment of foreclosure is obtained – Mo. Rev. Stat. §§ 92.740 and 92.805; (2) a tax sale is conducted by the Sheriff – Mo. Rev. Stat. § 92.810; and (3) a judgment confirming the tax sale is obtained by the successful bidder – Mo. Rev. Stat. § 92.840. The Collector has discretion as to when to file a petition and actions to recover delinquent taxes may occur after taxes have been delinquent for more than one year. The purchase price must be paid by 2:00 p.m. of the day of sale. If it is not paid by that time, the property is reoffered the following day and if the Collector receives a lower offer, the delinquent first day successful bidder is subject to an action to recover the difference. See Mo. Rev. Stat. § 513.240. Where no bid is equal to the full amount of all tax bills included in the judgment plus costs, interest, penalties and fees, title to the property is transferred to the Land Reutilization Authority and the tax bills cancelled. Mo. Rev. Stat. § 92.830.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE RATE CHANGE PROPOSAL PROVIDES FOR FUNDS IN SUCH AMOUNTS AS MAY BE REQUIRED TO COVER EMERGENCIES AND ANTICIPATED DELINQUENCIES FOR STORMWATER SERVICES.

FACTORS FOR RECOMMENDATION

Any Rate Change recommended to the Board of Trustees by the Rate Commission is to be accompanied by a statement of the Rate Commission that the proposed Rate Change, and all portions thereof:

- (1) is consistent with constitutional, statutory or common law as amended from time to time;
- (2) enhances the District's ability to provide adequate sewer and drainage systems and facilities, or related services;
- (3) is consistent with and not in violation of any covenant or provision relating to any outstanding bonds or indebtedness of the District;
- (4) does not impair the ability of the District to comply with applicable Federal or State laws or regulations as amended from time to time; and
- (5) imposes a fair and reasonable burden on all classes of ratepayers.

Charter Plan, § 7.270.

First Factor: Whether the Rate Change Proposal, and all portions thereof, “Is consistent with constitutional, statutory or common law as amended from time to time.”

The Charter does not define the terms or phrases utilized as the criteria governing the rate. As such, to interpret the meaning of words used in a statute, usually the words are attributed their plain and ordinary meaning. Sermchief v. Gonzales, 660 S.W.2d 683, 688 (Mo. banc 1983). Similarly, an interpretation of words in their plain and ordinary meaning can be performed on the words and phrases utilized in the Charter Plan. The commonly understood meaning of words is derived from the dictionary. Buechner v. Bond, 650 S.W.2d 611, 613 (Mo. banc 1983).

Webster’s Dictionary defines “consistent” as “fixed, firm, solid; holding together.” Webster’s Dictionary 390 (2d ed. 1979).

Black’s Law Dictionary defines “constitutional law” as “the body of law deriving from the U.S. Constitution and dealing primarily with governmental powers, civil rights, and civil liberties.” Black’s Law Dictionary 331 (8th ed. 2004). See also Webster’s Dictionary 391 (2d ed. 1979) (constitutional is “of or pertaining to, or inherent in, the constitution of a person or a thing”).

Next, “statutory law” is “the body of law derived from statutes rather than from constitutional or judicial decisions.” Black’s Law Dictionary 1452 (8th ed. 2004). See also Webster’s Dictionary 1778 (2d ed. 1979) (statutory is defined as “fixed, authorized or established by statute”).

Further, according to Black’s Law Dictionary, “common law,” as distinguished from statutory law created by the enactment of legislatures, is the body of law derived from judicial

decisions rather than from statutes or from constitutions. Black's Law Dictionary 293 (8th ed. 2004).

With this, Missouri defines "common law" as:

The common law of England and all statutes and acts of parliament made prior to the fourth year of the reign of James the First, of a general nature, which are not local to that kingdom and not repugnant to or inconsistent with the Constitution of the United States, the constitution of this state, or the statute laws in force for the time being

Mo. Rev. Stat. § 1.010 (2014).

Finally, according Black's Law Dictionary the word "amend" means to change, correct, or revise. Black's Law Dictionary 89 (8th ed. 2004). See also Webster's Dictionary 57 (2d ed. 1979) (to amend means to make better by some change; improve).

This first factor appears in identical fashion in § 7.300 of the Charter, which indicates that the Board of Trustees shall accept a Rate Commission Report unless it finds that the report "is contrary to constitutional, statutory or common law as amended from time to time." Charter Plan, § 7.300(b)(1). However, this factor is not further defined or explained.

As such, this factor must be interpreted in its plain and ordinary meaning pursuant to the rules of statutory construction. Consequently, to interpret the phrase, "is consistent with constitutional, statutory or common law as amended from time to time" with respect to the Rate Commission's rate recommendation means to ensure that any recommended rate comports with all existing and relevant federal and statutory provisions.

The District is a body corporate, a municipal corporation, and a political subdivision of the state, with power to act as a public corporation. Charter Plan, § 1.010.

Public Service Commission's jurisdiction, supervision, powers, and duties extend to sewer systems, their operations, and to persons and corporations owning, leasing, operating, or

controlling them. Mo. Rev. Stat. § 386.250(4) (2014). However, municipal corporations, such as the District, are not subject to the ratemaking process of the Public Service Commission. Instead, courts of equity have equitable jurisdiction to prevent municipal corporations from enforcing “charges that are clearly, palpably and grossly unreasonable.” Shepherd v. City of Wentzville, 645 S.W.2d 130, 133 (Mo. App. E.D. 1982) (internal citation omitted).

Authority

Pursuant to the District’s Charter, the District has the authority to propose or recommend a change in wastewater rates, stormwater rates and tax rates or change the structure of any of the foregoing. Charter Plan, § 7.040.

In State on inf. Dalton v. Metropolitan St. Louis Sewer District, 275 S.W.2d 225 (Mo. banc 1955), the court found that the original method of taxation adopted by the District was in violation of Article X, Section 3 of the Missouri Constitution, which provides that “[t]axes . . . shall be uniform upon the same class of subjects within the territorial limits of the authority levying the tax.” 275 S.W.2d 225 (Mo. banc 1955). The court held that this provision prohibited taxing real estate and tangible personal property for the general purposes and general obligations of the entire District at a different rate on its valuation in various parts of the District. Id. Thus, the court found that the method used to tax under this plan was unconstitutional because the property tax in the County was in excess of that in the City. The court further held that the apportionment of the amounts to be collected for the general purposes of the entire District between the City and the County without any standards whatever would be invalid against Article X, Section 3. “Sec. 3, Art. X is a recognition of the principle of equality and uniformity of taxation required by the equal protection clause of the Fourteenth Amendment of the Federal Constitution which ‘imposes a limitation upon all powers of the state which can touch the

individual or his property, including among them that of taxation.” Id. at 234 (internal citation omitted).

The court found that while a classification may be made in tax legislation, it must be a reasonable classification and there can be no discrimination between taxable subjects, including property that belongs to the same class. Id. Thus, it held that the determination of property of the same value and in the same district based on whether it is located in the city or the county is not a reasonable basis for classification for taxation. Id. Finally, the court held that the District could make a valid apportionment on the basis of assessed valuation which would produce a uniform tax on all tangible property in the District. Thus, the Plan itself was not unconstitutional, just the method used under this set of facts for apportioning the tax. Id. The District subsequently corrected the matter.

The Rate Change Proposal presents the District's proposed use of an additional \$900 million in bond financing and \$440 million in cash financing to fund its CIRP from FY2017 through FY2020 to provide the funds needed to comply with regulatory requirements relating to deficiencies in the District's wastewater system including sewers, pump stations and treatment plants and to satisfy the requirements of the Consent Decree.

The District proposes to finance the required capital improvements by a combination of wastewater user charge revenues, available fund balances, revenue bond proceeds, Missouri Clean Water State Revolving Fund loan proceeds, grants and contributions, other operating revenues, and interest income. See Ex. MSD 1, Rate Change Proposal, § 4.6.1.

In the event that the voters of the District do not approve bond financing for the CIRP in order to comply with the terms of the Consent Decree, the District proposes cash financing. The

financial analysis supporting the development of the alternative cash financing rate is described in Ex. MSD 1, § 4.11, Figure 4.9 and Table 4-22.

Revenue Bonds. The District was formed on February 9, 1954, when voters in the City of St. Louis and a portion of St. Louis County approved the Charter Plan to provide a metropolitan-wide system of stormwater treatment and facilities for the collection, treatment, and disposal of sewage. The Charter Plan was amended on November 7, 2000, and further amended on June 5, 2012.

SECTION 3.020. Powers of the District. — the District established under the provisions of this Plan shall have power:

* * *

To meet the cost of acquiring, constructing, improving, or extending all or any part of the sewer or drainage systems: (a) through the expenditure of any funds available for that purpose; (b) through the issuance of bonds for that purpose, payable from taxes to be levied and collected by the District; (c) through the issuance of bonds for that purpose, payable from special benefit assessments levied and collected by the District; (d) from the proceeds of special benefit assessments or bills evidencing such assessments; (e) from any other funds which may be obtained under any law of the state or of the United States for that purpose; (f) from the proceeds of revenue bonds, payable from the revenues to be derived from the operation of sewerage and drainage facilities and systems of the entire District . . . as may be set forth in propositions submitted at elections in the District . . . from time to time called and held to authorize the issuance of such revenue bonds; or (g) from any combination of any or all such methods of providing funds.

* * *

See Charter Plan, § 3.020(15) (emphasis added).

The Charter Plan requires an annual budget, an explanatory budget message, and a general appropriation ordinance conforming with the budget. The budget shall provide a complete financial plan for the budget year for all District and subdistrict funds, and shall include the following:

- (6) Estimated revenues to be actually received from all sources during the budget year, together with a comparative statement of revenues for the two years next preceding, itemized by year, fund, and source.
- (7) Proposed expenditures, including projected expenses included in the Rate Commission's budget as provided in Section 7.260, recommended by the Executive Director for the budget year, together with a comparative statement of expenditures for the two years next preceding, itemized by year, fund, activity, and object.
- (8) The amount required for the payment of interest, amortization, and redemption charges on the debt of the District or any subdistrict.
- (9) A general budget summary.
- (10) A list of capital projects.

In no event shall the total amount of proposed expenditures for the budget year from any fund exceed the estimated revenues to be actually received plus any unencumbered balance or less any deficit estimated for the beginning of the budget year.

See Charter Plan, § 7.130 (emphasis added). Subject to these restrictions, the District has the authority to issue revenue bonds.

At the end of each fiscal year, the unexpended and unencumbered parts of all appropriations shall revert to the funds from which appropriated. Ex. RC 88, Section 7.050. Upon approval by the Board of Trustees, the Executive Director may transfer any unencumbered appropriation balances or portion thereof from one classification of expenditure to another. See Ex. RC 88, Section 7.150.

The District's authority to issue revenue bonds requires the approval of the voters of the District. Specifically, the Charter Plan provides:

No general obligation bonds, except bonds for refunding, advance refunding, extending, or unifying the whole or any part of valid bonded indebtedness, shall be issued without the assent of the voters of the District . . . in the number required by Article VI, § 26(b) of the Constitution of Missouri (as amended from time to time), voting at an election to be held for that purpose. No revenue bonds payable from the revenues to be derived from the operation of any or all sewer

and drainage systems and facilities of the District . . . except bonds for refunding, advance refunding, extending, or unifying the whole or any part of revenue bonds, shall be issued without the assent of a simple majority of the voters of the District . . . voting at an election to be held for that purpose. Notwithstanding anything herein to the contrary, the District is expressly authorized to issue District-wide general obligation and revenue bonds.

See Charter Plan, § 7.170 (emphasis added).

The Missouri Supreme Court has expressly recognized this authority, stating, "The other powers objected to, namely, . . . incurring debts, . . . issuance of tax anticipation warrants, . . . and issuance of bonds, . . . are essential powers of such district." State on inf. Dalton v. Metro. St. Louis Sewer Dist., 275 S.W.2d 225, 231 (Mo. banc 1955). The court continued, "[w]ithout the power to incur debts and issue bonds, adequate drains, sewers and disposal plants could not be constructed. However, in the exercise of this power, the District is subject to the financial limitations imposed by the Constitution on all government subdivisions." Id.

The District is proposing to seek voter approval to assess a District-wide stormwater tax of \$0.10 per \$100 of assessed property value. As part of the new stormwater tax:

- The Operation and Maintenance Tax will be eliminated;
- The subdistrict specific Operation, Maintenance and Capital Improvements taxes will be eliminated;
- The flat rate charges will be eliminated; and
- The ad valorem tax of \$0.197 per assessed valuation will remain in place to provide the District with the necessary funding to meet regulatory requirements.

A new stormwater District-wide Tax of \$0.10 per \$100 assessed valuation will provide the District with the necessary funding to meet the operating requirements of the expanded service levels. New stormwater District-wide Tax of \$0.10 per \$100 assessed valuation will provide the District with the necessary funding to meet the operating requirements of the expanded service A

levels. See Ex. MSD 1, Rate Change Proposal, § 5.4. The District has rewritten Section 5.4, Proposed Funding Methods, p. 5-9, Ex. MSD 1, to clarify the administrative approach associated with setting the OMCI tax rate to zero dollars:

Meeting the proposed increased level of SW service beginning in FY17 requires that the District develop a more equitable and consolidated SW charge. The District is proposing to seek voter approval to assess a District-wide SW tax to replace the current SW O&M Tax and flat rate charges. The proposed District-wide tax rate is \$0.10 per \$100 of assessed property value. The subdistrict specific OMCI taxes will be set to \$0.00 as part of this Rate Proposal as well; however, the regulatory tax will remain in place. Charging this new SW District-wide Tax will provide the District with the necessary funding to meet the operating requirements of the expanded service levels. Additionally, this proposed structure will eliminate the disjointed revenue sources and provide a funding source that allows for a cohesive plan across the entire District.

Ex. MSD 114A, Response to Question 6 of the Fifth Discovery Request of the Rate Commission.

The Charter Plan provides the District the power:

To levy, assess, and collect taxes on all taxable property within the District or a subdistrict, as the case may be; provided, that the rate of taxation for purposes of operation and maintenance shall not exceed ten cents on the hundred dollars assessed valuation.

See Ex. RC 88, Charter Plan, § 3.020(15).

On March 8, 1988, a majority of the voters approved stormwater service charges pursuant to Ordinance No. 7358, adopted December 23, 1987. In addition, flat rate charges of .24 cents per month for residential and non-residential properties and .18 cents per unit for multi-residential were also approved. See Ex. MSD 1, Rate Change Proposal, § 5.2; Ex. MSD 3D, Direct Testimony of Jonathan C. Sprague, p. 5, ll. 18-23; p. 6, ll. 1-14. The approval of the imposition of ad valorem taxes of \$0.10 per \$100 assessed valuation may be submitted to the voters on the first Tuesday after the first Monday in April, August or November. See Mo. Rev. Stat. § 115.123.1.

Clean Water Act and Consent Decree

Section 204(b) of the Water Pollution Control Act of 1972, as amended in 1977, commonly known as the “Clean Water Act,” specifies conditions relating to charges for wastewater service. See 33 U.S.C. § 1283.

Implementation of the Clean Water Act and approval of a system of user charges by the Environmental Protection Agency (the “EPA”) has generally resulted in a simple, uniform, flat commodity or volumetric charges for all customers, regardless of billable volume, effluent strengths, load factor, peaking characteristics, or other considerations. Acceptable exceptions have included a surcharge system for high effluent strength discharges and assignment of the cost of the industrial pretreatment program to the participants.

The EPA has adopted rules and regulations regarding user charges. These rules and regulations are incorporated in Part 35 of Title 40 of the Code of Federal Regulations.

User Charges are those levied on users of a treatment works for their proportionate shares of the cost of operation and maintenance (including interim replacement) of the treatment works. 40 C.F.R. § 35.2005 (52). Treatment works consist of all facilities used for the collection, transmission, storage, treatment, and disposal of wastewater. 40 C.F.R. § 35.2005 (49). If the wastewater utility is to be eligible for federal grants, it must demonstrate compliance with the following user charge requirements as part of the rate design process:

- Rates must result in the distribution of the cost of operation and maintenance of all treatment works within the grantee’s jurisdiction. Distribution must be in proportion to each user or user class contribution to the total wastewater loading of the treatment works.

- Rates must generate sufficient revenues to offset the cost of all treatment works operation and maintenance expense.
- Each user who discharges pollutants to the treatment works causing increased costs will pay for such increased costs.
- Grantee must apportion operation and maintenance costs associated with the treatment and disposal of I/I to users on the basis of the allocation of all other operations, or a system that includes consideration of flow volume of the users, land area of the users, or the number of connections to the users.

See 40 C.F.R. 35.2140.

The District's position is that the Rate Change Proposal is necessary for it to comply with the Clean Water Act and the Consent Decree. On June 11, 2007, the United States of America, acting at the request and on behalf of the Administrator of the United States Environmental Protection Agency, and the State of Missouri by the authority of the Attorney General of Missouri, filed a claim in the United States District Court for the Eastern District of Missouri against the Metropolitan St. Louis Sewer District captioned United States of America and the State of Missouri and the Missouri Coalition for the Environment Foundation v. The Metropolitan St. Louis Sewer District, for injunctive relief and civil penalties alleging: unpermitted discharges from combined sewer system; violation of the proper operation and maintenance condition in the District's NPDES permits; violation of the backup power condition in the District's NPDES permits; violation of the bypass prohibition condition in the District's NPDES permits; violation of the noncompliance reporting condition in the District's NPDES permits; failure to submit long-term CSO control plan pursuant to Part D.1 of the District's

NPDES permits and CWA § 308 Request; and violation of the general criteria special condition in the District’s NPDES permits.

The District executed on July 15, 2011, a 23-year, \$4.7 billion Consent Decree program with the United States Environmental Protection Agency, the State of Missouri, and the Missouri Coalition for the Environment Foundation.⁸ This program requires the District to make investments in the wastewater system to eliminate sanitary sewer overflows and combined sewer overflows, and helps reduce the risk of flooding customer properties. Ex. MSD 47. The current estimated CIRP needs are presented in Figure 4-3 and Table 4-7 of Exhibit MSD 1 for FY2015 through FY2020. The total CIRP project cost for this six-year period is projected to be \$1.975 billion. The largest component of the CIRP over the next six years will be capital investments related to mitigating sanitary sewer overflows throughout the wastewater system. Ex. MSD 1, Rate Change Proposal, Appendix 7.2. Additional needs include other improvements to comply with regulatory requirements outside of the Consent Decree are also included therein.

The District testified that the Clean Water Act provides for penalties up to \$32,500 per violation per day. See Ex. MSD 3B, Direct Testimony of Susan Myers. Failure to meet the requirements imposed at the Federal and State level would be extremely financially burdensome and would directly hamper or at differing levels, even thwart the efforts of the District. Id. The Consent Decree also outlines stipulated penalties ranging from \$500 per day to \$5,000 per day. See Ex. MSD at 47.

Missouri Constitution

In 1980, Missouri voters approved Article X, Sections 16-24 of the Missouri Constitution (the “Hancock Amendment”). The Hancock Amendment purports to shield taxpayers against the

⁸ Major Consent Decree Components—Update Document may be found in Ex. MSD 1, Rate Change Proposal, Appendix 7.2.1.

government's ability to increase the tax burden above that borne by the taxpayers on November 4, 1980. See Zweig v. Metro. St. Louis Sewer Dist., 412 S.W.3d 223, 231 (Mo. banc 2013).

Specifically, the first sentence of the Hancock Amendment states:

Property taxes and other local taxes . . . may not be increased above the limitations specified herein without direct voter approval as provided by this constitution. . . .

Mo. Const. art. X, § 16. This provision is implemented by Section 22(a), which provides:

[P]olitical subdivisions are hereby prohibited from levying any tax, license or fees, not authorized by law, charter or self-enforcing provisions of the constitution when this section is adopted or from increasing the current levy of an existing tax, license or fees, above that current levy authorized by law or charter when this section is adopted without the approval of the required majority of the qualified voters. . . .

Mo. Const. art. X, § 22(a) (emphasis added).

The Missouri Supreme Court has rejected the contention that all fees, whether user fees or tax-fees, are subject to the Hancock Amendment. Keller v. Marion County Ambulance Dist., 820 S.W.2d 301 (Mo. banc 1992). See also Arbor Inv. Co., LLC v. City of Hermann, 341 S.W.3d 673 (Mo. banc 2011) (city utility rates did not constitute “fee” increase within meaning of the Hancock Amendment, requiring voter approval); Mullenix-St. Charles Properties, L.P. v. City of St. Charles, 983 S.W.2d 550, 561 (Mo. App. E.D. 1998) (Hancock Amendment applies only to revenue increases that are in fact tax increases, whether labeled as taxes, licenses, or fees). Revenue increases, which are in fact fees for services rendered in connection with specific services, ordinarily are not taxes unless the object of the requirement is to raise revenue to be paid into the general fund of government. Mullenix-St. Charles Properties, L.P., 983 S.W.2d at 561. “Fees or charges prescribed by law to be paid by certain individuals to public officers for services rendered in connection with a specific purpose ordinarily are not taxes . . . unless the object of the requirement is to raise revenue to be paid into the general fund of the government to

defray customary governmental expenditures rather than compensation of public officers for particular services rendered.” Keller, 820 S.W.2d at 303-04.

In Keller, the court looked to the principles of statutory construction to give effect to the intent of the voters who adopted the Hancock Amendment. Id. at 302. The court determined that:

If the people of Missouri intended to prohibit localities from increasing a source of revenue without voter approval, a general term like “revenue” or “revenue increase” could have been used. Instead, the people of Missouri characterized “fees” in § 22(a) as an alternative to a “tax.” This characterization suggests that what is prohibited are fee increases that are taxes in everything but name. What is allowed are fee increases which are “general and special revenues” but not a “tax.”

Id. at 303.

The Keller court articulated a five-factor test to be applied in determining whether a revenue increase by a local government is an increase in a “tax, license or fee” that requires voter approval under the Hancock Amendment:

- 1) When is the fee paid? – Fees paid subject to the Hancock Amendment are likely to be paid on a periodic basis while fees not subject to the Hancock Amendment are likely due to be paid only on or after a provision of a good or service to the individual paying the fee.
- 2) Who pays the fee? – A fee subject to the Hancock Amendment is likely to be blanket-billed to all or almost all of the residents of the political subdivision while a fee not subject to the Hancock Amendment is likely to be charged only to those who actually use the good or service for which the fee is charged.
- 3) Is the amount of the fee to be paid affected by the level of goods or services provided to the fee payer? – Fees subject to the Hancock Amendment are less likely to depend on the level of goods or services provided to the fee payer while fees not subject to the Hancock Amendment are likely to be dependent on the level of goods or services provided to the fee payer.
- 4) Is the government providing a service or good? – If the government is providing a good or service, or permission to use government property, the fee is less likely to be subject to the Hancock Amendment. If there is not a good

or service being provided or someone unconnected with the government is providing the good or service, then any charge required by and paid to a local government is probably subject to the Hancock Amendment.

- 5) Has the activity historically and exclusively been provided by the government? – If the government has historically and exclusively provided the good, service, permission or activity, the fee is likely subject to the Hancock Amendment. If the government has not historically and exclusively provided the good, service, permission or activity, then any charge is probably not subject to the Hancock Amendment.

Keller, 820 S.W.2d at 311, n.10.

Courts since Keller have reviewed these five factors to determine whether revenue increases are subject to the Hancock Amendment, including revenue increases involving the District. See, e.g., Beatty v. Metro. St. Louis Sewer Dist., 867 S.W.2d 217 (Mo. banc 1993) (examining Keller factors to determine that the District’s sewer charges were taxes subject to Hancock Amendment); Missouri Growth Ass’n v. Metro. St. Louis Sewer Dist., 941 S.W.2d 615 (Mo. App. E.D. 1997) (examining Keller factors to determine that the District’s amended sewer charges were not subject to the Hancock Amendment); Arbor Inv. Co. LLC v. City of Hermann, 341 S.W.3d 673 (Mo. banc 2011).

Despite frequent application, however, many courts have expressed frustration with the Keller criteria’s lack of insight and manipulation. Zweig, 412 S.W.3d at 234. As a result, the Missouri Supreme Court in Zweig reorganized the Keller criteria.

Zweig involved a challenge to the District’s impervious-stormwater charge that was implemented without voter approval. 412 S.W.3d at 223 (holding that District violated the Hancock Amendment by implementing the charge). The overriding principle of that decision is that a “user fee must be charged in exchange for, and based upon, an individual’s use of the relevant service.” Id. at 227. The court stated, “[t]o be a user fee beyond the scope of section

22(a)'s vote approval requirement, the charge must be paid by all of the users of the relevant service based on each payer's actual use of that service." Id. at 240.

Zweig first recounted Keller's holding that not all revenue increases are subject to the Hancock Amendment. It explained that the key distinction in Keller was "between charges that an individual recipient pays for 'actual services rendered' and the [ambulance] district's 'property tax revenue that assures minimal ambulance service.'" Zweig, 412 S.W.3d at 232 (quoting Keller, 820 S.W.2d at 304, n.7) (emphasis omitted). It offered the following example:

To illustrate this distinction, assume that a political subdivision imposes a charge on property owners to build and operate a swimming pool. If the political subdivision also decides to charge an admission fee to those who actually use the pool, no voter approval is required under section 22(a) because that charge is a genuine user fee, imposed only when a specific service (i.e., access to the pool) actually is rendered to a particular recipient in an individualized transaction. The first charge is not a user fee, however, because it is not charged in exchange for an individual's use of that service. Instead, it is charged to ensure the availability of that service for the entire community. The political subdivision was levying a tax when it imposed the first charge, therefore, and prior voter approval is required under section 22(a).

Zweig, 412 S.W.3d at 232. Focusing on the use of the word "levy" in section 22(a), the Zweig court explained that section 22(a) applies to "actions that create an obligation to pay that is not contingent upon each payer's actual use of the political subdivision's service." Id. at 233.

The court then addressed Keller, noting that the criteria "were not cut from whole cloth," but rather, were meant solely to aid courts in applying the "traditional" test for distinguishing fees and taxes: "Fees or charges prescribed by law to be paid by certain individuals to public officers for services rendered in connection with a specific purpose ordinarily are not taxes." Id. at 233-34 (citing Keller, 820 S.W.2d at 303-04, citing Leggett, 342 S.W.2d at 875). The Zweig court refocused the analysis, noting:

Before meaningful guidance can be gleaned from any of the Keller criteria, the Leggett test makes clear that the court first must have a clear and complete

understanding of the *service* that the political subdivision claims to provide, including the *users* of this service and the *transactions* in which that service supposedly is rendered in exchange for the user fee. See Leggett, 342 S.W.2d at 875 (fees are not taxes if they are “paid *by* certain individuals *to* public officers *for* services rendered”).

Despite the critical importance of these determinations, no express inquiry into the nature of the political subdivision’s service occurs until the fourth Keller criterion. Even then, Keller fails to emphasize the scope or importance of this service analysis, probably because Keller assumes this is clear from the Leggett test. In hindsight, however, the Keller criteria eclipsed the role of the Leggett rule so thoroughly that this connection is rarely made. As a result, the cause of judicial frustration with the Keller criteria may lie more with the *order* of those criteria than with their *substance*. To demonstrate this point (and to avoid a further dose of judicial frustration), this Court begins its analysis with the fourth Keller criterion.

Zweig, 412 S.W.3d at 234 (emphasis in original). Thus, the Zweig court reordered the Keller criteria and analyzed each, along with additional characteristics, as applied to the impervious-stormwater charge. Id. at 234-44.

The Zweig Court focused first on the fourth Keller criterion, which asks whether the political subdivision is providing a service in exchange for the disputed charge. Zweig, 412 S.W.3d at 234-35. The court accepted the District’s characterization of its services as “ensuring the ‘continuous and ongoing’ availability of its drainage and oversight functions, regardless of whether or when they are needed.” Id. at 236. It, however, rejected the argument that the District “provides these generalized ‘availability’ services only to the Ratepayers and no one else,” but instead held that the user of the “availability” services was the District as a whole. Id. The court explained: “Where there are no individual users and no readily identifiable transactions in which the political subdivision renders the relevant service in exchange for a fee, the charge cannot be a valid user fee.” Id. (emphasis added). It recognized that “[w]hat matters is that MSD did not impose the charge in exchange for an individual’s actual use of [the stormwater] services.” Id.

Turning to the second Keller criterion – who pays the charges? – the court identified the relevant inquiry as “why some are charged and others are not” or, in other words, “the source of the obligation to pay the disputed charge.” Id. at 236, 237. If the charge is tied to the use of the service and is imposed on all who use the service, it is likely that the political subdivision is setting the price for rendering its services to individual users. Id. at 236. However, if the charge is tied to residency or ownership instead of use, the charge is not a user fee. Id. The court concluded that the District could not tie the obligation to pay the impervious-stormwater charge to an individual’s use of the “availability” services because that service was being rendered to the District as a whole, not to individual landowners. Id. at 237. The obligation to pay the charge was instead tied to the ownership of real property, which weighed strongly against the conclusion that the charge was a user fee. Id.

The court then considered the first Keller criterion, which asks whether the payment occurs regularly or after use. Id. at 238. The court explained that if a charge is paid only on or after the provision of a good or service to the payer, then it is likely that the charge is a user fee, but if the charge is paid periodically and regardless of when or if the payer actually uses the service, the criterion indicates that the charge is a tax. Id. Since the focus of the criterion is on whether the payment is made “only on or after” the payer uses the service, and because the court had concluded that individual use of the District’s “availability” services is not possible, the Zweig court determined that the impervious-stormwater charge cannot be paid “only on or after” the individual payer uses the services. Id. It classified the impervious-stormwater charge as “precisely the sort of periodic charge unrelated to the payer’s actual use of the relevant service that the first Keller criterion [sought] to identify.” Id.

The court then analyzed the third Keller criterion considering how the amount of the charge is calculated. It explained that the criterion, like the preceding two criteria, “focuses on the relationship between the disputed charge and the payer’s use of the service that supposedly is being render[ed] in exchange for that fee.” Id. at 239. If the amount is more dependent on the level of goods or services provided, in other words the extent of the use, then it is more likely a user fee; if the amount is not dependent on use of the service, it is likely a tax. Id. There were no individual users of the District’s relevant service (i.e., the “continuous and ongoing” availability of the stormwater system), and thus this criteria weighed in favor of a tax. Id. at 240.

Finally, the court considered the fifth Keller criterion: whether the services being provided have “historically and exclusively been provided by the government.” Id. at 241. The court explained that the criterion is “based on the assumption that historically governmental services are more likely to be funded by levying taxes but, when a political subdivision enters into the private-sector market, it is more likely to charge a price for its services just as its private competitors do.” Id. The court found no evidence that the District’s service of ensuring the availability of stormwater drainage was or had ever been provided by private entities to individual landowners in exchange for a fee. Id. Thus, the court concluded that the fifth Keller criterion suggested that the impervious-stormwater charge was a tax. Id. at 242.

The Zweig court, however, did not end its analysis with the Keller factors. Rather, it reiterated that “the Keller criteria are not the only indicia courts may consider when determining whether a political subdivision has levied a tax without voter approval.” Zweig, 412 S.W.3d at 242. Thus, the court reasoned (1) the fact that the District gave itself a lien as a remedy for nonpayment of the impervious-stormwater charge; and (2) the fact that the District did not claim the right to terminate stormwater services for failing to pay, but rather claimed the right to shut

off unrelated services, suggested that the District was levying a tax and not simply setting prices for sales of its services.

In sum, the Zweig court held that the District's decision to implement the impervious-stormwater charge without a vote violated section 22(a). As a result of Zweig, the District will submit its proposed increase in stormwater charges for voter approval.

WASTEWATER

The current Wastewater Rate Change Proposal is factually similar to the rate increase upheld by the Missouri Court of Appeals in Missouri Growth. Specifically, for property with a water meter, the bill is calculated using a base charge in addition to usage-based rates. For property without a water meter, the bill is calculated using a base charge in addition to estimated usage-based rates based on the number of rooms, baths, showers and water closets in a property.

Since Missouri Growth, however, the Missouri Supreme Court issued its opinion in Zweig. Although the court in Zweig did not specifically address the wastewater charge, it modified the Keller test and other criteria, and thus the Wastewater Rate Change Proposal must still be analyzed to determine whether it is a revenue increase that requires voter approval under the Hancock Amendment.

For example, the Zweig court made the following comments with regard to the analysis of criterion:

The Court is aware that MSD's 1993 sewer charges – also imposed without prior voter approval – were determined not to be a violation of section 22(a) because those sewer charges were a valid “user fee.” Missouri Growth Ass'n v. Metro. St. Louis Sewer Dist., 941 S.W.2d 615, 624 (Mo. App. 1997). In reaching that conclusion, Missouri Growth distinguished Beatty II, which held that MSD's sewer charges were taxes and not user fees, on the ground that MSD had made “significant changes” to its sewer charges after Beatty II was decided. Specifically, MSD began charging (at least in part) on the basis of each customer's actual sewer usage, which MSD estimated on the basis of the customer's actual water usage. Id. The question of whether using water usage as

a proxy for sewer usage is adequate to change MSD's sewer charges from taxes (as held in Beatty II) to user fees (as held in Missouri Growth) is not before this Court. Here, MSD does not claim that the amount of impervious area on a given property is a proxy for a landowner's use of MSD's stormwater drainage system.

Zweig, 412 S.W.3d at 240, n.12 (emphasis added).

In addition, the Zweig Court considered two additional factors related to the remedy for nonpayment that supported the conclusion that the impervious-stormwater charge was actually a tax. See Zweig, 412 S.W.3d at 242-43 (finding of tax supported by (1) lien as remedy for nonpayment and (2) right to shut-off services having nothing to do with stormwater). As applied to wastewater, the court in Beatty II similarly recognized that the District's ordinance gave it a lien on real property for the failure to pay sewer charges, which suggested that the charge was a tax. See Beatty II, 867 S.W.2d at 221; see also Zweig, 412 S.W.3d at 242-43 (relying on Beatty II's conclusion that lien supported finding of tax and on Arbor's conclusion that no lien suggested imposition of user fee). Thus, the fact that failure to pay the sewer charges results in a lien against property supports the finding of a tax.

With regard to Zweig's conclusion about shutting off unrelated services, however, Missouri Revised Statute § 393.015 specifically gives sewer corporations, municipality or sewer districts established by statute, and sewer districts created by constitutional authority, the right to contract with any water corporation to terminate water services to any customer's premises for the nonpayment of a sewer bill. Thus, the statute has specifically authorized sewer corporations to seek termination of an unrelated service (water) for the nonpayment of a bill. Thus, unlike the situation in Zweig, this remedy is not unique to governmental entities providing this service.

In sum, the current Wastewater Rate Change Proposal is factually similar to the rate increase already held to be a "true" user fee by the Missouri Court of Appeals in Missouri Growth. The Zweig court's analysis of stormwater generally supports the conclusion that

wastewater sewer charges are user fees because they are paid in exchange for (and after) individual use of the sewer system services and, as determined in Missouri Growth, bear a direct relationship to the services provided. The Missouri Supreme Court in Zweig did cast some uncertainty on Missouri Growth's holding that using water usage as a proxy for sewer usage was sufficient to change the sewer charges from taxes into user fees. Nevertheless, in the absence of the express overruling of Missouri Growth and in light of the wastewater charges meeting the principles espoused by Zweig for user fees, voter approval should not be required for the wastewater rate increase, and the Wastewater Rate Change Proposal is in compliance with the Hancock Amendment.

It is the District's position that the Wastewater Rate Change Proposal is compliant with the Hancock Amendment, and no other party has presented evidence to the contrary. Any rate increase resulting from revenue bond proposals would be approved by the voters, and thus in compliance with the Hancock Amendment.

STORMWATER

In 2007, the District recommended and subsequently implemented a fee based on impervious area. As stated, in Zweig, the Missouri Supreme Court held that the District violated Article X, Section 22(a) of the Missouri Constitution by implementing the new stormwater charge based on impervious area without voter approval. Although the current 2015 Rate Proposal includes a stormwater ad valorem tax levy that the District will take to the voters, questions have been raised as to whether an ad valorem tax is fair and reasonable under the Charter Plan, or alternatively, whether an impervious charge would better meet this standard. An impervious charge cannot be considered without discussing the opinion of the Missouri Supreme

Court in Zweig, and whether an impervious charge will be consistent with constitutional, statutory or common law.

The Zweig case considers only whether the District's previous impervious area charge violated the Hancock Amendment because it was imposed without voter approval. Any stormwater rate increase, whether based on ad valorem property values or on impervious, is intended to be brought to the voters and thus, clearly in compliance with the Hancock Amendment.

The Zweig case indicates that there is no in-between from a "user fee" and a "tax" – a user fee is not required to be approved under Hancock because it is not a tax; a charge is required to be approved under Hancock if it is a tax. To the Missouri Supreme Court, the stormwater charge is in fact a tax even though based on impervious area. Zweig, 412 S.W.3d at 234.

The Zweig decision, however, also discussed the impervious area method for calculating the stormwater charge in more general terms, which raises a concern as to whether such a calculation is permissible under Missouri law. Specifically, the court explains that the District's ability to fund its activities is limited and quotes Article VI, Section 30(b) of the Missouri Constitution, as follows: "The plan shall provide for the assessment and taxation of real estate ... giving due regard to other provisions of this constitution." Zweig, 412 S.W.3d at 229. The court identifies under MSD's Charter:

MSD has the power to: (a) levy property taxes, provided the total levy for maintenance and operation does not exceed \$0.10 per \$100 assessed valuation; (b) levy special assessments for the construction, improvement, or extension of specific sewer and drainage facilities; and (c) establish a schedule of "rates, rentals, and other charges, to be collected from all real property served by the sewer facilities of the District."

Id. The court states in a footnote: "Ratepayers do not challenge MSD's authority to levy the stormwater user charge under the Plan or section 30(b) of the constitution. The only claim in this

case – and the only issue decided here – is whether section 22(a) prohibits MSD from levying this stormwater user charge without prior voter approval.” Id. at n.2. This footnote raises some concerns that if faced with a challenge, the court could in fact hold that the District lacks the authority to levy an impervious area stormwater charge. This is based on various provisions of the Missouri Constitution that limit the calculation of property taxes.

Article X of the Missouri Constitution governs taxation. Section 4(a) classifies all taxable property into three classes: (1) real property; (2) tangible personal property; and (3) intangible personal property. It continues:

The general assembly, by general law, may provide for further classification within classes 2 and 3, based solely on the nature and characteristics of the property, and not on the nature, residence or business of the owner, or the amount owned. Nothing in this section shall prevent the taxing of franchise, privileges or incomes, or the levying of excise or motor vehicle license taxes, or any other taxes of the same or different types.

Article X, section 4(b) then provides:

Property in classes 1 and 2 and subclasses of those classes, shall be assessed for tax purposes at its value or such percentage of its value as may be fixed by law for each class and for each subclass. ... Property in class 1 shall be subclassed in the following classifications:

- (1) Residential property;
- (2) Agricultural and horticultural property;
- (3) Utility, industrial, commercial, railroad, and all other property not included in subclass (1) and (2) of class 1.

Property in the subclasses of class 1 may be defined by law, however subclasses (1), (2) and (3) shall not be further divided, provided, land in subclass (2) may by general law be assessed for tax purposes on its productivity capability. The same percentage of value shall be applied to all properties within any subclass. No classes or subclass shall have a percentage of its true value in money in excess of thirty-three and one-third percent.

(emphasis added).

As recently described by the Missouri Court of Appeals:

Collectively, these provisions of the Missouri Constitution authorize the legislature to (1) adopt statutory definitions for the three subclassifications of real property recognized by the Constitution; (2) set the percentage of value which shall serve as the assessed value for property within each subclassification; and (3) enact statutes which permit property subclassified as agricultural to be valued (and thus assessed) based on its productive capability. The legislature has exercised its constitutional authority in each of these respects.

Rinehart v. Bateman, 363 S.W.3d 357, 364 (Mo. App. W.D. 2012).

Article X, Section 4(b) of the Missouri Constitution, along with Section 137.115 of the Missouri Statutes, “require that real property in Missouri be taxed according to its true value in money.” Snider v. Casino Aztar/Aztar Missouri Gaming Corp., 156 S.W.3d 341, 348 (Mo. banc 2005). “Normally, ‘true value in money’ is the equivalent of fair market value.” Rinehart, 363 S.W.3d at 365.

For example, in State on Inf. of Dalton v. Metro. St. Louis Sewer Dist., 275 S.W.2d 225 (Mo. banc 1955), the Missouri Supreme Court considered various challenges brought against the District’s Plan. The same portion of Article VI, § 30(b) mentioned by the court in Zweig was considered:

The plan shall provide for the assessment and taxation of real estate in accordance with the use to which it is being put at the time of the assessment, whether agricultural, industrial, or other use, giving due regard to the other provisions of this constitution.

Dalton, 275 S.W.2d at 232. In interpreting this provision, the court in Dalton reiterated that assessment of real property for general purposes must be made on the basis of value, writing:

Real property (and tangible personal property) is required by Sec. 4(b), Art. X to be ‘assessed for tax purposes at its value or such percentage of its value as may be fixed by law.’ ... In any event, the statement was qualified by the final clause, ‘giving due regard to other provisions of this constitution.’ This very clearly prevents the assessment of property for general purposes of the District from being made on any other basis than its value, Sec. 4(b), Art. X, and requires that such value shall not exceed the assessed valuation for state and county purposes.

Sec. 11(a), Art. X. Therefore, the District may properly take the assessment of real and tangible personal property, made by the City and County Assessors, as its assessment basis for taxes for its general purposes.

Id. at 232-33 (emphasis added).⁹ The Missouri Supreme Court in McKay Buick, Inc. v. Spradling, 529 S.W.2d 394 (Mo. banc 1975) reiterates the requirement that property be assessed based on its value. This case involves a challenge to a law imposing a property tax on motor vehicles and goods/merchandise held for use and sale by motor vehicle dealers. Id. at 399. The court declares that the value of such property is “fixed,” and assessed a “motor vehicle property tax” at \$2.43 on new motor vehicles; \$1.50 on used motor vehicles; and \$0.57 on goods, wares and merchandise other than motor vehicles. Id. After concluding that the law imposed a property tax on tangible personal property, the court states:

In short, Art. X requires that when tangible personal property is taxed there must be an assessed valuation placed upon the property and, if there is no assessed valuation placed upon the property, then the tax is constitutionally invalid as a direct tax upon tangible personal property under Art. X, § 4(b), of the constitution.

...

.... To fix the value of something must mean that there is a value in money attributed to it. Here, there is no value in money attributed to the property taxed nor is any method set forth to arrive at a value or money base for the computation of the tax. Because there is no money value attributed to the property taxed by the 1974 amendment, the court is not called upon to decide whether the legislature can constitutionally set a fixed dollar amount as the money value of an entire class of property or whether the legislature is restricted by Art. X, §§ and 4(b), to providing the method of determining the value of the property for tax purposes and setting the percentage of the value to be taxed.

The court holds that the 1974 amendment eliminates the value factor from what it declares to be a property tax and is, therefore, constitutionally invalid as a property tax under Art. X, § 4(b) The 1974 amendment to § 150.010 provides no method for determining the value of the property for taxation but

⁹ Although the Dalton court’s conclusion that the clause “assessment and taxation of real estate in accordance with the use to which it is being put at the time of the assessment” referred to special assessments, not general taxation, this is likely based on the fact that the then-current version of Article X, Section 4(b) did not provide for different classes/uses of real property. Dalton, 275 S.W.2d at 232-33.

simply eliminates the value factor altogether from a tax denominated a motor vehicle property tax. This is not permissible under Art. X, § 4(b).

Id. at 399-402 (emphasis added).

Although Article X, Section 4(b) of the Missouri Constitution was amended in 1982 and is after these cases, the value requirement has remained.

It is not clear whether the Missouri Supreme Court in the Zweig footnote was actually alluding to the possibility that the stormwater charge is unauthorized under the Missouri Constitution. However, given the court's characterization of the stormwater charge as a property tax, there is a concern that the stormwater charge is based on the amount of impervious area, not on value of the property as required by Article X, Section 4(b) of the Missouri Constitution. By eliminating the value factor from the property tax, there is a risk that, if faced with a challenge, the court could hold any such District charge constitutionally invalid.

The District legal counsel provided the following comments on Zweig at the Prehearing Conference:

Ms. Bowser: You're saying that the Court case leads you to believe that the impervious fee would be challenged again, am I correct?

Ms. Myers: What we're saying is that in our opinion the Supreme Court did not give real clear direction. What they did give us direction on was the impervious fee that we were trying to implement at the time it needed to be voted on. We don't feel that they went as far to say that that actual fee was a tax.

Ms. Bowser: But the impression you feel at this time an ad valorem tax will not be challenged or less likely to be challenged?

Ms. Myers: Correct.

Ms. Bowser: Is there a specific part of the constitution that you are citing to make that determination?

Ms. Myers: Yes, in one of my testimonies or on maybe a discovery request, I went through what we feel gives you authority to tax it has to do with our charter. It has to do with the constitution, and has to do with tax laws. And I

believe one of the rate commission's discovery requests. I don't remember which one.

Ex. MSD 134, p 56, l. 12 – p. 51, l. 10.

Intervenors MIEC and HBA and the Rate Consultant support the use of an impervious area fee as fair and reasonable, without regard to any legal analysis as to risks under Zweig.

There was evidence, however, that other Missouri utilities impose a stormwater charge based on impervious area, and such charges have not been challenged. The Kansas City Missouri System imposes a voted on impervious area charge. See Ex. MSD 144 at p. 68. Mr. Hoelscher notes, "Upon the ruling of the Supreme Court, they decided to allow not-for-profits to opt out of payment of that fee. They're asking them to voluntarily pay it, but the City of Kansas City is asking that they be—is allowing them to apply...." Id. at p. 69.

As described in the material discussing the Fifth Factor at pp. 193-242 of this Report, as an alternative, the Rate Commission believes that a stormwater charge imposed on an impervious basis would result in rates that impose a fair and reasonable burden on all classes of ratepayers. However, given the current state of the law after the Missouri Supreme Court in Zweig, the Rate Commission finds that it does not know whether or not a stormwater rate change proposal based on impervious area would be consistent with constitutional, statutory or common law as amended from time to time. As more fully stated in the Statement of the Rate Commission on Funding for Stormwater Services, on pp. 24-26 of this Report, the Rate Commission recommends that the District conduct a full legal analysis of the issue, including consultation with other utilities across the State imposing a voter approved impervious area charge, and consider the possibility of pursuing legislation, a declaratory action in court, or a Constitutional amendment on this issue.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE RATE CHANGE PROPOSAL IS CONSISTENT WITH CONSTITUTIONAL, STATUTORY OR COMMON LAW AS AMENDED FROM TIME TO TIME.

Second Factor: Whether the Rate Change Proposal, and all portions thereof, “Enhances the District’s ability to provide adequate sewer and drainage systems and facilities, or related services.”

The terms “adequate sewer and facilities” appears in part in Section 1.010 of the Charter Plan and reads, “In the interest of the public health and for the purpose of providing adequate sewer and drainage facilities within the boundaries herein defined . . . there is hereby established a metropolitan sewer district . . .” Charter Plan, § 1.010 (emphasis added).

These terms appear again in Section 7.300 of the Charter, which provides that the Board of Trustees shall accept a Rate Commission Report unless it finds that the report “substantially impairs the District’s ability to provide adequate sewer and drainage systems and facilities or related services to the point where public health or institutional safety may be jeopardized.” *Id.* at § 7.300(b)(2). (emphasis added.)

Similar language may be found in the Operational Rules, Regulations and Procedures of the Rate Commission (“Operational Rules”) indicating that the District shall submit to each member of the Commission information related to direct testimony that may explain “how the Proposed Rate Change will enhance the District’s ability to provide adequate sewer and drainage systems and facilities, or related services.” See Operational Rules, Regulations and Procedures of the Rate Commission of The Metropolitan St. Louis Sewer District, § 3(2)(b) (2011). (emphasis added.)

Neither the Charter Plan nor the Operational Rules, however, defines the term “enhance”. To interpret the meaning of words used in a statute, usually the words are attributed their plain and ordinary meaning. *Sermchief v. Gonzales*, 660 S.W.2d 683, 688 (Mo. banc 1983). The

commonly understood meaning of words is derived from the dictionary. Buechner v. Bond, 650 S.W.2d 611, 613 (Mo. banc 1983).

Black's Law Dictionary defines "enhanced" as "made greater; increased." Black's Law Dictionary 570 (8th ed. 2004). See also Webster's Dictionary 603 (2d ed. 1979) (to enhance means to rise, increase or make greater).

Consequently, this criteria may be interpreted in accordance with its plain and ordinary meaning. An analysis of this criteria in its plain and ordinary meaning which reads, "enhances the District's ability to provide adequate sewer and drainage systems and facilities or related services" would be to ensure that the proposed rate improves the District's ability to provide adequate services and systems throughout the metropolitan district.

The District's current wastewater rate structure consists of monthly service charges and volume charges applicable to all District customers. All non-residential customers are also assessed a compliance charge and extra strength charges where applicable. The monthly service charges include a billing and collection charge and a system availability charge. A volume charge is assessed to all customers based on their respective water usage. Water usage information is provided by customers' respective water provider on either a metered or unmetered basis. Non-residential customers are also assessed one of five tiered compliance charges based on the amount of inspection and testing of wastewater needed to comply with current regulations. Extra strength surcharges are applied to monitored non-residential customers generating excess biochemical oxygen demand, chemical oxygen demand, and total suspended solids. Ex. MSD 1, Rate Change Proposal, § 4.1.

A summary of the financial plan showing projected wastewater revenues and wastewater revenue requirements for the District during the forecast period is presented in

Table 4-10 of Exhibit MSD 1 which shows projected wastewater user charge revenue that is required in order to balance the revenue requirements through FY2020. The increase shown for each year was selected based on consideration of three principal criteria:

- (iv) Total revenue necessary to meet cash requirements for normal wastewater operations. This includes consideration of a one-month lag in the receipt of additional user charge revenue from increased rates;
- (v) Annual increases in wastewater revenues available to cash finance a portion of the wastewater utility related major capital improvements; and
- (vi) Wastewater revenue required to meet certain financial metrics, based on comments from the District's rating agencies, including debt service coverage levels and strong liquidity position over the Rate Proposal period.

See Ex. MSD 1, Rate Change Proposal, § 4.8. Total revenue is projected to be \$286.5 million in FY2015 and increase to \$459.1 million in FY2020. This represents an overall annual compound increase of 9.6% during this time period. Id.¹⁰

Table 4-10 shows the estimated net revenue remaining after deducting wastewater Operations and Maintenance expenses from total wastewater revenues. Anticipated debt service requirements on senior revenue bonds and State Revolving Fund loans will require the District to obtain additional revenue bond authorization in the amount of \$900 million before the start of FY2018. Id.

The District's existing wastewater rates have been in effect since July 1, 2014, and the approved rates for FY2016 will go into effect on July 1, 2015. See Table 4-1 of Ex. MSD 1; Ex. MSD 84A, Response to Question 2 of the First Discovery Request of the Rate Commission.

¹⁰ The Rate Change Proposal relies upon certain assumptions with respect to conditions, events, and circumstances that may occur in the future. Although considered reasonable, some of these anticipated conditions, events and circumstances may not occur resulting in potential differences in revenues and costs than currently projected.

The District executed on July 15, 2011, a 23-year, \$4.7 billion Consent Decree program with the United States Environmental Protection Agency and the Missouri Coalition for the Environment Foundation. See Ex. MSD 47, Consent Decree. This program requires the District to make investments in the wastewater system to eliminate sanitary sewer overflows, combined sewer overflows, and help reduce the risk of flooding customer properties. The current estimated Capital Improvement and Replacement Program needs are presented in Figure 4-3 and Table 4-7 of Exhibit MSD 1 for FY2015 through FY2020. The total Capital Improvement and Replacement Program project cost for this six-year period is projected to be \$1.975 billion. The largest component of the Capital Improvement and Replacement Program over the next six years will be capital investments related to mitigating sanitary sewer overflows throughout the wastewater system. Additional needs include other improvements to comply with regulatory requirements outside of the Consent Decree and the rehabilitation and replacement of existing system assets. Combined sewer overflows projects begin to substantially impact the Capital Improvement and Replacement Program as this component reaches \$158.3 million in FY2020. Table 4-7 of Exhibit MSD 1 presents the summary Capital Improvement and Replacement Program needs throughout the four-year proposed rate cycle. See also Ex. MSD 84A, Response to Question 3 of the First Discovery Request of the Rate Commission.

The more complete discussion of revenue requirements and funding on pp. 50-81, “Second Criteria: Whether the Rate Change Proposal is necessary to pay the costs of operation and maintenance” is incorporated herein by reference.

The parties to this proceeding agree that some wastewater rate increase is needed to enhance the District’s ability to provide adequate sewer facilities and related services for

wastewater services. There is no testimony in the proceeding indicating that the Wastewater Rate Change Proposal will not enhance the District's ability to provide adequate services, and no party has presented such position.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE RATE CHANGE PROPOSAL ENHANCES THE DISTRICT'S ABILITY TO PROVIDE ADEQUATE SEWER AND DRAINAGE FACILITIES OR RELATED SERVICES FOR WASTEWATER SERVICES.

STORMWATER

Stormwater Funding. The District proposes the use of a District-wide tax structure to replace the multi-layered subdistrict taxes now assessed on the real estate value of ratepayers' property. This proposed funding is designed to cover the cost of stormwater maintenance services, capital projects and associated Operations and Maintenance.¹¹

The District is partnering with 58 municipalities (co-permittees) and St. Louis County to comply with stormwater permit requirements for the St. Louis Metropolitan Small Municipal Separate Storm Sewer System. The District actively works to reduce pollutants that stormwater picks up and carries into local bodies of water through the St. Louis County Phase II stormwater Management Plan. The District maintains public storm sewers, plans and designs improvements to stormwater infrastructure, regulates stormwater drainage and floodplain impact related to development projects, and helps coordinate regional efforts to address pollution carried in or caused by stormwater runoff. See Ex. MSD 1, Rate Change Proposal, § 5.1; and see Ex. MSD 84A, Response to Question 19 of the First Discovery Request of the Rate Commission.

Existing Stormwater Rates and Taxes. District stormwater revenue is now derived principally from subdistrict ad valorem taxes. Existing stormwater rates and taxes levied by the District are presented in Table 5-1 of Exhibit MSD 1. On March 8, 1988, a majority of the voters approved stormwater service charges pursuant to Ordinance No. 7358, adopted December 23, 1987. In addition, flat rate charges of .24 cents per month for residential and non-residential properties and .18 cents per unit for multi-residential were also approved. See Ex.

¹¹ The Rate Change Proposal relies upon certain assumptions with respect to conditions, events, and circumstances that may occur in the future. Although considered reasonable, some of these anticipated conditions, events and circumstances may not occur resulting in potential differences in revenues and costs than currently projected.

MSD 1, Rate Change Proposal, § 5.2; Ex. MSD 3D, Direct Testimony of Jonathan C. Sprague, p. 5, ll. 18-23; p. 6, ll. 1-14.

The current stormwater charges and taxes postpone needed improvements and contribute to a deterioration of the stormwater system resulting from inadequate maintenance and delayed improvements. Id.

Stormwater revenues consist of monthly flat rate user charges and ad valorem taxes for District-wide stormwater costs as well as other subdistrict specific taxes which fund capital projects and Operations and Maintenance activities specific to each subdistrict's service area. The application of stormwater ad valorem taxes varies by service area. All wastewater customers are charged the flat rate user charges. All property in the District service area is charged \$0.0197 per \$100 of assessed value District-wide tax. Only customers within the District's original service area are charged the additional \$0.0682 Stormwater Operations and Maintenance tax. Operations, Maintenance and Capital Improvement taxes are levied for specific subdistricts within the original service area and range from \$0.05 to \$0.10 per \$100 of assessed property value. Id. See also Ex. MSD 3C, Direct Testimony of Richard L. Unverferth, p. 8, ll. 4-14.

The subdistrict funding results in varying levels of stormwater services. Customers paying only the District-wide tax receive only the minimal stormwater service needed to comply with regulatory requirements. Customers paying both the District-wide and Stormwater Operations and Maintenance tax receive regulatory services and a level of maintenance up to the limits of the revenue generated by these stormwater taxes. Those customers paying specific Operations, Maintenance and Capital Improvement taxes in addition to the District-wide and Stormwater Operations and Maintenance taxes receive the highest level of stormwater services.

Id. See Ex. MSD 84A, Response to Questions 5 and 6 of the First Discovery Request of the Rate Commission; Ex. MSD 85A, Response to Questions 1 and 2(a) of the Second Discovery Request of the Rate Commission.

Stormwater Revenue Requirements. The revenue required to provide for the continued, and expanding operations of the District's stormwater utility must be sufficient to meet its cash requirements for system operation. Revenue requirements include (i) total stormwater system Operation and Maintenance and Regulatory expenses; (ii) expenditures for routine and any major capital improvements; and (iii) provision for an adequate operating reserve. See Ex. MSD 1, Rate Change Proposal, § 5.3. Table 5-5 of Exhibit MSD 1 presents a summary comparison of all existing and proposed stormwater revenues under existing rates and taxes with projected revenue requirements for FY2015 through FY2020. See Ex. MSD 1, Rate Change Proposal, § 5.6. See also Ex. MSD 99A, Response to Question 5 of the Fourth Discovery Request of the Rate Commission. See also Ex. MSD 84A, Response to Question 23 of the First Discovery Request of the Rate Commission; Ex. MSD 85A, Response to Question 3 of the Second Discovery Request of the Rate Commission; Ex. MSD 86A, Response to Questions 10, 13 and 14 of the Third Discovery Request of the Rate Commission.

Operations and Maintenance. Operations and Maintenance expense is presented in Table 5-2 of Exhibit MSD 1 and shows the portion of operations that are tied directly to regulatory requirements and the cash financing available for major stormwater capital improvements which are planned to begin in FY2017. The Operations, Maintenance and Capital Improvements Capital Projects have been identified for each of the subdistricts and will be completed to fully utilize the investments made by each subdistrict. Capital spending in the Operations, Maintenance and Capital Improvements funds will be \$23.9 million from FY2017

through FY2020. During this same time period, capital spending in the stormwater Operations and Maintenance Fund and the proposed District-wide stormwater fund is projected to be \$46.9 million. Capital funding in the District-wide stormwater fund is made up of \$.012 of the proposed \$.10 per \$100 assessed value tax levy. Id.

While revenue collected from the existing stormwater user charge and ad valorem taxes is available to fund stormwater related Operations and Maintenance expenditures, these revenue sources are not sufficient. The majority of stormwater Operations and Maintenance activities are the result of failures in the existing collection and conveyance system or as a reaction to customer complaints. These activities include removing blockages, open channel cleaning, repair of storm sewer line failures, and limited inlet inspections and cleanings. See Ex. MSD 1, Rate Change Proposal, § 5.3.1.

Levee Districts. The area comprising the District includes six levee districts, to-wit: Earth City Levee District; Missouri Bottoms Levee District – Bridgeton Subdistrict; Missouri Bottoms Levee District – Hazelwood Subdistrict; Riverport Levee District; Howard Bend Levee District; and Monarch – Chesterfield Levee District. See Ex. MSD 99A, Response to Question 3 of the Fourth Discovery Request of the Rate Commission.

The stormwater regulatory tax will be collected from the levee districts and the funds collected will be sufficient to provide the District with resources to perform the regulatory services within the levee districts during the next rate cycle. The District has no obligation to perform operation or maintenance service within the Levee Districts. See Ex. MSD 96, Transcript of First Technical Conference, April 8, 2015; Testimony of Richard L. Unverferth, p. 61, ll. 24-25; p. 62, ll. 1-9. See also Ex. MSD 84A, Response to Question 21 of the First Discovery Request of the Rate Commission.

Major Capital Improvement Program. The proposed stormwater Capital Improvement and Replacement Program is comprised of two major components. The first are capital projects within the Operations, Maintenance and Capital Improvements subdistricts to complete the investments that those customers have supported through specific subdistrict taxes. The second are infrastructure rehabilitation projects that will be performed throughout the District and will be funded with a new, proposed District-wide tax. The estimated level of stormwater Capital Improvement and Replacement Program needs is presented in Figure 5-2. See Ex. MSD 1, Rate Change Proposal, § 5.3.3.

Stormwater improvements to the public system would consist of asset renewal and/or small additions that would improve the life and/or functionality of a stormwater system. Examples would include such things as storm sewer rehabilitation or adding an additional inlet and/or piping to improve drainage within a system. In addition, improvements can be made to the stormwater system as a whole to protect structures and property from flooding or erosion. Examples would include such things as the construction of new storm sewer systems, providing increased capacity to storm sewer systems, channel rehabilitation, and channel stabilization to provide erosion protection. See Ex. MSD 86A, Response to Question 14 of the Third Discovery Request of the Rate Commission.

Stormwater Regulatory Services. The District has certain regulatory obligations it must comply with to meet stormwater quality requirements outlined by Missouri Department of Natural Resources. The District is a co-permittee in a State-issued Municipal Separate Storm Sewer System (MS4) permit. Under this permit, the District must implement Best Management Practices to address stormwater quality issues. Under the new tax structure and Rate Proposal, this tax will remain in place to maintain these services. The District-wide ad valorem tax of

\$.0197 per \$100 Assessed Value levied by the District provides adequate funding to meet current regulatory obligations. See Ex. MSD 1, Rate Change Proposal, § 5.3.4. See also Ex. MSD 84A, Response to Questions 20 and 22 of the First Discovery Request of the Rate Commission.

The FY2015 adopted budget is the basis for projecting existing stormwater Operations and Maintenance expenses and is adjusted for the same inflation and growth factors as wastewater. Table 5-2 of Exhibit MSD 1 shows FY2015 Stormwater Operations and Maintenance expenses to be \$15.0 million. Id.

Proposed Funding Methods. The District believes that an ad valorem property tax used to operate and maintain the public stormwater system within its municipal boundaries is fair and equitable because (i) the use of property taxes to fund services and the maintenance of infrastructure is allowed under the Missouri Constitution and is used by District and other municipal entities in the area to pay for these kinds of services; (ii) the use of an impervious area method would cost the ratepayers approximately \$950 thousand/per year more to operate and maintain than an ad valorem taxing method; and (iii) the use of an impervious area method may result in fewer people participating in funding these services compared to an ad valorem taxing method based on recent Missouri Supreme Court decisions and state legislation. See Ex. MSD 100A, Response to Question 7 of First Discovery Request of Intervenor Home Builders Association.

The District is proposing to seek voter approval to assess a District-wide stormwater tax to replace the current stormwater Operations and Maintenance Tax and flat rate charges. The proposed District-wide tax rate is \$0.10 per \$100 of assessed property value.

The subdistrict specific Operations, Maintenance and Capital Improvements taxes will be eliminated.

The ad valorem tax of \$0.197 per assessed valuation will remain in place to provide the District with the necessary funding to meet regulatory requirements.

A new stormwater District-wide Tax of \$0.10 per \$100 assessed valuation will provide the District with the necessary funding to meet the operating requirements of the expanded service levels. See Ex. MSD 1, Rate Change Proposal, § 5.4. The District has rewritten Section 5.4, Proposed Funding Methods, p. 5-9, Ex. MSD 1, to clarify the administrative approach associated with setting the OMCI tax rate to zero dollars:

Meeting the proposed increased level of SW service beginning in FY17 requires that the District develop a more equitable and consolidated SW charge. The District is proposing to seek voter approval to assess a District-wide SW tax to replace the current SW O&M Tax and flat rate charges. The proposed District-wide tax rate is \$0.10 per \$100 of assessed property value. The subdistrict specific OMCI taxes will be set to \$0.00 as part of this Rate Proposal as well; however, the regulatory tax will remain in place. Charging this new SW District-wide Tax will provide the District will the necessary funding to meet the operating requirements of the expanded service levels. Additionally, this proposed structure will eliminate the disjointed revenue sources and provide a funding source that allows for a cohesive plan across the entire District.

Ex. MSD 114A, Response to Question 6 of the Fifth Discovery Request of the Rate Commission.

The taxable base for the District-wide Tax of \$0.10 per \$100 assessed valuation assumes a 0.5% increase in the assessed valuation of the City of St. Louis and St. Louis County. Ex. MSD 3G, Direct Testimony of Teresa A. Bellville, p. 7, ll. 16-23. From December 31, 2012, to December 31, 2014, however, the assessed valuation of the City of St. Louis declined by \$166,885,120 or 5%, and in St. Louis County declined by \$666,565,250 or 3%. See Ex. RC 92, Total Assessed Valuations for St. Louis County, and Ex. RC 93, Assessed Value Information for St. Louis City.

The Charter Plan provides the District the power:

To levy, assess, and collect taxes on all taxable property within the District or a subdistrict, as the case may be; provided, that the rate of taxation for purposes of operation and maintenance shall not exceed ten cents on the hundred dollars assessed valuation.

See Ex. RC 88, Charter Plan, § 3.020(15). Both taxes must be approved by the voters of the District. See [Mo. Const.]. On March 8, 1988, a majority of the voters approved stormwater service charges pursuant to Ordinance No. 7358, adopted December 23, 1987. In addition, flat rate charges of .24 cents per month for residential and non-residential properties and .18 cents per unit for multi-residential were also approved. See Ex. MSD 1, Rate Change Proposal, § 5.2; Ex. MSD 3D, Direct Testimony of Jonathan C. Sprague, p. 5, ll. 18-23; p. 6, ll. 1-14. The approval of the imposition of ad valorem taxes of \$0.10 per \$100 assessed valuation may be submitted to the voters on the first Tuesday after the first Monday in April, August or November. See Mo. Rev. Stat. § 115.123.1. Notice under Section 7.310 of the Charter Plan to the Board of Aldermen, Comptroller, License Collector, and Collector of the City of St. Louis, the County Council and Collector of St. Louis County of ad valorem taxes to be levied by the District upon real property as of January 1, 2016, must be fixed not later than October first for entry in the tax books for calendar year 2016. See Mo. Rev. Stat. § 67.110.1. No action by the Board of Trustees to effect a change in the rate may occur prior to 45 days after the date upon which the report is received. See Section 7.300 of the Charter Plan. Any proposition to impose an ad valorem tax may be considered by the Board of Trustees only after a public hearing conducted in accordance with the provisions of Section 7.320 of the Charter Plan. In order to submit the proposal to the voters at the election conducted on the first Tuesday after the first Monday in April, notice to the Board of Election Commissioners of the City of St. Louis and of

St. Louis County by January 22, 2016, in order to satisfy the 10-week notice requirement to the election authorities. See Mo. Rev. Stat. § 115.125.

The District states that an ad valorem property tax used to operate and maintain the public stormwater system within its municipal boundaries is fair and equitable because the use of property taxes to fund services and the maintenance of infrastructure is allowed under the Missouri Constitution and is used by MSD and other municipal entities in the area to pay for these kinds of services. See Ex. MSD 100, Response to Question 7 of the First Discovery Request of Intervenor Home Builders Association.

In the 2007 Rate Change Proposal, the District recommended a new stormwater fee be implemented to provide sufficient funding to support the projected basic stormwater program revenue requirements based upon charging individual customers an established rate times the quantity of impervious area on their property. Impervious area was initially determined from 1996 aerial photography and updated from 2000 aerial photography. See Ex. MSD 5, 2007 Rate Proposal, Section 4.5, p. 4-9.

In addition to the recommendation for a stormwater impervious area charge, there were also changes proposed for the OMCI revenues. OMCI projects were planned to continue to be financed by OMCI taxes and were separately identified from those projects to be funded by impervious area charges. The District proposed a reconfiguration of the existing 23 OMCI subdistricts into five watershed based subdistricts as a means to provide enhanced stormwater services as determined by a vote of each subdistrict's customers. A survey undertaken by Black & Veatch in 2014 to assess stormwater financing and management elicited response from more than 75 utilities including the District. Ninety percent of the respondents calculated the fee on gross and/or impervious area and 79 percent calculated stormwater user fees on impervious area.

See Ex. MSD 84G, 2014 Stormwater Utility Survey, Figures 19 and 20, pg. 13. See also Ex. MSD 127, Testimony of Mr. William Stannard at the Third Technical Conference, p. 116, ll. 12-15; p. 117, ll. 1-7.

The Black & Veatch 2014 Stormwater Survey notes that:

The risk of legal challenges could be a potential barrier to establishing stormwater user fees. Seventy-eight percent of the utilities that responded in this survey had not faced any legal challenges to their fees. Of those that faced a legal challenge, the challenge primarily seems to have been either due to lack of authority to assess fees or on the grounds of constitutionality.

Ex. MSD 84G, 2014 Stormwater Utility Survey, p. 12.

The District is unsure that not-for-profit entities would participate in a voted-on impervious fee, since Mo. Rev. Stat. § 204.700 exempted approximately 3,500 customers from participating in the impervious fee since the customers were residents not receiving wastewater or stormwater services. See Ex. MSD 127, Testimony of Brian Hoelscher, Third Technical Conference, p. 42, ll. 16-18; p. 43, ll. 17-24. The District believes that further legislation may exempt nonprofit entities and even more ratepayers for similar reasons. The levy of a property tax, however, would be protected from such legislation by the Missouri Constitution. Id. p. 44, ll. 1-5; Ex. MSD 114A, Response to Question 11 of the Fifth Discovery Request of the Rate Commission.

Article X, Section 1 of the Missouri Constitution limits the taxing power of political subdivisions to those entities authorized by statute. The Missouri Supreme Court held in Dalton v. The Metro. St. Louis Sewer Dist., 275 S.W.2d 225 (1955) that (i) Article VI, Section 30(b) of the Missouri Constitution, which authorized establishment of the District and (ii) the Charter Plan, included a grant of legislative power to “provide for taxation of all tangible property for general purposes and obligations of the district.” See also Dalton, 275 S.W.2d, at 233; Ex. RC

126, Article X of Missouri Constitution; Ex. MSD 114A, Response to Question 10 of the Fifth Discovery Request of the Rate Commission.

Article VI, Section 30(b) of the Missouri Constitution provides that the District's Charter Plan "shall provide for the assessment and taxation of real estate in accordance with the use to which it is being put at the time of assessment, whether agricultural, industrial or other use, giving due regard to the other provisions of this constitution." The District derives its power to tax from the Constitution and, therefore, does not need to rely on a statute for taxing authority. Id.

Mr. Stannard read from "Expanding Financing and Pricing Concepts into Stormwater" of *Water & Wastewater Finance and Pricing*, Fourth Edition, Copyright 2015, which states that the most appropriate stormwater rate structure links demand for service to the rate structure. Total runoff volume, a cost causation factor, is influenced by size of the parcel, vegetation, slope, soils, and the amount of roof top and pavement (impervious area where water cannot readily percolate into the earth). All these influence the [estimated] runoff volume and thus the demand from the property. The paramount variable is the amount of the impervious area. See Ex. MSD 127, Testimony of William Stannard, Third Technical Conference, pp. 105-110.

Impervious area rate structures have been used very frequently to date by jurisdictions because an impervious area basis reflects cost drivers, it is very fair, and is relatively easy to understand.

Mr. Stannard testified that a critical step in the rate development process is to use the cost of service process to allocate the total revenue requirements and calculate fair and equitable rates. See Ex. MSD 127, Testimony of William Stannard, Third Technical Conference, p. 114,

ll. 7-10; see also Ex. MSD 84A, Response to Questions 8, 9, and 10 of the First Discovery Request of the Rate Commission.

Stormwater Subdistricts. Ordinance No. 13856, adopted June 12, 2014, approved the current tax rates for general administration that is used for regulatory compliance (Section Two), operation and maintenance of existing public stormwater facilities (Section Three), and for the OMCI subdistricts (Sections Four through Twenty-One).

Stormwater improvement projects identified within the Rate Change Proposal and within each zone (Red, Yellow, Green) were prioritized by planning the projects with the highest benefit cost ratio project within each Zone independently based on funding availability. Generally the projects identified in Green and Yellow zones have equal benefit cost ratios. Generally the projects within the Red Zone have a higher benefit cost ratio than those being done in the Green and Yellow zones. There are no projects to be completed in the Red zone with a lower benefit cost ratio than the Green and Yellow zones. See Ex. MSD 114A, Response to Questions 1 and 2 of the Fifth Discovery Response of the Rate Commission; Ex. MSD 127, Testimony of Richard Unverforth, Third Technical Conference, pp. 74-84.

Stormwater Operating Reserve. The stormwater operating reserve is designed to add a layer of protection for unplanned expenses. Under the proposed funding mechanism, stormwater revenues will be collected from ad valorem taxes which are collected annually in the City and County. Due to this annual revenue collection schedule, it is necessary for the stormwater fund to maintain a reserve balance that provides sufficient working capital to meet the regular operating and capital expenses in the first six months of a fiscal year after which a new year's revenues will be collected. An operating reserve equal to 240 days of stormwater Operations and Maintenance

expense is reflected in this Rate Proposal. See Ex. MSD 1, Rate Change Proposal, § 5.3.5; Ex. MSD 3H, Direct Testimony of William Stannard, p. 19, ll. 1-11.

Because the voters will not be asked to approve the ad valorem tax until April 2016, the new tax rate will not be fixed until October 1st. Collections of the new tax rate will begin in late November 2016 with substantial payments by December 2016. The operating reserve may not be funded until the sixth or seventh month of FY2016.

A summary of stormwater revenues under existing and proposed rates and taxes is presented in Table 5-3 of Exhibit MSD 1 for the period FY2015 through FY2020 provided by District staff. Projected stormwater tax revenues shown in Table 5-3 through FY2016 are based on staff projections developed for the District's FY15 budget. This budget was approved on June 11, 2014. Table 5-1 also presents the proposed new Stormwater Tax which will be assessed to all customers of the District. Id.

HOME BUILDERS ASSOCIATION POSITION

Intervenor Home Builders Association testified at the Prehearing Conference that it believes that the current stormwater rate change proposal will not enhance the District's ability to provide adequate services. Intervenor Home Builders Association asserts that the Stormwater Rate Change Proposal does not enhance the District's ability to provide adequate sewer and drainage systems and facilities and related services, and recommends a credit program. At the Prehearing Conference, Counsel for Home Builders Association noted:

We also introduced that credit because we believe the credit system will enhance the District's ability to provide adequate sewer and drain and system and facility or relate service which is another one of the criteria that the Rate Commission should examine under the charter. Under the current proposed structure, property owners are being charged twice for storm water management once through ad valorem property tax, and once through maintaining better management practice on their property. For those property owners who have installed some form of O and M such as rain guarding or retention basins. HBA has illustrated various

options for storm water credit programs and illustrating in fact these storm water credit programs work. And this in fact enhances the management of storm water in those various areas.

Ex. MSD 134, Transcript of June 26, 2015 Prehearing Conference, p. 75, ll. 18 – p. 76, l. 8.

Home Builders Association asserts that storm water credit guides produced by Home Builders Association along with publications by the EPA will illustrate the connection between BMP in reducing operation and maintenance cost while the District continues to rely on and to discourage inclusion of storm water credit program under storm water rate change proposal. Home Builders Association's position is that this will enhance the District's ability to provide storm water services to the overall area.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE RATE CHANGE PROPOSAL ENHANCES THE DISTRICT'S ABILITY TO PROVIDE ADEQUATE SEWER AND DRAINAGE FACILITIES OR RELATED SERVICES FOR STORMWATER SERVICES.

Third Factor: Whether the Rate Change Proposal for Wastewater Services, and all portions thereof, “Is *consistent* with and not in *violation* of any covenant or provision relating to any outstanding bonds or indebtedness of the District.”

The Charter Plan states that the Board of Trustees shall accept a Rate Commission Report unless it finds that the report “is consistent with and not in violation of any covenant or provision relating to any outstanding bonds or indebtedness of the District.” The terms “consistent with” and “not in violation” are not defined. Charter Plan, § 7.300(b)(3).

The Operational Rules, Regulations and Procedures of the Rate Commission (“Operational Rules”) provide that the District shall submit to each member of the Commission information related to direct testimony that may explain, “whether and to what extent the Proposed Rate Change is necessary to enable the District to comply with any covenant or provision relating to any outstanding bonds or indebtedness of the District. See Operational Rules, Regulations and Procedures of the Rate Commission of The Metropolitan St. Louis Sewer District, § 3(2)(c) (2011). (emphasis added.)

Neither the Charter Plan nor the Operational Rules defines “consistent with” or “not in violation”. As such, to interpret the meaning of words used in a statute, usually the words are attributed their plain and ordinary meaning. Sermchief v. Gonzales, 660 S.W.2d 683, 688 (Mo. banc 1983). The commonly understood meaning of words is derived from the dictionary. Buechner v. Bond, 650 S.W.2d 611, 613 (Mo. banc 1983).

Webster’s Dictionary defines the term “consistent” as “fixed, firm, solid; holding together.” Webster’s Dictionary 390 (2d ed. 1979).

Further, a “violation” is “an infraction or a breach of the law; a transgression.” Black’s Law Dictionary 1600 (8th ed. 2004). See also Webster’s Dictionary 2040 (2d ed. 1979) (a violation is a breach or infringement).

An analysis of the language “is consistent with and not in violation of any covenant or provision relating to any outstanding bonds or indebtedness of the District” would require the Rate Commission to recommend a rate only if it complies with provisions relating to any outstanding bonds or indebtedness of the District.

The Rate Change Proposal presents the District's proposed use of \$900 million in bond financing and \$440 million in cash financing to fund its Capital Improvement and Replacement Program from FY2017 through FY2020 to provide the funds needed to comply with regulatory requirements relating to deficiencies in the District's wastewater system including sewers, pump stations and treatment plants and to satisfy the requirements of the Consent Decree.¹²

The District proposes to finance the required capital improvements by a combination of wastewater user charge revenues, available fund balances, revenue bond proceeds, Missouri Clean Water State Revolving Fund loan proceeds, grants and contributions, other operating revenues, and interest income. See Ex. MSD 1, Rate Change Proposal, § 4.6.1.

Wastewater Major Capital Improvement and Replacement Program. The District executed on July 15, 2011, a 23-year, \$4.7 billion Consent Decree program with the United States Environmental Protection Agency, the State of Missouri, and the Missouri Coalition for the Environment Foundation. See Ex. MSD 47, MSD Consent Decree. This program requires the District to make investments in the wastewater system to eliminate sanitary sewer

¹² The Rate Change Proposal relies upon certain assumptions with respect to conditions, events, and circumstances that may occur in the future. Although considered reasonable, some of these anticipated conditions, events and circumstances may not occur resulting in potential differences in revenues and costs than currently projected.

overflows, combined sewer overflows, and help reduce the risk of flooding customer properties. The current estimated Capital Improvement and Replacement Program needs are presented in Figure 4-3 and Table 4-7 of Exhibit MSD 1 for FY2015 through FY2020. The total Capital Improvement and Replacement Program project cost for this six-year period is projected to be \$1.975 billion. The largest component of the Capital Improvement and Replacement Program over the next six years will be capital investments related to mitigating sanitary sewer overflows throughout the wastewater system. Additional needs include other improvements to comply with regulatory requirements outside of the Consent Decree and the rehabilitation and replacement of existing system assets. Combined sewer overflows projects begin to substantially impact the Capital Improvement and Replacement Program as this component reaches \$158.3 million in FY2020. Table 4-7 of Exhibit MSD 1 presents the summary Capital Improvement and Replacement Program needs throughout the four-year proposed rate cycle. See Ex. MSD 94A, Response to Questions 1, 2, 3, 4, 5, 6, 8, and 18 of First Discovery Response of Rate Commission.

Revenue Bonds. The District was formed on February 9, 1954, when voters in the City of St. Louis and a portion of St. Louis County approved the Charter Plan to provide a metropolitan-wide system of stormwater treatment and facilities for the collection, treatment, and disposal of sewage. The Charter Plan was amended on November 7, 2000, and further amended on June 5, 2012.

SECTION 3.020. Powers of the District. — the District established under the provisions of this Plan shall have power:

* * *

To meet the cost of acquiring, constructing, improving, or extending all or any part of the sewer or drainage systems: (a) through the expenditure of any funds available for that purpose; (b) through the issuance of bonds for that purpose.

payable from taxes to be levied and collected by the District; (c) through the issuance of bonds for that purpose, payable from special benefit assessments levied and collected by the District; (d) from the proceeds of special benefit assessments or bills evidencing such assessments; (e) from any other funds which may be obtained under any law of the state or of the United States for that purpose; (f) from the proceeds of revenue bonds, payable from the revenues to be derived from the operation of sewerage and drainage facilities and systems of the entire District . . . as may be set forth in propositions submitted at elections in the District . . . from time to time called and held to authorize the issuance of such revenue bonds; or (g) from any combination of any or all such methods of providing funds.

* * *

See Charter Plan, § 3.020(15) (emphasis added).

The Charter Plan requires an annual budget, an explanatory budget message, and a general appropriation ordinance conforming with the budget. The budget shall provide a complete financial plan for the budget year for all District and subdistrict funds, and shall include the following:

- (1) Estimated revenues to be actually received from all sources during the budget year, together with a comparative statement of revenues for the two years next preceding, itemized by year, fund, and source.
- (2) Proposed expenditures, including projected expenses included in the Rate Commission's budget as provided in Section 7.260, recommended by the Executive Director for the budget year, together with a comparative statement of expenditures for the two years next preceding, itemized by year, fund, activity, and object.
- (3) The amount required for the payment of interest, amortization, and redemption charges on the debt of the District or any subdistrict.
- (4) A general budget summary.
- (5) A list of capital projects.

In no event shall the total amount of proposed expenditures for the budget year from any fund exceed the estimated revenues to be actually received plus any unencumbered balance or less any deficit estimated for the beginning of the budget year.

See Charter Plan, § 7.130 (emphasis added). Subject to these restrictions, the District has the authority to issue revenue bonds.

At the end of each fiscal year, the unexpended and unencumbered parts of all appropriations shall revert to the funds from which appropriated. See Ex. RC 88, MSD Charter as of June 5, 2012 Amendments, Section 7.050. Upon approval by the Board of Trustees, the Executive Director may transfer any unencumbered appropriation balances or portion thereof from one classification of expenditure to another. Id. at Section 7.150.

The District's authority to issue revenue bonds requires the approval of the voters of the District. Specifically, the Charter Plan provides:

No general obligation bonds, except bonds for refunding, advance refunding, extending, or unifying the whole or any part of valid bonded indebtedness, shall be issued without the assent of the voters of the District . . . in the number required by Article VI, § 26(b) of the Constitution of Missouri (as amended from time to time), voting at an election to be held for that purpose. No revenue bonds payable from the revenues to be derived from the operation of any or all sewer and drainage systems and facilities of the District . . . except bonds for refunding, advance refunding, extending, or unifying the whole or any part of revenue bonds, shall be issued without the assent of a simple majority of the voters of the District . . . voting at an election to be held for that purpose. Notwithstanding anything herein to the contrary, the District is expressly authorized to issue District-wide general obligation and revenue bonds.

See Charter Plan, § 7.170 (emphasis added).

The Missouri Supreme Court has expressly recognized this authority, stating, "The other powers objected to, namely, . . . incurring debts, . . . issuance of tax anticipation warrants, . . . and issuance of bonds, . . . are essential powers of such district." State on inf. Dalton v. Metro. St. Louis Sewer Dist., 275 S.W.2d 225, 231 (Mo. banc 1955). The court continued, "[w]ithout the power to incur debts and issue bonds, adequate drains, sewers and disposal plants could not be constructed. However, in the exercise of this power, the District is subject to the financial limitations imposed by the Constitution on all government subdivisions." Id.

Outstanding Revenue Bonds. Revenue bonds do not rely upon the general credit or tax money of the District and do not constitute indebtedness of the District within the limitations of Charter Plan Section 7.190 or Article VI, § 26(b) of the Missouri Constitution. Under the authority of Mo. Rev. Stat. § 250.120.1 (2000), once the voters have approved revenue bonds, the District has authority to raise wastewater and stormwater rates to pay principal and interest on the bonds and to meet the costs of maintenance and operation of the facilities.

On April 22, 2004, the Board of Trustees issued its first revenue bonds under the terms of a Master Bond Ordinance.

Section 6.1 of the Bond Ordinance requires the District to operate the System on a revenue producing basis and at all times to prescribe, fix, maintain, and collect rates, fees, and other charges for the services, facilities, and commodities furnished by the System fully sufficient at all times to pay annual operation and maintenance expense, provide a reasonable operating reserve, produce net revenues in each fiscal year equal to at least 1.25 times the Debt Service Requirement on all Senior Bonds currently outstanding and 1.15 times the Debt Service Requirement on all Bonds then outstanding and accumulate sufficient funds to meet the costs of major renewals, replacements, repairs, additions, betterments, and improvements to the System to keep it in good working condition. See Ex. MSD 27, Bond Master Ordinance 11713.

Additional senior revenue bonds have been issued in 2006, 2008, 2010, 2011, 2012, and 2013. See Ex. MSD 84A, Response to Question 25 of the First Discovery Request of the Rate Commission. Supplemental Bond Ordinances authorized by the Board of Trustees relating to additional revenue bond issues include the same covenants. Exs. MSD 28 through 41. The principal remaining on all of the District's senior revenue bonds issued to date is \$740.7 million as of December 31, 2014. The District has also participated in multiple subordinate series of

revenue bonds issued under the Missouri State Revolving Fund loan program. The total amount of principal remaining on all of the District's State Revolving Fund Loans issued to date is approximately \$315.4 million as of December 31, 2014. See Ex. MSD 1, Rate Change Proposal § 4.6.2. See also Ex. MSD 99A, Response to Questions 4, 6, 7, 8, 9, and 10 of the Fourth Discovery Request of the Rate Commission.

A consideration in measuring the adequacy of District revenues is the provision of sufficient debt service coverage to meet the actual debt service paid to the bondholders on the senior revenue bonds and on the State Revolving Fund loans. The debt service coverage of the senior revenue bond debt service, i.e., the ratio of net revenue to total senior revenue bond debt service for each year of the study period shows the debt service coverage of the combined senior revenue bond and State Revolving Fund debt service (i.e., the ratio of net revenue to total debt service for each year of the study period). Current wastewater revenue bond covenants require the District to provide debt service coverage equal to at least 125% (>1.25x) of the annual principal and interest payment on all senior revenue bonds and 115% (>1.15x) of the combined annual principal and interest payment on all wastewater senior revenue bonds and all State Revolving Fund loans. See Ex. MSD 1, Rate Change Proposal, § 4.8.

Moody's Investors Services assigned a credit rating of Aa1 to the District's 2013B revenue bond obligations on November 19, 2013. Ex. MSD 49, Moody's Credit Rating Report. Fitch Ratings assigned a rating of AA+ on November 18, 2013, to the District's Series 2013B revenue bond obligations. Ex. MSD 50, Fitch Credit Rating Report. Standard & Poor's Ratings Service assigned a rating of AAA on November 15, 2013, to the District's Series 2013B revenue bond obligations. See Ex. MSD 48, S&P Credit Rating Report.

The rating agencies have each noted that the District's current credit rating could be compromised if projected senior debt service coverage fell below the 2.4x to 2.9x range and projected total debt coverage fell below the 1.6x to 1.8x range. The Rate Proposal is designed to maintain a senior debt service coverage ratio of at least 2.50x over the Rate Proposal period. Ex. MSD 3F, Direct Testimony of Bethany Pugh, p. 5, ll. 8-12. See also Ex. MSD 96, Transcript for Technical Conference on Direct Testimony, April 8, 2015; Testimony of Tim R. Snoke, p. 76, ll. 4-25; p. 77, ll. 1-23; Ex. MSD 84A, Response to Questions 27 and 33 of the First Discovery Request of the Rate Commission.

Proposed Revenue Bonds. The Rate Change Proposal is designed to generate debt service coverages for proposed revenue bonds consistent with rating agencies' expectations for "AA" rated large metropolitan wastewater systems. Ex. MSD 3F, Direct Testimony of Bethany Pugh, p. 4, ll. 1-19.

The District's Capital Improvement and Replacement Program projects are primarily funded by the issuance of senior revenue bonds and State Revolving Fund loans while the smaller remaining work is on a cash-funded basis (Pay As You Go). Debt financing of the majority of the Capital Improvement and Replacement Program allows the financing burden to be appropriately shared by both present and future users benefiting from the wastewater system improvements. Capital improvements routinely incurred each year as determined by the District's comprehensive asset management program are more appropriately financed with Pay As You Go revenue generated from annual wastewater service revenue. Ex. MSD 1, Rate Change Proposal, § 4.6.1; Ex. MSD 3E, Direct Testimony of Tim R. Snoke, p. 3, ll. 10-12; p. 4, ll. 1-24.

New senior revenue bonds with a total par value of \$1.07 billion and \$180 million in additional State Revolving Fund loans are expected to be issued between FY2015 and FY2020 to provide this funding. At the end of FY2016, it is estimated the District will have issued approximately 70% of its current debt authorization of \$945 million. This will require the District to obtain voter approval for authorization of \$900 million of additional debt financing prior to FY2018. The District plans to take advantage of the State Revolving Fund loan program but expects to be limited to \$25 million each year from FY2017 through FY2020. In total, cash financing is expected to fund 26.3% of the total Capital Improvement and Replacement Program between FY2015 and FY2020. Id.

The District anticipates receiving grants and contributions of \$3.5 million between FY2015 and FY2020. Id.

The projected amortization of future revenue bond issues determined by PFM, the District's financial advisor, is based on current market conditions and certain assumptions regarding future market conditions. Proposed revenue bond issues will be governed by supplemental bond ordinances incorporating the bond covenants set forth in the Master Bond Ordinance. Generally, future senior revenue bonds are assumed to have a 30-year term and annual coupon rates between 5.0% and 5.5%. Future State Revolving Fund loans issued to fund the Capital Improvement and Replacement Program are expected to have 20-year terms and a net effective annual interest and administration cost of about 3% per year. In addition to the interest cost of future debt, the District will incur issuance costs with each senior revenue bond issue and State Revolving Fund loan, and be required to maintain a debt service reserve fund for the senior revenue bonds. The issuance costs for senior revenue bonds are estimated at 1.0% of the total issuance amount. Issuance costs for State Revolving Fund loans are expected to be

0.65% of the total State Revolving Fund loan amount. A Debt Service Reserve Fund will be established in an amount equal to the lesser of (i) the maximum amount of principal or on interest due in any District fiscal year on all outstanding senior revenue bonds; (ii) 125% of the average annual debt service on outstanding senior revenue bonds; or (iii) an amount not in excess of 10% of the par value of the outstanding senior revenue bonds. See Ex. MSD 1, Rate Change Proposal, § 4.6.2.

Based on these assumptions, the total annual debt service during the forecast period for existing debt and future proposed debt is expected to increase from \$65.5 million in FY2015 to \$146.1 million in FY2020. Id.

The Missouri Supreme Court has specifically held that the issuer of revenue bonds for the operation and maintenance of a sewage system had the authority to raise water and sewage rates, not only to pay principal and interest in revenue bonds issued for the purpose of construction of a water treatment plant and water transmission lines, but also to meet the cost of maintenance and operation of the physical plan itself. Oswald v. City of Blue Springs, 635 S.W.2d 332, 333-334 (Mo. banc 1982). Moreover, once the voters have approved the bonds, such increases may be made without again submitting the increase to the voters. Id. at 334. Under Oswald, approval of the Rate Change Proposal is not required to meet existing bond covenant requirements on revenue bonds previously authorized by the voters.

Missouri State Revolving Fund. The "Missouri Clean Water Law" is designed to meet the requirements of the Federal Clean Water Act of 1987 (the "Act"). 33 U.S.C. §§ 125-1376. See Mo. Rev. Stat. § 644.011 (2014). It also establishes the Missouri Clean Water Commission (the "Commission"), which is required to adopt rules and regulations to enforce the powers and duties of Chapter 644 and the Act. Mo. Rev. Stat. §§ 644.021, 644.026 (2014). The Missouri

Code of State Regulations sets forth the general requirements for the implementation of Title VI of the Act, which authorizes the administrator of the Environmental Protection Agency (the "EPA") to make capitalization grants to states to fund financial assistance programs authorized by Title VI of the Act. See 10 CSR 20-4.021.

The Missouri State Revolving Fund Program is a partnership between the EPA and the Missouri Department of Natural Resources (the "Department"), and provides subsidized low interest rate loans to qualifying applicants.

In Missouri, the Clean Water State Revolving Fund Program consists of the Water and Wastewater Loan Fund ("WWLF") and the Water and Wastewater Revolving Loan Fund ("WWRLF") and those accounts secured by funds from the WWLF and the WWRLF. 10 CSR 20-4.040(2)(P). The State Revolving Fund is subject to the requirements, restrictions, and eligibilities placed on the State Revolving Fund by the Act. Id. The State Revolving Fund also funds the State Direct Loan Program ("Direct Loans"). 10 CSR 20-4.041.

The Department may make Direct Loans by purchasing the general obligation bonds, revenue bonds, short-term notes or other acceptable obligations of any qualified applicant for the planning, design, and/or construction of an eligible project. 10 CSR 20-4.041(1). These loans shall not exceed the total eligible project cost. Id.

Direct Loans are funded from State Revolving Fund loan repayments of federal capitalization grants. 10 CSR 20-4.041(3). The Department purchases the revenue bonds, general obligation bonds, or other acceptable debt obligations from the recipient no later than six months following the initial operation of the facilities constructed by the project or by the closing deadline contained in the construction loan agreement, whichever is earlier. 10 CSR 20-4.041(8). In addition, the Department may require the recipient to include those assurances and

clauses in the loan agreements and bond resolutions as deemed necessary to protect the interest of the state. Id.

Under the Direct Loan Program, the bonds, notes or other debt obligations shall be fully amortized in no more than 20 years after initiation of operation and the payment frequency shall be no less than annually with the first payment no later than one year after the initiation of operation. 10 CSR 20-4.041(9). Repayment of principal shall begin no later than one year after initiation of operation and if at any time during the loan period the facility financed through a Direct Loan is sold, either outright or on contract for deed, to an entity other than a political subdivision of the state, the loan becomes due and payable upon transfer. Id.

The Fiscal Year 2015 Clean Water State Revolving Fund Intended Use Plan, as amended, for the Missouri State Revolving Fund Program has been approved. See Ex. MSD 99G, Original Fiscal Year 2015 Clean Water SRF Intended Use Plan, and Ex. MSD 99H, Amended Fiscal Year 2015 Clean Water SRF Plan. The Clean Water State Revolving Fund Loan section defines the terms for the State Revolving Fund program. While the Federal government has reduced the funding for all State Revolving Fund state programs, the District anticipates receiving a \$25 million share of Missouri State Revolving Fund funds on an annual basis. Ex. MSD 1, Rate Change Proposal, § 4.6.1. Proposed State Revolving Fund loans are assumed to have an interest/administration fee of 2.5% with 20-year maturities. Issuance costs are estimated to be 0.65% of the principal amount. Ex. MSD 1, § 4.6.2.

The most recent due diligence questionnaire from the Missouri Department of Natural Resources dated September 5, 2013, is provided as Exhibit MSD 66. Question III of the Exhibit details the project and financial structure of a direct State Revolving Fund Loan.

The level of cash balances and bond coverage ratios reflected in the Rate Change Proposal are based on guidance provided by PFM. The District's debt service obligations are determined by existing bond ordinances and future use of debt based on the structure of these ordinances. Ex. MSD 84A, Response to Question 27 of the First Discovery Request of the Rate Commission; Ex. MSD 94A, Response to Questions 9 and 10 of the First Discovery Request of Missouri Industrial Energy Consumers; Ex. MSD 98A, Response to Questions 1-7 of the Second Discovery Request of Missouri Industrial Energy Consumers; Ex. MSD 99A, Response to Questions 7, 8, 9, and 11 of the Fourth Discovery Request of the Rate Commission.

Effect on Rate Change Proposal. It is the District's position that the proposed rate change is necessary to reflect: (i) the level of cash balances and resulting bond coverage ratios required through FY2020 to minimize a possible deterioration in the District's bond rating; (ii) the generation of sufficient revenue to fund the Capital Improvement and Replacement Program required to address the Consent Decree; and (iii) the District's debt service obligations.

The District's senior lien bond debt service coverage is projected at 3.06x in FY2017 while total debt service coverage is projected at 1.88x. Pledged revenues for FY2017 will provide adequate coverage of projected maximum senior lien debt service and adequate coverage of projected maximum total debt service. The District has projected ratios for minimum projected debt service coverage on senior lien debt of 2.76x and on all outstanding debt of 1.81x in FY2017. See Ex. MSD 1, Rate Change Proposal, Table 4-10, page 4-22.

In FY2020, minimum debt service coverage on senior and total is projected to be 2.52x and 1.86x, respectively. This compares to bond covenant minimum debt service requirements of 1.25 and 1.15 above net annual revenues respectively. See Ex. MSD 1, Rate Change Proposal, Table 4-10, page 4-22; and Ex. MSD 11K, Master Bond Ordinance, § 6.1. The projected debt

service coverage meets the District's objective to maintain senior debt service coverage above 2.50x, which is in line with comments provided by rating agencies during the District's last bond issuance, related to expectations for debt service coverage in order to maintain ratings.

A minimum level of net revenues is also required to comply with the Maximum Annual Debt Service Requirement (Additional Bonds Test) and Debt Service Requirement (annual rate covenant debt service coverage). See Ex. MSD 27, Master Bond Ordinance, §§ 5.3.1 and 6.1.2 respectively. The District's projections to meet the minimum debt service requirements in FY2020 require net revenues to be at least \$360 million for the annual rate covenant debt service requirement. Net revenue for FY2020 under the FY2020 proposed rates, however, is higher than the minimum required to allow for full funding of other costs, including PAYGO capital financing. See Ex. MSD 99A, Response to Question 10 of the Fourth Discovery Request of the Rate Commission.

By the end of FY2016, the District intends to have issued approximately 70% of its current debt authorization of \$945 million in revenue bonds. The District expects to require voter approval for an additional authorization of \$900 million prior to FY2018. Total debt financing for FY2017 to FY2020 is expected to include \$918,645,000 in revenue bonds and \$100 million in state revolving loan proceeds, resulting in planned use of the remaining current authorization and approximately 86% of the new bond authorization. Cumulative cash financing will be approximately \$360 million for FY2017 to FY2020. The resulting cumulative debt financing percentage is projected to be 69% of total capital financing for FY2015 to FY2020. See Ex. MSD 1, Rate Change Proposal, page 4-16 and 4-17.

	July 1, 2016 ¹	June 30, 2020	Fitch
Annual Debt Service Coverage	1.79	1.86	2.0
Total outstanding long-term debt per customer	\$2,968	\$4,972	\$1,812
Total outstanding long-term debt per capita	\$953	\$1,586	\$514
Projected debt per customer (4 years out), bonding FY21-24 ²	\$4,972	\$6,605	\$1,973
Projected debt per customer (4 years out), no bonding FY21-24 ²	\$4,972	\$4,700	\$1,973
Projected debt per capita (4 years out), bonding FY21-24 ²	\$1,586	\$2,097	\$558
Projected debt per capita (4 years out), no bonding FY21-24 ²	\$1,586	\$1,492	\$558
Days of cash on hand	600	550	\$398
Days of working capital ³	Unavailable	Unavailable	410
Individual average monthly bill	\$44.72	\$60.86	\$35
Individual average annual bill as a % of Median Household Income, bonding ⁴	1.0%	1.4%	0.9%
Individual average annual bill as a % of Median Household Income, no bonding ⁴	1.0%	2.1%	0.9%
Average annual projected rate increases (%) next 4 years, bonding FY21-24 ⁴	10.6%	10.5%	3.7%
Average annual projected rate increases (%) next 4 years, no bonding FY21-24	10.6%	17.6%	3.7%

¹ Based on the full 12-month period prior to July 1, 2016.

² District based upon five years.

³ Working capital is generally defined as current unrestricted assets minus current liabilities payable from unrestricted assets, divided by operating expenses less depreciation, divided by 365. The District does not create long-term projections for current assets and current liabilities, so does not have a working capital projection to provide.

⁴ Fitch annual rate increase based upon projections divided by years included in projections.

Ex. RC 90, Fitch 2014 Median Report; Ex. MSD 114A, Response to Question 5 of the Fifth Discovery Request of the Rate Commission.

The District's current outstanding debt is \$1,065,223,900. See Ex. MSD 94M, Summary of Outstanding Bond Issues. In addition, the District is planning for the issuance of an additional \$1,248,645,000 during the period fiscal year 2015 through 2020. At the end of FY2020, total outstanding debt is projected to be \$2,148,370,000. The annual debt service requirement resulting from existing and proposed debt is expected to increase from \$65.5 million in FY2015 to \$146.1 million in FY2020. See Ex. MSD 1, Rate Change Proposal, page 4-22, Table 4-10.

The District's Rate Proposal will necessarily result in a significant increase in debt. The District does not have a statutory debt limit; however, it is constrained by funding limits.

The District's current rates (FY2015) result in a typical annual residential customer bill, assuming 7 Ccf per month, of 1.00% of the weighted average median household income (MHI) for St. Louis County and the City of St. Louis. Upon implementation of the FY2020 rate increase, the typical annual residential bill is estimated to be 1.36% of the weighted average MHI, assuming no change in MHI. See Ex. RC 101, Rate Commission Rebuttal Testimony of Pamela Lemoine, p. 17, ll. 10-18; p. 18, Ex. PRL3.

Additional rate increases are expected beyond the Rate Proposal period in order to continue to finance future CIRP associated with the Consent Decree. Such rate increases will reduce affordability for future customers. See MSD 50, Fitch Rating Report, 18 November 2013 ("planned rate hikes will reduce overall affordability").

By using revenue bond financing for a portion of the major capital improvements that are of a non-recurring nature, the financing burden is appropriately shared by both present and future users of the facilities who will benefit from the improvements. For those capital improvements that tend to be routinely incurred each year for nominal replacements (i.e.,

extensions and minor improvements), these costs are reasonably financed annually from current wastewater service revenue.

Utilization of revenue bond financing allows the District to fund large near term capital improvements while moderating the rate increases imposed on customers. In contrast, use of cash financing would require significantly higher rate increases during FY2017 to FY2020. See Ex. MSD 1, Rate Change Proposal, § 4.11.

Revenue bond financing, while more expensive than Pay As You Go because of the interest component of the annual debt service payment, allows for a reasonable alignment of costs across generations, i.e., more of those benefiting from or using the asset to pay the cost. In addition to improving equity between generations of ratepayers, revenue bond funding may allow for the construction of assets sooner than would occur if all of the cash had to be accumulated before beginning construction. See Ex. MSD 96, Transcript for Technical Conference for Direct Testimony, April 8, 2015; Testimony of Brian Hoelscher, p. 33, ll. 2-6.

Cash Financing. In the event that the voters of the District do not approve \$900 million in bond financing for a portion of the Capital Improvement and Replacement Program, the District proposes cash financing in order to comply with the terms of the Consent Decree.

Table 6-2 in the Rate Change Proposal presents projected wastewater bills based on the authorization of \$900 million in revenue bonds. The typical customer bill of 7 Ccf per month is shown on line 3, with the annual percentage change on line 4. Table 4-25 presents the same information with the assumption of no further bond authorization.

The alternative rates to finance the entire Capital Improvement and Replacement Program are presented by Table 4-7 of Ex. MSD 1, Rate Change Proposal. The resulting rate components change to those shown in Table 4.24 of Ex. MSD 1, Rate Change Proposal. This

change results in a 9.8% increase in the FY2017 average single family residential monthly bill, a 65.0% increase in FY2018, a 13.1% increase in FY2019 and a 15.0% increase in FY2020. The typical single family customer bill throughout the Rate Proposal timeframe is presented in Figure 4-9 of Ex. MSD 1, Rate Change Proposal, and shows the impact of not using debt financing for the Capital Improvement and Replacement Program beyond what has already been authorized. See also Ex. MSD 96, Transcript for Technical Conference for Direct Testimony, April 8, 2015; testimony of Brian Hoelscher, p. 32, ll. 20-25; p. 33, l. 1.

Other Contractual Obligations

The District has entered into a number of office equipment and technology leases (collectively, the “Leases”) over varying periods in which the payment obligation of the District exceeds \$500,000 as follows: (i) Active blanket contracts and purchase orders over \$500,000 as of March 19, 2015, Ex. MSD 84Q; (ii) Engineering Consultant contracts over \$500,000 as of March 20, 2015, Ex. MSD 84R; (iii) Engineering Consultant contracts with an amount remaining over \$500,000 as of March 20, 2015, Ex. MSD 84S; (iv) Construction contracts with balance of \$500,000 or more as of March 20, 2015, Ex. MSD 84T; and (v) Construction contracts of \$500,000 or more regardless of balance as of March 20, 2015, Ex. MSD 84U.

None of these obligations limit the District’s ability to propose a rate increase and none include provisions requiring compliance with negative covenants regarding rates.

THE RATE COMMISSION, AFTER CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE RATE CHANGE PROPOSAL TO FUND THE CIRP WITH THE USE OF \$900,000,000 IN REVENUE BONDS AND \$440,000,000 IN CASH FINANCING IS CONSISTENT WITH AND NOT IN VIOLATION OF ANY

COVENANT OR PROVISION RELATING TO ANY OUTSTANDING BONDS OR INDEBTEDNESS OF THE DISTRICT.

ALTERNATIVELY, IF VOTER APPROVAL IS NOT OBTAINED FOR FUTURE BOND FINANCING, THE RATE COMMISSION, AFTER CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DESCRIBED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE PROPOSED RATE CHANGE PROPOSAL TO FUND THE CIRP THROUGH CASH BASIS FINANCING IS CONSISTENT WITH AND NOT IN VIOLATION OF ANY COVENANT OR PROVISION RELATING TO ANY OUTSTANDING BONDS OR INDEBTEDNESS OF THE DISTRICT.

Fourth Factor: Whether the Rate Change Proposal, and all portions thereof, “Does not *impair* the ability of the District to comply with applicable *Federal or State laws or regulations as amended from time to time*”

The Charter Plan states that the Board of Trustees of the District shall accept a Rate Commission Report unless it finds that the report “fails to meet an existing or new standard contained in applicable Federal or State laws or regulations as amended from time to time.” Charter Plan, § 7.300(b)(4).

The same language appears in the Operational Rules, Regulations and Procedures of the Rate Commission (“Operational Rules”) indicating that the District shall submit to each member of the Commission information related to direct testimony that may explain “whether and to what extent the proposed Rate Change is necessary to enable the District to comply with applicable federal or State laws or regulations as amended from time to time” Operational Rules, Regulations and Procedures of the Rate Commission of The Metropolitan St. Louis Sewer District, § 3(2)(d) (2002).

The phrase “does not impair” is, however, not defined. To interpret the meaning of words used in a statute, usually the words are attributed their plain and ordinary meaning. Sermchief v. Gonzales, 660 S.W.2d 683, 688 (Mo. banc 1983). The commonly understood meaning of words is derived from the dictionary. Buechner v. Bond, 650 S.W.2d 611, 613 (Mo. banc 1983).

“Federal law” means the United States Constitution, all federal statutes and treaties promulgated by Congress, and all federal regulations promulgated by federal agencies, and “state law” means state constitutions, state statutes and regulations, and the concept of state common

law tort actions. Gorton v. American Cyanamid Co., 533 N.W.2d 746 (Wis. 1995), cert. denied, 516 U.S. 1067 (1996).

As such, an interpretation of the plain and ordinary meaning of the language “does not impair the ability of the District to comply with applicable Federal or State laws or regulations” would require the Rate Commission to propose a rate that complies with all relevant federal, state, local laws and regulations. The dictionary definition of “impair” means “[t]o diminish the value of.” Black’s Law Dictionary 767(8th ed. 2004). See also Webster’s Dictionary 910 (2d ed. 1979) (to impair means a diminution or decrease).

Authority

Pursuant to the District’s Charter, the District has the authority to propose or recommend a change in wastewater rates, stormwater rates and tax rates or change the structure of any of the foregoing. Charter Plan, § 7.040.

In State on inf. Dalton v. Metro. St. Louis Sewer Dist., the court found that the original method of taxation adopted by the District was in violation of Article X, Section 3 of the Missouri Constitution, which provides that “[t]axes . . . shall be uniform upon the same class of subjects with the territorial limits of the authority levying the tax.” 275 S.W.2d 225 (Mo. banc 1955). The court held that this provision prohibited taxing real estate and tangible personal property for the general purposes and general obligations of the entire District at a different rate on its valuation in various parts of the District. Id. Thus, the court found that the method used to tax under this plan was unconstitutional because the property tax in the County was in excess of that in the City. The court further held that the apportionment of the amounts to be collected for the general purposes of the entire District between the City and the County without any standards whatever would be invalid against Article X, Section 3. “Sec. 3, Art. X is a recognition of the

principle of equality and uniformity of taxation required by the equal protection clause of the Fourteenth Amendment of the Federal Constitution which ‘imposes a limitation upon all powers of the state which can touch the individual or his property, including among them that of taxation.’” Id. at 234 (internal citation omitted).

The court found that while a classification may be made in tax legislation, it must be a reasonable classification and there can be no discrimination between taxable subjects, including property that belongs to the same class. Id. Thus, it held that the determination of property of the same value and in the same district based on whether it is located in the city or the county is not a reasonable basis for classification for taxation. Id. Finally, the court held that the District could make a valid apportionment on the basis of assessed valuation which would produce a uniform tax on all tangible property in the District. Thus, the Plan itself was not unconstitutional, just the method used under this set of facts for apportioning the tax. Id. The District subsequently corrected the matter.

The Rate Change Proposal presents the District's proposed use of an additional \$900 million in bond financing and \$440 million in cash financing to fund its CIRP from FY2017 through FY2020 to provide the funds needed to comply with regulatory requirements relating to deficiencies in the District's wastewater system including sewers, pump stations and treatment plants and to satisfy the requirements of the Consent Decree.

The District proposes to finance the required capital improvements by a combination of wastewater user charge revenues, available fund balances, revenue bond proceeds, Missouri Clean Water State Revolving Fund loan proceeds, grants and contributions, other operating revenues, and interest income. See Ex. MSD 1, Rate Change Proposal, § 4.6.1.

In the event that the voters of the District do not approve bond financing for the CIRP in order to comply with the terms of the Consent Decree, the District proposes cash financing. The financial analysis supporting the development of the alternative cash financing rate is contained in Table 4-7 of Ex. MSD 1, Rate Change Proposal.

The District was formed on February 9, 1954, when voters in the City of St. Louis and a portion of St. Louis County approved the Charter Plan to provide a metropolitan-wide system of stormwater treatment and facilities for the collection, treatment, and disposal of sewage. The Charter Plan was amended on November 7, 2000, and further amended on June 5, 2012.

SECTION 3.020. Powers of the District. — the District established under the provisions of this Plan shall have power:

* * *

To meet the cost of acquiring, constructing, improving, or extending all or any part of the sewer or drainage systems: (a) through the expenditure of any funds available for that purpose; (b) through the issuance of bonds for that purpose, payable from taxes to be levied and collected by the District; (c) through the issuance of bonds for that purpose, payable from special benefit assessments levied and collected by the District; (d) from the proceeds of special benefit assessments or bills evidencing such assessments; (e) from any other funds which may be obtained under any law of the state or of the United States for that purpose; (f) from the proceeds of revenue bonds, payable from the revenues to be derived from the operation of sewerage and drainage facilities and systems of the entire District . . . as may be set forth in propositions submitted at elections in the District . . . from time to time called and held to authorize the issuance of such revenue bonds; or (g) from any combination of any or all such methods of providing funds.

* * *

See Charter Plan, § 3.020(15) (emphasis added).

The Charter Plan requires an annual budget, an explanatory budget message, and a general appropriation ordinance conforming with the budget. The budget shall provide a

complete financial plan for the budget year for all District and subdistrict funds, and shall include the following:

- (11) Estimated revenues to be actually received from all sources during the budget year, together with a comparative statement of revenues for the two years next preceding, itemized by year, fund, and source.
- (12) Proposed expenditures, including projected expenses included in the Rate Commission's budget as provided in Section 7.260, recommended by the Executive Director for the budget year, together with a comparative statement of expenditures for the two years next preceding, itemized by year, fund, activity, and object.
- (13) The amount required for the payment of interest, amortization, and redemption charges on the debt of the District or any subdistrict.
- (14) A general budget summary.
- (15) A list of capital projects.

In no event shall the total amount of proposed expenditures for the budget year from any fund exceed the estimated revenues to be actually received plus any unencumbered balance or less any deficit estimated for the beginning of the budget year.

See Charter Plan, § 7.130 (emphasis added). Subject to these restrictions, the District has the authority to issue revenue bonds.

At the end of each fiscal year, the unexpended and unencumbered parts of all appropriations shall revert to the funds from which appropriated. See Ex. RC 88, MSD Charter as of June 5, 2012 Amendments, § 7.050. Upon approval by the Board of Trustees, the Executive Director may transfer any unencumbered appropriation balances or portion thereof from one classification of expenditure to another. Id. at § 7.150.

The District's authority to issue revenue bonds requires the approval of the voters of the District. Specifically, the Charter Plan provides:

No general obligation bonds, except bonds for refunding, advance refunding, extending, or unifying the whole or any part of valid bonded indebtedness, shall

be issued without the assent of the voters of the District . . . in the number required by Article VI, § 26(b) of the Constitution of Missouri (as amended from time to time), voting at an election to be held for that purpose. No revenue bonds payable from the revenues to be derived from the operation of any or all sewer and drainage systems and facilities of the District . . . except bonds for refunding, advance refunding, extending, or unifying the whole or any part of revenue bonds, shall be issued without the assent of a simple majority of the voters of the District . . . voting at an election to be held for that purpose. Notwithstanding anything herein to the contrary, the District is expressly authorized to issue District-wide general obligation and revenue bonds.

See Charter Plan, § 7.170 (emphasis added).

The Missouri Supreme Court has expressly recognized this authority, stating, "The other powers objected to, namely, . . . incurring debts, . . . issuance of tax anticipation warrants, . . . and issuance of bonds, . . . are essential powers of such district." State on inf. Dalton v. Metro. St. Louis Sewer Dist., 275 S.W.2d 225, 231 (Mo. banc 1955). The court continued, "[w]ithout the power to incur debts and issue bonds, adequate drains, sewers and disposal plants could not be constructed. However, in the exercise of this power, the District is subject to the financial limitations imposed by the Constitution on all government subdivisions." Id.

The District is proposing to seek voter approval to assess a District-wide stormwater tax of \$0.10 per \$100 of assessed property value. As part of the new stormwater tax:

- The Operation and Maintenance Tax will be eliminated;
- The subdistrict specific Operation, Maintenance and Capital Improvements taxes will be eliminated;
- The flat rate charges will be eliminated; and
- The ad valorem tax of \$0.197 per assessed valuation will remain in place to provide the District with the necessary funding to meet regulatory requirements.

A new stormwater District-wide Tax of \$0.10 per \$100 assessed valuation will provide the District with the necessary funding to meet the operating requirements of the expanded service

levels. New stormwater District-wide Tax of \$0.10 per \$100 assessed valuation will provide the District with the necessary funding to meet the operating requirements of the expanded service A levels. See Ex. MSD 1, Rate Change Proposal, § 5.4. The District has rewritten Section 5.4, Proposed Funding Methods, p. 5-9, Ex. MSD 1, to clarify the administrative approach associated with setting the OMCI tax rate to zero dollars:

Meeting the proposed increased level of SW service beginning in FY17 requires that the District develop a more equitable and consolidated SW charge. The District is proposing to seek voter approval to assess a District-wide SW tax to replace the current SW O&M Tax and flat rate charges. The proposed District-wide tax rate is \$0.10 per \$100 of assessed property value. The subdistrict specific OMCI taxes will be set to \$0.00 as part of this Rate Proposal as well; however, the regulatory tax will remain in place. Charging this new SW District-wide Tax will provide the District with the necessary funding to meet the operating requirements of the expanded service levels. Additionally, this proposed structure will eliminate the disjointed revenue sources and provide a funding source that allows for a cohesive plan across the entire District.

Ex. MSD 114A, Response to Question 6 of the Fifth Discovery Request of the Rate Commission.

The Charter Plan provides the District the power:

To levy, assess, and collect taxes on all taxable property within the District or a subdistrict, as the case may be; provided, that the rate of taxation for purposes of operation and maintenance shall not exceed ten cents on the hundred dollars assessed valuation.

See Ex. RC 88, MSD Charter as of June 5, 2012 Amendments, § 3.020(15).

On March 8, 1988, a majority of the voters approved stormwater service charges pursuant to Ordinance No. 7358, adopted December 23, 1987. In addition, flat rate charges of .24 cents per month for residential and non-residential properties and .18 cents per unit for multi-residential were also approved. See Ex. MSD 1, Rate Change Proposal, § 5.2; Ex. MSD 3D, Direct Testimony of Jonathan C. Sprague, p. 5, ll. 18-23; p. 6, ll. 1-14. The approval of the imposition of ad valorem taxes of \$0.10 per \$100 assessed valuation may be submitted to the

voters on the first Tuesday after the first Monday in April, August or November. See Mo. Rev. Stat. § 115.123.1.

Clean Water Act and Consent Decree

Section 204(b) of the Water Pollution Control Act of 1972, as amended in 1977, commonly known as the “Clean Water Act,” specifies conditions relating to charges for wastewater service. See 33 U.S.C. § 1283.

Implementation of the Clean Water Act and approval of a system of user charges by the Environmental Protection Agency (the “EPA”) has generally resulted in a simple, uniform, flat commodity or volumetric charges for all customers, regardless of billable volume, effluent strengths, load factor, peaking characteristics, or other considerations. Acceptable exceptions have included a surcharge system for high effluent strength discharges and assignment of the cost of the industrial pretreatment program to the participants.

The EPA has adopted rules and regulations regarding user charges. These rules and regulations are incorporated in Part 35 of Title 40 of the Code of Federal Regulations.

User Charges are those levied on users of a treatment works for their proportionate shares of the cost of operation and maintenance (including interim replacement) of the treatment works. 40 C.F.R. § 35.2005 (52). Treatment works consist of all facilities used for the collection, transmission, storage, treatment, and disposal of wastewater. 40 C.F.R. § 35.2005 (49). If the wastewater utility is to be eligible for federal grants, it must demonstrate compliance with the following user charge requirements as part of the rate design process:

- Rates must result in the distribution of the cost of operation and maintenance of all treatment works within the grantee’s jurisdiction. Distribution must be in proportion to

each user or user class contribution to the total wastewater loading of the treatment works.

- Rates must generate sufficient revenues to offset the cost of all treatment works operation and maintenance expense.
- Each user who discharges pollutants to the treatment works causing increased costs will pay for such increased costs.
- Grantee must apportion operation and maintenance costs associated with the treatment and disposal of I/I to users on the basis of the allocation of all other operations, or a system that includes consideration of flow volume of the users, land area of the users, or the number of connections to the users.

See 40 C.F.R. 35.2140.

The District's position is that the Rate Change Proposal is necessary for it to comply with the Clean Water Act and the Consent Decree. On June 11, 2007, the United States of America, acting at the request and on behalf of the Administrator of the United States Environmental Protection Agency, and the State of Missouri by the authority of the Attorney General of Missouri, filed a claim in the United States District Court for the Eastern District of Missouri against the Metropolitan St. Louis Sewer District captioned United States of America and the State of Missouri and the Missouri Coalition for the Environment Foundation v. The Metropolitan St. Louis Sewer District, for injunctive relief and civil penalties alleging: unpermitted discharges from combined sewer system; violation of the proper operation and maintenance condition in the District's NPDES permits; violation of the backup power condition in the District's NPDES permits; violation of the bypass prohibition condition in the District's NPDES permits; violation of the noncompliance reporting condition in the District's NPDES

permits; failure to submit long-term CSO control plan pursuant to Part D.1 of the District's NPDES permits and CWA § 308 Request; and violation of the general criteria special condition in the District's NPDES permits.

The District executed on July 15, 2011, a 23-year, \$4.7 billion Consent Decree program with the United States Environmental Protection Agency and the Missouri Coalition for the Environment Foundation.¹³ This program requires the District to make investments in the wastewater system to eliminate sanitary sewer overflows and combined sewer overflows, and helps reduce the risk of flooding customer properties. See Ex. MSD 47. The current estimated CIRP needs are presented in Figure 4-3 and Table 4-7 of Exhibit MSD 1 for FY2015 through FY2020. The total CIRP project cost for this six-year period is projected to be \$1.975 billion. The largest component of the CIRP over the next six years will be capital investments related to mitigating sanitary sewer overflows throughout the wastewater system. Ex. MSD 1, Rate Change Proposal at Appendix 7.2. Additional needs include other improvements to comply with regulatory requirements outside of the Consent Decree are also included therein.

The District testified that the Clean Water Act provides for penalties up to \$32,500 per violation per day. See Ex. MSD 3B, Direct Testimony of Susan Myers. Failure to meet the requirements imposed at the Federal and State level would be extremely financially burdensome and would directly hamper or at differing levels, even thwart the efforts of the District. Id. The Consent Decree also outlines stipulated penalties ranging from \$500 per day to \$5,000 per day. See Ex. MSD 47.

¹³ Major Consent Decree Components—Update Document may be found in Ex. MSD 1, Rate Change Proposal, Appendix 7.2.1.

Missouri Constitution

In 1980, Missouri voters approved Article X, Sections 16-24 of the Missouri Constitution (the “Hancock Amendment”). The Hancock Amendment purports to shield taxpayers against the government’s ability to increase the tax burden above that borne by the taxpayers on November 4, 1980. See Zweig v. Metro. St. Louis Sewer Dist., 412 S.W.3d 223, 231 (Mo. banc 2013).

Specifically, the first sentence of the Hancock Amendment states:

Property taxes and other local taxes . . . may not be increased above the limitations specified herein without direct voter approval as provided by this constitution. . . .

Mo. Const. art. X, § 16. This provision is implemented by Section 22(a), which provides:

[P]olitical subdivisions are hereby prohibited from levying any tax, license or fees, not authorized by law, charter or self-enforcing provisions of the constitution when this section is adopted or from increasing the current levy of an existing tax, license or fees, above that current levy authorized by law or charter when this section is adopted without the approval of the required majority of the qualified voters. . . .

Mo. Const. art. X, § 22(a) (emphasis added).

The Missouri Supreme Court has rejected the contention that all fees, whether user fees or tax-fees, are subject to the Hancock Amendment. Keller v. Marion County Ambulance Dist., 820 S.W.2d 301 (Mo. banc 1992). See also Arbor Inv. Co., LLC v. City of Hermann, 341 S.W.3d 673 (Mo. banc 2011) (city utility rates did not constitute “fee” increase within meaning of the Hancock Amendment, requiring voter approval); Mullenix-St. Charles Properties, L.P. v. City of St. Charles, 983 S.W.2d 550, 561 (Mo. App. E.D. 1998) (Hancock Amendment applies only to revenue increases that are in fact tax increases, whether labeled as taxes, licenses, or fees). Revenue increases, which are in fact fees for services rendered in connection with specific services, ordinarily are not taxes unless the object of the requirement is to raise revenue to be paid into the general fund of government. Mullenix-St. Charles Properties, L.P., 983 S.W.2d at

561. “Fees or charges prescribed by law to be paid by certain individuals to public officers for services rendered in connection with a specific purpose ordinarily are not taxes . . . unless the object of the requirement is to raise revenue to be paid into the general fund of the government to defray customary governmental expenditures rather than compensation of public officers for particular services rendered.” Keller, 820 S.W.2d at 303-04.

In Keller, the court looked to the principles of statutory construction to give effect to the intent of the voters who adopted the Hancock Amendment. Id. at 302. The court determined that:

If the people of Missouri intended to prohibit localities from increasing a source of revenue without voter approval, a general term like “revenue” or “revenue increase” could have been used. Instead, the people of Missouri characterized “fees” in § 22(a) as an alternative to a “tax.” This characterization suggests that what is prohibited are fee increases that are taxes in everything but name. What is allowed are fee increases which are “general and special revenues” but not a “tax.”

Id. at 303.

The Keller court articulated a five-factor test to be applied in determining whether a revenue increase by a local government is an increase in a “tax, license or fee” that requires voter approval under the Hancock Amendment:

- 6) When is the fee paid? – Fees paid subject to the Hancock Amendment are likely to be paid on a periodic basis while fees not subject to the Hancock Amendment are likely due to be paid only on or after a provision of a good or service to the individual paying the fee.
- 7) Who pays the fee? – A fee subject to the Hancock Amendment is likely to be blanket-billed to all or almost all of the residents of the political subdivision while a fee not subject to the Hancock Amendment is likely to be charged only to those who actually use the good or service for which the fee is charged.
- 8) Is the amount of the fee to be paid affected by the level of goods or services provided to the fee payer? – Fees subject to the Hancock Amendment are less likely to depend on the level of goods or services provided to the fee payer

while fees not subject to the Hancock Amendment are likely to be dependent on the level of goods or services provided to the fee payer.

- 9) Is the government providing a service or good? – If the government is providing a good or service, or permission to use government property, the fee is less likely to be subject to the Hancock Amendment. If there is not a good or service being provided or someone unconnected with the government is providing the good or service, then any charge required by and paid to a local government is probably subject to the Hancock Amendment.
- 10) Has the activity historically and exclusively been provided by the government? – If the government has historically and exclusively provided the good, service, permission or activity, the fee is likely subject to the Hancock Amendment. If the government has not historically and exclusively provided the good, service, permission or activity, then any charge is probably not subject to the Hancock Amendment.

Keller, 820 S.W.2d at 311, n.10.

Courts since Keller have reviewed these five factors to determine whether revenue increases are subject to the Hancock Amendment, including revenue increases involving the District. See, e.g., Beatty v. Metro. St. Louis Sewer Dist., 867 S.W.2d 217 (Mo. banc 1993) (examining Keller factors to determine that the District’s sewer charges were taxes subject to Hancock Amendment); Missouri Growth Ass’n v. Metro. St. Louis Sewer Dist., 941 S.W.2d 615 (Mo. App. E.D. 1997) (examining Keller factors to determine that the District’s amended sewer charges were not subject to the Hancock Amendment); Arbor Inv. Co. LLC v. City of Hermann, 341 S.W.3d 673 (Mo. banc 2011).

Despite frequent application, however, many courts have expressed frustration with the Keller criteria’s lack of insight and manipulation. Zweig, 412 S.W.3d at 234. As a result, the Missouri Supreme Court in Zweig reorganized the Keller criteria.

Zweig involved a challenge to the District’s impervious-stormwater charge that was implemented without voter approval. 412 S.W.3d at 223 (holding that District violated the Hancock Amendment by implementing the charge). The overriding principle of that decision is

that a “user fee must be charged in exchange for, and based upon, an individual’s use of the relevant service.” Id. at 227. The court stated, “[t]o be a user fee beyond the scope of section 22(a)’s vote approval requirement, the charge must be paid by all of the users of the relevant service based on each payer’s actual use of that service.” Id. at 240

Zweig first recounted Keller’s holding that not all revenue increases are subject to the Hancock Amendment. It explained that the key distinction in Keller was “between charges that an individual recipient pays for ‘actual services rendered’ and the [ambulance] district’s ‘property tax revenue that assures minimal ambulance service.’” Zweig, 412 S.W.3d at 232 (quoting Keller, 820 S.W.2d at 304, n.7) (emphasis omitted). It offered the following example:

To illustrate this distinction, assume that a political subdivision imposes a charge on property owners to build and operate a swimming pool. If the political subdivision also decides to charge an admission fee to those who actually use the pool, no voter approval is required under section 22(a) because that charge is a genuine user fee, imposed only when a specific service (i.e., access to the pool) actually is rendered to a particular recipient in an individualized transaction. The first charge is not a user fee, however, because it is not charged in exchange for an individual’s use of that service. Instead, it is charged to ensure the availability of that service for the entire community. The political subdivision was levying a tax when it imposed the first charge, therefore, and prior voter approval is required under section 22(a).

Zweig, 412 S.W.3d at 232. Focusing on the use of the word “levy” in section 22(a), the Zweig court explained that section 22(a) applies to “actions that create an obligation to pay that is not contingent upon each payer’s actual use of the political subdivision’s service.” Id. at 233.

The court then addressed Keller, noting that the criteria “were not cut from whole cloth,” but rather, were meant solely to aid courts in applying the “traditional” test for distinguishing fees and taxes: “Fees or charges prescribed by law to be paid by certain individuals to public officers for services rendered in connection with a specific purpose ordinarily are not taxes.” Id.

at 233-34 (citing Keller, 820 S.W.2d at 303-04, citing Leggett, 342 S.W.2d at 875). The Zweig court refocused the analysis, noting:

Before meaningful guidance can be gleaned from any of the Keller criteria, the Leggett test makes clear that the court first must have a clear and complete understanding of the *service* that the political subdivision claims to provide, including the *users* of this service and the *transactions* in which that service supposedly is rendered in exchange for the user fee. See Leggett, 342 S.W.2d at 875 (fees are not taxes if they are “paid *by* certain individuals *to* public officers *for* services rendered”).

Despite the critical importance of these determinations, no express inquiry into the nature of the political subdivision’s service occurs until the fourth Keller criterion. Even then, Keller fails to emphasize the scope or importance of this service analysis, probably because Keller assumes this is clear from the Leggett test. In hindsight, however, the Keller criteria eclipsed the role of the Leggett rule so thoroughly that this connection is rarely made. As a result, the cause of judicial frustration with the Keller criteria may lie more with the *order* of those criteria than with their *substance*. To demonstrate this point (and to avoid a further dose of judicial frustration), this Court begins its analysis with the fourth Keller criterion.

Zweig, 412 S.W.3d at 234 (emphasis in original). Thus, the Zweig court reordered the Keller criteria and analyzed each, along with additional characteristics, as applied to the impervious-stormwater charge. Id. at 234-44.

The Zweig Court focused first on the fourth Keller criterion, which asks whether the political subdivision is providing a service in exchange for the disputed charge. Zweig, 412 S.W.3d at 234-35. The court accepted the District’s characterization of its services as “ensuring the ‘continuous and ongoing’ availability of its drainage and oversight functions, regardless of whether or when they are needed.” Id. at 236. It, however, rejected the argument that the District “provides these generalized ‘availability’ services only to the Ratepayers and no one else,” but instead held that the user of the “availability” services was the District as a whole. Id. The court explained: “Where there are no individual users and no readily identifiable transactions in which the political subdivision renders the relevant service in exchange for a fee,

the charge cannot be a valid user fee.” Id. (emphasis added). It recognized that “[w]hat matters is that MSD did not impose the charge in exchange for an individual’s actual use of [the stormwater] services.” Id.

Turning to the second Keller criterion – who pays the charges? – the court identified the relevant inquiry as “why some are charged and others are not” or, in other words, “the source of the obligation to pay the disputed charge.” Id. at 236, 237. If the charge is tied to the use of the service and is imposed on all who use the service, it is likely that the political subdivision is setting the price for rendering its services to individual users. Id. at 236. However, if the charge is tied to residency or ownership instead of use, the charge is not a user fee. Id. The court concluded that the District could not tie the obligation to pay the impervious-stormwater charge to an individual’s use of the “availability” services because that service was being rendered to the District as a whole, not to individual landowners. Id. at 237. The obligation to pay the charge was instead tied to the ownership of real property, which weighed strongly against the conclusion that the charge was a user fee. Id.

The court then considered the first Keller criterion, which asks whether the payment occurs regularly or after use. Id. at 238. The court explained that if a charge is paid only on or after the provision of a good or service to the payer, then it is likely that the charge is a user fee, but if the charge is paid periodically and regardless of when or if the payer actually uses the service, the criterion indicates that the charge is a tax. Id. Since the focus of the criterion is on whether the payment is made “only on or after” the payer uses the service, and because the court had concluded that individual use of the District’s “availability” services is not possible, the Zweig court determined that the impervious-stormwater charge cannot be paid “only on or after” the individual payer uses the services. Id. It classified the impervious-stormwater charge as

“precisely the sort of periodic charge unrelated to the payer’s actual use of the relevant service that the first Keller criterion [sought] to identify.” Id.

The court then analyzed the third Keller criterion considering how the amount of the charge is calculated. It explained that the criterion, like the preceding two criteria, “focuses on the relationship between the disputed charge and the payer’s use of the service that supposedly is being render[ed] in exchange for that fee.” Id. at 239. If the amount is more dependent on the level of goods or services provided, in other words the extent of the use, then it is more likely a user fee; if the amount is not dependent on use of the service, it is likely a tax. Id. There were no individual users of the District’s relevant service (i.e., the “continuous and ongoing” availability of the stormwater system), and thus this criteria weighed in favor of a tax. Id. at 240.

Finally, the court considered the fifth Keller criterion: whether the services being provided have “historically and exclusively been provided by the government.” Id. at 241. The court explained that the criterion is “based on the assumption that historically governmental services are more likely to be funded by levying taxes but, when a political subdivision enters into the private-sector market, it is more likely to charge a price for its services just as its private competitors do.” Id. The court found no evidence that the District’s service of ensuring the availability of stormwater drainage was or had ever been provided by private entities to individual landowners in exchange for a fee. Id. Thus, the court concluded that the fifth Keller criterion suggested that the impervious-stormwater charge was a tax. Id. at 242.

The Zweig court, however, did not end its analysis with the Keller factors. Rather, it reiterated that “the Keller criteria are not the only indicia courts may consider when determining whether a political subdivision has levied a tax without voter approval.” Zweig, 412 S.W.3d at 242. Thus, the court reasoned (1) the fact that the District gave itself a lien as a remedy for

nonpayment of the impervious-stormwater charge; and (2) the fact that the District did not claim the right to terminate stormwater services for failing to pay, but rather claimed the right to shut off unrelated services, suggested that the District was levying a tax and not simply setting prices for sales of its services.

In sum, the Zweig court held that the District's decision to implement the impervious-stormwater charge without a vote violated section 22(a). As a result of Zweig, the District will submit its proposed increase in stormwater charges for voter approval.

WASTEWATER

The current Wastewater Rate Change Proposal is factually similar to the rate increase upheld by the Missouri Court of Appeals in Missouri Growth. Specifically, for property with a water meter, the bill is calculated using a base charge in addition to usage-based rates. For property without a water meter, the bill is calculated using a base charge in addition to estimated usage-based rates based on the number of rooms, baths, showers and water closets in a property.

Since Missouri Growth, however, the Missouri Supreme Court issued its opinion in Zweig. Although the court in Zweig did not specifically address the wastewater charge, it modified the Keller test and other criteria, and thus the Wastewater Rate Change Proposal must still be analyzed to determine whether it is a revenue increase that requires voter approval under the Hancock Amendment.

For example, the Zweig court made the following comments with regard to the analysis of criterion:

The Court is aware that MSD's 1993 sewer charges – also imposed without prior voter approval – were determined not to be a violation of section 22(a) because those sewer charges were a valid “user fee.” Missouri Growth Ass'n v. Metro. St. Louis Sewer Dist., 941 S.W.2d 615, 624 (Mo. App. 1997). In reaching that conclusion, Missouri Growth distinguished Beatty II, which held that MSD's sewer charges were taxes and not user fees, on the ground that MSD had made

“significant changes” to its sewer charges after Beatty II was decided. Specifically, MSD began charging (at least in part) on the basis of each customer’s actual sewer usage, which MSD estimated on the basis of the customer’s actual water usage. Id. The question of whether using water usage as a proxy for sewer usage is adequate to change MSD’s sewer charges from taxes (as held in Beatty II) to user fees (as held in Missouri Growth) is not before this Court. Here, MSD does not claim that the amount of impervious area on a given property is a proxy for a landowner’s use of MSD’s stormwater drainage system.

Zweig, 412 S.W.3d at 240, n.12 (emphasis added).

In addition, the Zweig Court considered two additional factors related to the remedy for nonpayment that supported the conclusion that the impervious-stormwater charge was actually a tax. See Zweig, 412 S.W.3d at 242-43 (finding of tax supported by (1) lien as remedy for nonpayment and (2) right to shut-off services having nothing to do with stormwater). As applied to wastewater, the court in Beatty II similarly recognized that the District’s ordinance gave it a lien on real property for the failure to pay sewer charges, which suggested that the charge was a tax. See Beatty II, 867 S.W.2d at 221; see also Zweig, 412 S.W.3d at 242-43 (relying on Beatty II’s conclusion that lien supported finding of tax and on Arbor’s conclusion that no lien suggested imposition of user fee). Thus, the fact that failure to pay the sewer charges results in a lien against property supports the finding of a tax.

With regard to Zweig’s conclusion about shutting off unrelated services, however, Missouri Revised Statute § 393.015 specifically gives sewer corporations, municipality or sewer districts established by statute, and sewer districts created by constitutional authority, the right to contract with any water corporation to terminate water services to any customer’s premises for the nonpayment of a sewer bill. Thus, the statute has specifically authorized sewer corporations to seek termination of an unrelated service (water) for the nonpayment of a bill. Thus, unlike the situation in Zweig, this remedy is not unique to governmental entities providing this service.

In sum, the current Wastewater Rate Change Proposal is factually similar to the rate increase already held to be a “true” user fee by the Missouri Court of Appeals in Missouri Growth. The Zweig court’s analysis of stormwater generally supports the conclusion that wastewater sewer charges are user fees because they are paid in exchange for (and after) individual use of the sewer system services and, as determined in Missouri Growth, bear a direct relationship to the services provided. The Missouri Supreme Court in Zweig did cast some uncertainty on Missouri Growth’s holding that using water usage as a proxy for sewer usage was sufficient to change the sewer charges from taxes into user fees. Nevertheless, in the absence of the express overruling of Missouri Growth and in light of the wastewater charges meeting the principles espoused by Zweig for user fees, voter approval should not be required for the wastewater rate increase, and the Wastewater Rate Change Proposal is in compliance with the Hancock Amendment.

It is the District’s position that the Wastewater Rate Change Proposal is compliant with the Hancock Amendment, and no other party has presented evidence to the contrary. Any rate increase resulting from revenue bond proposals would be approved by the voters, and thus in compliance with the Hancock Amendment.

STORMWATER

In 2007, the District recommended and subsequently implemented a fee based on impervious area. As stated, in Zweig, the Missouri Supreme Court held that the District violated Article X, Section 22(a) of the Missouri Constitution by implementing the new stormwater charge based on impervious area without voter approval. Although the current 2015 Rate Proposal includes a stormwater ad valorem tax levy that the District will take to the voters, questions have been raised as to whether an ad valorem tax is fair and reasonable under the

Charter Plan, or alternatively, whether an impervious charge would better meet this standard. An impervious charge cannot be considered without discussing the opinion of the Missouri Supreme Court in Zweig, and whether an impervious charge will be consistent with constitutional, statutory or common law.

The Zweig case considers only whether the District's previous impervious area charge violated the Hancock Amendment because it was imposed without voter approval. Any stormwater rate increase, whether based on ad valorem property values or on impervious, is intended to be brought to the voters and thus, clearly in compliance with the Hancock Amendment.

The Zweig case indicates that there is no in-between from a "user fee" and a "tax" – a user fee is not required to be approved under Hancock because it is not a tax; a charge is required to be approved under Hancock if it is a tax. To the Missouri Supreme Court, the stormwater charge is in fact a tax even though based on impervious area. Zweig, 412 S.W.3d at 234.

The Zweig decision, however, also discussed the impervious area method for calculating the stormwater charge in more general terms, which raises a concern as to whether such a calculation is permissible under Missouri law. Specifically, the court explains that the District's ability to fund its activities is limited and quotes Article VI, Section 30(b) of the Missouri Constitution, as follows: "The plan shall provide for the assessment and taxation of real estate ... giving due regard to other provisions of this constitution." Zweig, 412 S.W.3d at 229. The court identifies under MSD's Charter:

MSD has the power to: (a) levy property taxes, provided the total levy for maintenance and operation does not exceed \$0.10 per \$100 assessed valuation; (b) levy special assessments for the construction, improvement, or extension of specific sewer and drainage facilities; and (c) establish a schedule of "rates, rentals, and other charges, to be collected from all real property served by the sewer facilities of the District."

Id. The court states in a footnote: “Ratepayers do not challenge MSD’s authority to levy the stormwater user charge under the Plan or section 30(b) of the constitution. The only claim in this case – and the only issue decided here – is whether section 22(a) prohibits MSD from levying this stormwater user charge without prior voter approval.” Id. at n.2.

This footnote raises some concerns that if faced with a challenge, the court could in fact hold that the District lacks the authority to levy an impervious area stormwater charge. This is based on various provisions of the Missouri Constitution that limit the calculation of property taxes.

Article X of the Missouri Constitution governs taxation. Section 4(a) classifies all taxable property into three classes: (1) real property; (2) tangible personal property; and (3) intangible personal property. It continues:

The general assembly, by general law, may provide for further classification within classes 2 and 3, based solely on the nature and characteristics of the property, and not on the nature, residence or business of the owner, or the amount owned. Nothing in this section shall prevent the taxing of franchise, privileges or incomes, or the levying of excise or motor vehicle license taxes, or any other taxes of the same or different types.

Article X, section 4(b) then provides:

Property in classes 1 and 2 and subclasses of those classes, shall be assessed for tax purposes at its value or such percentage of its value as may be fixed by law for each class and for each subclass. ... Property in class 1 shall be subclassed in the following classifications:

- (4) Residential property;
- (5) Agricultural and horticultural property;
- (6) Utility, industrial, commercial, railroad, and all other property not included in subclass (1) and (2) of class 1.

Property in the subclasses of class 1 may be defined by law, however subclasses (1), (2) and (3) shall not be further divided, provided, land in subclass (2) may by

general law be assessed for tax purposes on its productivity capability. The same percentage of value shall be applied to all properties within any subclass. No classes or subclass shall have a percentage of its true value in money in excess of thirty-three and one-third percent.

(emphasis added).

As recently described by the Missouri Court of Appeals:

Collectively, these provisions of the Missouri Constitution authorize the legislature to (1) adopt statutory definitions for the three subclassifications of real property recognized by the Constitution; (2) set the percentage of value which shall serve as the assessed value for property within each subclassification, and (3) enact statutes which permit property subclassified as agricultural to be valued (and thus assessed) based on its productive capability. The legislature has exercised its constitutional authority in each of these respects.

Rinehart v. Bateman, 363 S.W.3d 357, 364 (Mo. App. W.D. 2012).

Article X, Section 4(b) of the Missouri Constitution, along with Section 137.115 of the Missouri Statutes, “require that real property in Missouri be taxed according to its true value in money.” Snider v. Casino Aztar/Aztar Missouri Gaming Corp., 156 S.W.3d 341, 348 (Mo. banc 2005). “Normally, ‘true value in money’ is the equivalent of fair market value.” Rinehart, 363 S.W.3d at 365.

For example, in State on Inf. of Dalton v. Metro. St. Louis Sewer Dist., 275 S.W.2d 225 (Mo. banc 1955), the Missouri Supreme Court considered various challenges brought against the District’s Plan. The same portion of Article VI, § 30(b) mentioned by the court in Zweig was considered:

The plan shall provide for the assessment and taxation of real estate in accordance with the use to which it is being put at the time of the assessment, whether agricultural, industrial, or other use, giving due regard to the other provisions of this constitution.

Dalton, 275 S.W.2d at 232. In interpreting this provision, the court in Dalton reiterated that assessment of real property for general purposes must be made on the basis of value, writing:

Real property (and tangible personal property) is required by Sec. 4(b), Art. X to be ‘assessed for tax purposes at its value or such percentage of its value as may be fixed by law.’ ... In any event, the statement was qualified by the final clause, ‘giving due regard to other provisions of this constitution.’ This very clearly prevents the assessment of property for general purposes of the District from being made on any other basis than its value, Sec. 4(b), Art. X, and requires that such value shall not exceed the assessed valuation for state and county purposes. Sec. 11(a), Art. X. Therefore, the District may properly take the assessment of real and tangible personal property, made by the City and County Assessors, as its assessment basis for taxes for its general purposes.

Id. at 232-33 (emphasis added).¹⁴ The Missouri Supreme Court in McKay Buick, Inc. v. Spradling, 529 S.W.2d 394 (Mo. banc 1975) reiterates the requirement that property be assessed based on its value. This case involves a challenge to a law imposing a property tax on motor vehicles and goods/merchandise held for use and sale by motor vehicle dealers. Id. at 399. The court declares that the value of such property is “fixed,” and assessed a “motor vehicle property tax” at \$2.43 on new motor vehicles; \$1.50 on used motor vehicles; and \$0.57 on goods, wares and merchandise other than motor vehicles. Id. After concluding that the law imposed a property tax on tangible personal property, the court states:

In short, Art. X requires that when tangible personal property is taxed there must be an assessed valuation placed upon the property and, if there is no assessed valuation placed upon the property, then the tax is constitutionally invalid as a direct tax upon tangible personal property under Art. X, § 4(b), of the constitution. ...

.... To fix the value of something must mean that there is a value in money attributed to it. Here, there is no value in money attributed to the property taxed nor is any method set forth to arrive at a value or money base for the computation of the tax. Because there is no money value attributed to the property taxed by the 1974 amendment, the court is not called upon to decide whether the legislature can constitutionally set a fixed dollar amount as the money value of an entire class of property or whether the legislature is restricted by Art. X, §§ 3 and 4(b), to providing the method of determining the value of the property for tax purposes and setting the percentage of the value to be taxed.

¹⁴ Although the Dalton court’s conclusion that the clause “assessment and taxation of real estate in accordance with the use to which it is being put at the time of the assessment” referred to special assessments, not general taxation, this is likely based on the fact that the then-current version of Article X, Section 4(b) did not provide for different classes/uses of real property. Dalton, 275 S.W.2d at 232-33.

The court holds that the 1974 amendment eliminates the value factor from what it declares to be a property tax and is, therefore, constitutionally invalid as a property tax under Art. X, § 4(b) The 1974 amendment to § 150.010 provides no method for determining the value of the property for taxation but simply eliminates the value factor altogether from a tax denominated a motor vehicle property tax. This is not permissible under Art. X, § 4(b).

Id. at 399-402 (emphasis added).

Although Article X, Section 4(b) of the Missouri Constitution was amended in 1982 is after these cases, the value requirement has remained.

It is not clear whether the Missouri Supreme Court in the Zweig footnote was actually alluding to the possibility that the stormwater charge is unauthorized under the Missouri Constitution. However, given the court's characterization of the stormwater charge as a property tax, there is a concern that the stormwater charge is based on the amount of impervious area, not on value of the property as required by Article X, Section 4(b) of the Missouri Constitution. By eliminating the value factor from the property tax, there is a risk that, if faced with a challenge, the court could hold any such District charge constitutionally invalid.

The District legal counsel provided the following comments on Zweig at the Prehearing Conference:

Ms. Bowser: You're saying that the Court case leads you to believe that the impervious fee would be challenged again, am I correct?

Ms. Myers: What we're saying is that in our opinion the Supreme Court did not give real clear direction. What they did give us direction on was the impervious fee that we were trying to implement at the time it needed to be voted on. We don't feel that they went as far to say that that actual fee was a tax.

Ms. Bowser: But the impression you feel at this time an ad valorem tax will not be challenged or less likely to be challenged?

Ms. Myers: Correct.

Ms. Bowser: Is there a specific part of the constitution that you are citing to make that determination?

Ms. Myers: Yes, in one of my testimonies or on maybe a discovery request, I went through what we feel gives you authority to tax it has to do with our charter. It has to do with the constitution, and has to do with tax laws. And I believe one of the rate commission's discovery request. I don't remember which one.

Ex. MSD 134, Transcript of June 26, 2015 Prehearing Conference. p. 56, l. 12 – p. 57, l. 10.

Intervenors Missouri Industrial Energy Consumers and Home Builders Association and the Rate Consultant support the use of an impervious area fee as fair and reasonable, without regard to any legal analysis as to risks under Zweig.

There was evidence, however, that other Missouri utilities impose a stormwater charge based on impervious area, and such charges have not been challenged. The Kansas City Missouri System imposes a voted on impervious area charge. See Ex. MSD 144, Transcript of July 10, 2015 Public Hearing, at p. 68. Mr. Hoelscher notes, “Upon the ruling of the Supreme Court, they decided to allow not-for-profits to opt out of payment of that fee. They're asking them to voluntarily pay it, but the City of Kansas City is asking that they be—is allowing them to apply....” Id. at p. 69.

As described in the material discussing the Fifth Factor at pp. 193-243 of this Report, the Rate Commission believes that a stormwater charge imposed on an impervious basis would result in rates that impose a fair and reasonable burden on all classes of ratepayers. However, given the current state of the law after the Missouri Supreme Court in Zweig, the Rate Commission finds that it does not know whether or not a stormwater rate change proposal based on impervious area would impair the ability of the District to comply with applicable Federal and state laws or regulations as amended from time to time. As more fully stated in the Statement of the Rate Commission on Funding for Stormwater Services, on pp. 24-26 of this Report, the Rate Commission recommends that the District conduct a full legal analysis of the issue, including

consultation with other utilities across the State imposing a voter approved impervious area charge, and consider the possibility of pursuing legislation, a declaratory action in court, or a Constitutional amendment on this issue.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL OF THE FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT THE RATE CHANGE PROPOSAL DOES NOT IMPAIR THE ABILITY OF THE DISTRICT TO COMPLY WITH APPLICABLE FEDERAL AND STATE LAWS OR REGULATIONS AS AMENDED FROM TIME TO TIME.

Fifth Factor: Whether the Rate Change Proposal, and all portions thereof, “Imposes a *fair and reasonable* burden on all classes of ratepayers”

The Charter does not define the terms or phrases utilized as the criteria governing the rate. As such, to interpret the meaning of words used in a statute, usually the words are attributed their plain and ordinary meaning. Sermchief v. Gonzales, 660 S.W.2d 683, 688 (Mo. banc 1983). Similarly, an interpretation of words in their plain and ordinary meaning can be performed on the words and phrases utilized in the Charter Plan. The commonly understood meaning of words is derived from the dictionary. Buechner v. Bond, 650 S.W.2d 611, 613 (Mo. banc 1983).

According to Black’s Law Dictionary, the term “fair” is defined as “impartial; just; equitable; disinterested. Free of bias or prejudice.” Black’s Law Dictionary 673 (8th ed. 2004). See also Webster’s Dictionary 658 (2d ed. 1979) (fair is honest, open, just and equitable).

“Reasonable” is defined as, “fair, proper, or moderate under the circumstances.” Black’s Law Dictionary, 1293 (8th ed. 2004). See also Webster’s Dictionary 1502 (2d ed. 1979) (reasonable is equitable, tolerable and not excessive).

Similar language of this fifth factor can be found in Section 7.300 of the Charter, which indicates that the Board of Trustees shall accept a Rate Commission Report unless it finds that the report “imposes an unfair or excessive burden on one or more classes of ratepayers.” Charter Plan, § 7.300(b)(5).

Further, this language appears in the Operational Rules, Regulations and Procedures of the Rate Commission whereby the District shall submit to each member of the Commission information related to direct testimony that may explain “why the Proposed Rate Change is necessary, fair and reasonable” and “why the burden imposed on each class of ratepayers by the

Proposed Rate Change is fair and reasonable, including whether and how cost of service considerations, cost causation principles, customer impact data, economic development considerations, environmental effects and other factors have not been factored into such determination.” Operational Rules, Regulations and Procedures of the Rate Commission of The Metropolitan St. Louis Sewer District, §§ 3(2)(a) and 3(2)(e). However, neither of these provisions are defined nor explained.

The District’s rates and rate models have been exhaustively reviewed by the courts in Zweig v. Metro. St. Louis Sewer Dist., 412 S.W.3d 223, 231 (2013) (Mo. banc); Ring v. Metro. St. Louis Sewer Dist., 969 S.W.2d 716 (Mo. banc 1998); Missouri Growth Ass. v. Metro. St. Louis Sewer Dist., 941 S.W.2d 615 (Mo. App. E.D. 1997); Beatty v. Metro. St. Louis Sewer Dist., 914 S.W.2d 791 (Mo. banc 1995); and Beatty v. Metro. St. Louis Sewer Dist., 867 S.W.2d 217 (Mo. banc 1993). However, none of the cases have considered whether the rates charged by the District are fair and reasonable.

On several occasions, Missouri courts have discussed whether a rate is fair or reasonable in utility rates cases where a class of ratepayers alleged that the Public Service Commission approved unlawfully discriminatory rates. For instance, in State of Missouri at the Relation of Nancy Dyer and J. Raymond Dyer v. Pub. Serv. Comm’n, 341 S.W.2d 795 (Mo. 1961), the PSC approved a schedule of rates which allowed for higher percentage increases in electric utility rates for residential and commercial customers than for industrial customers. 341 S.W.2d at 796. In this case, the rate for residential customers was increased 8.6% while the rate for industrial customers was increased 5.5%. Id. at 799. The PSC found that the higher increase, imposed upon residential and commercial customers rather than industrial customers, was due to larger capital expenditures such as the use of air conditioning, installation for hundreds of miles of

heavier wires and transformers, and higher labor costs, incurred on behalf of the residential customers. Id. As such, the court found that the rates were fair and no unlawful discrimination had occurred.

Several months later, the Missouri Supreme Court heard R.P. Smith, et al. v. Pub. Serv. Comm'n, 351 S.W.2d 768 (Mo. 1961). In this case, the PSC approved an order which allowed electric utility rates to be increased a greater percentage for commercial than residential customers. Id. at 771. The Missouri Supreme Court affirmed the PSC's order and found that the fact that there was a larger increase applied to one class as opposed to another does not alone indicate that the rate is unfair or unreasonable. Id. Further the Court found that there is no discrimination where a reasonable classification has a direct correlation to the differences in the situation of the customers or the furnishing of the services whereby valid reasons exist to justify the imposition of varying rates. Id.

Factors which supported the differential increase included the fact that the demand from industrial users is often high, the use is often occasional or inconsistent, and the use is often for only a portion of the day or a short duration during the year. Id. at 772. With this, the maintenance of the facilities to meet variable and often demanding loads was unprofitable to the utility. Id. As such, the rates were increased disproportionately to the disfavor of industrial customers to account for such costs. The Court stated that because there was a larger increase applied to one class as opposed to another does not alone indicate that the rate is unfair or unreasonable or that discrimination occurred. Id. at 771. Further, the Court found that there is no discrimination where a reasonable classification has a direct correlation to the differences in the situations of the customers or the furnishing of the services whereby valid reasons exist to

justify the imposition of varying rates. Id. This increase, consequently, was held to be a reasonable one. Id. at 722-773.

However, in State of Missouri, ex rel. DePaul Hosp. School of Nursing v. Public Service Comm'n, the Missouri Court of Appeals found the PSC's order approving a rate to be unlawfully discriminatory. 464 S.W.2d 737, 740 (Mo. App. 1971). In this case, the evidence demonstrated that the respondent was charged a substantially higher rate for the operation of its nursing home than others similarly situated who received a substantially lower rate, known as the hotel-motel rate. The court found that "[I]t was said that arbitrary discriminations alone are unjust, but if the difference in rates be based upon a *reasonable and fair* difference in conditions which justify a different rate, it is not unjust discrimination." Id. at 740 (quoting State ex rel. City of St. Louis v. Pub. Serv. Comm'n, 36 S.W.2d 947, 950 (Mo. 1931) (emphasis added).

In State of Missouri ex rel. City of Oak Grove, Missouri, et al. v. Pub. Serv. Comm'n, 796 S.W.2d 139 (Mo. App. W.D. 1987), the Missouri Court of Appeals found the PSC's order, which allowed a telephone company to provide extended area service in one metropolitan area when it was not provided in other suburban exchanges approximately the same distance from the central exchange, to be "lawful and reasonable." Id. In this case, the court held that discrimination does not exist merely because the distance between a central exchange and service complainant's exchange is approximately the same. Id. at 143. The court reasoned that the PSC was entitled to take into account factors such as population density and gross territory area when making these determinations. Id.

The PSC regulates telephone and telegraph companies (Mo. Rev. Stat. § 392.200) and gas, electric, water, heating and sewer companies (Mo. Rev. Stat. §§ 393.130, 393.140).

Generally, the PSC uses the standard “just and reasonable” in determining whether a proposed rate is valid.

The standard of review for telephone and telegraph companies provides that “all charges made and demanded by any telecommunications company for any service rendered or to be rendered in connection therewith shall be just and reasonable and not more than allowed by law or by order to decision of the commission.” Mo. Rev. Stat. § 392.200 (2014) (emphasis added).

The standard of review for gas, electric, water and sewer corporations provides that the PSC has the power to “determine and prescribe the just and reasonable rates and charges thereafter to be in force of the service to be furnished, notwithstanding that a higher rate or charge has heretofore been authorized by statute, and the just and reasonable acts and regulations to be done and observed.” Mo. Rev. Stat. § 393.140(5) (2014) (emphasis added).

The PSC’s role in the electric utility resource planning “shall be to provide the public with energy services that are safe, reliable and efficient, at just and reasonable rates, in a manner that serves the public interest.” 4 CSR 240-22.010 (emphasis added).

Whether a rate in effect at any given time is “just and reasonable” depends upon many facts and only can be determined after a rather extended investigation and study. State of Missouri ex rel. Laclede Gas Co. v. Pub. Serv. Comm’n, 535 S.W.2d 561 (Mo. Ct. App. 1976). A reasonable rate is a question of fact, calling for the exercise of common sense and sound judgment, not bound by any hard and fast rule, nor limited to any general formula. State ex rel. Southwestern Bell Tele. Co. v. Pub. Serv. Comm’n, 233 S.W. 425, 431 (Mo. 1921) (en banc) (rv’d on other grounds).

No writer whose views on public utility rates command respect purports to find a single yardstick by sole reference to which rates that are reasonable or socially desirable can be distinguished from rates that are unreasonable or adverse to the public interest. A complex of tests of acceptability is required, just as would be

the case with the tests of a good automobile, a good income-tax law, or a good poem.

State ex rel. City of Lake Lotawana v. Pub. Serv. Comm'n, 732 S.W.2d 191, n.1 (Mo. App. W.D. 1987) (quoting J. Bonbright, *Principles of Public Utility Rates* 67 (1961)).

In Laclede Gas, the Missouri Court of Appeals analyzed the issue of just and reasonable rates when the gas company argued that its existing approved rates were so unreasonably low as to be confiscatory. 535 S.W.2d at 569. Laclede argued that the rates must be sufficient to produce a fair return on the property. Id. The court determined that “[e]very utility does have an undoubted constitutional right to such a fair and reasonable return, and thus is a continuing right which does not cease after beginning rates are initially determined.” Id.

The court found that whether the rates in effect are just and reasonable depends upon many facts and can only be determined after rather extended investigation and study. Id. at 570.

The United States Supreme Court has analyzed the standard of “just and reasonable rates” under the Natural Gas Act in two relevant cases. Fed. Power Comm’n v. Nat. Gas Pipeline Co., 315 U.S. 575 (1942); Fed. Power Comm’n v. Hope Nat. Gas Co., 320 U.S. 591 (1944). In Natural Gas Pipeline, the Court, in determining whether the rate was just and reasonable, stated:

The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas. Agencies to whom the legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances. Once a fair hearing has been given, proper findings made and other statutory requirements satisfied, the courts cannot intervene in the absence of a clear showing that the limits of due process have been overstepped. If the commission’s order, as applied to the facts before it and viewed in its entirety, produces no arbitrary result, our inquiry is at an end.

315 U.S. at 586.

The Supreme Court provided further guidance in Hope Natural Gas, when it stated that rates cannot be made to depend upon the fair value, which is the end product of the process of rate-making and not the starting point, when the value of the going enterprise depends on earnings under whatever rates may be anticipated. 320 U.S. at 601. The Supreme Court further provided that under the statutory standard that natural gas rates shall be “just and reasonable,” the result reached, and not the method employed, is controlling. Id. at 602. If the total effect of the natural gas rates fixed by the Federal Power Commission cannot be said to be unjust and unreasonable, judicial inquiry under the Natural Gas Act is at an end. Id.

Standing requires that a party seeking relief have a legally cognizable interest in the subject matter and that such party has a threatened or actual injury. Eastern Mo. Laborers Dist. Council v. St. Louis County, 781 S.W.2d 43, 46 (Mo. banc 1989). The right of a taxpayer, on behalf of such party and other taxpayers similarly situated, to bring an action to enjoin the illegal expenditure of public funds cannot be questioned. Id. However, the mere filing of a lawsuit does not automatically confer standing on a taxpayer. Id. In Eastern Mo. Laborers Dist. Council, the court determined that:

In order to maintain a suit, taxpayers need not prove their taxes will increase because of the alleged expenditure. The impact on the taxpayer is presumed. A taxpayer who may be compelled to pay the assessment, or who has contributed to the sum jeopardized, is considered to have sufficient interest to enjoin the illegal act.

Id.

Therefore, the court set up the following test to determine whether a taxpayer has standing:

Absent fraud or other compelling circumstances, to have standing a taxpayer must be able to demonstrate a direct expenditure of funds generated through taxation, or an increased levy in taxes, or a pecuniary loss attributable to the challenged transaction of a municipality.

Id. at 47.

Thus, the court held that public policy demands a system of checks and balances whereby taxpayers can hold public officials accountable for their acts. Id. The standing of a taxpayer to sue is not to enable a private redress, but to benefit the public. Querry v. State Highway & Transp. Comm'n, 60 S.W.3d 630 (Mo. App. W.D. 2001).

Missouri courts, however, have not always held that persons have taxpayer standing when a direct connection between the alleged illegality and the outlay of public funds cannot be shown. See “Taxpayer Standing in Missouri”, Thomas C. Albus, 54 J. Mo.B. 199 (1998). In Finley v. Missouri Health Facilities Review Comm., 904 S.W.2d 1 (Mo. App. W.D. 1995), the Court did not find taxpayer standing because the only funds expended were general operating funds, which the committee would have expended regardless of the challenged action. Finley, 904 S.W.2d at 3. Plaintiff, a convalescent and retirement home, challenged the health facilities review committee’s issuance of a certificate of need, which allowed a nursing home in the same community to replace intermediate care facility beds with skilled nursing facility beds. Id. at 2. Plaintiff argued that it had taxpayer standing because it contributed to public funds used to support the activities of the review committee. Id. at 3. The court rejected plaintiff’s argument and found that it did not have taxpayer standing because the only expenses which the committee incurred were general operating expenses, which would be incurred regardless of the challenged action. Id. Thus, the court concluded that the committee’s action did not impact the direct expenditure of public funds of the nature sufficient to establish taxpayer standing. Id.

WASTEWATER

Wastewater Funding. The District current wastewater rate structure consists of monthly service charges and volume charges applicable to all District customers. All non-residential customers are also assessed a compliance charge and extra strength charges where applicable.

The monthly service charges include a billing and collection charge and a system availability charge. A volume charge is assessed to all customers based on their respective water usage. Water usage information is provided by customers' respective water provider on either a metered or unmetered basis. Non-residential customers are also assessed one of five tiered compliance charges based on the amount of inspection and testing of wastewater needed to comply with current regulations. Extra strength surcharges are applied to monitored non-residential customers generating excess biochemical oxygen demand, chemical oxygen demand, and total suspended solids. Ex. MSD 1, Rate Change Proposal, § 4.1.

A summary of the financial plan showing projected wastewater revenues and wastewater revenue requirements for the District during the forecast period is presented in Table 4-10 of Exhibit MSD 1 which shows projected wastewater user charge revenue that is required in order to balance the revenue requirements through FY2020. The increase shown for each year was selected based on consideration of three principal criteria:

- (i) Total revenue necessary to meet cash requirements for normal wastewater operations. This includes consideration of a one-month lag in the receipt of additional user charge revenue from increased rates;
- (ii) Annual increases in wastewater revenues available to cash finance a portion of the wastewater utility related major capital improvements; and
- (iii) Wastewater revenue required to meet certain financial metrics, based on comments from the District's rating agencies, including debt service coverage levels and strong liquidity position over the Rate Proposal period.

See Ex. MSD 1, Rate Change Proposal, § 4.8. Total revenue is projected to be \$286.5 million in FY2015 and increase to \$459.1 million in FY2020. This represents an overall annual compound increase of 9.6% during this time period. Id.¹⁵

¹⁵ The Rate Change Proposal relies upon certain assumptions with respect to conditions, events, and circumstances that may occur in the future. Although considered reasonable, some of these anticipated

Table 4-10 shows the estimated net revenue remaining after deducting wastewater Operations and Maintenance expenses from total wastewater revenues. Anticipated debt service requirements on senior revenue bonds and State Revolving Fund loans will require the District to obtain additional revenue bond authorization in the amount of \$900 million before the start of FY2018. Id.

The District's existing wastewater rates have been in effect since July 1, 2014, and the approved rates for FY2016 will go into effect on July 1, 2015. See Table 4-1 of Ex. MSD 1, Rate Change Proposal; Ex. MSD 84A, Response to Question 2 of the First Discovery Request of the Rate Commission.

Wastewater Operating Reserve. The operating reserve is a balance maintained to accommodate fluctuations in annual revenues and expenditures. The District has a minimum operating reserve target equal to 60 days of annual operating expenses. The existing revenue bond covenants require the District to maintain a minimum balance equal to 45 days of Operation and Maintenance expense. The self-imposed 60-day minimum provides a buffer to allow for potential timing issues involved with funding requirements, provide increased operational flexibility, and helps support future bond ratings. The wastewater operating reserve is projected to exceed the minimum balance during the period FY2015 to FY2020. Figure 4-5 presents the estimated balance in the wastewater operating reserve throughout the forecast period. Ex. MSD 1, Rate Change Proposal, § 4.7; Ex. MSD 3H, Direct Testimony of William Stannard, p. 10, ll. 20-24; p. 11, ll. 1-3.

Customer Accounts. The District's ratepayers are classified into three customer classes: single family, multi-family and non-residential. The District's wastewater revenue reflects the

conditions, events and circumstances may not occur resulting in potential differences in revenues and costs than currently projected.

assessment of the specific rate components for each customer class. See Ex. MSD 1, Rate Change Proposal, § 4.2.

The historical and projected average numbers of wastewater customers served by the District are provided in Figure 4-1 and Table 4-2 of Exhibit MSD 1. The projected change in the number of customers is based on a 10-year average historical trend using a US Census based cohort-component methodology. As indicated in Table 4-2, the number of total customer accounts declined by an average of 0.26% annually between FY2011 and FY2014. Based on this trend, the number of customer accounts is projected by the District to decline by 0.1% annually throughout the forecast. Id.

Contributed Volume. Billed wastewater volume is the estimated amount of water volume contributed to the sewer system by District customers. This volume is measured on either a metered or unmetered basis. The amount of contributed wastewater volume from metered customers is measured in Ccf (100 cubic feet). The volume from unmetered residential customers is determined based upon estimates of indoor water usage per fixture and the number of rooms within these properties. See Ex. MSD 1, Rate Change Proposal, § 4.3.

Billable wastewater volumes for all metered residential customers are determined based on water used during the period best equated to contributed wastewater volume. The District defines its best equated period as a 90 to 92-day period of water usage between November and April of the preceding winter period. Id.

The contributed wastewater volume of all non-residential customers is measured on a metered basis and billed based on actual quarterly usage less applicable exemption allowances for any water that does not enter the sewer system. Metered multi-family customers are either billed based on actual annual water usage or the average annual water usage established during

the best equated period, depending on the billing method selected by each multi-family customer. The selected billing basis is permanent and cannot be changed. Id.

The projections of contributed volumes are based on the historical trends in billed volumes and number of customers per customer class. Since FY2006, the District has experienced annual reductions in total billed volumes of approximately 3.0%, which is a cumulative 24% reduction. The decrease in billed wastewater volume is due in part to conservation measures, increased efficiency of appliances and fixtures and the impact of the national economy. Future billable wastewater volumes are expected to gradually decrease from FY2015 volumes by an overall average of 0.91% annually. Id.

Resistance Factor. A resistance factor recognizes that some metered customers can reasonably be expected to react to the higher wastewater charges by cutting back on their level of water use and thus wastewater service. Wastewater charges are typically designed for the full rate increase indicated but with the expectation that actual revenue received will be less than projected billed revenue due to the potential customer reactions. The resistance factor provides a compensating revenue adjustment for these potential reactions. See Ex. MSD 7, Rate Recommendation Report adopted by the Rate Commission on March 21, 2008, at p. 64.

The District did not consider a resistance factor for the Rate Change Proposal. The financial advisors of the District, however, did recommend application of a Bad Debt provision of 1.5% to future revenue projections so that higher cash balances be maintained to enhance the District's bond rating. Ex. MSD 3G, Direct Testimony of Teresa A. Bellville, p. 5, ll. 2-5; Ex. MSD 84A, Response to Question 24 of the First Discovery Request of the Rate Commission.

Compliance Charge. Costs incurred by the District to monitor the quality of wastewater volume from non-residential customers had historically been recovered by a single monthly

compliance charge applied uniformly to all non-residential customers. To provide greater cost recovery equity, a 5-tier structure of compliance charges was implemented as part of the last Rate Commission Proceeding adopted by the Board of Trustees in 2012. This tiered system allocates costs to customers in proportion to the number of inspections and sophistication of monitoring required. See Ex. MSD 1, Rate Change Proposal, § 4.10.5.

Projected Wastewater Revenues. Estimated revenues for FY2017 through FY2020 use FY2016 approved rates. The District's historical wastewater revenue for FY2013 and FY2014 is based on actual rates, customer account and usage data. Projected revenue from wastewater user charges are based on projected customer demands and the rates approved through FY2016 (revenue in FY2017-FY2020 assumes no changes in the approved rates for FY2016). The wastewater user charge revenue under existing rates increased from \$236.1 million in FY2013 to a projected \$313.6 million in FY2016. This change is due to a combination of key factors: approved rate increases, the impact of economic conditions, projected fluctuations in excess strength wastewater revenue due to more extensive pre-treatment programs and projected decreases in wastewater volume consistent with historical trends. As customer volumes continue to decline over the projection period, the revenue would be expected to decline as well. See Ex. MSD 1, Rate Change Proposal, § 4.4.

Wastewater billing adjustments are determined based on current budget estimates and projected based on historical trends. These adjustments include late charges, refunds and other adjustments. The provision for bad debt has steadily declined over the last several years and is projected at 1.5% of total wastewater user charge revenue throughout the forecast. This projection is based on predicting the propensity to pay for District customers with account balances delinquent greater than 30 days. The change to this calculation resulted in a net

revenue, rather than expense, for bad debt in FY2014 of \$7.2 million. Total other operating wastewater revenue is forecasted to decline from a budgeted amount of \$5.7 million in FY2015 to \$1.6 million in FY2020. The reduction is primarily due to the increases in the bad debt provision as wastewater user charge revenue increases. Id.

Wastewater Operation and Maintenance Expense. On April 22, 2004, the Board of Trustees issued revenue bonds under the terms of a Master Bond Ordinance which obligated the District to provide revenues sufficient to fund 100% of the expenses of operation and maintenance and for the accumulation of a reasonable operating reserve. See Ex. MSD 27, Master Bond Ordinance, § 6.1.1.

The revenue needed to support the Operations wastewater system must be sufficient to meet its cash requirements. The District's operating revenue requirements consist of the following: (i) total wastewater system Operations and Maintenance expenses; (ii) expenditures for routine capital improvements; (iii) components of the CIRP funded directly from revenues; (iv) wastewater revenue bond debt service; and (v) a minimum 60-day operating reserve. See Ex. MSD 1, Rate Change Proposal, § 4.5.

A summary of projected wastewater Operations and Maintenance for FY2015 through FY2020 is presented in Table 4-6 of Exhibit MSD 1. Ex. MSD 1, Rate Change Proposal, § 4.5.1; Ex. MSD 84A, Response to Questions 16 and 17 of the First Discovery Request of the Rate Commission; Ex. MSD 86A, Response to Questions 2, 3, 4, 5, 6, 7, and 8 of the Third Discovery Request of the Rate Commission.

Inflation Assumptions. Appendix 7.1.1 of the Rate Change Proposal, Exhibit MSD 1, describes the sources for developing the inflation assumptions. Most accounts were inflated using the Core PCE Price Index as published by the Congressional Budget Office's The Budget

and Economic Outlook: 2014 to 2024. The Bureau of Economic Analysis defines Core PCE Price Index as:

. . . personal consumption expenditures (PCE) prices excluding food and energy prices. The core PCE price index measures the prices paid by consumers for goods and services without the volatility caused by movements in food and energy prices to reveal underlying inflation trends.

Appendix 7.1.1 of the Rate Change Proposal also describes the inflation factor calculation for salary increases, and notes the source of information for Group Insurance assumptions. Inflation factors for utilities and Bond & Liability Insurance were based on management's estimates. See Ex. MSD 99A, Response to Question 19 of Fourth Discovery Request of Rate Commission.

Inflation assumptions are used in the Rate Model to account for anticipated price increases for the goods and services for operating and maintenance expenses as well as the construction, improvement, and replacement program expenses. See Ex. MSD 1, Rate Change Proposal, Appendix 7.1.1; Ex. MSD 3G, Direct Testimony of Teresa A. Bellville, p. 7, ll. 7-9.

The Budget and Economic Outlook: 2014 to 2024, published by the Congressional Budget Office of the Congress of the United States (CBO), was a source for inflation rates related to operations and maintenance expenses. Published in February of 2014, this document provided a 10-year forecast that best matched the District's rate model time horizon. Table G-1 was used as the basis for projected salary increases ranging from 2.9% to 3.2% over the eight-year period ending June 30, 2024. Group insurance was inflated at rates ranging from 8% to 10% based on projections provided by the District's insurance consultant, Arthur J. Gallagher & Company. Id. See also Ex. MSD 3H, Direct Testimony of William Stannard, p. 9, ll. 8-18. See also Ex. MSD 99A, Response to Question 19 of the Fourth Discovery Request of the Rate Commission.

The District analysis to estimate pension costs was combined to include both the Defined Benefit and Defined Contribution plans. The Defined Benefit Plan was closed to new participants in 2011 and has shown steady declines each year after. The assumption was made that continued decreases in the Defined Benefit Plan will be offset by future cost increases in the Defined Contribution Plan due to increased participation. See Ex. MSD 99A, Response to Question 19 of Fourth Discovery Request of Rate Commission.

The Bureau of Labor Statistics Reports issued in February and August of each of calendar years 2013, 2014, and 2015 for the St. Louis Metropolitan Region are generally consistent with the projected inflation rates contained in the Rate Change Proposal. Ex. RC 91A-F.

Routine Capital Improvements. Expenditures for routine annual capital improvements include those costs that tend to be routinely incurred each year for normal replacements such as vehicles, office equipment and minor improvement or repairs. Since the costs of these improvements are a continuing expense to be met each year, the District finances these expenditures from current wastewater revenues. These expenses are included in the District's annual budgets as capital outlay costs. Ex. MSD 1, Rate Change Proposal, § 4.5.2.

Capital projects funded in the Operations and Maintenance budget typically consist of expenditures that do not result in a new District asset. In general these projects include infrastructure repairs, watershed planning, rainfall data gathering and streamflow sampling which are all required to maintain existing assets. The District also funds capital improvements to computer software and hardware out of the Operations and Maintenance budget. Due to the nature of these projects, they are ineligible for bond or State Revolving Fund funding; therefore they are budgeted as operating expenses. Ex. MSD 1, Rate Change Proposal, § 4.5.3.

Wastewater Major Capital Improvement and Replacement Program. The implementation of a Major Capital Improvements Program has a significant impact upon the ability to manage operations and maintenance. See Ex. MSD 96, Transcript of Technical Conference for Direct Testimony, April 8, 2015; Testimony of Richard L. Unverferth, p. 55, ll. 16-22. The resources of the District on the engineering and construction management side are part of the annual operation budget and are accommodated through an annual budget process. The current capital expenditure is around \$250 million in FY2014 up to about \$450 million in FY2020, and the peak of the number of projects will be in FY2016, FY2017, and FY2018, and less projects but more expensive large projects in FY2018 and FY2019 during the second half of this rate cycle. Id. at p. 56, ll. 1-7.

The District executed on July 15, 2011, a 23-year, \$4.7 billion Consent Decree program with the United States Environmental Protection Agency and the Missouri Coalition for the Environment Foundation. See Ex. MSD 47, MSD Consent Decree. This program requires the District to make investments in the wastewater system to eliminate sanitary sewer overflows, combined sewer overflows, and help reduce the risk of flooding customer properties. The current estimated Capital Improvement and Replacement Program needs are presented in Figure 4-3 and Table 4-7 of Exhibit MSD 1 for FY2015 through FY2020. The total Capital Improvement and Replacement Program project cost for this six-year period is projected to be \$1.975 billion. The largest component of the Capital Improvement and Replacement Program over the next six years will be capital investments related to mitigating sanitary sewer overflows throughout the wastewater system. Additional needs include other improvements to comply with regulatory requirements outside of the Consent Decree and the rehabilitation and replacement of existing system assets. Combined sewer overflows projects begin to

substantially impact the Capital Improvement and Replacement Program as this component reaches \$158.3 million in FY2020. Table 4-7 of Exhibit MSD 1 presents the summary Capital Improvement and Replacement Program needs throughout the four-year proposed rate cycle. See Ex. MSD 84A, Response to Question 3 of the First Discovery Request of the Rate Commission.

The District proposes to finance the required capital improvements by a combination of wastewater user charge revenues, available fund balances, revenue bond proceeds, Missouri Clean Water State Revolving Fund loan proceeds, grants and contributions, other operating revenues, and interest income. See Ex. MSD 1, Rate Change Proposal, § 4.6.1.

The District will ensure that if actual annual spending within a fiscal year is below the projections, remaining funds will be used to accelerate projects. Within a given fiscal year, construction projects, when bid, may come in under budget. As well, projects may be delayed due to permitting, easement acquisition or other unknown issues. When this occurs, there is unused funding in the Capital Program. This unused funding can be reallocated to allow additional construction projects to proceed during the fiscal year, if other projects planned in future fiscal years are ready to be bid. These potential projects are identified in the annual capital improvement budget as Contingency Projects and are approved and adopted by the MSD Board of Trustees as part of the annual budget process. The District has been performing this procedure since the 2009 budget year. Regardless of project acceleration, any remaining funds within a given fiscal year are carried over to the following year for future projects. Ex. MSD 94A, Response to Question 10 of the First Discovery Request of the Rate Commission.

Salary Projections. The Rate Change Proposal contemplates 3% pay increases for employees over the rate period for wages, salaries and overtime. See Ex. MSD 3H, Direct

Testimony of William Stannard, p. 9, ll. 9-13. An examination of the agreements with its employees reveals that the District does not have a contractual obligation to increase pay of its employees. Each of the Collateral Bargaining Agreements with the United Wastewater Workers Association, a division of Service Employees International Union Local 1, and the American Federation of State, County & Municipal Employees (Local 410) for a term ending June 24, 2016, and the Bricklayers Local 1 of Missouri, the Electricians Local No. 1, the International Union of Operating Engineers Hoisting Local No. 513, and Machinists District No. 9 for a term ending June 30, 2013; providing that (i) incremental pay increases are not guaranteed; (ii) pay increases are subject to changes in the Collective Bargaining Agreement; and (iii) the District reserves the right to make changes to the pay plan and incremental pay increases as outlined in Civil Service Rules and Regulations and as directed by the Board. See Ex. MSD 45, Collective Bargaining Agreement between the District and the American Federation of State, County & Municipal Employees Local 410, and United Wastewater Workers Association, a division of Service Employees International Union Local 1, Articles XXXV and XXXVI; Ex. MSD 46, Collective Bargaining Agreement Between the District and Bricklayers Local 1 of Missouri, the Electricians Local No. 1, the International Union of Operating Engineers (Hoisting) Local No. 513 and Machinists District No. 9, Article XXXI.

Infiltration/Inflow. Infiltration/Inflow includes flow entering the sewer system from illegal roof and foundation drains, groundwater infiltration through sewer service pipe and main joints and stormwater runoff or inflow from the combined sewer system. District-wide Infiltration/Inflow is approximately 50% of the total wastewater flow reaching the treatment plants on an annual basis. See Ex. MSD 1, Rate Change Proposal, § 4.9.4.

Each customer class should bear its proportionate share of the costs associated with Infiltration/Inflow, as the wastewater system must be adequate to convey and process the total wastewater flow. The amount of Infiltration/Inflow to be recovered directly from wastewater service charges is assigned to customer classes on the premise that 40% of the total is distributed on the basis of the number of customers within each class, with the remaining 60% allocated on the basis of contributed wastewater volume. Id. See also Ex. MSD 3H, Direct Testimony of William Stannard, p. 15, ll. 15-24; p. 16, ll. 1-11.

Wastewater Revenues Inadequate. Under the previously approved Rate Change Proposals, the wastewater rates are inadequate to meet the total revenue requirements.

Wastewater revenues must be at least sufficient to finance the District's Operations and Maintenance expense, routine annual capital improvements and debt service costs on existing and proposed senior revenue bonds and State Revolving Fund loans while maintaining an adequate operating reserve and complying with all revenue bond debt service coverage requirements. Annual revenues or existing reserve refunds can also be used to finance the wastewater utility's major capital improvement program. Figure 4-6 of Exhibit MSD 1 presents the estimated financial plan of the wastewater enterprise which shows that annual wastewater revenues under existing rates are not sufficient to meet the total revenue requirements of the wastewater utility during the forecast period without future revenue increases. See Ex. MSD 1, Rate Change Proposal, § 4.8.

Certain assumptions have been applied to the District's Operations and Maintenance from its FY2015 budget estimates through the proposed four-year rate cycle ending in FY2020. Inflation percentages vary by expense type. Salary expenses and other related lines are inflated annually at rates between 3.1% and 3.2% for the years FY2017 to FY2020. Health Insurance

expense is projected to increase annually at rates between 8.1% and 9.6%, while general supplies and contractual services are expected to increase annually between 1.9% and 2.0% over the same four-year period. Future wastewater Operations and Maintenance expense is projected to increase from \$169.4 million in FY2015 to \$193.1 million in FY2020. Id.

The proposed wastewater volume charges shown in Table 4-19 of Exhibit MSD 1 are designed to recover costs for volume associated with normal strength contributed wastewater. To provide for the recovery of costs associated with above average strength contributions, an extra strength surcharge rate is applied to wastewater loadings that exceed normal strength limits. Cost of service based rates for excess strength wastewater are equal to the unit costs shown on lines 15-17 of Table 4-19 of Exhibit MSD 1 and are expressed on a cost per ton basis. See Ex. MSD 1, Rate Change Proposal, § 4.5.4.

The District asserts that recommended rates presented in Table 4-18 adequately recover the total cost of service, and equitably recover the allocated cost of service from each customer class.

Customer Billing. Currently it is District policy to bill one month in arrears for wastewater services. The practice of billing in arrears results in less than a full 12 months of billings under new rates in a given 12-month period following the effective date of the rate increase.

Days Cash on Hand. Days Cash on Hand is a liquidity metric that measures an entity's ability to meet short-term needs and contingencies. See MSD 3F, Direct Testimony of Bethany Pugh, Q11, page 6-7. The median number of Days Cash on Hand for utilities with an AA bond rating is 398 days. See Ex. RC 90, Fitch Rating 2014 Water and Sewer Medians. As of June 15, 2015, Days Cash on Hand is estimated at 600 days. See Ex. MSD 114A, MSD Response to

Question 4, Fifth Discovery Request of the Rate Commission, page 8. The availability of this cash provides some security for possible customer resistance. If billable wastewater volume decreases due to customer resistance, these funds could be available to bridge revenue shortfalls at the potential consequence of lower bond ratings and higher debt costs on future bond issues. See Ex. MSD 43, District's Debt Management Policy 2004, p. 14, which allows for periodic adjustments of cash on hand for liquidity purposes.

Total Days Cash on Hand is projected to be 600 days at June 30, 2016, and 550 days at June 30, 2020. See Exhibit MSD 114A, MSD Response to Question 4, Fifth Discovery Request of the Rate Commission. While the projections indicate a decrease from current levels, the decline is not precipitous, and is projected to remain in excess of the current Fitch median of 398 days for AA rated utilities.

For FY2017, operating costs of \$176,389,110 (Ex. MSD 1, Rate Change Proposal, Table 4-10, Line 7), the District would require total Days Cash on Hand of \$192,336,619 to match the median number of Days Cash on Hand for an AA bond rating.

Table 4-10, line 23, presents the forecasted operating reserve fund balance for each year of the Rate Period. The District's rate proposal forecasts that at the end of FY2017 there will be a balance of \$44,856,428 in the Operating Reserve Fund. In terms of days of operation and maintenance expenses, this total is equivalent to about 91 days and a number that is consistent with the targets of other wastewater utilities and the metrics used by the bond rating agencies. See Ex. MSD 1, Rate Change Proposal, page 4-22, Table 4-10.

Wastewater Operating Reserve. The Rate Change Proposal assumes an operating reserve equal to 60 days of operating costs, for operation and maintenance expenses (general ledger accounts 100-400) and routine annual capital costs (general ledger account 500). An allowance

for capital outlays or routine annual capital costs is included because these costs are also an annual operating expense funded from annual revenues. See Ex. MSD 1, Rate Change Proposal, § 4.7.

The operating reserve is a balance maintained to accommodate fluctuations in annual revenues and expenditures. The District has a minimum operating reserve target equal to 60 days of annual operating expenses. The existing revenue bond covenants require the District to maintain a minimum balance equal to 45 days of Operations and Maintenance expense. The self-imposed 60 days minimum provides a buffer to allow for potential timing issues involved with funding requirements, provide increased operational flexibility, and helps support future bond ratings. Id.

Wastewater Cash Balances. Available cash balances are a very important element of a wastewater utility's financial plan. Adequate fund balances are necessary to ensure adequate working capital and funds for unanticipated events. Table 4-10 of the District's Rate Proposal (MSD1, page 4-22, line 23) presents the District's forecasted combined operating reserve. As shown, the District projects that at the end of FY2020 there will be a balance of \$40,752,786 in Combined Operating Reserves, equating to approximately 77 days of operation and maintenance expenses.

In 2014, 30,719 customers (or 9.6% of District customers) met the criteria for Low Income customers and 38,982 customers (or 12.2%) qualify for the Customer Assistance Program ("CAP"). See Ex. MSD 1, Rate Change Proposal, Appendix 7.4.

Median means a value in an ordered set of values below and above which there is an equal number of values. *Merriam-Webster Dictionary*, <http://www.merriam-webster.com>.

The median home value in the City of St. Louis is \$119,200 and in the County of St. Louis is \$174,500. See Ex. RC 129, St. Louis County Quick Facts From the U.S. Census Bureau; Ex. RC 130, St. Louis City Quick Facts from U.S. Census Bureau. Approximately 85% of the land area in St. Louis County is contained within the District. See Ex. MSD 139, MSD's Response to Evidence Submitted After June 22, 2015. The median household income in the City of St. Louis is \$34,582 and in the County of St. Louis is \$58,910. Ex. RC 129, St. Louis County Quick Facts from the U.S. Census Bureau; Ex. RC 130, St. Louis City Quick Facts from U.S. Census Bureau.

The percentage of persons below the poverty level in the City of St. Louis is 27.4% and in the County of St. Louis is 10.9%. Id.

Bad Debt Allowances. The District issues a monthly bill to approximately 424,000 commercial and residential accounts. The bill has a Wastewater User Charge which includes a base charge and a volume charge based on either the amount of water used at an address or, if no water meter is in use, the number of rooms, baths, water closets, and showers in the building. Commercial properties are also billed a Compliance Charge based on the type of wastewater discharged to the public sewer system. The District policy to bill customers for services provided in the previous month can be found in the Wastewater User Charge Ordinance which is included in Exhibit MSD 19, page 348; section 6.

Since June 30, 2014, the District has determined the Bad Debt Reserve by using billed revenue to record the reserve. The District changed the allowance calculation using 2.15% of the wastewater sewer service billed revenue. The collection trend demonstrated that 98% of the billings were collected within five years. Some examples of the results to make the determination on the rate to use are as follows:

<u>Years</u>	<u>Billings</u>	<u>Collections</u>	<u>Rate</u>
1981 to 2014	\$2,390,617,668	97.20%	2.80%
2009 (5 years ago only one year)	222,679,265	97.90%	2.10%
2008, 2009, 2010	655,508,870	97.90%	2.10%
2006, 2007, 2008, 2009, 2010	1,059,434,618	98.30%	1.70%

The District made an adjustment for years 2006 through June 2014 billing cycle using 2.15% for the billings on wastewater sewer service charges. In addition, for the years 1981 to 2005, the District chose to record the uncollected balance which was less than the 2.15%.¹⁶ See Ex. MSD 1, Rate Change Proposal, Appendix § 7.3.

The District's actual bad debt expense, write-offs, year-end balances, actual expenses, delinquency aging, and Remediation Plan for FY2010-FY2014 is shown on Ex. MSD 840.

MISSOURI INDUSTRIAL ENERGY CONSUMERS POSITION

Michael P. Gorman, testifying on behalf of Missouri Industrial Energy Consumers, believes that the District's proposed increases in its wastewater rates are unreasonable. He believes the District appears to have made an error in recording the wastewater user charges listed in its Rate Change Proposal and the wastewater user charges used to produce its Wastewater Financial Plan forecast because the proposed wastewater user charges shown in Exhibit MSD 1, Table ES-2 are higher than the rates used in the financial plan. A comparison prepared by Mr. Gorman of the wastewater user charges listed in Exhibit MSD 1, Table ES-2 and those used to forecast wastewater revenue in MSD's financial plan is shown on Schedule MPG-1.

¹⁶ In FY2020, the Stormwater service charge will be adjusted using the same process to calculate the reserve balance. This adjustment is planned to be made in December FY2015. See Ex. MSD 1, Appendix § 7.3.

It is Mr. Gorman's opinion that the District's proposed wastewater charges are unreasonable because they are based on imbalanced or unreasonable assumptions. The District financial forecast summarized on Table 4-10, page 4-22 of Exhibit MSD 1 understates revenue at current rates because it reflects a decrease in number of customer accounts, and an unreasonably large projected continued decline to volume use per customer concerning wastewater volume sales. This wastewater volume sales understatement also results in an inflated wastewater volume charge because the District is proposing to spread its cost of service over an unreasonably low estimate of its wastewater volume sales. See Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman, p. 4, ll. 1-14; p. 5, ll. 1-10. See also Ex. MSD 121, Testimony of Michael P. Gorman during Second Technical Conference, p. 29, ll. 2-25; p. 30, ll. 1-12; and Ex. MSD 127, Testimony of Teresa Bellville, Third Technical Conference, p. 96, ll. 17-25 to p. 101.

Mr. Gorman expresses concern regarding MSD's projections which shift more wastewater cost allotted on volume to metered customers from nonmetered customers.

Mr. Gorman explained:

The shift could result in the District collecting more revenue if its projection of volume to metered customers in St. Louis County understated accurate meter billable volume. By understating billable metered customers, the District has the opportunity to collect more waste water revenue over forecasted period. In contrast, by understanding the amount of volume for nonmetered customers in the City of St. Louis, the District does not have the same opportunities as nonmetered customers are charged a fixed rate. That is nonmetered customers are not impacted by actual waste water volume. I believe they understated the volume component of – for unmetered customers.

Ex. MSD 121, Testimony, Second Technical Conference, p. 43, ll. 15-25; p. 44, ll. 1-20.

Mr. Gorman believes the District's projected revenue from Late Charges should increase in accordance with the increase in its projected customer bills. The Late Charge rate is

based on the principal amount of late payments. He revised the District's projected escalation of its Late Charge Revenue from 1.0% per year as proposed by the District up to the projected increase in its proposed wastewater user charges over the forecast period. Id. at p. 6, ll. 13-18. See also Ex. MSD 127, Testimony of Teresa Bellville regarding bad debt and collection process, pp. 93-94.

Mr. Gorman believes Waste Hauler Permit revenues from the District's projected level of \$670,000 per year over the forecast period should be increased to \$1.4 million—the average of the actual amount of other revenues incurred during 2010-2015 (excluding 2014 because it appeared to be an outlier year). Id. at p. 6, ll. 19-24.

It is his opinion that the utility expense escalation rate of 5.5% a year should be decreased to 3.0% every two years, starting in FY2016 and utility expense escalation rate be based on Ameren Missouri's projected increase in its electric utility rates, and consider offsets to utility expense caused by declining volume sales by the District. This adjustment also recognizes utilities' typical adjusted prices over two years rather than every year. Id. at p. 7, ll. 1-12.

Mr. Gorman states that historically, the District's bad debt provision has been approximately equal to 1.0% of its wastewater usage charges. For the forecast period, however, the District assumed that the bad debt provision as a percentage of wastewater charges would increase to 1.5%. This significantly increases the bad debt provision. He recommends maintaining the bad debt provision equal to 1.0% of wastewater bills, consistent with historical actual costs. Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman, at p. 6, ll. 1-12.

RATE CONSULTANT ANALYSIS

Pamela R. Lemoine, Rate Consultant to the Commission, believes that the District's projected costs to provide wastewater service and complete anticipated capital projects required

under the Consent Decree over the Rate Proposal period appear to be reasonable and are projected to provide the District with adequate funding to maintain the financial health of the utility. The District has calculated proposed wastewater rates based on cost of service principles that are commonly used in the industry, as outlined in the Water Environment Federation's Manual of Practice No. 27, "Financing and Charges for Wastewater Systems." See Ex. RC 101, Rebuttal Testimony of Pamela R. Lemoine, p. 8, ll. 7-13.

She states that the District charges its customers based on metered water consumption for most customers within the District's service area. Residential customers outside the City of St. Louis are billed based on a Winter Quarter Average, which is the average actual water consumption for a 90-92 day period between November and April of the preceding winter period. This is common practice in wastewater rate setting, as it reflects the amount of wastewater entering the District's system, and avoids including outdoor water usage during the summer months. Residential customers within the City of St. Louis are billed on the basis of Fixture Units (number of rooms, water closets, baths and separate showers), as such customers do not have water meters. Id. at p. 14, ll. 14-22; p. 15, ll. 1-3.

The results of the District analysis outlined in Appendix 7.1.2 provide the basis for the District's projected contributed wastewater volume by customer class, as summarized in Table 4-3 of the District's Rate Proposal. The analysis reflects the fact that the District has experienced declining wastewater volume that is expected to continue throughout the Rate Proposal period (MSD 1, Appendix 7.1.3, Graph 1.1 MSD Projected Usage). Ms. Lemoine observes that this is a phenomena being experienced across the country, and is due to a number of factors, including installation of high efficiency appliances, faucets, toilets, etc., as well as other potential factors such as economic conditions and environmental awareness. Id. at p. 15, ll. 4-12.

The District's experience of declining contributed wastewater volume (per customer) is consistent with wastewater utilities across the United States. This decline is due to several factors, including enhanced efficiency of appliances and plumbing fixtures, economic conditions, and general awareness regarding the efficient use of water (conservation). Based upon Ms. Lemoine's review, it is her opinion that the District's forecast of continued decline in wastewater volume throughout the Rate Proposal period is reasonable. Id. at p. 15, ll. 13-20.

Ms. Lemoine acknowledges that residential customers will necessarily pay more for wastewater service each year of the study period and beyond. Exhibit PRL4 summarizes the projected annual bill for an average residential customer (7 CcF/month). Based on the weighted median household income for the Service Area, as estimated by the District, an average residential customer is anticipated to pay 1.36 percent of Median Household Income (MHI) by FY2020, and just over 2 percent by FY2024. As a frame of reference, the EPA considers 2 percent of MHI as a threshold beyond which it considers a utility "heavily burdened." In addition, the anticipated double digit increases in all but one year result in a cumulative increase of 88.1 percent at the end of the Rate Proposal Period (FY2020), and nearly 181 percent by FY2024. This rate of increase can be expected to be difficult for low income and lower middle class income families to absorb. While certain low income customers will have access to the District's Customer Assistance Program, customers who are not eligible for the program will have difficulty paying their bills over time, as overall rates and monthly bills increase. Id. at p. 17, ll. 12-18; p. 18, ll. 2-8.

In response to Question 16 of the Fourth Discovery Request of the Rate Commission, the District states that:

The US Census Bureau reports that the MHI (Median Household Income) for St. Louis City (2009-2013) is \$34,582 and St. Louis County (2009-2013) is \$58,910.

Approximately 21% of MSD customers live in the City and 79% live in the County. These data correspond to a weighted average MHI of \$53,801 for the MSD service area. Assuming no increase in these MHI values, the wastewater bills as a percentage of MHI on July 1, 2017, would be 1.11% if the \$900 million bonds were authorized and 1.65% without bond authorization.

Ex. MSD 99A.

The District states that the average wastewater bill as a percentage of MHI on June 30, 2020 (a) is 1.36% if the \$900 million bonds were authorized; and (b) 2.14% if the \$900 million bonds were not authorized. See Ex. MSD 114A, Response to Question 5 of the Fifth Discovery Request of the Rate Commission.

Ms. Lemoine reviewed the District's assumptions regarding the escalation of various cost categories, as summarized in William Stannard's direct testimony (MSD 3H, page 9, line 13), as well as historical rates of change as presented in MSD 99I. Historically, total spending under the certain categories presented has varied substantially, due to not only inflation but for many other operational reasons. She believes the variation in operational needs year over year, as well as uncertainty regarding the overall economy in the future, makes it difficult to forecast actual future escalation rates. Therefore, it is important, particularly for utilities that establish a multi-year rate schedule, to be somewhat conservative in projecting future costs. In the event that costs do not escalate as planned, the rates adopted would provide for better debt service coverage, additional cash to improve liquidity (cash on hand), both of which would help maintain the District's financial health, and/or provide additional cash funding of capital projects, which would help to reduce the District's debt profile. For these reasons, she believes that the escalation rates are reasonable.

The District's projection that at the end of FY2020 there will be a balance of \$40,752,786 in Combined Operating Reserves, equating to approximately 77 days of operation and

maintenance expenses, is consistent with the targets of other wastewater utilities and provides the District with adequate working capital to provide for any unanticipated expenditures or emergencies. See Ex. RC 101, Rate Commission Rebuttal Testimony of Pamela Lemoine at p. 19, ll. 1-8.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT A WASTEWATER RATE CHANGE PROPOSAL WHICH PROJECTS (i) A LATE CHARGE REVENUES OF 1% PER YEAR; AND (ii) A UTILITY EXPENSE ESCALATION AT 5.5% A YEAR; DOES NOT IMPOSE A FAIR AND REASONABLE BURDEN ON ALL CLASSES OF RATEPAYERS.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT A WASTEWATER RATE CHANGE PROPOSAL WHICH PROJECTS (i) A LATE CHARGE REVENUE INCREASE IN ACCORDANCE WITH THE INCREASE IN PROJECTED CUSTOMER BILLS; AND (ii) A UTILITY EXPENSE ESCALATION AT 3% EVERY OTHER YEAR DOES IMPOSE A FAIR AND REASONABLE BURDEN ON ALL CLASSES OF RATEPAYERS.

STORMWATER

Stormwater Funding. The District proposes the use of a District-wide tax structure to replace the multi-layered subdistrict taxes now assessed on the real estate value of ratepayers' property. This proposed funding is designed to cover the cost of stormwater maintenance services, capital projects and associated Operations and Maintenance.¹⁷

The District is partnering with 58 municipalities (co-permittees) and St. Louis County to comply with stormwater permit requirements for the St. Louis Metropolitan Small Municipal Separate Storm Sewer System. The District actively works to reduce pollutants that stormwater picks up and carries into local bodies of water through the St. Louis County Phase II stormwater Management Plan. The District maintains public storm sewers, plans and designs improvements to stormwater infrastructure, regulates stormwater drainage and floodplain impact related to development projects, and helps coordinate regional efforts to address pollution carried in or caused by stormwater runoff. Ex. MSD 1, Rate Change Proposal, § 5.1; MSD Ex. 84A, Response to Question 19 of the First Discovery Request of the Rate Commission.

Existing Stormwater Rates and Taxes. District stormwater revenue is now derived principally from subdistrict ad valorem taxes. Existing stormwater rates and taxes levied by the District are presented in Table 5-1 of Exhibit MSD 1. On March 8, 1988, a majority of the voters approved stormwater service charges pursuant to Ordinance No. 7358, adopted December 23, 1987. In addition, flat rate charges of .24 cents per month for residential and non-residential properties and .18 cents per unit for multi-residential were also approved. Ex. MSD

¹⁷ The Rate Change Proposal relies upon certain assumptions with respect to conditions, events, and circumstances that may occur in the future. Although considered reasonable, some of these anticipated conditions, events and circumstances may not occur resulting in potential differences in revenues and costs than currently projected.

1, Rate Change Proposal, § 5.2; Ex. MSD 3D, Direct Testimony of Jonathan C. Sprague, p. 5, ll. 18-23; p. 6, ll. 1-14.

The current stormwater charges and taxes postpone needed improvements and contribute to a deterioration of the stormwater system resulting from inadequate maintenance and delayed improvements. Id.

Stormwater revenues consist of monthly flat rate user charges and ad valorem taxes for District-wide stormwater costs as well as other subdistrict specific taxes which fund capital projects and Operations and Maintenance activities specific to each subdistrict's service area. The application of stormwater ad valorem taxes varies by service area. All wastewater customers are charged the flat rate user charges. All property in the District service area is charged \$0.0197 per \$100 of assessed value District-wide tax. Only customers within the District's original service area are charged the additional \$0.0682 stormwater Operations and Maintenance tax. Operations, Maintenance and Capital Improvement taxes are levied for specific subdistricts within the original service area and range from \$0.05 to \$0.10 per \$100 of assessed property value. Id. See also Ex. MSD 3C, Direct Testimony of Richard L. Unverferth, p. 8, ll. 4-14.

The subdistrict funding results in varying levels of stormwater services. Customers paying only the District-wide tax receive only the minimal stormwater service needed to comply with regulatory requirements. Customers paying both the District-wide and Stormwater Operations and Maintenance tax receive regulatory services and a level of maintenance up to the limits of the revenue generated by these stormwater taxes. Those customers paying specific Operations, Maintenance and Capital Improvement taxes in addition to the District-wide and Stormwater Operations and Maintenance taxes receive the highest level of stormwater services.

Ex. MSD 84A, Response to Questions 5 and 6 of the First Discovery Request of the Rate Commission; Ex. MSD 85A, Response to Questions 1 and 2(a) of the Second Discovery Request of the Rate Commission.

Stormwater Revenue Requirements. The revenue required to provide for the continued, and expanding operations of the District's stormwater utility must be sufficient to meet its cash requirements for system operation. Revenue requirements include (i) total stormwater system Operation and Maintenance and Regulatory expenses; (ii) expenditures for routine and any major capital improvements; and (iii) provision for an adequate operating reserve. Ex. MSD 1, Rate Change Proposal, § 5.3. Table 5-5 of Exhibit MSD 1 presents a summary comparison of all existing and proposed stormwater revenues under existing rates and taxes with projected revenue requirements for FY2015 through FY2020. See Ex. MSD 1, Rate Change Proposal, § 5.6. See also Ex. MSD 99A, Response to Question 5 of the Fourth Discovery Request of the Rate Commission; Ex. MSD 84A, Response to Question 23 of the First Discovery Request of the Rate Commission; Ex. MSD 85A, Response to Question 3 of the Second Discovery Request of the Rate Commission; Ex. MSD 86A, Response to Questions 10, 13 and 14 of the Third Discovery Request of the Rate Commission.

Operations and Maintenance. Operations and Maintenance expense is presented in Table 5-2 of Exhibit MSD 1 and shows the portion of operations that are tied directly to regulatory requirements and the cash financing available for major stormwater capital improvements which are planned to begin in FY2017. The Operations, Maintenance and Capital Improvements Capital Projects have been identified for each of the subdistricts and will be completed to fully utilize the investments made by each subdistrict. Capital spending in the Operations, Maintenance and Capital Improvements funds will be \$23.9 million from FY2017

through FY2020. During this same time period, capital spending in the stormwater Operations and Maintenance Fund and the proposed District-wide stormwater fund is projected to be \$46.9 million. Capital funding in the District-wide stormwater fund is made up of \$.012 of the proposed \$.10 per \$100 assessed value tax levy. Id.

While revenue collected from the existing stormwater user charge and ad valorem taxes is available to fund stormwater related Operations and Maintenance expenditures, these revenue sources are not sufficient. The majority of stormwater Operations and Maintenance activities are the result of failures in the existing collection and conveyance system or as a reaction to customer complaints. These activities include removing blockages, open channel cleaning, repair of storm sewer line failures, and limited inlet inspections and cleanings. See Ex. MSD 1, Rate Change Proposal, § 5.3.1.

Levee Districts. The area comprising the District includes six levee districts, to-wit: Earth City Levee District; Missouri Bottoms Levee District – Bridgeton Subdistrict; Missouri Bottoms Levee District – Hazelwood Subdistrict; Riverport Levee District; Howard Bend Levee District; and Monarch – Chesterfield Levee District. See Ex. MSD 99A, Response to Question 3 of the Fourth Discovery Request of the Rate Commission.

The stormwater regulatory tax will be collected from the levee districts and the funds collected will be sufficient to provide the District with resources to perform the regulatory services within the levee districts during the next rate cycle. The District has no obligation to perform operation or maintenance service within the Levee Districts. See Ex. MSD 96, Transcript of Technical Conference for Direct Testimony, April 8, 2015; Testimony of Richard L. Unverferth, p. 61, ll. 24-25; p. 62, ll. 1-9. See also Ex. MSD 84A, Response to Question 21 of the First Discovery Request of the Rate Commission.

Major Capital Improvement Program. The proposed stormwater Capital Improvement and Replacement Program is comprised of two major components. The first are capital projects within the Operations, Maintenance and Capital Improvements subdistricts to complete the investments that those customers have supported through specific subdistrict taxes. The second are infrastructure rehabilitation projects that will be performed throughout the District and will be funded with a new, proposed District-wide tax. The estimated level of stormwater Capital Improvement and Replacement Program needs is presented in Figure 5-2. See Ex. MSD 1, Rate Change Proposal, § 5.3.3.

Stormwater improvements to the public system would consist of asset renewal and/or small additions that would improve the life and/or functionality of a stormwater system. Examples would include such things as storm sewer rehabilitation or adding an additional inlet and/or piping to improve drainage within a system. In addition, improvements can be made to the stormwater system as a whole to protect structures and property from flooding or erosion. Examples would include such things as the construction of new storm sewer systems, providing increased capacity to storm sewer systems, channel rehabilitation, and channel stabilization to provide erosion protection. See Ex. MSD 86A, Response to Question 14 of the Third Discovery Request of the Rate Commission.

Stormwater Regulatory Services. The District has certain regulatory obligations it must comply with to meet stormwater quality requirements outlined by Missouri Department of Natural Resources. The District is a co-permittee in a State-issued Municipal Separate Storm Sewer System (MS4) permit. Under this permit, the District must implement Best Management Practices to address stormwater quality issues. Under the new tax structure and Rate Proposal, this tax will remain in place to maintain these services. The District-wide ad valorem tax of

\$.0197 per \$100 Assessed Value levied by the District provides adequate funding to meet current regulatory obligations. See Ex. MSD 1, Rate Change Proposal, § 5.3.4. See also Response to Questions 20 and 22 of the First Discovery Request of the Rate Commission.

The FY2015 adopted budget is the basis for projecting existing stormwater Operations and Maintenance expenses and is adjusted for the same inflation and growth factors as wastewater. Table 5-2 of Exhibit MSD 1 shows FY2015 Stormwater Operations and Maintenance expenses to be \$15.0 million. Id.

Proposed Funding Methods. The District believes that an ad valorem property tax used to operate and maintain the public stormwater system within its municipal boundaries is fair and equitable because (i) the use of property taxes to fund services and the maintenance of infrastructure is allowed under the Missouri Constitution and is used by District and other municipal entities in the area to pay for these kinds of services; (ii) the use of an impervious area method would cost the ratepayers approximately \$950 thousand/per year more to operate and maintain than an ad valorem taxing method; and (iii) the use of an impervious area method may result in fewer people participating in funding these services compared to an ad valorem taxing method based on recent Missouri Supreme Court decisions and state legislation. See Ex. MSD 100A, Response to Question 7 of First Discovery Request of Intervenor Home Builders Association.

The District is proposing to seek voter approval to assess a District-wide stormwater tax to replace the current stormwater Operations and Maintenance Tax and flat rate charges. The proposed District-wide tax rate is \$0.10 per \$100 of assessed property value.

The subdistrict specific Operations, Maintenance and Capital Improvements taxes will be eliminated.

The ad valorem tax of \$0.197 per assessed valuation will remain in place to provide the District with the necessary funding to meet regulatory requirements.

A new stormwater District-wide Tax of \$0.10 per \$100 assessed valuation will provide the District with the necessary funding to meet the operating requirements of the expanded service levels. See Ex. MSD 1, Rate Change Proposal, § 5.4. The District has rewritten Section 5.4, Proposed Funding Methods, p. 5-9, Ex. MSD 1, to clarify the administrative approach associated with setting the OMCI tax rate to zero dollars:

Meeting the proposed increased level of SW service beginning in FY17 requires that the District develop a more equitable and consolidated SW charge. The District is proposing to seek voter approval to assess a District-wide SW tax to replace the current SW O&M Tax and flat rate charges. The proposed District-wide tax rate is \$0.10 per \$100 of assessed property value. The subdistrict specific OMCI taxes will be set to \$0.00 as part of this Rate Proposal as well; however, the regulatory tax will remain in place. Charging this new SW District-wide Tax will provide the District will the necessary funding to meet the operating requirements of the expanded service levels. Additionally, this proposed structure will eliminate the disjointed revenue sources and provide a funding source that allows for a cohesive plan across the entire District.

Ex. MSD 114A, Response to Question 6 of the Fifth Discovery Request of the Rate Commission.

The taxable base for the District-wide Tax of \$0.10 per \$100 assessed valuation assumes a 0.5% increase in the assessed valuation of the City of St. Louis and St. Louis County. Ex. MSD 3G, Direct Testimony of Teresa A. Bellville, p. 7, 11. 16-23. From December 31, 2012, to December 31, 2014, however, the assessed valuation of the City of St. Louis declined by \$166,885,120 or 5%, and in St. Louis County declined by \$666,565,250 or 3%. See Ex. RC 92, Total Assessed Valuations for St. Louis County, and RC 93, Total Assessed Values for St. Louis City.

The Charter Plan provides the District the power:

To levy, assess, and collect taxes on all taxable property within the District or a subdistrict, as the case may be; provided, that the rate of taxation for purposes of

operation and maintenance shall not exceed ten cents on the hundred dollars assessed valuation.

See Ex. RC 88, Charter Plan, Section § 3.020(15). Both taxes must be approved by the voters of the District. See [Mo. Const.]. On March 8, 1988, a majority of the voters approved stormwater service charges pursuant to Ordinance No. 7358, adopted December 23, 1987. In addition, flat rate charges of .24 cents per month for residential and non-residential properties and .18 cents per unit for multi-residential were also approved. See Ex. MSD 1, Rate Change Proposal, § 5.2; Ex. MSD 3D, Direct Testimony of Jonathan C. Sprague, p. 5, ll. 18-23; p. 6, ll. 1-14. The approval of the imposition of ad valorem taxes of \$0.10 per \$100 assessed valuation may be submitted to the voters on the first Tuesday after the first Monday in April, August or November. See Mo. Rev. Stat. § 115.123.1. Notice under Section 7.310 of the Charter Plan to the Board of Aldermen, Comptroller, License Collector, and Collector of the City of St. Louis, the County Council and Collector of St. Louis County of ad valorem taxes to be levied by the District upon real property as of January 1, 2016, must be fixed not later than October first for entry in the tax books for calendar year 2016. See Mo. Rev. Stat. § 67.110.1. No action by the Board of Trustees to effect a change in the rate may occur prior to 45 days after the date upon which the report is received. See Section 7.300 of the Charter Plan. Any proposition to impose an ad valorem tax may be considered by the Board of Trustees only after a public hearing conducted in accordance with the provisions of Section 7.320 of the Charter Plan. In order to submit the proposal to the voters at the election conducted on the first Tuesday after the first Monday in April, notice to the Board of Election Commissioners of the City of St. Louis and of St. Louis County is required by January 22, 2016, in order to satisfy the 10-week notice requirement to the election authorities. See Mo. Rev. Stat. § 115.125.

The District states that an ad valorem property tax used to operate and maintain the public stormwater system within its municipal boundaries is fair and equitable because the use of property taxes to fund services and the maintenance of infrastructure is allowed under the Missouri Constitution and is used by MSD and other municipal entities in the area to pay for these kinds of services. Ex. MSD 100, Response to Question 7 of the First Discovery Request of Home Builders Association.

In the 2007 Rate Change Proposal, the District recommended a new stormwater fee be implemented to provide sufficient funding to support the projected basic stormwater program revenue requirements based upon charging individual customers an established rate times the quantity of impervious area on their property. Impervious area was initially determined from 1996 aerial photography and updated from 2000 aerial photography. See Ex. MSD 5, 2007 Rate Proposal, Section 4.5, p. 4-9.

In addition to the recommendation for a stormwater impervious area charge, there were also changes proposed for the OMCI revenues. OMCI projects were planned to continue to be financed by OMCI taxes and have been separately identified from those projects to be funded by impervious area charges. The District proposed a reconfiguration of the existing 23 OMCI subdistricts into five watershed based subdistricts as a means to provide enhanced stormwater services as determined by a vote of each subdistrict's customers. A survey undertaken by Black & Veatch in 2014 to assess stormwater financing and management elicited response from more than 75 utilities including the District. Ninety percent of the respondents calculated the fee on gross and/or impervious area and 79 percent calculated stormwater user fees on impervious area. See Ex. MSD 84G, 2014 Stormwater Utility Survey, Figures 19 and 20, pg. 13. See also

Ex. MSD 127, Testimony of Mr. William Stannard at the Third Technical Conference, p. 116, ll. 12-15; p. 117, ll. 1-7.

The Black & Veatch 2014 Stormwater Survey notes that:

The risk of legal challenges could be a potential barrier to establishing stormwater user fees. Seventy-eight percent of the utilities that responded in this survey had not faced any legal challenges to their fees. Of those that faced a legal challenge, the challenge primarily seems to have been either due to lack of authority to assess fees or on the grounds of constitutionality.

Ex. MSD 84G, 2014 Stormwater Utility Survey, p. 12.

The District is unsure that not-for-profit entities would participate in a voted-on impervious fee, since Mo. Rev. Stat. § 204.700 exempted approximately 3,500 customers from participating in the impervious fee since the customers were residents not receiving wastewater or stormwater services. See Ex. MSD 127, Testimony of Brian Hoelscher, Third Technical Conference, p. 42, ll. 16-18; p. 43, ll. 17-24. The District believes that further legislation may exempt nonprofit entities and even more ratepayers for similar reasons. The levy of a property tax, however, would be protected from such legislation by the Missouri Constitution. Id. p. 44, ll. 1-5; Ex. MSD 114A, Response to Question 11 of the Fifth Discovery Request of the Rate Commission.

Article X, Section 1 of the Missouri Constitution limits the taxing power of political subdivisions to those entities authorized by statute. The Missouri Supreme Court held in Dalton v. The Metro. St. Louis Sewer Dist., 275 S.W.2d 225 (1955) that (i) Article VI, Section 30(b) of the Missouri Constitution, which authorized establishment of the District and (ii) the Charter Plan, included a grant of legislative power to “provide for taxation of all tangible property for general purposes and obligations of the district.” Dalton, 275 S.W.2d at 233. See also Ex. RC

126, Article X of Missouri Constitution; Ex. MSD 114A, Response to Question 10 of the Fifth Discovery Request of the Rate Commission.

Article VI, Section 30(b) of the Missouri Constitution provides that the District's Charter Plan "shall provide for the assessment and taxation of real estate in accordance with the use to which it is being put at the time of assessment, whether agricultural, industrial or other use, giving due regard to the other provisions of this constitution." The District derives its power to tax from the Constitution and, therefore, does not need to rely on a statute for taxing authority. Id.

Mr. Stannard read from "Expanding Financing and Pricing Concepts into Stormwater" of *Water & Wastewater Finance and Pricing*, Fourth Edition, Copyright 2015, which states that the most appropriate stormwater rate structure links demand for service to the rate structure. Total runoff volume, a cost causation factor, is influenced by size of the parcel, vegetation, slope, soils, and the amount of roof top and pavement (impervious area where water cannot readily percolate into the earth). All these influence the [estimated] runoff volume and thus the demand from the property. The paramount variable is the amount of the impervious area. See Ex. MSD 127, Testimony of William Stannard, Third Technical Conference, pp. 105-110.

Impervious area rate structures have been used very frequently to date by jurisdictions because an impervious area basis reflects cost drivers, it is very fair, and is relatively easy to understand.

Mr. Stannard testified that a critical step in the rate development process is to use the cost of service process to allocate the total revenue requirements and calculate fair and equitable rates. Id. at p. 114, ll. 7-10. See also Ex. MSD 84G, Response to Questions 8, 9, and 10 of the First Discovery Request of the Rate Commission.

Stormwater Subdistricts. Ordinance No. 13856, adopted June 12, 2014, approved the current tax rates for general administration that is used for regulatory compliance (Section Two), operation and maintenance of existing public stormwater facilities (Section Three), and for the OMCI subdistricts (Sections Four through Twenty-One).

Stormwater improvement projects identified within the Rate Change Proposal and within each zone (Red, Yellow, Green) were prioritized by planning the projects with the highest benefit cost ratio project within each Zone independently based on funding availability. Generally the projects identified in Green and Yellow zones have equal benefit cost ratios. Generally the projects within the Red Zone have a higher benefit cost ratio than those being done in the Green and Yellow zones. There are no projects to be completed in the Red zone with a lower benefit cost ratio than the Green and Yellow zones. See Ex. MSD 114A, Response to Questions 1 and 2 of the Fifth Discovery Response of the Rate Commission; Ex. MSD 127, Testimony of Richard L. Unverforth, Third Technical Conference, pp. 74-84.

Stormwater Operating Reserve. The stormwater operating reserve is designed to add a layer of protection for unplanned expenses. Under the proposed funding mechanism, stormwater revenues will be collected from ad valorem taxes which are collected annually in the City and County. Due to this annual revenue collection schedule, it is necessary for the stormwater fund to maintain a reserve balance that provides sufficient working capital to meet the regular operating and capital expenses in the first six months of a fiscal year after which a new year's revenues will be collected. An operating reserve equal to 240 days of stormwater Operations and Maintenance expense is reflected in this Rate Proposal. See Ex. MSD 1, Rate Change Proposal, § 5.3.5; Ex. MSD 3H, Direct Testimony of William Stannard, p. 19, ll. 1-11.

Because the voters will not be asked to approve the ad valorem tax until April 2016, the new tax rate will not be fixed until October 1st. Collections of the new tax rate will begin in late November 2016 with substantial payments by December 2016. The operating reserve may not be funded until the sixth or seventh month of FY2016.

A summary of stormwater revenues under existing and proposed rates and taxes is presented in Table 5-3 of Exhibit MSD 1 for the period FY2015 through FY2020 provided by District staff. Projected stormwater tax revenues shown in Table 5-3 through FY2016 are based on staff projections developed for the District's FY15 budget. This budget was approved on June 11, 2014. Table 5-1 also presents the proposed new Stormwater Tax which will be assessed to all customers of the District. Id.

MISSOURI INDUSTRIAL ENERGY CONSUMERS POSITION

Mr. Gorham testifies that a stormwater capital charge should not be uniform across the District. He believes that to the extent the District is modernizing stormwater services in some areas and developing infrastructure for others for the first time in other areas, these other areas should pay for the stormwater service infrastructure. Since areas of the service territory which have more modern stormwater systems have already incurred the cost of those systems, and should not be required to subsidize the District's cost of providing the same service to other areas in its service area. This cross-subsidization within the service territory is simply imbalanced and should not be allowed. See Ex. MIEC 102, Rebuttal Testimony of Michael Gorman, p. 24, ll. 8-16.

Mr. Gorman believes further that imposing stormwater charges in a way that better reflects the District's actual cost of providing stormwater service is a more equitable and

balanced method for charging for these infrastructure development and maintenance costs. Id. at p. 24, ll. 17-19.

According to Mr. Gorman, the District's proposal to impose a uniform tax based on property value across its District has no cost-causation basis, and therefore does not equitably spread its proposed stormwater costs across its customers within its service territory. Id. at p. 24, ll. 20-22.

Mr. Gorman believes that the stormwater cap table charge should not be uniform across all of the District's service area to the extent the District is modernizing stormwater service in some areas and developing infrastructure for other areas for the first time. These other areas should pay for stormwater service infrastructure. Other areas of service territory, which had more modern stormwater system have already incurred the cost of those systems and should not be required to subsidize the District cost of providing the same service to other customers. See Ex. MSD 171, Testimony of Michael P. Gorman, Second Technical Conference, p. 48, ll. 12-24.

It is Mr. Gorman's concern that the uniform assessment proposed to be levied would result in ratepayers who have already paid for their capital improvement subsidizing capital improvements in an area where the ratepayers have not done so. Id. p. 50, ll. 12-17.

HOME BUILDERS ASSOCIATION POSITION

Michael Boerding appeared on behalf of Intervenor Home Builders Association of St. Louis and Eastern Missouri, and stated that in order to comply with the St. Louis County Phase II permit, the District along with various municipalities and St. Louis County, must incorporate Best Management Practices (BMP) in the site plans for all new construction within the District taking place on tracts of over one acre.

The District requires that an Annual BMP Maintenance Report be submitted to the District for all commercial and residential homeowner association maintained facilities to ensure maintenance is conducted in accordance with the owner's BMP Maintenance Agreement and the Stormwater Management Facilities Report (SWMFR). The Annual Report consists of a completed inspection checklist and/or maintenance log, a narrative description of corrective action measures taken, photographs, and any other documentation demonstrating compliance with the BMP Maintenance Agreement and the owner's SWMFR. The costs associated with issuing the Annual Report are also borne by the property owner or homeowners association as the case may be. See Ex. HBA 103, Rebuttal Testimony of Michael Boerding, at ll. 60-76.

Mr. Boerding understands that the District has provided some literature that predicts operation and maintenance costs of BMPs to be 10% of total construction costs for BMPs costing \$10,000 and 5% for those costing \$100,000. Id. at ll. 88-93.

Mr. Boerding believes that without considering impervious area or a credit-based program related to stormwater quantity and quality, the District's Stormwater Tax Change is not equitable. Charging customers solely on the basis of their property value has no relation to the property's burden on the District's stormwater system. Id. at ll. 96-102.

Mr. Michael Boerding recommends:

- (1) The installation, operation, and maintenance of BMPs in both the residential and commercial context result in significant costs and expense to the consumer, while providing a direct and proximate benefit to the District through reductions in the quantity of stormwater runoff and improvements to the quality of stormwater runoff.
- (2) Because the District has been unable to articulate a causal connection between property value and the value of service provided by the District, it is my opinion that the District's

proposed Stormwater Tax change based on a District-wide ad valorem tax of 10 cents per \$100 of assessed property value fails as a fair and equitable taxing methodology.

- (3) If the District incorporates into the proposed Stormwater Tax Change a consideration for impervious area or a credit program based on factors such as volume reduction, peak flow reduction, or water quality control, I believe a fair and equitable taxing methodology could be established.

Id. at ll. 40-53. See also Ex. MSD 127, Testimony of Richard Unverferth, Third Technical Conference, pp. 63-65, concerning BMPs.

Emily Schwartze Post, Assistant Staff Vice president for Public Policy for the Home Builders Association of St. Louis & Eastern Missouri, on behalf of the Home Builders Association, filed an affidavit that programs have been implemented to incentivize customers to take an active role in reducing stormwater runoff and improving the quality of stormwater runoff by Lynchburg, VA; Richmond, VA; Minneapolis, MN; Seattle, WA; Washington, DC; Baltimore, MD; and Fernandina, FL.

These programs provide an incentive to implement better site design practices to help reduce the volume of stormwater runoff, minimize the pollutant loads from a site, and allow projects to not only meet, but exceed stormwater and water quality requirements providing a benefit through reduced impacts on existing systems.

By encouraging developers and individual property owners to exceed current regulations and take an active role in stormwater management, the District is likely to see several benefits, including: (i) reductions in runoff volume reducing the amount of runoff requiring treatment; (ii) increases in the quality of runoff allowing the District to more easily meet water quality standard requirements; (iii) reducing the need for drainage infrastructure thereby reducing costs; and (iv)

potentially increasing tax revenues by encouraging rain gardens and similar BMPs that often appeal to many home owners and can increase property values. See Ex. HBA 124, Affidavit of Emily Schwartze Post, dated June 15, 2015.

The Home Builders Association of St. Louis & Eastern Missouri does not believe the concept of an ad valorem property tax can be implemented in a manner that is fair and equitable when there is seemingly no nexus between property value and the stormwater services provided by the District. See Ex. HBA 124C, Memorandum of Considerations for the Rate Commission.

Further, the proposed Stormwater Rate Change Proposal provides no credit for those ratepayers who install stormwater remediation and quality control devices, all of which may reduce Operations & Maintenance costs for the District, and certainly further the objectives of the EPA consent decree by reducing the quantity, and improving the quality of stormwater runoff within the District. Id.

The Home Builders Association believes the inequity of the ad valorem tax proposal is further illustrated by the disparate impact that the proposed tax will have upon residential District ratepayers. The current proposal raises taxes in the City of St. Louis (See Ex. MSD 1, page 5-4, shown in yellow; See also Customer Rate Impacts “City and Near County,” p. 6-7), whose population is least able to sustain a tax increase, while reducing taxes in that part of St. Louis County lying east of I-270, an area including Ladue, Huntleigh, Country Life Acres, Des Peres, Kirkwood, Webster Groves and other affluent communities that are most able to pay a tax increase (See Ex. MSD 1, page 5-4, shown in green; See also Customer Rate Impacts “OMCI Districts,” p. 6-7).

RATE CONSULTANT ANALYSIS

Pamela R. Lemoine, Rate Consultant to the Commission, believes that the proposed Stormwater Tax Change will charge customers based on the value of the property, which has no relation to the property's burden on the stormwater system. Under the proposed Stormwater Tax Change, two single family properties with the same square footage of impervious area and lot size, in different parts of the County, will pay a different amount for stormwater service, due only to a difference in property value and not due to the level of service received. Ex. RC 101, Rate Commission Rebuttal Testimony of Pamela Lemoine, at p. 20, ll. 4-10.

As set forth in this report, although the Stormwater Rate Change Proposal is based on an ad valorem tax, Intervenors Missouri Industrial Energy Consumers and Home Builders Association and the Rate Consultant all find such a method not to be fair and reasonable and support the use of an impervious area charge as the fair and reasonable method, without regard to possible legal issues or risks under Zweig.

There was evidence that other Missouri utilities impose a stormwater charge based on impervious area, and such charges have not been challenged. The Kansas City Missouri System imposes a voted on impervious area charge. See Ex. MSD 144, Transcript of July 10, 2015 Public Hearing, at 68. Mr. Hoelscher notes, "Upon the ruling of the Supreme Court, they decided to allow not-for-profits to opt out of payment of that fee. They're asking them to voluntarily pay it, but the City of Kansas City is asking that they be—is allowing them to apply...." Id. at 69.

The Rate Commission believes that a stormwater charge imposed on an impervious basis would result in rates that impose a fair and reasonable burden on all classes of ratepayers. As

more fully discussed in the Statement in this Report at pp. 24-26, the Rate Commission believes that the most appropriate stormwater rate structure links demands for service to cost causation.

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT A STORMWATER RATE CHANGE PROPOSAL WHICH IMPOSES A \$0.10 PER HUNDRED DOLLARS AD VALOREM PROPERTY TAX TO FUND STORMWATER OPERATIONS DOES IMPOSE A FAIR AND REASONABLE BURDEN ON ALL CLASSES OF RATEPAYERS.

AND

THE RATE COMMISSION, AFTER DISCUSSION AND CONSIDERATION OF ALL FACTS AND CIRCUMSTANCES DISCLOSED IN THESE PROCEEDINGS, FINDS AND DETERMINES THAT A STORMWATER RATE CHANGE PROPOSAL WHICH CHARGES CUSTOMERS AN ESTABLISHED RATE TIMES THE QUANTITY OF IMPERVIOUS AREA OF THEIR PROPERTY TO FUND STORMWATER OPERATIONS DOES IMPOSE A FAIR AND REASONABLE BURDEN ON ALL CLASSES OF RATEPAYERS.

MINORITY REPORT

COMMISSIONERS SCHNEIDER, STEIN, TOENJES AND WILLIAMS SUBMIT THIS MINORITY REPORT REGARDING THE AMOUNT OF CAPITAL IMPROVEMENT AND REPLACEMENT PROGRAM DEBT FUNDING

We respectfully dissent from the majority decision with respect to the amount of Capital Improvement and Replacement Program debt funding.

The District proposes that the amount of Capital Improvement and Replacement Program (“CIRP”) be funded by 75% of debt.

After the FY2020-FY2023 CIRP peak period, Missouri Industrial Energy Consumers proposes it would be reasonable to increase the percentage of Capital Improvement and Replacement Program funded by debt from 75% based on what is required to produce target debt service coverage ratios and manage rate impacts. See Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman, p. 5, pp. 11-21.

We acknowledge that the District must adhere to certain requirements to maintain an AA credit rating.

We note the District always maintains considerably more cash on hand than needed to meet the following year’s Operation and Maintenance expenses and satisfy debt service coverage any cash reserve targets.

We believe the District should increase the amount of Capital Improvement and Replacement Program debt amount financing to the maximum amount while satisfying requirements to maintain an AA credit rating.

MINORITY REPORT

COMMISSIONERS BROCKMAN, MAHFOOD, AND STEIN SUBMIT THIS MINORITY REPORT REGARDING WASTE HAULER PERMIT REVENUE

We respectfully dissent from the majority decision with respect to waste hauler permit revenue.

The District projects Waste Hauler Permit revenues at a level of \$670,000 per year during the forecast period.

Missouri Industrial Energy Consumers proposes that Waste Hauler revenue should be increased to \$1.4 million—the average of the actual amount of other revenues incurred during 2010-2015 (excluding 2014 because it appeared to be an outlier year). Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman, p. 6, ll. 19-24.

We believe Waste Hauler Permit revenues from the District's projected level of \$670,000 per year during the forecast period should be increased to \$1.4 million as proposed by Missouri Industrial Energy Consumers.

MINORITY REPORT

COMMISSIONERS BROCKMAN, KELLING, SCHNEIDER, STEIN, TOENJES, AND WILLIAMS SUBMIT THIS MINORITY REPORT REGARDING BAD DEBT

We respectfully dissent from the majority decision with respect to bad debt.

Since June 30, 2014, the District has determined the Bad Debt Reserve by using billed revenue to record the reserve. The District changed the allowance calculation using 2.15% of the wastewater sewer service billed revenue. The collection trend demonstrated that 98% of the billings were collected within five years. Ex. MSD 1, Appendix 7.3.1, Revenue Collection Efforts.

The District made an adjustment for years 2006 through June 2014 billing cycle using 2.15% for the billings on wastewater sewer service charges. In addition, for the years 1981 to 2005, the District chose to record the uncollected balance which was less than the 2.15%. Id. The District's actual bad debt expense, write-offs, year-end balances, actual expenses, delinquency aging, and Remediation Plan for FY2010-FY2014 are shown on Ex. MSD 840.

For the Rate Change Proposal, however, the District assumed that the bad debt provision as a percentage of wastewater charges would increase to 1.5%. (While the District's Finance Advisor did not recommend a Resistance Factor in the Rate Change Proposal, it did recommend application of a Bad Debt provision of 1.5% of future revenue projections so that higher cash balances would be maintained to enhance the District's bond rating. Ex. MSD 3G, Direct Testimony of Teresa Bellville, p. 5, ll. 2-5.)

Missouri Industrial Energy Consumers states that the District's bad debt provision has historically been approximately equal to 1.0% of its wastewater usage charges. Missouri Industrial Energy Consumers proposes use of the historical 1% of wastewater charge. Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman, p. 6, ll. 4-12.

We support a bad debt provision equal to 1.0% of wastewater bills, consistent with historical actual costs as proposed by MIEC.

MINORITY REPORT

COMMISSIONERS BOWSER, CHODES, KELLING, MAHFOOD, O'CONNELL, AND TOMAZI SUBMIT THIS MINORITY REPORT REGARDING LATE CHARGES

We respectfully dissent from the majority decision with respect to late charges.

In considering changes to its Late Charge Revenue, the District assumed Late Charges would grow by 1.0% per year.

Missouri Industrial Energy Consumers proposes that the District's projected revenue from Late Charges should increase in accordance with the increase in its projected customer bills since the Late Charge rate is based on the principal amount of late payments. Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman, p. 6, ll. 13-18.

We support escalation of Late Charge Revenue to 1% per year.

MINORITY REPORT

COMMISSIONER STEIN SUBMITS THIS MINORITY REPORT REGARDING METERED AND UNMETERED RATEPAYERS

I respectfully dissent from the majority decision with respect to metered and unmetered ratepayers.

Missouri Industrial Energy Consumers observed that the District's projections which shift more wastewater cost allotted on volume to metered customers from nonmetered customers are not fair and reasonable since the shift could result in the District collecting more revenue if its projection of volume to metered customers in St. Louis County understated accurate meter billable volume. By understating billable metered customers, the District has the opportunity to collect more wastewater revenue over the forecasted period. In contrast, by understating the amount of volume for nonmetered customers in the City of St. Louis, the District does not have the same opportunities as nonmetered customers who are charged a fixed rate. Ex. MSD 121, Testimony of Michael P. Gorman, Second Technical Conference, p. 43, ll. 15-25; p. 44, ll. 1-20.

I believe the District's projections which shift more wastewater cost allotted on volume to metered customers from nonmetered customers are not fair and reasonable.

MINORITY REPORT

COMMISSIONERS BOWSER, MAHFOOD, AND O'CONNELL SUBMIT THIS MINORITY REPORT REGARDING UTILITY EXPENSE ESCALATION

We respectfully dissent from the majority decision with respect to utility expense escalation.

The District has assumed a utility expense escalation rate of 5.5% a year.

Missouri Industrial Energy Consumers has proposed that the utility expense escalation factor of the District should coincide with outlooks by utility companies which provide services to the District (Ameren Missouri, for example, projects its rate base to grow by approximately 2.0% through year end 2019). Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman, p. 7, ll. 1-12.

Missouri Industrial Energy Consumers suggests that (i) the utility expense escalation rate be decreased to 3.0% every two years, starting in FY2016; (ii) the utility expense escalation rate be based on Ameren Missouri's projected increase in its electric utility rates; and (iii) the District consider offsets to utility expense caused by declining volume sales by the District. Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman, p. 7, ll. 1-12.

We believe (i) the utility expense escalation rate of 5.5% a year should not be decreased to 3.0% every two years, starting in FY2016; and (ii) the utility expense escalation rate not be based on Ameren Missouri's projected increase in its electric utility rates.

MINORITY REPORT

COMMISSIONERS JONES AND WILLIAMS SUBMIT THIS MINORITY REPORT REGARDING ALLOCATION OF PROCEEDS OF THE STORMWATER AD VALOREM TAX AMONG THE YELLOW, GREEN, AND RED ZONES

We respectfully dissent from the majority decision with respect to the allocation of proceeds of the Stormwater ad valorem tax among the Yellow, Green, and Red Zones.

Stormwater improvement projects identified within the Yellow, Green, or Red Zones were prioritized by the District within each Zone independently based on funding availability. Generally, the District found that projects within the Red Zone have a higher benefit cost ratio than those in the Green and Yellow Zones. Ex. MSD 127, Testimony of Richard Unverferth, Third Technical Conference, pp. 73-82.

The OMCI Subdistricts are largely within the Green Zone and these ratepayers have been paying for OMCI for more than 35 years; Yellow Zone ratepayers have been paying for Operations and Maintenance for more than 35 years; while the Red Zone ratepayers have only paid for regulatory services during this period. Id.

Since the Yellow and Green Zones have already incurred the cost of those systems, they should not be required to subsidize the District's cost of providing the same service to the Red Zone. "This cross-subsidization within the service territory is simply imbalanced and should not be allowed." Ex. MIEC 102, Rebuttal Testimony of Michael P. Gorman, p. 24, ll. 17-19.

We believe that the proceeds of the ad valorem tax not required for operation and maintenance should be allocated among each of the Zones and not exclusively prioritized on a higher benefit cost ratio.

MINORITY REPORT

COMMISSIONERS BOWSER, MAHFOOD, SCHNEIDER, STEIN, TOENJES, AND TOMAZI SUBMIT THIS MINORITY REPORT REGARDING AD VALOREM FUNDING FOR STORMWATER SERVICES

We respectfully dissent from the majority decision with respect to the levy of an ad valorem tax to finance stormwater services.

In the 2007 Rate Change Proposal, the District recommended a new stormwater fee be implemented to support the stormwater program revenue requirements based upon charging individual customers an established rate times the quantity of impervious area on their property. Ex. MSD 5, Section 4.5 of Rate Change Proposal, February 2007.

The current Rate Change Proposal is an ad valorem property tax used to operate and maintain the public stormwater system within the District which the District believes is fair and equitable because (i) the use of property taxes to fund services and the maintenance of infrastructure is allowed under the Missouri Constitution and is used by District and other municipal entities in the area to pay for these kinds of services; (ii) the use of an impervious area method would cost more to operate and maintain than an ad valorem taxing method; and (iii) the use of an impervious area method may result in fewer people participating in funding these services compared to an ad valorem taxing method based on recent Missouri Supreme Court decisions and state legislation. Ex. MSD 100A, Response to Question 7 of First Discovery Request of Home Builders Association.

We believe that the most appropriate stormwater rate structure links demand for service to cost causation. Impervious area rate structures have been used very frequently because an impervious area basis reflects cost drivers, it is very fair, and is relatively easy to understand.

The Black & Veatch survey found that 90% of the respondents based the stormwater user fee on gross and/or impervious area and 79% calculated stormwater user fees on impervious area and not on a tax levy. Ex. MSD 84G, p. 12.

In addition, nonprofit entities would be subject to an impervious charge but not an ad valorem tax. The impact of the nonprofit entity infrastructure on the cost of providing stormwater service is not de minimis. Five of the top 10 major employers and nine of the top 20 are located within the District: BJC HealthCare, Washington University in St. Louis, Mercy Health, SSM Health Care, Archdiocese of St. Louis, Saint Louis University, Special School District of St. Louis County, St. Louis Community College District, Tenet Healthsystem Medical, Inc.

We believe that imposing stormwater charges in a way that better reflects the District's actual cost of providing stormwater service is a more equitable and balanced method for charging for infrastructure development and maintenance costs. The District's proposal to impose a uniform tax based on property value across its District has no cost-causation basis, and

therefore does not equitably spread its proposed stormwater costs across its customers within the District.

We believe that an impervious area charge for stormwater services satisfies the requirements of the Charter for a fair and reasonable rate.

MINORITY REPORT

COMMISSIONERS SCHOEDEL AND TOMAZI SUBMIT THIS MINORITY REPORT REGARDING AMOUNT OF CAPITAL IMPROVEMENT AND REPLACEMENT PROGRAM DEBT FUNDING

We respectfully dissent from the majority decision with respect to the amount of Capital Improvement and Replacement Program debt funding.

The District proposes that an additional \$1,340,000,000 be raised to comply with the Consent Decree.

We believe the District should renegotiate the Consent Decree to (i) eliminate the 12-mile tunnel under the River des Peres; and (ii) eliminate the rain gauge network and all of its reporting requirements; and (iii) extend the term of the Capital Improvement and Replacement Program.

The proposed rate increases required to comply with the Consent Decree will result in residential rates which will exceed the Environmental Protection Agency's guidelines on ratepayer impact of 2% of Median Household Income.

**RESPECTFULLY SUBMITTED, THIS 5TH DAY OF AUGUST, 2015, BY THE
RATE COMMISSION OF THE METROPOLITAN ST. LOUIS SEWER DISTRICT**

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Steven Chodes
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