



City of St. Helena
Regular City Council Meeting
Tuesday, September 26, 2017 @ 6:00 PM
Vintage Hall Board Room - Second Floor
465 Main Street, St. Helena

PLEASE NOTE: Any person who wishes to speak regarding an item on the agenda or make a comment under the "Oral Communication" portion of the agenda may do so, but please observe the time limit of three minutes.

Page

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Mayor: Alan Galbraith, Vice Mayor: Peter White, City Council: Paul Dohring, Geoff Ellsworth and Mary Koberstein

4. PUBLIC FORUM:

Members of the public are entitled to speak on matters of municipal concern not on the agenda during Public Forum. Each person's comments shall be limited to 3 minutes. Each person is entitled to speak on any non-agendized item only once at any meeting. Brief questions by Councilmembers for clarifications may be posed and answered, and Councilmembers may make requests that items be placed on future agendas, but in accordance with state law, no substantive discussion or action may take place unless and until the matter properly appears on the agenda.

5. REPORTS BY STAFF AND CITY COUNCIL, FUTURE AGENDA ITEMS, AND AB 1234 REPORTS:

Reports by staff and/or Councilmembers on items of general interest. Brief questions for clarification may be posed and answered, and Councilmembers may request that items be placed on a future agenda. Except under certain circumstances, the Brown Act prohibits any other discussion or action by the City Council.

6. STAFF BRIEFING

6.1. Water Conservation Update

7 - 15

[Presentation](#)

7. CONSENT ITEMS

Members of the Council or the public may ask that any items be considered individually for purposes of considering alternative action, for extended discussion, or for public comment. Unless that is done, one motion may be used to adopt all recommended actions. (Roll Call Vote)

7.1. Consideration and proposed approval of a Resolution approving a Memorandum of Understanding (MOU) between the St. Helena School District and the St. Helena Recreation Department to provide services for an After-School Enrichment Program for the St. Helena Primary and St. Helena Elementary Schools for the period August 1, 2017 – June 30, 2018.

17 - 21

CEQA Determination: Not a CEQA project
Prepared By: Andre Pichly, Recreation Director
Recommendation:
Staff recommends the City Council of the City of St. Helena adopt the MOU.

[Staff Report](#)

- 7.2. Consideration and proposed approval of a resolution approving temporary closure of Oak Avenue, Adams Street, and Tainter Street for the October 21, 2017 Hometown Harvest Festival festivities and authorizing possession of open alcoholic beverages on those public streets 23 - 26

CEQA Determination: Categorically Exempt, Section 15323
Prepared By: Andre Pichly, Recreation Director
Recommendation:
Staff recommends the City Council of the City of St. Helena adopt the resolution.

[Staff Report](#)

- 7.3. Consideration and proposed adoption of a resolution approving the Road Maintenance and Rehabilitation Account Project List (FY 2017/18) 27 - 76

CEQA Determination: Exempt from the requirements of CEQA pursuant to Section 15301, Class 1, which exempts the operation, leasing, or minor alteration of existing facilities

Prepared By: Erica Ahmann Smithies, Public Works Director and City Engineer

Recommendation:

Adopt a resolution approving the Road Maintenance and Rehabilitation Account Project List for FY 2017/18.

[Staff Report](#)

- 7.4. Consideration and proposed adoption of a resolution accepting the Water and Wastewater Rates and to proceed with the Proposition 218 requirements for Water and Wastewater Rate Schedule Changes. 77 - 235

CEQA Determination: Exempt from the requirements of CEQA under the "General Rule", Section 15061 (b)(3), in that it can be seen with certainty that the proposed action will have no impact on the environment.

Prepared By: April Mitts, Finance Director

Recommendation:

Approve a resolution authorizing the City Manager to begin the Proposition 218 requirements for water and wastewater rate schedule changes; and accept the Draft 2017 Water and Wastewater Rates prepared by Hansford Economic Consulting.

[Staff Report](#)

- 7.5. Consideration and Proposed Adoption of the Resolution authorizing the creation of the Capital Improvement Project Oak Avenue Storm Drain Repair R18-82 and authorizing the transfer of \$65,000 from Gas Tax revenue to R18-82 237 - 241
- CEQA Determination: Exempt from the requirements of CEQA pursuant to Section 15301, Class 1, which exempts the operation, leasing, or minor alteration of existing facilities
 Prepared By: Tobias Barr, Project Manager
 Recommendation:
 Adopt the attached Resolution authorizing the creation of the Capital Improvement Project Oak Avenue Storm Drain Repair R18-82 and authorizing the transfer of \$65,000 from Gas Tax revenue to R18-82.
[Staff Report](#)
8. PUBLIC HEARINGS
- 8.1. None
9. NEW BUSINESS
- 9.1. Introduction and first reading of an ordinance adding Chapter 10.36 to the St. Helena Municipal Code to provide for designated truck traffic routes within the City of St. Helena 243 - 255
- CEQA Determination: This project is deemed exempt from the requirements of CEQA under Section 15301, Existing Facilities; and Section 15061(b) (3), which identifies that a rulemaking activity which does not have the potential for causing a significant effect on the environment is therefore, exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant impact on the environment.
 Prepared By: Erica Ahmann Smithies, Public Works Director and City Engineer, William Imboden, Chief of Police
 Recommendation:
 Staff recommends that the City Council conduct the first reading of the ordinance, introduce by title only and waive further reading.
[Staff Report](#)
- 9.2. Council Discussion and Direction on Traffic Safety Enhancements on Highway 29 and Pratt Avenue Vicinity 257 - 259
- CEQA Determination: Not a CEQA project
 Prepared By: Allison Mattioli, Management Analyst
 Recommendation:
 Staff is seeking Council feedback and direction in regards to traffic safety enhancements on Highway 29 and Pratt Avenue vicinity.
[Staff Report](#)
- 9.3. Information update on Elm Tunnel by Caltrans Representative 261 - 270
[Presentation](#)
- 9.4. Consideration and Proposed Approval of Resolution Authorizing Creation of a Community Engagement Strategy for the Planned Civic 271 - 277

Needs Assessment

CEQA Determination: Not a CEQA project

Prepared By: Mark T. Prestwich, City Manager

Recommendation:

It is recommended the City Council authorize and adopt Resolution creating the St. Helena Asset Planning Engagement (SHAPE) Committee and accompanying public engagement process to seek citizen feedback on the forthcoming Civic Facilities Needs Assessment activities.

[Staff Report](#)

[OUTREACH](#)

- 9.5. City of St. Helena Municipal Service Review and Sphere of Influence Update 279 - 286

CEQA Determination: Not a CEQA project

Prepared By: Noah Housh, Planning & Community Improvement Director

Recommendation:

Authorize staff to communicate preliminary feedback on the draft MSR/SOI to NAPA LAFCo and request a postponement of the planned October 2, 2017 LAFCO discussion of the St. Helena MSR/SOI until an accurate document is presented for review.

[Staff Report](#)

- 9.6. City Council requested standing items:
- a. City owned Adams Street property update: Receive oral report by staff
 - b. Waste Water Treatment Plant Upgrade Status: Receive oral report by staff

10. ITEMS LIKELY TO BE PLACED ON THE NEXT OR FUTURE MEETING AGENDA:

- 10.1. October:
- 1. 10/10 Measure A Amendment – Finance
 - 2. 10/10 Housing allocation – Planning
 - 3. 10/10 2nd reading of proposed truck ordinance - PW
 - 4. 10/10 Las Alcobas Pedestrian Bridge Appeal - Planning
 - 5. Vineland Vista Mobile Home Park Fire Agreement - PW
 - 6. M Group Contract amendment - Planning
 - 7. 10/24 or 11/14 Little League Contract Amendment - Recreation
 - 8. 10/24 ADA Policy - HR
 - 9. 10/10 Proclamation for National Friends of Libraries Week
 - 10. 10/10 NOC for emergency WW Plan work - PW
 - 11. 1st Qtr Finance Review - Finance
 - 12. AB1600 Report – Finance
 - 13. Facilities Condition Assessment - PW
 - 14. 10/24 Library Broadband - Library
 - 15. 10/24 Napa Valley Marathon Encroachment fee waiver – PW

- 16. 10/24 Adopt ADA Policy - HR
- 17. 10/24 Finalize strategic objectives - Admin
- 18. CDBG Closeout - Finance
- 19. 10/24 WTP Truck Purchase - PW
- November:
- 20. 11/28 Adoption of utility rates (PH Notice) - Finance
- 21. 11/28 PH - Consideration and proposed approval of a resolution adopting Recreation fees and charges – Recreation
- 22. Wildan Contract Amendment - PW

11. ADJOURNMENT

The next Regular City Council meeting is scheduled for October 10, 2017, at 6:00 p.m. in the Vintage Hall Board Room located at 465 Main Street.

This agenda was posted at City Hall, 1480 Main Street, and at Vintage Hall, 465 Main Street, St. Helena, California on September 22, 2017.



Cindy Tzaferopoulos, City Clerk

In Compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please call the City Clerk's Office (707) 967-2792. Notification 72 hours prior to the meeting as required by Section 202 of the Americans with Disabilities Act will enable the City to make reasonable arrangements to ensure accessibility to this meeting

CHALLENGING DECISIONS OF CITY ENTITIES

The time limit within which to commence any lawsuit or legal challenge to any quasi-adjudicative decision made by the City of St. Helena is governed by Section 1094.6 of the Code of Civil Procedure, unless a shorter limitation period is specified by any other provision, including without limitation Government Code section 65009 applicable to many land use and zoning decisions, Government Code section 66499.37 applicable to the Subdivision Map Act, and Public Resources Code section 21167 applicable to the California Environmental Quality Act (CEQA). Under Section 1094.6, any lawsuit or legal challenge to any quasi-adjudicative decision made by the City must be filed no later than the 90th day following the date on which such decision becomes final. Any lawsuit or legal challenge, which is not filed within that 90-day period, will be barred. Government Code section 65009 and 66499.37, and Public Resources Code section 21167, impose shorter limitations periods and requirements, including timely service in addition to filing.

If a person wishes to challenge the above actions in court, they may be limited to raising only those issues they or someone else raised at the meeting described in this notice, or in written correspondence delivered to the City of St. Helena, at or prior to the meeting. In addition, judicial challenge may be limited or barred where the interested party has not sought and exhausted all available administrative remedies.

SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE

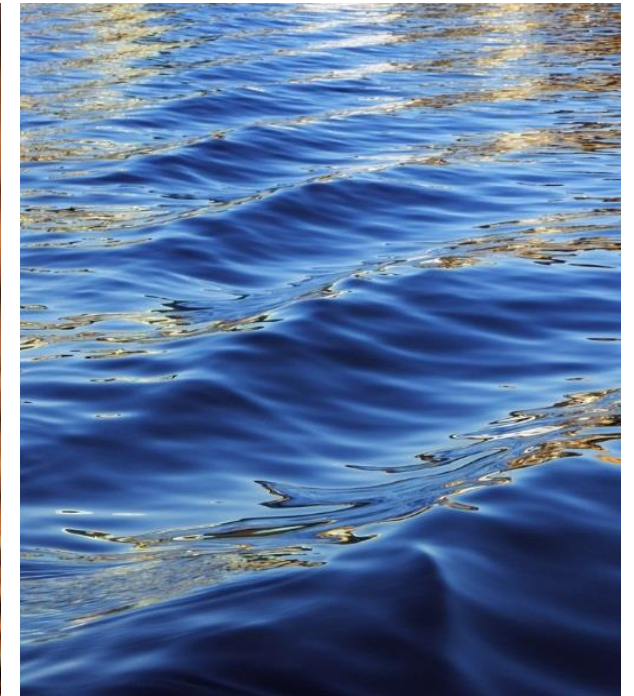
AGENDA

Any supplemental writings or documents distributed to a majority of the City Council regarding any item on this Agenda, after the posting of the Agenda, will be available for public review in the City Clerk's Office located at 1480 Main Street, St. Helena, California, during normal business hours. In addition, such writings or documents will be made available on the City's web site at <https://sthelena.civicweb.net> and will be available for public review at the respective meeting.



City of St. Helena Water Update

By: Jennifer Tuell
Senior HR/IT Analyst



Department of Public Works

September 26, 2017 City Council Meeting



Rebate Program Statistics

- Mailed bilingual flyer to all customers
- 37 applications received and 35 rebates issued
- Paid \$13,050 in rebates
- Customers spent over \$40,000 on improvements
- Currently accepting applications
- Removed nearly 11,000 sq. ft. of turf grass on 11 properties
- Replaced
 - 9 clothes washers
 - 3 recirculating hot water pumps
 - 13 toilets
 - 3 WBIC



Rebate Programs



Before



After



Rebate Programs



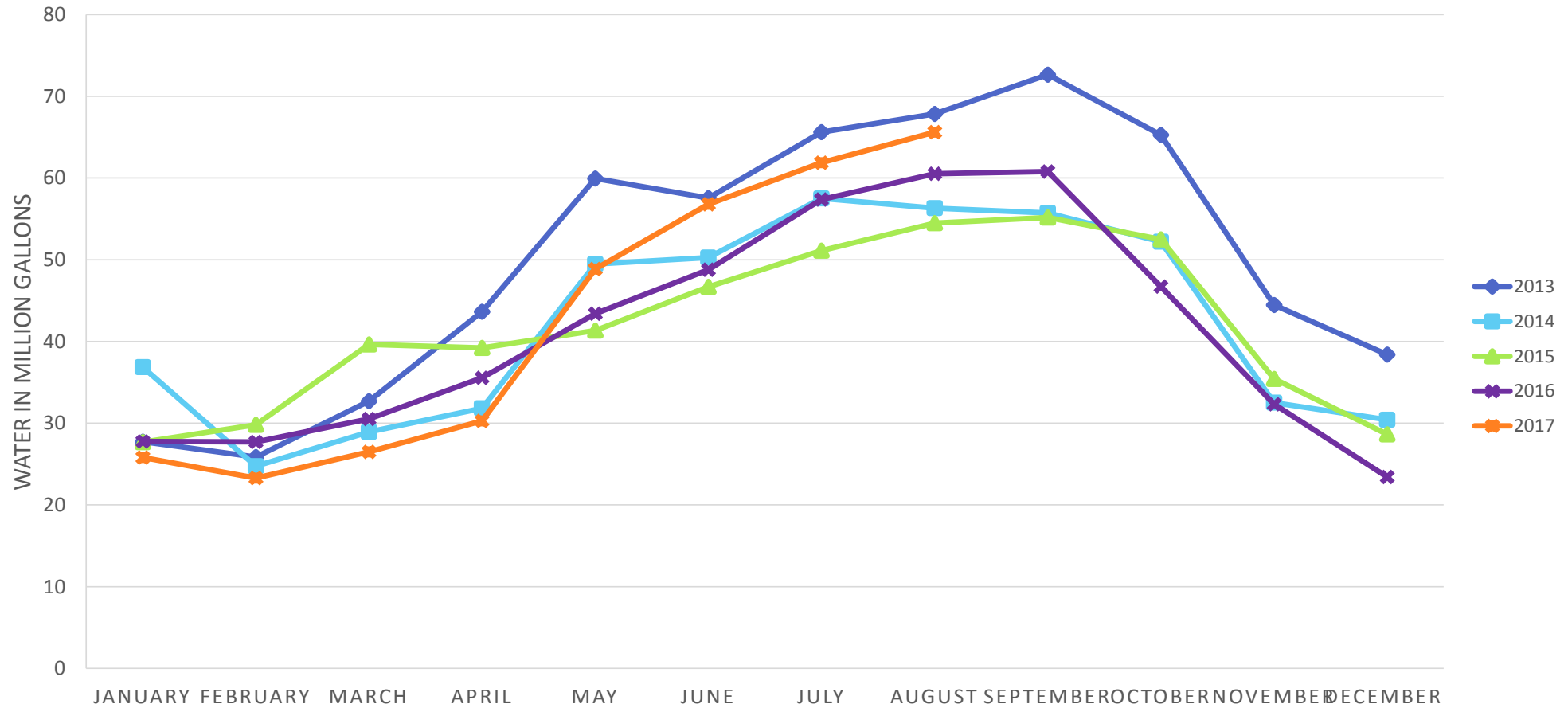
Before



After



Water Production 2013-2017





Water Reduction Compared to 2013

	2015	2016	2017
January		0.07%	-6.98%
February		7.18%	-9.93%
March		-6.67%	-18.99%
April		-18.51%	-30.59%
May		-27.60%	-18.51%
June	-18.91%	-15.26%	-1.35%
July	-22.11%	-12.57%	-5.70%
August	-19.66%	-10.78%	-3.28%
September	-24.05%	-16.31%	
October	-19.59%	-28.43%	
November	-20.37%	-27.33%	
December	-25.37%	-39.02%	
TOTAL	-16.62%	-17.75%	



Water Conservation and Education





2017 ST. HELENA HARVEST FESTIVAL

Fun Run 8 am Pet Parade 9:30 Harvest Fest 11-4

Art Vendors!
Food and Wine!
Kids Carnival!
Live Music!

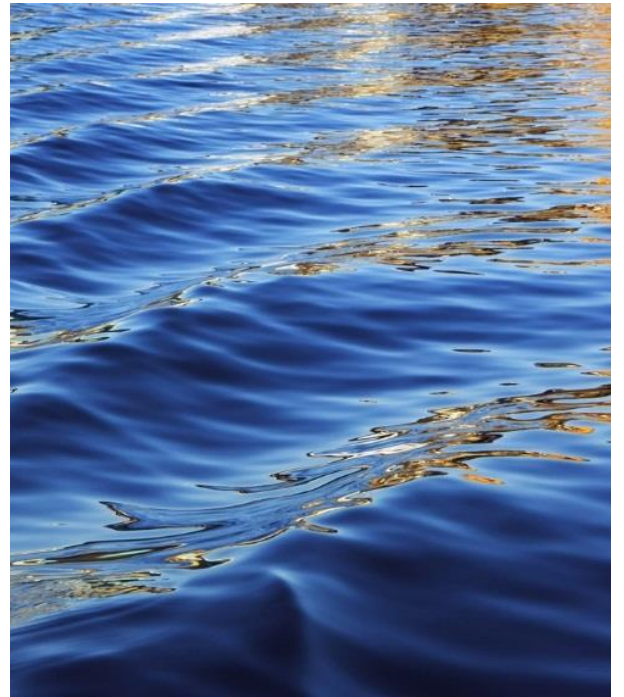
Saturday 10.21.2017 @ Oak & Adams
www.cityofsthelena.org/harvestfestival





Questions?

www.cityofstheleena.org/water





Report to the City Council
Council Meeting of September 26, 2017

Agenda Section: Consent

Subject: Consideration and proposed approval of a Resolution approving a Memorandum of Understanding (MOU) between the St. Helena School District and the St. Helena Recreation Department to provide services for an After-School Enrichment Program for the St. Helena Primary and St. Helena Elementary Schools for the period August 1, 2017 – June 30, 2018.

CEQA Determination: Not a CEQA project

Prepared By: Andre Pichly, Recreation Director

Reviewed By: Mark Prestwich, City Manager

Approved By: Mark Prestwich, City Manager

BACKGROUND

The After-School Enrichment Program provides a warm, caring environment beyond school hours where children have the opportunity to play with school friends. The After-School Enrichment Program offers exciting activities which stimulate children to be healthier and happier which include sports, art activities, drama, dance, and computer exploration. The After-School Enrichment Program has been operating at the St. Helena Elementary for the past two years. The Recreation department, school administrators, and teachers want to continue working together to ensure their After-School Enrichment Program supplement the learning taking place during the school year and utilizing age-appropriate materials and equipment for students.

DISCUSSION

The St. Helena Unified School District, hereinafter referred to as SHUSD, and the St. Helena Recreation Department, hereinafter referred to as SHRD, will continue to work cooperatively to build an asset-based approach to the delivery of services to children, youth and families. SHUSD and SHRD will implement effective enrichment

programming for positive youth development as part of the After-School Enrichment program at St. Helena Elementary and St. Helena Primary.

Students in the After-School Enrichment Program will participate in:

Arts and Music

Drama and Dance

Technology and Robotics

Science experiments

Nutrition and fitness activities

DESCRIPTION OF PROGRAM SERVICES

A. The City of St. Helena agrees to:

1. Provide program coordination which includes;
 - o Negotiating agreements with outside agencies
 - o Organizing student registration in conjunction with school site administrators
 - o Developing schedules for all program aspects

B. SHUSD agrees to:

1. Assist and facilitate advertising the program to students and families.
2. Provide payment to the City of St. Helena based on invoices received from outside vendors that provide enrichment opportunities, within the above parameters, not to exceed \$12,000.
3. Provide payment to the City of St. Helena for administration of the services under this agreement, totaling \$6,000.

FISCAL IMPACT

The City of St. Helena will be compensated a total of \$18,000 for all services described in this agreement.

RECOMMENDED ACTION

Staff recommends the City Council of the City of St. Helena adopt the attached MOU.

ATTACHMENTS

[City of St. Helena Enrichment Agreement](#)

[After-School Enrichment MOU Reso](#)



*Board - approved
6/22/17
upload to PO*

**Memorandum of Understanding
Between
St. Helena Unified School District
and
The City of St. Helena**

The purpose of this MOU is to outline the agreement between the St. Helena Unified School District (SHUSD) and the City of St. Helena as it relates to the payment for the operation of after school enrichment programs for St. Helena Primary School and St. Helena Elementary School for the period August 1, 2017 – June 30, 2018.

Compensation to the City of St. Helena for all services as described by this agreement shall be \$18,000.

The City of St. Helena agrees to:

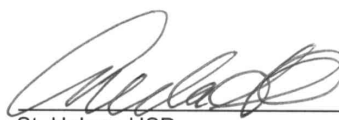
- Provide program coordination which includes;
 - Negotiating agreements with outside agencies
 - Organizing student registration in conjunction with school site administrators
 - Developing schedules for all program aspects

SHUSD agrees to:

- Assist and facilitate advertising the program to students and families.
- Provide payment to the City of St. Helena based on invoices received from outside vendors that provide enrichment opportunities, within the above parameters, not to exceed \$12,000.
- Provide payment to the City of St. Helena for administration of the services under this agreement, totaling \$6,000.

City of St. Helena

Date



St. Helena USD

5/31/17

Date

CITY OF ST. HELENA

RESOLUTION NO. 2017-__

**Approving a MOU between the St. Helena School District
and the St. Helena Recreation Department to provide services
for an After-School Enrichment Program
for the St. Helena Primary and St. Helena Elementary Schools**

RECITALS

- A. There is a need in St. Helena community for an After-School Enrichment Program.
- B. The After-School Enrichment Program will provide a warm, caring environment beyond school hours where children have the opportunity to play and socialize with school friends.
- C. The After-School Enrichment Program will also offer exciting activities which stimulate children to be healthier and happier and includes sports, art activities, drama, dance, and computer exploration.
- D. The After-School Enrichment Program has been operating at the St. Helena Elementary for the previous two years. The Recreation department, school administrators, and teachers work together to ensure the After-School Enrichment Program supplements the learning taking place during the school year and utilizing age-appropriate materials and equipment for students.

RESOLUTION

NOW, THEREFORE, the City Council of the City of St. Helena resolves as follows:

- 1. The City Council approves the MOU between the St. Helena School District and the St. Helena Recreation Department to provide services for an After-School Enrichment Program for the St. Helena Primary and St. Helena Elementary Schools for the period of August 1, 2017 through June 30, 2018; and
- 2. The City Council authorizes the City Manager to execute the MOU on behalf of the City.

Approved at a Regular Meeting of the St. Helena City Council on September 26, 2017, by the following vote:

Mayor Galbraith:	_____
Vice Mayor White:	_____
Councilmember Dohring:	_____
Councilmember Ellsworth:	_____
Councilmember Koberstein:	_____

APPROVED:

Alan Galbraith, Mayor

ATTEST:

Cindy Tzaopoulos, City Clerk



Report to the City Council
Council Meeting of September 26, 2017

Agenda Section: Consent

Subject: Consideration and proposed approval of a resolution approving temporary closure of Oak Avenue, Adams Street, and Tainter Street for the October 21, 2017 Hometown Harvest Festival festivities and authorizing possession of open alcoholic beverages on those public streets

CEQA Determination: Categorically Exempt, Section 15323

Prepared By: Andre Pichly, Recreation Director

Reviewed By: Mark Prestwich, City Manager

Approved By: Mark Prestwich, City Manager

BACKGROUND

The Hometown Harvest Festival is an annual event put on by the St. Helena Recreation Department. The event is held on third Saturday, each year on Oak Avenue and open to the community.

DISCUSSION

The St. Helena Recreation Department is hosting the annual Harvest Festival celebration on Oak Ave. on October 21, 2017. The event is approximately from 6:00am to 5:00 pm and will be open to the community of Napa Valley.

Fun Run: (5K Run)

Time: 7:00am – 9:00am

Location: Adams St. (between Oak Ave. and Kearney St.)

Organized by the St Helena Montessori School

Pet Parade

Time: 9:00am – 12:00pm

Location: Oak Ave. (between Pine St. and Adams St) & Adams St. (between Oak Ave. and Kearney St.)

Judges: Located on the corner of Oak Ave. and Adams St.

Organized by Parks & Recreation Commissioners; Tracy Smith and Donna Hinds

Harvest Festival

Time: 11:00am – 4:00pm

Location: Oak Ave. (between Adams St and Spring St.)

Includes craft vendors, non-profits food booths, wine tasting, kid zone, and music.

Organized by the St. Helena Recreation Department

Non-Profits selling alcohol beverages:

St. Helena Kiwanis Foundation

St. Helena Rotary Club

St. Helena Oddfellows

FISCAL IMPACT

None

RECOMMENDED ACTION

Staff recommends the City Council of the City of St. Helena adopt the attached resolution.

ATTACHMENTS

[Harvest 2017- RESO Harvest Festival](#)

CITY OF ST. HELENA

RESOLUTION NO. 2017 - ____

**APPROVING TEMPORARY CLOSURE OF OAK AVENUE, ADAMS STREET
AND TAINTER STREET FOR THE OCTOBER 21, 2017 HOMETOWN
HARVEST FESTIVAL FESTIVITIES AND AUTHORIZING POSSESSION OF
OPEN ALCHOHOLIC BEVERAGES ON THOSE PUBLIC STREETS**

RECITALS

- A. The St. Helena Recreation Department has requested temporary closure of Oak Avenue between Spring St. and Pine St. Adams Street between Oak Ave. and Kearney St., and Tainter Street between Oak Ave. and Kearney St., for the October 21, 2017 Hometown Harvest Festival;
- B. Closure of City streets in the area will provide space for Harvest Festival activities and are situated adjacent to where event will take place;
- C. St. Helena Kiwanis Foundation, St. Helena Oddfellows and St. Helena Rotary Club have requested authorization to sell beer and wine at the event. St. Helena Municipal Code Section 9.04.010 authorizes the Council, by permit, to allow possession of open alcoholic beverages on public streets or any private or public off-street parking lot;
- D. In consideration for the benefits of this event to the community of St. Helena, the City Council desires to waive the Encroachment Permit fee for the event but does not waive the permit requirements and the General Conditions applicable to said permit;
- E. Section 21101(e) of the California Vehicle Code provides the local authorities may, by resolutions, temporarily close a portion of any street for celebrations, parades, local special events, and other purposes when, in the opinion of local authorities having jurisdiction or a public officer of employee that the local authority designated by resolution, the closing is necessary for the safety and protection of persons who are to use that portion of the street during the temporary closing;

RESOLUTION

NOW, THEREFORE, the City Council of the City of St. Helena resolves as follows:

1. The City Council finds that the benefits derived from the temporary closing of portions of City streets for the Hometown Harvest Festival outweigh the anticipated inconvenience to the neighborhood and citizens generally, and authorize closure of:
 - Oak Avenue between Spring Street and Pine Street on October 21, 2017 from 6:00 a.m. to 12:00 p.m.
 - Oak Avenue between Spring Street and Adams Street on October 21, 2017 from 6:00 a.m. to 5:00 p.m.
 - Adams Street between Oak Avenue and Kearney Street on October 21, 2017 from 6:00 a.m. to 5:00 p.m.
 - Tainter Street between Oak Avenue and Kearney Street on October 21, 2017 from 6:00 a.m. to 5:00 p.m.
2. The possession of open container of beer and wine is permitted on public streets and parking lots encompassed by this event.
3. Temporarily closing a portion of the subject streets is necessary for the safety and protection of persons who are to use that portion of the street during the temporary closing.
4. The City insurance policy covers this event at no additional cost to the City.
5. The City Manager is directed to provide reasonable levels of City staff support to accomplish closure of streets and related activities.

Approved at a Regular Meeting if the St. Helena City Council on September 26, 2017 by the following vote:

Mayor Galbraith:	_____
Vice Mayor White:	_____
Councilmember Dohring:	_____
Councilmember Ellsworth:	_____
Councilmember Koberstein:	_____

APPROVED:

ATTEST:

Alan Galbraith, Mayor

Cindy Tzaopoulos, City Clerk



Report to the City Council
Council Meeting of September 26, 2017

Agenda Section: Consent

Subject: Consideration and proposed adoption of a resolution approving the Road Maintenance and Rehabilitation Account Project List (FY 2017/18)

CEQA Determination: Exempt from the requirements of CEQA pursuant to Section 15301, Class 1, which exempts the operation, leasing, or minor alteration of existing facilities

Prepared By: Erica Ahmann Smithies, Public Works Director and City Engineer

Reviewed By:

Approved By: Mark Prestwich, City Manager

BACKGROUND

On April 28, 2017, the Governor signed Senate Bill (SB) 1, the Road Repair and Accountability Act of 2017. SB 1 increases per gallon fuel excise taxes; increases diesel fuel sales taxes and vehicle registration fees; and provides for inflationary adjustments to tax rates in future years. Beginning November 1, 2017, the State Controller (Controller) will deposit various portions of this new funding into the newly created Road Maintenance and Rehabilitation Account (RMRA).

A percentage of the new RMRA funding will be apportioned by formula to eligible cities and counties pursuant to Streets and Highways Code Section 2032(h) for basic road maintenance, rehabilitation, and critical safety projects on the local streets and roads system. The adopted FY17/18 Operations Budget included an anticipated RMRA revenue to the City for FY17/18 in the amount of \$40,893 and future years will grow to approximately \$116,020 annually. The difference is that the revenue collection for FY17/18 does not start until November 1, 2017 and will start being deposited in mid-January 2018. The recommended action will ensure the City receives these revenues as anticipated.

DISCUSSION

Prior to receiving an apportionment of RMRA funds in FY 17/18, the City is required to submit to the California Transportation Commission a list of projects proposed to be funded by October 16, 2017. The list of projects proposed to be funded with these funds shall include:

- A description of the project;
- The location of each proposed project;
- A proposed schedule for the project's completion; and
- The estimated useful life of the improvement.

Staff recommends that the limited FY 17/18 RMRA funds be allocated to the following projects:

- Pavement Restoration Project (R18-79): City staff did not identify a specific street for the Pavement Restoration Project (R18-79) prior to adoption, but is now recommending an overlay on Railroad Avenue from Fulton Lane to Hunt Avenue. Railroad was originally identified in 2015 for treatment, but due to lack funding and delays to the curb ramp upgrade project it was dropped. Now with the design of the curb ramps underway with local grant funds, it is possible that Railroad Avenue can be designed and paved during the same timeframe.
- Oak Avenue Storm Drain Repair (R18-82): The Oak Avenue Storm Drain Repair (R18-82) came up very recently and is eligible for RMRA funding. The storm drain and street repairs on Oak Avenue between the vicinity of Spring Street to Mitchell Drive need to take place immediately and the RMRA funds can offset additional unknown costs.

The adopted project list will not limit the flexibility of the City to fund projects in accordance with local needs and priorities so long as the projects are consistent with SB 1 and adopted by City Council.

Given the short time frame for this year and the amount of funds allocated to the City, street projects chosen were based on the ability to complete this year. In addition, a citywide inspection and assessment of the street pavement system is currently underway. Staff intends on presenting to Council an update on the pavement assessment in early 2018. It will be the intent to include a more comprehensive list of proposed FY 18/19 street maintenance projects with that presentation. In the meantime, staff recommends that Council approve the RMRA Project List and respective streets noted above for FY 17/18 in order to meet the October 16 deadline.

FISCAL IMPACT

On August 8, 2017, City Council adopted the 2017-2022 Capital Improvement Plan and 2017/2018 Annual Budget which includes the Pavement Restoration Project (R18-79) in the amount of \$300,000. On September 26, 2017, City Council adopted a resolution to create the Oak Avenue Storm Drain Repair (R18-82) project and transfer gas tax funds to the project budget.

The adopted FY17/18 Capital Improvements Plan Budget includes \$295,000 in General Funds for City Streets. In order to be compliant with receiving the RMRA funds, the City is required to provide an annual general fund maintenance of effort (MOE) towards streets in the amount of \$314,571. The MOE amount is based on the City's average general fund spending effort in fiscal years 08/09, 09/10, and 10/11. Per the annual reporting guidelines, the City will need to either increase the general fund limit now or increase it in FY18/19 by the shortfall of \$19,571. Staff recommends rolling the General Fund increase to FY18/19 since there will be a required increase of general funds to the capital street projects to meet the countywide Measure T MOE requirements. The City of St. Helena's annual Measure T MOE requirement is \$379,189 and will surpass the RMRA annual MOE and FY17/18 shortfall.

RECOMMENDED ACTION

Adopt a resolution approving the Road Maintenance and Rehabilitation Account Project List for FY 2017/18.

ATTACHMENTS

[Attch1 Final LSR Program Reporting Guidelines](#)

[Attch2 RMRA MOE](#)

[Attch3 2017-18 LSR Project List](#)

[Attch4 RMRA Project List RESO](#)

**THE ROAD REPAIR AND
ACCOUNTABILITY ACT OF 2017**

**2017 LOCAL STREETS AND ROADS
FUNDING**

ANNUAL REPORTING GUIDELINES

August 2017

California Transportation Commission



2017 LOCAL STREETS AND ROADS FUNDING ANNUAL REPORTING GUIDELINES

Adopted by the California Transportation Commission on
August 16, 2017

Pursuant to California Streets and Highways Code Section 2034

Commissioners

Bob Alvarado – Chair
Fran Inman – Vice Chair
Yvonne B. Burke
Lucetta Dunn
James Earp
James C. Ghielmetti
Carl Guardino
Christine Kehoe
James Madaffer
Joseph Tavaglione

Senator Jim Beall – Ex Officio
Assembly Member Jim Frazier– Ex Officio

Susan Bransen – Executive Director

**CALIFORNIA TRANSPORTATION COMMISSION
THE ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017**

ANNUAL REPORTING GUIDELINES FOR LOCAL STREETS AND ROADS FUNDING

TABLE OF CONTENTS

I. Introduction	1
1. Background and Purpose of Reporting Guidelines.....	1
2. Program Objectives and Statutory Requirements.....	1
3. Program Roles and Responsibilities	3
4. Program Schedule	4
II. Funding.....	4
5. Source	4
6. Estimation and Disbursement of Funds.....	5
III. Eligibility and Program Priorities	5
7. Eligible Recipients	5
8. Program Priorities and Example Projects	5
IV. Project List Submittal.....	6
9. Content and Format of Project List	6
10. Process and Schedule for Project List Submittal.....	10
11. Commission Submittal of Eligible Entities to the State Controller's Office.....	10
V. Project Expenditure Reporting and Auditing	11
12. Scope of Completed Project Expenditure Report.....	11
13. Process and Schedule for Project Report Submittal.....	13
14. Commission Reporting of Project Information Received.....	13
15. State Controller Expenditure Reporting and Maintenance of Effort Monitoring....	14
16. Workforce Development Requirements and Project Signage.....	16
Appendix A – Local Streets and Roads Project List Form.....	17
Appendix B - Local Streets and Roads Completed Project Expenditure Report Form	19
Appendix C – Local Streets and Roads Program Schedule.....	21

I. Introduction

1. Background and Purpose of Reporting Guidelines

On April 28, 2017 the Governor signed Senate Bill (SB) 1 (Beall, Chapter 5, Statutes of 2017), which is known as the Road Repair and Accountability Act of 2017. To address basic road maintenance, rehabilitation and critical safety needs on both the state highway and local streets and road system, SB 1: increases per gallon fuel excise taxes; increases diesel fuel sales taxes and vehicle registration fees; and provides for inflationary adjustments to tax rates in future years.

Beginning November 1, 2017, the State Controller (Controller) will deposit various portions of this new funding into the newly created Road Maintenance and Rehabilitation Account (RMRA). A percentage of this new RMRA funding will be apportioned by formula to eligible cities and counties pursuant to Streets and Highways Code (SHC) Section 2032(h) for basic road maintenance, rehabilitation, and critical safety projects on the local streets and roads system. For a detailed breakdown of RMRA funding sources and the disbursement of funding please see Sections 5 and 6 of these guidelines.

SB 1 emphasizes the importance of accountability and transparency in the delivery of California's transportation programs. Therefore, in order to be eligible for RMRA funding, statute requires cities and counties to provide basic annual RMRA project reporting to the California Transportation Commission (Commission).

These guidelines describe the general policies and procedures for carrying out the annual RMRA project reporting requirements for cities and counties and other statutory objectives as outlined in Section 2 below. The guidelines were developed in consultation with state, regional, and local government entities and other transportation stakeholders.

The Commission may amend these guidelines after first giving notice of the proposed amendments. In order to provide clear and timely guidance, it is the Commission's policy that a reasonable effort be made to amend the guidelines prior to the due date for project lists or the Commission may extend the deadline for project list submission in order to facilitate compliance with the amended guidelines.

2. Program Objectives and Statutory Requirements

Streets and Highways Code (SHC) Section 2032.5(a) articulates the general intent of the legislation that recipients of RMRA funding be held accountable for the efficient investment of public funds to maintain local streets and roads and are accountable to the people through performance goals that are tracked and reported.

Pursuant to SHC Section 2030(a), the objective of the Local Streets and Roads Program is to address deferred maintenance on the local streets and roads system through the prioritization and delivery of basic road maintenance and rehabilitation projects as well as critical safety projects.

Cities and counties receiving RMRA funds must comply with all relevant federal and state laws, regulations, policies, and procedures. The main requirements for the program are codified in SHC Sections 2034, 2036, 2037, and 2038 and include the following:

California Transportation Commission
 2017 Local Streets and Roads Funding Program
 Annual Reporting Guidelines

August 2017

- Prior to receiving an apportionment of RMRA funds from the Controller in a fiscal year, a city or county must submit to the Commission a list of projects proposed to be funded with these funds. All projects proposed to receive funding must be included in a city or county budget that is adopted by the applicable city council or county board of supervisors at a regular public meeting [SHC 2034(a)(1)].
- The list of projects must include a description and the location of each proposed project, a proposed schedule for the project's completion, and the estimated useful life of the improvement [SHC 2034(a)(1)]. Further guidance regarding the scope, content, and submittal process for project lists prepared by cities and counties is provided in Sections 9-10.
- The project list does not limit the flexibility of an eligible city or county to fund projects in accordance with local needs and priorities so long as the projects are consistent with RMRA priorities as outlined in SHC 2030(b) [SHC 2034(a)(1)].
- The Commission will report to the Controller the cities and counties that have submitted a list of projects as described in SHC 2034(a)(1) and that are therefore eligible to receive an apportionment of RMRA funds for the applicable fiscal year [SHC 2034(a)(2)].
- The Controller, upon receipt of the report from the Commission, shall apportion RMRA funds to eligible cities and counties pursuant to SHC 2032(h) [SHC 2034(a)(2)].
- For each fiscal year in which RMRA funds are received and expended, cities and counties must submit documentation to the Commission that includes a description and location of each completed project, the amount of funds expended on the project, the completion date, and the estimated useful life of the improvement [SHC 2034(b)]. Further guidance regarding the scope, content, and submittal process for program expenditure reports is provided in Sections 12-13.
- A city or county receiving an apportionment of RMRA funds is required to sustain a maintenance of effort (MOE) by spending at least the annual average of its general fund expenditures during the 2009–10, 2010–11, and 2011–12 fiscal years for street, road, and highway purposes from the city's or county's general fund [SHC 2036]. Monitoring and enforcement of the maintenance of effort requirement for RMRA funds will be carried out by the Controller and is addressed in more detail in Section 15.
- A city or county may spend its apportionment of RMRA funds on transportation priorities other than priorities outlined in SHC 2030(b) if the city or county's average Pavement Condition Index (PCI) meets or exceeds 80 [SHC 2037].
- By July 1, 2023, cities and counties receiving RMRA funds must follow guidelines developed by the California Workforce Development Board (Board) that address participation and investment in, or partnership with, new or existing pre-apprenticeship training programs [SHC 2038]. Further information regarding the forthcoming Board Guidelines and future Board-sponsored grant opportunities is available in Section 16.

3. Program Roles and Responsibilities

Below is a general outline of the roles and responsibilities of recipient cities/counties, the Commission, the Controller, and the California Workforce Development Board, in carrying out the program's statutory requirements, as well as activities the Commission will undertake to meet the legislative intent of SB 1:

Recipient Cities/Counties:

- Develop and submit a list of projects to the Commission each fiscal year.
- Develop and submit a project expenditure report to the Commission each fiscal year.
- Comply with all requirements including reporting requirements for RMRA funding.

Commission:

- Provide technical assistance to cities and counties in the preparation of project lists and reports.
- Receive project lists from cities and counties each fiscal year.
- Provide a comprehensive list to the Controller each fiscal year of cities and counties eligible to receive RMRA apportionments.
- Receive program expenditure reports from cities and counties each fiscal year and provide aggregated statewide information regarding use of RMRA funds to the Legislature and the public (e.g. the Commission's Annual Report to the Legislature and a SB 1 Accountability Website).

Controller:

- Receive list of cities and counties eligible for RMRA apportionments each fiscal year from the Commission.
- Apportion RMRA funds to cities and counties.
- Oversee Maintenance of Effort and other requirements for RMRA funds including reporting required pursuant to SHC 2151.

California Workforce Development Board:

- Pursuant to SHC 2038, establish a pre-apprenticeship development and training grant program beginning January 1, 2019 that local public agencies receiving RMRA funds are eligible to apply for or partner with other entities to apply for.
- Pursuant to SHC 2038, develop guidelines for public agencies receiving RMRA funds to participate, invest in, or partner with, new or existing pre-apprenticeship training programs. Local public agencies receiving RMRA funds must follow the guidelines by no later than July 1, 2023.

4. Program Schedule

The following schedule lists the major milestones for the development of the 2017 Local Streets and Roads Funding Annual Reporting Guidelines, initial submittal of project lists, and transmittal of eligibility list to the Controller. See Appendix C for a more detailed program schedule.

Draft Guidelines Circulated for Public Review	June 19 – July 10, 2017
Commission Adoption of Guidelines	August 16-17, 2017
Technical Assistance and Outreach to Cities/Counties	August 18 – October 16, 2017
Project Lists due to Commission	October 16 , 2017
Commission Adopts List of Eligible Cities and Counties	December 6-7 , 2017
Commission Submits List to Controller	December 6-7, 2017
Controller FY 17-18 Apportionments Begin	Mid-January 2018

II. Funding

5. Source

The State of California imposes per-gallon excise taxes on gasoline and diesel fuel, sales taxes on diesel fuel, and registration taxes on motor vehicles and dedicates these revenues to transportation purposes. Portions of these revenues flow to cities and counties through the Highway Users Tax Account (HUTA) and the newly established RMRA created by SB 1.

The Local Streets and Roads Funding Program administered by the Commission in partnership with the Controller is supported by RMRA funding which includes portions of revenues pursuant to SHC 2031 from the following sources:

- An additional 12 cent per gallon increase to the gasoline excise tax effective November 1, 2017.
- An additional 20 cent per gallon increase to the diesel fuel excise tax effective November 1, 2017.
- An additional vehicle registration tax called the “Transportation Improvement Fee” with rates based on the value of the motor vehicle effective January 1, 2018.
- An additional \$100 vehicle registration tax on zero emissions (ZEV) vehicles of model year 2020 or later effective July 1, 2020.
- Annual rate increases to these taxes beginning on July 1, 2020 (July 1, 2021 for the ZEV fee) and every July 1st thereafter equal to the change in the California Consumer Price Index (CPI).

SHC 2032(h)(2) specifies that 50 percent of the balance of revenues deposited into the RMRA, after certain funding is set aside for various programs, will be continuously appropriated for apportionment to cities and counties by the Controller pursuant to the formula in SHC Section 2103(a)(3)(C)(i) and (ii).

6. Estimation and Disbursement of Funds

While neither, the Commission nor the State Controller's Office prepare formal estimates of RMRA funds, the Department of Finance (DOF) estimates the total amount of funding that will be deposited into the RMRA annually. The California State Association of Counties and the League of California Cities use this information from DOF to develop city and county level estimates of RMRA funds which are available here:

California State Association of Counties

<http://www.counties.org/sb-1-road-repair-and-accountability-act-2017>

League of California Cities

<http://www.californiacityfinance.com/>

Each fiscal year, upon receipt of a list of cities and counties that are eligible to receive an apportionment of RMRA funds pursuant to SHC 2032(h)(2) from the Commission, the Controller is required to apportion RMRA funds to eligible cities and counties consistent with the formula outlined in SHC Section 2103(a)(3)(C)(i) and (ii). It is expected that the Controller will continuously apportion RMRA funds on a monthly basis to eligible cities and counties using a process and system similar to that of HUTA apportionments. RMRA funding is continuously apportioned and is not provided on a reimbursement basis.

The Commission does not approve project lists and provide authorization to proceed with RMRA funded projects. The Commission receives project lists, determines they are complete and meet basic statutory requirements outlined in SHC 2034 and then approves and submits a statewide list to the Controller of cities and counties that are eligible to begin receiving monthly RMRA funding apportionments.

III. Eligibility and Program Priorities

7. Eligible Recipients

Eligible recipients of RMRA funding apportionments include cities and counties that have prepared and submitted a project list to the Commission pursuant to SHC Section 2034(a)(1) and that have been included in a list of eligible entities submitted by the Commission to the Controller pursuant to SHC Section 2034(a)(2).

Recipients of RMRA apportionments must comply with all relevant federal and state laws, regulations, policies, and procedures.

8. Program Priorities and Example Projects

Pursuant to SHC Section 2030(a), RMRA funds made available for the Local Streets and Roads Funding Program shall be prioritized for expenditure on basic road maintenance and rehabilitation projects, and on critical safety projects.

SHC Section 2030(b)(1) provides a number of example projects and uses for RMRA funding that include, but are not limited to, the following:

- Road Maintenance and Rehabilitation
- Safety Projects

- Railroad Grade Separations
- Complete Streets Components (including active transportation purposes, pedestrian and bicycle safety projects, transit facilities, and drainage and stormwater capture projects in conjunction with any other allowable project)
- Traffic Control Devices

SHC Section 2030(b)(2) states that funds made available by the program may also be used to satisfy a match requirement in order to obtain state or federal funds for projects authorized by this subdivision.

SHC Section 2030(c)-(f) specifies additional project elements that will be incorporated into RMRA-funded projects by cities and counties to the extent possible and cost effective, and where feasible (as deemed by cities and counties). These elements are:

- Technologies and material recycling techniques that lower greenhouse gas emissions and reduce the cost of maintaining local streets and roads through material choice and construction method.
- Systems and components in transportation infrastructure that recognize and accommodate technologies including but not limited to ZEV fueling or charging and infrastructure-vehicles communications for transitional or fully autonomous vehicles.
- Project features to better adapt the transportation asset to withstand the negative effects of climate change and promote resiliency to impacts such as fires, floods, and sea level rise (where appropriate given a project's scope and risk level for asset damage due to climate change).
- Complete Streets Elements (such as project features that improve the quality of bicycle and pedestrian facilities and that improve safety for all users of transportation facilities) are expected to be incorporated into RMRA funded projects to the extent (as deemed by cities and counties) beneficial, cost-effective, and practicable in the context of facility type, right-of-way, project scope, and quality of nearby facilities.

Pursuant to SHC Section 2037, a city or county may spend its apportionment of RMRA funds on transportation priorities other than those outlined in SHC Section 2030 if the city's or county's average Pavement Condition Index (PCI) meets or exceeds 80.

IV. Project List Submittal

9. Content and Format of Project List

Pursuant to SHC Section 2034(a)(1), prior to receiving an apportionment of RMRA funds from the State Controller in a fiscal year, a city or county must submit to the Commission a list of projects proposed to be funded with these funds pursuant to an adopted city or county budget, which may include pertinent budget amendments.

Listed below are the specific statutory criteria for the content of the project list along with additional guidance provided to help ensure a consistent statewide format and to facilitate accountability and transparency within the Local Streets and Roads Program.

a.) Included in an Adopted Budget

All proposed projects must be included in a city or county budget that is adopted by the applicable city council or county board of supervisors at a regular public meeting.

To ensure transparency and to meet the intent of SHC Section 2034(a)(1) "included in a city or county budget" can mean either of the following:

- a.) A specific list of projects proposed for RMRA funding adopted as part of the city/county's regular operating or capital improvement budget, at a regular public meeting; or
- b.) A specific list of projects proposed for RMRA funding amended into the city/county's regular operating or capital improvement budget, at a regular public meeting.

Documentation of Inclusion in an Adopted Budget

A city or county must provide a public record which illustrates that projects proposed for RMRA funding through the Local Streets and Roads Program have been included in an adopted city or county operating budget. Examples of an acceptable public record include:

- a.) An excerpt from the city/county's regular operating or capital improvement budget including the relevant list of projects and an adopting resolution;
- b.) An excerpt from the city/county's regular operating or capital improvement budget including the relevant list of projects and meeting minutes documenting approval at a regular public meeting.
- c.) An excerpt from the city/county's amended operating or capital improvement budget including the relevant list of projects, or the staff report specifying the projects to be included, as well as an adopting resolution or meeting minutes documenting approval at a regular public meeting.

Submittal of electronic copies of the relevant excerpts from an operating budget (or amendment) and support documentation (i.e. resolution or minutes) is encouraged. Support documentation requirements are further discussed in Appendix A.

b.) List of Projects – Content

Pursuant to SHC 2034(a)(1), the project list must include a description and the location of each proposed project, a proposed schedule for each project's completion, and the estimated useful life of the improvement. The project list is intended to cover, at a minimum, the applicable fiscal year. Cities and counties may include project information for future fiscal years but are expected to update the project list as needed every fiscal year prior to submittal to the Commission.

Development and Content

The Commission recognizes the inherent diversity of road maintenance and rehabilitation needs among the approximately 540 jurisdictions across the state that may utilize Local Streets and Roads Program funding.

Given the emphasis SB 1 places on accountability and transparency in delivering California's transportation programs, cities and counties are encouraged to clearly articulate how these funds are being utilized through the development of a robust project list.

To promote statewide consistency in the content and format of project information submitted to the Commission, and to facilitate transparency within the Local Streets and Roads Funding Program, the following guidance is provided regarding the key components of the project list. Please note that project lists included in a city or county budget should, at a minimum, include the elements mandated by statute: description, location, schedule for completion and useful life. Cities and counties should include more detailed project information as described below in the project list submitted to the Commission.

For further assistance, Appendix A has been developed to outline project list content and format.

Project Description

The list must include a project description for each proposed project. The city/county is encouraged to provide a brief non-technical description (up to 5 sentences) written so that the main objectives of the project can be clearly and easily understood by the public.

The level of detail provided will vary depending upon the nature of the project; however, it is highly encouraged that the project description contain a minimum level of detail needed for the public to understand what is being done and why it is a critical or high-priority need.

Project Location

The list must include a project location for each proposed project. The city/county is encouraged to provide project location information that, at a minimum, would allow the public to clearly understand where within the community the project is being undertaken. For example, providing specific street names where improvements are being undertaken and specifying project termini when possible are preferable to more general information such as “various” or “south-west side of city/county”. If project-specific geolocation data is available, it is highly encouraged to be included in the project list submitted to the Commission.

Proposed Schedule for Completion

The list must include a completion schedule for each proposed project. The city/county is encouraged to provide a high-level timeline that provides a clear picture to the public of when a project is reasonably expected to be completed. The proposed schedule for completion should clearly articulate if a project will take multiple years to complete.

Estimated Useful Life

The list must include an estimated useful life for each proposed project. The city/county is encouraged to provide information regarding the estimated useful life of the project that is clear, understandable, and based on industry-standards for the project materials and design, where applicable.

Technology, Climate Change, and Complete Streets Considerations

SHC Section 2030(c)-(f) specifies additional project elements that will be incorporated into RMRA-funded projects by cities and counties to the extent possible and cost effective, and where feasible. These elements are:

- Technologies and material recycling techniques that lower greenhouse gas emissions and reduce the cost of maintaining local streets and roads through material choice and construction method.

- Systems and components in transportation infrastructure that recognize and accommodate technologies including but not limited to ZEV fueling or charging and infrastructure-vehicles communications for transitional or fully autonomous vehicles.
- Project features to better adapt the transportation asset to withstand the negative effects of climate change and promote resiliency to impacts such as fires, floods, and sea level rise (where appropriate given a project's scope and risk level for asset damage due to climate change).
- Complete Streets Elements (such as project features that improve the quality of bicycle and pedestrian facilities and that improve safety for all users of transportation facilities) are expected to be incorporated into RMRA funded projects to the extent (as deemed by cities and counties) beneficial, cost-effective, and practicable in the context of facility type, right-of-way, project scope, and quality of nearby facilities.

Cities and counties are encouraged to consider all of the above for implementation, to the extent possible, cost-effective, and feasible, in the design and development of projects for RMRA funding.

To meet the intent of SHC 2032.5(a) as outlined in Section 2 of these Guidelines, in addition to the statutory requirements outlined in Section 10, the standard forms developed by the Commission will allow cities and counties to report on the inclusion of these elements.

Other Statutory Considerations for Project Lists

Pursuant to SHC Section 2034(a)(1), the project list shall not limit the flexibility of an eligible city or county to fund projects in accordance with local needs and priorities, so long as the projects are consistent with SHC Section 2030(b). After submittal of the project list to the Commission, in the event a city or county elects to make changes to the project list pursuant to the statutory provision noted above, formal notification of the Commission is not required. However, standard reporting forms will provide an opportunity for jurisdictions to annually communicate such changes to the Commission as part of the regular reporting process.

Pursuant to SHC Section 2037, a city or county may spend its apportionment of RMRA funds on transportation priorities other than those outlined in SHC 2030(b) if the city or county's average Pavement Condition Index (PCI) meets or exceeds 80. This provision however, does not eliminate the requirement for cities and counties to prepare and submit a list of projects or the requirement to consider technology, climate change, and complete streets elements to the extent possible, cost-effective and feasible, in the design and development of projects for RMRA funding.

In the event a city or county will spend its apportionment of RMRA funds on transportation priorities other than those outlined in Section 8 of these guidelines and pursuant to SHC 2037, cities and counties are encouraged to work with its respective Regional Transportation Planning Agency or Metropolitan Planning Organization to ensure that projects are included in the applicable Regional Transportation Plan.

c.) List of Projects – Standard Format

Please note that project lists included in a city or county budget should, at a minimum, include the elements mandated by statute: description, location, schedule for completion and useful life elements. Cities and counties should include more detailed project information in the project list submitted to the Commission.

To promote statewide consistency of project information submitted to the Commission, a standard project list format is under development and is further explained in Appendix A.

For the initial submittal of project lists in 2017, cities and counties are required to use the standard form available. The form will be provided by the Commission to cities and counties at the earliest opportunity after adoption of the guidelines.

The Commission intends to make available an online platform so that cities and counties can quickly and easily enter project list information and upload support documentation online.

10. Process and Schedule for Project List Submittal

A city or county must submit a project list and support documentation by **October 16, 2017** to the Commission. All materials should be provided electronically to: ctc@dot.ca.gov. In the event a jurisdiction wishes to submit a hard copy please contact the program manager at:

Eric Thronson, Deputy Director
 California Transportation Commission
Eric.Thronson@dot.ca.gov
 (916) 654-7179

11. Commission Submittal of Eligible Entities to the State Controller's Office

Pursuant to SHC Section 2034(a), a city or county must submit a project list to the Commission to be eligible for the receipt of RMRA funds, and the Commission must report to the Controller the jurisdictions that are eligible to receive funding. Upon receipt of project lists and support documentation, Commission staff will review submittals to ensure they are complete. Once a project list submittal has been received and deemed complete by staff, the city or county will be added to a list of jurisdictions eligible to receive RMRA funding for that fiscal year as required by SHC Section 2034(a)(2). All project lists and support documentation submitted by cities and counties will be posted to the Commission's website.

The list of eligible cities and counties will be brought forward for Commission consideration at a regularly scheduled meeting where staff will request Commission direction to transmit the list to the Controller. Upon direction of the Commission, staff will transmit the list to the Controller pursuant to SHC Section 2034(a)(2) and the cities and counties included on the list will be deemed eligible to receive RMRA apportionments for that fiscal year pursuant to SHC Section 2034 (a)(1). Upon receipt of the list from the Commission, the Controller is expected to apportion funds to the cities and counties included on the list pursuant to SHC Sections 2034(a)(2) and 2032(h). In the event a city or county does not provide a complete project list and support documentation for Commission consideration and eligibility designation pursuant to deadlines established by these guidelines, cities and counties are expected to work cooperatively with Commission staff to provide any missing information as soon as possible. Once completed information is provided, Commission action to establish eligibility will be taken at the next earliest opportunity.

V. Project Expenditure Reporting and Auditing

12. Scope of Completed and In-Progress Project Expenditure Report

Pursuant to SHC Section 2034(b), for each fiscal year in which an apportionment of RMRA funds is received and upon expenditure of funds, cities and counties must submit documentation to the Commission pertaining to the expenditure of those funds that includes: a description and location of each completed project, the amount of funds expended on the project, the completion date, and the estimated useful life of the improvement. The project expenditure reporting process will also provide an opportunity for cities and counties to report on the progress and expenditures associated with multi-year projects that are not yet complete.

Listed below are the specific statutory criteria for the content of the completed project expenditure report along with additional guidance provided to help ensure a consistent statewide format and to facilitate accountability and transparency within the Local Streets and Roads Program.

a.) Completed and In-Progress Project Expenditure Report – Content

Development and Content

Given the emphasis SB 1 places on accountability and transparency in delivering California's transportation programs, it is vitally important that cities and counties clearly articulate the public benefit of these funds through the development of a robust project expenditure report.

To promote statewide consistency in the content and format of project expenditure information submitted and to facilitate transparency and robust reporting within the Local Streets and Roads Funding Program, the following guidance is provided regarding the key components of the completed project expenditure report. Additionally, Appendix B has been developed to provide an example of project expenditure report content and format.

The project expenditure report must cover the full fiscal year and include projects that have completed construction and are fully operational. The standard form will also provide an opportunity for cities and counties to report on the progress and expenditures associated with multi-year projects that are not yet complete.

Project Description

The report must include a project description for each completed and in-progress project. The city/county is encouraged to provide a brief non-technical description (up to 5 sentences) written so that the main objectives of the project can be clearly and easily understood by the public.

The level of detail provided will vary depending upon the nature of the project; however, it is highly encouraged that the project description contain a minimum level of detail needed for the public to understand exactly what work was completed or will be completed in the future.

Project Location

The report must include a project location for each completed and in-progress project. The city/county is required to provide project location information that, at a minimum, would allow the public to clearly understand where within the community the project was or will be constructed. For example, specific street names where improvements were undertaken

and project termini should be specified. If project-specific geolocation data is available, it is highly encouraged to be included.

The Amount of Funds Expended and the Project Completion Date

The report must include the amount of RMRA funds expended on the project and its date of completion or expected date of completion. For the purposes of the project expenditure report, a project is considered complete when it is operational/open to traffic. Construction contract close-out is not required to be complete.

Estimated Useful Life

The report must include an estimated useful life for each proposed project. The city/county is encouraged to provide information regarding the estimated useful life of the project that is clear, understandable, and based on industry-standards for the project materials and design, where applicable.

Technology, Climate Change, and Complete Streets Considerations

SHC Section 2030(c)-(f) specifies additional project elements that will be incorporated into RMRA-funded projects by cities and counties to the extent possible and cost effective, and where feasible. These elements are:

- Technologies and material recycling techniques that lower greenhouse gas emissions and reduce the cost of maintaining local streets and roads through material choice and construction method.
- Systems and components in transportation infrastructure that recognize and accommodate technologies including but not limited to ZEV fueling or charging and infrastructure-vehicles communications for transitional or fully autonomous vehicles.
- Project features to better adapt the transportation asset to withstand the negative effects of climate change and promote resiliency to impacts such as fires, floods, and sea level rise (where appropriate given a project's scope and risk level for asset damage due to climate change).
- Complete Streets Elements (such as project features that improve the quality of bicycle and pedestrian facilities and that improve safety for all users of transportation facilities) are expected to be incorporated into RMRA funded projects to the extent (as deemed by cities and counties) beneficial, cost-effective, and practicable in the context of facility type, right-of-way, project scope, and quality of nearby facilities.

Cities and counties are encouraged to consider all of the above for implementation, to the extent possible, cost-effective and feasible, in the design and development of projects for RMRA funding. In the event that completed projects contain technology, climate change, and complete streets considerations pursuant to SHC 2030(c)-(f). Standard reporting forms developed by the Commission will allow, cities and counties to report on the inclusion of these elements in RMRA-funded projects.

Standard reporting forms developed by the Commission will also provide space for supplementary information to be provided regarding the benefits of RMRA funded projects. Cities and counties should consider providing additional information in the proposed project list as appropriate in order to clearly communicate how RMRA funding is being effectively put to use.

Other Statutory Considerations for Project Expenditure Reports

Pursuant to SHC Section 2037, a city or county may spend its apportionment of RMRA funds on transportation priorities other than those outlined in SHC Section 2030(b) if the city's or county's average Pavement Condition Index (PCI) meets or exceeds 80. This provision, however, does not eliminate the requirement for cities and counties to prepare and submit a completed project expenditure report or the requirement to consider technology, climate change, and complete streets elements to the extent possible, cost-effective and feasible, in the design and development of projects for RMRA funding.

b.) Project Expenditure Report – Standard Format

To promote statewide consistency of project information submitted, a standard completed and in-progress project expenditure report format has been developed and is further explained in Appendix B.

For the initial submittal of project expenditure reports in 2017, cities and counties are required to use the standard form available. The form will be provided by the Commission to cities and counties at the earliest opportunity after adoption of the guidelines.

The Commission intends to make available an online platform so that cities and counties can quickly and easily enter completed and in-progress project information online.

13. Process and Schedule for Project Expenditure Report Submittal

Completed Project Reports must be developed and submitted to the Commission according to the statutory requirements of SHC Section 2034(b) as outlined above in Section 12.

A city or county must submit a Completed and In-Progress Project Report by **October 1, 2018** and October 1st of each subsequent year to the Commission. All materials should be provided electronically to ctc@dot.ca.gov. In the event a jurisdiction wishes to submit a hard copy please contact the program manager at:

Eric Thronson, Deputy Director
 California Transportation Commission
Eric.Thronson@dot.ca.gov
 (916) 654-7179

14. Commission Reporting of Project Information Received

In order to meet the requirements of SB 1 which include accountability and transparency in the delivery of California's transportation programs, it is vitally important that the Commission clearly communicate the public benefits achieved by RMRA funds. The Commission intends to articulate these benefits through the development of an SB 1 accountability website and through other reporting mechanisms such as the Commission's Annual Report to the Legislature.

Upon receipt of project expenditure reports, Commission staff will review submittals to ensure they are complete. If any critical project information is missing (i.e. SHC 2034(b) requirements such as project description, location, date of completion, expenditures, and useful life of improvement) Commission staff will notify city/county staff to complete for resubmittal within 10 working days.

All completed project expenditure reports submitted by cities and counties will be posted to the Commission's SB 1 Accountability website. The Commission will also analyze the completed project expenditure reports provided by cities and counties and aggregate the project information to provide both statewide and city/county level summary information such as the number, type, and location of RMRA funded projects. This information will also be provided on the Commission's SB 1 Accountability website by December 1st each year, and included in the Commission's Annual Report to the Legislature which is delivered to the Legislature by December 15th each year.

In the event a city or county does not provide a project expenditure report by the deadline requested (October 1st each year) to allow for Commission analysis and inclusion on the SB 1 accountability website and in the Annual Report to the Legislature, absence of the report will be noted on the website, in the Annual Report, and may be reported to the State Controller.

15.State Controller Expenditure Reporting and Maintenance of Effort Monitoring

This section provides general information regarding the detailed expenditure reporting and maintenance of effort requirements that cities and counties are responsible for demonstrating to the State Controller's Office. It is important to note that the Commission has no oversight or authority regarding these provisions. Specific guidance should be sought from the State Controller's Office in these areas.

In addition to the RMRA completed project reporting requirements outlined in SHC Section 2034(b), SHC Section 2151 requires each city and county to file an annual report of expenditures for street or road purposes with the State Controller's Office. SHC Section 2153 imposes a mandatory duty on the State Controller's Office to ensure that the annual streets and roads expenditure reports are adequate and accurate. Additional information regarding the preparation of the annual streets and roads expenditure report is available online in the [Guidelines Relating to Gas Tax Expenditures for Cities and Counties](#) prepared and maintained by the State Controller's Office. These Guidelines were last updated in August 2015 and are anticipated to be updated again to address new accountability provisions of SB 1.

Expenditure authority for RMRA funding is governed by Article XIX of the California Constitution as well as Chapter 2 (commencing with Section 2030) of Division 3 of the SHC.

RMRA funds received should be deposited as follows in order to avoid the commingling of those funds with other local funds:

- a.) In the case of a city, into the city account that is designated for the receipt of state funds allocated for local streets and roads.
- b.) In the case of a county, into the county road fund.
- c.) In the case of a city and county, into a local account that is designated for the receipt of state funds allocated for local streets and roads.

RMRA funds are subject to audit by the Controller pursuant to Government Code Section 12410 and SHC Section 2153. Pursuant to SHC 2036, a city or county receiving an apportionment of RMRA funds is required to sustain a maintenance of effort (MOE) by spending at least the annual average of its general fund expenditures during the 2009–10, 2010–11, and 2011–12 fiscal years for street, road, and highway purposes from the city's or county's general fund. Monitoring and enforcement of the MOE requirement for RMRA funds will be carried out by the Controller.

MOE requirements are fully articulated in statute as follows:

Streets and Highways Code Section 2036

(a) cities and counties shall maintain their existing commitment of local funds for street, road, and highway purposes in order to remain eligible for RMRA funding apportionment.

(b) In order to receive an allocation or apportionment pursuant to Section 2032, the city or county shall annually expend from its general fund for street, road, and highway purposes an amount not less than the annual average of its expenditures from its general fund during the 2009–10, 2010–11, and 2011–12 fiscal years, as reported to the Controller pursuant to Section 2151. For purposes of this subdivision, in calculating a city's or county's annual general fund expenditures and its average general fund expenditures for the 2009–10, 2010–11, and 2011–12 fiscal years, any unrestricted funds that the city or county may expend at its discretion, including vehicle in-lieu tax revenues and revenues from fines and forfeitures, expended for street, road, and highway purposes shall be considered expenditures from the general fund. One-time allocations that have been expended for street and highway purposes, but which may not be available on an ongoing basis, including revenue provided under the Teeter Plan Bond Law of 1994 (Chapter 6.6 (commencing with Section 54773) of Part 1 of Division 2 of Title 5 of the Government Code), may not be considered when calculating a city's or county's annual general fund expenditures.

(c) For any city incorporated after July 1, 2009, the Controller shall calculate an annual average expenditure for the period between July 1, 2009, and December 31, 2015, inclusive, that the city was incorporated.

(d) For purposes of subdivision (b), the Controller may request fiscal data from cities and counties in addition to data provided pursuant to Section 2151, for the 2009–10, 2010–11, and 2011–12 fiscal years. Each city and county shall furnish the data to the Controller not later than 120 days after receiving the request. The Controller may withhold payment to cities and counties that do not comply with the request for information or that provide incomplete data.

(e) The Controller may perform audits to ensure compliance with subdivision (b) when deemed necessary. Any city or county that has not complied with subdivision (b) shall reimburse the state for the funds it received during that fiscal year. Any funds returned as a result of a failure to comply with subdivision (b) shall be reapportioned to the other counties and cities whose expenditures are in compliance.

(f) If a city or county fails to comply with the requirements of subdivision (b) in a particular fiscal year, the city or county may expend during that fiscal year and the following fiscal year a total amount that is not less than the total amount required to be expended for those fiscal years for purposes of complying with subdivision (b).

16. Workforce Development Requirements and Project Signage

Pursuant to SHC Section 2038, by July 1, 2023, cities and counties receiving RMRA funds must follow guidelines developed by the California Workforce Development Board that address participation & investment in, or partnership with, new or existing pre-apprenticeship training programs. Cities and Counties receiving RMRA funds will also be eligible to compete for funding from the Board's pre-apprenticeship development and training grant program that includes a focus on outreach to women, minority participants, underrepresented subgroups, formerly incarcerated individuals, and local residents to access training and employment opportunities. Upon California Workforce Development Board adoption of guidelines and grant funding opportunities in this area, the Commission will update the Local Streets and Roads Program Reporting Guidelines to incorporate this information by reference.

To demonstrate to the public that RMRA funds are being put to work, cities and counties should consider including project funding information signage, where feasible and cost-effective, stating that the project was made possible by SB 1 – The Road Repair and Accountability Act of 2017.

Appendix A – Local Streets and Roads Project List Form

To promote statewide consistency in the content and format of project information submitted to the Commission, and to facilitate transparency within the Local Streets and Roads Funding Program, Appendix A provides the general outline of a standard Project List form that is under development for cities and counties to use in submitting the proposed list of projects to the Commission. This will be an electronic form with a series of drop-down menus, check-boxes, and fillable fields.

For the initial submittal of project lists in 2017, cities and counties are required to use the standard form once available. The form will be provided by the Commission to cities and counties at the earliest opportunity after adoption of the guidelines. The Commission intends to make available an online platform so that cities and counties can quickly and easily enter project list information and upload support documentation online.

Please note that project lists included in a city or county budget should include, at a minimum, the elements mandated by statute: description, location, schedule for completion and useful life elements, while the form below includes more detailed project information.

The nature/type of information that will be included in the standard form is outlined below:

General Info:

- City and County Name
- Project Lead and Department Contact Information
- Legislative District(s)
- Jurisdiction's Average Network PCI and date/year of measurement
- Fiscal Year
- Supplementary Information¹ (a place for the city/county to report how RMRA projects were identified as a priority, how they demonstrate an efficient investment of public funds, and any additional benefits of the projects).

Proposed Project A

Description:

- Brief description (up to 5 sentences) written in a non-technical way that is understandable to the public and which includes some quantifiable measurement about the project (e.g. replace 5 culverts, repave/resurface 2 miles of road, restripe 1 mile of bike lanes, etc.)
- Have city/county check boxes specifying the type of project it is based on RMRA priorities or "other" and the inclusion of additional Technology, Climate Change and Complete Streets elements (SHC 2030). Space will be provided for cities and counties to provide an optional narrative description of the additional elements and check boxes for why additional elements may not have been included i.e. feasibility.
- Local/Regional project number (if applicable)

^{2,3} Supplementary and location information can be used to demonstrate a variety of benefits of RMRA projects including effective prioritization of funds, equitable distribution, and efficient utilization of funding.

California Transportation Commission
2017 Local Streets and Roads Funding Program
Annual Reporting Guidelines

August 2017

Location:

- Should be as specific as possible (i.e. street names and project termini) and geolocation information should be provided if available²

Proposed Schedule for Completion:

- Anticipated construction year

Estimated Useful Life:

- Should be clear, understandable, and based on industry-standards as applicable.

Support Documentation

- Electronic Copy of excerpt from City/County's Adopted Budget or Budget Amendment including proposed list of projects, or the staff report specifying the projects to be included in a budget amendment
- Adopting resolution or meeting minutes to document budget/amendment approval
- Additional information regarding support documentation is available in Section 10 of the guidelines

Project Flexibility

Pursuant to SHC Section 2034(a)(1), this project list shall not limit the flexibility of an eligible city or county to fund projects in accordance with local needs and priorities, so long as the projects are consistent with SHC Section 2030(b).

^{2,3} Supplementary and location information can be used to demonstrate a variety of benefits of RMRA projects including effective prioritization of funds, equitable distribution, and efficient utilization of funding.

Appendix B - Local Streets and Roads Project Expenditure Report Form

To promote statewide consistency in the content and format of project expenditure information submitted to the Commission, and to facilitate transparency within the Local Streets and Roads Funding Program, Appendix B provides the general outline of a standard Project Expenditure Report form that is under development for cities and counties to use. This will be an electronic form with a series of drop-down menus, check-boxes, and fillable fields.

For the initial submittal of project expenditure reports to the Commission in 2018, cities and counties are required to use the standard form once available. The form will be provided by the Commission to cities and counties at the earliest opportunity after adoption of the guidelines.

The Commission intends to make available an online platform so that cities and counties can quickly and easily enter project expenditure information online.

The nature/type of information that will be included in the standard form is outlined below:

General Info:

- City/County Name
- Project Lead and Department Contact Information
- Legislative District(s)
- Jurisdiction's Average Network PCI and year/date of measurement.
- Total Funds Apportioned during the Fiscal Year
- Supplementary Information³ (a spot for the city/county to report how RMRA projects were identified as a priority, how they demonstrate an efficient investment of public funds, and any additional benefits of the projects).

Completed or In Progress Project A

Description:

- Brief description (up to 5 sentences) written in a non-technical way that is understandable to the public and which includes some quantifiable measurement about the project (e.g. replace 5 culverts, repave/resurface 2 miles of road, restripe 1 mile of bike lanes, etc.)
- Have city/county check boxes specifying the type of project it is based on RMRA priorities or "other" and the inclusion of additional Technology, Climate Change and Complete Streets elements (SHC 2034). Space will be provided for cities and counties to provide an optional narrative description of the additional elements and check boxes for why additional elements may not have been included i.e. feasibility.
- Local/Regional project number (if applicable)
- Space will be provided for cities and counties to identify any project list changes resulting from the flexibility afforded by SHC 2034(a)(1) such as projects added, deleted, or replaced if applicable.

^{3,4} Supplementary and location information can be used to demonstrate a variety of benefits of RMRA projects including effective prioritization of funds, equitable distribution, and efficient utilization of funding.

California Transportation Commission
2017 Local Streets and Roads Funding Program
Annual Reporting Guidelines

August 2017

Location:

- Must be as specific as possible (i.e. street names and project termini) and geolocation information is highly encouraged to be provided if available⁴

Amount of Funds Expended:

- Enter the amount of RMRA funds expended on the project and the total project cost
- Enter the amount and type of other funds expended on the project

Completion Date:

- Drop down menu to select the month and year that the project is complete/operational etc.
- Place to enter status update on multi-year projects and expected completion date

Estimated Useful Life:

- Should be clear, understandable, and based on industry-standards as applicable.

Signage:

- Provide a place to report on the inclusion of project funding information signage, if applicable

^{3,4} Supplementary and location information can be used to demonstrate a variety of benefits of RMRA projects including effective prioritization of funds, equitable distribution, and efficient utilization of funding.

Appendix C – Local Streets and Roads Program Schedule

FY 17-18	
Adoption of Final Guidelines Call for Project Lists	August 16-17, 2017
Technical Assistance and Outreach to Cities/Counties	August 18 – October 16, 2017
Project Lists due to Commission	October 16, 2017
Commission Adopts List of Eligible Cities and Counties	December 6-7, 2017
Commission Submits List to Controller	December 6-7, 2017
Controller FY 17-18 Apportionments Begin	Mid-January 2018
Completed Project Report Submitted to Commission for 2017 - 2018 Fiscal Year	October 1, 2018
Commission Posts Statewide LSR Program Accountability Information Online	December 1, 2018
FY 18-19	
Guidelines Update as Needed	TBD
Call for Project Lists	TBD ⁵
Commission Review, Approval & Adoption of List of Eligible Cities and Counties	TBD ⁶
Commission Submits Final List to Controller	July 1, 2018
Controller FY 18-19 Apportionments Begin	Mid-September 2018
Completed Project Report Submitted to Commission for 2018 - 2019 Fiscal Year	October 1, 2019
Commission Posts Statewide LSR Program Accountability Information Online	December 1, 2019

^{5,6} The Commission is working with city and county representatives to develop a schedule for FY 18-19 that accommodates city and county budgeting processes; statutory clarification may be needed in this area.

City General Fund Maintenance of Effort (MOE) Initial Estimates For Receipt of Road Maintenance and Rehabilitation Account (RMRA) Funds Under the Road Repair and Accountability Act of 2017 (SB1 Beall)

The Road Repair and Accountability Act of 2017 (SB1 Beall) includes a substantial boost in Local Streets and Roads Funding over the Highway Users Tax Account allocations that cities and counties have been receiving. The Act establishes a new “Road Maintenance and Rehabilitation Account (RMRA) in the state treasury and allocates amounts to cities and counties from that account based on statutory formulas.¹

RMRA Maintenance of Effort [Streets and Highways Code Sec 2036]

The Road Repair and Accountability Act contains a local agency maintenance of effort (MOE) requirement that applies to funds allocated through the RMRA. The Act states that the MOE requirement is to ensure that these new roads funds do not supplant existing levels of city and county general revenue spending on streets and roads. The MOE for the receipt of RMRA funds state that a city or county must maintain general fund spending for street, road, and highway purposes at no less than average of 2009–10, 2010–11, and 2011–12 years. In making this calculation certain one-time funds may be excluded. A city or county that fails to comply in a particular year may make it up with in additional expenditures in the following year.

The Act provides that the State Controller may perform audits to ensure compliance with these MOE rules. If the State Controller determines that a city or county has not met it’s MOE, the agency will be required to reimburse the state for the funds it received during that fiscal year. However, a city or county that fails to comply in a particular fiscal year may expend during that fiscal year and the following fiscal year a total amount that is sufficient to comply. Any funds withheld or returned as a result of a failure to comply will be reapportioned to the other counties and cities whose expenditures are in compliance.

2036. (a) Cities and counties shall maintain their existing commitment of local funds for street, road, and highway purposes in order to remain eligible for an allocation or apportionment of funds pursuant to Section 2032.

(b) In order to receive an allocation or apportionment pursuant to Section 2032, the city or county shall annually expend from its general fund for street, road, and highway purposes an amount not less than the annual average of its expenditures from its general fund during the 2009–10, 2010–11, and 2011–12 fiscal years, as reported to the Controller pursuant to Section 2151. For purposes of this subdivision, in calculating a city’s or county’s annual general fund expenditures and its average general fund expenditures for the 2009–10, 2010–11, and 2011–12 fiscal years, any unrestricted funds that the city or county may expend at its discretion, including vehicle in-lieu tax revenues and revenues from fines and forfeitures, expended for street, road, and highway purposes shall be considered expenditures from the general fund. One-time allocations that have been expended for street and highway purposes, but which may not be available on an ongoing basis, including revenue provided under the Teeter Plan Bond Law of 1994 (Chapter 6.6 (commencing with Section 54773) of Part 1 of Division 2 of Title 5 of the Government Code), may not be considered when calculating a city’s or county’s annual general fund expenditures.

¹ For more information, see “Local Streets and Roads Funding FAQ – with Estimates for 2016-17, 2017-18 and FY2018-19” here: <http://californiacityfinance.com/LSR1704.pdf>

(c) For any city incorporated after July 1, 2009, the Controller shall calculate an annual average expenditure for the period between July 1, 2009, and December 31, 2015, inclusive, that the city was incorporated.

(d) For purposes of subdivision (b), the Controller may request fiscal data from cities and counties in addition to data provided pursuant to Section 2151, for the 2009–10, 2010–11, and 2011–12 fiscal years. Each city and county shall furnish the data to the Controller not later than 120 days after receiving the request. The Controller may withhold payment to cities and counties that do not comply with the request for information or that provide incomplete data.

(e) The Controller may perform audits to ensure compliance with subdivision (b) when deemed necessary. Any city or county that has not complied with subdivision (b) shall reimburse the state for the funds it received during that fiscal year. Any funds withheld or returned as a result of a failure to comply with subdivision (b) shall be reapportioned to the other counties and cities whose expenditures are in compliance.

(f) If a city or county fails to comply with the requirements of subdivision (b) in a particular fiscal year, the city or county may expend during that fiscal year and the following fiscal year a total amount that is not less than the total amount required to be expended for those fiscal years for purposes of complying with subdivision (b).

Initial Draft Estimated RMRA MOE Requirements – UPDATED - 7 AUGUST 2017

These estimates are based on figures reported by each city in the annual streets expenditure reports in Table 5 under “Expenditures by Source” titled “Discretionary.” That is the numbers for your city upon which the MOE is based were **reported by your city**. See http://www.sco.ca.gov/ard_locrep_streets.html These numbers align with the definition in the statute that stipulates: “any unrestricted funds that the city or county may expend at its discretion, including vehicle in-lieu tax revenues and revenues from fines and forfeitures, expended for street, road, and highway purposes shall be considered expenditures from the general fund.”

The State Controller’s Office is computing MOE requirements based on the SCO interpretation of SB1. These will be the official MOE figures. To assist cities with budgeting and in anticipation of those SCO estimates, we have pulled the data from SCO reports per statute and computed initial estimated MOE requirements for every city. If you have questions or concerns, please contact me.

Frequently Asked Questions Regarding the RMRA MOE

1. Can I use my CIP and Operational Costs to meet my MOE requirement?

The MOE requirement is for a minimum amount of spending of discretionary revenues on streets and roads. CIP, maintenance and operation expenditures if for streets and roads all qualify if funding is from discretionary general fund.

2. Why is my MOE number so high?

The MOE calculation is specified in statute which is quoted in my cover memo. The numbers upon which the MOE is based are those reported BY YOUR CITY to the SCO in the annual streets and roads report.

3. What do I do if I think my number is too high?

We expect the SCO will provide a process to a) have certain one time expenditures in those years eliminated from the MOE calculation pursuant to the statute and b) correct any errors in the reported numbers on which the MOE is based. Because the figures in the Annual SCO Streets and Roads reports were submitted and certified as correct by your city staff, you will need to provide a solid case if you now believe they were reported in error.

4. Where can I find my latest MOE estimate?

Our initial unofficial MOE estimates are at http://www.californiacityfinance.com/RMRA_MOEstim1708.pdf. These calculations are our unofficial calculations adhering to direction in the law. We are awaiting official initial MOE calculations from the SCO.

5. The discretionary spending on streets and roads reported in 2009-10, 2010-11, and 2011-12 includes items that I don't think are allowable expenditures under SB1. Shouldn't these amounts be excluded from the MOE calculation?

No. RMRA use definitions do not apply to the MOE or to spending to meet the MOE. The law (SB1 Streets and Highways Code Sec 2036) says the MOE is determined by "a city's or county's annual ... average general fund expenditures for the 2009-10, 2010-11, and 2011-12 fiscal years...." General Fund Expenditures, for this purpose, is defined as "any unrestricted funds that the city or county may expend at its discretion, including vehicle in-lieu tax revenues and revenues from fines and forfeitures, expended for street, road, and highway purposes...." This spending definition does not necessarily match the prescribed uses of RMRA funding.

Accordingly, the annual discretionary general fund spending to meet this MOE requirement does not have to be spent only on RMRA qualifying expenses but is, like the MOE, to be "any unrestricted funds that the city or county (expends) at its discretion, including vehicle in-lieu tax revenues and revenues from fines and forfeitures, expended for street, road, and highway purposes...."

6. Who do I talk with to get my City's MOE corrected?

The California State Controller's Office (SCO) has the authority for the determination and oversight of the MOE and the proper use of RMRA funds. We expect SCO will provide a process for establishing MOE amounts and additional guidance on the RMRA soon.

7. RMRA revenues will not begin flowing until 2018. This first year of SB1 will not provide a full year of funding. So, is the MOE prorated for FY2017-18?

Regarding the MOE requirement, it doesn't matter how much you might receive from the RMRA in FY2017-18 or any other year. To receive any RMRA funds in a year you must satisfy the MOE in the fiscal year. That is, in order to receive any RMRA funds in FY2017-18 then you must expend on streets and roads, general revenues of at least the average of your 2009-10, 2010-11, and 2011-12 fiscal years amounts in FY2017-18. There is no provision in the law for any proration.

8. How is this going to work with other transportation funding MOEs?

There has not been another statewide transportation funding MOE since the Proposition 42 MOE expired with the Fuel Tax swap in 2010. Some county transportation measures have MOE requirements and the particulars of those vary and may differ from the SB1 MOE. Meeting one MOE does not necessarily satisfy meeting another.

mjgc

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹

revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

ALAMEDA COUNTY

ALAMEDA	1,817,166	1,519,569	1,635,157	1,657,297	1,657,297
ALBANY	0	1,635	1,100,543	367,393	367,393
BERKELEY	3,664,974	2,608,499	4,130,381	3,467,951	3,467,951
DUBLIN	1,289,800	1,189,071	1,209,090	1,229,320	1,229,320
EMERYVILLE	3,648,993	2,022,540	2,055,182	2,575,572	2,575,572
FREMONT	6,803,092	7,132,286	6,693,269	6,876,216	6,876,216
HAYWARD	1,139,351	3,871,846	3,692,880	2,901,359	2,901,359
LIVERMORE	5,821,398	4,253,390	5,192,011	5,088,933	5,088,933
NEWARK	3,383,991	2,430,828	3,271,477	3,028,765	3,028,765
OAKLAND	10,956,731	2,008,164	3,143,420	5,369,438	5,369,438
PIEDMONT	909,635	935,620	992,282	945,846	945,846
PLEASANTON	7,627,227	6,813,745	6,629,726	7,023,566	7,023,566
SAN LEANDRO	4,291,323	2,676,131	2,414,034	3,127,163	3,127,163
UNION CITY	513,336	488,585	131,004	377,642	377,642

ALPINE COUNTY

AMADOR COUNTY

AMADOR	0	60	0	20	20
IONE	0	0	0	0	0
JACKSON	211,866	198,660	196,265	202,264	202,264
PLYMOUTH	69,623	59,785	62,229	63,879	63,879
SUTTER CREEK	59,903	83,677	150,750	98,110	98,110

BUTTE COUNTY

BIGGS	18,335	42,662	82,751	47,916	47,916
CHICO	200,000	(500,000) ²	0	66,667 ²	66,667
GRIDLEY	268,450	244,045	223,964	245,486	245,486
OROVILLE	602,456	334,702	321,720	419,626	419,626
PARADISE	4,384	104,884	0	36,423	36,423

CALAVERAS COUNTY

ANGELS CAMP	0	0	4,904	1,635	1,635
-------------	---	---	-------	-------	-------

COLUSA COUNTY

COLUSA	419,141	337,428	247,276	334,615	334,615
WILLIAMS	0	0	0	0	0

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹

revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes						
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.	

CONTRA COSTA COUNTY

ANTIOCH	2,417,682	1,575,381	1,875,381	1,956,148	1,956,148
BRENTWOOD	2,017,096	3,096,154	1,454,125	2,189,125	2,189,125
CLAYTON	0	0	0	0	0
CONCORD	4,167,882	3,896,046	2,608,143	3,557,357	3,557,357
DANVILLE	980,000	1,804,890	0	928,297	928,297
EL CERRITO	0	469,895	60,053	176,649	176,649
HERCULES	424,976	308,750	195,336	309,687	309,687
LAFAYETTE	538,160	1,137,045	1,151,013	942,073	942,073
MARTINEZ	1,697,622	1,586,339	1,542,581	1,608,847	1,608,847
MORAGA	458,808	404,252	0	287,687	287,687
OAKLEY	13,770	44,905	568,102	208,926	208,926
ORINDA	787,678	780,302	1,193,244	920,408	920,408
PINOLE	173,063	156,564	83,930	137,852	137,852
PITTSBURG	220,325	227,292	150,780	199,466	199,466
PLEASANT HILL	841,972	1,109,112	1,239,733	1,063,606	1,063,606
RICHMOND	0	4,160,798	5,760,486	3,307,095	3,307,095
SAN PABLO	659,155	296,194	439,473	464,941	464,941
SAN RAMON	1,022,558	161,185	451,901	545,215	545,215
WALNUT CREEK	3,959,699	3,286,107	3,565,758	3,603,855	3,603,855

DEL NORTE COUNTY

CRESCENT CITY	251,808	0	273,314	175,041	175,041
---------------	---------	---	---------	---------	---------

EL DORADO COUNTY

PLACERVILLE	600,221	405,623	426,044	477,296	477,296
SOUTH LAKE TAHOE	2,433,597	2,218,073	1,543,976	2,065,215	2,065,215

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹

revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

FRESNO COUNTY

CLOVIS	2,286,601	2,137,226	2,214,879	2,212,902	2,212,902
COALINGA	0	0	0	0	0
FIREBAUGH	0	0	0	0	0
FOWLER	17,036	208,347	14,598	79,994	79,994
FRESNO	6,844,300	573,700	6,761	2,474,920	2,474,920
HURON	0	223,367	(222,367)	74,456	74,456
KERMAN	26,600	34,000	0	20,200	20,200
KINGSBURG	0	0	0	0	0
MENDOTA	0	0	0	0	0
ORANGE COVE	0	0	0	0	0
PARLIER	0	0	0	0	0
REEDLEY	247,591	143,569	124,022	171,727	171,727
SANGER	99,950	19,519	0	39,823	39,823
SAN JOAQUIN	0	0	0	0	0
SELMA	1,030,961	963,341	78,022	690,775	690,775

GLENN COUNTY

ORLAND	90,538	64,252	83,310	79,367	79,367
WILLIAMS	201,764	213,873	193,336	202,991	202,991

HUMBOLDT COUNTY

ARCATA	878,098	1,545,729	2,291,103	1,571,643	1,571,643
BLUE LAKE	710	215	11,483	4,136	4,136
EUREKA	879,200	657,994	1,094,430	877,208	877,208
FERNDALE	56,902	44,899	24,123	41,975	41,975
FORTUNA	184,100	320,656	319,748	274,835	274,835
RIO DELL	0	0	0	0	0
TRINIDAD	56,579	96,579	139,458	97,539	97,539

IMPERIAL COUNTY

BRAWLEY	0	0	0	0	0
CALEXICO	1,119,648	812,293	704,137	878,693	878,693
CALIPATRIA	0	0	0	0	0
EL CENTRO	407	128,361	407	43,058	43,058
HOLTVILLE	0	0	0	0	0
IMPERIAL	11,114	231,667	8,500	83,760	83,760
WESTMORLAND	0	0	0	0	0

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹
revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

INYO COUNTY

BISHOP	269,505	235,994	232,266	245,922	245,922
--------	---------	---------	---------	---------	---------

KERN COUNTY

ARVIN	106,365	0	0	35,455	35,455
BAKERSFIELD	15,351,175	18,407,230	16,078,698	16,612,368	16,612,368
CALIFORNIA CITY	73,263	34,364	195,851	101,159	101,159
DELANO	528,533	429,307	209,209	389,016	389,016
MARICOPA	31,533	0	0	10,511	10,511
MCFARLAND	40,000	98,624	0	46,208	46,208
RIDGECREST	517,908	60,208	60,935	213,017	213,017
SHAFTER	1,424,758	1,524,770	2,282,625	1,744,051	1,744,051
TAFT	1,020,557	642,652	875,346	846,185	846,185
TEHACHAPI	394,808	515,722	483,619	464,716	464,716
WASCO	99,423	179,869	350,836	210,043	210,043

KINGS COUNTY

AVENAL	0	0	0	0	0
CORCORAN	0	0	0	0	0
HANFORD	1,804,199	2,200,842	2,207,838	2,070,960	2,070,960
LEMOORE	494,265	406,001	239,080	379,782	379,782

LAKE COUNTY

CLEARLAKE	0	123,646	132,905	85,517	85,517
LAKEPORT	489,318	529,482	670,310	563,037	563,037

LASSEN COUNTY

SUSANVILLE	308,765	255,586	105,094	223,148	223,148
------------	---------	---------	---------	---------	---------

LOS ANGELES COUNTY

AGOURA HILLS	956,157	1,005,281	996,816	986,085	986,085
ALHAMBRA	306,927	296,910	708,718	437,518	437,518
ARCADIA	1,913,984	1,854,062	2,278,187	2,015,411	2,015,411
ARTESIA	1,125	0	742,357	247,827	247,827
AVALON	105,457	168,729	255,435	176,540	176,540
AZUSA	780,344	483,711	71,016	445,024	445,024
BALDWIN PARK	361,398	285,677	222,774	289,950	289,950
BELL	434,798	125,778	284,516	281,697	281,697
BELLFLOWER	2,727,428	2,775,505	2,962,153	2,821,695	2,821,695
BELL GARDENS	557,383	461,203	344,629	454,405	454,405
BEVERLY HILLS	12,874,051	19,540,509	7,456,168	13,290,243	13,290,243
BRADBURY	0	0	0	0	0

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹
revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
	FY2009-10	FY2010-11	FY2011-12	Average	Adjustment
RMRA M.O.E.					
BURBANK	11,955,090	10,949,610	7,336,836	10,080,512	10,080,512
CALABASAS	797,343	778,817	522,170	699,443	699,443
CARSON	6,916,410	6,335,704	4,328,117	5,860,077	5,860,077
CERRITOS	3,608,889	704,349	837,764	1,717,001	1,717,001
CLAREMONT	1,454,356	242,188	203,631	633,392	633,392
COMMERCE	3,190,948	1,592,024	1,627,264	2,136,745	2,136,745
COMPTON	829,833	818,986	640,261	763,027	763,027
COVINA	953,689	819,275	1,408,049	1,060,338	1,060,338
CUDAHY	0	0	0	0	0
CULVER CITY	4,167,397	3,728,639	3,709,842	3,868,626	3,868,626
DIAMOND BAR	681,816	421,352	299,935	467,701	467,701
DOWNEY	1,812,186	1,361,623	1,548,399	1,574,069	1,574,069
DUARTE	591,412	394,713	533,792	506,639	506,639
EL MONTE	410,071	814,913	161,822	462,269	462,269
EL SEGUNDO	5,177,586	2,254,312	2,551,368	3,327,755	3,327,755
GARDENA	1,193,667	1,099,753	1,063,621	1,119,014	1,119,014
GLENDALE	9,081,387	8,522,517	8,085,954	8,563,286	8,563,286
GLENDORA	1,720,466	1,626,701	1,050,239	1,465,802	1,465,802
HAWAIIAN GARDENS	147,624	433,266	400,238	327,043	327,043
HAWTHORNE	0	0	0	0	0
HERMOSA BEACH	3,380,115	3,586,813	2,162,351	3,043,093	3,043,093
HIDDEN HILLS	27,472	45,144	39,469	37,362	37,362
HUNTINGTON PARK	1,191,582	1,179,006	1,041,999	1,137,529	1,137,529
INDUSTRY	6,509,389	10,920,173	2,364,583	6,598,048	6,598,048
INGLEWOOD	1,147,915	769,482	1,040,571	985,989	985,989
IRWINDALE	690,386	348,110	482,197	506,898	506,898
LA CANADA FLINTRIDGE	2,202,159	2,173,240	3,185,572	2,520,324	2,520,324
LA HABRA HEIGHTS	78,124	92,148	51,737	74,003	74,003
LAKEWOOD	4,495,301	4,909,682	5,129,413	4,844,799	4,844,799
LA MIRADA	2,717,321	1,504,007	5,390,861	3,204,063	3,204,063
LANCASTER	1,355,922	251,259	3,600,057	1,735,746	1,735,746
LA PUENTE	0	0	0	0	0
LA VERNE	2,449,828	1,390,038	978,452	1,606,106	1,606,106
LAWDALE	240,074	297,073	313,756	283,634	283,634
LOMITA	108,983	204,404	529,884	281,090	281,090
LONG BEACH	17,266,404	13,332,842	14,718,886	15,106,044	15,106,044
LOS ANGELES	268,428,548	234,218,950	227,232,488	243,293,329	243,293,329

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹
revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

LYNWOOD	690,943	1,069,090	239,750	666,594	666,594
MALIBU	1,570,959	1,589,493	1,603,012	1,587,821	1,587,821
MANHATTAN BEACH	3,800,614	4,283,738	4,582,318	4,222,223	4,222,223
MAYWOOD	318	5,723	288,209	98,083	98,083
MONROVIA	1,670,715	579,787	(219,343) ²	750,167 ²	750,167
MONTEBELLO	1,028,926	2,183,626	4,101,819	2,438,124	2,438,124
MONTEREY PARK	1,375,769	2,868,247	852,184	1,698,733	1,698,733
NORWALK	2,961,198	3,126,844	3,097,526	3,061,856	3,061,856
PALMDALE	7,207,726	3,252,531	2,708,944	4,389,734	4,389,734
PALOS VERDES ESTATES	232,685	208,813	235,654	225,717	225,717
PARAMOUNT	709,398	507,778	619,790	612,322	612,322
PASADENA	3,391,198	4,098,719	8,685,000	5,391,639	5,391,639
PICO RIVERA	2,804,728	1,525,974	1,563,133	1,964,612	1,964,612
POMONA	3,443,306	2,684,809	2,773,505	2,967,207	2,967,207
RANCHO PALOS VERDES	1,915,139	2,132,626	1,389,643	1,812,469	1,812,469
REDONDO BEACH	2,685,065	2,014,566	1,393,607	2,031,079	2,031,079
ROLLING HILLS ⁽²⁾					
ROLLING HILLS ESTATES	245,742	262,218	429,249	312,403	312,403
ROSEMEAD	161,229	8,088	0	56,439	56,439
SAN DIMAS	2,063,869	2,926,431	2,398,471	2,462,924	2,462,924
SAN FERNANDO	349,463	41,713	208,286	199,821	199,821
SAN GABRIEL	1,428,104	1,236,396	1,414,819	1,359,773	1,359,773
SAN MARINO	2,808,488	2,618,345	2,061,737	2,496,190	2,496,190
SANTA CLARITA	3,977,890	2,681,167	3,626,073	3,428,377	3,428,377
SANTA FE SPRINGS	2,539,594	2,616,256	2,805,331	2,653,727	2,653,727
SANTA MONICA	15,407,478	12,321,512	23,382,752	17,037,247	17,037,247
SIERRA MADRE	160,704	146,406	148,388	151,833	151,833
SIGNAL HILL	2,165,291	1,892,342	1,462,885	1,840,173	1,840,173
SOUTH EL MONTE	4,453	0	0	1,484	1,484
SOUTH GATE	1,864,513	1,139,588	927,575	1,310,559	1,310,559
SOUTH PASADENA	2,211,601	1,146,122	1,472,480	1,610,068	1,610,068
TEMPLE CITY	108,754	104,971	101,705	105,143	105,143
TORRANCE	12,671,207	11,975,231	11,532,040	12,059,493	12,059,493
VERNON	789,165	616,736	1,084,827	830,243	830,243
WALNUT	427,897	449,317	461,108	446,107	446,107
WEST COVINA	655,146	446,279	600,020	567,148	567,148
WEST HOLLYWOOD	1,663,083	1,786,338	1,254,234	1,567,885	1,567,885

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹

revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

WESTLAKE VILLAGE	1,896,954	445,573	406,851	916,459	916,459
WHITTIER	3,291,161	3,540,982	3,190,556	3,340,900	3,340,900
MADERA COUNTY					
CHOWCHILLA	43,506	0	0	14,502	14,502
MADERA	260,628	121,158	212,755	198,180	198,180
MARIN COUNTY					
BELVEDERE	442,476	365,733	463,072	423,760	423,760
CORTE MADERA	1,665,313	2,604,247	1,722,747	1,997,436	1,997,436
FAIRFAX	499,871	507,240	272,251	426,454	426,454
LARKSPUR	1,129,598	1,125,382	948,999	1,067,993	1,067,993
MILL VALLEY	1,530,604	970,048	1,186,390	1,229,014	1,229,014
NOVATO	2,922,113	2,180,893	2,311,164	2,471,390	2,471,390
ROSS	410,353	227,259	390,396	342,669	342,669
SAN ANSELMO	610,326	812,227	771,124	731,226	731,226
SAN RAFAEL	3,286,015	2,131,621	3,516,476	2,978,037	2,978,037
SAUSALITO	1,268,822	416,372	759,721	814,972	814,972
TIBURON	998,306	779,340	777,617	851,754	851,754
MARIPOSA COUNTY					
MENDOCINO COUNTY					
FORT BRAGG	163,112	127,916	(214,877) ²	97,009 ²	97,009
POINT ARENA	35,143	39,596	19,392	31,377	31,377
UKIAH	1,015,454	1,018,434	938,535	990,808	990,808
WILLITS	339,912	248,148	286,361	291,474	291,474
MERCED COUNTY					
ATWATER	332,849	341,145	192,298	288,764	288,764
DOS PALOS	289,260	217,149	122,779	209,729	209,729
GUSTINE	0	0	0	0	0
LIVINGSTON	0	0	0	0	0
LOS BANOS	865,482	555,964	0	473,815	473,815
MERCED	6,413,988	762,439	623,995	2,600,141	2,600,141
MODOC COUNTY					
ALTURAS	159,978	418,965	200,869	259,937	259,937
MONO COUNTY					
MAMMOTH LAKES	2,188,565	3,451,879	2,432,446	2,690,963	2,690,963

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹

revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

MONTEREY COUNTY

CARMEL-BY-THE-SEA	482,699	870,129	318,316	557,048	557,048
DEL REY OAKS	50,083	50,083	(3,660) ²	33,389 ²	33,389
GONZALES	0	0	0	0	0
GREENFIELD	0	0	0	0	0
KING CITY	3,757	1,976	2,056	2,596	2,596
MARINA	262,149	201,648	495,396	319,731	319,731
MONTEREY	5,169,965	4,683,315	3,466,513	4,439,931	4,439,931
PACIFIC GROVE	326,756	396,862	720,604	481,407	481,407
SALINAS	2,566,632	2,012,218	2,022,712	2,200,521	2,200,521
SAND CITY	536,176	428,197	470,280	478,218	478,218
SEASIDE	321,933	450,000	133,952	301,962	301,962
SOLEDAD	0	2,065	38,904	13,656	13,656

NAPA COUNTY

AMERICAN CANYON	457,021	571,052	451,046	493,040	493,040
CALISTOGA	244,564	447,910	128,796	273,757	273,757
NAPA	3,330,763	5,449,318	3,652,302	4,144,128	4,144,128
SAINT HELENA	284,378	376,263	283,073	314,571	314,571
YOUNTVILLE	941,139	325,101	419,045	561,762	561,762

NEVADA COUNTY

GRASS VALLEY	910,649	995,548	961,755	955,984	955,984
NEVADA CITY	366,447	279,414	250,984	298,948	298,948
TRUCKEE	3,517,946	3,942,314	3,579,115	3,679,792	3,679,792

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹
revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

ORANGE COUNTY

ALISO VIEJO	392,545	385,492	8,622	262,220	262,220
ANAHEIM	22,543,428	15,141,040	15,562,104	17,748,857	17,748,857
BREA	1,343,161	1,205,851	1,356,635	1,301,882	1,301,882
BUENA PARK	4,818,959	4,609,964	4,321,859	4,583,594	4,583,594
COSTA MESA	6,324,674	6,298,168	6,334,994	6,319,279	6,319,279
CYPRESS	6,634,618	8,021,830	9,617,722	8,091,390	8,091,390
DANA POINT	6,452,565	4,176,300	4,745,582	5,124,816	5,124,816
FOUNTAIN VALLEY	4,469,975	3,304,608	3,592,118	3,788,900	3,788,900
FULLERTON	2,315,518	2,124,267	1,988,991	2,142,925	2,142,925
GARDEN GROVE	4,825,510	3,931,859	4,263,722	4,340,364	4,340,364
HUNTINGTON BEACH	8,190,597	6,350,941	7,705,371	7,415,636	7,415,636
IRVINE	19,806,503	18,517,112	18,599,848	18,974,488	18,974,488
LAGUNA BEACH	2,498,189	2,120,813	2,186,030	2,268,344	2,268,344
LAGUNA HILLS	1,738,942	1,721,975	1,662,965	1,707,961	1,707,961
LAGUNA NIGUEL	5,624,297	4,955,035	5,010,908	5,196,747	5,196,747
LAGUNA WOODS	156,715	178,749	167,145	167,536	167,536
LA HABRA	2,024,870	2,194,407	1,944,219	2,054,499	2,054,499
LAKE FOREST	3,363,634	4,954,663	7,440,553	5,252,950	5,252,950
LA PALMA	675,628	669,660	702,444	682,577	682,577
LOS ALAMITOS	647,315	402,094	442,447	497,285	497,285
MISSION VIEJO	3,489,970	5,242,822	6,398,197	5,043,663	5,043,663
NEWPORT BEACH	13,756,884	12,846,504	12,623,532	13,075,640	13,075,640
ORANGE	3,068,536	2,813,823	3,127,497	3,003,285	3,003,285
PLACENTIA	717,757	1,058,594	707,690	828,014	828,014
RANCHO SANTA MARGARI	350,000	350,000	350,000	350,000	350,000
SAN CLEMENTE	5,555,466	4,849,073	4,878,925	5,094,488	5,094,488
SAN JUAN CAPISTRANO	1,871,804	1,845,703	1,753,210	1,823,572	1,823,572
SANTA ANA	4,018,974	3,209,849	5,213,933	4,147,585	4,147,585
SEAL BEACH	4,509,128	5,697,609	1,775,397	3,994,045	3,994,045
STANTON	505,311	169,808	0	225,040	225,040
TUSTIN	4,734,458	5,888,281	6,918,786	5,847,175	5,847,175
VILLA PARK	1,965,258	1,972,153	1,094,534	1,677,315	1,677,315
WESTMINSTER	2,105,380	2,031,851	2,668,697	2,268,643	2,268,643
YORBA LINDA	2,281,209	2,254,158	2,194,251	2,243,206	2,243,206

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹
revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

PLACER COUNTY

AUBURN	618,097	552,860	307,564	492,840	492,840
COLFAX	0	0	1,176	392	392
LINCOLN	0	0	0	0	0
LOOMIS	0	0	0	0	0
ROCKLIN	161,531	513,070	628,776	434,459	434,459
ROSEVILLE	4,262,137	6,038,474	6,835,903	5,712,171	5,712,171

PLUMAS COUNTY

PORTOLA	146,671	184,184	128,542	153,132	153,132
---------	---------	---------	---------	---------	---------

RIVERSIDE COUNTY

BANNING	316,181	38,587	133,164	162,644	162,644
BEAUMONT	0	586,825	1,552,970	713,265	713,265
BLTYHE	261,196	1,076,032	445,295	594,174	594,174
CALIMESA	77,232	64,501	0	47,244	47,244
CANYON LAKE	41,009	26,318	25,798	31,042	31,042
CATHEDRAL CITY	1,033,190	574,077	1,080,111	895,793	895,793
COACHELLA	1,802,424	2,375,264	1,929,366	2,035,685	2,035,685
CORONA	3,424,971	2,989,106	2,986,573	3,133,550	3,133,550
DESERT HOT SPRINGS	435,933	369,337	370,783	392,018	392,018
EASTVALE (inc. 1 Oct 2010)	n/a	see notes below	see notes below	59,787 ⁴	59,787
HEMET	18,924	0	0	9,462	9,462
INDIAN WELLS	1,075,582	1,115,139	3,318,722	1,836,481	1,836,481
INDIO	4,648,594	2,075,668	2,383,136	3,035,799	3,035,799
JURUPA VALLEY (inc. 1 July 2	n/a	see notes below	see notes below	0 ⁴	0
LAKE ELSINORE	1,198,185	1,367,576	1,165,691	1,243,817	1,243,817
LA QUINTA	2,798,095	1,031,556	1,590,929	1,806,860	1,806,860
MENIFEE	0	0	0	0	0
MORENO VALLEY	1,600,807	1,506,617	2,119,479	1,742,301	1,742,301
MURRIETA	785,317	1,510,212	1,660,517	1,318,682	1,318,682
NORCO	78,660	26,269	12,036	38,988	38,988
PALM DESERT	5,346,951	4,688,794	4,566,328	4,867,358	4,867,358
PALM SPRINGS	4,243,162	4,274,880	4,578,581	4,365,541	4,365,541
PERRIS	235,180	907,323	307,663	483,389	483,389
RANCHO MIRAGE	1,815,441	3,458,223	3,506,707	2,926,790	2,926,790
RIVERSIDE	18,039,443	17,447,014	17,333,720	17,606,726	17,606,726
SAN JACINTO	543,637	735,080	730,303	669,673	669,673
TEMECULA	3,228,915	2,875,767	2,854,016	2,986,233	2,986,233

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹
revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
	FY2009-10	FY2010-11	FY2011-12	Average	Adjustment
WILDOMAR	0	197,300	0	65,767	65,767
SACRAMENTO COUNTY					
CITRUS HEIGHTS	0	11,310	0	3,770	3,770
ELK GROVE	0	0	0	0	0
FOLSOM	1,473,865	2,277,959	442,926	1,398,250	1,398,250
GALT	0	0	0	0	0
ISLETON	50,190	0	0	16,730	16,730
RANCHO CORDOVA	747,343	720,065	2,194,804	1,220,737	1,220,737
SACRAMENTO	7,449,889	1,433,525	1,005,704	3,296,373	3,296,373
SAN BENITO COUNTY					
HOLLISTER	458,122	60,920	99,852	206,298	206,298
SAN JUAN BAUTISTA	0	0	0	0	0
SAN BERNARDINO COUNTY					
ADELANTO	339,193	472,925	248,691	353,603	353,603
APPLE VALLEY	0	0	0	0	0
BARSTOW	2,484,667	2,654,695	3,795,185	2,978,182	2,978,182
BIG BEAR LAKE	3,034,548	1,305,417	2,165,150	2,168,372	2,168,372
CHINO	55,318	56,835	21,232	44,462	44,462
CHINO HILLS	268,179	93,919	163,462	175,187	175,187
COLTON	1,311,329	97,071	87,163	498,521	498,521
FONTANA	9,846,854	3,699,217	2,575,569	5,373,880	5,373,880
GRAND TERRACE	58,467	0	0	19,489	19,489
HESPERIA	680,722	506,594	479,895	555,737	555,737
HIGHLAND	217,535	217,535	0	145,023	145,023
LOMA LINDA	757,135	372,208	96,426	408,590	408,590
MONTCLAIR	1,501,863	1,055,294	1,197,408	1,251,522	1,251,522
NEEDLES	0	0	0	0	0
ONTARIO	5,459,508	5,716,882	6,770,777	5,982,389	5,982,389
RANCHO CUCAMONGA	4,233,742	3,321,146	5,431,084	4,328,657	4,328,657
REDLANDS	1,485,613	878,358	1,098,413	1,154,128	1,154,128
RIALTO	839,950	18,397	998,174	618,840	618,840
SAN BERNARDINO	745,909	1,388,089	1,367,734	1,167,244	1,167,244
TWENTYNINE PALMS	56,265	34,045	104,590	64,967	64,967
UPLAND	1,770,339	1,911,541	3,160,014	2,280,631	2,280,631
VICTORVILLE	1,345,727	1,579,487	268,273	1,064,496	1,064,496
YUCAIPA	2,093,399	1,429,872	682,027	1,401,766	1,401,766
YUCCA VALLEY	136,216	213,532	684,360	344,703	344,703

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹
revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

SAN DIEGO COUNTY

CARLSBAD	7,768,758	8,643,205	9,484,234	8,632,066	8,632,066
CHULA VISTA	4,284,581	4,845,643	4,416,013	4,515,412	4,515,412
CORONADO	1,130,992	1,467,113	1,298,946	1,299,017	1,299,017
DEL MAR	557,690	439,548	546,371	514,536	514,536
EL CAJON	2,562,928	1,961,613	1,710,408	2,078,316	2,078,316
ENCINITAS	2,983,335	4,715,373	6,504,348	4,734,352	4,734,352
ESCONDIDO	5,534,227	4,750,613	4,903,832	5,062,891	5,062,891
IMPERIAL BEACH	283,836	279,745	249,164	270,915	270,915
LA MESA	2,815,965	3,050,420	3,140,439	3,002,275	3,002,275
LEMON GROVE	247,142	271,524	386,339	301,668	301,668
NATIONAL CITY	2,073,854	4,280,361	1,878,084	2,744,100	2,744,100
OCEANSIDE	1,621,465	1,986,767	3,064,757	2,224,330	2,224,330
POWAY	1,378,976	1,477,763	1,309,212	1,388,650	1,388,650
SAN DIEGO	32,013,564	34,525,926	23,510,641	30,016,710	30,016,710
SAN MARCOS	5,277,365	5,499,837	5,594,791	5,457,331	5,457,331
SANTEE	720,361	641,629	788,451	716,814	716,814
SOLANA BEACH	716,800	1,020,641	934,373	890,605	890,605
VISTA	3,263,167	3,338,145	2,712,790	3,104,701	3,104,701

SAN FRANCISCO COUNT

SAN FRANCISCO	34,060,774	30,858,152	27,153,357	30,690,761	30,690,761
---------------	------------	------------	------------	------------	------------

SAN JOAQUIN COUNTY

ESCALON	485,821	225,909	238,194	316,641	316,641
LATHROP	66,760	0	0	22,253	22,253
LODI	1,129,948	1,382,113	1,063,781	1,191,947	1,191,947
MANTECA	1,513,358	1,090,716	768,606	1,124,227	1,124,227
RIPON	263,839	(1,523,972) ²	0	87,946 ²	87,946
STOCKTON	2,722,388	0	(18,097,962) ²	907,463 ²	907,463
TRACY	367,397	671,756	433,812	490,988	490,988

SAN LUIS OBISPO COUN

ARROYO GRANDE	1,337,039	1,313,030	1,645,843	1,431,971	1,431,971
ATASCADERO	117,080	687,596	38,160	280,945	280,945
EL PASO DE ROBLES	1,263,548	1,317,288	771,728	1,117,521	1,117,521
GROVER BEACH	0	0	0	0	0
MORRO BAY	189,087	307,516	402,324	299,642	299,642
PISMO BEACH	488,414	540,340	647,868	558,874	558,874
SAN LUIS OBISPO	7,398,079	7,549,275	9,858,855	8,268,736	8,268,736

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹
revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

SAN MATEO COUNTY

ATHERTON	1,075,865	1,212,259	899,134	1,062,419	1,062,419
BELMONT	1,196,905	1,043,314	185,181	808,467	808,467
BRISBANE	588,741	570,931	583,646	581,106	581,106
BURLINGAME	3,214,265	2,929,395	3,663,028	3,268,896	3,268,896
COLMA	1,781,976	1,366,174	1,227,421	1,458,524	1,458,524
DALY CITY	1,000,332	992,832	1,066,693	1,019,952	1,019,952
EAST PALO ALTO	0	0	192,040	64,013	64,013
FOSTER CITY	722,700	402,256	747,596	624,184	624,184
HALF MOON BAY	794,639	273,097	1,632,951	900,229	900,229
HILLSBOROUGH	1,202,601	1,000,490	888,905	1,030,665	1,030,665
MENLO PARK	4,534,894	3,939,987	2,270,802	3,581,894	3,581,894
MILLBRAE	0	0	0	0	0
PACIFICA	989,904	1,049,391	679,430	906,242	906,242
PORTOLA VALLEY	430,666	308,227	298,799	345,897	345,897
REDWOOD CITY	9,559,696	8,167,391	8,079,182	8,602,090	8,602,090
SAN BRUNO	491,000	492,615	449,103	477,573	477,573
SAN CARLOS	434,449	449,212	734,364	539,342	539,342
SAN MATEO	3,102,059	7,299,897	1,476,173	3,959,376	3,959,376
SOUTH SAN FRANCISCO	2,696,742	1,726,553	1,542,899	1,988,731	1,988,731
WOODSIDE	551,419	536,005	500,000	529,141	529,141

SANTA BARBARA COUN

BUELLTON	44,843	123,346	126,470	98,220	98,220
CARPINTERIA	291,354	126,184	319,459	245,666	245,666
GOLETA	698,506	724,174	705,871	709,517	709,517
GUADALUPE	5,820	5,310	0	3,710	3,710
LOMPOC	393,783	392,139	1,710,135	832,019	832,019
SANTA BARBARA	6,150,746	6,739,901	6,619,640	6,503,429	6,503,429
SANTA MARIA	3,693,021	1,670,769	4,080,539	3,148,110	3,148,110
SOLVANG	437,202	222,114	371,070	343,462	343,462

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹
revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

SANTA CLARA COUNTY

CAMPBELL	3,717,163	158,052	164,017	1,346,411	1,346,411
CUPERTINO	4,508,687	4,973,044	5,061,090	4,847,607	4,847,607
GILROY	1,157,263	1,035,537	1,429,121	1,207,307	1,207,307
LOS ALTOS	1,713,054	900,761	3,290,808	1,968,208	1,968,208
LOS ALTOS HILLS	1,835,280	1,602,571	1,609,247	1,682,366	1,682,366
LOS GATOS	3,664,544	3,577,175	3,974,855	3,738,858	3,738,858
MILPITAS	1,624,068	2,123,909	1,688,912	1,812,296	1,812,296
MONTE SERENO	2,089	531	10,046	4,222	4,222
MORGAN HILL	164,213	781,186	1,054,701	666,700	666,700
MOUNTAIN VIEW	2,682,067	2,046,834	2,150,759	2,293,220	2,293,220
PALO ALTO	7,875,495	10,427,085	10,023,114	9,441,898	9,441,898
SAN JOSE	23,028,116	16,574,888	14,420,537	18,007,847	18,007,847
SANTA CLARA	10,117,863	9,321,717	8,833,115	9,424,232	9,424,232
SARATOGA	1,740,219	2,625,413	725,475	1,697,036	1,697,036
SUNNYVALE	9,358,635	8,143,695	9,206,239	8,902,856	8,902,856

SANTA CRUZ COUNTY

CAPITOLA	1,293,942	948,821	934,395	1,059,053	1,059,053
SANTA CRUZ	2,914,473	2,639,804	2,808,666	2,787,648	2,787,648
SCOTTS VALLEY	338,260	265,213	273,147	292,207	292,207
WATSONVILLE	1,100,944	1,013,529	1,034,286	1,049,586	1,049,586

SHASTA COUNTY

ANDERSON	0	0	0	0	0
REDDING	1,011,254	783,216	2,924,866	1,573,112	1,573,112
SHASTA LAKE	0	19,320	202,095	73,805	73,805

SIERRA COUNTY

LOYALTON	21,968	18,308	26,975	22,417	22,417
----------	--------	--------	--------	--------	--------

SISKIYOU COUNTY

DORRIS	24,053	20,965	17,567	20,862	20,862
DUNSMUIR	140,334	140,682	124,826	135,281	135,281
ETNA	54,937	47,795	47,348	50,027	50,027
FORT JONES	0	22,517	5,302	9,273	9,273
MONTAGUE	0	0	0	0	0
MOUNT SHASTA	439,864	399,153	436,894	425,304	425,304
TULELAKE	0	0	0	0	0
WEED	352,743	280,764	278,106	303,871	303,871
YREKA	521,174	460,001	282,466	421,214	421,214

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹
revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

SOLANO COUNTY

BENICIA	1,857,969	1,679,980	1,479,646	1,672,532	1,672,532
DIXON	1,179,516	848,315	673,682	900,504	900,504
FAIRFIELD	8,766,267	3,894,180	3,872,451	5,510,966	5,510,966
RIO VISTA	217,366	99,953	118,291	145,203	145,203
SUISUN CITY	30,621	0	0	10,207	10,207
VACAVILLE	2,522,502	1,569,382	1,571,808	1,887,897	1,887,897
VALLEJO	985,323	1,040,209	369,330	798,287	798,287

SONOMA COUNTY

CLOVERDALE	156,010	5,169	293,365	151,515	151,515
COTATI	60,115	51,040	31,544	47,566	47,566
HEALDSBURG	0	0	0	0	0
PETALUMA	7,322,338	993,999	495,748	2,937,362	2,937,362
ROHNERT PARK	1,025,979	828,585	981,407	945,324	945,324
SANTA ROSA	6,468,129	8,800,507	5,678,335	6,982,324	6,982,324
SEBASTOPOL	245,648	129,744	159,486	178,293	178,293
SONOMA	404,756	347,232	0	250,663	250,663
WINDSOR	724,561	1,797,156	2,696,772	1,739,496	1,739,496

STANISLAUS COUNTY

CERES	0	0	0	0	0
HUGHSON	136,680	132,119	189,270	152,690	152,690
MODESTO	3,530,841	959,975	1,812,175	2,100,997	2,100,997
NEWMAN	0	0	219,381	73,127	73,127
OAKDALE	153,977	60,722	0	71,566	71,566
PATTERSON	572,796	481,166	501,794	518,585	518,585
RIVERBANK	336,919	134,230	180,178	217,109	217,109
TURLOCK	0	0	0	0	0
WATERFORD	0	147,216	25,913	57,710	57,710

SUTTER COUNTY

LIVE OAK	3,923	3,923	3,923	3,923	3,923
YUBA CITY	0	0	0	0	0

TEHAMA COUNTY

CORNING	232,529	185,640	285,173	234,447	234,447
RED BLUFF	495,197	293,275	525,779	438,084	438,084
TEHAMA	3,601	1,102	430	1,711	1,711

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹
revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes					
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.

TRINITY COUNTY TULARE COUNTY

DINUBA	57,000	70,000	120,000	82,333	82,333
EXETER	637,515	58,441	83,984	259,980	259,980
FARMERSVILLE	0	0	0	0	0
LINDSAY	154,202	397,100	(758,524) ²	183,767 ²	183,767
PORTERVILLE	1,182,108	850,182	1,248,670	1,093,653	1,093,653
TULARE	1,752,448	2,255,760	695,425	1,567,878	1,567,878
VISALIA	2,699,377	2,631,980	2,413,037	2,581,465	2,581,465
WOODLAKE	24,478	0	0	8,159	8,159

TUOLUMNE COUNTY

SONORA	459,266	383,799	344,989	396,018	396,018
--------	---------	---------	---------	---------	---------

VENTURA COUNTY

CAMARILLO	5,331,295	4,979,260	3,428,772	4,579,776	4,579,776
FILLMORE	(185,162) ²	156,008	0	52,003 ²	52,003
MOORPARK	242	119,733	160,815	93,597	93,597
OJAI	102,182	29,086	186,093	105,787	105,787
OXNARD	5,213,999	5,498,706	3,773,725	4,828,810	4,828,810
PORT HUENEME	1,146,207	1,068,356	1,088,406	1,100,990	1,100,990
SAN BUENAVENTURA	4,813,188	4,566,749	5,082,875	4,820,937	4,820,937
SANTA PAULA	60,816	27,770	22,770	37,119	37,119
SIMI VALLEY	5,381,507	3,247,812	2,800,262	3,809,860	3,809,860
THOUSAND OAKS	5,375,524	5,741,951	5,756,860	5,624,778	5,624,778

YOLO COUNTY

DAVIS	2,204,650	2,280,231	1,980,047	2,154,976	2,154,976
WEST SACRAMENTO	932,681	1,166,477	336,459	811,872	811,872
WINTERS	0	0	0	0	0
WOODLAND	637,225	1,588,429	2,400,473	1,542,042	1,542,042

YUBA COUNTY

MARYSVILLE	424,889	441,426	724,393	530,236	530,236
WHEATLAND	1,700	0	0	567	567

Statewide Total	\$ 1,232,281,068	\$ 1,103,010,080	\$ 1,059,032,801	\$ 1,138,746,213	\$ 1,138,746,213
-----------------	------------------	------------------	------------------	------------------	------------------

Maintenance of Effort - General Fund for Streets & Roads - Estimated Unofficial

Road Maintenance and Rehabilitation Account per Streets & Hwys Code Sec 2036 ¹

revised est: 08/07/2017

Streets and Roads Annual Report - Reported General Fund for Street Purposes						
FY2009-10	FY2010-11	FY2011-12	Average	Adjustment	RMRA M.O.E.	

Notes:

1. "In order to receive an allocation or apportionment pursuant to Section 2032, the city or county shall annually expend from its general fund for street, road, and highway purposes an amount not less than the annual average of its expenditures from its general fund during the 2009-10, 2010-11, and 2011-12 fiscal years, as reported to the Controller pursuant to Section 2151. For purposes of this subdivision, in calculating a city's or county's annual general fund expenditures and its average general fund expenditures for the 2009-10, 2010-11, and 2011-12 fiscal years, any unrestricted funds that the city or county may expend at its discretion, including vehicle in-lieu tax revenues and revenues from fines and forfeitures, expended for street, road, and highway purposes shall be considered expenditures from the general fund. One-time allocations that have been expended for street and highway purposes, but which may not be available on an ongoing basis, including revenue provided under the Teeter Plan Bond Law of 1994 (Chapter 6.6 (commencing with Section 54773) of Part 1 of Division 2 of Title 5 of the Government Code), may not be considered when calculating a city's or county's annual general fund expenditures." - Streets and Highways Code Sec 2036(b)

Source data: SCO Annual Streets and Roads Reports at http://www.sco.ca.gov/ard_locrep_streets.html Table 5 "Discretionary." Also See Table 3.

2. Assumes negative values treated as zero expenditures for that year.

3. Although RMRA funds do not begin flowing until after January 2018, the full MOE is required for FY2017-18 and subsequent years.

4. "For any city incorporated after July 1, 2009, the Controller shall calculate an annual average expenditure for the period between July 1, 2009, and December 31, 2015, inclusive, that the city was incorporated." - Streets and Highways Code Sec 2036(c) Two cities, Eastvale (1 Oct 2010) and Jurupa Valley (1 July 2011), incorporated after July 1, 2009.

	<u>2010-11*</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>2014-15</u>	<u>7thru12.'15*</u>	<u>MOE</u>
Eastvale	16,270	41,471	88,331	58,525	64,231	45,052	59,787
monthly	1,808	3,456	7,361	4,877	5,353	7,509	
mo's in calc	9	12	12	12	12	6	
		<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16*</u>	<u>MOE</u>
Jurupa Valley		-	-	-	-	-	-

Senate Bill (SB) 1 Proposed Project List Form

Local Streets and Roads Program

Agency Name:		Agency Contact:
St Helena		Erica Ahmann Smithies
		(707) 968-2629
LoCode:	5051	esmithies@cityofsthelena.org

FY
17/18

Summary of Proposed Project List

Project No.	Project Title	Project Description	Project Location	Estimated Completion Date (mm/dd/yyyy)		Estimated Useful Life (# of yrs)	
				Pre-Construction	Construction	Min.	Max.
PP01	Pavement Restoration Project	Overlay 0.3 miles on Railroad Avenue and re-stripe	Railroad Ave from Fulton Ln to Hunt Ave	05/2018	07/2018	7	15
PP02	Oak Avenue Storm Drain Repair	Replace storm drain, backfill trenches, and repair street	Oak Ave btw Mitchell Drive& Spring St	10/2017	11/2017	7	50
PP03							
PP04							
PP05							
PP06							
PP07							
PP08							
PP09							
PP10							
PP11							
PP12							
PP13							
PP14							
PP15							
PP16							
PP17							
PP18							
PP19							
PP20							
PP21							
PP22							
PP23							
PP24							
PP25							

CITY OF ST. HELENA

RESOLUTION NO. 2017-

**APPROVING THE ROAD MAINTENANCE AND REHABILITATION
ACCOUNT PROJECT LIST (FY 2017/18)**

RECITALS

- A. Senate Bill 1 (SB 1), the Road Repair and Accountability Act of 2017 (Chapter 5, Statutes of 2017) was passed by the Legislature and Signed into law by the Governor in April 2017 in order to address the significant multi-modal transportation funding shortfalls statewide; and
- B. SB 1 includes accountability and transparency provisions that will ensure the residents of our City are aware of the projects proposed for funding in our community and which projects have been completed each fiscal year; and
- C. The City must include a list of all projects proposed to receive funding from the Road Maintenance and Rehabilitation Account (RMRA), created by SB 1, in the City budget, which must include a description and the location of each proposed project, a proposed schedule for the project's completion, and the estimated useful life of the improvement; and
- D. The City, will receive an estimated \$40,893 in RMRA funding in Fiscal Year 2017-18 from SB 1; and
- E. Prior to receiving an apportionment of RMRA funds in FY 17/18, the City is required to submit to the California Transportation Commission a list of projects proposed to be funded by October 16, 2017; and
- F. Staff has recommended that the FY 17/18 RMRA funds be utilized for the Pavement Restoration Project (R18-79) and Oak Avenue Storm Drain Repair (R18-82); and

RESOLUTION

NOW, THEREFORE, the City Council of the City of St. Helena resolves as follows:

- 1. Finds the Road Maintenance and Rehabilitation Account Project List to be exempt from the California Environmental Quality Act pursuant to CEQA section 15301, Existing Facilities Class 1 which exempts the operation, repair, maintenance, and permitting of existing facilities involving negligible or no expansion of use including publicly owned utilities; and
- 2. Approves the following Road Maintenance and Rehabilitation Account Project List for FY 17-18:
 - a. Pavement Restoration Project (R18-79)
Location: Railroad Avenue from Fulton Lane to Hunt Avenue
Description: Overlay and Restriping

Estimated Useful life: 7-15 years

Estimated Project Completion: July 2018

b. Oak Avenue Storm Drain Repair (R18-82)

Location: Oak Street from Spring Street to Mitchell Drive

Description: Storm Drain Replacement and Street Repair

Estimated Useful life: 7-50 years

Estimated Project Completion: November 2017

I HEREBY CERTIFY that this Resolution was adopted at a regular meeting of the City Council held on September 26, 2017 by the following roll call vote:

Mayor Galbraith:

Vice Mayor White:

Councilmember Dohring:

Councilmember Ellsworth:

Councilmember Koberstein:

APPROVED:

ATTEST:

Alan Galbraith, Mayor

Cindy Tzaopoulos, City Clerk



Report to the City Council
Council Meeting of September 26, 2017

Agenda Section: Consent

Subject: Consideration and proposed adoption of a resolution accepting the Water and Wastewater Rates and to proceed with the Proposition 218 requirements for Water and Wastewater Rate Schedule Changes.

CEQA Determination: Exempt from the requirements of CEQA under the "General Rule", Section 15061 (b)(3), in that it can be seen with certainty that the proposed action will have no impact on the environment.

Prepared By: April Mitts, Finance Director

Reviewed By: Mark Prestwich, City Manager

Approved By: Mark Prestwich, City Manager

BACKGROUND

On November 29, 2016, City Council adopted new utility rates for the City of St. Helena. Following adoption of the new rates City Council provided direction to form an Ad Hoc Water and Wastewater Committee with the direction to review the Water and Wastewater Study dated October 31, 2016 and make recommendations, if any, to the Council for revisions to the Study and possible adjustments to the rates adopted by the City Council on November 29, 2016.

The Utility Rate Ad Hoc Committee met numerous times during April and May 2017 and presented their recommendations to City Council at a special meeting held on June 19, 2017. At this meeting City Council discussed each recommendation and provided direction to staff and Hansford Economic Consulting (HEC) to complete the utility rate revisions.

The purpose of each study was to determine the level of funding required to adequately fund the water and wastewater systems while providing the residents and businesses

with safe and reliable water and wastewater systems that meet State and Federal requirements.

The October 31, 2016 Study presented provided an explanation and justification of the calculated water and wastewater rates through June 30, 2022, and it documented adherence to the law regarding setting of rates by a municipality. The Study calculated water and wastewater rates by customer type for the next ten years; however, the City only adopted rates for five years with the proposition 218 notification and hearing process. The revised rate models presented for adoption adhere to the methodologies, explanation, and justifications used in the original rate study dated October 31, 2016 with revisions only to the revenue requirements based on City Council direction. The October 31, 2016 Rate Study is provided as Attachment 5.

In November 1996, California voters approved Proposition 218 requiring compliance with certain procedures and standards with regard to "property-related" fee increases imposed by local governmental agencies. Per California Constitution Article XIII D, Section 6, water and wastewater rates shall not be extended, imposed, or increased by any agency unless it meets all of the following requirements;

1. Revenues derived from the fee or charge shall not exceed the funds required to provide the related service to the property.
2. Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
3. The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
4. No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted.
5. No fee or charge may be imposed for general governmental services including, but not limited to, police, fire, ambulance or library services, where the service is available to the public at large in substantially the same manner as it is to property owners.

DISCUSSION

On September 12, 2017, the City published rate models for the citizens to review and for the City Council to consider. On September 18, 2017 the City held a Special Meeting for City Council to discuss the options presented and make recommendations on which rate model to proceed with for the establishment of new utility rates for the City of St. Helena.

Staff is bringing the Council's selected September 18, 2017 Water and Wastewater Rates (Attachment 3 and Attachment 4) back to Council to accept and to proceed with the Proposition 218 process. If Council accepts the rates and directs staff to proceed with the Proposition 218 notices, the following will be the remaining steps;

1. Develop a Notice of Public Hearing on Proposed Rate Adjustments to Water and Wastewater Rates, citing the proposed maximum rates, how the property owner can calculate their bill, how the revenues will be utilized, general information about the scheduled public hearing and instructions on how to protest the proposed rates;
2. Mail the notices to property owners and tenants, if any, at least 45 days before the scheduled public hearing (November 28, 2017); and
3. Collect and maintain a count of all written protest votes received. The City cannot impose the new rates if 50% plus one unique parcel protests are submitted to, and validated by, the City Clerk. Immediately after the close of the public hearing, the City Clerk will make a determination if a majority protest exists and report the results to the City Council.
4. If a majority protest does not exist, the City Council may adopt proposed rates by ordinance. If a majority protest does exist, the City Council could - at its discretion - place the matter on the ballot for voter approval.

The draft resolution, if adopted, will facilitate the Proposition 218 proceedings. New water and wastewater rates can be adopted after the Public Hearing scheduled for November 28, 2017 at 6:00 pm.

FISCAL IMPACT

The fiscal impact of this item is the cost to print and mail Proposition 218 Notices. Water and wastewater rates will not be impacted by this resolution.

RECOMMENDED ACTION

Approve a resolution authorizing the City Manager to begin the Proposition 218 requirements for water and wastewater rate schedule changes; and accept the Draft 2017 Water and Wastewater Rates prepared by Hansford Economic Consulting.

ATTACHMENTS

[Attachment 1 - Rate Increase Notice Resolution](#)

[Attachment 2 - Prop 218 Notice](#)

[Attachment 3 - Proposed Water Rates](#)

[Attachment 4 - Proposed Wastewater Rates](#)

[Attachment 5 - 2016 Rate Study](#)

Attachment 1

CITY OF ST. HELENA

RESOLUTION NO. 2017-____

**Acceptance of Water and Wastewater
Rates and Adoption of a Resolution
to Proceed with the Proposition 218
Requirements for Water and
Wastewater Rate Schedule Changes**

RECITALS

- A. On November 29, 2016, City Council adopted new utility rates; and
- B. Prior to this increase the previous water and wastewater rates were last reviewed in 2011. The 2011 rate changes implemented annual rate increases for five years based on the Consumer Price Index (CPI); and
- C. The 2011 water and wastewater rates did not provide adequate funding for the water and wastewater systems; and
- D. In 2016, the City contracted with Hansford Economic Consulting to perform a Water and Wastewater Rate Study. The purpose of this study was to determine the level of funding required to adequately fund the water and wastewater systems, providing the residents and businesses with safe and reliable water and wastewater systems that meets State and Federal requirements; and
- E. In November 1996, California voters approved Proposition 218 requiring compliance with certain procedures and standards with regard to "property-related" fee increases imposed by local governmental agencies; and
- F. On May 24, 2016 City Council authorized the re-establishment of the Ad Hoc Revenue Source Task Force (Task Force) to review and provide input on the Rate Study. Two meetings were held, one on August 4, 2016 and the other on September 13, 2016, these meetings were open to the public and recorded; and
- G. On November 29, 2016, City Council adopted new utility rates for the City of St. Helena effective the February 2017 billing cycle; and
- H. Following the adoption of the new rates City Council provided direction to form an Ad Hoc Utility Rate Committee with the direction to review the Water and Wastewater Study dated October 31, 2016 and make recommendations, if any, to the City Council for revisions to the Study and possible adjustments to the rates adopted by City Council on November 29, 2016; and

Attachment 1

- I. The Ad Hoc Utility Rate Committee met numerous times during April and May 2017, these meetings were open to the public and recorded; and
- J. On June 19, 2017 the Ad Hoc Utility Rate Committee presented their recommendations to City Council; and
- K. At this meeting City Council discussed each recommendation and provided direction to staff and HEC to complete the utility rate revisions; and
- L. On September 12, 2017, the City published rate models for citizen review and City Council consideration; and
- M. On September 18, 2017 the City held a Special Meeting for City Council to discuss the options presented and make recommendations on which rate models to proceed with for the establishment of new utility rates for the City of St. Helena; and
- N. Per California Constitution Article XIID, Section 6, water and wastewater rates shall not be extended, imposed, or increased by any agency unless it meets all of the following requirements:
 - 1. Revenues derived from the fee or charge shall not exceed the funds required to provide the related service to the property,
 - 2. Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed,
 - 3. The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel,
 - 4. No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted, and
 - 5. No fee or charge may be imposed for general governmental services including, but not limited to, police, fire, ambulance or library services, where the service is available to the public at large in substantially the same manner as it is to property owners.

RESOLUTION

The City Council of the City of St. Helena hereby resolves as follows:

Attachment 1

1. Acknowledges acceptance of the Draft 2017 Water and Wastewater Rates completed by Hansford Economic Consulting, circulated September 12, 2017.
2. Directs the City Manager to proceed with the Proposition 218 process, including:
 - Develop a Notice of Public Hearing on proposed modifications to water and wastewater rates, citing the proposed maximum rates, how the property owner can calculate their bill, how the revenues will be utilized, general information about the scheduled public hearing and instructions on how to protest the proposed rates;
 - Mail the notices to property owners and/or tenants at least 45 days before the scheduled public hearing (scheduled for November 28, 2017 at 6:00 pm); and
 - Collect and maintain a count of all written protest votes received. The City cannot impose the new rates if 50% plus one unique parcel protests are submitted to, and validated by, the City Clerk. Immediately after the close of the public hearing, the City Clerk will make a determination if a majority protest exists and report the results to the City Council.
 - If a majority protest does not exist, the City Council may adopt proposed rates by resolution. If a majority protest does exist, the City Council could - at its discretion - place the matter on the ballot for voter approval.

Approved at a Regular Meeting of the St. Helena City Council on September 26, 2017 by the following vote:

Mayor Galbraith:	_____
Vice Mayor White:	_____
Councilmember Dohring:	_____
Councilmember Koberstein:	_____
Councilmember Ellsworth:	_____

APPROVED:

ATTEST:

Alan Galbraith, Mayor

Cindy Tzafopoulos, City Clerk

Attachment 2



NOTICE OF PUBLIC HEARING

PROPOSED WATER AND WASTEWATER

RATE CHANGES

«Customer Name» «DBA»
 «Mailing Address»
 «City and State» «Zip»

RE: «Service Address», «APN»

PUBLIC HEARING
November 28, 2017 @ 6:00 p.m.
 Vintage Hall Board Room – Second Floor
 465 Main Street, St. Helena

PROPOSITION 218 NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the City of St. Helena will hold a Public Hearing on Tuesday, November 28, 2017 at 6:00 p.m. at the location stated above to consider the adoption of modifications to the rates for its water and wastewater services.

****Toda esta información puede ser encontrada en Español en la página web de la Ciudad de St. Helena www.cityofstheleena.org/ratestudy. Si tiene preguntas adicionales por favor contacte a Carlos Uribe al 707-486-6144 o por correo electrónico curibe@cityofstheleena.org****

WHY ARE WATER AND WASTEWATER RATE CHANGES NEEDED?

The City makes every effort to provide its customers with the most efficient and cost effective water and wastewater services possible. Rates are used to: (1) adequately fund the water and wastewater systems so they can be operated safely and provide residents and businesses with reliable service; (2) maintain the operational and financial stability of the utilities; (3) comply with state and federal regulatory water and wastewater treatment and disposal requirements; (4) fund water and wastewater infrastructure needs; (5) provide timely maintenance of existing facilities; and (6) provide operating reserves of at least 25% of the annual water and wastewater budgets for emergencies and unforeseen costs.

The City engaged an independent consultant to examine current and projected water and wastewater utility system revenue needs. The consultant's initial analysis demonstrated a need to raise water and wastewater rates over the next five years to achieve funding needs which led to the adoption of the current utility rates on November 29, 2016. Prior to this rate adoption the City had not performed an analysis of its rates for water and wastewater services since 2011. The City's water and wastewater utilities rely on rates to fund operating and capital needs. It is considered a best practice to analyze rate structures every three to five years.

Prior to the rates adopted on November 29, 2016, the water fund used reserves to fund general operations and the wastewater fund had no reserves. Reserve funds are needed to fund emergencies and unforeseen costs. In 2011, the City adopted a target of reaching an operating reserve of 25% of the annual budget in each of the water and wastewater funds.

Seeing the impact of utility rates adopted on November 29, 2016 had on residents and businesses, City Council, on March 14, 2017, established an Ad Hoc Utility Rate Committee to: (1) review the Water and Wastewater Study dated October 31, 2016, and make recommendations, if any, to the Council for revisions to the Study and potential

adjustments to the rates adopted by City Council on November 29, 2016; (2) assess available financing options for CIP projects in the first five years of the Rate Study; (3) assess other significant financial assumptions in the study, such as reserves, adequacy of sinking funds, and designated and undesignated fund balances, and do so in accordance with generally accepted financial principles; and (4) explore any apparent inequities related to industrial, commercial, and residential rates, generate alternative rate models, and recommend potential actions.

On June 19, 2017, the Ad Hoc Utility Rate Committee made its recommendations to City Council and City Council directed staff to update the water and wastewater rate models according to their recommendations.

The consultant's additional analysis and proposed changes to the current utility rate structures provide revenues that (1) comply with City Council recommendations; (2) recover costs reasonably borne in providing the services; (3) are equitable to all customer classes; and (4) are proportionate to the cost of the service attributable to the parcels within each customer class.

The 2016 Water and Wastewater Rate Study and cost data used to calculate the proposed rate modifications in the water and wastewater service charges are available online (www.cityofsthelena.org/ratestudy) or in person at the locations identified on Page 8. City staff is also available to answer questions.

Questions?

Contact Jenn Weeks
jweeks@cityofsthelena.org
707.968-2753

¿Preguntas?

Contacte a Carlos Uribe
curibe@cityofsthelena.org
707.486.6144

YOUR RIGHTS

If you are the record owner of a property subject to the proposed rates or a tenant directly liable for the payment of water and wastewater service fees (i.e., a customer of record), you may submit a written protest against the proposed rate changes. Written protests may be submitted in person or by mail to the City Clerk, City of St. Helena, 1480 Main Street, St. Helena, CA 94574, or in person at the Public Hearing (date, time and location noted on the previous page), so long as they are **received** prior to the conclusion of public testimony at the Public Hearing. Protests that are postmarked but not received prior to the Public Hearing will not be counted. Please identify on the front of the envelope "Water and Wastewater Rate Protest" for any protest, whether mailed or submitted in person to the City Clerk. Protests submitted verbally, by e-mail, facsimile, or other electronic means will not be accepted.

Each protest **must**: (1) be in writing; (2) state that the protest is being submitted in opposition to the proposed water and wastewater rate modifications; (3) provide the location of the identified parcel or parcels for which the protest is submitted (by assessor's parcel number or street address); and (4) include the name and original signature of the property owner or customer of record submitting the protest. Only one written protest per parcel will be counted.

The City Council will consider all written protests timely submitted and consider all public comments made at the Public Hearing. Oral comments at the Public Hearing will not qualify as formal protests unless accompanied by a written protest. At the conclusion of the Public Hearing, the City Council will consider adopting the proposed rate modifications. If, at the close of the Public Hearing, complete written protests are submitted by the record owners or customers of record for the majority of the parcels served by the City's water and/or wastewater utilities (50% plus one, a "majority protest"), the City will not approve the proposed rates. If, at the close of the Public Hearing, a majority protest does not exist, the City Council may impose rate modifications up to the maximum amounts proposed. If adopted, the new water and wastewater rates will be effective for the December 2017 billing cycle.

(inclusive of service provided in November 2017) and thereafter the approved schedule of rate increases will go into effect for each November billing cycle (inclusive of service provided in October) of 2018, 2019, 2020, and 2021.

PROPOSED WATER RATES

The City is proposing to adopt a five-year water rate schedule shown in the table on Page 5. Overall the rate schedule decreases rates and still keeps in line with funding needs. The City remains committed to operating as efficiently as possible and will only implement annual rates increases as needed based on a regular review of utility finances.

Under the current and proposed rate structures, customers are charged a monthly fixed service charge and a variable use rate for metered water use. Under the current and proposed rate structures, the variable use rate differs depending on the amount of metered water used, a seasonal water rate structure, with higher use rates per hundred cubic feet (HCF) in the peak season, May through October, and lower use rates per HCF in the off-peak season, November through April, and a drought surcharge. The drought surcharge would be applied when the City determines it is in Phase 1 water restrictions, as defined in the city municipal code.

Customers wanting to utilize raw water available at the Lower Creek Reservoir, per St. Helena Municipal Code, Section 13.12.030, must obtain a permit through the City on a quarterly basis. The permit and instructions are available on the City website: <http://www.cityofstheleena.org/resource>.

Current Five-Year Water Rate Schedule

Charges	Current	Billing Period Beginning *						
		2/8/2017	11/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021	
Service Charge			Monthly Charges per Meter					
5/8" , 3/4" & SF 1"	\$27.52	\$43.22	\$51.71	\$60.59	\$64.78	\$68.91	\$73.27	
1"	\$63.80	\$80.08	\$96.76	\$114.44	\$123.35	\$132.22	\$141.61	
1.5"	\$124.12	\$141.67	\$172.02	\$204.36	\$221.14	\$237.94	\$255.72	
2"	\$196.50	\$215.12	\$261.84	\$311.76	\$337.99	\$364.27	\$392.10	
3"	\$365.51	\$413.06	\$503.54	\$600.40	\$651.86	\$703.51	\$758.21	
4"	\$607.01	\$640.46	\$780.29	\$930.11	\$1,010.10	\$1,090.44	\$1,175.54	
6"	\$1,210.18	\$1,252.50	\$1,528.85	\$1,825.17	\$1,983.80	\$2,143.19	\$2,312.05	
Private Fire Protection			Monthly Charges per Fire Service Pipe					
4"	\$4.00	\$8.47	\$9.92	\$11.38	\$11.89	\$12.36	\$12.86	
6"	\$6.00	\$24.59	\$28.81	\$33.05	\$34.53	\$35.91	\$37.34	
8"	\$8.00	\$52.41	\$61.40	\$70.43	\$73.57	\$76.52	\$79.58	
Raw Water <i>per Gallon</i>	\$0.00267	\$0.00273	\$0.00320	\$0.00367	\$0.00383	\$0.00398	\$0.00414	
TREATED WATER USE CHARGES PER HCF								
NON-DROUGHT PERIOD	[1]							
Off-Peak (Nov-Apr)		\$5.50	\$6.37	\$7.19	\$7.37	\$7.54	\$7.71	
Peak (May-Oct)		\$6.11	\$7.09	\$8.00	\$8.20	\$8.38	\$8.58	
DROUGHT PERIOD	[1]							
Off-Peak (Nov-Apr)		\$5.81	\$6.73	\$7.60	\$7.79	\$7.97	\$8.15	
Peak (May-Oct)		\$6.46	\$7.49	\$8.45	\$8.66	\$8.86	\$9.06	

Source: HEC.

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

[1] Current Rate Structure rates as follows:

Tiers by customer category (in hcf):		<u>Tier 1</u>	<u>Tier 2</u>		<u>Tier 1</u>	<u>Tier 2</u>
Single family	0-14	15+	Non-residential <=1"		0-36	37+
Multi-family	0-5	6+	Non-residential 1.5"		0-120	121+
			Non-residential 2"		0-192	193+
<i>Price per HCF</i>	<i>\$4.48</i>	<i>\$6.74</i>	Non-residential 3"		0-360	361+
<i>Price per HCF - Landscape Irrigation</i>	<i>\$5.22</i>		Non-residential 4"		0-600	601+
			Non-residential 6"		0-1,250	1,251+
			Non-residential 8"		0-1,920	1,921+

Proposed Five-Year Water Rate Schedule

Charges	Current	Rates Effective*				
		12/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021
Service Charge		Monthly Charges per Meter				
5/8", 3/4" & SF 1"	\$43.22	\$54.17	\$56.20	\$61.36	\$65.63	\$69.89
1"	\$80.08	\$95.91	\$100.44	\$110.68	\$119.41	\$128.22
1.5"	\$141.67	\$165.65	\$174.36	\$193.07	\$209.25	\$225.64
2"	\$215.12	\$248.86	\$262.56	\$291.43	\$316.53	\$342.00
3"	\$413.06	\$472.90	\$500.00	\$556.00	\$604.96	\$654.72
4"	\$640.46	\$729.79	\$772.11	\$858.79	\$934.75	\$1,011.98
6"	\$1,252.50	\$1,423.17	\$1,507.16	\$1,678.44	\$1,828.74	\$1,981.63
Private Fire Protection		Monthly Charges per Fire Service Pipe				
4"	\$8.47	\$11.22	\$11.39	\$12.18	\$12.77	\$13.33
6"	\$24.59	\$32.59	\$33.07	\$35.39	\$37.09	\$38.73
8"	\$52.41	\$69.45	\$70.48	\$75.41	\$79.05	\$82.53
Raw Water <i>per Gallon</i>	\$0.00273	\$0.00313	\$0.00335	\$0.00359	\$0.00379	\$0.00397
TREATED WATER USE CHARGES						
NON-DROUGHT PERIOD						
Off-Peak (Nov-Apr)	\$5.50	\$5.88	\$5.84	\$6.15	\$6.33	\$6.50
Peak (May-Oct)	\$6.11	\$6.54	\$6.50	\$6.84	\$7.04	\$7.23
DROUGHT PERIOD						
Off-Peak (Nov-Apr)	\$5.81	\$6.21	\$6.17	\$6.49	\$6.69	\$6.87
Peak (May-Oct)	\$6.46	\$6.91	\$6.86	\$7.22	\$7.44	\$7.63

Source: HEC.

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

PROPOSED WASTEWATER RATES

Existing wastewater rates are shown in the table below.

Existing Wastewater Rate Schedule

Customer Category		Fiscal Year Ending					
		2017	2018	2019	2020	2021	2022
<i>Billing Period Beginning * -----></i>		<i>2/8/2017</i>	<i>11/8/2017</i>	<i>11/8/2018</i>	<i>11/8/2019</i>	<i>11/8/2020</i>	<i>11/8/2021</i>
Residential							
Single Family	monthly per unit	\$48.04	\$55.24	\$70.13	\$73.03	\$74.18	\$75.23
Multi-Family	monthly per unit	\$29.07	\$33.42	\$42.43	\$44.18	\$44.88	\$45.52
Mobile Homes	monthly per unit	\$43.11	\$49.57	\$62.93	\$65.53	\$66.56	\$67.51
<i>Residential Rate per HCF</i>	<i>per HCF</i>	<i>\$4.69</i>	<i>\$5.39</i>	<i>\$6.84</i>	<i>\$7.12</i>	<i>\$7.23</i>	<i>\$7.34</i>
Schools Flat Rate per Student	monthly per student	\$1.40	\$1.62	\$2.15	\$2.21	\$2.26	\$2.28
Non-Residential							
Car Wash	monthly per account	\$209.93	\$243.25	\$328.36	\$336.45	\$343.13	\$346.45
Religious Places/Community Centers	monthly per account	\$35.34	\$40.85	\$54.06	\$55.68	\$56.71	\$57.34
Commercial [1]	monthly per account	\$62.70	\$72.20	\$92.64	\$96.19	\$97.78	\$99.09
Groceries and Mortuaries	monthly per account	\$433.93	\$492.12	\$552.00	\$595.15	\$599.41	\$613.71
Laundry	monthly per account	\$970.94	\$1,121.45	\$1,475.85	\$1,522.21	\$1,549.87	\$1,567.76
Mixed Retail w/ Food	monthly per account	\$541.20	\$617.30	\$730.21	\$775.32	\$783.78	\$799.17
Motel with Food	monthly per account	\$2,617.64	\$2,978.36	\$3,444.90	\$3,681.23	\$3,715.59	\$3,795.12
Motel without Food	monthly per account	\$642.15	\$738.08	\$933.28	\$972.87	\$987.93	\$1,002.28
Restaurant	monthly per account	\$840.03	\$952.80	\$1,070.03	\$1,153.27	\$1,161.63	\$1,189.23
Napa Valley College	monthly per account	\$2,889.93	\$3,341.62	\$4,436.77	\$4,565.57	\$4,651.20	\$4,701.87
Service Station	monthly per account	\$93.25	\$107.06	\$134.07	\$140.12	\$142.20	\$144.37
Winery Production (Merryvale/Spottswoode)	monthly per account	\$989.21	\$1,116.93	\$1,199.98	\$1,310.53	\$1,315.85	\$1,351.87
Sutter Home Winery	monthly per account	\$876.04	\$1,007.39	\$1,278.85	\$1,331.67	\$1,352.66	\$1,371.89
<i>Car Wash</i>	<i>per HCF</i>	<i>\$3.43</i>	<i>\$3.97</i>	<i>\$5.36</i>	<i>\$5.49</i>	<i>\$5.60</i>	<i>\$5.65</i>
<i>Religious Places/Community Centers</i>	<i>per HCF</i>	<i>\$3.72</i>	<i>\$4.30</i>	<i>\$5.69</i>	<i>\$5.86</i>	<i>\$5.97</i>	<i>\$6.03</i>
<i>Commercial [1]</i>	<i>per HCF</i>	<i>\$4.27</i>	<i>\$4.92</i>	<i>\$6.31</i>	<i>\$6.55</i>	<i>\$6.66</i>	<i>\$6.75</i>
<i>Groceries and Mortuaries</i>	<i>per HCF</i>	<i>\$10.30</i>	<i>\$11.68</i>	<i>\$13.10</i>	<i>\$14.12</i>	<i>\$14.22</i>	<i>\$14.56</i>
<i>Laundry</i>	<i>per HCF</i>	<i>\$3.81</i>	<i>\$4.40</i>	<i>\$5.79</i>	<i>\$5.97</i>	<i>\$6.08</i>	<i>\$6.15</i>
<i>Mixed Retail w/ Food</i>	<i>per HCF</i>	<i>\$6.73</i>	<i>\$7.68</i>	<i>\$9.08</i>	<i>\$9.64</i>	<i>\$9.75</i>	<i>\$9.94</i>
<i>Motel with Food</i>	<i>per HCF</i>	<i>\$7.91</i>	<i>\$9.00</i>	<i>\$10.41</i>	<i>\$11.12</i>	<i>\$11.23</i>	<i>\$11.47</i>
<i>Motel without Food</i>	<i>per HCF</i>	<i>\$4.59</i>	<i>\$5.27</i>	<i>\$6.67</i>	<i>\$6.95</i>	<i>\$7.06</i>	<i>\$7.16</i>
<i>Restaurant</i>	<i>per HCF</i>	<i>\$10.18</i>	<i>\$11.54</i>	<i>\$12.96</i>	<i>\$13.97</i>	<i>\$14.07</i>	<i>\$14.41</i>
<i>Napa Valley College</i>	<i>per HCF</i>	<i>\$3.67</i>	<i>\$4.24</i>	<i>\$5.63</i>	<i>\$5.79</i>	<i>\$5.90</i>	<i>\$5.97</i>
<i>Service Station</i>	<i>per HCF</i>	<i>\$4.82</i>	<i>\$5.53</i>	<i>\$6.93</i>	<i>\$7.24</i>	<i>\$7.35</i>	<i>\$7.46</i>
<i>Winery Production (Merryvale/Spottswoode)</i>	<i>per HCF</i>	<i>\$17.31</i>	<i>\$19.55</i>	<i>\$21.00</i>	<i>\$22.93</i>	<i>\$23.03</i>	<i>\$23.66</i>
<i>Sutter Home Winery</i>	<i>per HCF</i>	<i>\$4.50</i>	<i>\$5.17</i>	<i>\$6.57</i>	<i>\$6.84</i>	<i>\$6.95</i>	<i>\$7.04</i>

Source: HEC.

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

[1] Commercial includes City buildings.

The City is proposing to adopt the five-year wastewater rate schedule shown in the table below. The table indicates the proposed maximum rates and effective dates for the wastewater rates. The rate schedule decreases some rate categories and increases some rate categories and will keep in line with funding needs. The City remains committed to operating as efficiently as possible and will only implement annual rates increases wastewater as needed based on regular review of wastewater utility finances.

Proposed Five-Year Wastewater Rate Schedule

Land Use	Current 2/8/2017	2018 12/8/2017	2019 11/8/2018	2020 11/8/2019	2021 11/8/2020	2022 11/8/2021
Residential						
Single Family Flat Monthly Charge per Unit	\$48.04	\$56.10	\$56.50	\$58.93	\$60.91	\$63.66
Use Charge per HCF (SFR, Multi-Family, Mobile Homes)	\$4.69	\$4.92	\$4.96	\$5.17	\$5.34	\$5.58
Non-Residential						
Flat Monthly Charge per Account [1]						
5/8"	n.a.	\$77.86	\$78.41	\$81.78	\$84.54	\$88.34
1"	n.a.	\$194.64	\$196.03	\$204.46	\$211.35	\$220.86
1.5"	n.a.	\$389.29	\$392.07	\$408.92	\$422.69	\$441.71
2"	n.a.	\$622.86	\$627.31	\$654.27	\$676.31	\$706.74
3"	n.a.	\$1,245.72	\$1,254.62	\$1,308.54	\$1,352.62	\$1,413.49
4"	n.a.	\$1,946.43	\$1,960.35	\$2,044.59	\$2,113.46	\$2,208.57
6"	n.a.	\$3,892.86	\$3,920.69	\$4,089.18	\$4,226.93	\$4,417.14
Use Charge per HCF	<i>avg. winter month</i>	<i>Rate applied to metered water use each month [2]</i>				
Car Wash	n.a.	\$3.40	\$3.42	\$3.57	\$3.69	\$3.86
Religious Places/Community Centers	n.a.	\$3.78	\$3.81	\$3.97	\$4.11	\$4.29
Commercial [3]	n.a.	\$4.46	\$4.50	\$4.69	\$4.85	\$5.07
Groceries and Mortuaries	n.a.	\$12.00	\$12.09	\$12.61	\$13.03	\$13.62
Laundry	n.a.	\$3.90	\$3.93	\$4.09	\$4.23	\$4.42
Mixed Retail	n.a.	\$7.51	\$7.56	\$7.88	\$8.15	\$8.52
Lodging with Food	n.a.	\$9.01	\$9.07	\$9.46	\$9.78	\$10.22
Lodging without Food	n.a.	\$4.89	\$4.92	\$5.13	\$5.30	\$5.54
Restaurant	n.a.	\$11.90	\$11.98	\$12.50	\$12.92	\$13.50
Napa Valley College	n.a.	\$3.72	\$3.75	\$3.91	\$4.04	\$4.22
Service Station	n.a.	\$5.14	\$5.18	\$5.40	\$5.58	\$5.83
Winery Pre-Treated	n.a.	\$4.75	\$4.79	\$4.99	\$5.16	\$5.39
Winery Non-Treated [4]	n.a.	\$20.94	\$21.09	\$21.99	\$22.73	\$23.75
Schools	n.a.	\$1.85	\$1.86	\$1.94	\$2.01	\$2.10

Source: City of St. Helena and HEC.

[1] Includes multi-family and mobile homes.

[2] Amount applied to wineries according to measured wastewater flow entering the system, which may or may not equal metered water use.

Payment calculations for flow entering the wastewater system will be conducted on a semi-annual or annual basis.

[3] Commercial includes City buildings.

[4] Currently none.

The current rate schedule includes all types of residential under the residential category (single family, multi-family, and mobile home), and each dwelling unit is charged a fixed monthly service charge per unit plus a variable charge based on monthly winter average water use. Monthly winter average water use is calculated on the months of January through March, excluding any months with zero usage. The average winter water use represents the monthly water consumption that is returned to the wastewater treatment plant. The proposed rate structure

changes residential to only include single family residential service charges per unit. Multi-family and mobile home parks are categorized as non-residential and will be billed a base charge based on their meter size and the residential variable use charge based on their winter average water use.

The proposed wastewater rates for non-residential customers, including schools and religious places/community centers, include a fixed monthly service charge per the size of the meter serving the property, and a variable charge based on actual water use per account. As under the current rate structure, under the proposed rate structure non-residential customers will have a variable use charge that reflects the strength of the wastewater discharged by the non-residential customer type. The greater the strength of the wastewater discharged, the more it costs the City to treat the wastewater. Under the proposed rate structure, the variable charges for all customers are based on flow and wastewater strength. The City Public Works Director will determine the non-residential customer's strength category for each non-residential customer. When multiple uses are served through one water meter, the City will apply the rate for the dominant use. The proposed modifications are intended to more accurately reflect actual customer usage patterns, and the strength of customer wastewater.

To view a copy of the Rate Study please visit:

www.cityofsthelena.org/ratestudy

In-person during regular business hours at:

City Hall
1480 Main Street,
St. Helena, CA 94574

Monday – Friday
8:00 AM – 5:00 PM

St. Helena Public Library
1492 Library Ln
St Helena, CA 94574

Monday 10:00 AM - 6:00 PM
Tuesday 10:00 AM - 7:00 PM
Wednesday 10:00 AM - 7:00 PM
Thursday 10:00 AM - 9:00 PM
Friday 2:00 PM - 6:00 PM
Saturday 2:00 PM - 6:00 PM

*****Toda esta información puede ser encontrada en Español en la página web de la Ciudad de St. Helena www.cityofsthelena.org/ratestudy. Si tiene preguntas adicionales por favor contacte a Carlos Uribe al 707-486-6144 o por correo electrónico curibe@cityofsthelena.org*****

Attachment 3

Table 1
Calculated Water Rates through Fiscal Year Ending 2022
20-year Debt Scenario

DRAFT

Charges	Current	Rates Effective*				
		12/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021
Service Charge						
		Monthly Charges per Meter				
5/8", 3/4" & SF 1"	\$43.22	\$54.17	\$56.20	\$61.36	\$65.63	\$69.89
1"	\$80.08	\$95.91	\$100.44	\$110.68	\$119.41	\$128.22
1.5"	\$141.67	\$165.65	\$174.36	\$193.07	\$209.25	\$225.64
2"	\$215.12	\$248.86	\$262.56	\$291.43	\$316.53	\$342.00
3"	\$413.06	\$472.90	\$500.00	\$556.00	\$604.96	\$654.72
4"	\$640.46	\$729.79	\$772.11	\$858.79	\$934.75	\$1,011.98
6"	\$1,252.50	\$1,423.17	\$1,507.16	\$1,678.44	\$1,828.74	\$1,981.63
Private Fire Protection						
		Monthly Charges per Fire Service Pipe				
4"	\$8.47	\$11.22	\$11.39	\$12.18	\$12.77	\$13.33
6"	\$24.59	\$32.59	\$33.07	\$35.39	\$37.09	\$38.73
8"	\$52.41	\$69.45	\$70.48	\$75.41	\$79.05	\$82.53
Raw Water <i>per Gallon</i>	\$0.00273	\$0.00313	\$0.00335	\$0.00359	\$0.00379	\$0.00397
TREATED WATER USE CHARGES						
NON-DROUGHT PERIOD						
Off-Peak (Nov-Apr)	\$5.50	\$5.88	\$5.84	\$6.15	\$6.33	\$6.50
Peak (May-Oct)	\$6.11	\$6.54	\$6.50	\$6.84	\$7.04	\$7.23
DROUGHT PERIOD						
Off-Peak (Nov-Apr)	\$5.81	\$6.21	\$6.17	\$6.49	\$6.69	\$6.87
Peak (May-Oct)	\$6.46	\$6.91	\$6.86	\$7.22	\$7.44	\$7.63

Source: HEC.

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

Attachment 3

Table 2
Projected Water Fund Cash Flow
20-year Debt Scenario

DRAFT

Revenues and Expenses	Billing Period Beginning	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
		12/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021	11/8/2022	11/8/2023	11/8/2024	11/8/2025	11/8/2026
Revenue											
Water Sales [1]		\$5,650,000	\$6,045,500	\$6,468,685	\$6,824,463	\$7,148,625	\$7,363,083	\$7,583,976	\$7,811,495	\$8,045,840	\$8,287,215
Investment Earnings		\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Finance Charges		\$31,925	\$31,925	\$31,925	\$31,925	\$31,925	\$31,925	\$31,925	\$31,925	\$31,925	\$31,925
Other Revenue		\$17,206	\$17,206	\$17,206	\$17,206	\$17,206	\$17,206	\$17,206	\$17,206	\$17,206	\$17,206
Meter Replacement Fee		\$47,612	\$49,139	\$50,715	\$52,341	\$54,019	\$55,750	\$57,537	\$59,381	\$61,283	\$63,247
Total Revenues		\$5,771,744	\$6,168,770	\$6,593,531	\$6,950,935	\$7,276,775	\$7,492,964	\$7,715,644	\$7,945,007	\$8,181,254	\$8,424,593
Operating Expenses		\$4,564,287	\$4,618,788	\$4,887,310	\$5,225,440	\$5,300,431	\$5,552,796	\$5,819,093	\$6,100,227	\$6,397,172	\$6,710,977
Net Revenue before Debt Service and System											
Rehabilitation		\$1,207,456	\$1,549,982	\$1,706,221	\$1,725,495	\$1,976,344	\$1,940,168	\$1,896,551	\$1,844,779	\$1,784,082	\$1,713,616
Debt Service		\$995,416	\$1,168,336	\$1,165,873	\$1,164,857	\$1,324,932	\$1,321,576	\$1,322,052	\$1,320,941	\$1,319,515	\$1,314,037
Debt Service Coverage [2]		1.21	1.33	1.46	1.48	1.49	1.47	1.43	1.40	1.35	1.30
Net Revenue		\$212,040	\$381,646	\$540,348	\$560,638	\$651,412	\$618,592	\$574,499	\$523,838	\$464,567	\$399,579
Beginning Balance [3]		\$9,736,527	\$8,141,052	\$5,126,106	\$5,666,453	\$6,096,345	\$6,183,835	\$6,478,260	\$6,788,464	\$6,570,418	\$6,270,260
Net Revenue		\$212,040	\$381,646	\$540,348	\$560,638	\$651,412	\$618,592	\$574,499	\$523,838	\$464,567	\$399,579
PAYGO Capital Projects		(\$1,807,515)	(\$3,396,593)	\$0	(\$130,746)	(\$563,922)	(\$324,167)	(\$264,294)	(\$741,885)	(\$764,726)	(\$788,270)
Ending Balance		\$8,141,052	\$5,126,106	\$5,666,453	\$6,096,345	\$6,183,835	\$6,478,260	\$6,788,464	\$6,570,418	\$6,270,260	\$5,881,569
Months of Operating Expenses in Reserve [4]		21.4	13.3	13.9	14.0	14.0	14.0	14.0	12.9	11.8	10.5

Source: City of St. Helena and HEC.

[1] Rates for FY 2018 calculated as 5 months of current rates plus 7 months of rates implemented December 2017. Rates for all future fiscal years calculated as 4 months of the rates implemented in February of the prior fiscal year plus 8 months of the rates implemented in November of the current fiscal year.

[2] Minimum debt service coverage is 1.20; target is 1.30 to 1.50.

[3] Estimated beginning balance for the operating and capital funds combined per the City 2017/18 Budget.

[4] Target is 10-14 months of operating expenses.

Attachment 3

Table 4
Estimated Ten-Year Schedule of Water Capital Improvements in Future \$'s
20-year Debt Scenario
30-year Debt Scenario

DRAFT

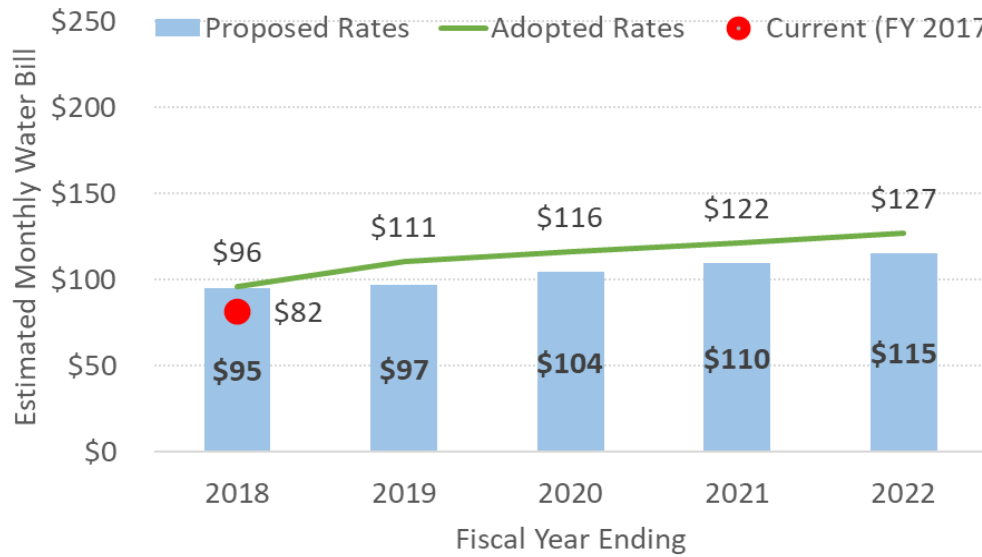
Project	Total Cost Less Existing Funding	Fiscal Year Ending										2027 Year 10
		2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5	2023 Year 6	2024 Year 7	2025 Year 8	2026 Year 9		
[2]												
Estimated Project Costs (Future \$'s) [1]												
York Creek Upper Dam Removal/Mitigation	\$97,250	\$47,888	\$49,362	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Meadowood Tank Upgrades	\$391,596	\$0	\$391,596	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Reservoir Improvements	\$1,016,061	\$0	\$0	\$0	\$0	\$1,016,061	\$0	\$0	\$0	\$0	\$0	\$0
Dwyer Road Booster	\$907,741	\$0	\$0	\$487,900	\$419,840	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Valve House Valve Replacement	\$593,950	\$0	\$0	\$0	\$0	\$593,950	\$0	\$0	\$0	\$0	\$0	\$0
Holmes Tank Upgrade	\$1,458,730	\$7,542	\$0	\$0	\$1,451,188	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Creek Flow Measurement	\$556,341	\$12,750	\$543,591	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sludge Handling Program	\$159,379	\$0	\$0	\$159,379	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Tank 2 Rehabilitation	\$771,244	\$60,000	\$711,244	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pump Station Upgrades	\$200,000	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lower York Creek Dam Rehab	\$538,562	\$190,695	\$0	\$0	\$0	\$0	\$0	\$347,867	\$0	\$0	\$0	\$0
Bell Canyon Intake Tower Replacement	\$2,469,822	\$923,640	\$1,546,182	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WTP Condition Assessment	\$164,285	\$0	\$0	\$0	\$164,285	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Spill Containment at Bell Creek Intake	\$75,000	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SCADA Improvements (Rutherford & Holmes)	\$159,379	\$0	\$159,379	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Spill Containment at Stonebridge Well	\$75,000	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Upgrade Rutherford Pump Station	\$529,675	\$0	\$51,539	\$478,136	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Remove Restriction at Rutherford PS	\$153,079	\$50,000	\$103,079	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Water System	\$53,126	\$0	\$0	\$53,126	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Master Plan Update	\$150,000	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Replace Mains < 6-inch Diameter	\$4,828,303	\$0	\$0	\$0	\$438,095	\$677,374	\$698,229	\$719,726	\$741,885	\$764,726	\$788,270	\$788,270
Bell Canyon Spillway Stability Assessment	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Phreatic Surface Monitoring and Assessment	\$65,000	\$65,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Estimated Project Costs (Future \$'s)												
	\$15,513,523	\$1,957,515	\$3,396,593	\$1,337,919	\$2,473,409	\$2,287,384	\$698,229	\$1,067,593	\$741,885	\$764,726	\$788,270	\$788,270
less Ops Cash Funded	\$367,412	\$150,000	\$0	\$53,126	\$164,285	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net CIP Project Costs (Future \$'s)												
	\$15,146,111	\$1,807,515	\$3,396,593	\$1,284,793	\$2,309,123	\$2,287,384	\$698,229	\$1,067,593	\$741,885	\$764,726	\$788,270	\$788,270
Debt-Funded	\$6,363,993	\$0	\$0	\$1,284,793	\$2,178,377	\$1,723,462	\$374,062	\$803,299	\$0	\$0	\$0	\$0
Cash Funded	\$8,782,118	\$1,807,515	\$3,396,593	\$0	\$130,746	\$563,922	\$324,167	\$264,294	\$741,885	\$764,726	\$788,270	\$788,270
Total Debt and Cash Funded												
	\$15,146,111	\$1,807,515	\$3,396,593	\$1,284,793	\$2,309,123	\$2,287,384	\$698,229	\$1,067,593	\$741,885	\$764,726	\$788,270	\$788,270
Source: City of St. Helena and HEC.												
Future.co												

future cip

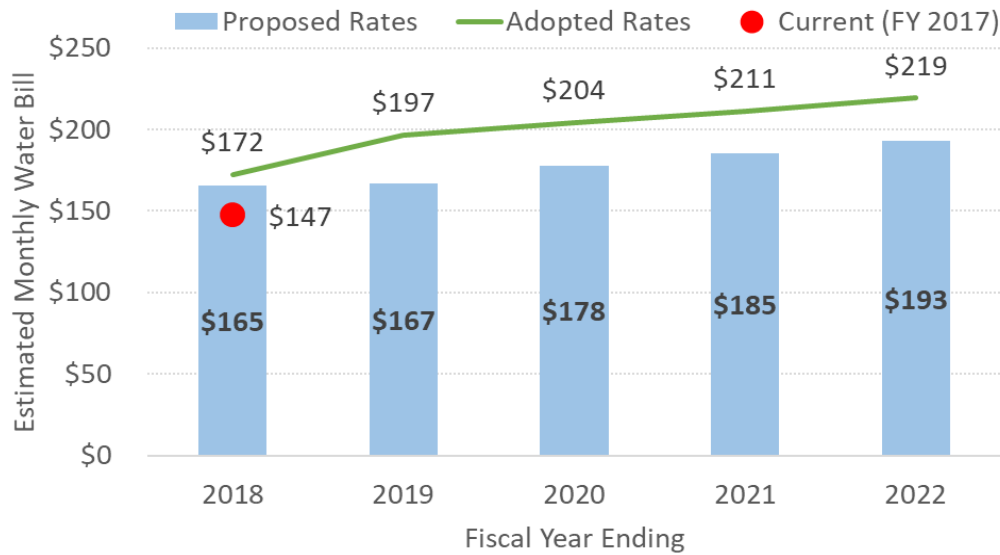
Source: City of St. Helena and HEC.
 [1] Estimated costs increased by historical Engineering News Record Construction Cost Index 20-year average increase.
 [2] Total Cost Less Existing Funding = Total Cost - Existing Bonds - Existing Grants

Attachment 3

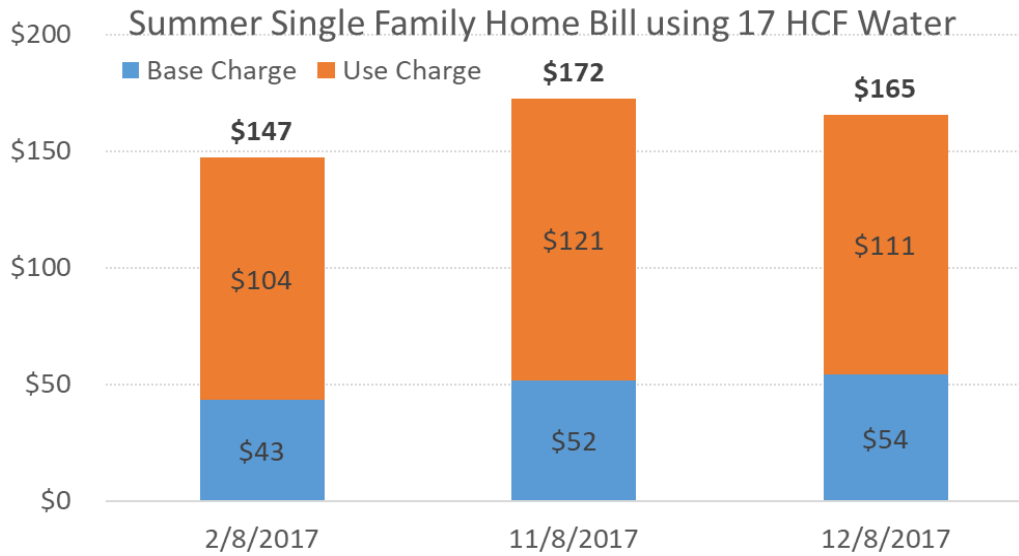
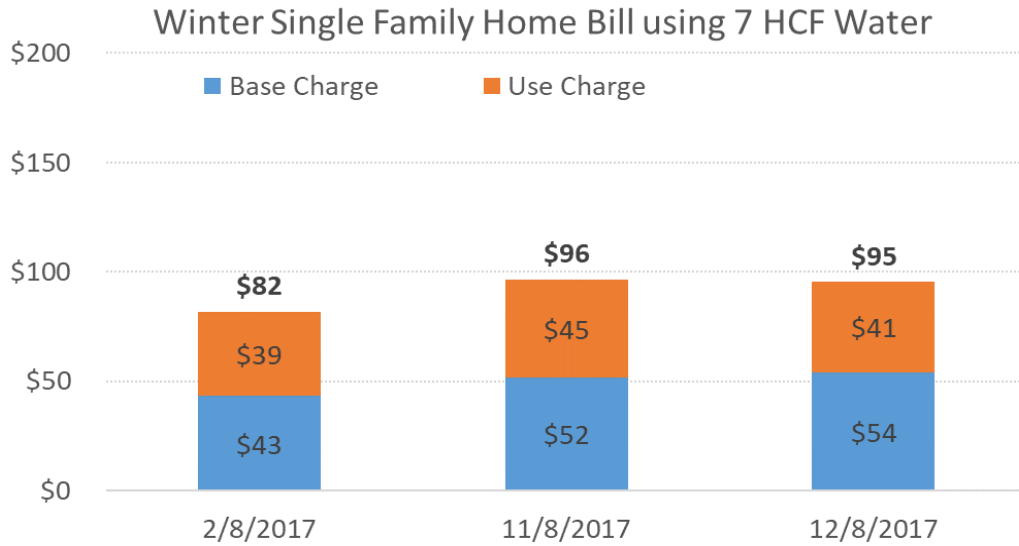
Winter Single Family Home Bill using 7 HCF Water



Summer Single Family Home Bill using 17 HCF Water

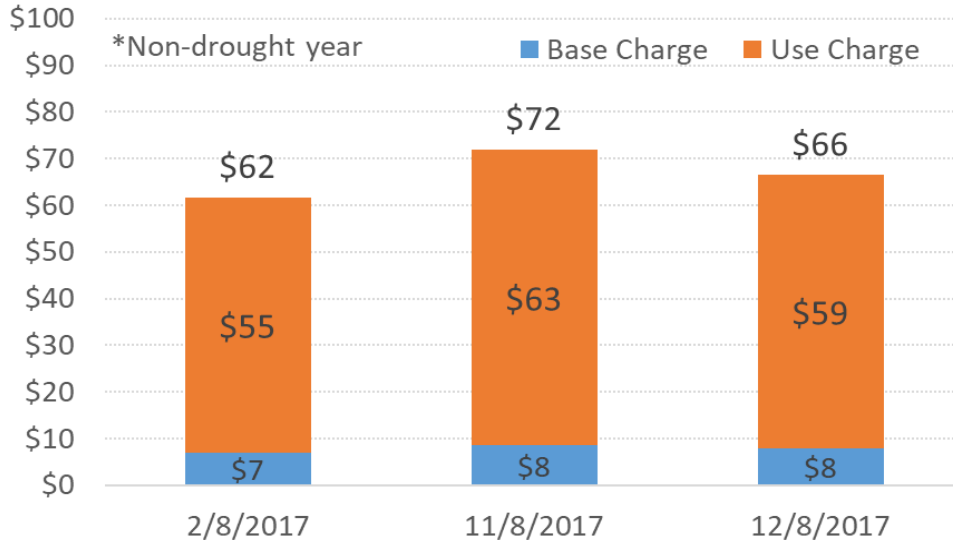


Attachment 3

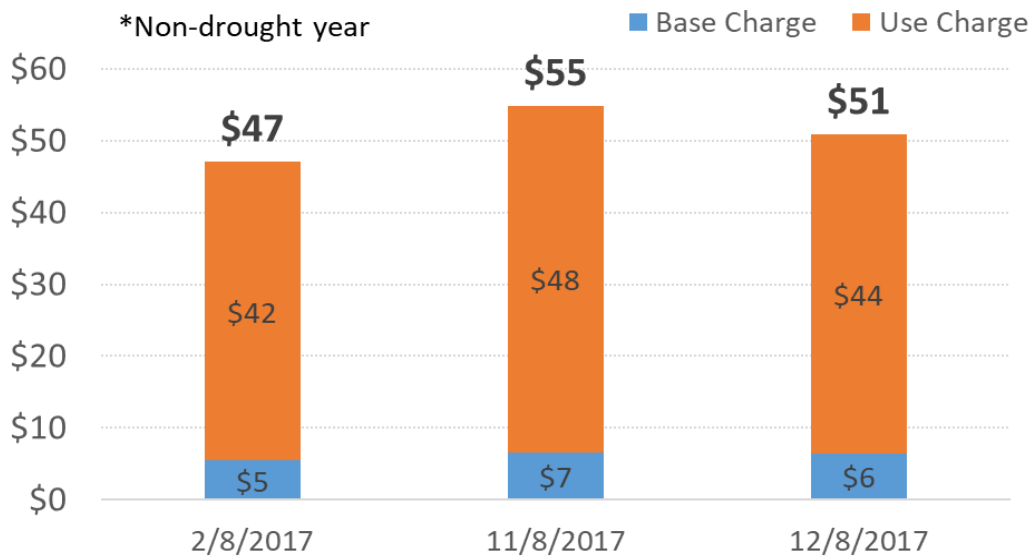


Attachment 3

Mobile Home Park (211 units) Average Year-Round Bill, Per Unit

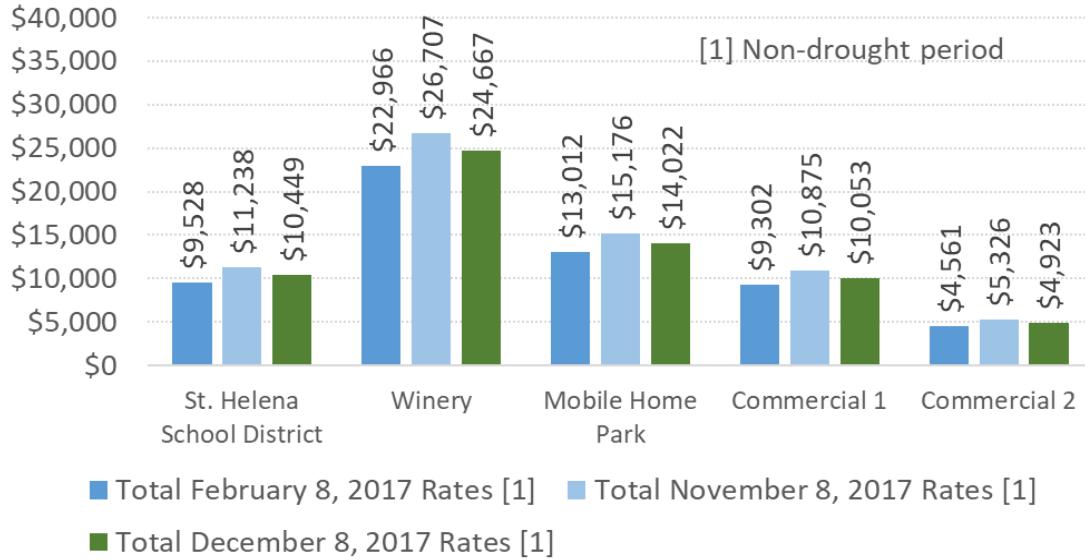


Apartment Complex (26 units) Average Year-Round Bill, Per Unit

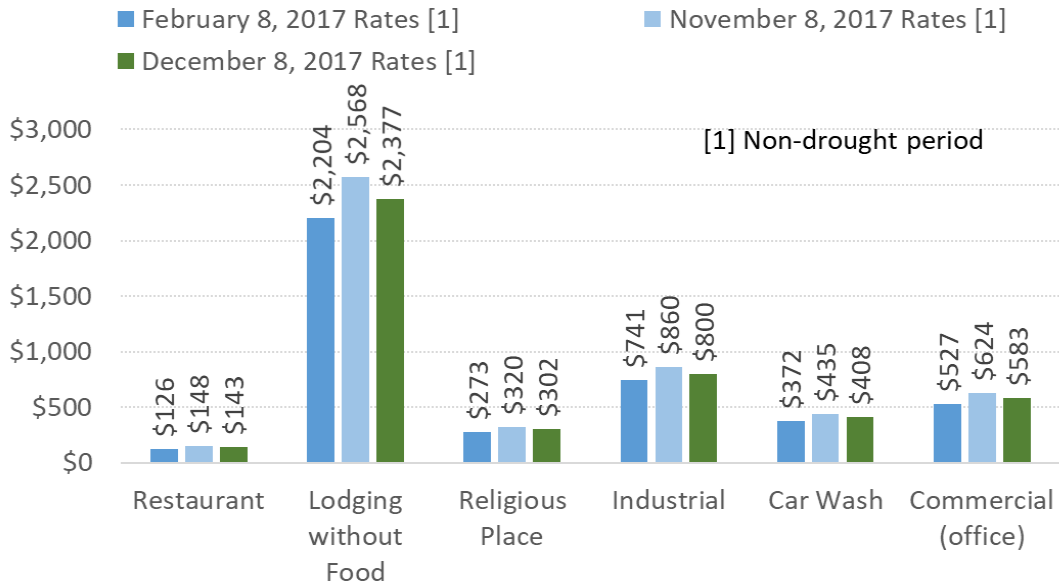


Attachment 3

Large Water Users Monthly Bill Impact



Sample of Non-Residential Water Users Bill Impact



Attachment 4

Table 2
Calculated Wastewater Rates
30-year Debt Scenario

DRAFT

Land Use	Current 2/8/2017	2018 12/8/2017	2019 11/8/2018	2020 11/8/2019	2021 11/8/2020	2022 11/8/2021
Residential						
Single Family Flat Monthly Charge per Unit	\$48.04	\$56.10	\$56.50	\$58.93	\$60.91	\$63.66
Use Charge per HCF	\$4.69	\$4.92	\$4.96	\$5.17	\$5.34	\$5.58
Non-Residential						
Flat Monthly Charge per Account						
5/8"	n.a.	\$77.86	\$78.41	\$81.78	\$84.54	\$88.34
1"	n.a.	\$194.64	\$196.03	\$204.46	\$211.35	\$220.86
1.5"	n.a.	\$389.29	\$392.07	\$408.92	\$422.69	\$441.71
2"	n.a.	\$622.86	\$627.31	\$654.27	\$676.31	\$706.74
3"	n.a.	\$1,245.72	\$1,254.62	\$1,308.54	\$1,352.62	\$1,413.49
4"	n.a.	\$1,946.43	\$1,960.35	\$2,044.59	\$2,113.46	\$2,208.57
6"	n.a.	\$3,892.86	\$3,920.69	\$4,089.18	\$4,226.93	\$4,417.14
Use Charge per HCF	<i>avg. winter month</i>	<i>Rate applied to metered water use each month [1]</i>				
Car Wash	n.a.	\$3.40	\$3.42	\$3.57	\$3.69	\$3.86
Religious Places/Community Centers	n.a.	\$3.78	\$3.81	\$3.97	\$4.11	\$4.29
Commercial [2]	n.a.	\$4.46	\$4.50	\$4.69	\$4.85	\$5.07
Groceries and Mortuaries	n.a.	\$12.00	\$12.09	\$12.61	\$13.03	\$13.62
Laundry	n.a.	\$3.90	\$3.93	\$4.09	\$4.23	\$4.42
Mixed Retail	n.a.	\$7.51	\$7.56	\$7.88	\$8.15	\$8.52
Lodging with Food	n.a.	\$9.01	\$9.07	\$9.46	\$9.78	\$10.22
Lodging without Food	n.a.	\$4.89	\$4.92	\$5.13	\$5.30	\$5.54
Restaurant	n.a.	\$11.90	\$11.98	\$12.50	\$12.92	\$13.50
Napa Valley College	n.a.	\$3.72	\$3.75	\$3.91	\$4.04	\$4.22
Service Station	n.a.	\$5.14	\$5.18	\$5.40	\$5.58	\$5.83
Winery Pre-Treated	n.a.	\$4.75	\$4.79	\$4.99	\$5.16	\$5.39
Winery Non-Treated [3]	n.a.	\$20.94	\$21.09	\$21.99	\$22.73	\$23.75
Schools	n.a.	\$1.85	\$1.86	\$1.94	\$2.01	\$2.10

Source: City of St. Helena and HEC.

[1] Amount applied to wineries according to measured wastewater flow entering the system, which may or may not equal metered water use.

Payment calculations for flow entering the wastewater system will be conducted on a semi-annual or annual basis.

[2] Commercial includes City buildings.

[3] Currently none.

Attachment 4

Table 4
Projected Wastewater Fund Cash Flow
30-year Debt Scenario

DRAFT

Revenues and Expenses	2018		2019		2020		2021		2022		2023		2024		2025		2026		2027	
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Operating Revenues																				
Charges for Services [1]	\$3,134,929	\$3,558,144	\$3,807,215	\$3,978,539	\$4,157,573	\$4,282,301	\$4,410,770	\$4,543,093	\$4,679,386	\$4,819,767										
Growth in Services	\$4,852	\$5,507	\$5,893	\$6,158	\$6,435	\$6,628	\$6,827	\$7,032	\$7,243	\$7,460										
Total Sewer Sales	\$3,139,781	\$3,563,651	\$3,813,108	\$3,984,697	\$4,164,008	\$4,288,929	\$4,417,597	\$4,550,125	\$4,686,629	\$4,827,227										
Investment Earnings	\$4,613	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0										
Finance Charges	\$21,754	\$21,754	\$21,754	\$21,754	\$21,754	\$21,754	\$21,754	\$21,754	\$21,754	\$21,754										
Sewer Connection Fee	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0										
Total Operating Revenues	\$3,167,148	\$3,585,405	\$3,834,861	\$4,006,451	\$4,185,762	\$4,310,683	\$4,439,351	\$4,571,878	\$4,708,382	\$4,848,981										
Operating Expenses	\$2,378,968	\$2,350,625	\$2,426,345	\$2,561,219	\$2,704,213	\$2,855,872	\$3,016,782	\$3,187,572	\$3,368,920	\$3,561,558										
Operating Revenue before Capital Improvements and Debt Service	\$788,180	\$1,234,780	\$1,408,517	\$1,445,232	\$1,481,549	\$1,454,810	\$1,422,569	\$1,384,306	\$1,339,462	\$1,287,423										
Debt Service	\$253,904	\$733,280	\$733,002	\$736,560	\$978,892	\$981,038	\$977,869	\$979,348	\$980,498	\$980,304										
Debt Service Coverage [2]	3.1	1.7	1.9	2.0	1.5	1.5	1.5	1.5	1.4	1.3										
Net Revenues (Deficit)	\$534,276	\$501,500	\$675,515	\$708,672	\$502,657	\$473,772	\$444,700	\$404,958	\$358,964	\$307,119										
Beginning Fund Balance [3]	\$2,408,652	\$1,041,768	\$1,502,036	\$1,371,265	\$1,638,556	\$1,664,807	\$1,702,852	\$1,841,668	\$2,061,156	\$2,228,938										
Net Revenues (Deficit)	\$534,276	\$501,500	\$675,515	\$708,672	\$502,657	\$473,772	\$444,700	\$404,958	\$358,964	\$307,119										
PAYGO Capital Projects	(\$1,901,160)	(\$41,232)	(\$806,286)	(\$441,380)	(\$476,406)	(\$435,727)	(\$305,883)	(\$185,471)	(\$191,181)	(\$197,067)										
Ending Fund Balance	\$1,041,768	\$1,502,036	\$1,371,265	\$1,638,556	\$1,664,807	\$1,702,852	\$1,841,668	\$2,061,156	\$2,228,938	\$2,338,989										
Months of Operating Expenses in Reserve [4]	5.3	7.7	6.8	7.7	7.4	7.2	7.3	7.8	7.9	7.9										

Source: HFC

Source: HEC.

[1] Rates for FY 2018 calculated as 5 months of current rates plus 7 months of rates implemented December 2017. Rates for all future fiscal years calculated as 4 months of the rates implemented the prior November plus 8 months of the rates implemented in November of the current fiscal year.

[2] Minimum debt service coverage is 1.20; target is 1.30 to 1.50.

[3] Estimated beginning balance for the operating and capital funds combined per the City 2017/18 Budget.

[4] Target is 6-8 months of operating expenses.

Attachment 4

Table 6
Wastewater Capital Improvements Schedule in Future \$'s
30-year Debt Scenario

DRAFT

Project	Funding Source	Total Cost	2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5	2023 Year 6	2024 Year 7	2025 Year 8	2026 Year 9	2027 Year 10
Estimated Project Costs (Future \$'s) [1]												
Sewer Collection System												
Replace 1% of Sewer Mains Annually	Cash/Debt	\$1,725,834	\$150,000	\$154,618	\$159,379	\$164,285	\$169,343	\$174,557	\$179,931	\$185,471	\$191,181	\$197,067
Cinella Pump Station Upgrades	Cash/Debt	\$528,882	\$0	\$77,309	\$451,573	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Add Sewer Pump Stations to SCADA	Cash/Debt	\$167,657	\$0	\$0	\$0	\$54,762	\$112,896	\$0	\$0	\$0	\$0	\$0
Wet Weather Flow Monitoring	Ops Cash	\$51,539	\$0	\$51,539	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Sewer System	Ops Cash	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sewer Master Plan	Ops Cash	\$150,000	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Replace Rodding Machine	Ops Cash	\$41,232	\$0	\$41,232	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CCTV Program	Ops Cash	\$172,583	\$15,000	\$15,462	\$15,938	\$16,429	\$16,934	\$17,456	\$17,993	\$18,547	\$19,118	\$19,707
Subtotal Sewer Collection		\$2,887,728	\$365,000	\$340,160	\$626,889	\$235,476	\$299,173	\$192,013	\$197,925	\$204,018	\$210,300	\$216,774
Treatment Plant												
WWTP Upgrades Ph. 1	Cash/Debt	\$8,233,628	\$1,386,406	\$3,371,707	\$3,475,515	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reclamation Field Improvements	Cash/Debt/Impact Fees	\$1,451,692	\$28,240	\$700,936	\$722,516	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pond 2 & 3 Levee	Cash/Debt	\$121,847	\$60,000	\$61,847	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Facilities Automation	Cash/Debt	\$144,000	\$144,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Well	Cash/Debt	\$65,000	\$65,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sludge Removal	Cash/Debt/Impact Fees	\$152,309	\$75,000	\$77,309	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Recycled Water Feasibility Study	Cash/Debt	\$84,672	\$0	\$0	\$0	\$84,672	\$0	\$0	\$0	\$0	\$0	\$0
Temp Trailer at WRF	Cash/Debt	\$30,441	\$8,000	\$3,092	\$3,188	\$3,286	\$3,387	\$3,491	\$5,998	\$0	\$0	\$0
Replace WRF Operations Building and Shop	Cash/Debt	\$3,449,538	\$0	\$0	\$0	\$109,524	\$1,128,957	\$2,211,058	\$0	\$0	\$0	\$0
Upgrade Chemical Storage Facilities	Cash/Debt	\$581,857	\$0	\$0	\$0	\$0	\$0	\$581,857	\$0	\$0	\$0	\$0
Phase 2 WWTP Upgrades	Cash/Debt	\$458,745	\$0	\$0	\$0	\$109,524	\$112,896	\$116,371	\$119,954	\$0	\$0	\$0
Subtotal Treatment Plant		\$14,773,730	\$1,766,646	\$4,214,892	\$4,201,219	\$222,333	\$1,329,911	\$2,912,778	\$125,952	\$0	\$0	\$0
Total Estimated Project Costs (Future \$'s)		\$17,661,458	\$2,131,646	\$4,555,052	\$4,828,107	\$457,809	\$1,629,084	\$3,104,791	\$323,877	\$204,018	\$210,300	\$216,774
Operating Costs		\$424,123	\$215,000	\$15,938	\$16,429	\$16,934	\$17,456	\$17,993	\$18,547	\$19,118	\$19,707	\$0
Impact Fee Funded		\$383,129	\$15,486	\$190,648	\$176,996	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Project Costs		\$16,854,206	\$1,901,160	\$4,297,403	\$4,635,174	\$441,380	\$1,612,150	\$3,087,335	\$305,883	\$185,471	\$191,181	\$197,067
Debt Funded		\$11,872,411	\$0	\$4,256,171	\$3,828,888	\$0	\$1,135,744	\$2,651,608	\$0	\$0	\$0	\$0
Cash Funded		\$4,981,795	\$1,901,160	\$41,232	\$806,286	\$441,380	\$476,406	\$435,727	\$305,883	\$185,471	\$191,181	\$197,067
Total Debt and Cash Funded [2]		\$16,854,206	\$1,901,160	\$4,297,403	\$4,635,174	\$441,380	\$1,612,150	\$3,087,335	\$305,883	\$185,471	\$191,181	\$197,067

Future \$'s

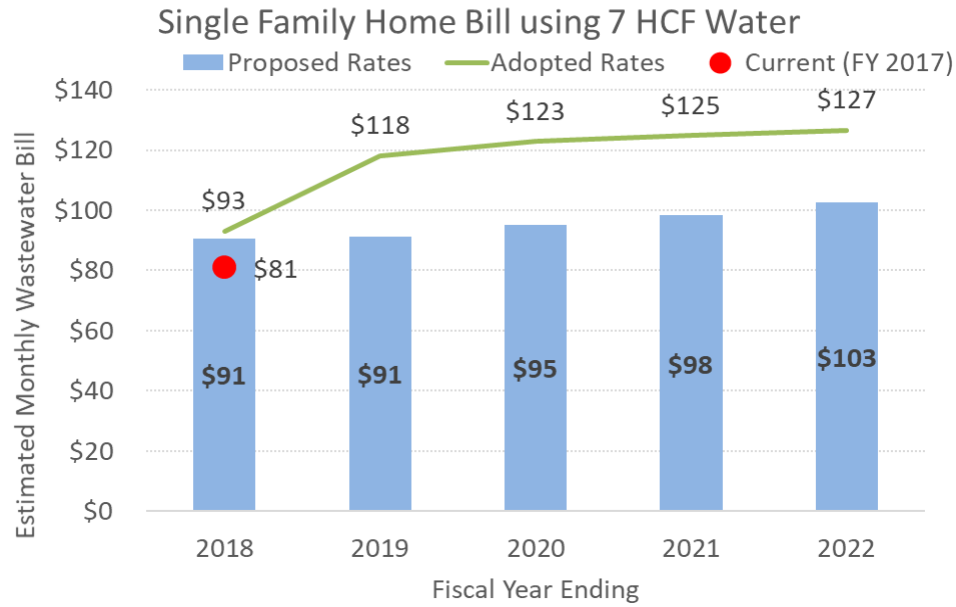
Source: City of St. Helena and HEC.

[1] Estimated costs increased by historical ENR Construction Cost Index 20 year average increase.

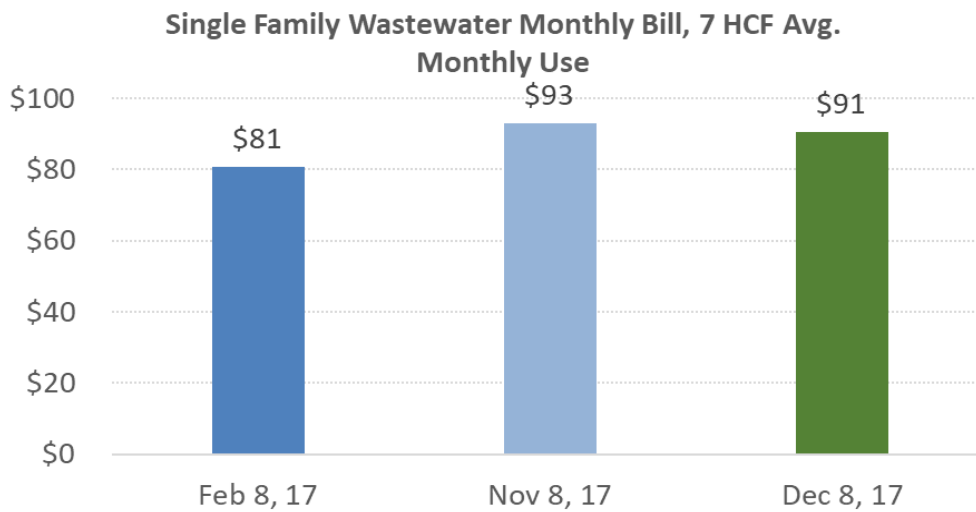
[2] Totals do not exactly match due to rounding.

Attachment 4

30-year Debt Scenario

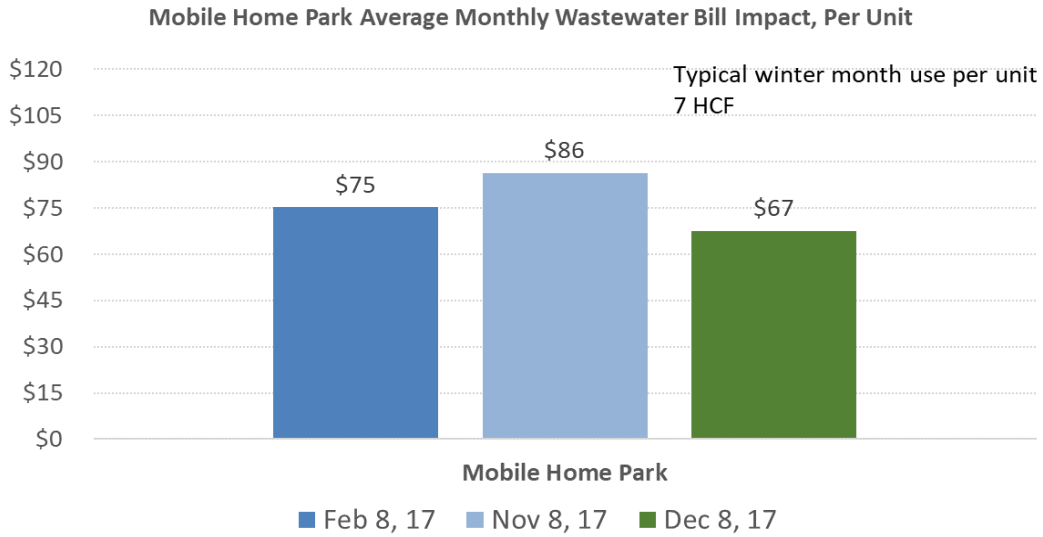


30-year Debt Scenario

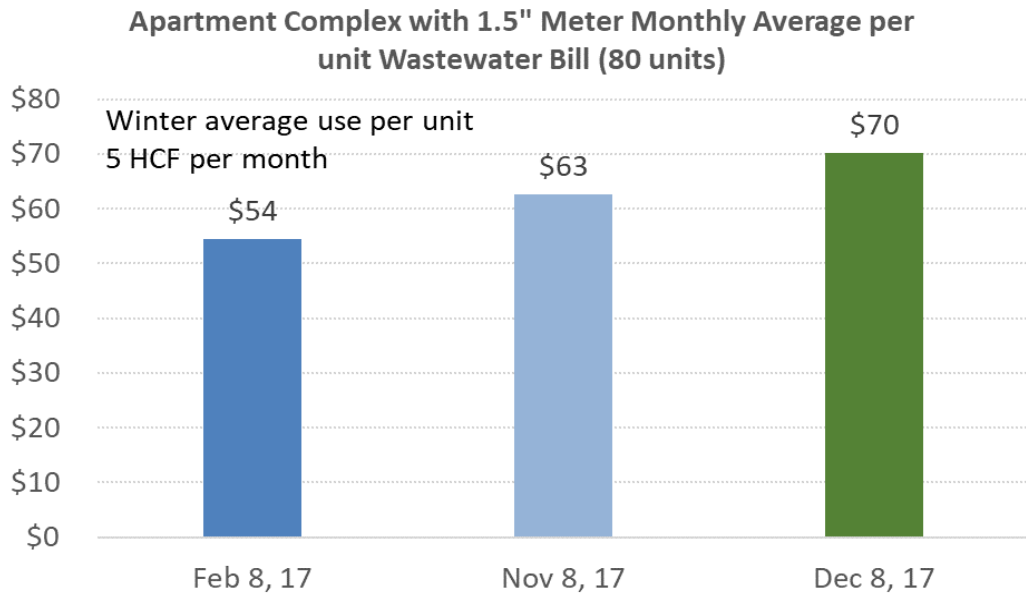


Attachment 4

30-year Debt Scenario

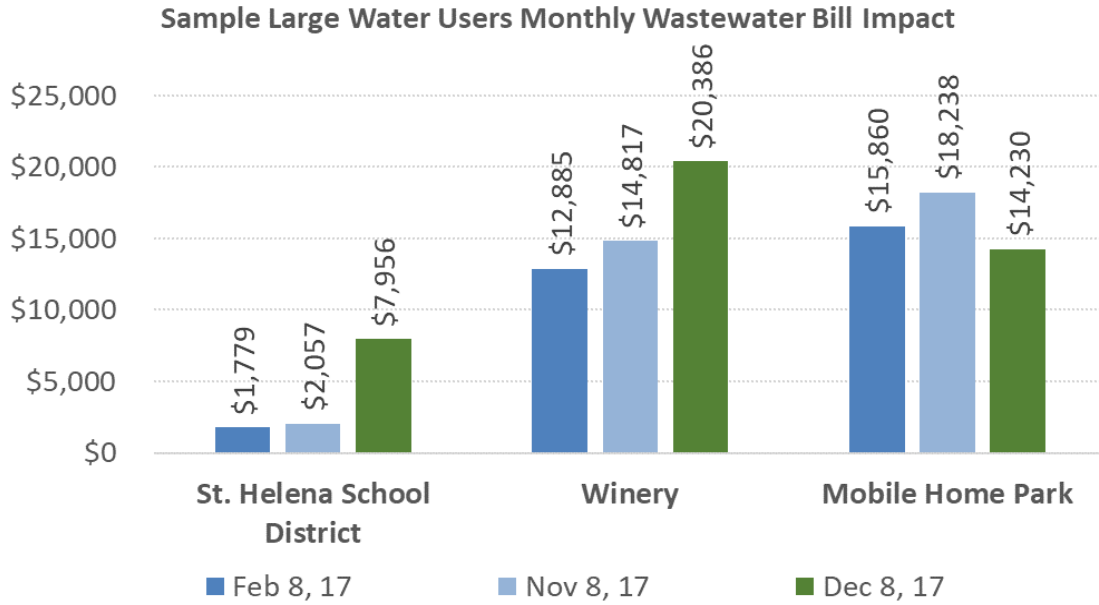


30-year Debt Scenario

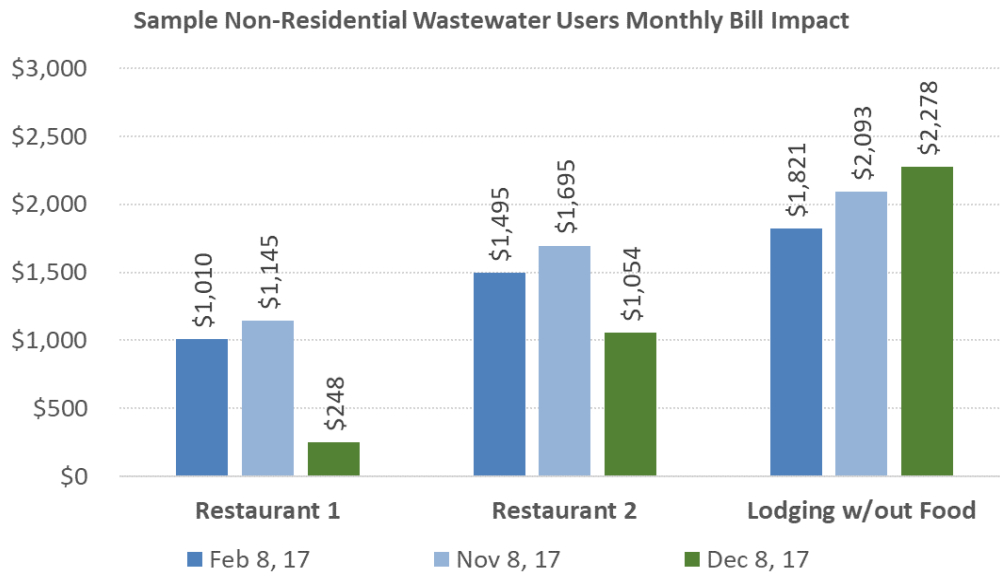


Attachment 4

30-year Debt Scenario

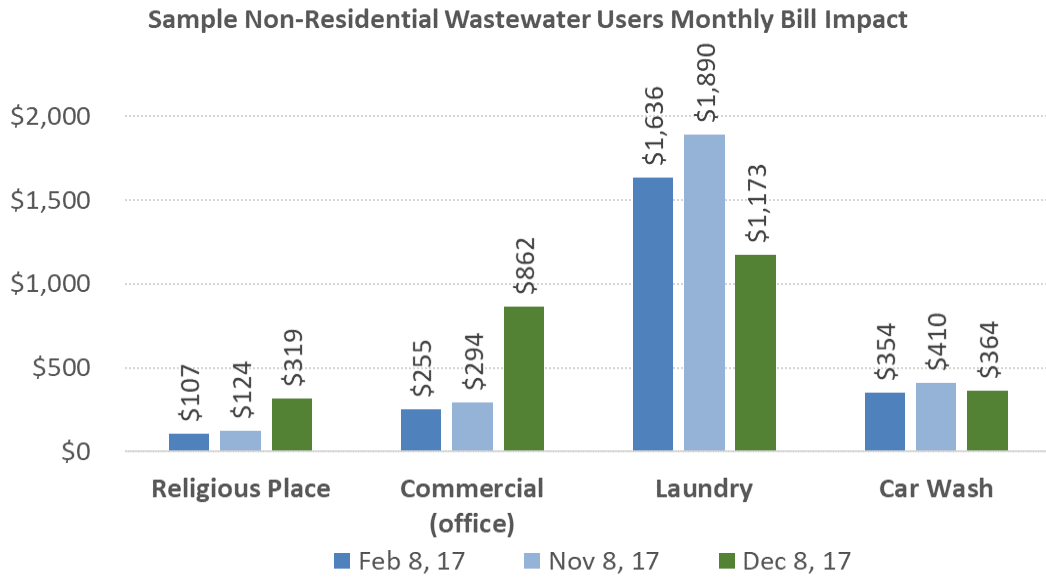


30-year Debt Scenario



Attachment 4

30-year Debt Scenario



Attachment 5

**HANSFORD ECONOMIC
CONSULTING**



**City of St. Helena (2016)
Water and Wastewater
Rate Study**

FINAL
October 31, 2016

HEC Project #150182

Attachment 5

Attachment 5

TABLE OF CONTENTS

SECTION	PAGE
1. Introduction	1
1.1 Purpose of Study	1
1.2 Background on the Utility Systems	2
1.3 Financial Health of the Utility Funds	3
1.4 Customer Base	5
1.5 Major Assumptions	8
1.6 Rate Structures	10
2. Water Rate Study Summary	12
2.1 Key Findings	12
2.2 Methodology	13
2.3 New Rate Impacts	14
3. Wastewater Rate Study Summary	18
3.1 Key Findings	18
3.2 Methodology	19
3.3 New Rate Impacts	19
4. Combined Utilities Impact	22
4.1 Residential Impacts	22
4.2 Affordability	23
4.3 Large Water Users Impacts	25

Attachment 5

LIST OF TABLES

TABLE	PAGE
1 Calculated Water Rates through Fiscal Year Ending 2022	13
2 Calculated Wastewater Rate Schedule	19
3 Affordability of Water Utility Costs for Residents	24

LIST OF FIGURES

FIGURE	PAGE
1 Projected Water Cash Balances	4
2 Projected Wastewater Cash Balances	5
3 Historical Population Growth	6
4 Water Customers	6
5 Water Use by Customer Type	7
6 Typical Annual Wastewater Flows by Customer Type	7
7 Components of Water Revenue Requirement	14
8 Typical Monthly Bill for the Off-Peak Season	15
9 Typical Monthly Bill for the Peak Season	15
10 Non-Residential Water Rate Impact	16
11 Average Monthly Water Charges for Large Water Users	17
12 Components of Wastewater Revenue Requirement	20
13 Bill Impacts for Single Family Homes	20
14 Average Monthly Bill Impact for Sample Non-Residential Users	21
15 Average Monthly Bill Impact for Large Water Users	21
16 Single Family Home Utility Costs in Off-Peak Months, based on 7 HCF	22
17 Single Family Home Utility Costs in Peak Months, based on 17 HCF	22
18 Impact of Combined Utility Bill Increases	23
19 Combined Utilities Impact on Large Water Users	25

Attachment 5

Section 1: INTRODUCTION

1.1 PURPOSE OF STUDY

The City's responsibility as a water and wastewater system operator is to first and foremost provide the residents and businesses of the City with clean, safe potable water and a reliable wastewater system that meets State and Federal regulatory requirements; second, to protect its water resources, third to manage and maintain the utility systems infrastructure (assets) to be fiscally responsible to current and future residents, and fourth to support public safety (primarily fire defense).

The purpose of this Water and Wastewater Rate Study (Study) is to determine the level of funding required over the next five years to adequately fund the water and wastewater utility systems. This report provides an explanation and justification of the calculated water and wastewater rates through fiscal year 2022 and it documents adherence to the law regarding setting of rates by a municipality. Per California Constitution Article 13D, water and wastewater rates shall not be extended, imposed, or increased by any agency unless it meets all of the following requirements:

- (1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.
- (2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- (3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
- (4) No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted.
- (5) No fee or charge may be imposed for general governmental services including, but not limited to, police, fire, ambulance or library, services, where the service is available to the public at large in substantially the same manner as it is to property owners.

The Study includes two accompanying documents, 'City of St. Helena Water Rate Study Technical Memorandum' and 'City of St. Helena Wastewater Rate Study Technical Memorandum'. These documents provide the detailed calculations for each utility rate study.

The water financial model projects revenues and expenses, and calculates rates for the next ten years; however, the City is only proposing to adopt rates for the next five years with the Proposition 218 notification and hearing.

On May 24, 2016 St. Helena City Council authorized the re-establishment of the Ad Hoc Revenue Source Task Force (Task Force) to review and provide input on the rate study (Resolution No. 2016-

Attachment 5

66). Two meetings were held: one on August 4, 2016 and the other on September 13, 2016. The Rate Study Team, consisting of Hansford Economic Consulting and City staff members, requested feedback on policy decisions related to the Rate Study. These meetings were open to the public and recorded, in the hope of increasing transparency and public participation, as well as providing a place for members of the public to ask questions and receive additional information.

Key acronyms used regularly throughout the report are the following:

City = City of St. Helena
 HCF = Hundred Cubic Feet
 MGD = Million Gallons a Day
 CIP = Capital Improvement Project(s)
 SF = Single Family
 SRF = State Revolving Fund
 MHI = Median Household Income

1.2 BACKGROUND ON THE UTILITY SYSTEMS

The City of St. Helena (City) provides water and wastewater services to residents and businesses inside and outside of the City. The City's water sources include surface water from Bell Canyon Reservoir, groundwater from Stonebridge Wells, and purchased treated water from the City of Napa. The Louis Stralla Water Treatment Plant (water treatment plant), which treats surface water stored in Bell Canyon Reservoir, has a capacity of 4.3 million gallons a day (MGD); however, there are flow limitations in the inlet piping which restricts use of the plant to less than its capacity. Stonebridge Wells includes two active groundwater wells and a filtration facility, including filtration tanks, chlorination facilities, and a backwash return system. The filter removes iron and manganese. Treated water from the City's water sources is distributed via six storage tanks and four pump stations.

The City first entered into an agreement with the City of Napa for delivery of treated water in September 2006. The third amendment to that agreement, entered into in December 2011, increases the minimum annual delivery to 600 acre-feet with optional delivery up to 800 acre-feet. Optional additional delivery of 200 acre-feet may be delivered provided the City of Napa has sufficient water supply. If Napa does not have sufficient supply it will attempt to acquire supplemental dry-year water on a single year basis from an outside source. Price and payment terms of the optional supply will differ from the base supply, as detailed in the agreement.

The City currently distributes over 550 million gallons of clean drinking water each year. Water use fluctuates year to year depending on several factors including, but not limited to, growth, weather, sustained drought, plumbing retrofits, and pricing of water. Untreated water suitable for construction water purposes only is also available for purchase from the Lower Reservoir adjacent to York Creek.

The City's wastewater system consists of a collection system of more than 22 miles of pipe. Effluent is treated at the 0.5 million gallons a day (average daily dry weather flow) treatment plant. The wastewater treatment plant was built in 1967. The secondary level treatment plant discharges to the Napa River or land (City-owned grass fields, redwood/willow trees, and mosquito fish ponds).

Attachment 5

The City's National Pollutant Discharge Elimination System (NPDES) permit was renewed in March 2016; at the same time a Cease and Desist Order (CDO) No. R2-2016-0004 was issued because the City is unable to meet the more stringent effluent requirements of the renewed NPDES permit. A draft feasibility study was prepared for the City in August 2016 which recommends improvements at the wastewater treatment plant so that the City can be in compliance and the CDO lifted.

Separate water and wastewater enterprise funds account for the revenues and expenses associated with each of these services. An enterprise fund is a fund that is intended to recover its costs through user fees and charges. Enterprise funds provide the repayment capacity for, and make debt service payments on, any debt incurred for capital projects; therefore, enterprise fund bond-funded projects do not diminish the City's general fund debt capacity.

Enterprise funds need to be managed in a fiscally responsible manner so that users are paying for their current use of the system. Both utility systems need constant maintenance to prolong the life of the assets. If there is insufficient collection of money for system maintenance future users have to pay for repairs when they become critical and costs are more expensive.

1.3 FINANCIAL HEALTH OF THE UTILITY FUNDS

Currently both utility funds are financially at risk. The City continues to use available reserves for both operating expenses and capital improvement projects (projects are funded on a pay-as-you-go basis). The water operating fund currently has \$525,000 of unrestricted cash; the wastewater operating fund has no cash reserves. Total cash balances for operating and capital funds combined as of July 1, 2016 were \$6.1 million in the water fund and \$1.1 million in the wastewater fund.

Utility system costs typically increase at a greater rate than inflation and while City rates have increased in recent years they have not kept pace with the fiscal needs of the water and wastewater enterprise funds. In addition, the current rates do not collect for system rehabilitation of either system which has resulted in the City having to use reserves and delay necessary capital improvements. The lack of improvements to major infrastructure has resulted in heavy fines to the City. If rates are not increased to pay for these items, the City's General Fund will need to be utilized. These are unsustainable actions that will negatively impact other City services such as parks, streets, and library if not corrected.

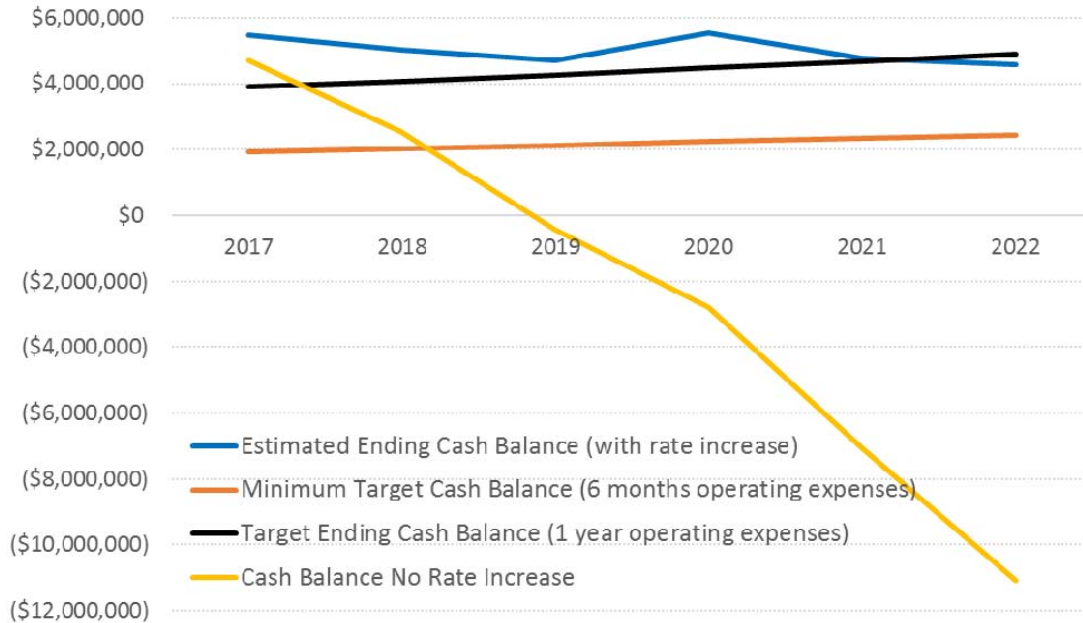
The revenue requirement is the amount that must be raised from rates or other charges for service net of other income such as investment earnings, area surcharges, finance charges, and other miscellaneous revenues. The revenue requirement for the water fund is projected to increase from \$5.5 million to \$8.4 million over the next 5 years. The revenue requirement for the wastewater fund is projected to increase from \$3.0 million to \$4.6 million over the next 5 years.

Including the operating and capital funds for each utility, both the water and wastewater enterprise funds will have negative cash balances within two years without rate increases.

Figure 1 shows the projected cash balances (operating and capital funds combined) for water and **Figure 2** shows the projected cash balances for wastewater (operating and capital funds combined) through fiscal year 2022.

Attachment 5

Figure 1
Projected Water Cash Balances

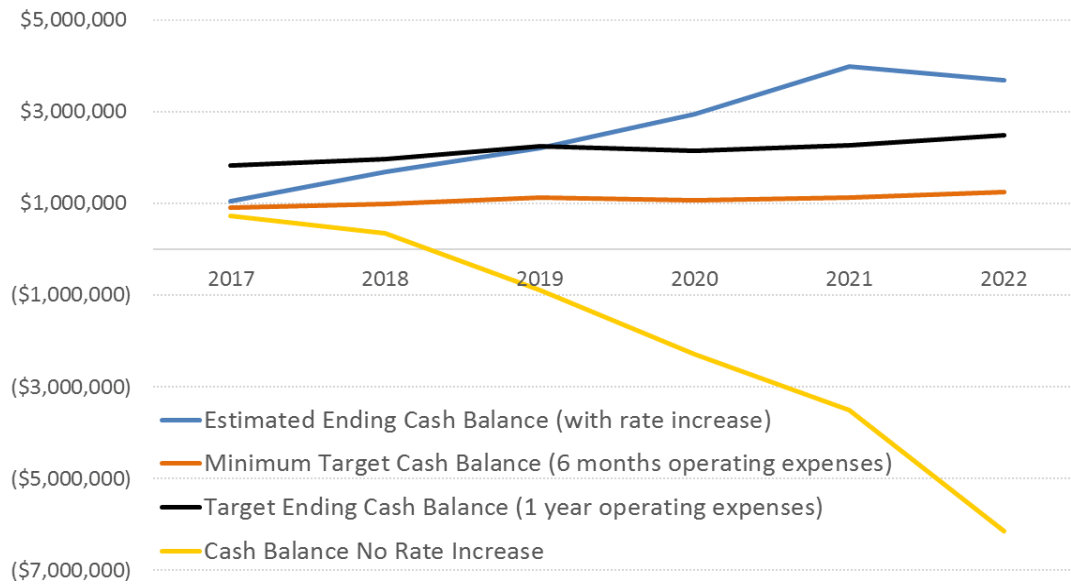


The blue lines show the projected total cash balance with rate increases. The yellow lines show the projected cash balances with no rate increases. The black lines show the target cash balance, equal to one year of operating expenses, and the orange lines show the minimum cash balance at 6 months operating expenses. The goal over time is for the black and blue lines to be as close as possible. These graphs demonstrate that the rate increases are essential.

The projected cash balance for wastewater (with a rate increase) is greater than the target cash balance because of cash outlay necessary in future years for capital improvements, including more than \$2 million for completion of the operations building and shop at the wastewater treatment plant.

Attachment 5

Figure 2
Projected Wastewater Cash Balances



1.4 CUSTOMER BASE

The City services a population of approximately 6,000. The City experienced population decline which began before, and lasted through, the Great Recession (2004 through 2014). Population is now slightly greater than it was in 2000. The average annual population growth from 2000 to 2015 was 0.1%. According to the US Census Bureau there are 2.47 persons per occupied housing unit, a figure that has remained relatively stable since 2000. Historical population change is shown in **Figure 3** below.

The City has approximately 2,600 water connections and serves more than 3,000 residential households, about 260 non-residential establishments, including businesses, schools, religious places and community centers, more than 20 industrial customers, and about 30 irrigation-only customers. A pie chart illustrating the customer base is shown in **Figure 4**.

Water use by residential and non-residential customer type is shown in **Figure 5**. Although residential customers comprise 87% of the total customer base, they use 50% of total water deliveries. Industrial customers, who comprise only 1% of the customer base use 21% of total water deliveries.

Attachment 5

Figure 3
Historical Population Growth

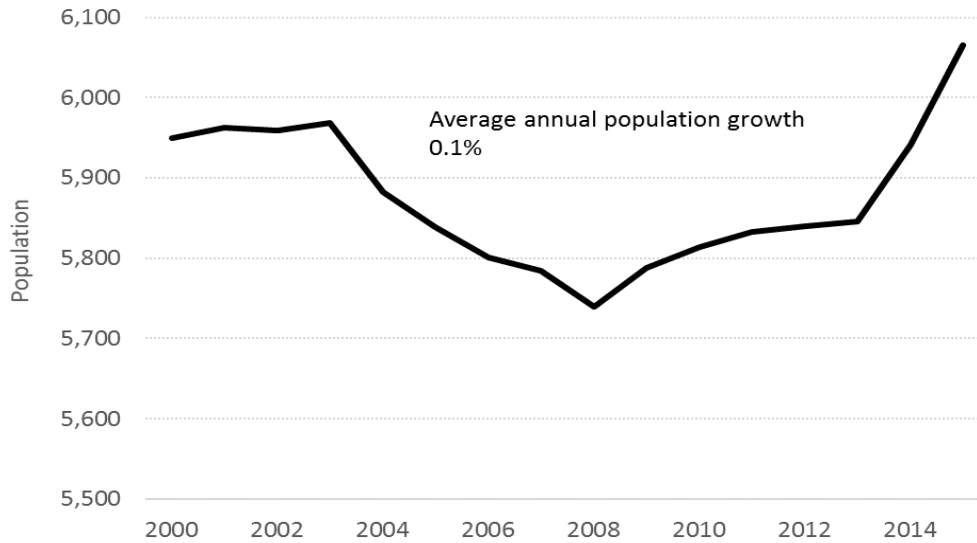
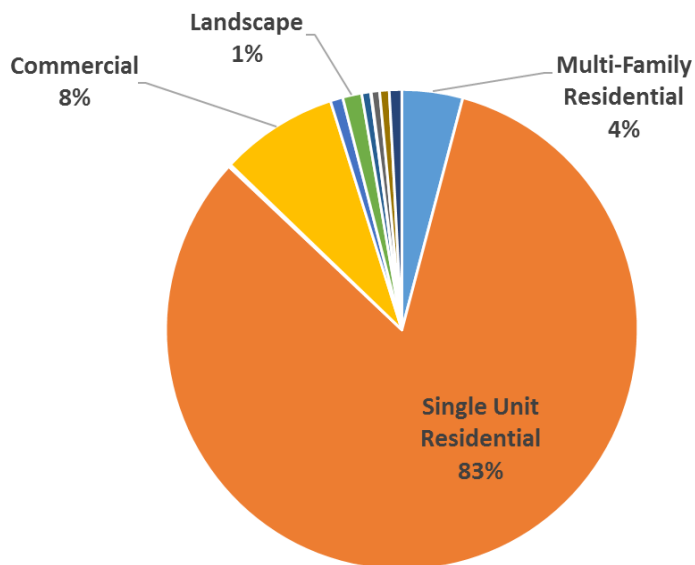
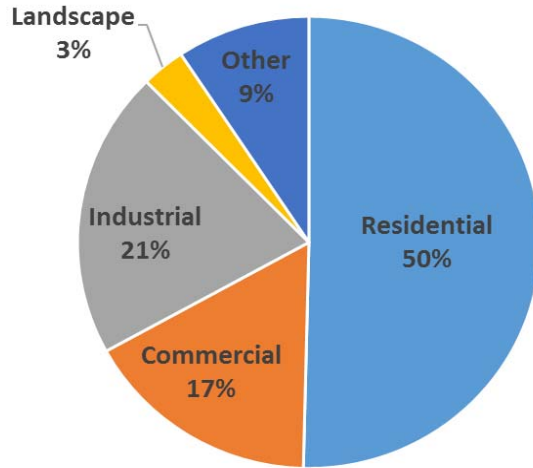


Figure 4
Water Customers



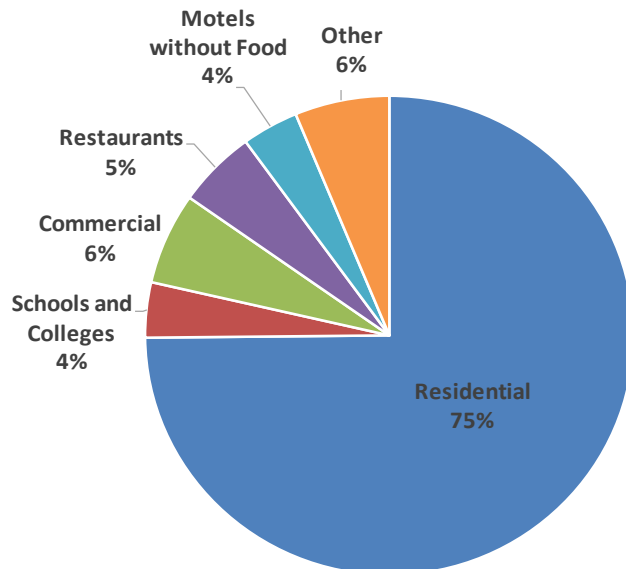
Attachment 5

Figure 5
Water Use by Customer Type



The City provides wastewater service to the same households, institutional uses and businesses, with the exception of those having septic systems. **Figure 6** shows typical annual flow to the wastewater treatment plant by residential and non-residential customer types.

Figure 6
Typical Annual Wastewater Flow by Customer Type



Attachment 5

1.5 MAJOR ASSUMPTIONS

Several major assumptions influence the scope of the report and findings herein. They are summarized here:

- Water CIP Projects will be funded through rates, grants, old and new debt, impact fees, and reserves.** The York Creek upper dam removal and mitigation project as well as the Meadowood tank upgrades project are expected to be partially grant funded, and partially funded by existing bond proceeds. The Bell Canyon Creek flow measurement project will be partially funded by existing bond proceeds. For large infrastructure projects the City will apply to advantageous loan and grant programs. Pump station upgrades and the Bell Canyon intake tower replacement are assumed to be funded by new debt. Spill containment at both the Bell Creek intake and Stonebridge Well, valve replacement at the Bell Valve House, as well as the Bell Canyon reservoir improvements, will be funded by reserves. Rates (cash) will be used for all other capital outlay needs for existing customers. Impact fees will be used to fund capital project costs attributable to new customers. The water enterprise fund will loan the impact fee fund cash to pay for the new customers' share of facility costs.
- Wastewater CIP Projects will be funded through rates, reserves and debt.** Reserves will be used to fund the replacement of the wastewater reclamation facility operations building and shop. Phase 1 and Phase 2 of the wastewater treatment plant upgrades are assumed to be funded by new debt. Cash will be used for all other capital improvement projects. The wastewater impact fee fund has sufficient cash to pay for new customers' share of wastewater facility costs.
- Future users' share of costs updated.** The water and wastewater impact fees must be updated to reflect the CIP presented in the Rate Study. The cash balances for impact fee funds 764 (water) and 774 (wastewater) have not been updated in the Study; with updated CIPs for both utility systems the impact fees need to be updated. An increase in the water impact fee would improve the repayment period from future to existing customers and reduce future rate increases for existing customers.
- System rehabilitation costs are fully accounted for in the rate models.** Both the water and wastewater rate models include a calculated annual cost for long-term replacement of facilities. Facilities include existing and new facilities built in the next five years. The Study projects that a capital repair and replacement reserve of \$1.7 million could be accumulated in the wastewater fund by 2022. It is not anticipated that any reserve for capital repair and replacement could be accumulated in the water fund.
- New growth.** New development is assumed to increase at a pace of five single family units per year. This pace of growth was estimated using the St. Helena average annual change in US Census reported number of occupied housing units from 2000 to 2015, and is consistent with the City's General Plan.

Attachment 5

- **Rate structure is modified for both water and wastewater.** In an effort to allocate costs as equitably as possible with available data, the Study modifies the rate structures for both utilities as described further below and elsewhere in this report.
- **The new rate structures are assumed to be in effect February 8, 2017. The following five rate increases are assumed to be in effect November 8 of each year (November 2017, 2018, 2019, 2020, and 2021).** The rate increases go into effect as soon as possible to increase cash flow, and in the fall when price changes have less impact to customers than in the summer months. The new rates would be reflected on the City's February (and thereafter November) utility bills. The rate change dates are based on the City's current billing cycles; if the dates of the billing cycles change (for example meter reads change from the 8th of each month to the 10th of each month) the rate changes will follow the date of the new billing cycle.
- **Low income utilities subsidies, authorized by City Resolution No. 2006-44, are funded by the City general fund so that some utility customers do not subsidize others.** The general fund transfers the appropriate subsidy amount for low income households into the water and wastewater funds to maintain the revenue requirement.
- **Water-specific Assumptions:**
 - **New water meter replacement fee.** With the useful service life of a meter being approximately 20 years, the City needs to collect funds for a routine meter replacement program, replacing about five percent of the meters in the system each year. There are approximately 2,500 meters to be serviced with an approximate annual cost of \$46,000 in 2016 dollars. The new meter replacement fee is included in the updated service charges.
 - **Meadowood area surcharges are eliminated.** Customers in the Meadowood area, which is outside of the City limits, currently pay a surcharge based on consumption by all using those facilities plus a uniform maintenance surcharge. Per the decision made during the September 13th, 2016 Task Force meeting, Meadowood area customers will no longer pay a surcharge.
 - **The percentage of revenue requirement collected in base (flat) fees/service charges gradually increases.** Fixed costs comprise about 70% of the City's water system total annual operating costs. Currently the City collects 30% of costs in service charges and 70% in use charges. The water rate study gradually increases the base charges from 30% of revenue requirement to 36% of revenue requirement over the next five years. Greater revenue collection from service charges increases revenue stability for the enterprise funds. The increase is gradual to avoid large increases to households on fixed incomes.
 - **Single family residential 1" meter customers pay the same rates as single family residential 5/8" meter customers.** The total number of 5/8" meters was adjusted to include single family 1" meters. Due to CA Residential Code Section R313 (fire sprinklers), almost all new residential development is required to install 1" meters in

Attachment 5

order to have sufficient flow for sprinklers; however, most existing homes built prior to implementation of CA Residential Code Section R313 have a 5/8" or 3/4" meter. Because the 1" residential customers utilize the same average amount of water as the 3/4" and 5/8" customers, it is appropriate for them to pay the same rates, and not be penalized by the fire sprinklers requirement.

- o **The new water rate structure includes a drought period surcharge.** A drought period will be defined in the City municipal code. When the City implements Phase 1 drought restrictions it would also implement drought rates. Drought rates are only applied to use charges (does not affect service charges). Drought rates are 6% higher than non-drought rates because during drought years the cost of water per 1,000 gallons is 6% higher than during non-drought years.

1.6 RATE STRUCTURES

Water Rate Structures

The water rate study calculated water charges under two methods of collection for costs recovered through use charges. A brief summary of the rate structure differences is provided below. The Task Force chose the seasonal rate structure as the preferred water rate structure at the September 13th, 2016 Task Force Meeting; therefore, the Study only presents findings of the seasonal rate structure. Details of the seasonal rate structure, along with results, are presented in Section 2.

WATER STUDY	
Uniform Rate Structure	
Same as current rate structure except no tiers for use charges	
All customers pay a base charge by meter size per month + a uniform use charge for all treated water	
Seasonal Rate Structure	
All customers pay a base charge by meter size per month + a seasonal use charge for all water (higher during the peak than off-peak months)	
Peak = May through October	
Off-Peak = November through April	

Wastewater Rate Structures

In the financial modeling for the wastewater rate study two rate structures were considered for collection of the revenue requirement; a modified rate structure and a new rate structure. A comparison of the two rate structures considered is provided on the following page. Per the August 4th, 2016 and September 13th, 2016 Task Force meetings, the City's Task Force chose the new rate structure as the preferred rate structure; therefore, the Study only presents findings of the new rate structure. For record keeping the modified rate structure findings are presented in Attachment B of the 'City of St. Helena Wastewater Rate Study Technical Memorandum'.

Attachment 5

WASTEWATER STUDY	
Modified Rate Structure	
	Same as current rate structure except religious places/community centers are broken out as their own rate category
	Single family pay monthly flat base rate and a flow charge per Hundred Cubic Feet (HCF) of average winter month water
	Multi-family/mobile homes and non-residential pay monthly flat base rate based on meter size per month and a flow charge per HCF of average winter month water
New Rate Structure	
	Mobile Home parks classified as residential; religious places/community centers are broken out as their own rate category
	All Residential (single family, multi-family and mobile homes) pay flat base rates based on number of dwelling units plus a flow charge per HCF of average winter month water
	Flat monthly charge for schools based on number of students
	Non-residential pay a flat base rate by customer type (per account) plus a flow charge per HCF of average winter month water

Attachment 5

Section 2: WATER RATE STUDY SUMMARY

2.1 KEY FINDINGS

- The City has been pulling from reserves for water system operations. At the end of fiscal year 2016 (June 30) the operating fund had a positive unrestricted net position of roughly \$5 million. At the end of fiscal year 2017, the operating fund is expected to be depleted to an unrestricted net position of about \$525,000. System rehabilitation is being funded from reserves because depreciation is not currently included in the rates. This is unsustainable.
- It is projected that in fiscal year 2017 the water fund will have a 0.72 debt service coverage ratio. The City is out of compliance with its bond covenants to maintain a 1.20 minimum debt service coverage ratio. This must be rectified immediately.
- The City has identified a minimum of \$17.7 million, net of grant funds and existing bond proceeds, of water system capital improvements in today's dollars to be funded over the next 10 years. This cost is inflated to a total of \$20.8 million dollars over the next 10 years.
 - o The funding plan applies two City-awarded grants, which total \$1,787,876, for the York Creek dam removal and creek restoration project, as well as existing water bonds in the amount of \$2.7 million.
 - o Meadowood tank upgrades are partially funded by \$120,100 from existing bond proceeds.
 - o The City will continue to aggressively pursue any grant opportunities.
 - o \$0.2 million for pump station upgrades, and \$2.1 million for Bell Canyon intake tower replacement are assumed to be financed by new debt.
 - o All other system improvement costs will be cash-funded.
 - o The project for installation of smart meters is currently unfunded; however, the project is not anticipated to start in the next five years. The total cost for this project is estimated at \$1.5 million, and
 - o A new water meter replacement fee for routine replacement of existing meters, which is included in the monthly service charge, will fund \$0.3 million of meter replacement costs, not included in the CIP.
- By raising the rates in February 2017 the City will generate sufficient revenue to meet its bond covenants, to begin building a healthy reserve, to fund necessary planned capital improvements, and to fully fund water operations without using other City funds. A healthy reserve is necessary to fund emergencies and other unanticipated capital projects. Without the rate increases the water fund is projected to have a negative balance of <\$11.1> million by the end of fiscal year 2022. The water fund would have to be loaned money from other City funds, taking away money for other essential City services such as parks, library and streets.

Current and calculated water rates are shown in **Table 1**.

Attachment 5

Table 1
Calculated Water Rates through Fiscal Year Ending 2022

Charges	Current	Billing Period Beginning *					
		2/8/2017	11/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021
Service Charge		Monthly Charges per Meter					
5/8" , 3/4" & SF 1"	\$27.52	\$43.22	\$51.71	\$60.59	\$64.78	\$68.91	\$73.27
1"	\$63.80	\$80.08	\$96.76	\$114.44	\$123.35	\$132.22	\$141.61
1.5"	\$124.12	\$141.67	\$172.02	\$204.36	\$221.14	\$237.94	\$255.72
2"	\$196.50	\$215.12	\$261.84	\$311.76	\$337.99	\$364.27	\$392.10
3"	\$365.51	\$413.06	\$503.54	\$600.40	\$651.86	\$703.51	\$758.21
4"	\$607.01	\$640.46	\$780.29	\$930.11	\$1,010.10	\$1,090.44	\$1,175.54
6"	\$1,210.18	\$1,252.50	\$1,528.85	\$1,825.17	\$1,983.80	\$2,143.19	\$2,312.05
Private Fire Protection		Monthly Charges per Fire Service Pipe					
4"	\$4.00	\$8.47	\$9.92	\$11.38	\$11.89	\$12.36	\$12.86
6"	\$6.00	\$24.59	\$28.81	\$33.05	\$34.53	\$35.91	\$37.34
8"	\$8.00	\$52.41	\$61.40	\$70.43	\$73.57	\$76.52	\$79.58
Raw Water <i>per Gallon</i>	\$0.00267	\$0.00273	\$0.00320	\$0.00367	\$0.00383	\$0.00398	\$0.00414
TREATED WATER USE CHARGES PER HCF							
NON-DROUGHT PERIOD	[1]						
Off-Peak (Nov-Apr)		\$5.50	\$6.37	\$7.19	\$7.37	\$7.54	\$7.71
Peak (May-Oct)		\$6.11	\$7.09	\$8.00	\$8.20	\$8.38	\$8.58
DROUGHT PERIOD	[1]						
Off-Peak (Nov-Apr)		\$5.81	\$6.73	\$7.60	\$7.79	\$7.97	\$8.15
Peak (May-Oct)		\$6.46	\$7.49	\$8.45	\$8.66	\$8.86	\$9.06

Source: HEC.

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

[1] Current Rate Structure rates as follows:

Tiers by customer category (in hcf):	Tier 1	Tier 2		Tier 1	Tier 2
Single family	0-14	15+	Non-residential <=1"	0-36	37+
Multi-family	0-5	6+	Non-residential 1.5"	0-120	121+
			Non-residential 2"	0-192	193+
Price per HCF	\$4.48	\$6.74	Non-residential 3"	0-360	361+
Price per HCF - Landscape Irrigation	\$5.22		Non-residential 4"	0-600	601+
			Non-residential 6"	0-1,250	1,251+
			Non-residential 8"	0-1,920	1,921+

2.2 METHODOLOGY

The detailed methodology for calculation of rates is presented in the 'City of St. Helena Water Rate Study Technical Memorandum'. Under the new seasonal rate structure, customer bills continue to be comprised of 2 fees: (1) fixed monthly service charges (now also including a meter replacement fee), and (2) variable use charges. The new seasonal rate structure is as follows:

- All customers pay the same usage rate per HCF for treated water off-peak (Nov-Apr) and peak (May-Oct). The peak rate is higher than the off-peak rate to reflect the additional costs of water operations during the peak period. Analysis in the 'City of St. Helena Water Rate

Attachment 5

Study Technical Memorandum’ demonstrates that water operations costs are 11% higher during the peak period.

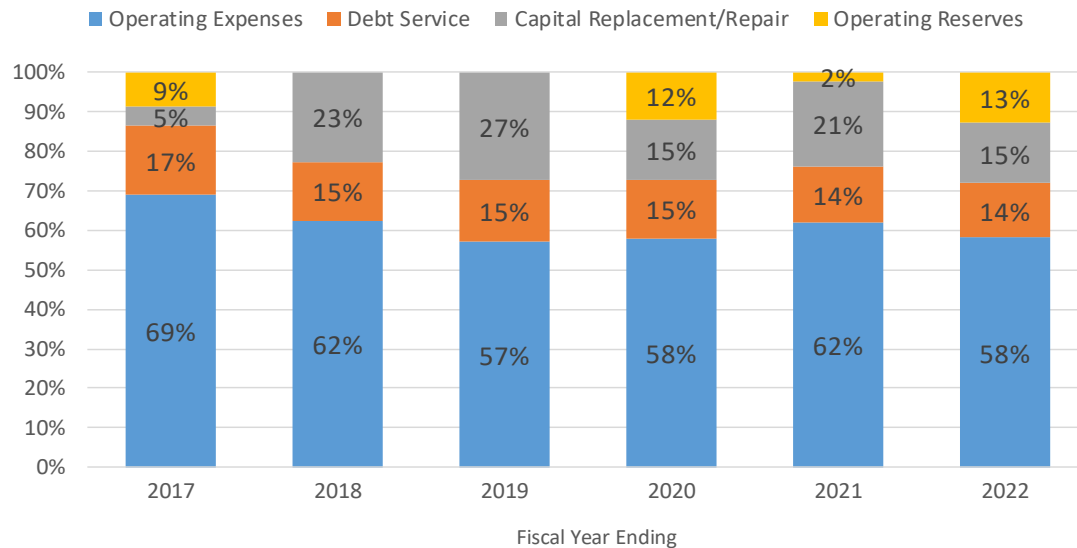
2.3 NEW RATE IMPACTS

Components of revenue requirement are shown in **Figure 7**. Operating expenses are the largest component of cost, followed by capital replacement/repair, debt service, and operating reserves.

Single Family Residential Impacts

Figure 8 shows the water bill impact for a typical single family home in the off-peak months using the seasonal water rate structure in a non-drought period. Single family homes typically use 7 HCF per month in the winter (calculated using January and February data 2011 through 2015). **Figure 9** shows the water bill impact for a typical single family home in the peak months using the seasonal water rate structure in a non-drought period. Single family homes typically use 17 HCF per month in the summer (calculated using July and August data 2011 through 2015).

Figure 7
Components of Water Revenue Requirement



Attachment 5

Figure 8
Typical Water Monthly Bill for the Off-Peak Season

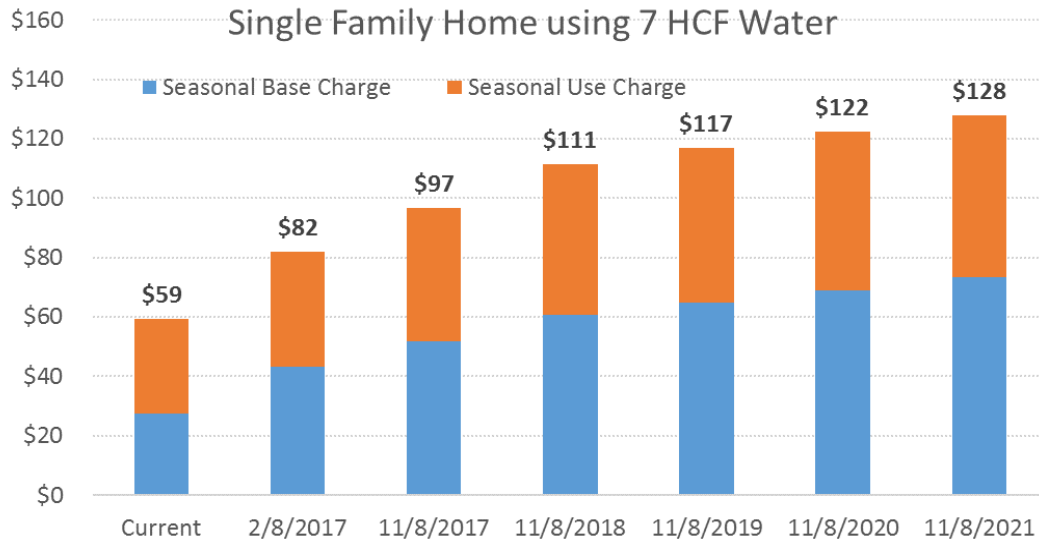
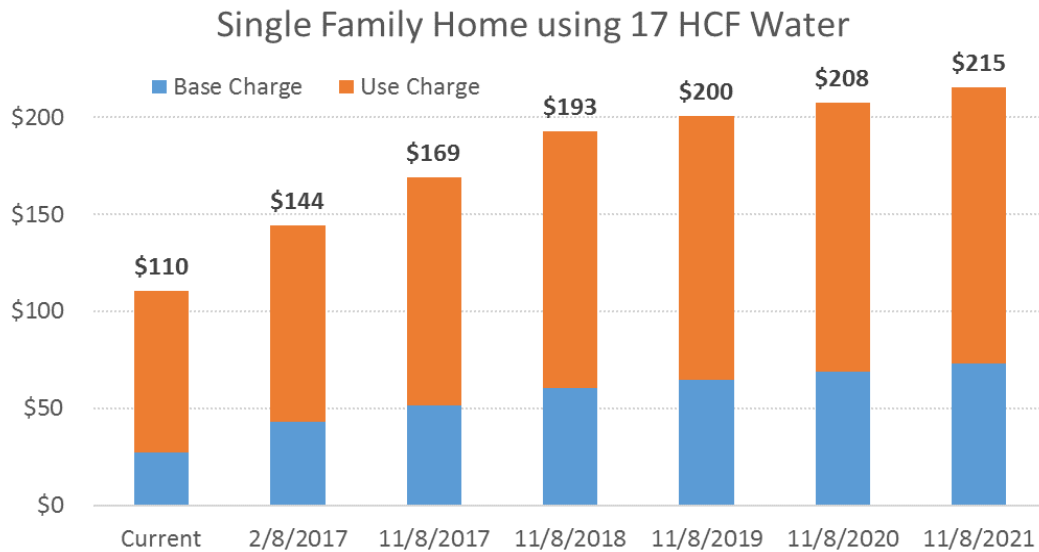


Figure 9
Typical Water Monthly Bill for the Peak Season

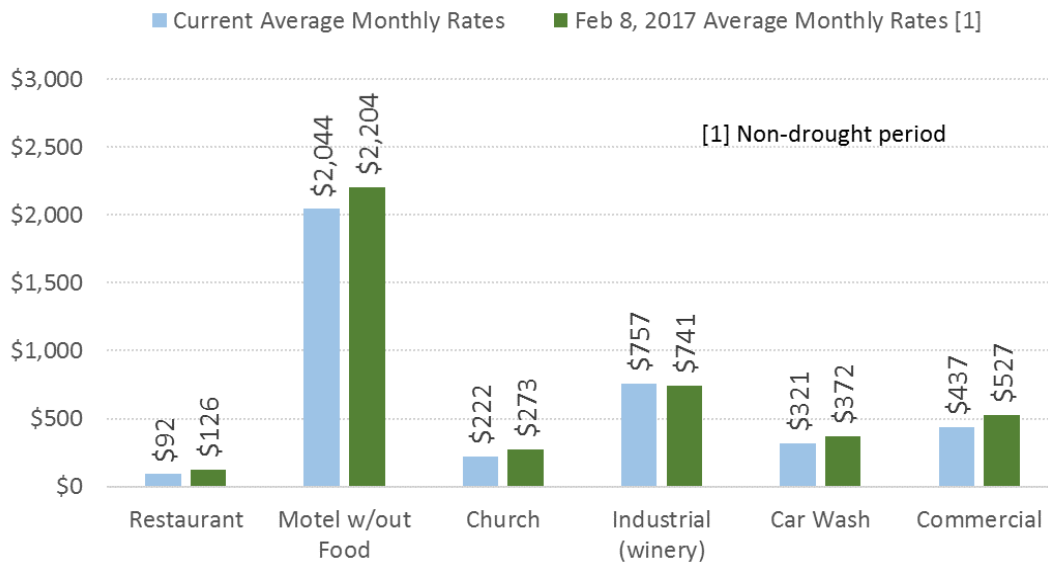


Attachment 5

Non-Residential Users

Six types of non-residential users were selected to illustrate the impacts of water rate increases in February 2017; these include a restaurant, a motel without food, a church, an industrial customer (winery), a cash wash, and a commercial office. **Figure 10** illustrates the impact to each type of water user assuming a non-drought period. Charges are calculated using actual consumption by the customers between January 2015 and December 2015. The impact is greater for all customers with the exception of the industrial customer.

Figure 10
Non-Residential Water Rate Impact



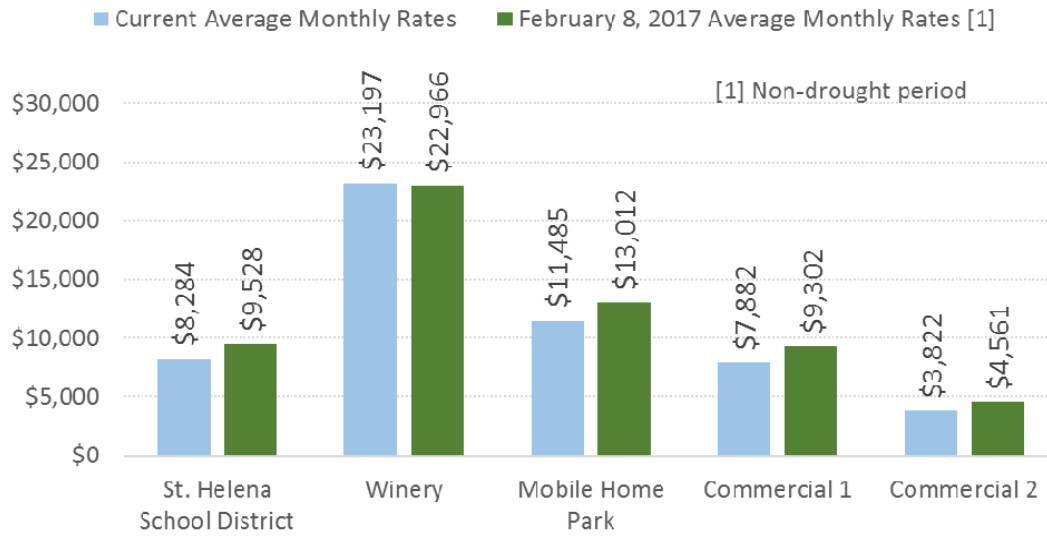
Large Water Users

The largest water users in the City include the St. Helena School District, wineries, mobile home park, and some large commercial businesses.

The Study examines the impact to a selection of these users in **Figure 11** using current charges and February 8, 2017 charges assuming a non-drought period. Charges are calculated using actual consumption by the customers between January 2015 and December 2015. In the selection, average monthly charges increase for all customers except the winery. Actual water bills will differ from customer to customer.

Attachment 5

Figure 11
Average Monthly Water Charges for Large Water Users



Attachment 5

Section 3: WASTEWATER RATE STUDY SUMMARY

3.1 KEY FINDINGS

- The City has been using wastewater fund reserves to fund operations. At the end of fiscal year 2016 (June 30) the operating fund had a negative unrestricted net position of <\$79,805>. At the end of fiscal year 2017, the operating fund is expected to have a negative unrestricted net position of <\$27,000>. System rehabilitation is being funded from reserves because depreciation is not currently included in the rates. This is unsustainable.
- The City has identified a minimum of \$15.4 million, net of grant funds and existing bonds, in capital improvements in today's dollars to be funded over the next 10 years. In future dollars this totals \$17.7 million to be funded over the next 10 years. The financing plan assumes that:
 - o Phases 1 and 2 of the wastewater treatment plant upgrades will be debt-financed.
 - o Reserves will be used to finance \$3.7 million for replacement of the wastewater reclamation facility operations building and shop, which is expected to be accomplished fiscal year 2021 through fiscal year 2023.
 - o Cash will fund the remaining CIP costs.
- By raising the rates in February 2017 the City will generate sufficient revenue to meet its bond covenants, to begin building a healthy reserve, to fund necessary capital improvements and to fully fund wastewater operations without using other City funds. A healthy reserve is necessary to fund emergencies and other unanticipated capital projects. Without the rate increase the wastewater fund is projected to have a negative fund balance within two fiscal years and would have to be loaned money from other City funds, taking away money for other essential City services.
- The new rate structure improves equity among certain customer classes by basing rates on typical flow and strength characteristics of each customer type. Multi-family dwellings and mobile home parks, which display characteristics more similar to residential than non-residential, are shifted to residential. Schools pay on a flat monthly rate per student basis. Non-residential customers' water use is determined by average winter water use, by customer type, to account for water that does not go to the wastewater treatment plant (applied outdoors or otherwise does not enter the sewer collection system).

Table 2 on the next page shows the new wastewater rate schedule. The current rate schedule cannot be compared with the new rate schedule because the structure is different; however, a single family unit currently pays a base monthly charge of \$47.35 and a monthly use charge of \$3.94 per HCF of winter water use.

Attachment 5

Table 2
Calculated Wastewater Rate Schedule
- New Rate Structure

Customer Category		Fiscal Year Ending					
		2017	2018	2019	2020	2021	2022
Billing Period Beginning * ----->		2/8/2017	11/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021
Residential							
Single Family	monthly per unit	\$48.04	\$55.24	\$70.13	\$73.03	\$74.18	\$75.23
Multi-Family	monthly per unit	\$29.07	\$33.42	\$42.43	\$44.18	\$44.88	\$45.52
Mobile Homes	monthly per unit	\$43.11	\$49.57	\$62.93	\$65.53	\$66.56	\$67.51
Residential Rate per HCF	per HCF	\$4.69	\$5.39	\$6.84	\$7.12	\$7.23	\$7.34
Schools Flat Rate per Student	monthly per student	\$1.40	\$1.62	\$2.15	\$2.21	\$2.26	\$2.28
Non-Residential							
Car Wash	monthly per account	\$209.93	\$243.25	\$328.36	\$336.45	\$343.13	\$346.45
Religious Places/Community Centers	monthly per account	\$35.34	\$40.85	\$54.06	\$55.68	\$56.71	\$57.34
Commercial [1]	monthly per account	\$62.70	\$72.20	\$92.64	\$96.19	\$97.78	\$99.09
Groceries and Mortuaries	monthly per account	\$433.93	\$492.12	\$552.00	\$595.15	\$599.41	\$613.71
Laundry	monthly per account	\$970.94	\$1,121.45	\$1,475.85	\$1,522.21	\$1,549.87	\$1,567.76
Mixed Retail w/ Food	monthly per account	\$541.20	\$617.30	\$730.21	\$775.32	\$783.78	\$799.17
Motel with Food	monthly per account	\$2,617.64	\$2,978.36	\$3,444.90	\$3,681.23	\$3,715.59	\$3,795.12
Motel without Food	monthly per account	\$642.15	\$738.08	\$933.28	\$972.87	\$987.93	\$1,002.28
Restaurant	monthly per account	\$840.03	\$952.80	\$1,070.03	\$1,153.27	\$1,161.63	\$1,189.23
Napa Valley College	monthly per account	\$2,889.93	\$3,341.62	\$4,436.77	\$4,565.57	\$4,651.20	\$4,701.87
Service Station	monthly per account	\$93.25	\$107.06	\$134.07	\$140.12	\$142.20	\$144.37
Winery Production (Merryvale/Spottswode)	monthly per account	\$989.21	\$1,116.93	\$1,199.98	\$1,310.53	\$1,315.85	\$1,351.87
Sutter Home Winery	monthly per account	\$876.04	\$1,007.39	\$1,278.85	\$1,331.67	\$1,352.66	\$1,371.89
Car Wash	per HCF	\$3.43	\$3.97	\$5.36	\$5.49	\$5.60	\$5.65
Religious Places/Community Centers	per HCF	\$3.72	\$4.30	\$5.69	\$5.86	\$5.97	\$6.03
Commercial [1]	per HCF	\$4.27	\$4.92	\$6.31	\$6.55	\$6.66	\$6.75
Groceries and Mortuaries	per HCF	\$10.30	\$11.68	\$13.10	\$14.12	\$14.22	\$14.56
Laundry	per HCF	\$3.81	\$4.40	\$5.79	\$5.97	\$6.08	\$6.15
Mixed Retail w/ Food	per HCF	\$6.73	\$7.68	\$9.08	\$9.64	\$9.75	\$9.94
Motel with Food	per HCF	\$7.91	\$9.00	\$10.41	\$11.12	\$11.23	\$11.47
Motel without Food	per HCF	\$4.59	\$5.27	\$6.67	\$6.95	\$7.06	\$7.16
Restaurant	per HCF	\$10.18	\$11.54	\$12.96	\$13.97	\$14.07	\$14.41
Napa Valley College	per HCF	\$3.67	\$4.24	\$5.63	\$5.79	\$5.90	\$5.97
Service Station	per HCF	\$4.82	\$5.53	\$6.93	\$7.24	\$7.35	\$7.46
Winery Production (Merryvale/Spottswode)	per HCF	\$17.31	\$19.55	\$21.00	\$22.93	\$23.03	\$23.66
Sutter Home Winery	per HCF	\$4.50	\$5.17	\$6.57	\$6.84	\$6.95	\$7.04

Source: HEC.

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

[1] Commercial includes City buildings.

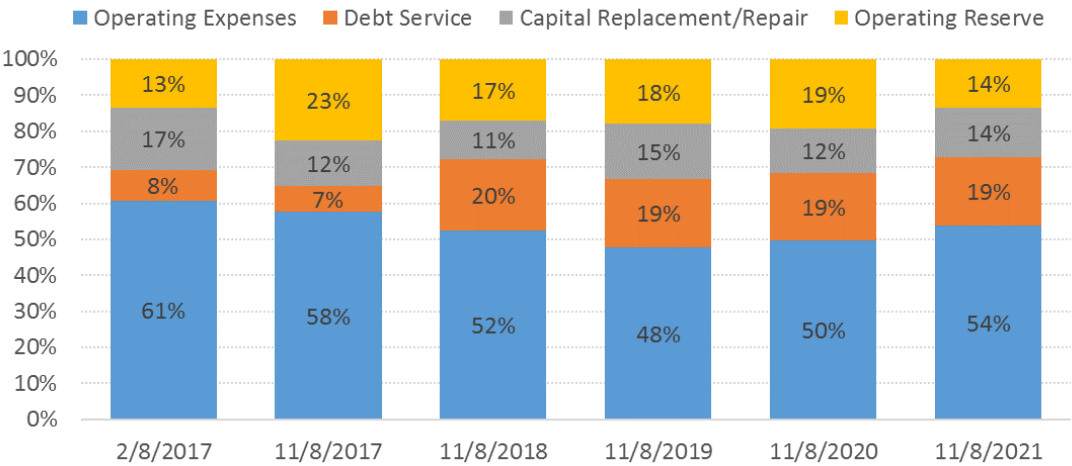
3.2 METHODOLOGY

The detailed methodology for calculation of rates is presented in the 'City of St. Helena Wastewater Rate Study Technical Memorandum'.

3.3 NEW RATE IMPACTS

Components of wastewater fund revenue requirement is shown in **Figure 12**. Operating expenses is the largest component of cost (more than 50%).

Figure 12
Components of Wastewater Revenue Requirement



Residential Bill Impacts

Figure 13 shows monthly bill impacts of the rate increases to single family residential customers under the new rate structure for the next five years.

Figure 13
Wastewater Bill Impact for Single Family Homes

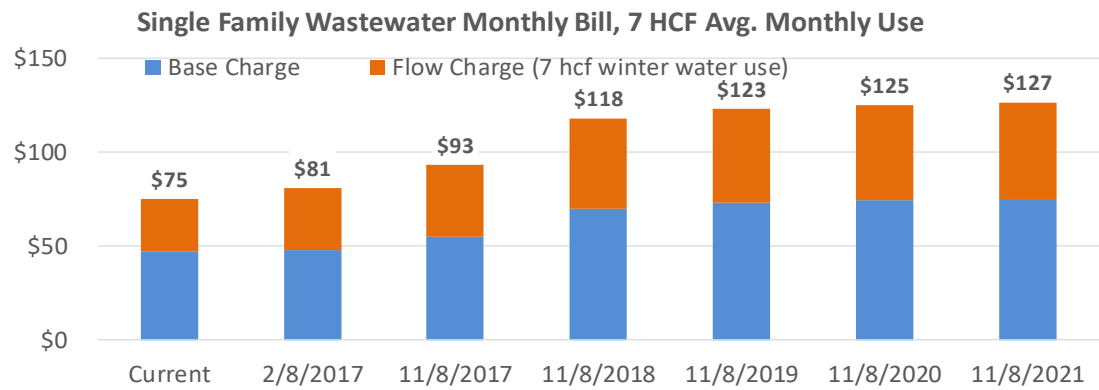


Figure 14 estimates monthly bill impacts of the February 8, 2017 rate changes for a sample of non-residential users. Because monthly bills for non-residential customers will vary from month to month and business type to business type, the examples given are only illustrative. Each non-residential customer will experience a different impact.

Attachment 5

Figure 14
Average Wastewater Monthly Bill Impact for Sample Non-Residential Users

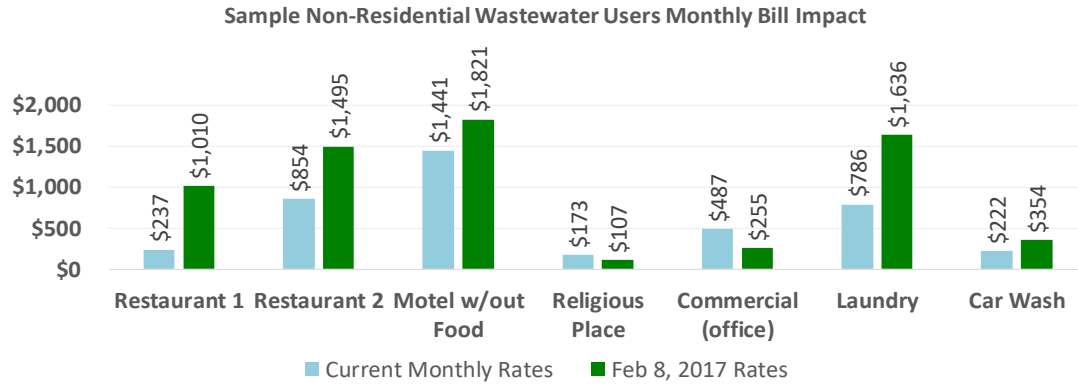
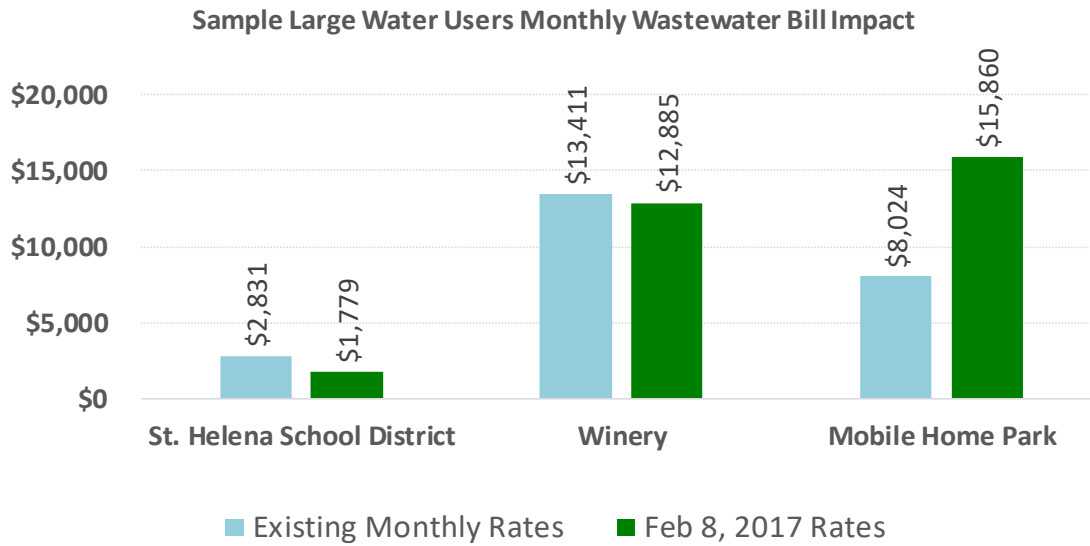


Figure 15 illustrates the impact on the same large water users as in the water rate study, with the exception of the two commercial businesses which do not receive City wastewater service.

Figure 15
Average Wastewater Monthly Bill Impact for Large Water Users



Section 4: COMBINED UTILITIES IMPACT

4.1 RESIDENTIAL IMPACTS

The combined impact of increased water and wastewater rates on typical single family home utility bills is illustrated in **Figure 16** for a typical off-peak month (using 7 HCF water, 7 HCF wastewater), and **Figure 17** for a typical peak month (using 17 HCF water, 7 HCF wastewater). Both comparisons assume a non-drought period.

Figure 16
Single Family Home Utility Costs in Off-Peak Months, based on 7 HCF

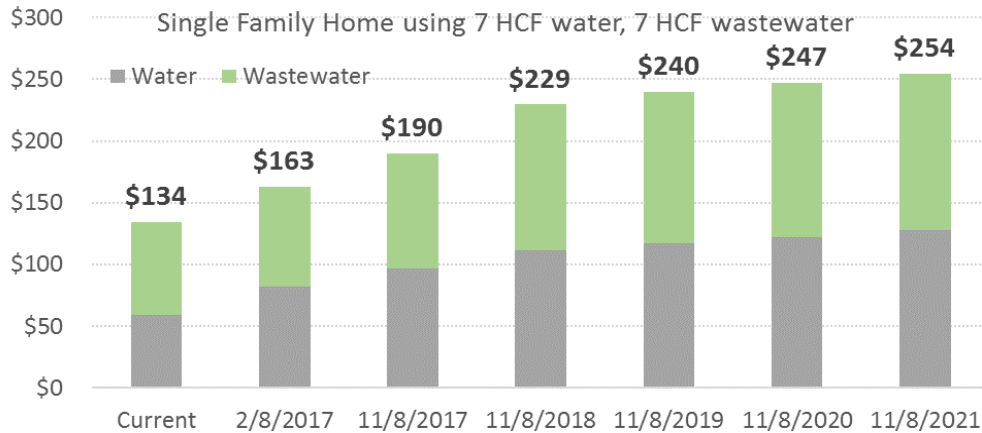
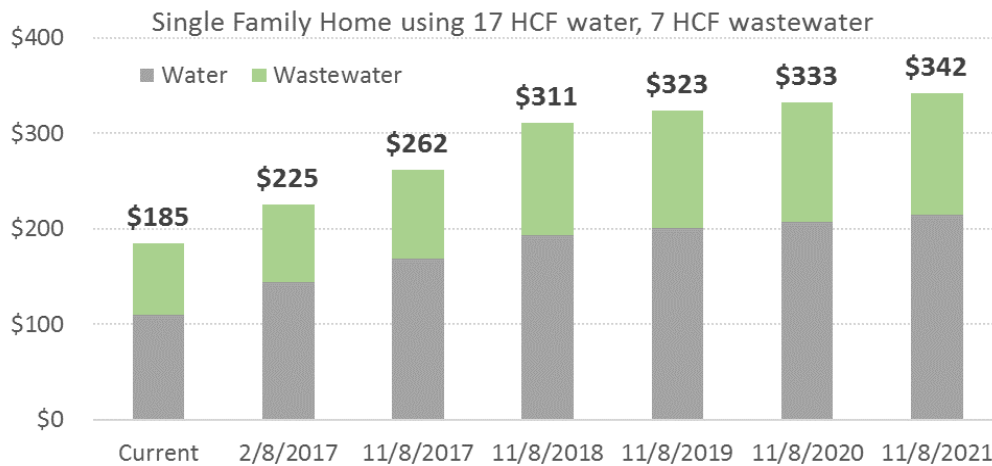


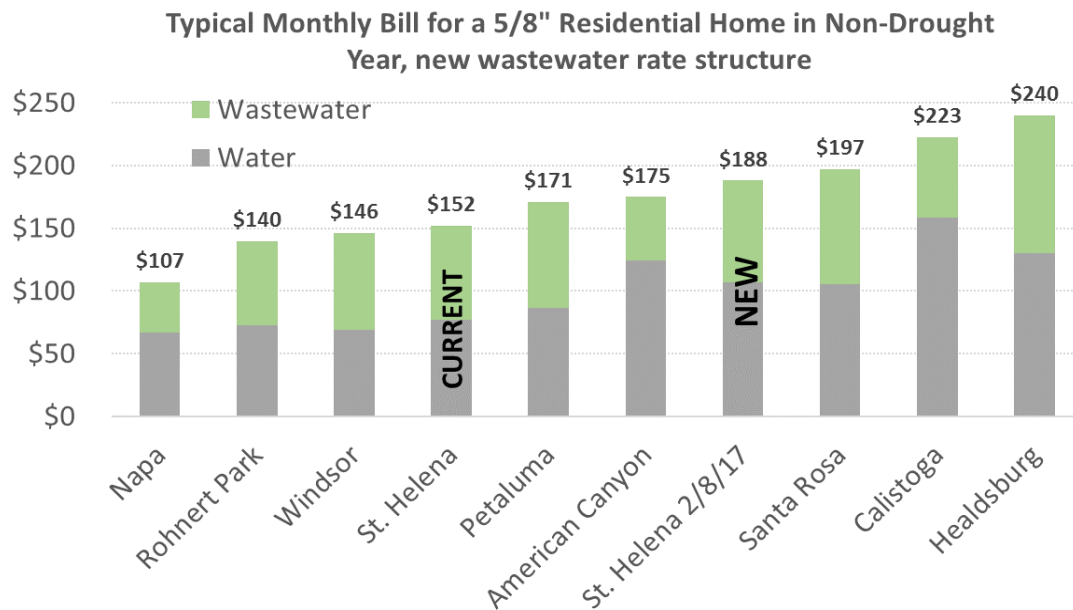
Figure 17
Single Family Home Utility Costs in Peak Months, based on 17 HCF



Attachment 5

Figure 18 illustrates what a household using an average of 11 HCF of water and 7 HCF of wastewater in a month would pay for combined water and wastewater in several comparison cities. For St. Helena, the use rate was calculated using the average of the peak and off-peak use rates. St. Helena's combined water and wastewater rates are currently in the middle of the range and will stay in the middle of the range with the proposed 24% rate increase. Note that the comparison cities utilized may be in the process of rate increases as well; this is a snapshot in time.

Figure 18
Impact of Combined Utility Bill Increases



4.2 AFFORDABILITY

The combined impact of increased utility costs must be considered together since they can increase costs beyond what is considered an affordable threshold. The affordability thresholds are guidelines used by State and Federal funding agencies when determining financing terms for debt-financing projects. The State Revolving Fund (SRF) program bases its evaluation of affordability of water rates on two criteria:

1. The Median Household Income (MHI) of the community compared to the State MHI, and
2. The percentage of MHI spent on water related bills.

Generally, water rates are considered to be burdensome if they are greater than 2.50% of MHI, and wastewater rates are considered to be burdensome if they are greater than 2.00% of MHI (or combined, a total of 4.50% of MHI). If a community's MHI is less than 80 percent of the State MHI, the community is considered "Disadvantaged", in which case a rate greater than 1.5 percent of MHI

Attachment 5

is considered burdensome. St. Helena is not considered disadvantaged, as the City's MHI is more than 127% of the State MHI.

Currently, St. Helena's combined water utility costs are 2.32% of MHI. With the increase in costs in February 2017 water costs will total 1.64% of MHI and wastewater will total 1.24% of MHI. Together, the utilities costs will total 2.88% of MHI. The increased water utility costs are, per the State's definition, well within the affordable threshold. The affordability calculations are shown in **Table 3**.

Table 3
Affordability of Water Utility Costs for Residents

Item	Current Rates	Proposed 2/8/2017 Rates
St. Helena Monthly Median Household Income (MHI) [1]	\$6,535	\$6,535
Monthly Water Bill		
Monthly Water Bill for 11 HCF [2]	\$76.80	\$107.08
Water Bill as Percentage of MHI [3]	1.18%	1.64%
Monthly Wastewater Bill		
Monthly Wastewater Bill for 7 HCF	\$74.93	\$80.84
Wastewater Bill as Percentage of MHI [3]	1.15%	1.24%
Total Monthly Utilities Bill	\$151.73	\$187.92
Monthly Utilities Bill as Percentage of MHI [3]	2.32%	2.88%
Median Household Income (MHI)		
Estimated California [1]	\$61,489	
Estimated St. Helena [1]	\$78,421	
St. Helena MHI as a percentage of the State MHI [4]	127.54%	

Source: HEC, California State Water Resources Control Board, and US Census Bureau.

aff comb

[1] 2014 5-year American Community Survey.

[2] Assumes a non-drought year and average seasonal use rate.

[3] The EPA considers bills unaffordable if combined water and wastewater bills are >4.5% of MHI. The State Clean Water SRF program only provides better loan terms (such as extended term financing, lower interest and principal forgiveness) to communities that are NOT Disadvantaged if the wastewater bill is >4% of MHI.

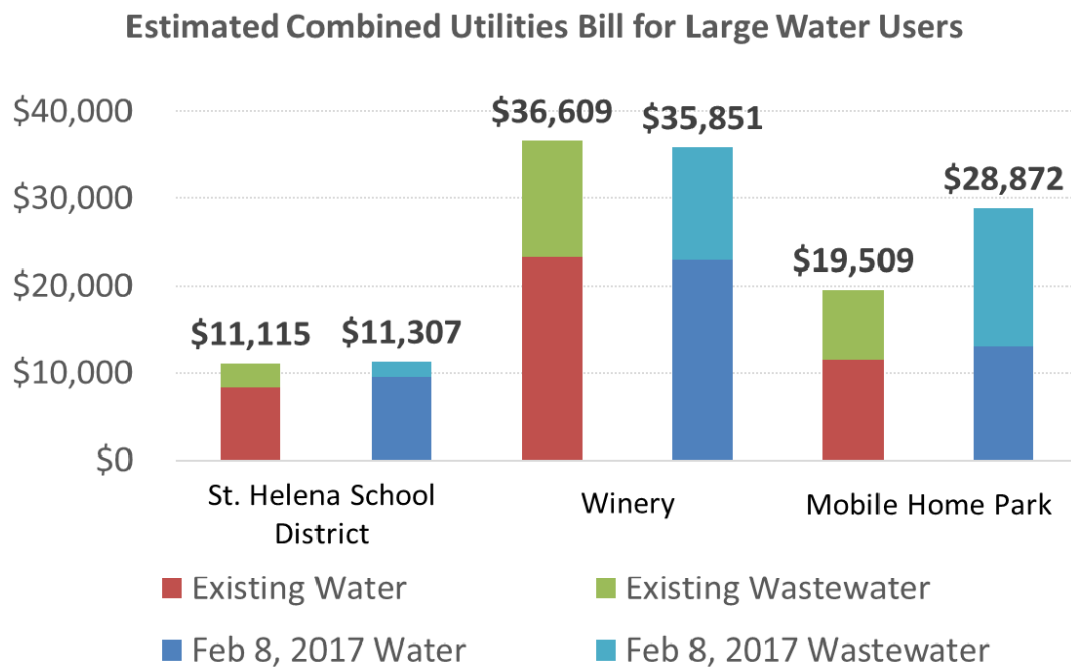
[4] Per the State Water Resources Control Board, a community with an MHI <80% of the Statewide MHI is Disadvantaged.

Attachment 5

4.3 LARGE WATER USERS IMPACTS

Figure 19 shows the cumulative impact of utility rate increases to some of St. Helena’s largest water users in a non-drought period. The St. Helena School District’s water bill increases but its wastewater bill decreases, resulting in a small net increase. The winery’s water bill decreases slightly and its wastewater bill decreases slightly, resulting in a net decrease. The mobile home park’s water bill increases slightly; however, its wastewater bill doubles.

Figure 19
Combined Utilities Impact on Large Water Users



Attachment 5

**HANSFORD ECONOMIC
CONSULTING**



**City of St. Helena (2016)
Water Rate Study
Technical Memorandum**

FINAL
October 31, 2016

HEC Project #150182

Attachment 5

**HANSFORD ECONOMIC
CONSULTING**

PO Box 10384
Truckee, CA 96162

Phone: 530-412-3676
Email: catherine@hansfordecon.com

Technical Memorandum WATER RATE STUDY

To: City of St. Helena

From: Catherine Hansford

Date: October 31, 2016

This technical memorandum presents the detailed water rate study. Support tables are provided in **Attachment A**.

THE WATER FUND

Revenues

The water system is 97% funded by water sales (rates) revenue, 1% by Meadowood area rate surcharges, and 2% by other revenues including investment earnings, finance charges, fees/fines, and other miscellaneous revenues.

Rate revenue is generated according to the current water rate schedule shown in **Table 1**. Under the current rate schedule all customers pay a service charge (or base charge) and a use charge. The service charge is different by meter size, and the use charge varies by customer type. All customers pay use charges in two tiers. The tier 1 rate is applied to single family homes for the first 14 units of water. A unit of water is a hundred cubic feet (HCF). Tier 2 is applied to all water use greater than 14 units consumed each month. The amount of water that tier 1 applies to each month differs by customer type, as shown in **Table 1**.

The Madrone Knoll pump facility (otherwise called the Meadowood pump facility) specifically benefits Meadowood area customers, who are outside the St. Helena city limits. Meadowood area customers pay an additional monthly surcharge for electric use at Meadowood pump facility plus a monthly maintenance fee. The schedule of current Meadowood surcharges is shown in **Table 2**.

Prepared by HEC

Attachment 5

Page 2 of 27

Water Rate Study, October 31, 2016

Table 1
Current Water Rate Schedule

Customer	Rate Schedule	
Monthly Fixed Service Charge		
Meter Size		Basis of Charge
5/8"	\$27.52	Month
3/4"	\$27.52	Month
1"	\$63.80	Month
1.5"	\$124.12	Month
2"	\$196.50	Month
3"	\$365.51	Month
4"	\$607.01	Month
6"	\$1,210.18	Month
8"	\$1,935.52	Month
Residential Use Charge		[1]
Tier 1 (0-14 Units)	\$4.48	Unit
Tier 2 (15+ Units)	\$6.74	Unit
Multi-Family Residential Use Charge		
Tier 1 (0-5 Units)	\$4.48	Unit
Tier 2 (6+ Units)	\$6.74	Unit
Non-Residential Use Charge		
5/8", 3/4", 1"		
Tier 1 (0-36 Units)	\$4.48	Unit
Tier 2 (37+ Units)	\$6.74	Unit
1.5"		
Tier 1 (0-120 Units)	\$4.48	Unit
Tier 2 (121+ Units)	\$6.74	Unit
2"		
Tier 1 (0-192 Units)	\$4.48	Unit
Tier 2 (193+ Units)	\$6.74	Unit
3"		
Tier 1 (0-360 Units)	\$4.48	Unit
Tier 2 (361+ Units)	\$6.74	Unit
4"		
Tier 1 (0-600 Units)	\$4.48	Unit
Tier 2 (601+ Units)	\$6.74	Unit
6"		
Tier 1 (0-1,250 Units)	\$4.48	Unit
Tier 2 (1,251+ Units)	\$6.74	Unit
8"		
Tier 1 (0-1,920 Units)	\$4.48	Unit
Tier 2 (1,921+ Units)	\$6.74	Unit
Landscape Irrigation Rate (\$ per unit) [2]	\$5.22	Unit

Source: City of St. Helena.

curr rates

[1] 1 unit=100 cubic feet.

[2] Service must be for landscape irrigation of public space (park, school or residential common area). Customer must implement water conservation best management practices, as determined by the city. Customer must accept more stringent water use cutbacks during periods of water shortage, as determined by the City.

Prepared by HEC

Attachment 5

Page 3 of 27

Water Rate Study, October 31, 2016

Table 2
Current Monthly Meadowood Area Surcharges

Total Water Consumption in HCF used by all accounts served by the same special reservoirs and pumping stations

0-150	\$1.81
151-200	\$1.45
201-250	\$1.25
251-300	\$1.07
301-350	\$0.88
351-400	\$0.80
401-450	\$0.74
451-500	\$0.65
501-550	\$0.56
551-600	\$0.50
601-1,250	\$0.49
1,251-1,500	\$0.48
1,501-1,750	\$0.47
1,751-2,000	\$0.43
2,001-2,250	\$0.40
2,251-2,500	\$0.39
2,501-2,750	\$0.37
2,751-3,000	\$0.36
3,001-3,250	\$0.34
3,251-3,500	\$0.33
3,501-3,750	\$0.32
3,751 and more	\$0.31
Per Residential Unit	\$27.94
Meadowood Complex (99 units + clubhouse)	\$2,793.60

Source: City of St. Helena.

pump

Expenses

The water fund includes an operating and capital fund. Annual operating costs include all water system operating and capital expenses. Over the past five years, personnel costs (salaries and benefits), Napa purchased water, capital projects, other capital fund expenses, and services have been the largest expenditure items. Personnel costs and Napa purchased water have comprised approximately 64 percent of annual costs. Percentage share of historical expenses by expense category is shown in **Figure 1**.

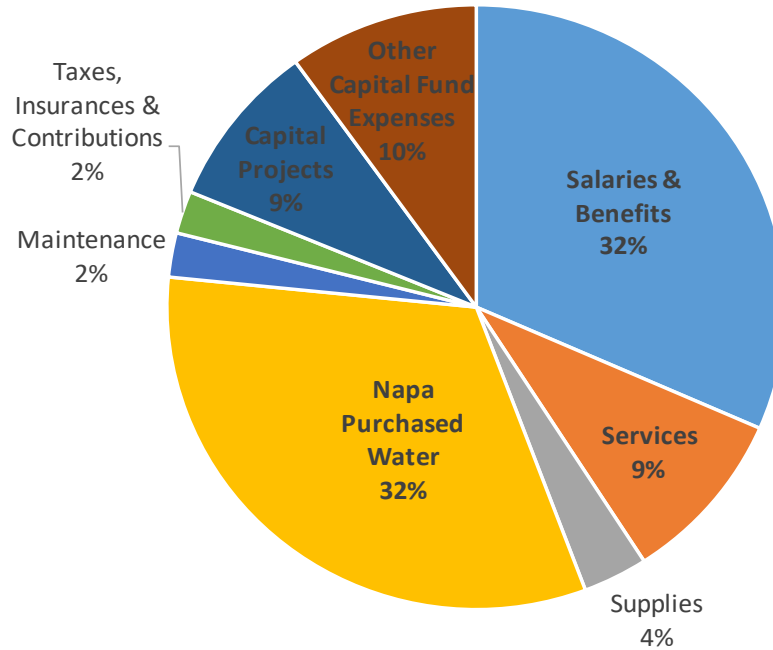
Prepared by HEC

Attachment 5

Page 4 of 27

Water Rate Study, October 31, 2016

Figure 1
Typical Annual Water Fund Expenses

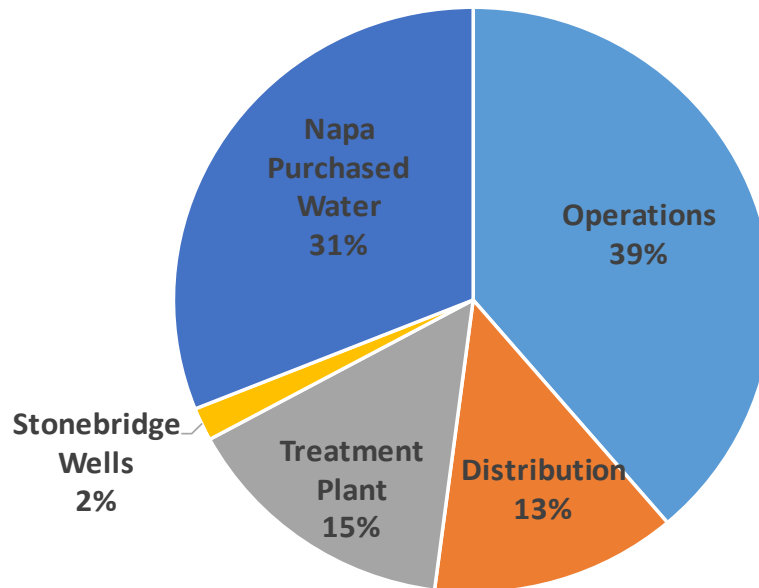


The operating fund expenses are further broken down into operations, distribution, treatment plant, Stonebridge Wells, and Napa purchased water. Percentage share of historical operating annual expenses by these categories is shown in **Figure 2**.

Supporting financial data is provided in Attachment A, **Tables A-1** through **A-3**.

Prepared by HEC

Figure 2
Operating Fund Expenses



THE WATER SYSTEM

The City's water sources include surface water from Bell Canyon Reservoir, groundwater from Stonebridge Wells, and purchased treated water from the City of Napa. The Louis Stralla Water Treatment Plant (water treatment plant), which treats surface water stored in Bell Canyon Reservoir, has a capacity of 4.3 million gallons a day (MGD); however, there are flow limitations in the inlet piping which restricts use of the plant to less than its capacity. Stonebridge Wells includes two active groundwater wells and a filtration facility, including filtration tanks, chlorination facilities and a backwash return system. The filter removes iron and manganese. Treated water from the City's water sources is distributed via six storage tanks and four pump stations.

The City first entered into an agreement with the City of Napa for delivery of treated water in September 2006. The third amendment to that agreement, entered into in December 2011, increases the minimum annual delivery to 600 acre-feet with optional delivery up to 800 acre-feet. Optional additional delivery of 200 acre-feet may be delivered provided the City of Napa has sufficient water supply. If Napa does not have sufficient supply it will attempt to acquire supplemental dry-year water on a single year basis from an outside source. Price and payment terms of the optional supply will differ from the base supply, as detailed in the agreement.

Untreated water available for construction water purposes only is also available for purchase from the Lower Reservoir adjacent to York Creek.

Attachment 5

Page 6 of 27

Water Rate Study, October 31, 2016

Historical system-wide water deliveries are shown in **Table 3**. Almost three-quarters of annual water production is used year-round consistently, and 26% of water production is additional water delivered for increased demand between May and October.

Table 3
Monthly Water Delivery

Month	2013	2014	2015		Avg. Annual Water Delivery (millions of gallons)	Percent of Delivery by Month
<i>millions of gallons</i>						
Jan	27.731	36.865	27.682		30.759	6%
Feb	25.853	24.743	29.805		26.800	5%
Mar	32.701	28.927	39.625		33.751	6%
Apr	43.635	31.822	39.224		38.227	7%
May	59.950	49.464	41.328		50.247	9%
Jun	57.567	50.268	46.679		51.505	10%
Jul	65.613	57.505	51.105		58.074	11%
Aug	67.830	56.303	54.491		59.541	11%
Sep	72.640	55.720	55.173		61.178	11%
Oct	65.278	52.195	52.491		56.655	11%
Nov	44.466	32.516	35.409		37.463	7%
Dec	38.386	30.405	28.648		32.480	6%
Total	601.651	506.733	501.661	A	536.681	100%
Peaking Period (May through October inclusive)				B	337.200	63%
Base Monthly Flow				C	33.247	
Base Annual Flow				D = C*12	398.962	74%
Additional Flow				E = A-D	137.719	26%

Source: City of St. Helena.

delivery

The City uses conjunctive management to preserve its water supplies in the long-term. The share of water supply from one particular source might change month to month. **Figure 3** shows the percentage share of water supply each month using data from 2013 and 2014, both non-drought years. The graph shows that Bell Canyon water is consistently about 40% of the total water supply each month. Water from the City of Napa and Stonebridge Wells fluctuates from year to year but the most variable use of water supply is Stonebridge Wells.

During a non-drought year approximately 40% of water supply is from Bell Canyon, 32% from the City of Napa, and 28% from Stonebridge Wells. This is illustrated in **Figure 4**. During a drought year the City reduces pumping from Stonebridge Wells to preserve groundwater supplies. The percentage share of water supplies during a drought year are 46% from Bell Canyon, 38% from the

Prepared by HEC

Attachment 5

Page 7 of 27

Water Rate Study, October 31, 2016

City of Napa, and 16% from Stonebridge Wells, as illustrated in **Figure 5**. Total water deliveries are reduced during a drought year. In 2013, a non-drought year, almost 602 million gallons of water were delivered. In 2015, a drought year, almost 502 million gallons of water were delivered.

Figure 3
Water Sources by Month in a Non-Drought Year

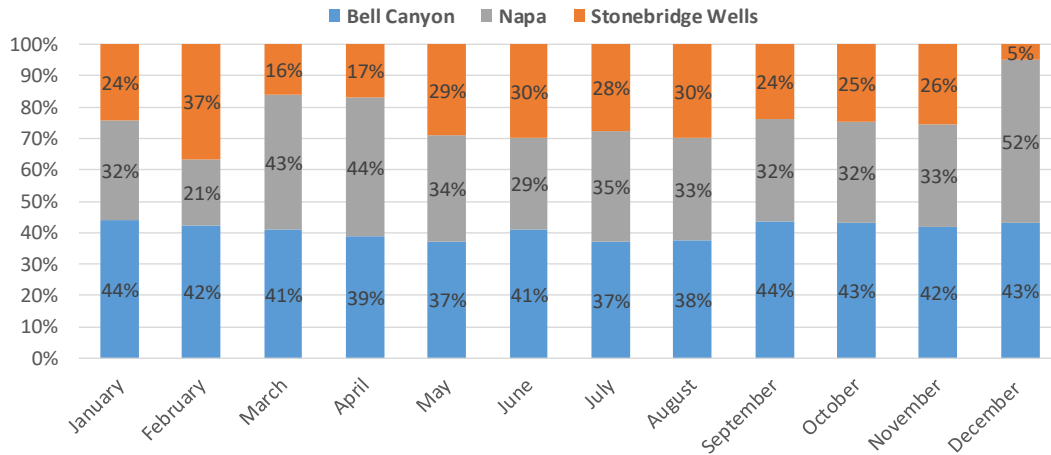
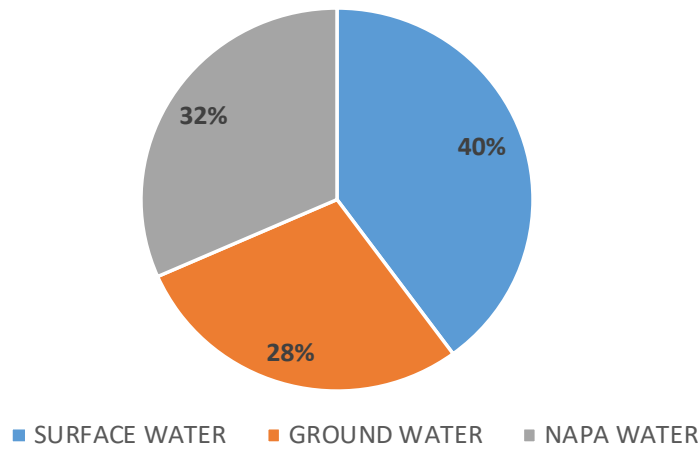


Figure 4
Water Supplies in a Non-Drought Year



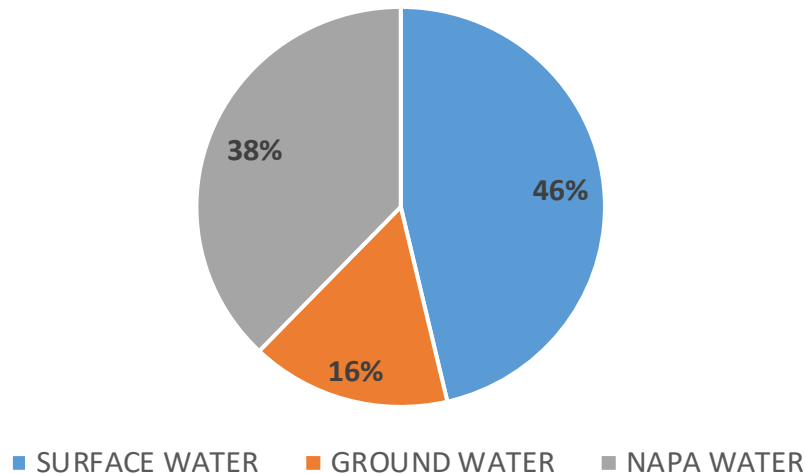
Prepared by HEC

Attachment 5

Page 8 of 27

Water Rate Study, October 31, 2016

Figure 5
Water Supplies in a Drought Year



WATER USE

Water use fluctuates year to year depending on several factors including, but not limited to, growth, weather, sustained drought, plumbing retrofits, and pricing of water. Average water use by customer type for the past five years is used as the basis on which to project water use over the next five years in the rate study. Historical annual and average annual water use by customer type is shown in **Table A-4**.

Comparison of production and consumption in **Table A-5** shows that unaccounted for water is about 7% of total deliveries which is well within acceptable industry standards. Some unaccounted water will be for hydrant flushing, running to waste at wells and other operational uses of water. Not all unaccounted for water is leaked.

Customer Characteristics

St. Helena experiences greater water demand during summer months than winter months primarily due to outdoor irrigation applications of water. **Table 4** shows average monthly annual use, winter use, and summer use by customer category. With the exception of multi-family, commercial, and laundry customers all water customers use twice as much water, or more, during the summer months than they do in the winter months.

Prepared by HEC

Attachment 5

Page 9 of 27

Water Rate Study, October 31, 2016

Table 4
Customer Usage Characteristics

Customer Type	Number of		Average	Winter	Summer	Summer
	Accounts	Units	Monthly Use	Monthly Average	Monthly Average	to Winter Ratio
			<i>hcf monthly use per unit</i>	[1]	[2]	
Residential						
Single Unit	2,028	2,028	11	7	17	2
Multi-Fam	102	673	7	6	7	1
Mobile Homes	4	247	7	7	13	2
Subtotal Residential	2,134	2,948				
Non-Residential			<i>use per meter</i>			
Commercial	197		34	28	41	1
Industrial	21		541	359	647	2
Landscape	32		53	11	108	10
Religious Places [3]	15		17	9	28	3
Laundry	1		256	265	254	1
Library Schools	14		119	73	164	2
Motel/Hotel	16		152	93	170	2
City Owned	21		52	18	74	4
Subtotal Non-Residential	317					
Total	2,451	2,948				

Source: City of St. Helena and HEC.

char

[1] January and February consumption.

[2] July and August consumption.

[3] Includes community centers.

REVENUE REQUIREMENT

The revenue requirement refers to the amount of money that must be raised for revenue sufficiency of the water fund through rates. The projection of revenue requirement is the cornerstone for calculation of rates. This section explains the derivation of revenue requirement for this Study. Components of revenue requirement include:

- Capital Improvements
- Debt Service
- Meter Replacement Program
- Operations Expenses and Reserves
- System Rehabilitation

Prepared by HEC

Attachment 5

Page 10 of 27

Water Rate Study, October 31, 2016

Non-water sales revenue projections are credited against projected operations costs. Non-water sales include investment earnings, finance charges (late fees for past due payments), existing Meadowood area surcharges, meter replacement fees, and other miscellaneous revenues.

Capital Improvements

Water system capital costs in any one year are dependent on the state of the current infrastructure to serve existing customers and necessary improvements to accommodate potential new customers. **Table 5** summarizes the capital improvement costs identified by the City as necessary in the next ten years. The costs do not include project costs that already have funding sources identified (i.e. have a grant secured or are to be funded with existing City bond proceeds). All costs are expressed in future dollars. The total ten-year capital improvements projects (CIP) cost is estimated at \$20.8 million. Of this total it is anticipated that \$13.8 million will be spent in the next five years.

Costs are further allocated to existing and future customers based on their estimated use of the facilities. Only \$2.0 million of the total cost is for projects partially benefiting future customers. These projects include Meadowood tank upgrades, Dwyer Road booster improvements, Bell House valve replacement, Holmes tank upgrade, Bell Canyon creek flow measurement, Tank 2 rehabilitation, and Bell Canyon intake tower replacement. **Table A-6** and **Table A-7** provide the water system CIP detail in current and future dollars. Future costs are inflated using the Engineering News Record Construction Cost Index (ENR CCI) past 20-year annual average increase of 3.1%.

Table 5
Capital Improvement Costs Summary

Customer	Estimated CIP Costs in Future Dollars		
	Through 2022	2023 to 2027	Total CIP
Existing Customer Share	\$11,747,982	\$7,006,340	\$18,754,322
Future Customer Share	\$2,045,145	\$0	\$2,045,145
Total Existing and Future	\$13,793,127	\$7,006,340	\$20,799,466

Source: HEC.

cip share

CIP funding sources of costs are shown in **Table 6**, with supporting data in **Table A-8**.

Prepared by HEC

Attachment 5

Page 11 of 27

Water Rate Study, October 31, 2016

Table 6
Sources of Funding for CIP Costs

Source	Total Cost	Total Through FY 2022	Fiscal Year Ending					
			2017	2018	2019	2020	2021	2022
				Year 1	Year 2	Year 3	Year 4	Year 5
Future \$'s								
Cash - Capital Fund	\$14,571,782	\$7,565,442	\$274,386	\$1,496,091	\$2,069,348	\$1,195,209	\$1,750,606	\$779,802
Cash - Operations Fund	\$405,604	\$405,604	\$0	\$0	\$0	\$56,453	\$349,151	\$0
Debt - Capital Fund	\$2,001,334	\$2,001,334	\$569,522	\$1,431,811	\$0	\$0	\$0	\$0
Reserves	\$1,775,602	\$1,775,602	\$0	\$159,385	\$0	\$0	\$0	\$1,616,217
Existing Customers CIP	\$18,754,322	\$11,747,982	\$843,908	\$3,087,287	\$2,069,348	\$1,251,662	\$2,099,757	\$2,396,019

Source: City of St. Helena and HEC.

exis rates

Debt Service

The City has existing debt service for a water revenue bond sold in 2006. In 2012, the City entered into an installment purchase agreement with the California Statewide Communities Development Authority to finance for water and wastewater system improvements. The debt is secured by a pledge of the net revenues of the water and wastewater system. The installment purchase agreement includes provisions requiring that the City set rates, fees and charges for each fiscal year so as to yield system net revenues during each fiscal year equal to at least 120% of the annual debt service (including parity debt). The City is currently, and has been, out of compliance with this requirement, which will impact the City's rating for future debt if not corrected. Existing yearly debt service payments are shown in **Table A-9**.

New debt service is assumed to be incurred, financed by the State Drinking Water Revolving Fund (DWSRF), for pump station upgrades and Bell Canyon intake tower replacement. The total estimated DWSRF-funded project costs are \$2.3 million. Due to the size of the projects a 15% contingency factor was added to the estimated City cost. The calculated annual new debt service is calculated based on total project costs of \$2.7 million. The estimated annual debt service is \$166,000 although an additional 10% is due in the first 10 years of the loan to build up a reserve of one year of debt service. Existing customers' share of the debt is 86%; the remaining debt service is for future customers' share of the Bell Canyon intake tower replacement costs. The calculated new debt is shown in **Table 7**.

Prepared by HEC

Attachment 5

Page 12 of 27

Water Rate Study, October 31, 2016

Table 7
Estimated DWSRF New Debt

Item	Construction Fiscal Year
Projects Needed in Next 3 Years	2018
Pump Station Upgrades	\$212,514
Bell Canyon Intake Tower Replacement	\$2,104,494
Subtotal Costs	\$2,317,008
Contingency (15%) [1]	\$347,551
Total	\$2,664,559
Estimated Annual Debt Service [2], [3]	\$166,118
<i>Existing Customers Debt Service</i>	<i>\$143,485</i>
<i>Future Customers Debt Service</i>	<i>\$22,632</i>
Total Debt-Financed Infrastructure Cost	\$2,664,559
Estimated Total Financing Costs	\$657,795

Source: State Water Resources Control Board and HEC.

new debt

[1] State-funded projects typically cost more (more administration as well as American Iron and Steel requirements, and labor reporting).

[2] DWSRF loan assumptions:

Interest Rate (2016 rate is 1.6%)	2.2%
Term (years)	20

[3] Annual debt service is 10% higher for the first 10 years to build one year of reserve.

Meter Replacement Program

The City does not currently collect for replacement of water meters; costs of replacement are currently paid for with reserves, which is unsustainable. This rate study includes calculation of annual costs to replace meters. Each year City crews will replace older water meters that are near the end of their useful life, or which are inaccurately measuring water flow. The cost to replace meters by size of meter was used to determine the annual cost of the meter replacement program. The estimated meter replacement fee revenues are shown in **Table 8**. Meter replacement program costs will increase as the number of City water meters increases and as the cost of installation increases. It is estimated that the meter replacement program will increase from approximately \$47,000 in 2017 to \$54,000 in 2022. Meter replacement costs by size are shown in **Table A-10**.

Prepared by HEC

Attachment 5

Page 13 of 27

Water Rate Study, October 31, 2016

Table 8
Estimated Meter Replacement Fee Program Cost

Item	Assumption	Fiscal Year Ending					
		2017	2018	2019	2020	2021	2022
			Year 1	Year 2	Year 3	Year 4	Year 5
<i>Projected Growth in Water Meters</i>			5	5	5	5	5
City Water Meters in 2016 [1]		2,485	2,485	2,485	2,485	2,485	2,485
Projected City Water Meters		2,485	2,490	2,495	2,500	2,505	2,510
Estimated Replacement Cost per Meter [2]	3.0%	\$374	\$385	\$397	\$409	\$421	\$434
Percentage of Meters Replaced	20-yr cycle	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Estimated Meter Replacement Program Cost		\$46,494	\$47,985	\$49,524	\$51,112	\$52,751	\$54,442

Source: City of St. Helena and HEC.

meter cost

[1] Includes each meter in compound meters.

[2] Weighted average cost of meters.

Operations Expenses and Reserves

Budgeted fiscal year 2017 expenses are used to project future year expenditures. All operating expenditures are increased 5% each year with the exception of maintenance, taxes, insurances and contributions which are increased at 10% per year, and Napa purchased water, increased at 3% per year per the 2011 amended agreement with the City of Napa. **Table A-11** shows historical annual average operating cost increases of 5.3%.

The water rate study has a target cash reserve of six to twelve months of operating expenses. Additional rate revenue will have to be collected to achieve this reserve fund target within the five-year period.

System Rehabilitation

Depreciation is used as the basis for which to collect rates to cover system rehabilitation costs. Inclusion of system rehabilitation costs demonstrates fiscal responsibility toward the assets to potential future investors and helps to establish good credit¹. Depreciation is calculated based on existing water facilities and new facilities built in the next 5-year period. **Table 9** shows the total annual amount included in the rates for system rehabilitation. Supporting data is provided in **Tables A-12** and **A-13**.

¹ Per Governmental Accounting Standards Board (GASB) 34, local governments must report on the value of their infrastructure assets and plan for asset maintenance (including collecting sufficient revenue) to obtain good credit when issuing bonds or procuring other forms of financing for long-term construction projects.

Prepared by HEC

Attachment 5

Page 14 of 27

Water Rate Study, October 31, 2016

Table 9
System Rehabilitation Annual Budget Estimate

Depreciation	Fiscal Year Ending					
	2017	2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5
Existing Assets Annual Depreciation	\$875,144	\$902,107	\$929,901	\$958,551	\$988,084	\$1,018,526
New Assets Annual Depreciation	\$25,985	\$72,094	\$104,294	\$158,594	\$268,189	\$309,305
Total Annual Depreciation	\$901,130	\$974,201	\$1,034,195	\$1,117,145	\$1,256,273	\$1,327,831
Percentage of Depreciation in Rates	0%	100%	100%	100%	100%	100%
Estimated System Rehabilitation Cost	\$0	\$974,200	\$1,034,200	\$1,117,100	\$1,256,300	\$1,327,800

Source: HEC.

depr

Meadowood Area Surcharges

Currently approximately \$50,000 each year is generated from surcharges applied in the Meadowood area, which is outside of the City limits. Per the September 13, 2016 Task Force meeting, Meadowood area surcharges are to be eliminated when new rates go into effect February 8, 2017.

Revenue Requirement

Table 10 on page 16 provides the projection of annual costs and revenues and the resulting revenue requirement through fiscal year 2027. Total revenue requirement is projected to increase from \$5.5 million in fiscal year 2017 to \$8.4 million in fiscal year 2022, and \$9.6 million in fiscal year 2027.

COST CLASSIFICATION

After determining a utility's revenue requirements, a utility's next step is determining the cost of service. Utilizing a public agency's approved budget, financial reports, operating data, and capital improvement plans, the rate study categorizes (functionalizes) the costs, expenses, and assets of the water system among major operating functions to determine the cost of service.

After the assets and the costs of operating those assets are properly categorized by function, the rate study allocates those "functionalized costs" to the various customer classes (e.g., single-family residential, multi-family residential and commercial) by determining the characteristics of those classes and the contribution of each to incurred costs such as peaking factors or different delivery costs, service characteristics and demand patterns. Rate design is the final part of the rate-making procedure. The revenue requirement and cost of service analysis are used to determine appropriate rates for each customer class.

Cost classification provides a guideline for the City in determining the portion of revenue requirement to collect through service charges versus use charges. Generally, rates reflect fixed costs in the service charges (flat monthly rates) and variable costs in the use charges (per HCF of

Prepared by HEC

Attachment 5

Page 15 of 27

Water Rate Study, October 31, 2016

water). Through the cost classification analysis, it is calculated that fixed costs comprise about 70% of St. Helena's water system total annual operating costs. Currently St. Helena collects 30% of costs recovered through rates in service charges and 70% in use charges.

If all fixed costs (70%) were in the service charge the bill increase would be dramatic for people on a fixed income. This rate study gradually increases the allocation of total costs to base charges from 31% in 2017, to 36% in 2022, and to 41% in 2027. Allocation of the projected revenue requirement is shown in **Table 11**. Supporting detail is shown in **Tables A-14 and A-15** in **Appendix A**.

Prepared by HEC

Attachment 5

Page 16 of 27

Water Rate Study, October 31, 2016

Table 10
Projected Revenue Requirement

Operating Expenses and Revenues		Fiscal Year Ending										
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Annual Increase	Budgeted	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Operating Expenses												
Salaries & Benefits	5.0%	\$1,612,243	\$1,692,855	\$1,777,498	\$1,866,373	\$1,959,691	\$2,057,676	\$2,160,560	\$2,268,588	\$2,382,017	\$2,501,118	\$2,626,174
Services	5.0%	\$507,525	\$532,901	\$559,546	\$587,524	\$616,900	\$647,745	\$680,132	\$714,139	\$749,846	\$787,338	\$826,705
Supplies	5.0%	\$138,690	\$145,625	\$152,906	\$160,551	\$168,579	\$177,007	\$185,858	\$195,151	\$204,908	\$215,154	\$225,911
Napa Purchased Water	3.0%	\$1,349,019	\$1,389,490	\$1,431,174	\$1,474,109	\$1,518,333	\$1,563,883	\$1,610,799	\$1,659,123	\$1,708,897	\$1,760,164	\$1,812,969
Maintenance	10.0%	\$157,079	\$172,787	\$190,066	\$209,072	\$229,977	\$252,977	\$278,275	\$306,103	\$336,713	\$370,384	\$407,422
Taxes, Insurances & Contributions	10.0%	\$133,167	\$146,484	\$161,132	\$177,245	\$194,970	\$214,467	\$235,913	\$259,505	\$285,455	\$314,001	\$345,401
Meter Replacement Program		\$19,373	\$47,985	\$49,524	\$51,112	\$52,751	\$54,442	\$56,186	\$57,987	\$59,845	\$61,763	\$63,741
WTP Condition Assessment		\$0	\$0	\$0	\$0	\$174,576	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Water System		\$0	\$0	\$0	\$56,453	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Master Plan Update		\$0	\$0	\$0	\$0	\$174,576	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Expenses		\$3,917,096	\$4,128,126	\$4,321,846	\$4,582,439	\$5,090,354	\$4,968,197	\$5,207,724	\$5,460,595	\$5,727,681	\$6,009,921	\$6,308,323
Debt Service												
Existing (2012B & 2006A Bonds)		\$989,251	\$982,916	\$985,767	\$982,373	\$980,513	\$980,132	\$974,551	\$974,027	\$971,916	\$969,490	\$964,087
New Debt for 2018 Improvements		\$0	\$0	\$182,729	\$182,729	\$182,729	\$182,729	\$182,729	\$182,729	\$182,729	\$182,729	\$182,729
Subtotal Debt Service		\$989,251	\$982,916	\$1,168,496	\$1,165,102	\$1,163,243	\$1,162,861	\$1,157,281	\$1,156,757	\$1,154,646	\$1,152,220	\$1,146,816
Capital Projects (cash funded)		\$274,386	\$521,891	\$1,035,148	\$78,109	\$494,306	\$0	\$523,620	\$362,953	\$0	\$0	\$0
System Rehabilitation		\$0	\$974,200	\$1,034,200	\$1,117,100	\$1,256,300	\$1,327,800	\$1,393,200	\$1,472,700	\$1,531,300	\$1,609,700	\$1,665,200
Operating Reserves		\$500,000	\$0	\$0	\$950,000	\$200,000	\$1,069,600	\$600,000	\$700,000	\$965,000	\$800,000	\$650,000
Total Costs		\$5,680,733	\$6,607,133	\$7,559,690	\$7,892,750	\$8,204,202	\$8,528,458	\$8,881,824	\$9,153,004	\$9,378,627	\$9,571,841	\$9,770,340
Non-Operating Credits [Expenses]												
Investment Earnings	constant	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Finance Charges	constant	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000
Surcharge-Meadowood [1]		\$48,643	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Revenue	constant	\$32,850	\$32,850	\$32,850	\$32,850	\$32,850	\$32,850	\$32,850	\$32,850	\$32,850	\$32,850	\$32,850
Meter Replacement Fee		\$19,373	\$47,985	\$49,524	\$51,112	\$52,751	\$54,442	\$56,186	\$57,987	\$59,845	\$61,763	\$63,741
Total Non-Operating Credits [Expenses]		\$161,866	\$141,835	\$143,374	\$144,962	\$146,601	\$148,292	\$150,036	\$151,837	\$153,695	\$155,613	\$157,591
Total Revenue Requirement		\$5,518,867	\$6,465,298	\$7,416,316	\$7,747,788	\$8,057,602	\$8,380,166	\$8,731,788	\$9,001,167	\$9,224,932	\$9,416,228	\$9,612,749
Percent Increase in Revenue Requirement [2]		24%	17%	15%	4%	4%	4%	4%	3%	2%	2%	2%
Sources: City of St. Helena and HEC.												

Source: City of St. Helena and HEC.

[1] FY 2017 costs from 2017 budget for "Surcharge-Meadowood" plus "Pumping Charge". Per Task Force September 13, 2016 meeting, Meadowood surcharges are eliminated.

[2] Percentage increase for FY 2017 based on FY 2016 water sales.

Prepared by HEC

Attachment 5

Page 17 of 27

Water Rate Study, October 31, 2016

Table 11
Allocation of Revenue Requirement to Service and Use Charges

Costs	Fiscal Year Ending										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Total Revenue Requirement	\$5,518,867	\$6,465,298	\$7,416,316	\$7,747,788	\$8,057,602	\$8,380,166	\$8,731,788	\$9,001,167	\$9,224,932	\$9,416,228	\$9,612,749
Fire Services	0.48%	\$26,569	\$31,126	\$35,704	\$37,300	\$38,792	\$40,345	\$42,037	\$43,334	\$44,411	\$45,332
Non-Fire Services Rev. Req.											
Customer Charges	9.43%	9.43%	9.43%	9.43%	9.43%	9.43%	9.43%	9.43%	9.43%	9.43%	9.43%
Subtotal in Customer Charges		\$520,435	\$609,684	\$699,366	\$730,624	\$759,840	\$790,258	\$823,416	\$848,819	\$869,920	\$887,960
% in base	[1]	21.23%	22.23%	23.23%	24.23%	25.23%	26.23%	27.23%	28.23%	29.23%	30.23%
Subtotal in Capacity Charges		\$1,171,870	\$1,437,487	\$1,723,098	\$1,877,590	\$2,033,246	\$2,198,443	\$2,378,005	\$2,541,379	\$2,696,806	\$2,846,892
% in use	[1]	68.85%	67.85%	66.85%	65.85%	64.85%	63.85%	62.85%	61.85%	60.85%	59.85%
Subtotal in Use Charges		\$3,799,993	\$4,387,001	\$4,958,147	\$5,102,274	\$5,225,724	\$5,351,120	\$5,488,329	\$5,567,635	\$5,613,794	\$5,636,044
Source: HEC.											
cost alloc											

Prepared by HEC

Attachment 5

Page 18 of 27

Water Rate Study, October 31, 2016

RATES ANALYSIS

Service Charges. Service costs are divided into customer costs and capacity costs. Customer costs are allocated to customers based on the number of water accounts (which is the same as the number of meters). Capacity costs are allocated to customers based on the number of equivalent meters, determined by the relative hydraulic capacity of the meter size relative to a 5/8-inch meter. **Table 12** shows the calculation of equivalent meters, calculation of equivalent fire units, and number of meters by meter size. Total number of meters by customer type is shown in **Table A-16**.

The total number of 5/8" meters was adjusted to include single family 1" meters. Due to CA Residential Code Section R313 (fire sprinklers), almost all new residential development is required to install 1" meters in order to have sufficient flow for sprinklers; however, most existing homes built prior to implementation of CA Residential Code Section R313, have a 5/8" or 3/4" meter. Because the 1" residential customers utilize the same average amount of water as the 3/4" and 5/8" customers, it is appropriate for them to pay the same rates, and not be penalized by the fire sprinklers requirement.

Table 12
Estimated Meter and Fire Equivalent Units

Meter Size	Number of Meters	Meter Flow (gpm)	Meter Ratio	Equivalent Meter Units	Number of Fire Services	Pipe Flow	Equivalent Fire Units
		[1]	[1]			[2]	
5/8"	1,987	20	1.0	1,987			
1"	330	50	2.5	825		1	0
1.5"	61	100	5.0	305		3	0
2"	47	160	8.0	376		6	0
3"	7	320	16.0	112		18	0
4"	9	500	25.0	225	79	38	3,027
6"	11	1,000	50.0	550	33	111	3,673
8"	0	1,600	80.0	0	14	237	3,321
Total	2,452			4,380	126		10,021

Source: American Water Works Association, City of St. Helena and HEC.

m equiv

[1] AWWA standard meter flow and ratios - assumes all larger meters are compound meters (AWWA C702). 1.5" meters and smaller are displacement type. 2" and larger are compound type meters.

[2] Hazen-Williams equation for flow through pressure conduits is pipe diameter raised to the 2.63 power.

Prepared by HEC

Attachment 5

Page 19 of 27

Water Rate Study, October 31, 2016

The calculation of monthly service charges through fiscal year 2022 is shown in **Table 13**. The total service charges include addition of the customer and capacity charges. All 5/8", 3/4" and single family residential 1" meters pay the same service charge.

Table 13
Calculated Monthly Service Charge per Meter

		Fiscal Year Ending					
		2017	2018	2019	2020	2021	2022
Billing Period Beginning*		2/8/2017	11/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021
Customer Costs		\$520,435	\$609,684	\$699,366	\$730,624	\$759,840	\$790,258
Customer Accounts		2,451	2,456	2,461	2,466	2,471	2,476
Cost per Account per Month		\$17.69	\$20.69	\$23.68	\$24.69	\$25.63	\$26.60
Capacity Costs		\$1,171,870	\$1,437,487	\$1,723,098	\$1,877,590	\$2,033,246	\$2,198,443
Est. Billable Meter Equivalents		4,032	4,037	4,042	4,047	4,052	4,057
Meter		Capacity Costs Monthly Service Charges per Meter					
Meter Size	Ratio						
5/8", 3/4" & SF 1"	1.0	\$24.22	\$29.67	\$35.52	\$38.66	\$41.82	\$45.16
1"	2.5	\$60.55	\$74.18	\$88.81	\$96.66	\$104.54	\$112.89
1.5"	5.0	\$121.10	\$148.37	\$177.62	\$193.31	\$209.08	\$225.79
2"	8.0	\$193.76	\$237.39	\$284.20	\$309.30	\$334.53	\$361.26
3"	16.0	\$387.52	\$474.77	\$568.40	\$618.59	\$669.05	\$722.52
4"	25.0	\$605.50	\$741.83	\$888.12	\$966.55	\$1,045.39	\$1,128.94
6"	50.0	\$1,211.01	\$1,483.66	\$1,776.24	\$1,933.11	\$2,090.78	\$2,257.87
Total Base Monthly Charges per Meter							
Meter Size							
5/8", 3/4" & SF 1"		\$41.91	\$50.36	\$59.21	\$63.35	\$67.44	\$71.75
1"		\$78.25	\$94.87	\$112.49	\$121.35	\$130.16	\$139.49
1.5"		\$138.80	\$169.05	\$201.31	\$218.00	\$234.70	\$252.38
2"		\$211.46	\$258.07	\$307.88	\$333.99	\$360.15	\$387.86
3"		\$405.22	\$495.46	\$592.08	\$643.28	\$694.68	\$749.12
4"		\$623.20	\$762.52	\$911.80	\$991.24	\$1,071.02	\$1,155.53
6"		\$1,228.70	\$1,504.35	\$1,799.93	\$1,957.80	\$2,116.41	\$2,284.47

Source: City of St. Helena and HEC.

service charge

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

Seasonal Rate Structure

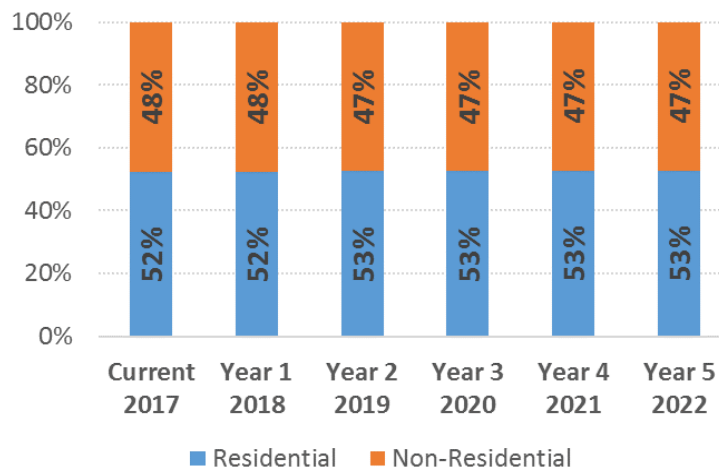
Two rate structures were evaluated for collection of use charges: the uniform rate structure and the seasonal rate structure. The September 13th, 2016 Task Force meeting selected the seasonal rate structure as the preferred rate structure for the Study; therefore, only the seasonal rate structure is presented herein.

Total costs allocated to use charges are divided by projected water demand in the peak and off-peak seasons to calculate the use rate per HCF in the peak and off-peak seasons. The use rate during each season is the same for all treated water customers. Water use by season is determined

Prepared by HEC

in **Table A-17**. Total annual projected water demand is shown in **Figure 6**, with supporting data in **Table A-18**.

Figure 6
Projected Water Demand



The projection of water demand incorporates assumed growth of 5 units per year and an expectation that as water rates increase demand will decrease. The projection of water demand accounts for reduced consumption due to increased rates. The relationship between increased prices and decreased demand is referred to as price elasticity. Price elasticity varies by geography due to many micro-economic variables. Hansford Economic Consulting (HEC) applied industry knowledge to establish assumed price elasticity factors for St. Helena. The price elasticity and water demand analysis is shown in **Tables A-18** through **A-20**.

Off-peak water rates are lower November through April (off-peak months) than during peak months (May through October). During the peak months the costs of operating the water system are 11% higher. Supporting data is provided in **Tables A-17** and **A-21**.

Drought Surcharge

In addition to the seasonal rate structure the City may implement a drought surcharge. The drought surcharge would be implemented when the City enters Phase I drought regulations. **Table A-22** calculates a drought surcharge ratio that would be applied to the seasonal rate structure. The drought surcharge would only be applied to use charges, not to service charges. The analysis demonstrates that during drought years the cost of water is 6% higher than during non-drought years.

The calculation of use charges is shown in **Table 14**.

Attachment 5

Page 21 of 27

Water Rate Study, October 31, 2016

Table 14
Calculated Use Charges per HCF

		Fiscal Year Ending					
		2017	2018	2019	2020	2021	2022
	Billing Period Beginning*	2/8/2017	11/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021
Allocated Cost		\$3,799,993	\$4,387,001	\$4,958,147	\$5,102,274	\$5,225,724	\$5,351,120
Total Consumption		645,800	643,042	644,175	646,780	647,544	648,219
Cost per HCF		\$5.88	\$6.82	\$7.70	\$7.89	\$8.07	\$8.26
SEASONAL RATE STRUCTURE							
Off-Peak Water Use (Nov-Apr)	37%	240,040	239,015	239,436	240,404	240,688	240,939
Peak Water Use (May-Oct)	63%	405,760	404,027	404,739	406,376	406,856	407,280
Total Consumption		645,800	643,042	644,175	646,780	647,544	648,219
Calculated Cost per HCF by Season -- NON-DROUGHT PERIOD							
Off-Peak Costs per HCF		\$5.50	\$6.37	\$7.19	\$7.37	\$7.54	\$7.71
Peak Costs per HCF	1.11	\$6.11	\$7.09	\$8.00	\$8.20	\$8.38	\$8.58
Calculated Cost per HCF by Season -- DROUGHT PERIOD							
Off-Peak Costs per HCF	1.06	\$5.81	\$6.73	\$7.60	\$7.79	\$7.97	\$8.15
Peak Costs per HCF	1.11	\$6.46	\$7.49	\$8.45	\$8.66	\$8.86	\$9.06

Source: HEC.

use charge

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

A small portion of fixed costs are associated with private fire protection. Fire costs are allocated to fire customers based on the number of equivalent fire units. Fire service charges are calculated in **Table 15**.

Calculated meter replacement fees are shown in **Table 16**. Meter replacement fees are calculated using data presented in **Table A-10**. The raw water cost and rate per HCF for February 8, 2017 is calculated in **Table 17**. Raw water may only be taken from the Lower Reservoir for construction-related water applications.

Prepared by HEC

Attachment 5

Page 22 of 27

Water Rate Study, October 31, 2016

Table 15
Calculation of Fire Service Charges

		2017	2018	2019	2020	2021	2022
Fire Services		Current	Year 1	Year 2	Year 3	Year 4	Year 5
Billing Period Beginning*		2/8/2017	11/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021
Fire Services Cost Allocation		\$26,569	\$31,126	\$35,704	\$37,300	\$38,792	\$40,345
Equivalent Fire Units		10,021	10,021	10,021	10,021	10,021	10,021
Monthly Cost per Equivalent Fire Unit		\$0.22	\$0.26	\$0.30	\$0.31	\$0.32	\$0.34
Pipe Size	Pipe Flow	Monthly Charge					
1"	1	\$0.22	\$0.26	\$0.30	\$0.31	\$0.32	\$0.34
1.5"	3	\$0.64	\$0.75	\$0.86	\$0.90	\$0.94	\$0.97
2"	6	\$1.37	\$1.60	\$1.84	\$1.92	\$2.00	\$2.08
3"	18	\$3.97	\$4.65	\$5.34	\$5.58	\$5.80	\$6.03
4"	38	\$8.47	\$9.92	\$11.38	\$11.89	\$12.36	\$12.86
6"	111	\$24.59	\$28.81	\$33.05	\$34.53	\$35.91	\$37.34
8"	237	\$52.41	\$61.40	\$70.43	\$73.57	\$76.52	\$79.58

Source: HEC.

fire

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

Table 16
Calculated Meter Replacement Fees by Meter Size

Meter Size	Fiscal Year Ending					
	2017	2018	2019	2020	2021	2022
	Year 1	Year 2	Year 3	Year 4	Year 5	
Annual escalator						
3/4" or less	\$1.31	\$1.35	\$1.39	\$1.43	\$1.47	\$1.52
1"	\$1.83	\$1.89	\$1.94	\$2.00	\$2.06	\$2.12
1-1/2"	\$2.88	\$2.96	\$3.05	\$3.14	\$3.24	\$3.33
2"	\$3.66	\$3.77	\$3.88	\$4.00	\$4.12	\$4.24
3"	\$7.84	\$8.08	\$8.32	\$8.57	\$8.83	\$9.09
4"	\$17.26	\$17.78	\$18.31	\$18.86	\$19.42	\$20.01
6"	\$23.79	\$24.51	\$25.24	\$26.00	\$26.78	\$27.58

Source: HEC.

meter fee

Prepared by HEC

Attachment 5

Page 23 of 27

Water Rate Study, October 31, 2016

Table 17
Raw Water Rate Calculation for Fiscal Year 2017

Costs	Estimated Cost FY 2016-17
Total Operating Costs [1]	\$3,897,723
Less Napa Purchased Water	\$1,349,019
Less Stonebridge Wells Costs	\$85,400
Less Distribution Costs	\$685,930
Less Treated Water Costs	\$834,407
Total Raw Water Operating Costs	\$942,967
City Water Supplies (gallons) [2]	345,701,088
Cost per Gallon	\$0.00273
Cost per HCF	\$2.04

Source: City of St. Helena.

raw

[1] Equals total operating costs in the revenue requirement table less the meter replacement program costs, WTP condition assessment costs, updating GIS maps costs, and Water Master Plan update costs.

[2] Based on annual average production of city groundwater and surface water.

A summary of the calculated water rates schedule through fiscal year 2027 is given in **Table 18**.

Prepared by HEC

Attachment 5

Page 24 of 27

Water Rate Study, October 31, 2016

Table 18
Calculated Water Rates

Charges		Billing Period Beginning *											
Current		2/8/2017	11/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021	11/8/2022	11/8/2023	11/8/2024	11/8/2025	11/8/2026	
Monthly Charges per Meter													
Service Charge													
5/8", 3/4" & SF 1"	\$27.52	\$43.22	\$51.71	\$60.59	\$64.78	\$68.91	\$73.27	\$78.00	\$82.13	\$85.95	\$89.54	\$93.26	
1"	\$63.80	\$80.08	\$96.76	\$114.44	\$123.35	\$132.22	\$141.61	\$151.81	\$160.89	\$169.40	\$177.51	\$185.90	
1.5"	\$124.12	\$141.67	\$172.02	\$204.36	\$221.14	\$237.94	\$255.72	\$275.02	\$292.36	\$308.70	\$324.35	\$340.54	
2"	\$196.50	\$215.12	\$261.84	\$311.76	\$337.99	\$364.27	\$392.10	\$422.31	\$449.54	\$475.26	\$499.94	\$525.48	
3"	\$365.51	\$413.06	\$503.54	\$600.40	\$651.86	\$703.51	\$758.21	\$817.59	\$871.27	\$922.08	\$970.92	\$1,021.45	
4"	\$607.01	\$640.46	\$780.29	\$930.11	\$1,010.10	\$1,090.44	\$1,175.54	\$1,267.90	\$1,351.51	\$1,430.71	\$1,506.92	\$1,585.75	
6"	\$1,210.18	\$1,252.50	\$1,528.85	\$1,825.17	\$1,983.80	\$2,143.19	\$2,312.05	\$2,495.35	\$2,661.38	\$2,818.75	\$2,970.20	\$3,126.89	
Private Fire Protection													
4"	\$4.00	\$8.47	\$9.92	\$11.38	\$11.89	\$12.36	\$12.86	\$13.40	\$13.81	\$14.15	\$14.45	\$14.75	
6"	\$6.00	\$24.59	\$28.81	\$33.05	\$34.53	\$35.91	\$37.34	\$38.91	\$40.11	\$41.11	\$41.96	\$42.84	
8"	\$8.00	\$52.41	\$61.40	\$70.43	\$73.57	\$76.52	\$79.58	\$82.92	\$85.48	\$87.60	\$89.42	\$91.28	
Raw Water per Gallon [1]	\$0.00267	\$0.00273	\$0.00320	\$0.00367	\$0.00383	\$0.00398	\$0.00414	\$0.00432	\$0.00445	\$0.00456	\$0.00465	\$0.00475	
TREATED WATER USE CHARGES PER HCF													
SEASONAL RATE STRUCTURE													
NON-DROUGHT PERIOD													
Off-Peak (Nov-Apr)	[2]	\$5.50	\$6.37	\$7.19	\$7.37	\$7.54	\$7.71	\$7.90	\$8.01	\$8.06	\$8.08	\$8.11	
Peak (May-Oct)		\$6.11	\$7.09	\$8.00	\$8.20	\$8.38	\$8.58	\$8.79	\$8.90	\$8.97	\$8.99	\$9.02	
DROUGHT PERIOD													
Off-Peak (Nov-Apr)	[2]	\$5.81	\$6.73	\$7.60	\$7.79	\$7.97	\$8.15	\$8.35	\$8.46	\$8.52	\$8.54	\$8.57	
Peak (May-Oct)		\$6.46	\$7.49	\$8.45	\$8.66	\$8.86	\$9.06	\$9.28	\$9.41	\$9.47	\$9.50	\$9.53	

Source: HEC.

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

[1] Raw water costs increased from fiscal year 2016-17 by the same percentage increase as the revenue requirement.

[2] Current Rate Structure rates as follows:

Tiers by customer category (in hcf):

Single family
Multi-family

Price per HCF
Price per HCF - Landscape Irrigation

Prepared by HEC

Attachment 5

Page 25 of 27

Water Rate Study, October 31, 2016

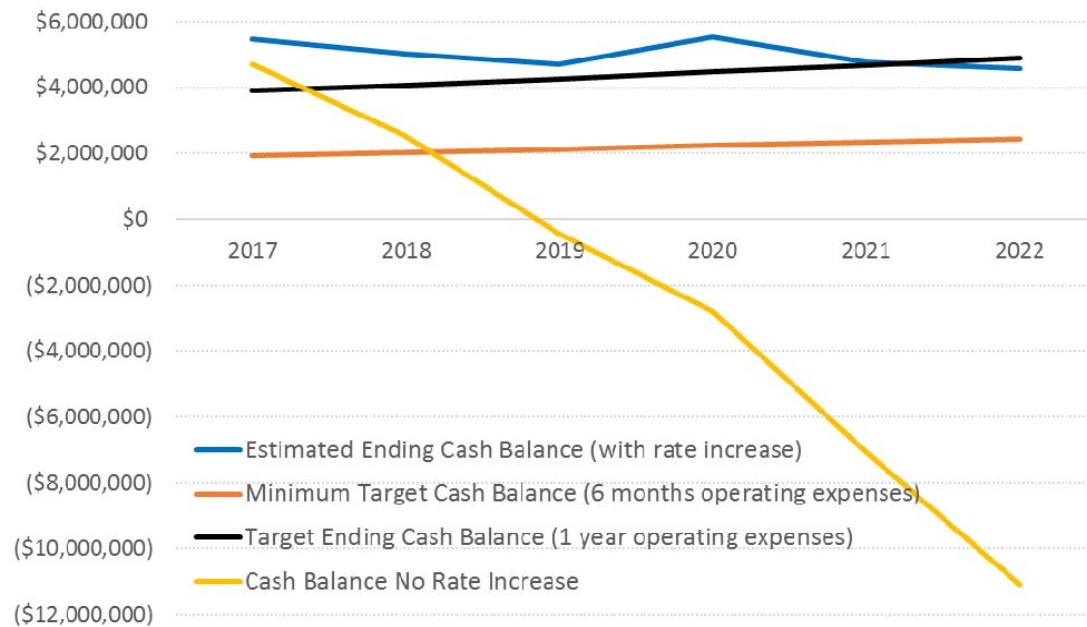
CASH FLOW

Table 19 and **Table 20** on the following pages show the projected cash flow and cash flow by fund, respectively, through fiscal year 2027. With adoption of the calculated rates it is anticipated that the City will be able to meet all water enterprise fund obligations and achieve at least six months of operating expenses in cash reserves in each year of the projection. The cash flow table demonstrates that a debt service coverage ratio of at least 1.20 will be met. In addition, the City may be able to designate (put aside) up to \$3.1 million by fiscal year ending 2027 for future cash funding of system rehabilitation.

Figure 7 shows projected water fund balances with and without rate increases as well as target and minimum operating cash reserves.

Figure 7

Projected Water Fund Cash Balance (Operating and Capital Funds combined)



Prepared by HEC

Attachment 5

Page 26 of 27

Water Rate Study, October 31, 2016

Table 19
Projected Cash Flow

Revenues and Expenses	Fiscal Year Ending										
	2017 Estimated	2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5	2023 Year 6	2024 Year 7	2025 Year 8	2026 Year 9	2027 Year 10
Billing Period Beginning*											
Revenue	2/8/2017	11/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021	11/8/2022	11/8/2023	11/8/2024	11/8/2025	11/8/2026
Water Sales [1]	\$4,459,929	\$6,149,821	\$7,099,310	\$7,637,297	\$7,954,330	\$8,272,645	\$8,614,580	\$8,911,374	\$9,150,344	\$9,352,463	\$9,547,242
Meadowland Surcharge [1]	\$53,088	\$19,770	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Meter Replacement Fee	\$19,373	\$47,612	\$49,139	\$50,715	\$52,341	\$54,019	\$55,750	\$57,537	\$59,381	\$61,283	\$63,247
Other Revenues	\$93,850	\$93,850	\$93,850	\$93,850	\$93,850	\$93,850	\$93,850	\$93,850	\$93,850	\$93,850	\$93,850
Total Revenues	\$4,626,240	\$6,311,054	\$7,242,299	\$7,781,862	\$8,100,521	\$8,420,513	\$8,764,181	\$9,062,761	\$9,303,574	\$9,507,596	\$9,704,338
Operating Expenses	\$3,917,096	\$4,128,126	\$4,321,846	\$4,582,439	\$5,090,354	\$4,968,197	\$5,207,724	\$5,460,595	\$5,727,681	\$6,009,921	\$6,308,323
Net Revenue before Debt Service and System Rehabilitation	\$709,144	\$2,182,928	\$2,920,454	\$3,199,423	\$3,010,168	\$3,452,317	\$3,556,457	\$3,602,166	\$3,575,893	\$3,497,675	\$3,396,015
Debt Service	\$989,251	\$982,916	\$1,168,496	\$1,165,102	\$1,163,243	\$1,162,861	\$1,157,281	\$1,156,757	\$1,154,646	\$1,152,220	\$1,146,816
Debt Service Coverage [2]	0.72	2.22	2.50	2.75	2.59	2.97	3.07	3.11	3.10	3.04	2.96
System Rehabilitation	\$0	\$974,200	\$1,034,200	\$1,117,100	\$1,256,300	\$1,327,800	\$1,393,200	\$1,472,700	\$1,531,300	\$1,609,700	\$1,665,200
Net Revenue	(\$280,107)	\$225,812	\$717,758	\$917,221	\$590,625	\$961,656	\$1,005,976	\$972,709	\$889,947	\$735,755	\$583,998
Beginning Balance [3]	\$6,113,512	\$5,474,019	\$5,018,555	\$4,701,164	\$5,540,276	\$4,766,595	\$4,590,032	\$5,092,389	\$5,722,146	\$7,177,867	\$8,391,982
Net Revenue	(\$280,107)	\$225,812	\$717,758	\$917,221	\$590,625	\$961,656	\$1,005,976	\$972,709	\$889,947	\$735,755	\$583,998
Cash Funded Capital Projects	(\$274,386)	(\$521,891)	(\$1,035,148)	(\$78,109)	(\$494,306)	\$0	(\$523,620)	(\$362,953)	\$0	\$0	\$0
Spill Containment at Bell Creek & Stonebridge	\$0	(\$159,385)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Reservoir Improvements	\$0	\$0	\$0	\$0	\$0	(\$1,079,726)	\$0	\$0	\$0	\$0	\$0
Bell Valve House Valve Replacement	\$0	\$0	\$0	\$0	\$0	(\$536,491)	\$0	\$0	\$0	\$0	\$0
Bell Canyon Creek Flow Measurement	(\$85,000)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer Out to Impact Fee Fund	\$0	\$0	\$0	\$0	(\$870,000)	(\$70,000)	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Add Back System Depreciation Net of CIP	\$0	\$0	\$0	\$0	\$0	\$547,998	\$0	\$0	\$545,775	\$458,359	\$548,199
Ending Balance	\$5,474,019	\$5,018,555	\$4,701,164	\$5,540,276	\$4,766,595	\$4,590,032	\$5,092,389	\$5,722,146	\$7,177,867	\$8,391,982	\$9,544,179
Months of Operating Expenses in Reserve	17	15	13	15	11	11	12	13	15	17	18
Designated [4]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$1,300,000	\$2,400,000	\$3,100,000
Undesignated Ending Balance	\$5,474,019	\$5,018,555	\$4,701,164	\$5,540,276	\$4,766,595	\$4,590,032	\$5,092,389	\$5,522,146	\$5,877,867	\$5,991,982	\$6,444,179
Undesignated Months of Op. Exps. in Reserve	17	15	13	15	11	11	12	12	12	12	12
Target Balance [5]	\$3,897,723	\$4,080,141	\$4,272,322	\$4,474,874	\$4,688,452	\$4,913,755	\$5,151,537	\$5,402,608	\$5,667,836	\$5,948,158	\$6,244,582

Source: City of St. Helena and HEC.

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

[1] Rates for FY 2017 calculated as 7 months of current rates plus 5 months of rates implemented in February 2017. Rates for all future fiscal years calculated as 4 months of the rates implemented in February of the prior fiscal year plus 8 months of the rates implemented in November of the current fiscal year.

[2] Debt service coverage should be at least 1.20.

[3] Estimated beginning balance for the operating and capital funds combined per the City 2016/17 Budget.

[4] New designated fund for capital repairs and replacement.

[5] Minimum six months and target balance is one year of operating expenses.

Prepared by HEC

Attachment 5

Page 27 of 27

Water Rate Study, October 31, 2016

Table 20
Projected Cash Flow by Fund

Fund	2017 Estimated	2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5	2023 Year 6	2024 Year 7	2025 Year 8	2026 Year 9	2027 Year 10
Operating Fund 561											
Beginning Balance	\$4,923,632	\$4,643,525	\$4,869,337	\$4,487,094	\$4,854,316	\$4,024,941	\$4,364,595	\$4,740,571	\$4,983,280	\$6,439,002	\$7,653,116
Net Revenue	(\$280,107)	\$225,812	\$717,758	\$917,221	\$590,625	\$961,656	\$1,005,976	\$972,709	\$889,947	\$735,755	\$583,998
Add Back System Depreciation Net of CIP	\$0	\$0	\$0	\$0	\$0	\$547,998	\$0	\$0	\$545,775	\$458,359	\$548,199
Transfer Out to Capital Fund	\$0	\$0	(\$1,100,000)	(\$550,000)	(\$550,000)	(\$1,100,000)	(\$650,000)	(\$750,000)	\$0	\$0	\$0
Transfer In (Out) -Impact Fee Fund	\$0	\$0	\$0	\$0	(\$870,000)	(\$70,000)	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Ending Balance	\$4,643,525	\$4,869,337	\$4,487,094	\$4,854,316	\$4,024,941	\$4,364,595	\$4,740,571	\$4,983,280	\$6,439,002	\$7,653,116	\$8,805,314
Capital Fund 763											
Beginning Balance	\$1,189,880	\$830,494	\$149,218	\$214,070	\$685,961	\$741,654	\$225,438	\$351,818	\$738,865	\$738,865	\$738,865
Transfer In from Operating Fund	\$0	\$0	\$1,100,000	\$550,000	\$550,000	\$1,100,000	\$650,000	\$750,000	\$0	\$0	\$0
Capital Projects Expenses [1]	(\$359,386)	(\$681,276)	(\$1,035,148)	(\$78,109)	(\$494,306)	(\$1,616,217)	(\$523,620)	(\$362,953)	\$0	\$0	\$0
Ending Balance	\$830,494	\$149,218	\$214,070	\$685,961	\$741,654	\$225,438	\$351,818	\$738,865	\$738,865	\$738,865	\$738,865
Combined Operating and Capital Funds	\$5,474,019	\$5,018,555	\$4,701,164	\$5,540,276	\$4,766,595	\$4,590,032	\$5,092,389	\$5,722,146	\$7,177,867	\$8,391,982	\$9,544,179
Impact Fee Fund 764											
Beginning Balance	\$685,291	\$702,091	\$620,876	\$388,259	\$114,398	\$8,850	\$3,208	\$2,722	\$2,730	\$3,243	\$4,274
Transfer In (Out) -Operating Fund [2]	\$0	\$0	\$0	\$0	\$870,000	\$70,000	(\$20,000)	(\$20,000)	(\$20,000)	(\$20,000)	(\$20,000)
Fee Revenues [3]	\$16,800	\$17,225	\$17,660	\$18,106	\$18,564	\$19,033	\$19,514	\$20,007	\$20,513	\$21,031	\$21,563
Expenses											
Meadowood Tank Upgrades	\$0	\$0	\$136,913	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Dwyer Road Booster	\$0	\$0	\$0	\$259,225	\$223,069	\$0	\$0	\$0	\$0	\$0	\$0
Bell Valve House Valve Replacement	\$0	\$0	\$0	\$0	\$0	\$94,675	\$0	\$0	\$0	\$0	\$0
Holmes Tank Upgrade	\$0	\$0	\$0	\$32,743	\$771,043	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Creek Flow Measurement	\$0	\$88,876	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Tank 2 Rehabilitation	\$0	\$9,563	\$113,364	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ending Balance	\$702,091	\$620,876	\$388,259	\$114,398	\$8,850	\$3,208	\$2,722	\$2,730	\$3,243	\$4,274	\$5,837

Source: City of St. Helena and HEC.

[1] Cash-funded projects only. Projects that are debt-funded are included in the operating fund.

[2] Future users' share of debt service is approximately \$25,000 each year starting in fiscal year 2019.

[3] Assumes growth of 5 units per year and the current impact fee of \$1.68 per building square foot
2,000 average home building square feet
Fee assumed to grow 2.5% per year.

The impact fee needs to be revised for these CIP costs.

\$3,360 Average fee per unit

Prepared by HEC

Attachment 5

Attachment 5

ATTACHMENT A
WATER RATE STUDY
SUPPORT TABLES

Attachment 5

Attachment 5

Table A-1
City of St. Helena Water Rate Study
Historical Water Fund Financial Performance

	Actual Financials for Fiscal Year Ending					Avg. Annual Percentage Change
Revenues and Expenses	2011	2012	2013	2014	2015	
OPERATING						
Revenues						
Charges For Services	\$3,062,669	\$4,313,393	\$4,731,720	\$4,883,409	\$4,237,307	8.5%
Miscellaneous	\$6,117	\$12,088	\$28,246	\$12,491	\$89,673	95.7%
Total Revenues	\$3,068,786	\$4,325,481	\$4,759,966	\$4,895,900	\$4,326,980	9.0%
Expenses						
Personnel	\$1,207,335	\$1,214,927	\$1,176,559	\$1,131,354	\$1,362,727	3.1%
Contracted Services	\$21,451	\$56,561	\$0	\$0	\$0	-100.0%
Purchased Water	\$787,525	\$1,178,400	\$1,189,925	\$1,327,251	\$1,272,770	12.8%
Utilities	\$105,749	\$106,389	\$147,994	\$170,384	\$161,313	11.1%
Fuel	\$0	\$0	\$0	\$0	\$0	n.a.
Other Supplies and Expenses	\$399,366	\$530,562	\$370,484	\$498,635	\$560,847	8.9%
Depreciation and Amortization	\$617,876	\$657,710	\$792,559	\$792,559	\$1,028,037	13.6%
Subtotal Expenses	\$3,139,302	\$3,744,549	\$3,677,521	\$3,920,183	\$4,385,694	8.7%
NET OPERATING INCOME (LOSS)	(\$70,516)	\$580,932	\$1,082,445	\$975,717	(\$58,714)	
NON OPERATING						
Transfers Out	\$0	(\$55,479)	\$0	\$0	\$0	n.a.
Gains (Loss) on Capital Asset Disposals	\$0	(\$124,356)	\$0	\$0	\$0	n.a.
Interest and Investment Revenue	\$49,268	\$34,746	\$16,909	\$25,476	\$40,968	-4.5%
Interest Expense	(\$387,792)	(\$349,084)	(\$396,126)	(\$343,880)	(\$196,547)	-15.6%
Net Non Operating Revenues (Expenses)	(\$338,524)	(\$494,173)	(\$379,217)	(\$318,404)	(\$155,579)	-17.7%
Capital Contributions	\$190,034	\$321,951	\$169,417	\$287,140	\$152,989	-5.3%
Change in Net Assets	(\$219,006)	\$408,710	\$872,645	\$944,453	(\$61,304)	
Net Assets Beginning Balance	\$10,649,155	\$10,430,149	\$10,502,760	\$11,375,405	\$12,319,858	
Net Assets Ending Balance	\$10,430,149	\$10,838,859	\$11,375,405	\$12,319,858	\$12,258,554	

Source: City of St. Helena.

cafr

Attachment 5

Table A-2
City of St. Helena Water Rate Study
Historical Revenues and Expenditures

Revenues and Expenses	Fiscal Year Ending				Estimated 2016	Budgeted 2017
	2012	2013	2014	2015		
OPERATING FUND						
Revenues						
Investment Earnings	\$33,247	\$16,718	\$24,907	\$30,781	\$24,900	\$25,000
Fire Service Agreement Fees	\$0	\$0	\$0	\$0	\$0	\$0
Raw Water Permit Fees	\$100	\$400	\$550	\$750	\$650	\$800
Water Conservation Fines	\$0	\$0	\$0	\$0	\$0	\$0
Backflow Testing & Insp Fees	\$0	\$300	\$150	\$150	\$150	\$150
Sale Of Capital Asset	\$0	\$0	\$0	\$0	\$0	\$0
Other Revenue	\$11,988	\$6,165	\$11,791	\$7,594	\$5,500	\$8,500
Insurance Receipts	\$0	\$0	\$0	\$0	\$0	\$0
Water Revenue	\$2,251	\$2,089	\$1,306	\$2,327	\$2,300	\$5,500
Surcharge-Meadowood	\$30,210	\$30,223	\$30,223	\$32,223	\$30,223	\$30,223
Pumping Charge	\$23,120	\$23,038	\$23,956	\$22,890	\$23,650	\$18,420
Rates - Inside City Limits	\$3,862,757	\$4,264,423	\$4,381,060	\$3,821,553	\$4,082,365	\$3,343,945
Rates - Outside City Limits	\$337,510	\$364,387	\$385,337	\$345,644	\$359,600	\$359,600
Finance Charges	\$34,418	\$30,514	\$40,533	\$36,142	\$37,150	\$36,000
Sale of Remote Meters	\$571	\$231	\$4,575	\$3,046	\$1,740	\$1,500
Hydrant Rental	\$150	\$150	\$0	\$0	\$0	\$0
Property Rentals	\$8,400	\$8,400	\$8,400	\$8,400	\$8,400	\$8,400
Water Meter Install Fee	\$14,006	\$8,265	\$8,018	\$10,724	\$5,000	\$8,000
Total Revenues	\$4,358,728	\$4,755,303	\$4,920,806	\$4,322,225	\$4,581,628	\$3,846,038
Expenses						
Salaries & Benefits	\$1,217,968	\$1,168,983	\$1,165,302	\$1,299,809	\$1,565,976	\$1,612,243
Services	\$440,097	\$284,472	\$348,495	\$358,264	\$538,363	\$564,625
Supplies	\$147,577	\$100,683	\$82,066	\$117,593	\$142,949	\$151,490
Napa Purchased Water	\$1,178,401	\$1,189,926	\$1,327,251	\$1,272,770	\$1,311,272	\$1,349,019
Maintenance	\$91,794	\$68,433	\$78,880	\$124,006	\$195,116	\$172,579
Taxes, Insurances & Contributions	\$102,988	\$74,528	\$79,111	\$91,930	\$147,415	\$133,167
Capital	\$13,175	\$33,471	\$11,886	\$15,056	\$59,785	\$137,925
Transfers	\$179,836	\$0	\$200,000	\$979,380	\$111,995	\$0
Debt	\$349,084	\$396,126	\$343,980	\$196,547	\$1,008,078	\$1,001,067
Total Expenses	\$3,720,918	\$3,316,623	\$3,636,971	\$4,455,356	\$5,080,949	\$5,122,115
Operating Fund Net Revenues	\$637,810	\$1,438,681	\$1,283,835	(\$133,132)	(\$499,321)	(\$1,276,077)
WATER CAPITAL FUND						
Revenues						
Transfers in	\$182,000	\$92,045	\$200,000	\$979,380	\$75,541	\$0
Total Revenues	\$182,000	\$92,045	\$200,000	\$979,380	\$75,541	\$0
Expenses						
Salaries & Benefits	\$110,984	\$349	\$0	\$0	\$0	\$0
Professional Services	\$233,894	\$430,235	\$1,638,364	\$424,649	\$0	\$0
Training	\$0	\$0	\$0	\$38	\$0	\$0
Supplies	\$0	\$17,802	\$14,030	\$2,382	\$0	\$0
Advertising	\$421	\$0	\$0	\$0	\$0	\$0
Taxes and Charges	\$0	\$0	\$0	\$3,120	\$0	\$0
Capital Projects Budget	\$0	\$0	\$0	\$4,092	\$0	\$0
Capital Equipment	\$0	\$0	\$5,875	\$0	\$0	\$0
Capital Imp Equipment	\$0	\$222,039	\$10,759	\$0	\$0	\$0
Total Expenses	\$345,300	\$670,426	\$1,669,028	\$434,282	\$0	\$0
Capital Fund Net Revenues	(\$163,300)	(\$578,381)	(\$1,469,028)	\$545,098	\$75,541	\$0
WATER IMPACT FUND						
Revenues						
Investment Revenue	\$1,054	\$17	\$569	\$1,787	\$1,500	\$1,800
Other Revenue	\$0	\$21,381	\$0	\$45,937	\$0	\$0
Water Impact Fees	\$321,951	\$169,417	\$287,140	\$152,989	\$110,000	\$100,000
Total Revenues	\$323,005	\$190,815	\$287,709	\$200,713	\$111,500	\$101,800
Expenses						
Transfers Out	\$182,000	\$92,045	\$0	\$0	\$0	\$0
Total Expenses	\$182,000	\$92,045	\$0	\$0	\$0	\$0
Water Impact Fund Net Revenues	\$141,005	\$98,770	\$287,709	\$200,713	\$111,500	\$101,800

Source: City of St. Helena Financial Data.

rev exp

Attachment 5

Table A-3
City of St. Helena Water Rate Study
Historical Expenditures

Expenses	Actuals Fiscal Year Ending				Estimated 2016	Budgeted 2017
	2012	2013	2014	2015		
Operations						
Salaries & Benefits	\$509,098	\$442,817	\$448,242	\$507,936	\$678,792	\$706,986
Services	\$271,166	\$91,007	\$127,243	\$137,836	\$290,421	\$311,925
Supplies	\$11,086	\$13,053	\$12,308	\$10,918	\$20,513	\$18,792
Napa Purchased Water	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance	\$6,942	\$6,959	\$10,452	\$21,512	\$13,246	\$13,197
Taxes, Insurances & Contributions	\$86,653	\$64,812	\$68,027	\$79,911	\$123,415	\$113,467
Capital	\$0	\$5,272	\$113	\$551	\$8,234	\$1,925
Transfers	\$179,836	\$0	\$200,000	\$979,380	\$111,995	\$0
Debt	\$349,084	\$396,126	\$343,980	\$196,547	\$1,008,078	\$1,001,067
Subtotal Operations	\$1,413,864	\$1,020,046	\$1,210,366	\$1,934,592	\$2,254,694	\$2,167,359
Distribution						
Salaries & Benefits	\$362,007	\$357,787	\$357,186	\$413,670	\$497,637	\$490,637
Services	\$50,639	\$56,393	\$72,008	\$76,939	\$86,957	\$85,700
Supplies	\$20,493	\$16,111	\$10,127	\$21,459	\$21,810	\$28,298
Napa Purchased Water	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance	\$37,922	\$36,834	\$44,189	\$52,003	\$57,389	\$60,295
Taxes, Insurances & Contributions	\$0	\$0	\$0	\$0	\$0	\$0
Capital	\$12,238	\$0	\$0	\$0	\$26,000	\$21,000
Transfers	\$0	\$0	\$0	\$0	\$0	\$0
Debt	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Distribution	\$483,298	\$467,126	\$483,510	\$564,071	\$689,793	\$685,930
Treatment						
Salaries & Benefits	\$346,863	\$368,378	\$359,875	\$378,203	\$389,547	\$414,620
Services	\$84,949	\$89,641	\$94,000	\$89,843	\$102,350	\$109,900
Supplies	\$109,114	\$59,140	\$49,245	\$73,764	\$74,988	\$91,600
Napa Purchased Water	\$1,178,401	\$1,189,926	\$1,327,251	\$1,272,770	\$1,311,272	\$1,349,019
Maintenance	\$36,589	\$24,384	\$21,299	\$50,197	\$104,518	\$83,587
Taxes, Insurances & Contributions	\$16,335	\$9,716	\$11,084	\$12,019	\$24,000	\$19,700
Capital	\$937	\$28,199	\$1,356	\$14,505	\$14,776	\$115,000
Transfers	\$0	\$0	\$0	\$0	\$0	\$0
Debt	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Treatment	\$1,773,187	\$1,769,383	\$1,864,109	\$1,891,301	\$2,021,451	\$2,183,426
Stonebridge Wells						
Salaries & Benefits	\$0	\$0	\$0	\$0	\$0	\$0
Services	\$33,343	\$47,430	\$55,244	\$53,646	\$58,635	\$57,100
Supplies	\$6,884	\$12,380	\$10,386	\$11,452	\$25,638	\$12,800
Napa Purchased Water	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance	\$10,341	\$257	\$2,940	\$294	\$19,963	\$15,500
Taxes, Insurances & Contributions	\$0	\$0	\$0	\$0	\$0	\$0
Capital	\$0	\$0	\$10,416	\$0	\$10,775	\$0
Transfers	\$0	\$0	\$0	\$0	\$0	\$0
Debt	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Stonebridge Wells	\$50,568	\$60,067	\$78,986	\$65,392	\$115,011	\$85,400
Total Expenses	\$3,720,918	\$3,316,623	\$3,636,971	\$4,455,356	\$5,080,949	\$5,122,115

Source: City of St. Helena.

hist exp

Attachment 5

Table A-4
City of St. Helena Water Rate Study
Historical Water Use by Customer Category

Customer	2011	2012	2013	2014	2015	Average [1]	% of Avg.
<i>Figures in HCF</i>							
Residential							
Single Unit	257,882	287,886	315,468	256,777	249,219	262,941	39%
Multi-Fam	53,603	53,447	54,233	47,016	41,356	48,856	7%
Mobile Homes	28,762	28,086	33,486	26,478	24,777	27,026	4%
Subtotal Residential	340,247	369,419	403,187	330,271	315,352	338,822	50%
Non-Residential							
Commercial	79,633	84,345	88,911	85,056	70,394	79,857	12%
Industrial	154,499	149,776	163,569	131,722	117,691	138,422	21%
Landscape	26,100	28,440	30,349	17,268	10,650	20,615	3%
Churches	3,308	3,462	3,911	2,847	1,895	2,878	0%
Wells	2,584	2,470	2,531	2,705	2,579	2,585	0%
Laundry	3,390	3,317	3,366	2,949	2,412	3,017	0%
Library Schools	20,009	19,613	20,981	18,022	20,162	19,452	3%
Motel/Hotel	28,650	32,351	32,173	27,028	27,720	28,937	4%
City Owned	9,664	10,554	14,963	11,559	13,088	11,216	2%
Subtotal Non-Residential	327,837	334,328	360,754	299,156	266,591	306,978	46%
Raw Water	36,005	27,617	27,393	21,756	21,274	26,663	4%
Total Billable	704,089	731,364	791,334	651,183	603,217	672,463	100%
Non-Billable	62,293	59,636	69,465	61,384	64,609	61,980	
Total Water	766,382	791,000	860,799	712,567	667,826	725,950	

Source: City of St. Helena

use

[1] Average excludes 2013.

Attachment 5

Table A-5
City of St. Helena Water Rate Study
Calculation of Unaccounted for Water

	2013	2014	2015	Average
	Gallons of Water			
Consumption	568,883,172	477,673,548	446,865,672	497,807,464
Production	601,650,524	506,733,207	501,660,534	536,681,422
Consumption as a % of				
Production	95%	94%	89%	93%
Water	5%	6%	11%	7%

Source: City of St. Helena.

unacc

Table A-6
City of St. Helena Water Rate Study
Estimated Ten-Year Schedule of Water Capital Improvements in 2016 \$'s

Project	Notes	Total Cost	Total Cost Less Existing Funding	Fiscal Year Ending										
				2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Estimated Project Costs (2016 \$'s)			[1]	Costs are net of existing bond proceeds and grant funds										
York Creek Upper Dam Removal/Mitigation	Partially funded by grant and City (existing bond proceeds)	\$ 6,177,117	\$1,695,775	\$0	\$847,888	\$847,888	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Meadowood Tank Upgrades	Partially funded by grant and City (existing bond proceeds)	\$500,000	\$379,900	\$0	\$0	\$379,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Reservoir Improvements	Funded by Reserves	\$900,000	\$900,000	\$0	\$0	\$0	\$0	\$0	\$900,000	\$0	\$0	\$0	\$0	\$0
Dwyer Road Booster	Moved out 3 years	\$842,523	\$842,523	\$0	\$0	\$0	\$459,190	\$383,333	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Intake Mid-Valve Repair		\$14,387	\$14,387	\$14,387	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Valve House Valve Replacement	Funded by Reserves	\$526,105	\$526,105	\$0	\$0	\$0	\$0	\$0	\$526,105	\$0	\$0	\$0	\$0	\$0
Holmes Tank Upgrade	Moved out 3 years	\$1,383,000	\$1,383,000	\$0	\$0	\$0	\$58,000	\$1,325,000	\$0	\$0	\$0	\$0	\$0	\$0
	Partially funded by City existing bond proceeds													
Bell Canyon Creek Flow Measurement		\$750,000	\$492,750	\$0	\$492,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sludge Handling Program	Moved out 2 years	\$150,000	\$150,000	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Raw Water Metering Station	Moved out 1 year	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0
Tank 2 Rehabilitation	Moved out 1 year	\$750,000	\$750,000	\$0	\$60,000	\$690,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Well Filter Rehabilitation		\$11,103	\$11,103	\$11,103	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pump Station Upgrades	Funded by New Debt	\$200,000	\$200,000	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Replace 12" Transmission Main	Moved out 1 year	\$400,000	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$400,000	\$0	\$0	\$0	\$0
Lower York Creek Dam Rehab		\$480,695	\$480,695	\$190,695	\$0	\$0	\$0	\$0	\$0	\$0	\$290,000	\$0	\$0	\$0
Bell Canyon Intake Tower Replacement	Funded by New Debt	\$2,000,000	\$2,000,000	\$650,000	\$1,350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WTP Condition Assessment	Moved out 2 years	\$150,000	\$150,000	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0
Spill Containment at Bell Creek Intake	Funded by Reserves	\$75,000	\$75,000	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SCADA Improvements (Rutherford & Holmes)		\$150,000	\$150,000	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Spill Containment at Stonebridge Well	Funded by Reserves	\$75,000	\$75,000	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Upgrade Rutherford Pump Station		\$500,000	\$500,000	\$0	\$0	\$50,000	\$450,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Remove Restriction at Rutherford PS		\$150,000	\$150,000	\$0	\$50,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Install Smart Meters	Unfunded [2]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Water System		\$50,000	\$50,000	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Master Plan Update		\$150,000	\$150,000	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0
	Moved out and increased in later years													
Replace Mains < 6-Inch Diameter		\$4,000,000	\$4,000,000	\$0	\$0	\$0	\$0	\$400,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
Replace 1% of Water Mains Annually		\$150,000	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000
Additional Storage		\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000	\$0	\$0	\$0
Annual Maintenance Program		\$950,000	\$950,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000	\$50,000
Total Estimated Project Costs (2016 \$'s)		\$22,584,930	\$17,726,238	\$916,185	\$3,200,638	\$2,117,788	\$1,367,190	\$2,658,333	\$2,076,105	\$1,550,000	\$1,440,000	\$750,000	\$850,000	\$800,000

Source: City of St. Helena and HEC.

2016 cip

[1] Total Cost Less Existing Funding = Total Cost - Existing Bonds - Existing Grants

[2] Installing Smart Meters program is currently unfunded. Total cost for the program is estimated at \$1.5 million.

Table A-7

City of St. Helena Water Rate Study

Estimated Ten-Year Schedule of Water Capital Improvements in Future \$'s

Project	Notes	Existing Funding	Fiscal Year Ending										
			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Estimated Project Costs (Future \$'s) [1]			Annual Increase 3.1%										
York Creek Upper Dam Removal/Mitigation	Partially funded by grant and City (existing bond proceeds)	\$1,829,635	\$0	\$900,939	\$928,696	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Meadowood Tank Upgrades	Partially funded by grant and City (existing bond proceeds)	\$416,107	\$0	\$0	\$416,107	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Reservoir Improvements	Funded by Reserves	\$1,079,726	\$0	\$0	\$0	\$0	\$0	\$1,079,726	\$0	\$0	\$0	\$0	\$0
Dwyer Road Booster	Moved out 3 years	\$964,587	\$0	\$0	\$0	\$518,449	\$446,137	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Intake Mid-Valve Repair		\$14,830	\$14,830	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Valve House Valve Replacement	Funded by Reserves	\$631,166	\$0	\$0	\$0	\$0	\$0	\$631,166	\$0	\$0	\$0	\$0	\$0
Holmes Tank Upgrade	Moved out 3 years	\$1,607,570	\$0	\$0	\$0	\$65,485	\$1,542,085	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Creek Flow Measurement	Partially funded by City existing bond proceeds	\$523,581	\$0	\$523,581	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sludge Handling Program	Moved out 2 years	\$169,358	\$0	\$0	\$0	\$169,358	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Raw Water Metering Station	Moved out 1 year	\$131,403	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$131,403	\$0	\$0	\$0
Tank 2 Rehabilitation	Moved out 1 year	\$819,515	\$0	\$63,754	\$755,761	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Well Filter Rehabilitation		\$11,445	\$11,445	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pump Station Upgrades	Funded by New Debt	\$212,514	\$0	\$212,514	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Replace 12" Transmission Main		\$494,663	\$0	\$0	\$0	\$0	\$0	\$0	\$494,663	\$0	\$0	\$0	\$0
Lower York Creek Dam Rehab		\$566,250	\$196,570	\$0	\$0	\$0	\$0	\$0	\$0	\$369,680	\$0	\$0	\$0
Bell Canyon Intake Tower Replacement	Funded by New Debt	\$2,104,494	\$670,026	\$1,434,468	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WTP Condition Assessment	Moved out 2 years	\$174,576	\$0	\$0	\$0	\$0	\$174,576	\$0	\$0	\$0	\$0	\$0	\$0
Spill Containment at Bell Creek Intake	Funded by Reserves	\$79,693	\$0	\$79,693	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SCADA Improvements (Rutherford & Holmes)		\$169,358	\$0	\$0	\$0	\$169,358	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Spill Containment at Stonebridge Well	Funded by Reserves	\$79,693	\$0	\$79,693	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Upgrade Rutherford Pump Station		\$562,839	\$0	\$0	\$54,765	\$508,073	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Remove Restriction at Rutherford PS		\$162,659	\$0	\$53,128	\$109,531	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Install Smart Meters	Unfunded [2]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Water System		\$56,453	\$0	\$0	\$0	\$56,453	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Master Plan Update		\$174,576	\$0	\$0	\$0	\$0	\$174,576	\$0	\$0	\$0	\$0	\$0	\$0
Replace Mains < 6-Inch Diameter	Moved out and increased in later years	\$5,131,085	\$0	\$0	\$0	\$0	\$465,535	\$719,817	\$741,995	\$764,855	\$788,420	\$812,711	\$837,751
Replace 1% of Water Mains Annually		\$209,438	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$209,438
Additional Storage		\$1,255,708	\$0	\$0	\$0	\$0	\$0	\$0	\$618,329	\$637,379	\$0	\$0	\$0
Annual Maintenance Program		\$1,166,546	\$51,540	\$53,128	\$54,765	\$56,453	\$290,959	\$59,985	\$61,833	\$63,738	\$65,702	\$338,630	\$69,813
Total Estimated Project Costs (Future \$'s)		\$20,799,466	\$944,412	\$3,400,897	\$2,319,626	\$1,543,629	\$3,093,869	\$2,490,694	\$1,916,820	\$1,835,653	\$985,525	\$1,151,341	\$1,117,001

Source: City of St. Helena and HEC.

future clip

[1] Estimated costs increased by historical Engineering News Record Construction Cost Index 20-year average increase.

[2] Installing Smart Meters program is currently unfunded. Total cost for the program is estimated at \$1.5 million.

[3] Total Cost Less Existing Funding = Total Cost - Existing Bonds - Existing Grants

Table A-8
City of St. Helena Water Rate Study
Total Cost by Water System and Share of Cost to Existing Customers

Project	Funding Source	Percent Share Existing Customers	Percent Share in Rate Model	Total Cost	Fiscal Year Ending										
					2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
					Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Estimated Project Costs (2016 \$'s)		per City CIP													
York Creek Upper Dam Removal/Mitigation	Cash	100%	100%	\$1,695,775	\$0	\$847,888	\$847,888	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Meadowood Tank Upgrades	Cash	67%	67%	\$254,900	\$0	\$0	\$254,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Reservoir Improvements	Reserves	100%	100%	\$900,000	\$0	\$0	\$0	\$0	\$0	\$900,000	\$0	\$0	\$0	\$0	\$0
Dwyer Road Booster	Cash	50%	50%	\$421,262	\$0	\$0	\$0	\$229,595	\$191,667	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Intake Mid-Valve Repair	Cash	100%	100%	\$14,387	\$14,387	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Valve House Valve Replacement	Reserves	85%	85%	\$447,189	\$0	\$0	\$0	\$0	\$0	\$447,189	\$0	\$0	\$0	\$0	\$0
Holmes Tank Upgrade	Cash	50%	50%	\$691,500	\$0	\$0	\$0	\$29,000	\$662,500	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Creek Flow Measurement	Cash	83%	83%	\$409,107	\$0	\$409,107	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sludge Handling Program	Cash	100%	100%	\$150,000	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Raw Water Metering Station	Cash	100%	100%	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0
Tank 2 Rehabilitation	Cash	85%	85%	\$637,500	\$0	\$51,000	\$586,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Well Filter Rehabilitation	Cash	100%	100%	\$11,103	\$11,103	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pump Station Upgrades	Debt	100%	100%	\$200,000	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Replace 12" Transmission Main	Cash	100%	100%	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$400,000	\$0	\$0	\$0	\$0
Lower York Creek Dam Rehab	Cash	100%	100%	\$480,695	\$190,695	\$0	\$0	\$0	\$0	\$0	\$0	\$290,000	\$0	\$0	\$0
Bell Canyon Intake Tower Replacement	Debt	85%	85%	\$1,700,000	\$552,500	\$1,147,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WTP Condition Assessment	Ops Cash	100%	100%	\$150,000	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0
Spill Containment at Bell Creek Intake	Reserves	100%	100%	\$75,000	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SCADA Improvements (Rutherford & Holmes)	Cash	100%	100%	\$150,000	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Spill Containment at Stonebridge Well	Reserves	100%	100%	\$75,000	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Upgrade Rutherford Pump Station	Cash	100%	100%	\$500,000	\$0	\$0	\$50,000	\$450,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Remove Restriction at Rutherford PS	Cash	100%	100%	\$150,000	\$0	\$50,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Install Smart Meters	Unfunded	100%	100%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Water System	Ops Cash	100%	100%	\$50,000	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Master Plan Update	Ops Cash	100%	100%	\$150,000	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0
Replace Mains < 6-inch Diameter	Cash	100%	100%	\$4,000,000	\$0	\$0	\$0	\$0	\$400,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
Replace 1% of Water Mains Annually	Cash	100%	100%	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000
Additional Storage	Cash	100%	100%	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000	\$0	\$0	\$0
Annual Maintenance Program	Cash	100%	100%	\$950,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000	\$50,000
Total Estimated Project Costs (2016 \$'s)				\$15,913,418	\$818,685	\$2,905,495	\$1,889,288	\$1,108,595	\$1,804,167	\$1,997,189	\$1,550,000	\$1,440,000	\$750,000	\$850,000	\$800,000

Table A-8
City of St. Helena Water Rate Study
Total Cost by Water System and Share of Cost to Existing Customers

Project	Funding Source	Percent Share Existing Customers	Percent Share in Rate Model	Total Cost	Fiscal Year Ending										
					2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
					Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Estimated Project Costs (Future \$'s) [1]															
York Creek Upper Dam Removal/Mitigation	Cash	100%	100%	\$1,829,635	\$0	\$900,939	\$928,696	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Meadowood Tank Upgrades	Cash	67%	67%	\$279,194	\$0	\$0	\$279,194	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Reservoir Improvements	Reserves	100%	100%	\$1,079,726	\$0	\$0	\$0	\$0	\$0	\$1,079,726	\$0	\$0	\$0	\$0	\$0
Dwyer Road Booster	Cash	50%	50%	\$482,293	\$0	\$0	\$0	\$259,225	\$223,069	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Intake Mid-Valve Repair	Cash	100%	100%	\$14,830	\$14,830	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bell Valve House Valve Replacement	Reserves	85%	85%	\$536,491	\$0	\$0	\$0	\$0	\$0	\$536,491	\$0	\$0	\$0	\$0	\$0
Holmes Tank Upgrade	Cash	50%	50%	\$803,785	\$0	\$0	\$0	\$32,743	\$771,043	\$0	\$0	\$0	\$0	\$0	\$0
Bell Canyon Creek Flow Measurement	Cash	83%	83%	\$434,704	\$0	\$434,704	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sludge Handling Program	Cash	100%	100%	\$169,358	\$0	\$0	\$0	\$169,358	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Raw Water Metering Station	Cash	100%	100%	\$131,403	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$131,403	\$0	\$0
Tank 2 Rehabilitation	Cash	85%	85%	\$696,588	\$0	\$54,191	\$642,397	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Well Filter Rehabilitation	Cash	100%	100%	\$11,445	\$11,445	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pump Station Upgrades	Debt	100%	100%	\$212,514	\$0	\$212,514	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Replace 12" Transmission Main	Cash	100%	100%	\$494,663	\$0	\$0	\$0	\$0	\$0	\$0	\$494,663	\$0	\$0	\$0	\$0
Lower York Creek Dam Rehab	Cash	100%	100%	\$566,250	\$196,570	\$0	\$0	\$0	\$0	\$0	\$0	\$369,680	\$0	\$0	\$0
Bell Canyon Intake Tower Replacement	Debt	85%	85%	\$1,788,820	\$569,522	\$1,219,298	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WTP Condition Assessment	Ops Cash	100%	100%	\$174,576	\$0	\$0	\$0	\$0	\$174,576	\$0	\$0	\$0	\$0	\$0	\$0
Spill Containment at Bell Creek Intake	Reserves	100%	100%	\$79,693	\$0	\$79,693	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SCADA Improvements (Rutherford & Holmes)	Cash	100%	100%	\$169,358	\$0	\$0	\$0	\$169,358	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Spill Containment at Stonebridge Well	Reserves	100%	100%	\$79,693	\$0	\$79,693	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Upgrade Rutherford Pump Station	Cash	100%	100%	\$562,839	\$0	\$0	\$54,765	\$508,073	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Remove Restriction at Rutherford PS	Cash	100%	100%	\$162,659	\$0	\$53,128	\$109,531	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Install Smart Meters	Unfunded	100%	100%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Water System	Ops Cash	100%	100%	\$56,453	\$0	\$0	\$0	\$56,453	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Master Plan Update	Ops Cash	100%	100%	\$174,576	\$0	\$0	\$0	\$0	\$174,576	\$0	\$0	\$0	\$0	\$0	\$0
Replace Mains < 6-Inch Diameter	Cash	100%	100%	\$5,131,085	\$0	\$0	\$0	\$0	\$465,535	\$719,817	\$741,995	\$764,855	\$788,420	\$812,711	\$837,751
Replace 1% of Water Mains Annually	Cash	100%	100%	\$209,438	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$209,438
Additional Storage	Cash	100%	100%	\$1,255,708	\$0	\$0	\$0	\$0	\$0	\$0	\$618,329	\$637,379	\$0	\$0	\$0
Annual Maintenance Program	Cash	100%	100%	\$1,166,546	\$51,540	\$53,128	\$54,765	\$56,453	\$290,959	\$59,985	\$61,833	\$63,738	\$65,702	\$338,630	\$69,813
Total Estimated Project Costs (Future \$'s)				\$18,754,322	\$843,908	\$3,087,287	\$2,069,348	\$1,251,662	\$2,099,757	\$2,396,019	\$1,916,820	\$1,835,653	\$985,525	\$1,151,341	\$1,117,001
2016 \$'s															
Cash - Capital Fund				\$12,166,229	\$266,185	\$1,407,995	\$1,889,288	\$1,058,595	\$1,504,167	\$650,000	\$1,550,000	\$1,440,000	\$750,000	\$850,000	\$800,000
Cash - Operations Fund				\$350,000	\$0	\$0	\$0	\$50,000	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0
Debt - Capital Fund				\$1,900,000	\$552,500	\$1,347,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserves				\$1,497,189	\$0	\$150,000	\$0	\$0	\$0	\$1,347,189	\$0	\$0	\$0	\$0	\$0
Total				\$15,913,418	\$818,685	\$2,905,495	\$1,889,288	\$1,108,595	\$1,804,167	\$1,997,189	\$1,550,000	\$1,440,000	\$750,000	\$850,000	\$800,000
Future \$'s															
Cash - Capital Fund				\$14,571,782	\$274,386	\$1,496,091	\$2,069,348	\$1,195,209	\$1,750,606	\$779,802	\$1,916,820	\$1,835,653	\$985,525	\$1,151,341	\$1,117,001
Cash - Operations Fund				\$405,604	\$0	\$0	\$0	\$56,453	\$349,151	\$0	\$0	\$0	\$0	\$0	\$0
Debt - Capital Fund				\$2,001,334	\$569,522	\$1,431,811	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserves				\$1,775,602	\$0	\$159,385	\$0	\$0	\$0	\$1,616,217	\$0	\$0	\$0	\$0	\$0
Total				\$18,754,322	\$843,908	\$3,087,287	\$2,069,348	\$1,251,662	\$2,099,757	\$2,396,019	\$1,916,820	\$1,835,653	\$985,525	\$1,151,341	\$1,117,001

Source: City of St. Helena and HEC.

exist share

[1] Estimated costs increased by historical Engineering News Record Construction Cost Index 20-year average increase.

Attachment 5

Table A-9
City of St. Helena Water Rate Study
Existing Annual Debt Service

Fiscal Year Ending	Principal	Interest	Total	Remaining Principal
2017	\$514,130	\$475,121	\$989,251	\$11,121,087
2018	\$528,043	\$454,873	\$982,916	\$10,593,043
2019	\$550,870	\$434,897	\$985,767	\$10,042,174
2020	\$568,696	\$413,677	\$982,373	\$9,473,478
2021	\$591,522	\$388,991	\$980,513	\$8,881,956
2022	\$618,261	\$361,871	\$980,132	\$8,263,696
2023	\$641,087	\$333,464	\$974,551	\$7,622,609
2024	\$668,913	\$305,114	\$974,027	\$6,953,696
2025	\$696,739	\$275,177	\$971,916	\$6,256,956
2026	\$728,478	\$241,012	\$969,490	\$5,528,478
2027	\$760,217	\$203,870	\$964,087	\$4,768,261
2028	\$800,870	\$166,167	\$967,037	\$3,967,391
2029	\$836,522	\$128,353	\$964,874	\$3,130,870
2030	\$877,174	\$90,504	\$967,678	\$2,253,696
2031	\$908,913	\$51,095	\$960,008	\$1,344,783
2032	\$949,565	\$23,400	\$972,965	\$395,217
2033	\$395,217	\$7,904	\$403,122	\$0

Source: City of St. Helena and HEC.

debt serv

Attachment 5

Table A-10
City of St. Helena Water Rate Study
Meter Replacement Costs Estimate

Item	Assumption / Total	Meter Size							
		5/8"	3/4"	1"	1-1/2"	2"	3"	4"	6"
New Meter with Transponder [1]		\$200	\$250	\$350	\$550	\$700	\$1,500	\$3,300	\$4,550
Installation Costs [2]	20%	\$40	\$50	\$70	\$110	\$140	\$300	\$660	\$910
Administration Costs	3%	\$6	\$8	\$11	\$17	\$21	\$45	\$99	\$137
Total Cost per Meter	\$374	\$246	\$308	\$431	\$677	\$861	\$1,845	\$4,059	\$5,597
Replacement Interval (years)		20	20	20	20	20	20	20	20
Cost per Meter per Year		\$12	\$15	\$22	\$34	\$43	\$92	\$203	\$280
Monthly Cost per Meter		\$1.03	\$1.28	\$1.79	\$2.82	\$3.59	\$7.69	\$16.91	\$23.32
Monthly Cost per Billing Meter [3]		\$1.05	\$1.31	\$1.83	\$2.88	\$3.66	\$7.84	\$17.26	\$23.79

Source: City of St. Helena and HEC.

meter prog

[1] Approximate prices based on HEC experience.

[2] Actual installation costs vary by meter size as a percentage of meter cost.

[3] Accounts for an estimated vacancy rate of: 2%

Attachment 5

Table A-11
City of St. Helena Water Rate Study
Comparison of Historical Operating Expenses to Standard Indices

Historical Water Operating Expenses	Actuals Fiscal Year Ending				Estimated 2016	Change	
	2012	2013	2014	2015		Total	Avg. Annual
Salaries & Benefits	\$1,217,968	\$1,168,983	\$1,165,302	\$1,299,809	\$1,565,976	\$348,008	6.5%
Services	\$440,097	\$284,472	\$348,495	\$358,264	\$538,363	\$98,266	5.2%
Supplies	\$147,577	\$100,683	\$82,066	\$117,593	\$142,949	(\$4,628)	-0.8%
Napa Purchased Water	\$1,178,401	\$1,189,926	\$1,327,251	\$1,272,770	\$1,311,272	\$132,872	2.7%
Maintenance	\$91,794	\$68,433	\$78,880	\$124,006	\$195,116	\$103,322	20.7%
Taxes, Insurances & Contributions	\$102,988	\$74,528	\$79,111	\$91,930	\$147,415	\$44,427	9.4%
Total Expenses	\$3,178,823	\$2,887,026	\$3,081,105	\$3,264,373	\$3,901,091	\$722,268	5.3%
Engineering News Record							
	<i>Dec 2011</i>	<i>Dec 2012</i>	<i>Dec 2013</i>	<i>Dec 2014</i>	<i>Dec 2015</i>		
ENR Construction Cost Index 20-City [1]	9,172.00	9,412.00	9,668.00	9,936.00	10,135.00	963.00	2.5%
ENR Construction Cost Index San Francisco	10,204.79	10,355.09	10,898.84	10,915.84	11,155.41	950.62	2.3%
Bureau of Labor Statistics							
Consumer Price Index - California	232.99	237.71	241.53	244.81	250.71	17.73	1.9%
Consumer Price Index - San Francisco	234.33	239.53	245.71	252.27	260.29	25.96	2.7%

Source: City of St. Helena, California Department of Finance, and the Engineering News Record.

indices

[1] Engineering News Record (ENR) Consumer Cost Index (CCI) change 1995 to 2015:

ENR CCI 1995	5,524	Change	<u>Annual Avg. % Change</u>
ENR CCI 2015	10,135	4,611	3.1%

Table A-12
City of St. Helena Water Rate Study
Estimated Depreciation of New Assets

New Asset	Asset Life	Fiscal Year Ending										
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	years											
York Creek Upper Dam Removal/Mitigation	n.a.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Meadowood Tank Upgrades	50	\$0	\$0	\$8,322.14	\$8,322	\$8,322	\$8,322	\$8,322	\$8,322	\$8,322	\$8,322	\$8,322
Bell Canyon Reservoir Improvements	80	\$0	\$0	\$0	\$0	\$0	\$13,497	\$13,497	\$13,497	\$13,497	\$13,497	\$13,497
Dwyer Road Booster	50	\$0	\$0	\$0	\$10,369	\$19,292	\$19,292	\$19,292	\$19,292	\$19,292	\$19,292	\$19,292
Bell Canyon Intake Mid-Valve Repair	10	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483	\$1,483
Bell Valve House Valve Replacement	50	\$0	\$0	\$0	\$0	\$0	\$12,623	\$12,623	\$12,623	\$12,623	\$12,623	\$12,623
Holmes Tank Upgrade	50	\$0	\$0	\$0	\$1,310	\$32,151	\$32,151	\$32,151	\$32,151	\$32,151	\$32,151	\$32,151
Bell Canyon Creek Flow Measurement	40	\$0	\$13,090	\$13,090	\$13,090	\$13,090	\$13,090	\$13,090	\$13,090	\$13,090	\$13,090	\$13,090
Sludge Handling Program	40	\$0	\$0	\$0	\$4,234	\$4,234	\$4,234	\$4,234	\$4,234	\$4,234	\$4,234	\$4,234
Raw Water Metering Station	15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,760	\$8,760	\$8,760
Tank 2 Rehabilitation	50	\$0	\$1,275	\$16,390	\$16,390	\$16,390	\$16,390	\$16,390	\$16,390	\$16,390	\$16,390	\$16,390
Well Filter Rehabilitation	10	\$1,145	\$1,145	\$1,145	\$1,145	\$1,145	\$1,145	\$1,145	\$1,145	\$1,145	\$1,145	\$1,145
Pump Station Upgrades	50	\$0	\$4,250	\$4,250	\$4,250	\$4,250	\$4,250	\$4,250	\$4,250	\$4,250	\$4,250	\$4,250
Replace 12" Transmission Main	80	\$0	\$0	\$0	\$0	\$0	\$0	\$6,183	\$6,183	\$6,183	\$6,183	\$6,183
Lower York Creek Dam Rehab	20	\$9,829	\$9,829	\$9,829	\$9,829	\$9,829	\$9,829	\$9,829	\$28,313	\$28,313	\$28,313	\$28,313
Bell Canyon Intake Tower Replacement	80	\$8,375	\$26,306	\$26,306	\$26,306	\$26,306	\$26,306	\$26,306	\$26,306	\$26,306	\$26,306	\$26,306
WTP Condition Assessment	10	\$0	\$0	\$0	\$0	\$17,458	\$17,458	\$17,458	\$17,458	\$17,458	\$17,458	\$17,458
Spill Containment at Bell Creek Intake	50	\$0	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594
SCADA Improvements (Rutherford & Holmes)	10	\$0	\$0	\$0	\$16,936	\$16,936	\$16,936	\$16,936	\$16,936	\$16,936	\$16,936	\$16,936
Spill Containment at Stonebridge Well	50	\$0	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594	\$1,594
Upgrade Rutherford Pump Station	50	\$0	\$0	\$1,095	\$11,257	\$11,257	\$11,257	\$11,257	\$11,257	\$11,257	\$11,257	\$11,257
Remove Restriction at Rutherford PS	50	\$0	\$1,063	\$3,253	\$3,253	\$3,253	\$3,253	\$3,253	\$3,253	\$3,253	\$3,253	\$3,253
Install Smart Meters	15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Water System	10	\$0	\$0	\$0	\$5,645	\$5,645	\$5,645	\$5,645	\$5,645	\$5,645	\$5,645	\$5,645
Water Master Plan Update	10	\$0	\$0	\$0	\$0	\$17,458	\$17,458	\$17,458	\$17,458	\$17,458	\$17,458	\$17,458
Replace Mains < 6-Inch Diameter	80	\$0	\$0	\$0	\$0	\$5,819	\$14,817	\$24,092	\$33,653	\$43,508	\$53,667	\$64,139
Replace 1% of Water Mains Annually	80	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,618
Additional Storage	50	\$0	\$0	\$0	\$0	\$0	\$0	\$12,367	\$25,114	\$25,114	\$25,114	\$25,114
Annual Maintenance Program	10	\$5,154	\$10,467	\$15,943	\$21,589	\$50,685	\$56,683	\$62,866	\$69,240	\$75,810	\$109,673	\$116,655
Total Estimated Annual Depreciation		\$25,985	\$72,094	\$104,294	\$158,594	\$268,189	\$309,305	\$343,313	\$390,479	\$415,665	\$459,687	\$479,758

Source: City of St. Helena and HEC.

new dep

Attachment 5

Table A-13
City of St. Helena Water Rate Study
Depreciation of Existing Assets

Asset Category	Current Depreciation
Buildings	\$36,008
Vehicles	\$8,383
Equipment	\$155,600
Improvements	\$559,834
Pipes	\$115,319
Total	\$875,144

Source: City of St. Helena.

curr depr

Attachment 5

Table A-14
City of St. Helena Water Rate Study
Allocation of Plant in Service

Facility	Percent Allocation					Cost Allocation				
	Customer	Capacity	Fire		Total	Customer	Capacity	Fire		Cost Basis
			Capacity	Use				Capacity	Use	
Buildings	100%				100%	\$1,656,932	\$0	\$0	\$0	\$1,656,932
Vehicles	25%	40%		35%	100%	\$10,522	\$16,835	\$0	\$14,730	\$42,086
Equipment	10%	50%		40%	100%	\$206,127	\$1,030,636	\$0	\$824,509	\$2,061,272
Improvements		75%	10%	15%	100%	\$0	\$7,482,162	\$997,622	\$1,496,432	\$9,976,217
Pipes		75%		25%	100%	\$0	\$2,887,942	\$0	\$962,647	\$3,850,589
Total Plant in Service						\$1,873,580	\$11,417,575	\$997,622	\$3,298,319	\$17,587,095
% of Plant in Service						11%	65%	6%	19%	100%

Source: City of St. Helena and HEC. plant

Attachment 5

Table A-15
City of St. Helena Water Rate Study
Functional Allocation of Revenue Requirement

Expenditures	BUDGET 2016/17	Allocation Basis	Customer	Capacity	Fire Capacity	Use	Unclassified
Operations							
Salaries & Benefits	\$706,986	Avg. of Classified	0%	0%	0%	0%	100%
Services	\$311,925	Customers	100%	0%	0%	0%	0%
Supplies	\$18,792	Avg. of Classified	0%	0%	0%	0%	100%
Maintenance	\$13,197	Plant In Service	11%	65%	6%	19%	0%
Taxes, Insurances & Contributions	\$113,467	Avg. of Classified	0%	0%	0%	0%	100%
Capital	\$1,925	Plant In Service	11%	65%	6%	19%	0%
Debt	\$1,001,067	Ratio Avg. to Peak Month	0%	74%	0%	26%	0%
Subtotal Operations	\$2,167,359						
Distribution							
Salaries & Benefits	\$490,637	Avg. of Classified	0%	0%	0%	0%	100%
Services & Supplies	\$52,228	Avg. of Classified	0%	0%	0%	0%	100%
Utilities	\$61,770	Avg. of Classified	0%	0%	0%	0%	100%
Maintenance	\$60,295	Plant In Service	11%	65%	6%	19%	0%
Capital	\$21,000	Plant In Service	11%	65%	6%	19%	0%
Subtotal Distribution	\$685,930						
Treatment							
Salaries & Benefits	\$414,620	Ratio Avg. to Peak Month	0%	74%	0%	26%	0%
Services & Supplies	\$64,000	Ratio Avg. to Peak Month	0%	74%	0%	26%	0%
Utilities & Chemicals	\$137,500	Utilities & Chemicals	0%	0%	0%	100%	0%
Maintenance	\$83,587	Plant In Service	11%	65%	6%	19%	0%
Taxes, Insurances & Contributions	\$19,700	Avg. of Classified	0%	0%	0%	0%	100%
Capital	\$115,000	Plant In Service	11%	65%	6%	19%	0%
Subtotal Treatment	\$834,407						
Stonebridge Wells							
Services	\$57,100	Utilities & Chemicals	0%	0%	0%	100%	0%
Supplies	\$12,800	Utilities & Chemicals	0%	0%	0%	100%	0%
Maintenance	\$15,500	Plant In Service	11%	65%	6%	19%	0%
Subtotal Stonebridge Wells	\$85,400						
Napa Purchased Water	\$1,349,019	Napa	0%	75%	0%	25%	0%
TOTAL OPERATING EXPENDITURES	\$5,122,115		\$345,003	\$2,313,324	\$17,613	\$982,594	\$1,463,580
Reallocate As All Others			\$138,017	\$925,435	\$7,046	\$393,082	
ALLOCATION OF OP. EXP.	\$5,122,115		\$483,021	\$3,238,759	\$24,659	\$1,375,676	
	100%		9.4%	63.2%	0.5%	26.9%	

Source: City of St. Helena and HEC.

func

Table A-16
City of St. Helena Water Rate Study
Number of Meters

Meter Size	TOTAL	Customer Type											
		Commercial	Industrial	Residential			Landscape	Churches [2]	Laundry	Library/Schools	Motel/Hotel	All Other	City-Owned
				SF	MF	Mob							
	[1]												
5/8"	1,987	131	12	1,776	36	1	12	7	0	1	5	0	6
1"	330	40	0	232	36	0	6	6	0	1	2	0	7
1.5"	61	11	1	11	20	1	6	1	1	3	2	0	4
2"	47	11	1	8	6	1	7	1	0	6	4	0	2
3"	7	1	0	0	3	0	1	0	0	0	1	0	1
4"	9	2	1	1	0	0	0	0	0	3	1	1	0
6"	11	1	6	0	1	1	0	0	0	0	1	0	1
Total	2,452	197	21	2,028	102	4	32	15	1	14	16	1	21

Source: City of St. Helena.

meters

[1] Compound meters counted only once.

[2] Includes all religious places and community centers

Table A-17
City of St. Helena Water Rate Study
Calculated Consumption Charges for Seasonal Water Rates

Allocated Peak & Off-Peak	Fiscal Year Ending										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Allocated Cost	\$3,799,993	\$4,387,001	\$4,958,147	\$5,102,274	\$5,225,724	\$5,351,120	\$5,488,329	\$5,567,635	\$5,613,794	\$5,636,044	\$5,657,543
Off-Peak Water Use (Nov-Apr) 37%	240,040	239,015	239,436	240,404	240,688	240,939	241,176	241,506	241,799	242,079	242,329
Peak Water Use (May-Oct) 63%	405,760	404,027	404,739	406,376	406,856	407,280	407,682	408,238	408,734	409,208	409,631
Total Water Use	645,800	643,042	644,175	646,780	647,544	648,219	648,858	649,744	650,533	651,287	651,960
Off-Peak Costs per HCF	\$5.50	\$6.37	\$7.19	\$7.37	\$7.54	\$7.71	\$7.90	\$8.01	\$8.06	\$8.08	\$8.11
Peak Costs per HCF 1.11	\$6.11	\$7.09	\$8.00	\$8.20	\$8.38	\$8.58	\$8.79	\$8.90	\$8.97	\$8.99	\$9.02

Source: City of St. Helena and HEC. seasonal rates

Table A-18
City of St. Helena Water Rate Study
Projection of Water Demand

Customer	Fiscal Year Ending										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Residential	All figures in Hundreds of Cubic Feet										
Single Unit	262,941	261,914	262,758	264,154	264,862	265,537	266,199	266,954	267,672	268,377	269,052
Multi-Fam	48,856	48,665	48,696	48,830	48,836	48,836	48,833	48,848	48,856	48,861	48,861
Mobile Homes	27,026	26,920	26,938	27,012	27,015	27,015	27,014	27,022	27,026	27,029	27,029
Subtotal Residential	338,822	337,499	338,393	339,995	340,713	341,388	342,046	342,823	343,554	344,267	344,942
Non-Residential											
Commercial	79,857	79,272	79,369	79,778	79,797	79,797	79,789	79,834	79,857	79,874	79,873
Industrial	138,422	138,084	138,140	138,377	138,387	138,387	138,383	138,409	138,422	138,432	138,432
Landscape	20,615	20,413	20,447	20,587	20,594	20,594	20,591	20,606	20,615	20,620	20,620
Churches	2,878	2,867	2,869	2,876	2,877	2,877	2,877	2,878	2,878	2,878	2,878
Wells	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585
Laundry	3,017	3,010	3,011	3,016	3,016	3,016	3,016	3,017	3,017	3,017	3,017
Library Schools	19,452	19,357	19,372	19,439	19,442	19,442	19,441	19,448	19,452	19,454	19,454
Motel/Hotel	28,937	28,768	28,796	28,914	28,920	28,920	28,918	28,930	28,937	28,942	28,942
City Owned	11,216	11,189	11,193	11,213	11,213	11,213	11,213	11,215	11,216	11,217	11,217
Subtotal Non-Residential	306,978	305,543	305,782	306,785	306,831	306,831	306,812	306,921	306,979	307,020	307,018
Total Billable	645,800	643,042	644,175	646,780	647,544	648,219	648,858	649,744	650,533	651,287	651,960
Non-Billable [1]	61,980	61,980	61,980	61,980	61,980	61,980	61,980	61,980	61,980	61,980	61,980
Total Water	707,781	705,022	706,155	708,760	709,525	710,199	710,838	711,724	712,513	713,267	713,941

Source: City of St. Helena and HEC.

demand

[1] Non-Billable water includes unaccounted and/or unbilled water e.g. leaks, and certain city agreements.

Table A-19
City of St. Helena Water Rate Study
Assumptions for the Effect of Increasing Prices on Water Demand (Price Elasticity)

Customer Type	Estimated Elasticity	2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5	2023 Year 6	2024 Year 7	2025 Year 8	2026 Year 9	2027 Year 10
% Change in Price to Meet Revenue Requirement		17.1%	14.7%	4.5%	4.0%	4.0%	4.2%	3.1%	2.5%	2.1%	2.1%
Assumption for Inflation		2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Price Increase Adjusted for Inflation		14.6%	12.2%	2.0%	1.5%	1.5%	1.7%	0.6%	0.0%	-0.4%	-0.4%
Residential											
Single Unit	-0.08	-1.2%	-1.0%	-0.2%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Multi-Fam	-0.08	-1.2%	-1.0%	-0.2%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Mobile Homes	-0.08	-1.2%	-1.0%	-0.2%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Non-Residential											
Commercial	-0.15	-2.2%	-1.8%	-0.3%	-0.2%	-0.2%	-0.3%	-0.1%	0.0%	0.1%	0.1%
Industrial	-0.05	-0.7%	-0.6%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Landscape	-0.20	-2.9%	-2.4%	-0.4%	-0.3%	-0.3%	-0.3%	-0.1%	0.0%	0.1%	0.1%
Churches	-0.08	-1.2%	-1.0%	-0.2%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Laundry	-0.05	-0.7%	-0.6%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Library Schools	-0.10	-1.5%	-1.2%	-0.2%	-0.1%	-0.2%	-0.2%	-0.1%	0.0%	0.0%	0.0%
Motel/Hotel	-0.12	-1.8%	-1.5%	-0.2%	-0.2%	-0.2%	-0.2%	-0.1%	0.0%	0.1%	0.0%
City Owned	-0.05	-0.7%	-0.6%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%

Source: HEC.

elasticity

Attachment 5

Table A-20
City of St. Helena Water Rate Study
Projected Changes in Water Demand due to Price Changes

Customer Type	Fiscal Year Ending									
	2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5	2023 Year 6	2024 Year 7	2025 Year 8	2026 Year 9	2027 Year 10
Residential										
Single Unit [1]	262,941	263,617	264,292	264,968	265,644	266,320	266,995	267,671	268,347	269,023
Multi-Fam	48,856	48,856	48,856	48,856	48,856	48,856	48,856	48,856	48,856	48,856
Mobile Homes	27,026	27,026	27,026	27,026	27,026	27,026	27,026	27,026	27,026	27,026
Subtotal Residential	338,822	339,498	340,174	340,849	341,525	342,201	342,877	343,552	344,228	344,904
Non-Residential										
Commercial	79,857	79,857	79,857	79,857	79,857	79,857	79,857	79,857	79,857	79,857
Industrial	138,422	138,422	138,422	138,422	138,422	138,422	138,422	138,422	138,422	138,422
Landscape	20,615	20,615	20,615	20,615	20,615	20,615	20,615	20,615	20,615	20,615
Churches	2,878	2,878	2,878	2,878	2,878	2,878	2,878	2,878	2,878	2,878
Wells	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585
Laundry	3,017	3,017	3,017	3,017	3,017	3,017	3,017	3,017	3,017	3,017
Library Schools	19,452	19,452	19,452	19,452	19,452	19,452	19,452	19,452	19,452	19,452
Motel/Hotel	28,937	28,937	28,937	28,937	28,937	28,937	28,937	28,937	28,937	28,937
City Owned	11,216	11,216	11,216	11,216	11,216	11,216	11,216	11,216	11,216	11,216
Subtotal Non-Residential	306,978	306,978	306,978	306,978	306,978	306,978	306,978	306,978	306,978	306,978
Total Billable Water	645,800	953,454	954,129	954,805	955,481	956,157	956,832	957,508	958,184	958,860
Change in Demand due to Price [2]										
Residential										
Single Unit	-1,027	-858	-139	-106	-106	-120	-42	1	31	30
Multi-Fam	-191	-159	-26	-20	-20	-22	-8	0	6	5
Mobile Homes	-106	-88	-14	-11	-11	-12	-4	0	3	3
Subtotal Residential	-1,324	-1,105	-179	-136	-137	-155	-53	1	39	38
Non-Residential										
Commercial	-585	-488	-79	-60	-60	-68	-23	1	17	16
Industrial	-338	-282	-45	-35	-35	-39	-13	0	10	10
Landscape	-201	-168	-27	-21	-21	-23	-8	0	6	6
Churches	-11	-9	-2	-1	-1	-1	0	0	0	0
Laundry	-7	-6	-1	-1	-1	-1	0	0	0	0
Library Schools	-95	-79	-13	-10	-10	-11	-4	0	3	3
Motel/Hotel	-170	-141	-23	-17	-17	-20	-7	0	5	5
City Owned	-27	-23	-4	-3	-3	-3	-1	0	1	1
Subtotal Non-Residential	-1,435	-1,196	-193	-147	-147	-166	-57	1	42	40
Total Billable Water	-2,758	-2,301	-372	-283	-284	-321	-111	3	81	78

Source: HEC.

elas demand

[1] Assumes growth of 5 units per year.

[2] Change applied to summer months consumption only.

Percent of Year	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
-----------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Attachment 5

Table A-21
City of St. Helena Water Rate Study
Operating Expenses (FY2016) Peak to Off-Peak Ratio

Expenses	TOTAL Excl. Debt	Percent of Year Total
Jul-15	\$280,972	8%
Aug-15	\$156,745	5%
Sep-15	\$373,717	11%
Oct-15	\$367,289	11%
Nov-15	\$297,387	9%
Dec-15	\$391,236	11%
Jan-16	\$256,759	7%
Feb-16	\$158,108	5%
Mar-16	\$267,578	8%
Apr-16	\$252,836	7%
May-16	\$155,424	5%
Jun-16	\$471,651	14%
TOTAL	\$3,429,701	100%
PEAK	\$1,805,798	
PEAK AS % OF TOTAL	53%	
OFF-PEAK	\$1,623,903	
PEAK AVG.	\$300,966	
OFF-PEAK AVG.	\$270,650	
PEAK TO OFF-PEAK RATIO	1.11	

Source: City of St. Helena.

exp monthly 2

[1] Excludes operating costs not influenced by seasonal changes; debt, taxes, insurance, and capital.

Attachment 5

Table A-22
City of St. Helena Water Rate Study
Calculated Drought and Non-Drought Year Water Costs

Source Costs	Imported <i>City of Napa</i>	Surface Water <i>Bell Canyon</i>	Ground Water <i>Stonebridge Wells</i>	Total <i>All Sources</i>
Cost per 1,000 Galls				
	\$6.70	\$2.82	\$0.65	
DROUGHT YEAR				
Wtd. Avg. Cost per 1,000 Galls.	\$2.53	\$1.31	\$0.10	\$3.94
Source of Supply	38%	46%	16%	100%
NON-DROUGHT YEAR				
Wtd. Avg. Cost per 1,000 Galls.	\$2.12	\$1.13	\$0.19	\$3.43
Source of Supply	32%	40%	28%	100%
All Other Operations Costs (assumed not to change) [1]				\$1,814,740
All Other Operations Costs per 1,000 Gallons of City produced water				\$5.68
TOTAL DROUGHT YEAR COST PER 1,000 GALLONS				\$9.62
TOTAL NON-DROUGHT YEAR COSTS PER 1,000 GALLONS				\$9.10
<i>Ratio of Drought to Non-Drought</i>			<i>1.06</i>	

Source: City of St. Helena and HEC.

cost by source

[1] Includes general operations costs; excludes distribution costs, debt, capital, and transfers.

Attachment 5

**HANSFORD ECONOMIC
CONSULTING**



**City of St. Helena (2016)
Wastewater Rate Study
Technical Memorandum**

FINAL
October 31, 2016

HEC Project #150182

Attachment 5

**HANSFORD ECONOMIC
CONSULTING**

PO Box 10384
Truckee, CA 96162

Phone: 530-412-3676
Email: catherine@hansfordecon.com

Technical Memorandum WASTEWATER RATE STUDY

To: City of St. Helena

From: Catherine Hansford

Date: October 31, 2016

This technical memorandum presents the detailed wastewater rate study. Support tables are provided in **Attachment A**.

THE WASTEWATER FUND

Table A-1 in **Attachment A** shows comprehensive audited financial report data for the wastewater fund from 2011 through 2015. Detailed historical revenues and expenses are shown in **Table A-2**, with supporting data in **Table A-3**.

Revenues

The wastewater system is funded through rates, annexation fees, investment earnings, and sewer connection fees. More than 99% of revenue is from wastewater rates. Rate revenue is generated according to the current wastewater rate schedule shown on the following page in **Table 1**. Under the current rate schedule all customers pay a service charge (or base charge) and a flow charge per HCF based on average winter month water use. Residential single family customers pay a flat monthly base charge, and a flow charge. For non-residential customers, including residential multi-family customers, the service charge is different by meter size, and the flow charge is different by customer type.

Expenses

Figure 1 displays the components of expenditures for the past five years for the wastewater capital and operating funds combined. Personnel costs (salaries and benefits), services, and capital projects have been the largest expenditure items.

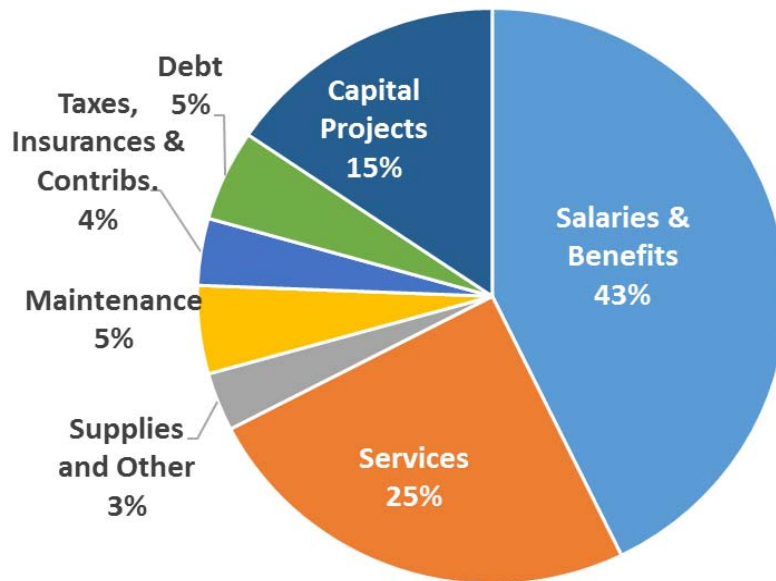
Prepared by HEC

Attachment 5

Page 2 of 23

Wastewater Rate Study, October 31, 2016

Figure 1
Typical Annual Wastewater Fund Expenditures



Prepared by HEC

Attachment 5

Page 3 of 23

Wastewater Rate Study, October 31, 2016

Table 1
Current Wastewater Rate Schedule

Land Use	Base Monthly Rate (2016)	Usage Rate (\$ per hcf of Winter Water Use)
Residential		[1]
Single Family	\$47.35	\$3.94
Multi-family	[2]	\$3.94
Non-Residential Base Rates		
5/8" & 3/4" Meter	\$42.12	
1" Meter	\$102.42	
1 1/2" Meter	\$202.92	
2" Meter	\$323.53	
3" Meter	\$604.94	
4" Meter	\$1,006.96	
6" Meter	\$2,012.00	
Non-Residential Usage Rates (per hcf)		
Car Wash		\$2.85
Schools		\$3.17
Laundry/Laundromat		\$3.34
Churches		\$3.64
City Buildings		\$3.64
Commercial (General)		\$3.64
Winery (Sutter Home)		\$4.27
Motels without Food		\$4.35
Service Stations/Auto Repair		\$4.70
Mixed Retail with Food		\$6.79
Motels with Food		\$8.75
Restaurant		\$11.68
Grocery		\$11.87
Mortuary		\$11.87
Winery (Merryvale)		\$20.94
Winery (Spottswode)		\$20.94

Source: City of St. Helena.

curr

[1] Single family usage charge based on average winter water use, determined as average monthly usage for billing cycles with read dates from January through March. Months with zero usage are to be excluded from the averaging. Usage charge to be adjusted annually in April, based on the newest winter average.

[2] Multi-family pays same base charges based on meter size as non-residential.

Prepared by HEC

Attachment 5

Page 4 of 23

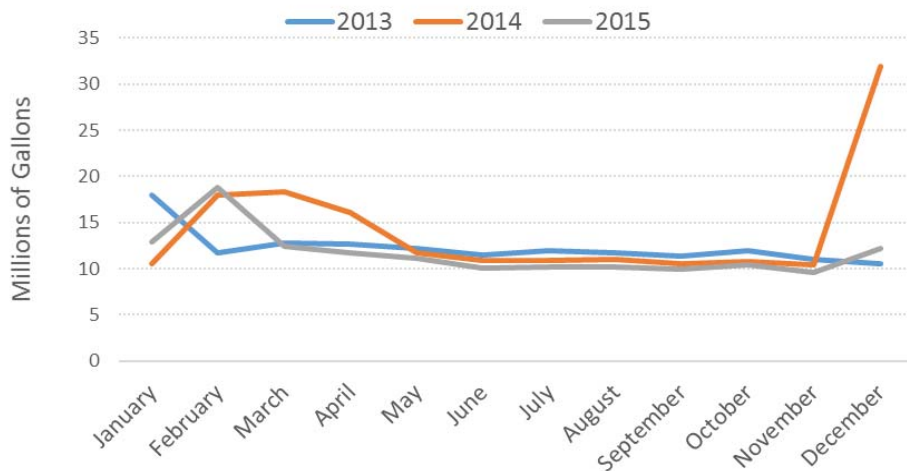
Wastewater Rate Study, October 31, 2016

THE WASTEWATER SYSTEM

The City's wastewater system consists of a collection system of more than 22 miles of pipe. Effluent is treated at the 0.5 million gallons a day (average daily dry weather flow) treatment plant. The wastewater treatment plant was built in 1967. The secondary level treatment plant discharges to the Napa River or land (City-owned grass fields, redwood/willow trees, and mosquito fish ponds). The City's National Pollutant Discharge Elimination System (NPDES) permit was renewed in March 2016; at the same time a Cease and Desist Order (CDO) No. R2-2016-0004 was issued because the City is unable to meet the more stringent effluent requirements of the renewed NPDES permit. A draft feasibility study was prepared for the City in August 2016 which recommends improvements at the wastewater treatment plant so that the City can be in compliance and the CDO lifted.

Figure 2 shows historical monthly influent at the wastewater treatment plant. Data is provided in **Table A-4**. Wastewater inflow at the treatment plant currently averages 0.4 million gallons per day (MGD).

Figure 2
Historical Wastewater Plant Monthly Influent Flow

**Customer Characteristics**

The number of customers and total calculated flow for each customer and customer category, BOD and TSS characteristics are summarized in **Table 2**.

Prepared by HEC

Attachment 5

Page 5 of 23

Wastewater Rate Study, October 31, 2016

Table 2
Summary of User Characteristics

Customer Category	Billing Basis	No. Billing Units	Wastewater Characteristics				Existing Treatment Capacity/Load				Total Annual Capacity/Load					
			Flow	BOD	SS	Flow	BOD	SS	Flow	BOD	SS					
			GPD	MG/L	MG/L	MGD	Lbs/Day	Lbs/Day	MG	Lbs/Year	Lbs/Year					
		(A)	(B)	(C)	(D)	(E)=A*(B)/1000000	(F)=C*(E)*8.34	(G)=D*(E)*8.34	(H)=(E)*365	(I)=C*(H)*8.34	(J)=(D)*(H)*8.34					
[1]																
Residential																
Single Family	Unit	1,503	175	200	200	0.26	439.25	439.25	96.12	160,328	160,328					
Multi-Family	Unit	669	106	200	200	0.07	118.29	118.29	25.89	43,177	43,177					
Mobile Homes (Vineyard Valley)	Unit	211	157	200	200	0.03	55.33	55.33	12.11	20,197	20,197					
School	Student	1,437	8	130	100	0.01	11.68	8.99	1.94	2,103	1,618					
Non-Residential																
Car Wash	Account	1	1,005	20	150	0.00	0.17	1.26	0.37	61	459					
Religious Places/Community Centers	Account	13	156	130	110	0.00	2.20	1.86	0.74	802	679					
Commercial [2]	Account	126	241	150	200	0.03	37.96	50.61	11.08	13,855	18,473					
Groceries and Mortuaries	Account	3	691	800	800	0.00	13.84	13.84	0.76	5,052	5,052					
Laundry	Account	1	4,181	150	110	0.00	5.23	3.84	1.53	1,909	1,400					
Mixed Retail w/ Food	Account	3	1,319	240	600	0.00	7.92	19.80	1.44	2,891	7,228					
Motel with Food	Account	2	5,429	500	600	0.01	45.28	54.34	3.96	16,528	19,833					
Motel without Food	Account	8	2,297	310	120	0.02	47.51	18.39	6.71	17,340	6,712					
Restaurant	Account	19	1,354	1,000	600	0.03	214.60	128.76	9.39	78,328	46,997					
Napa Valley College	Account	1	12,925	130	100	0.01	14.01	10.78	4.72	5,115	3,935					
Service Station	Account	5	318	180	280	0.00	2.38	3.71	0.58	870	1,353					
Winery Production (Merryvale/Spottswoode)	Account	2	937	2,800	400	0.00	43.78	6.25	0.68	15,981	2,283					
Sutter Home Winery	Account	1	3,195	200	200	0.00	5.33	5.33	1.17	1,945	1,945					
TOTAL (ADWF 0.5 MGD)												179.17	386,483	341,669		

Source: City of St. Helena, California Department of Education, Educational Demographics Unit, and HEC

Source: City of St. Helena, California Department of Education Educational Demographics Unit, and HEC.

[1] Schools multiplied by 180 days per year.

[2] Commercial includes City buildings.

chair

Prepared by HEC

Attachment 5

Page 6 of 23

Wastewater Rate Study, October 31, 2016

REVENUE REQUIREMENT

The revenue requirement refers to the amount of money that must be raised through rates. The projection of revenue requirement is the cornerstone for calculation of rates. This section explains the derivation of revenue requirement for this Study. Components of revenue requirement include:

- Capital Improvements
- Debt Service
- Operations Expenses and Reserves
- System Rehabilitation
- Wastewater Fund Reserves

Non-water sales revenue projections are credited against projected operations costs. Non-water sales include investment earnings and sewer connection fees.

Capital Improvements

Table 3 summarizes the capital improvement costs identified by the City as necessary in the next ten years. The costs do not include project costs that already have funding sources identified (i.e. have a grant secured or are to be funded with existing City bond proceeds). All costs are expressed in future dollars. The total ten-year capital improvement projects (CIP) costs is estimated at \$17.7 million. Of this total it is anticipated that \$13.0 million will be spent in the next five years.

Table A-5 and **Table A-6** provide the wastewater system CIP list of facilities, provided by the City for the next 10 years, in current and future dollars respectively. Major necessary improvements include phase 1 upgrades to the wastewater treatment plant, replacing the wastewater reclamation facility operations building and shop, and sewer mains replacement or rehabilitation.

Costs are further allocated to existing and future customers based on their estimated use of the facilities. Only \$125,000 of the total cost is for projects partially benefiting future customers. These projects include reclamation field facilities and miscellaneous maintenance improvements. Supporting data is provided in **Table A-7**, in 2016 dollars, and **Table A-8**, in future dollars. All other CIP items are allocated entirely to existing customers. Existing customers' costs included in rates are shown in **Table A-9**.

Future costs are inflated using the Engineering News Record Construction Cost Index (ENR CCI) past 20-year annual average increase of 3.1%.

Prepared by HEC

Attachment 5

Page 7 of 23

Wastewater Rate Study, October 31, 2016

Table 3
Wastewater Capital Improvement Costs by Customer Share

Customer	Estimated CIP Costs in Future Dollars		
	Through 2022	2023 to 2027	Total CIP
Existing Customer Share	\$12,909,786	\$4,699,894	\$17,609,680
Future Customer Share	\$57,033	\$68,049	\$125,082
Total Existing and Future	\$12,966,819	\$4,767,944	\$17,734,763

Source: HEC.

cip share

CIP funding sources of costs are shown in **Table 4**.

Table 4
Sources of Funding for Existing Customers CIP Costs

Project	Total Cost Less Existing Funding	Total Through FY 2022	Fiscal Year Ending					
			2017	2018	2019	2020	2021	2022
Future \$'s								
Cash - Capital Fund	\$4,636,494	\$2,636,034	\$521,023	\$426,887	\$391,846	\$686,181	\$270,883	\$339,214
Cash - Operations Fund	\$561,029	\$462,386	\$15,462	\$69,067	\$235,491	\$16,936	\$17,458	\$107,973
Debt - Capital Fund	\$8,746,428	\$8,495,287	\$239,259	\$743,798	\$3,582,746	\$3,693,130	\$116,384	\$119,970
Reserves	\$3,665,729	\$1,316,079	\$0	\$0	\$0	\$0	\$116,384	\$1,199,695
Total CIP	\$17,609,680	\$12,909,786	\$775,744	\$1,239,752	\$4,210,083	\$4,396,247	\$521,108	\$1,766,852

Source: City of St. Helena and HEC.

exis rates

Debt Service

The City has wastewater system debt associated with a 2005 bond issue, and refunding of that bond issue in 2012. Yearly debt service for the wastewater system is shown in **Table A-9**.

New debt is anticipated to be incurred for phase 1 and phase 2 of the wastewater treatment plant (WWTP) upgrades. For the rate study it is assumed these projects are funded with a Clean Water State Revolving Fund (CWSRF) loan. Due to the size of the projects, a 15% contingency factor was added to the estimated City cost. The estimated new CWSRF debt service is shown in **Table 5**. A year of debt service must be accumulated prior to repayment of the loan, which begins one year after completion of construction.

Prepared by HEC

Attachment 5

Page 8 of 23

Wastewater Rate Study, October 31, 2016

Table 5
Estimated CWSRF Debt Financing for WWTP Upgrades

Item	Construction Fiscal Year
Treatment Plant Phase 1	2019
Construction Cost Estimate	\$8,258,933
Contingency (15%) [1]	\$1,238,840
Total	\$9,497,773
Estimated Annual Debt Service [2]	\$592,124
Estimated Total Financing Costs	\$2,344,700
Treatment Plant Phase 2	2022
Construction Cost Estimate	\$487,495
Contingency (15%) [1]	\$73,124
Total	\$560,619
Estimated Annual Debt Service [2]	\$34,951
Estimated Total Financing Costs	\$138,399
Total Debt-Financed Infrastructure Cost	\$10,058,393
Estimated Total Financing Costs	\$2,483,099

Source: State Water Resources Control Board and HEC.

new debt

[1] State-funded projects typically cost more (more administration as well as American Iron and Steel requirements, and labor reporting).

[2] CWSRF loan assumptions:

Interest Rate	2.2%
Term (years)	20

Operations Expenses and Reserves

Estimated fiscal year 2015/16 operating expenses are used to project future year operating expenditures. All operating expenditures are increased 5% each year with the exception of capital, which is increased at 3% per year, and maintenance, taxes, insurances and contributions which are increased at 10% per year to be more consistent with higher historical increases for these expenses. **Table A-10** shows historical annual average operating cost increases of 14.6%. Fiscal year 2015/16 was abnormally high. Taking this out of the calculation, the data shows historical annual average operating cost increases of only 4.9%.

System Rehabilitation Costs

Prepared by HEC

Attachment 5

Page 9 of 23

Wastewater Rate Study, October 31, 2016

Depreciation is used as the basis for which to collect rates to cover system rehabilitation costs. Inclusion of system rehabilitation costs demonstrates fiscal responsibility toward the assets to potential future investors and helps to establish good credit¹. Depreciation is calculated based on existing wastewater assets and new assets added to the wastewater system in the next five years. **Table 6** shows the total annual amount of depreciation for existing and new assets included in the rate study. If the collected revenue is not applied to a CIP rehabilitation project it should be designated within the fund for the purposes of repair and rehabilitation only. Supporting data is provided in **Tables A-11** and **A-12**.

Table 6
System Rehabilitation Annual Costs

Asset List	Fiscal Year Ending					
	2017	2018	2019	2020	2021	2022
Existing Assets	\$340,044	\$350,521	\$361,320	\$372,452	\$383,928	\$395,756
Projected Assets Annual Depreciation	\$16,613	\$41,264	\$98,143	\$159,973	\$176,412	\$230,848
Total Annual Depreciation	\$356,657	\$391,785	\$459,463	\$532,425	\$560,339	\$626,604
<i>Percent Depreciation for System Rehabilitation</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>
System Rehabilitation	\$356,700	\$391,800	\$459,500	\$532,400	\$560,300	\$626,600

Source: City of St. Helena and HEC.

depr

Revenue Requirement

Table 7 on the next page provides the projection of annual costs and revenues and the resulting revenue requirement through fiscal year ending 2027. Total revenue requirement is projected to increase from \$3.0 million in the fiscal year 2017 to \$4.6 million in fiscal year 2022 to \$5.7 million in fiscal year 2027.

¹ Per Governmental Accounting Standards Board (GASB) 34, local governments must report on the value of their infrastructure assets and plan for asset maintenance (including collecting sufficient revenue) to obtain good credit when issuing bonds or procuring other forms of financing for long-term construction projects.

Prepared by HEC

Attachment 5

Page 10 of 23

Wastewater Rate Study, October 31, 2016

Table 7
Projected Revenue Requirement

Revenues and Expenses		Assumptions	Fiscal Year Ending										
			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Operating Expenses	Budgeted												
	Salaries & Benefits	**	\$1,071,519	\$1,125,095	\$1,181,350	\$1,240,417	\$1,302,438	\$1,367,560	\$1,435,938	\$1,507,735	\$1,583,122	\$1,662,278	\$1,745,392
	Services	5.0%	\$319,189	\$335,148	\$351,906	\$369,501	\$387,976	\$407,375	\$427,744	\$449,131	\$471,588	\$495,167	\$519,925
	Supplies	5.0%	\$75,942	\$79,739	\$83,726	\$87,912	\$92,308	\$96,923	\$101,770	\$106,858	\$112,201	\$117,811	\$123,702
	Maintenance	**	\$130,513	\$143,564	\$157,921	\$173,713	\$191,084	\$210,192	\$231,212	\$254,333	\$279,766	\$307,743	\$338,517
	Taxes, Insurances & Contribs.	**	\$105,967	\$116,564	\$128,220	\$141,042	\$155,146	\$170,661	\$187,727	\$206,500	\$227,150	\$249,865	\$274,851
	Capital	**	\$101,700	\$104,751	\$107,894	\$111,130	\$114,464	\$117,898	\$121,435	\$125,078	\$128,831	\$132,695	\$136,677
	Wet Weather Flow Monitoring		\$0	\$0	\$54,765	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Update GIS Maps of Sewer System		\$0	\$53,128	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Sewer Master Plan		\$0	\$0	\$164,296	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CCTV Program		\$15,462	\$15,939	\$16,430	\$16,936	\$17,458	\$17,995	\$18,550	\$19,121	\$19,711	\$20,318	\$20,944	
	Recycled Water Feasibility Study		\$0	\$0	\$0	\$0	\$0	\$89,977	\$0	\$0	\$0	\$0	
Total Operating Expenses			\$1,820,292	\$1,973,928	\$2,246,507	\$2,140,652	\$2,260,874	\$2,478,583	\$2,524,375	\$2,668,756	\$2,822,367	\$2,985,876	\$3,160,007
Debt Service													
Existing Debt			\$252,876	\$253,904	\$256,030	\$252,890	\$253,823	\$255,392	\$250,938	\$251,669	\$252,022	\$252,310	\$251,490
WWTP New Debt - Phase 1			\$0	\$0	\$592,124	\$592,124	\$592,124	\$592,124	\$592,124	\$592,124	\$592,124	\$592,124	\$592,124
WWTP New Debt - Phase 2			\$0	\$0	\$0	\$0	\$0	\$34,951	\$34,951	\$34,951	\$34,951	\$34,951	\$34,951
Total Debt Service			\$252,876	\$253,904	\$848,154	\$845,014	\$845,947	\$882,467	\$878,012	\$878,744	\$879,097	\$879,384	\$878,565
Capital Projects			\$164,323	\$35,087	\$0	\$153,781	\$0	\$0	\$154,028	\$0	\$0	\$0	\$0
System Rehabilitation			\$356,700	\$391,800	\$459,500	\$532,400	\$560,300	\$626,600	\$690,300	\$712,900	\$732,900	\$775,900	\$797,200
Operating Reserves			\$400,000	\$775,000	\$725,000	\$805,000	\$875,000	\$625,000	\$650,000	\$850,000	\$900,000	\$900,000	\$900,000
SUBTOTAL Annual Cost			\$2,994,191	\$3,429,719	\$4,279,161	\$4,476,847	\$4,542,121	\$4,612,649	\$4,896,715	\$5,110,400	\$5,334,364	\$5,541,161	\$5,735,771
Base			\$1,662,575	\$1,743,878	\$2,423,538	\$2,511,316	\$2,609,080	\$2,748,778	\$2,854,324	\$2,972,389	\$3,097,965	\$3,231,965	\$3,374,001
Use			\$1,331,616	\$1,685,841	\$1,855,623	\$1,965,531	\$1,933,042	\$1,863,871	\$2,042,391	\$2,138,010	\$2,236,399	\$2,309,196	\$2,361,771
Credits													
Investment Earnings			\$4,615	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sewer Connection Fee			\$900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Credits			\$5,515	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
REVENUE REQUIREMENT			\$2,988,676	\$3,429,719	\$4,279,161	\$4,476,847	\$4,542,121	\$4,612,649	\$4,896,715	\$5,110,400	\$5,334,364	\$5,541,161	\$5,735,771
Annual Percentage Change			42%	15%	25%	5%	1%	2%	6%	4%	4%	4%	4%
Base Costs Percentage			56%	51%	57%	56%	57%	60%	58%	58%	58%	58%	59%
Use Costs Percentage			44%	49%	43%	44%	43%	40%	42%	42%	42%	41%	40%

Source: HEC.

** Amounts included in Base Costs

Prepared by HEC

Attachment 5

Page 11 of 23

Wastewater Rate Study, October 31, 2016

RATES ANALYSIS

In the financial modeling for the wastewater rate study two rate scenarios were considered for collection of the revenue requirement; a modified rate structure and a new rate structure. Under the modified rate structure:

- Residential single family continues to pay a flat monthly charge per unit, plus a flow charge per HCF of winter water use.
- Non-Residential, including multi-family and mobile homes, pay a flat monthly charge by water meter size plus a flow charge per HCF of winter water use by customer type.
- Religious paces/community centers are placed into their own customer category (previously included as commercial).

Under the new rate structure:

- Residential single family, multi-family, and mobile homes pay a flat monthly charge per housing unit.
- Schools pay a flat monthly charge on a per student basis.
- Non-Residential pay a flat monthly charge by customer type plus a flow charge by customer type per HCF of winter water use.

In the new rate structure, there are no charges based on water meter size and all costs are allocated on flow and strength customer characteristics.

Per the August 4th, 2016 and September 13th, 2016 Task Force meetings, the City's Task Force chose the new rate structure as the preferred rate structure; therefore, the body of this memorandum includes the methodology and results of the new rate structure only. For record keeping the modified rate structure is presented in **Attachment B**.

New Rate Structure

The following four steps outline how wastewater rates are calculated such that the monthly wastewater rates meet legal requirements. The accompanying tables show the calculations for the first year of the analysis, fiscal year 2016-17, in order to demonstrate the model and illustrate how the rates are calculated. The same cost allocation methodology is used for all years considered in this analysis.

- 1. Establish the Wastewater Customer Base and User Characteristics** – The wastewater customer base includes residential (single family, multi-family, and mobile homes), schools, car wash, religious places/community center, commercial, grocery and mortuary, laundry, mixed retail with food, motel with food, motel without food, restaurant, Napa Valley College, service station, winery production, and Sutter Home Winery users. Wastewater flow parameters are based on City winter average (January through March) water meter reads and sewer strength is based on industry standards. *Wastewater inflow at the treatment plant currently averages 0.5 million gallons per day (MGD). The number of customers and total calculated flow for each customer and customer category, Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS) characteristics were summarized earlier in the report in Table 2.*

Prepared by HEC

Attachment 5

Page 12 of 23

Wastewater Rate Study, October 31, 2016

2. **Project Revenue Requirement and Allocate to Collection and Treatment** –Projections of annual costs and non-rate revenues are used to determine revenue requirement as previously described. *The revenue requirement (the amount to be funded through wastewater service charges/rates) for fiscal year 2016-17 is \$3.0 million. The revenue requirement is allocated between collection and treatment. Of this total cost, approximately 72% is for the treatment plant and 28% for the collection system. Table 8 shows the allocation of projected costs between the wastewater collection system and the treatment plant for fiscal year 2016-17.*
3. **Allocate Revenue Requirement based on Flow and Strength and Determine Unit Costs** – The revenue requirement is allocated based on flow and load (strength) depending on the percentage distribution of operations and maintenance operations attributed to flow, BOD, or TSS. Per unit revenue requirement for each projected year is determined by dividing the allocated revenue requirement by the demand for each customer type.

Costs are allocated to customer categories as follows:

- A. Allocate the costs (by Cost Category) to flow, BOD and TSS
- B. Determine the Unit Cost by Cost Category

Each of these steps is described in greater detail below.

A. Cost Allocation to Flow, BOD, and SS

Costs are allocated to flow, BOD, and SS based on percentage allocation or distribution factors. These percentage allocation factors are based on the estimated distribution of the treatment and collection facilities O&M activities between or related to flow, BOD, and TSS.

Table 9 shows the calculation of unit costs by cost category for flow, BOD, and TSS. Collection costs are strictly related to flow and therefore, 100 percent of the collection costs are allocated to flow. Treatment plant costs are allocated by cost category for flow, BOD and TSS using the subtotal percentages from the collection and treatment cost allocations.

Prepared by HEC

Attachment 5

Page 13 of 23

Wastewater Rate Study, October 31, 2016

Table 8

Revenue Requirement Distributed between Collection and Treatment

- New Rate Structure based on Flow and Strength

FY 2017

Expenditures	Projected Total	Allocation		Collection		Treatment	
		Collection	Treatment	Operations	Capital	Operations	Capital
Salaries & Benefits	\$1,071,519	21%	79%	\$227,165		\$844,354	
Services	\$319,189	4%	96%	\$12,682		\$306,507	
Supplies	\$75,942	22%	78%	\$16,619		\$59,323	
Maintenance	\$130,513	11%	89%	\$14,137		\$116,376	
Taxes, Insurances & Contribs.	\$105,967	0%	100%	\$0		\$105,967	
Capital	\$101,700	0%	100%	\$0		\$101,700	
Wet Weather Flow Monitoring	\$0	100%	0%	\$0		\$0	
Update GIS Maps of Sewer System	\$0	50%	50%	\$0		\$0	
Sewer Master Plan	\$0	50%	50%	\$0		\$0	
CCTV Program	\$15,462	100%	0%	\$15,462		\$0	
Recycled Water Feasibility Study	\$0	0%	100%	\$0		\$0	
Total Debt Service	\$252,876	100%	0%	\$252,876		\$0	
Capital Projects	\$164,323	0%	100%	\$0		\$164,323	
System Rehabilitation	\$356,700	50%	50%	\$178,350		\$178,350	
Total Operating Expenses	\$2,594,191	28%	72%	\$270,603	\$446,689	\$1,534,227	\$342,673
Operating Reserve	\$400,000						
Less Offsetting Revenue	(\$5,515)						
Total	\$2,988,676						

alloc

Source: HEC.

Prepared by HEC

Attachment 5

Page 14 of 23

Wastewater Rate Study, October 31, 2016

Table 9
Unit Cost Determination
- New Rate Structure based on Flow and Strength

FY 2017

Cost Category	Percent Allocation				Cost			Total Influent				Unit Cost Per:			
	Allocated Costs	Flow	BOD	SS	Flow	BOD	SS	Flow	BOD	SS		Mgal of Flow	Klb of BOD	Klb of SS	
	(A)	(B)	(C)	(D)	(E) = (A)*(B)	(F) = (A)*(C)	(G) = (A)*(D)	(H)	(I)	(J)	Table 2	(K) = (E)/(H)	(L) = (F)/(I)	(M) = (G)/(J)	
Operating Costs															
Collection System Costs	Table 8 \$270,603	100%	0%	0%	\$270,603	\$0	\$0	179	386	342		\$1,510.29	\$0.00	\$0.00	
Treatment Costs	\$1,534,227	34%	33%	33%	\$521,637	\$506,295	\$506,295	179	386	342		\$2,911.36	\$1,310.01	\$1,481.83	
Capital Costs															
Collection System Costs	\$446,689	100%	0%	0%	\$446,689	\$0	\$0	179	386	342		\$2,493.05	\$0.00	\$0.00	
Treatment Costs	\$342,673	34%	33%	33%	\$116,509	\$113,082	\$113,082	179	386	342		\$650.26	\$292.59	\$330.97	
Subtotal Collection Costs	\$717,291	100%	0%	0%	\$717,291	\$0	\$0	179	386	342		\$4,003.34	\$0.00	\$0.00	
Subtotal Treatment Costs	\$1,876,900	34%	33%	33%	\$638,146	\$619,377	\$619,377	179	386	342		\$3,561.61	\$1,602.60	\$1,812.80	
Subtotal Costs	\$2,594,191	52%	24%	24%	\$1,355,437	\$619,377	\$619,377					\$7,564.96	\$1,602.60	\$1,812.80	
Other Costs															
Operating Reserve	\$400,000	52%	24%	24%	\$208,996	\$95,502	\$95,502	179	386	342		\$1,166.45	\$247.11	\$279.52	
Less Offsetting Revenue	(\$5,515)	52%	24%	24%	(\$2,882)	(\$1,317)	(\$1,317)	179	386	342		(\$16.08)	(\$3.41)	(\$3.85)	
Subtotal Other Costs	\$394,485	52%	24%	24%	\$206,114	\$94,185	\$94,185					\$1,150.36	\$243.70	\$275.66	
TOTAL COSTS	\$2,988,676				\$1,561,552	\$713,562	\$713,562					\$8,715.32	\$1,846.30	\$2,088.46	

Source: HEC.

unit

Prepared by HEC

Attachment 5

Page 15 of 23

Wastewater Rate Study, October 31, 2016

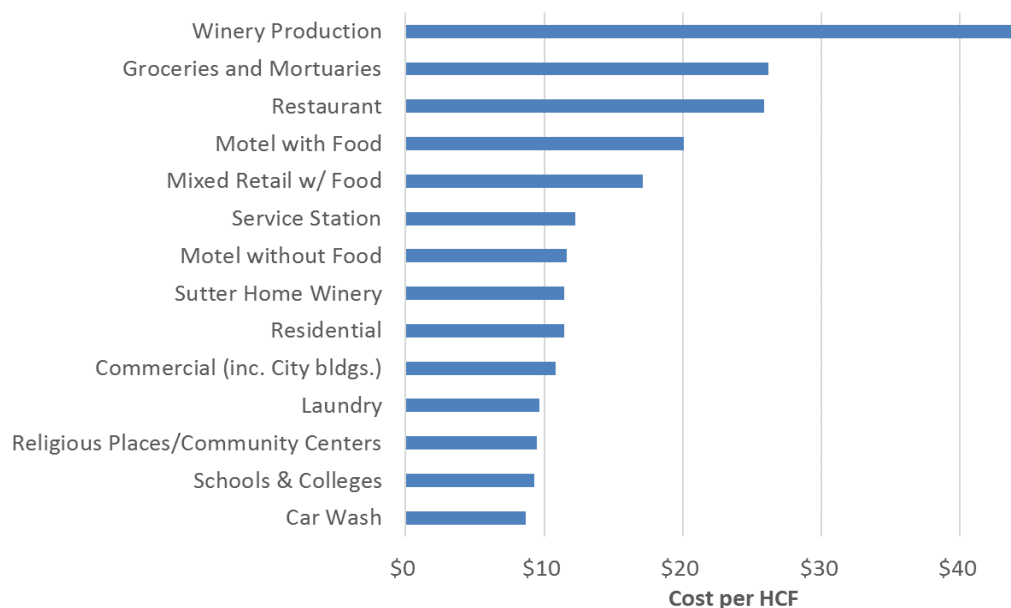
B. Unit Cost by Cost Category

The allocated costs are then divided by total annual capacity from **Table 2** to determine the unit cost by flow, BOD, and TSS units of measurement. These unit costs are used to determine the cost allocated to each customer type in the next step.

4. **Determine Revenue Requirement by Customer Type** – The per unit costs are multiplied by the flow and strength characteristics of each customer category to determine the annual cost by customer type. *The unit costs determined in **Table 9** are multiplied by the flow, BOD, or TSS for each customer type. These costs are then summed to determine the total costs allocated to each customer type, as shown in **Table 10**.*

Total allocated costs to each customer category are shown in **Table 11**. Residential customers are responsible for 69% of the total costs, schools are responsible for 1% of the total costs, and non-residential customers are responsible for 30% of the total costs. Total treatment cost per hundred cubic feet is greatest for high strength customers such as winery production customers, restaurants, groceries and mortuaries, and lowest for customers such as car washes and religious places/community centers which have low strength wastewater. This data is shown graphically in **Figure 3**.

Figure 3
Cost per Hundred Cubic Feet by Customer Type



Prepared by HEC

Attachment 5

Page 16 of 23

Wastewater Rate Study, October 31, 2016

Table 10

Allocation of Costs to Flow, BOD, and SS by Customer Category

- New Rate Structure based on Flow and Strength

FY 2017

Unit Cost/Customer Category	Flow MG/Yr	BOD Klb/Yr	SS Klb/Yr	Collection			Treatment			Other			TOTAL
				Flow (\$/Mgal)	SS (\$/Klb)	SS (\$/Klb)	Flow (\$/Mgal)	BOD (\$/Klb)	SS (\$/Klb)	Flow (\$/Mgal)	BOD (\$/Klb)	SS (\$/Klb)	
Unit Cost				\$4,003.34	\$3,561.61	\$1,602.60	\$1,812.80	\$1,150.36	\$243.70	\$275.66			
Residential													
Single Family	96	160	160	\$384,800	\$342,342	\$256,941	\$290,642	\$110,573	\$39,072	\$44,196			\$1,468,566
Multi-Family	26	43	43	\$103,629	\$92,195	\$69,196	\$78,271	\$29,778	\$10,522	\$11,902			\$395,493
Mobile Homes	12	20	20	\$48,474	\$43,125	\$32,367	\$36,612	\$13,929	\$4,922	\$5,567			\$184,996
School	2	2	2	\$7,766	\$6,909	\$3,371	\$2,933	\$2,232	\$513	\$446			\$24,170
Non-Residential													
Car Wash	0	0	0	\$1,469	\$1,307	\$98	\$832	\$422	\$15	\$127			\$4,270
Religious Places/Community Centers	1	1	1	\$2,961	\$2,635	\$1,285	\$1,230	\$851	\$195	\$187			\$9,345
Commercial [1]	11	14	18	\$44,338	\$39,445	\$22,204	\$33,488	\$12,740	\$3,376	\$5,092			\$160,685
Groceries and Mortuaries	1	5	5	\$3,031	\$2,697	\$8,096	\$9,158	\$871	\$1,231	\$1,393			\$26,477
Laundry	2	2	1	\$6,109	\$5,435	\$3,059	\$2,538	\$1,755	\$465	\$386			\$19,748
Mixed Retail w/ Food	1	3	7	\$5,783	\$5,145	\$4,633	\$13,103	\$1,662	\$705	\$1,993			\$33,022
Motel with Food	4	17	20	\$15,867	\$14,117	\$26,488	\$35,954	\$4,559	\$4,028	\$5,467			\$106,480
Motel without Food	7	17	7	\$26,850	\$23,887	\$27,789	\$12,168	\$7,715	\$4,226	\$1,850			\$104,485
Restaurant	9	78	47	\$37,599	\$33,450	\$125,529	\$85,196	\$10,804	\$19,089	\$12,955			\$324,622
Napa Valley College	5	5	4	\$18,887	\$16,803	\$8,197	\$7,133	\$5,427	\$1,247	\$1,085			\$58,778
Service Station	1	1	1	\$2,320	\$2,064	\$1,394	\$2,453	\$667	\$212	\$373			\$9,483
Winery Production (Merryvale/Spottswode)	1	16	2	\$2,740	\$2,437	\$25,612	\$4,139	\$787	\$3,895	\$629			\$40,239
Sutter Home Winery	1	2	2	\$4,669	\$4,154	\$3,117	\$3,526	\$1,342	\$474	\$536			\$17,818
TOTAL	179	386	342	\$717,291	\$638,146	\$619,377	\$619,377	\$206,114	\$94,185	\$94,185			\$2,988,676

alloc cost

Source: HEC.

[1] Commercial includes City buildings.

Prepared by HEC

Attachment 5

Page 17 of 23

Wastewater Rate Study, October 31, 2016

Table 11
Calculated Cost per Hundred Cubic Feet
- New Rate Structure based on Flow and Strength

FY 2017

Customer Category	Allocated Cost	Percentage of Cost	Annual Flow (MG)	Cost per 1,000 Gallons	Cost per HCF
Residential					
Single Family	\$1,468,566	49%	96.12	\$15.28	\$11.43
Multi-Family	\$395,493	13%	25.89	\$15.28	\$11.43
Mobile Homes	\$184,996	6%	12.11	\$15.28	\$11.43
Subtotal Residential	\$2,049,055	69%	134.11	\$15.28	\$11.43
School	\$24,170	1%	1.94	\$12.46	\$9.32
Non-Residential					
Car Wash	\$4,270	0%	0.37	\$11.64	\$8.70
Religious Places/Community Centers	\$9,345	0%	0.74	\$12.63	\$9.45
Commercial [1]	\$160,685	5%	11.08	\$14.51	\$10.85
Groceries and Mortuaries	\$26,477	1%	0.76	\$34.97	\$26.16
Laundry	\$19,748	1%	1.53	\$12.94	\$9.68
Mixed Retail w/ Food	\$33,022	1%	1.44	\$22.86	\$17.10
Motel with Food	\$106,480	4%	3.96	\$26.87	\$20.10
Motel without Food	\$104,485	3%	6.71	\$15.58	\$11.65
Restaurant	\$324,622	11%	9.39	\$34.56	\$25.85
Napa Valley College	\$58,778	2%	4.72	\$12.46	\$9.32
Service Station	\$9,483	0%	0.58	\$16.36	\$12.24
Winery Production (Merryvale/Spottswode)	\$40,239	1%	0.68	\$58.80	\$43.98
Sutter Home Winery	\$17,818	1%	1.17	\$15.28	\$11.43
Subtotal Non-Residential	\$915,452	31%	43.12	\$21.23	\$15.88
TOTAL	\$2,988,676	100%	179.17	\$16.68	\$12.48

Source: HEC.

flow cost

[1] Commercial includes City buildings.

Table 12 presents the calculated rates for February 8, 2017. The total allocated costs to each customer category provide the basis for the rates. It is projected that 59% of costs will be recovered through flat monthly charges (residential and school customers, as well as base charges for non-residential customers) and 41% of costs will be recovered through consumption charges. Customers with consumption charges pay for average monthly winter water passing through the water meter, measured from January through March.

Table 13 shows the projected wastewater rate schedule through fiscal year 2027.

Prepared by HEC

Attachment 5

Page 18 of 23

Wastewater Rate Study, October 31, 2016

Table 12
Wastewater Rates Calculations for February 8, 2017
- New Rate Structure based on Flow and Strength

FY 2017

Customer Category	Billing Basis	No. Billing Units	Allocated Cost	Base 59%	Flow 41%	Annual Cost per Billing Unit		Monthly Cost	
						Base	Flow	Base	Usage per HCF
Residential									
Single Family	Unit	1,503	\$1,468,566	\$866,454	\$602,112	\$576	\$401	\$48.04	\$4.69
Multi-Family	Unit	669	\$395,493	\$233,341	\$162,152	\$349	\$242	\$29.07	\$4.69
Mobile Homes	Unit	211	\$184,996	\$109,148	\$75,848	\$517	\$359	\$43.11	\$4.69
Residential			\$2,049,055	\$1,208,943	\$840,113				
School	Student	1,437	\$24,170	\$14,260	\$9,910	\$10	\$7	\$1.40	
Non-Residential (\$ per hcf of Winter Water Use)									
Car Wash	Account	1	\$4,270	\$2,519	\$1,751	\$2,519	\$1,751	\$209.93	\$3.43
Religious Places/Community Centers	Account	13	\$9,345	\$5,513	\$3,831.32	\$424	\$295	\$35.34	\$3.72
Commercial [1]	Account	126	\$160,685	\$94,804	\$65,881	\$752	\$523	\$62.70	\$4.27
Groceries and Mortuaries	Account	3	\$26,477	\$15,621	\$10,856	\$5,207	\$3,619	\$433.93	\$10.30
Laundry	Account	1	\$19,748	\$11,651	\$8,097	\$11,651	\$8,097	\$970.94	\$3.81
Mixed Retail w/ Food	Account	3	\$33,022	\$19,483	\$13,539	\$6,494	\$4,513	\$541.20	\$6.73
Motel with Food	Account	2	\$106,480	\$62,823	\$43,657	\$31,412	\$21,828	\$2,617.64	\$7.91
Motel without Food	Account	8	\$104,485	\$61,646	\$42,839	\$7,706	\$5,355	\$642.15	\$4.59
Restaurant	Account	19	\$324,622	\$191,527	\$133,095	\$10,080	\$7,005	\$840.03	\$10.18
Napa Valley College	Account	1	\$58,778	\$34,679	\$24,099	\$34,679	\$24,099	\$2,889.93	\$3.67
Service Station	Account	5	\$9,483	\$5,595	\$3,888	\$1,119	\$778	\$93.25	\$4.82
Winery Production (Merryvale/Spottswoode)	Account	2	\$40,239	\$23,741	\$16,498	\$11,871	\$8,249	\$989.21	\$17.31
Sutter Home Winery	Account	1	\$17,818	\$10,512	\$7,305	\$10,512	\$7,305	\$876.04	\$4.50
Non-Residential and Schools			\$939,621	\$554,376	\$385,245				
TOTAL			\$2,988,676	\$1,763,319	\$1,225,357				

Source: City of St. Helena, California Department of Education Educational Demographics Unit, and HEC.

[1] Commercial includes City buildings.

Prepared by HEC

Attachment 5

Page 19 of 23

Wastewater Rate Study, October 31, 2016

Table 13
Projected Wastewater Rate Schedule
- New Rate Structure based on Flow and Strength

Customer Category	Billing Period Beginning *----->	Fiscal Year Ending											2027
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		
Residential	monthly per unit	\$48.04	\$55.24	\$70.13	\$73.03	\$74.18	\$75.23	\$79.74	\$83.28	\$86.84	\$90.13	\$93.20	
	monthly per unit	\$29.07	\$33.42	\$42.43	\$44.18	\$44.88	\$45.52	\$48.24	\$50.39	\$52.54	\$54.53	\$56.39	
	monthly per unit	\$43.11	\$49.57	\$62.93	\$65.53	\$66.56	\$67.51	\$71.55	\$74.73	\$77.93	\$80.87	\$83.63	
	per HCF	\$4.69	\$5.39	\$6.84	\$7.12	\$7.23	\$7.34	\$7.78	\$8.12	\$8.47	\$8.79	\$9.09	
	monthly per student	\$1.40	\$1.62	\$2.15	\$2.21	\$2.26	\$2.28	\$2.41	\$2.52	\$2.62	\$2.71	\$2.80	
Non-Residential	monthly per account	\$209.93	\$243.25	\$328.36	\$336.45	\$343.13	\$346.45	\$365.12	\$382.42	\$397.39	\$411.10	\$423.62	
	monthly per account	\$35.34	\$40.85	\$54.06	\$55.68	\$56.71	\$57.34	\$60.54	\$63.35	\$65.91	\$68.25	\$70.41	
	monthly per account	\$62.70	\$72.20	\$92.64	\$96.19	\$97.78	\$99.09	\$104.91	\$109.63	\$114.25	\$118.51	\$122.47	
	monthly per account	\$433.93	\$492.12	\$552.00	\$595.15	\$599.41	\$613.71	\$658.17	\$683.48	\$717.89	\$749.95	\$781.06	
	monthly per account	\$970.94	\$1,121.45	\$1,475.85	\$1,522.21	\$1,549.87	\$1,567.76	\$1,656.08	\$1,732.56	\$1,802.98	\$1,867.65	\$1,927.33	
	monthly per account	\$541.20	\$617.30	\$730.21	\$775.32	\$783.78	\$799.17	\$852.68	\$887.69	\$929.47	\$968.22	\$1,005.31	
	monthly per account	\$2,617.64	\$2,978.36	\$3,444.90	\$3,681.23	\$3,715.59	\$3,795.12	\$4,057.95	\$4,220.11	\$4,424.57	\$4,614.57	\$4,797.54	
	monthly per account	\$840.03	\$952.80	\$993.28	\$972.87	\$987.93	\$1,002.28	\$1,026.67	\$1,099.72	\$1,157.47	\$1,201.49	\$1,242.73	
	monthly per account	\$642.15	\$820.03	\$1,070.03	\$1,153.27	\$1,161.63	\$1,189.23	\$1,275.22	\$1,324.33	\$1,390.92	\$1,452.93	\$1,513.11	
	monthly per account	\$2,889.93	\$3,341.62	\$4,436.77	\$4,565.57	\$4,651.20	\$4,701.87	\$4,962.71	\$5,194.00	\$5,402.37	\$5,593.58	\$5,769.41	
	monthly per account	\$93.25	\$107.06	\$134.07	\$140.12	\$142.20	\$144.37	\$153.21	\$159.92	\$166.89	\$173.33	\$179.38	
	monthly per account	\$989.21	\$1,116.93	\$1,199.98	\$1,310.53	\$1,315.85	\$1,351.87	\$1,455.91	\$1,508.79	\$1,588.84	\$1,663.63	\$1,736.98	
	monthly per account	\$876.04	\$1,007.39	\$1,278.85	\$1,331.67	\$1,352.66	\$1,371.89	\$1,454.02	\$1,518.68	\$1,583.65	\$1,643.55	\$1,699.58	
	per HCF	\$3.43	\$3.97	\$5.36	\$5.49	\$5.60	\$5.65	\$5.96	\$6.24	\$6.48	\$6.71	\$6.91	
	per HCF	\$3.72	\$4.30	\$5.69	\$5.86	\$5.97	\$6.03	\$6.37	\$6.67	\$6.94	\$7.18	\$7.41	
	per HCF	\$4.27	\$4.92	\$6.31	\$6.55	\$6.66	\$6.75	\$7.15	\$7.47	\$7.78	\$8.07	\$8.34	
	per HCF	\$10.30	\$11.68	\$13.10	\$14.12	\$14.22	\$14.56	\$15.62	\$16.22	\$17.03	\$17.79	\$18.53	
per HCF	\$3.81	\$4.40	\$5.79	\$5.97	\$6.08	\$6.15	\$6.50	\$6.80	\$7.07	\$7.33	\$7.56		
per HCF	\$6.73	\$7.68	\$9.08	\$9.64	\$9.75	\$9.94	\$10.60	\$11.04	\$11.56	\$12.04	\$12.50		
per HCF	\$7.91	\$9.00	\$10.41	\$11.12	\$11.23	\$11.47	\$12.26	\$12.75	\$13.37	\$13.94	\$14.50		
per HCF	\$4.59	\$5.27	\$6.67	\$6.95	\$7.06	\$7.16	\$7.59	\$7.93	\$8.27	\$8.58	\$8.88		
per HCF	\$10.18	\$11.54	\$12.96	\$13.97	\$14.07	\$14.41	\$15.45	\$16.04	\$16.85	\$17.60	\$18.33		
per HCF	\$3.67	\$4.24	\$5.63	\$5.79	\$5.90	\$5.97	\$6.30	\$6.59	\$6.86	\$7.10	\$7.32		
per HCF	\$4.82	\$5.53	\$6.93	\$7.24	\$7.35	\$7.46	\$7.92	\$8.26	\$8.62	\$8.95	\$9.27		
per HCF	\$17.31	\$19.55	\$21.00	\$22.93	\$23.03	\$23.66	\$25.48	\$26.40	\$27.80	\$29.11	\$30.40		
per HCF	\$4.50	\$5.17	\$6.57	\$6.84	\$6.95	\$7.04	\$7.47	\$7.80	\$8.13	\$8.44	\$8.73		
Source: HFC													DATE: 10/20/2024

Source: HEC

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

[1] Commercial includes City buildings.

Prepared by HEC

Attachment 5

Page 20 of 23

Wastewater Rate Study, October 31, 2016

Special user rates are calculated for new industries moving to the City that have special requirements attached to their operating permit with the City. Municipal code 13.20.020E would have to be revised from the current formula of $A(V)+B(BOD)+C(SS)+D$ to remove D, which is no longer applicable under the new rate structure. In the special user charges formula:

V is volume of water in millions of gallons

BOD is biochemical oxygen demand in pounds

SS is total suspended solids in pounds

A is allocated cost for each million gallons of flow

B is allocated cost per pound for biochemical oxygen demand

C is allocated cost per pound of total suspended solids

D is charge for water meter size

Table 14 shows the calculated special user rates through fiscal year 2022.

Table 14
Special User Rates

Municipal Code 13.20.020 E	Current	Fiscal Year Ending					
		2017	2018	2019	2020	2021	2022
Billing Period Beginning * ---->		2/8/2017	11/8/2017	11/8/2018	11/8/2019	11/8/2020	11/8/2021
[1]							
A (per million gallons of flow)	\$2,107.21	\$8,715.32	\$10,206.65	\$14,910.59	\$14,979.88	\$15,353.37	\$15,416.45
B (per pound of BOD)	\$1.02	\$1.85	\$2.07	\$2.08	\$2.32	\$2.32	\$2.39
C (per pound of SS)	\$1.17	\$2.09	\$2.34	\$2.35	\$2.62	\$2.62	\$2.71

Source: City of St. Helena and HEC.

special

* Dates reflect the current billing cycle; if the billing cycle date changes so will these effective dates.

[1] Current rates were set July 2011.

CASH FLOW

Table 15 shows the projected cash flow for the wastewater fund and **Figure 4** demonstrates cash balances with and without rate increases. With adoption of the calculated rates it is anticipated that the City will be able to meet all wastewater enterprise fund obligations, including existing and potential debt service coverage requirements, and achieve at least six months of operating expenses in cash reserves in each year of the projection. The cash flow table demonstrates that a debt service coverage ratio of at least 1.20 will be met. In addition, the City may be able to designate (put aside) up to \$1.7 million by fiscal year ending 2022, and \$3.8 million by fiscal year ending 2027 for future cash funding of system rehabilitation.

Prepared by HEC

Attachment 5

Page 21 of 23

Wastewater Rate Study, October 31, 2016

Table 15
Projected Cash Flow

Revenues and Expenses	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
<i>New EDUs</i>											
Operating Revenues											
Charges For Services	\$2,533,343	\$3,282,705	\$3,996,014	\$4,410,951	\$4,520,363	\$4,589,140	\$4,802,027	\$5,039,172	\$5,259,709	\$5,472,228	\$5,670,901
Growth in Services		\$4,850	\$5,578	\$7,081	\$7,373	\$7,489	\$7,596	\$8,050	\$8,408	\$8,768	\$9,100
Total Sewer Sales	\$2,533,343	\$3,287,555	\$4,001,591	\$4,418,032	\$4,527,736	\$4,596,629	\$4,809,622	\$5,047,222	\$5,268,118	\$5,480,997	\$5,680,001
Investment Earnings	\$4,615	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sewer Connection Fee	\$900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Revenues	\$2,538,858	\$3,287,555	\$4,001,591	\$4,418,032	\$4,527,736	\$4,596,629	\$4,809,622	\$5,047,222	\$5,268,118	\$5,480,997	\$5,680,001
Operating Expenses											
	\$1,820,292	\$1,973,928	\$2,246,507	\$2,140,652	\$2,260,874	\$2,478,583	\$2,524,375	\$2,668,756	\$2,822,367	\$2,985,876	\$3,160,007
Operating Revenue before Capital Improvements and Debt Service	\$718,566	\$1,313,627	\$1,755,084	\$2,277,380	\$2,266,862	\$2,118,047	\$2,285,247	\$2,378,466	\$2,445,751	\$2,495,120	\$2,519,994
Debt Service											
Existing Debt	\$252,876	\$253,904	\$256,030	\$252,890	\$253,823	\$255,392	\$250,938	\$251,669	\$252,022	\$252,310	\$251,490
WWTP New Debt - Phase 1	\$0	\$0	\$592,124	\$592,124	\$592,124	\$592,124	\$592,124	\$592,124	\$592,124	\$592,124	\$592,124
WWTP New Debt - Phase 2	\$0	\$0	\$0	\$0	\$0	\$34,951	\$34,951	\$34,951	\$34,951	\$34,951	\$34,951
Total Debt Service	\$252,876	\$253,904	\$848,154	\$845,014	\$845,947	\$882,467	\$875,012	\$878,744	\$879,097	\$879,384	\$878,565
<i>Debt Service Coverage [1]</i>	2.84	5.17	2.07	2.70	2.68	2.40	2.60	2.71	2.78	2.84	2.87
System Rehabilitation	\$356,700	\$391,800	\$459,500	\$532,400	\$560,300	\$626,600	\$690,300	\$712,900	\$732,900	\$775,900	\$797,200
Net Revenues (Deficit)	\$108,989	\$667,923	\$447,430	\$899,967	\$860,615	\$608,980	\$716,935	\$786,822	\$833,754	\$839,836	\$844,230
Beginning Fund Balance [2]	\$1,110,075	\$1,054,742	\$1,687,578	\$2,202,662	\$2,948,848	\$3,982,496	\$3,679,166	\$1,892,423	\$3,156,634	\$4,487,090	\$5,669,380
Net Revenues (Deficit)	\$108,989	\$667,923	\$447,430	\$899,967	\$860,615	\$608,980	\$716,935	\$786,822	\$833,754	\$839,836	\$844,230
Cash Funded Capital Improvements	(\$164,323)	(\$35,087)	\$0	(\$153,781)	\$0	\$0	(\$154,028)	\$0	\$0	\$0	\$0
Add Back System Rehabilitation	\$0	\$0	\$67,654	\$0	\$289,417	\$287,386	\$0	\$477,388	\$496,702	\$342,454	\$546,224
Replace WRF Operations Building and Shop	\$0	\$0	\$0	\$0	(\$116,384)	(\$1,199,695)	(\$2,349,650)	\$0	\$0	\$0	\$0
Ending Fund Balance	\$1,054,742	\$1,687,578	\$2,202,662	\$2,948,848	\$3,982,496	\$3,679,166	\$1,892,423	\$3,156,634	\$4,487,090	\$5,669,380	\$7,059,834
<i>Months of Operating Expenses in Reserve</i>	7	10	12	17	21	18	9	14	19	23	27
Designated Balance [4]	\$0	\$0	\$0	\$800,000	\$1,700,000	\$1,700,000	\$1,700,000	\$1,700,000	\$1,700,000	\$2,600,000	\$3,800,000
Undesignated Balance	\$1,054,742	\$1,687,578	\$2,202,662	\$2,148,848	\$2,282,496	\$1,979,166	\$197,423	\$1,456,634	\$2,787,090	\$3,069,380	\$3,259,834
<i>Months of Operating Expenses in Reserve</i>	7	10	12	12	12	10	1	7	12	12	12
Target Operating Reserves [3]	\$1,820,292	\$1,973,928	\$2,246,507	\$2,140,652	\$2,260,874	\$2,478,583	\$2,524,375	\$2,668,756	\$2,822,367	\$2,985,876	\$3,160,007

Source: HEC.

[1] Debt service coverage should be at least 1.20.

[2] Estimated beginning balance for the operating and capital funds combined per the City 2016/17 Budget.

[3] Minimum six months and target balance is one year of operating expenses.

[4] Designation for future system rehabilitation costs in new, separate fund.

Prepared by HEC

Attachment 5

Page 22 of 23

Wastewater Rate Study, October 31, 2016

Figure 4
Projected Wastewater Cash Balances

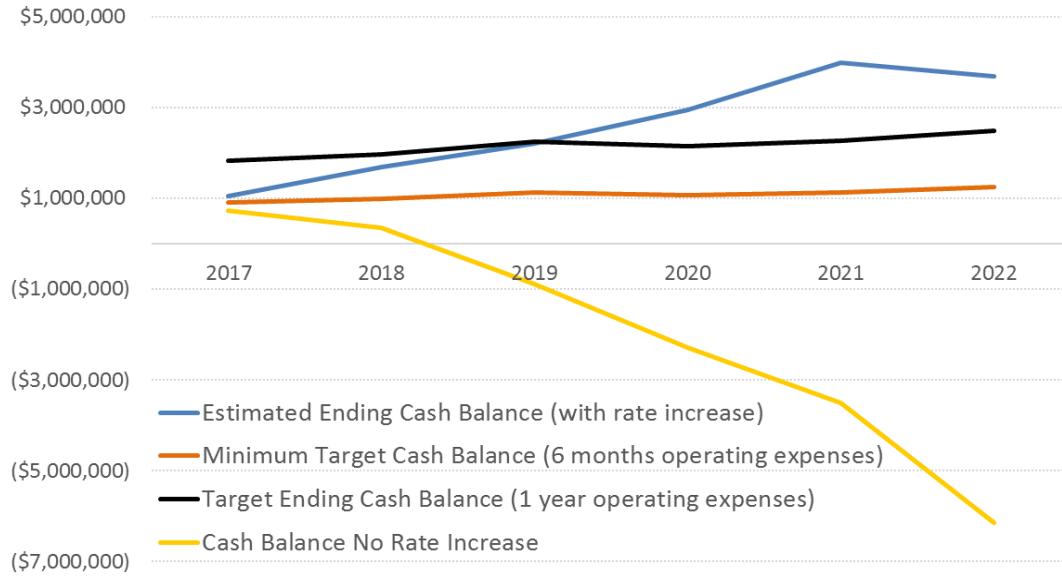


Table 16 on the following page shows the projected cash flow by fund.

Prepared by HEC

Attachment 5

Page 23 of 23

Wastewater Rate Study, October 31, 2016

Table 16
Projected Wastewater Fund Balances

Fund	Fiscal Year Ending										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Operating Fund 571											
Beginning Balance	(\$79,805)	\$29,184	\$697,108	\$1,212,192	\$2,112,159	\$3,262,191	\$3,658,557	\$1,875,492	\$2,389,702	\$3,720,159	\$4,902,449
Net Revenue	\$108,989	\$667,923	\$447,430	\$899,967	\$860,615	\$608,980	\$716,935	\$786,822	\$833,754	\$839,836	\$844,230
Add Back System Rehabilitation	\$0	\$0	\$67,654	\$0	\$289,417	\$287,386	\$0	\$477,388	\$496,702	\$342,454	\$546,224
Transfer Out to Capital Fund	\$0	\$0	\$0	\$0	\$0	(\$500,000)	(\$2,500,000)	(\$750,000)	\$0	\$0	\$0
Ending Balance	\$29,184	\$697,108	\$1,212,192	\$2,112,159	\$3,262,191	\$3,658,557	\$1,875,492	\$2,389,702	\$3,720,159	\$4,902,449	\$6,292,902
Capital Fund 773											
Beginning Balance	\$1,189,880	\$1,025,557	\$990,470	\$990,470	\$836,689	\$720,305	\$20,610	\$16,932	\$766,932	\$766,932	\$766,932
Transfer in from Operating Fund	\$0	\$0	\$0	\$0	\$0	\$500,000	\$2,500,000	\$750,000	\$0	\$0	\$0
Capital Projects Expenses [1]	(\$164,323)	(\$35,087)	\$0	(\$153,781)	(\$116,384)	(\$1,199,695)	(\$2,503,678)	\$0	\$0	\$0	\$0
Ending Balance	\$1,025,557	\$990,470	\$990,470	\$836,689	\$720,305	\$20,610	\$16,932	\$766,932	\$766,932	\$766,932	\$766,932
Combined Operating and Capital Funds	\$1,054,742	\$1,687,578	\$2,202,662	\$2,948,848	\$3,982,496	\$3,679,166	\$1,892,423	\$3,156,634	\$4,487,090	\$5,669,380	\$7,059,834
Impact Fee Fund 774											
Beginning Balance	\$698,783	\$676,115	\$675,355	\$674,546	\$673,683	\$672,767	\$671,793	\$670,760	\$669,665	\$668,505	\$633,753
Fee Revenues [2]	\$4,700	\$4,819	\$4,941	\$5,065	\$5,193	\$5,325	\$5,459	\$5,597	\$5,739	\$5,884	\$6,032
Expenses											
Miscellaneous Maintenance Projects	(\$5,412)	(\$5,578)	(\$5,750)	(\$5,928)	(\$6,110)	(\$6,298)	(\$6,492)	(\$6,692)	(\$6,899)	(\$40,636)	(\$7,330)
Reclamation Field Improvements	(\$21,956)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Expenses	(\$27,368)	(\$5,578)	(\$5,750)	(\$5,928)	(\$6,110)	(\$6,298)	(\$6,492)	(\$6,692)	(\$6,899)	(\$40,636)	(\$7,330)
Ending Balance	\$676,115	\$675,355	\$674,546	\$673,683	\$672,767	\$671,793	\$670,760	\$669,665	\$668,505	\$663,753	\$632,455
Source: HEC											

Flow by fund

Source: HEC.

[1] Cash-funded projects only. Projects that are debt-funded are included in the operating fund.

[2] Assumes growth of 5 units per year and the current impact fee of

\$0.47 per building square foot

Fee assumed to grow 2.5% per year.

2,000 average home building square feet

\$940 Average fee per unit

The impact fee needs to be revised for these CIP costs.

Prepared by HEC

Attachment 5

Attachment 5

ATTACHMENT A
WASTEWATER RATE STUDY
SUPPORT TABLES

Attachment 5

Attachment 5

Table A-1
City of St. Helena Wastewater Rate Study
Historical Wastewater Fund Financial Performance

Revenues and Expenses	Actual Financials for Fiscal Year Ending					Avg. Annual Percentage Change
	2011	2012	2013	2014	2015	
OPERATING						
Revenues						
Charges For Services	\$1,616,414	\$2,008,709	\$2,050,983	\$2,143,947	\$2,208,105	8.1%
Miscellaneous	\$1,098	\$1,200	\$17,708	\$8,925	\$32,759	133.7%
Subtotal Revenues	\$1,617,512	\$2,009,909	\$2,068,691	\$2,152,872	\$2,240,864	8.5%
Expenses						
Personnel	\$842,317	\$829,804	\$795,479	\$827,027	\$938,472	2.7%
Contracted Services	\$68,782	\$806	\$0	\$0	\$0	-100.0%
Fuel	\$0	\$0	\$0	\$0	\$0	n.a.
Utilities	\$80,906	\$74,339	\$85,819	\$85,755	\$87,970	2.1%
Other Supplies and Expenses	\$313,342	\$327,119	\$361,451	\$429,526	\$525,742	13.8%
Depreciation and Amortization	\$472,561	\$483,070	\$473,784	\$473,784	\$713,189	10.8%
Subtotal Expenses	\$1,777,908	\$1,715,138	\$1,716,533	\$1,816,092	\$2,265,373	6.2%
NON OPERATING						
Gains (Loss) on Capital Asset Disposals	(\$1,169)	(\$2,762)	\$0	\$0	\$0	-100.0%
Interest and Investment Revenue	\$9,180	\$7,990	\$3,478	\$5,515	\$10,347	3.0%
Interest Expense	(\$81,081)	(\$78,070)	(\$86,521)	(\$69,139)	(\$41,398)	-15.5%
Net Operating Revenues	(\$73,070)	(\$72,842)	(\$83,043)	(\$63,624)	(\$31,051)	-19.3%
Capital Contributions	\$94,235	\$217,765	\$98,047	\$4,900	\$19,600	
Change in Net Assets	(\$139,231)	\$439,694	\$367,162	\$278,056	(\$35,960)	
Net Assets Beginning Balance	\$8,421,556	\$8,282,325	\$8,592,123	\$8,959,285	\$9,237,341	
Net Assets Ending Balance	\$8,282,325	\$8,722,019	\$8,959,285	\$9,237,341	\$9,201,381	

Source: City of St. Helena.

cafr

Attachment 5

Table A-2
City of St. Helena Wastewater Rate Study
Historical Revenues and Expenditures

Revenues and Expenses	Actuals Fiscal Year Ending				Estimated 2016	Budgeted 2017
	2012	2013	2014	2015		
OPERATING FUND						
Revenues						
Investment Earnings	\$1,380	\$1,532	\$2,697	\$1,000	\$4,500	\$4,615
Annexation Fees	\$500	\$3,428	\$8,925	\$0	\$0	\$0
Rates	\$2,008,709	\$2,050,983	\$2,143,947	\$2,151,615	\$2,260,735	\$2,105,132
Sewer Connection Fee	\$0	\$0	\$4,900	\$0	\$0	\$900
Subtotal Revenues	\$2,010,589	\$2,055,942	\$2,160,470	\$2,152,615	\$2,265,235	\$2,110,647
Expenses						
Salaries & Benefits	\$829,613	\$795,480	\$827,047	\$896,865	\$987,778	\$1,071,519
Services	\$231,717	\$194,235	\$220,039	\$406,364	\$822,159	\$319,189
Supplies	\$48,460	\$55,452	\$80,836	\$41,318	\$91,641	\$75,942
Maintenance	\$81,882	\$72,003	\$68,000	\$118,625	\$167,473	\$130,513
Taxes, Insurances & Contribs.	\$76,885	\$54,533	\$64,460	\$73,328	\$122,416	\$105,967
Capital	\$22,631	\$26,001	\$58,925	\$817	\$170,139	\$101,700
Transfers	\$2,763	\$200,000	\$100,000	\$1,541,664	\$352,634	\$0
Debt	\$78,071	\$86,521	\$69,140	\$41,398	\$258,105	\$252,877
Subtotal Expenses	\$1,372,022	\$1,484,224	\$1,488,447	\$3,120,379	\$2,972,345	\$2,057,707
Operating Fund Net Revenues	\$638,567	\$571,718	\$672,023	(\$967,764)	(\$707,110)	\$52,940
CAPITAL FUND						
Revenues						
Transfers In	\$86,000	\$609,793	\$100,000	\$1,541,664	\$389,087	\$0
Subtotal Revenues	\$86,000	\$609,793	\$100,000	\$1,541,664	\$389,087	\$0
Expenses						
Salaries & Benefits	\$118,932	\$6,737	\$0	\$0	\$0	\$0
Professional Services	\$61,042	\$57,831	\$69,810	\$502,161	\$0	\$0
Advertising	\$344	\$0	\$0	\$803	\$0	\$0
Equipment Rental	\$2,345	\$11,727	\$0	\$0	\$0	\$0
Supplies	\$2,999	\$741	\$4,315	\$464	\$0	\$0
Maintenance	\$8,172	\$0	\$0	\$0	\$0	\$0
Capital Imp Land	\$21,993	\$0	\$0	\$0	\$0	\$0
Capital Projects Budget	\$0	\$0	\$0	\$12,420	\$0	\$0
Capital Equipment	\$0	\$3,261	\$17,765	\$13,831	\$0	\$0
Capital Imp Equipment	\$73,415	\$1,056,244	\$122,351	\$19,229	\$0	\$0
Subtotal Expenses	\$289,243	\$1,136,540	\$214,241	\$548,909	\$0	\$0
Capital Fund Net Revenues	(\$203,243)	(\$526,747)	(\$114,241)	\$992,755	\$389,087	\$0
IMPACT FUND						
Revenues						
Investment Earnings	\$6,423	\$1,872	\$2,818	\$2,587	\$2,000	\$2,500
Other Revenues	\$0	\$14,281	\$0	\$30,625	\$0	\$0
Impact Fees	\$217,766	\$98,047	(\$81,929)	\$19,600	\$15,000	\$18,000
Subtotal Revenues	\$224,188	\$114,200	(\$79,111)	\$52,812	\$17,000	\$20,500
Expenses						
Transfers Out	\$86,000	\$409,793	\$0	\$0	\$0	\$0
Subtotal Expenses	\$86,000	\$409,793	\$0	\$0	\$0	\$0
Impact Fund Net Revenues	\$138,188	(\$295,593)	(\$79,111)	\$52,812	\$17,000	\$20,500

Source: City of St. Helena.

rev exp

Attachment 5

Table A-3
City of St. Helena Wastewater Rate Study
Historical Wastewater Operating Fund Expenses by Fund

Expenses	Actuals Fiscal Year Ending				Estimated	Budgeted
	2012	2013	2014	2015	2016	2017
TREATMENT						
Salaries & Benefits	\$304,386	\$283,226	\$333,535	\$311,489	\$374,936	\$383,496
Services	\$108,212	\$125,718	\$140,438	\$185,439	\$439,873	\$124,950
Supplies	\$25,216	\$40,359	\$62,141	\$22,082	\$60,285	\$44,800
Maintenance	\$71,106	\$61,752	\$54,974	\$90,803	\$145,017	\$104,787
Taxes, Insurances & Contribs.	\$8,390	\$7,793	\$14,879	\$8,557	\$17,723	\$16,000
Capital	\$22,631	\$20,729	\$58,911	\$817	\$20,305	\$100,000
Transfers	\$0	\$0	\$0	\$0	\$0	\$0
Debt	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Treatment	\$539,940	\$539,577	\$664,878	\$619,187	\$1,058,139	\$774,033
COLLECTION						
Salaries & Benefits	\$177,746	\$185,921	\$176,868	\$191,484	\$106,094	\$103,176
Services	\$1,349	\$3,295	\$2,734	\$4,437	\$3,972	\$5,170
Supplies	\$12,655	\$5,382	\$8,690	\$8,918	\$11,926	\$12,550
Maintenance	\$3,833	\$3,293	\$3,164	\$6,400	\$9,410	\$12,729
Taxes, Insurances & Contribs.	\$0	\$0	\$0	\$0	\$0	\$0
Capital	\$0	\$0	\$0	\$0	\$141,600	\$0
Transfers	\$0	\$0	\$0	\$0	\$0	\$0
Debt	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Collection	\$195,583	\$197,891	\$191,456	\$211,239	\$273,002	\$133,625
OPERATIONS						
Salaries & Benefits	\$347,482	\$326,332	\$316,644	\$393,892	\$506,748	\$584,847
Services	\$122,156	\$65,222	\$76,868	\$216,488	\$378,314	\$189,069
Supplies	\$10,590	\$9,710	\$10,005	\$10,318	\$19,430	\$18,592
Maintenance	\$6,942	\$6,959	\$9,861	\$21,422	\$13,046	\$12,997
Taxes, Insurances & Contribs.	\$68,495	\$46,740	\$49,581	\$64,771	\$104,693	\$89,967
Capital	\$0	\$5,272	\$13	\$0	\$8,234	\$1,700
Transfers	\$2,763	\$200,000	\$100,000	\$1,541,664	\$352,634	\$0
Debt	\$78,071	\$86,521	\$69,140	\$41,398	\$258,105	\$252,877
Subtotal Operations	\$636,498	\$746,756	\$632,112	\$2,289,953	\$1,641,204	\$1,150,049
Total Expenses	\$1,372,022	\$1,484,224	\$1,488,447	\$3,120,379	\$2,972,345	\$2,057,707

Source: City of St. Helena.

op exp

Attachment 5

Table A-4
City of St. Helena Wastewater Rate Study
Historical Wastewater Plant Influent Flow

Month	2013	2014	2015
<i>Total Flow (millions of gallons)</i>			
January	17.953	10.586	12.838
February	11.676	17.922	18.802
March	12.789	18.283	12.453
April	12.641	16.041	11.762
May	12.131	11.722	11.142
June	11.461	10.912	10.021
July	11.918	10.851	10.118
August	11.717	10.962	10.162
September	11.405	10.478	9.973
October	11.928	10.802	10.416
November	10.990	10.436	9.539
December	10.546	31.952	12.211
Yearly Total	147.155	170.947	139.4374

Source: City of St. Helena.

inf flow

Table A-5
City of St. Helena Wastewater Rate Study
Wastewater Capital Improvements Schedule in 2016 \$'s

Project	Notes	Total Cost Less		Fiscal Year Ending										
		Total Cost	Existing Funding	2017 Current	2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5	2023 Year 6	2024 Year 7	2025 Year 8	2026 Year 9	2027 Year 10
Estimated Project Costs (2016 \$'s)			[1]											
Sewer Collection System														
Miscellaneous Maintenance Projects		\$550,000	\$550,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$200,000	\$35,000
Replace 1% of Sewer Mains Annually		\$1,650,000	\$1,650,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Crinella Pump Station Upgrades		\$500,000	\$500,000	\$0	\$0	\$75,000	\$425,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Add Sewer Pump Stations to SCADA		\$150,000	\$150,000	\$0	\$0	\$0	\$0	\$50,000	\$100,000	\$0	\$0	\$0	\$0	\$0
Wet Weather Flow Monitoring		\$50,000	\$50,000	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Sewer System		\$50,000	\$50,000	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sewer Master Plan		\$150,000	\$150,000	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Replace Rodding Machine		\$40,000	\$40,000	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CCTV Program		\$165,000	\$165,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Subtotal Sewer Collection		\$3,305,000	\$3,305,000	\$200,000	\$250,000	\$515,000	\$625,000	\$250,000	\$300,000	\$200,000	\$200,000	\$200,000	\$365,000	\$200,000
Treatment Plant														
WWTP Upgrades Ph. 1	Funded by New Debt	\$7,474,108	\$7,474,108	\$232,108	\$700,000	\$3,271,000	\$3,271,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reclamation Field Improvements		\$142,000	\$142,000	\$142,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pond 2 & 3 Levee		\$120,000	\$120,000	\$60,000	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Facilities Automation		\$144,000	\$144,000	\$0	\$144,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Well		\$65,000	\$65,000	\$65,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sludge Removal		\$150,000	\$150,000	\$75,000	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Recycled Water Feasibility Study		\$75,000	\$75,000	\$0	\$0	\$0	\$0	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0
Temp Trailer at WRF		\$28,000	\$28,000	\$5,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$5,000	\$0	\$0	\$0
Replace WRF Operations Building and Shop	Funded by Reserves	\$3,000,000	\$3,000,000	\$0	\$0	\$0	\$0	\$100,000	\$1,000,000	\$1,900,000	\$0	\$0	\$0	\$0
Upgrade Chemical Storage Facilities		\$500,000	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$0	\$0	\$0	\$0
Phase 2 WWTP Upgrades	Funded by New Debt	\$400,000	\$400,000	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$0	\$0
Subtotal Treatment Plant		\$12,098,108	\$12,098,108	\$579,108	\$922,000	\$3,334,000	\$3,274,000	\$203,000	\$1,178,000	\$2,503,000	\$105,000	\$0	\$0	\$0
Total Estimated Project Costs (2016 \$'s)		\$15,403,108	\$15,403,108	\$779,108	\$1,172,000	\$3,849,000	\$3,899,000	\$453,000	\$1,478,000	\$2,703,000	\$305,000	\$200,000	\$365,000	\$200,000

Source: City of St. Helena and HEC.

2016 cip

[1] Total Cost Less Existing Funding = Total Cost - Existing Bonds - Existing Grants

Table A-6
City of St. Helena Wastewater Rate Study
Wastewater Capital Improvements Schedule in Future \$'s

Project	Notes		Fiscal Year Ending										
			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
		Total Cost	Current	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Estimated Project Costs (Future \$'s) [1]				Annual Increase	3.1%								
Sewer Collection System													
Miscellaneous Maintenance Projects		\$687,508	\$36,078	\$37,190	\$38,336	\$39,517	\$40,734	\$41,989	\$43,283	\$44,617	\$45,991	\$270,904	\$48,869
Replace 1% of Sewer Mains Annually		\$1,988,624	\$154,621	\$159,385	\$164,296	\$169,358	\$174,576	\$179,954	\$185,499	\$191,214	\$197,105	\$203,178	\$209,438
Crinella Pump Station Upgrades		\$561,995	\$0	\$0	\$82,148	\$479,847	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Add Sewer Pump Stations to SCADA		\$178,161	\$0	\$0	\$0	\$0	\$58,192	\$119,970	\$0	\$0	\$0	\$0	\$0
Wet Weather Flow Monitoring		\$54,765	\$0	\$0	\$54,765	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Sewer System		\$53,128	\$0	\$53,128	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sewer Master Plan		\$164,296	\$0	\$0	\$164,296	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Replace Rodding Machine		\$43,812	\$0	\$0	\$43,812	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CCTV Program		\$198,862	\$15,462	\$15,939	\$16,430	\$16,936	\$17,458	\$17,995	\$18,550	\$19,121	\$19,711	\$20,318	\$20,944
Subtotal Sewer Collection		\$3,931,152	\$206,162	\$265,642	\$564,083	\$705,658	\$290,959	\$359,909	\$247,332	\$254,952	\$262,807	\$494,399	\$279,250
Treatment Plant													
WWTP Upgrades Ph. 1	Funded by New Debt	\$8,258,933	\$239,259	\$743,798	\$3,582,746	\$3,693,130	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reclamation Field Improvements		\$146,375	\$146,375	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pond 2 & 3 Levee		\$127,567	\$61,849	\$0	\$65,718	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Facilities Automation		\$153,010	\$0	\$153,010	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Well		\$67,003	\$67,003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sludge Removal		\$157,003	\$77,311	\$79,693	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Recycled Water Feasibility Study		\$89,977	\$0	\$0	\$0	\$0	\$0	\$89,977	\$0	\$0	\$0	\$0	\$0
Temp Trailer at WRF		\$32,189	\$5,154	\$3,188	\$3,286	\$3,387	\$3,492	\$3,599	\$3,710	\$6,374	\$0	\$0	\$0
Replace WRF Operations Building and Shop	Funded by Reserves	\$3,665,729	\$0	\$0	\$0	\$0	\$116,384	\$1,199,695	\$2,349,650	\$0	\$0	\$0	\$0
Upgrade Chemical Storage Facilities		\$618,329	\$0	\$0	\$0	\$0	\$0	\$0	\$618,329	\$0	\$0	\$0	\$0
Phase 2 WWTP Upgrades	Funded by New Debt	\$487,495	\$0	\$0	\$0	\$0	\$116,384	\$119,970	\$123,666	\$127,476	\$0	\$0	\$0
Subtotal Treatment Plant		\$13,803,610	\$596,950	\$979,688	\$3,651,751	\$3,696,517	\$236,259	\$1,413,241	\$3,095,354	\$133,850	\$0	\$0	\$0
Total Estimated Project Costs (Future \$'s)		\$17,734,763	\$803,112	\$1,245,330	\$4,215,833	\$4,402,174	\$527,219	\$1,773,150	\$3,342,686	\$388,801	\$262,807	\$494,399	\$279,250
Total Estimated Project Costs (2016 \$'s)		\$15,403,108	\$779,108	\$1,172,000	\$3,849,000	\$3,899,000	\$453,000	\$1,478,000	\$2,703,000	\$305,000	\$200,000	\$365,000	\$200,000
Total Estimated Project Costs (Future \$'s)		\$17,734,763	\$803,112	\$1,245,330	\$4,215,833	\$4,402,174	\$527,219	\$1,773,150	\$3,342,686	\$388,801	\$262,807	\$494,399	\$279,250

Source: City of St. Helena and HEC.

future cip

[1] Estimated costs increased by historical ENR Construction Cost Index 20 year average increase.

Table A-7
City of St. Helena Wastewater Rate Study
Existing Customers Share of CIP Costs in 2016 \$'s

		Percent	Percent Share		Fiscal Year Ending										
	Funding	Share Existing	Existing Customers	Total Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Project	Source	Customers	in Rate Model		Current	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Estimated Project Costs (2016 \$'s)															
Sewer Collection System															
Miscellaneous Maintenance Projects	Cash	85%	85%	\$467,500	\$29,750	\$29,750	\$29,750	\$29,750	\$29,750	\$29,750	\$29,750	\$29,750	\$29,750	\$170,000	\$29,750
Replace 1% of Sewer Mains Annually	Cash	100%	100%	\$1,650,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Crinella Pump Station Upgrades	Cash	100%	100%	\$500,000	\$0	\$0	\$75,000	\$425,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Add Sewer Pump Stations to SCADA	Cash	100%	100%	\$150,000	\$0	\$0	\$0	\$0	\$50,000	\$100,000	\$0	\$0	\$0	\$0	\$0
Wet Weather Flow Monitoring	Ops Cash	100%	100%	\$50,000	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Sewer System	Ops Cash	100%	100%	\$50,000	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sewer Master Plan	Ops Cash	100%	100%	\$150,000	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Replace Rodding Machine	Cash	100%	100%	\$40,000	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CCTV Program	Ops Cash	100%	100%	\$165,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Subtotal Collection System				\$3,222,500	\$194,750	\$244,750	\$509,750	\$619,750	\$244,750	\$294,750	\$194,750	\$194,750	\$194,750	\$335,000	\$194,750
Treatment Plant															
WWTP Upgrades Ph. 1	Debt	100%	100%	\$7,474,108	\$232,108	\$700,000	\$3,271,000	\$3,271,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reclamation Field Improvements	Cash	85%	85%	\$120,700	\$120,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pond 2 & 3 Levee	Cash	100%	100%	\$120,000	\$60,000	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Facilities Automation	Cash	100%	100%	\$144,000	\$0	\$144,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Well	Cash	100%	100%	\$65,000	\$65,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sludge Removal	Cash	100%	100%	\$150,000	\$75,000	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Recycled Water Feasibility Study	Ops Cash	100%	100%	\$75,000	\$0	\$0	\$0	\$0	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0
Temp Trailer at WRF	Cash	100%	100%	\$28,000	\$5,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$5,000	\$0	\$0	\$0
Replace WRF Operations Building and Shop	Reserves	100%	100%	\$3,000,000	\$0	\$0	\$0	\$0	\$100,000	\$1,000,000	\$1,900,000	\$0	\$0	\$0	\$0
Upgrade Chemical Storage Facilities	Cash	100%	100%	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$0	\$0	\$0	\$0
Phase 2 WWTP Upgrades	Debt	100%	100%	\$400,000	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$0	\$0
Subtotal Treatment				\$12,076,808	\$557,808	\$922,000	\$3,334,000	\$3,274,000	\$203,000	\$1,178,000	\$2,503,000	\$105,000	\$0	\$0	\$0
Total Estimated Project Costs (2016 \$'s)				\$15,299,308	\$752,558	\$1,166,750	\$3,843,750	\$3,893,750	\$447,750	\$1,472,750	\$2,697,750	\$299,750	\$194,750	\$335,000	\$194,750
Cash - Capital Fund				\$3,935,200	\$505,450	\$401,750	\$357,750	\$607,750	\$232,750	\$282,750	\$682,750	\$184,750	\$179,750	\$320,000	\$179,750
Cash - Operations Fund				\$490,000	\$15,000	\$65,000	\$215,000	\$15,000	\$15,000	\$90,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Debt - Capital Fund				\$7,874,108	\$232,108	\$700,000	\$3,271,000	\$3,271,000	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$0	\$0
Reserves				\$3,000,000	\$0	\$0	\$0	\$0	\$100,000	\$1,000,000	\$1,900,000	\$0	\$0	\$0	\$0
Total				\$15,299,308	\$752,558	\$1,166,750	\$3,843,750	\$3,893,750	\$447,750	\$1,472,750	\$2,697,750	\$299,750	\$194,750	\$335,000	\$194,750

Source: City of St. Helena.

2016 exist share

Table A-8
City of St. Helena Wastewater Rate Study
Existing Customers Share of CIP Costs in Future \$'s

Project	Funding Source	Percent Share Existing Customers	Percent Share Existing Customers in Rate Model	Total Cost	Fiscal Year Ending										
					2017 Current	2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5	2023 Year 6	2024 Year 7	2025 Year 8	2026 Year 9	2027 Year 10
Estimated Project Costs (Future \$'s) [1]					Annual Increase	3.1%									
Sewer Collection System															
Miscellaneous Maintenance Projects	Cash	85%	85%	\$584,382	\$30,667	\$31,611	\$32,585	\$33,589	\$34,624	\$35,691	\$36,791	\$37,924	\$39,093	\$230,268	\$41,538
Replace 1% of Sewer Mains Annually	Cash	100%	100%	\$1,988,624	\$154,621	\$159,385	\$164,296	\$169,358	\$174,576	\$179,954	\$185,499	\$191,214	\$197,105	\$203,178	\$209,438
Crinella Pump Station Upgrades	Cash	100%	100%	\$561,995	\$0	\$0	\$82,148	\$479,847	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Add Sewer Pump Stations to SCADA	Cash	100%	100%	\$178,161	\$0	\$0	\$0	\$0	\$58,192	\$119,970	\$0	\$0	\$0	\$0	\$0
Wet Weather Flow Monitoring	Ops Cash	100%	100%	\$54,765	\$0	\$0	\$54,765	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Update GIS Maps of Sewer System	Ops Cash	100%	100%	\$53,128	\$0	\$53,128	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sewer Master Plan	Ops Cash	100%	100%	\$164,296	\$0	\$0	\$164,296	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Replace Rodding Machine	Cash	100%	100%	\$43,812	\$0	\$0	\$43,812	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CCTV Program	Ops Cash	100%	100%	\$198,862	\$15,462	\$15,939	\$16,430	\$16,936	\$17,458	\$17,995	\$18,550	\$19,121	\$19,711	\$20,318	\$20,944
Subtotal Collection System				\$3,828,026	\$200,750	\$260,064	\$558,332	\$699,730	\$284,849	\$353,610	\$240,839	\$248,259	\$255,908	\$453,764	\$271,920
Treatment Plant															
WWTP Upgrades Ph. 1	Debt	100%	100%	\$8,258,933	\$239,259	\$743,798	\$3,582,746	\$3,693,130	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reclamation Field Improvements	Cash	85%	85%	\$124,419	\$124,419	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pond 2 & 3 Levee	Cash	100%	100%	\$127,567	\$61,849	\$0	\$65,718	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Facilities Automation	Cash	100%	100%	\$153,010	\$0	\$153,010	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Well	Cash	100%	100%	\$67,003	\$67,003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sludge Removal	Cash	100%	100%	\$157,003	\$77,311	\$79,693	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Recycled Water Feasibility Study	Ops Cash	100%	100%	\$89,977	\$0	\$0	\$0	\$0	\$0	\$89,977	\$0	\$0	\$0	\$0	\$0
Temp Trailer at WRF	Cash	100%	100%	\$32,189	\$5,154	\$3,188	\$3,286	\$3,387	\$3,492	\$3,599	\$3,710	\$6,374	\$0	\$0	\$0
Replace WRF Operations Building and Shop	Reserves	100%	100%	\$3,665,729	\$0	\$0	\$0	\$0	\$116,384	\$1,199,695	\$2,349,650	\$0	\$0	\$0	\$0
Upgrade Chemical Storage Facilities	Cash	100%	100%	\$618,329	\$0	\$0	\$0	\$0	\$0	\$0	\$618,329	\$0	\$0	\$0	\$0
Phase 2 WWTP Upgrades	Debt	100%	100%	\$487,495	\$0	\$0	\$0	\$0	\$116,384	\$119,970	\$123,666	\$127,476	\$0	\$0	\$0
Subtotal Treatment				\$13,781,654	\$574,994	\$979,688	\$3,651,751	\$3,696,517	\$236,259	\$1,413,241	\$3,095,354	\$133,850	\$0	\$0	\$0
Total Estimated Project Costs (Future \$'s)				\$17,609,680	\$775,744	\$1,239,752	\$4,210,083	\$4,396,247	\$521,108	\$1,766,852	\$3,336,193	\$382,109	\$255,908	\$453,764	\$271,920
2016 \$'s															
Cash - Capital Fund				\$3,935,200	\$505,450	\$401,750	\$357,750	\$607,750	\$232,750	\$282,750	\$682,750	\$184,750	\$179,750	\$320,000	\$179,750
Cash - Operations Fund				\$490,000	\$15,000	\$65,000	\$215,000	\$15,000	\$15,000	\$90,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Debt - Capital Fund				\$7,874,108	\$232,108	\$700,000	\$3,271,000	\$3,271,000	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$0	\$0
Reserves				\$3,000,000	\$0	\$0	\$0	\$0	\$100,000	\$1,000,000	\$1,900,000	\$0	\$0	\$0	\$0
Total				\$15,299,308	\$752,558	\$1,166,750	\$3,843,750	\$3,893,750	\$447,750	\$1,472,750	\$2,697,750	\$299,750	\$194,750	\$335,000	\$194,750
Future \$'s															
Cash - Capital Fund				\$4,636,494	\$521,023	\$426,887	\$391,846	\$686,181	\$270,883	\$339,214	\$844,328	\$235,512	\$236,198	\$433,446	\$250,976
Cash - Operations Fund				\$561,029	\$15,462	\$69,067	\$235,491	\$16,936	\$17,458	\$107,973	\$18,550	\$19,121	\$19,711	\$20,318	\$20,944
Debt - Capital Fund				\$8,746,428	\$239,259	\$743,798	\$3,582,746	\$3,693,130	\$116,384	\$119,970	\$123,666	\$127,476	\$0	\$0	\$0
Reserves				\$3,665,729	\$0	\$0	\$0	\$0	\$116,384	\$1,199,695	\$2,349,650	\$0	\$0	\$0	\$0
Total				\$17,609,680	\$775,744	\$1,239,752	\$4,210,083	\$4,396,247	\$521,108	\$1,766,852	\$3,336,193	\$382,109	\$255,908	\$453,764	\$271,920

Source: City of St. Helena.

fut exist share

[1] Estimated costs increased by historical ENR Construction Cost Index 20 year average increase.

Attachment 5

Table A-9
City of St. Helena Wastewater Rate Study
Existing Wastewater Debt Service Schedule

Fiscal Year Ending	Principal	Interest	Total	Remaining Principal
2015	\$126,522	\$125,841	\$252,363	\$3,063,478
2016	\$133,696	\$121,538	\$255,233	\$2,929,783
2017	\$135,870	\$117,007	\$252,876	\$2,793,913
2018	\$141,957	\$111,947	\$253,904	\$2,651,957
2019	\$149,130	\$106,900	\$256,030	\$2,502,826
2020	\$151,304	\$101,586	\$252,890	\$2,351,522
2021	\$158,478	\$95,345	\$253,823	\$2,193,044
2022	\$166,739	\$88,653	\$255,392	\$2,026,304
2023	\$168,913	\$82,025	\$250,938	\$1,857,391
2024	\$176,087	\$75,582	\$251,669	\$1,681,304
2025	\$183,261	\$68,762	\$252,022	\$1,498,044
2026	\$191,522	\$60,788	\$252,310	\$1,306,522
2027	\$199,783	\$51,708	\$251,490	\$1,106,739
2028	\$209,130	\$42,220	\$251,351	\$897,609
2029	\$218,478	\$32,763	\$251,241	\$679,131
2030	\$227,826	\$23,359	\$251,185	\$451,304
2031	\$236,087	\$13,584	\$249,671	\$215,217
2032	\$105,435	\$6,500	\$111,935	\$109,783
2033	\$109,783	\$2,196	\$111,978	\$0

Source: City of St. Helena.

debt service

Attachment 5

Table A-10
City of St. Helena Wastewater Rate Study
Operating Expenses Cost Escalation Factors

Expenses	Actuals Fiscal Year Ending				Estimated 2016	Total Change	Annual Avg. % Change
	2012	2013	2014	2015			
Salaries & Benefits	\$829,613	\$795,480	\$827,047	\$896,865	\$987,778	\$158,165	4.5%
Services	\$231,717	\$194,235	\$220,039	\$406,364	\$822,159	\$590,442	37.2%
Supplies	\$48,460	\$55,452	\$80,836	\$41,318	\$91,641	\$43,181	17.3%
Maintenance	\$81,882	\$72,003	\$68,000	\$118,625	\$167,473	\$85,591	19.6%
Taxes, Insurances & Contribs.	\$76,885	\$54,533	\$64,460	\$73,328	\$122,416	\$45,531	12.3%
Total Expenses	\$1,268,557	\$1,171,702	\$1,260,382	\$1,536,500	\$2,191,467	\$922,910	14.6%
Engineering News Record	<i>Dec 2011</i>	<i>Dec 2012</i>	<i>Dec 2013</i>	<i>Dec 2014</i>	<i>Dec 2015</i>		
ENR Construction Cost Index 20-City [1]	9,172.00	9,412.00	9,668.00	9,936.00	10,135.00	963.00	2.5%
ENR Construction Cost Index San Francisco	10,204.79	10,355.09	10,898.84	10,915.84	11,155.41	950.62	2.3%
Bureau of Labor Statistics							
Consumer Price Index - California	232.99	237.71	241.53	244.81	250.71	17.73	1.9%
Consumer Price Index - San Francisco	234.33	239.53	245.71	252.27	260.29	25.96	2.7%

Source: City of St. Helena, Bureau of Labor Statistics, and the Engineering New Record.

index

[1] Engineering News Record (ENR) Consumer Cost Index (CCI) change 1995 to 2015:

ENR CCI 1995	5,524	Change	<u>Annual Avg. % Change</u>
ENR CCI 2015	10,135	4,611	3.1%

Attachment 5

Table A-11
City of St. Helena Wastewater Rate Study
Existing Asset Depreciation

Asset Category	Current Depreciation
Buildings	\$22,667
Vehicles	\$18,067
Equipment	\$43,216
Improvements	\$239,170
Pipes	\$16,925
Total	\$340,044

Source: City of St. Helena and HEC.

cur depr

Table A-12
City of St. Helena Wastewater Rate Study
Estimated Depreciation of Projected Assets

Improvement Type	Average Life of Asset (years)	Fiscal Year Ending										
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
		Current Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Sewer Collection System [1]												
Miscellaneous Maintenance Projects	10	\$3,608	\$7,327	\$11,160	\$15,112	\$19,186	\$23,384	\$27,713	\$32,174	\$36,774	\$63,864	\$68,751
Reclamation Field Improvements	50	\$2,927	\$2,927	\$2,927	\$2,927	\$2,927	\$2,927	\$2,927	\$2,927	\$2,927	\$2,927	\$2,927
Replace 1% of Sewer Mains Annually	80	\$1,933	\$3,925	\$5,979	\$8,096	\$10,278	\$12,527	\$14,846	\$17,236	\$19,700	\$22,240	\$24,858
New Well	40	\$1,675	\$1,675	\$1,675	\$1,675	\$1,675	\$1,675	\$1,675	\$1,675	\$1,675	\$1,675	\$1,675
Crinella Pump Station Upgrades	50	\$0	\$0	\$1,643	\$11,240	\$11,240	\$11,240	\$11,240	\$11,240	\$11,240	\$11,240	\$11,240
Add Sewer Pump Stations to SCADA	10	\$0	\$0	\$0	\$0	\$5,819	\$17,816	\$17,816	\$17,816	\$17,816	\$17,816	\$17,816
Wet Weather Flow Monitoring	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Update GIS Maps of Sewer System	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sewer Master Plan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Replace Rodding Machine	15	\$0	\$0	\$2,921	\$2,921	\$2,921	\$2,921	\$2,921	\$2,921	\$2,921	\$2,921	\$2,921
CCTV Program	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Subtotal Sewer Collection		\$10,143	\$15,854	\$26,306	\$41,971	\$54,046	\$72,491	\$79,138	\$85,990	\$93,053	\$122,683	\$130,188
Treatment Plant [1]												
WWTP Upgrades Ph. 1	80	\$2,991	\$12,288	\$57,073	\$103,237	\$103,237	\$103,237	\$103,237	\$103,237	\$103,237	\$103,237	\$103,237
Pond 2 & 3 Levee	40	\$1,546	\$1,546	\$3,189	\$3,189	\$3,189	\$3,189	\$3,189	\$3,189	\$3,189	\$3,189	\$3,189
Facilities Automation	20	\$0	\$7,650	\$7,650	\$7,650	\$7,650	\$7,650	\$7,650	\$7,650	\$7,650	\$7,650	\$7,650
Sludge Removal	40	\$1,933	\$3,925	\$3,925	\$3,925	\$3,925	\$3,925	\$3,925	\$3,925	\$3,925	\$3,925	\$3,925
Recycled Water Feasibility Study	5	\$0	\$0	\$0	\$0	\$0	\$17,995	\$17,995	\$17,995	\$17,995	\$17,995	\$17,995
Temp Trailer at WRF	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Replace WRF Operations Building and Shop	80	\$0	\$0	\$0	\$0	\$1,455	\$16,451	\$45,822	\$45,822	\$45,822	\$45,822	\$45,822
Upgrade Chemical Storage Facilities	50	\$0	\$0	\$0	\$0	\$0	\$0	\$12,367	\$12,367	\$12,367	\$12,367	\$12,367
Phase 2 WWTP Upgrades	40	\$0	\$0	\$0	\$0	\$2,910	\$5,909	\$9,000	\$12,187	\$12,187	\$12,187	\$12,187
Subtotal Treatment Plant		\$6,470	\$25,410	\$71,837	\$118,001	\$122,366	\$158,357	\$203,186	\$206,372	\$206,372	\$206,372	\$206,372
Total Cumulative Depreciation		\$16,613	\$41,264	\$98,143	\$159,973	\$176,412	\$230,848	\$282,324	\$292,363	\$299,425	\$329,056	\$336,560

Source: City of St. Helena.

new depr

[1] Depreciation in future dollars.

Attachment 5

Table A-13
City of St. Helena Wastewater Rate Study
Calculated Winter Use and Total Billed Water Use for Sewer by Customer Type

Customer Type	Winter Months Jan-Mar 2015	# Units /Accounts /Students	Winter Months Jan-Mar 2015	Average	Average in Gallons
Residential	Total Water Use		Use per Unit per Day in HCF	HCF per Day	GPD
Single Family	34,381	1,503	0.25	0.24	175
Multi-Family	9,259	669	0.15	0.15	106
Mobile Homes (Vineyard Valley)	4,331	211	0.23	0.22	157
Residential	47,971	2,383	0.22	0.21	154
Non-Residential					
Car Wash	126	1	1.40	1.40	1,005
Church/CommCenter	254	13	0.22	0.22	156
Commercial	3,803	126	0.34	0.34	241
Grocery	260	3	0.96	0.96	691
Laundry	524	1	5.82	5.82	4,181
Mixed Retail w/ Food	496	3	1.84	1.84	1,319
Motel w/ Food	1,361	2	7.56	7.56	5,429
Motel w/out Food	2,303	8	3.20	3.20	2,297
Restaurant	3,225	19	1.89	1.89	1,354
Napa Valley College	1,620	1	18.00	18.00	12,925
Service Station	199	5	0.44	0.44	318
Merryvale Winery	235	2	1.31	1.31	937
Sutter Home (industrial) [1]	8,009	1	88.99	4.45	3,195
School	1,304	1,437	0.01	0.01	7

Source: City of St. Helena.

winter

[1] Only 5% of winter water use for this account is estimated to reach the wastewater plant.

Attachment 5

ATTACHMENT B

MODIFIED WASTEWATER RATE STRUCTURE

METHODOLOGY

1. **Determine Number of Sewer Meter Equivalents** – First establish the daily flow for one EDU (equivalent dwelling unit). This flow is the flow per day for a 5/8" meter since almost all residential units have a 5/8" water meter. Calculate the number of sewer meter equivalents using the current City meter ratios. *Using metered water usage data, it is determined that residential units use 280 gallons per day on average; however, only 180 gallons per day reaches the wastewater treatment plant, determined by average winter water use. **Table B-1** shows the flow per day by meter size and the calculation of estimated sewer meter equivalents for non-residential customers.*
2. **Allocate Revenue Requirement to Residential and Non-Residential** – Single Family residential customers are allocated costs based on percentage of flow. They are then further allocated to fixed base costs collected in flat monthly charges by dwelling unit and use costs collected in consumption charges. Non-residential costs, including multi-family, are allocated based on percentage of flow by non-residential customers. Non-residential costs are further allocated to fixed base costs collected in flat monthly charges by meter size and use costs collected in consumption charges. ***Table B-2** shows the allocation of revenue requirement. Costs are allocated 57% to residential and 43% to non-residential.*
3. **Calculate Rates** – Divide base residential costs by the number of residential units. Divide residential use costs by typical residential winter water use. Divide non-residential base costs by the number of sewer meter equivalents. Divide non-residential use costs by typical non-residential winter water use. *Calculated rates are shown in **Table B-2**.*
4. **Compare Rates** – A comparison of current and calculated wastewater rates for the next ten years, through fiscal year 2027, is included in **Table B-3**.

Attachment 5

Attachment 5

Table B-1
City of St. Helena Wastewater Rate Study
Calculation of Non-Residential Meter Equivalents

Item	Number of Meters	Meter Ratios	Flow per Day in Gallons	Estimated Sewer Meter Equivalents
Single Family (One EDU)			180	
Non-Residential				
5/8"	150	1.00	180	150
1"	73	2.43	438	178
1.5"	40	4.82	867	193
2"	32	7.68	1,383	246
3"	7	14.36	2,585	101
4"	7	23.91	4,303	167
6"	6	47.77	8,598	287
Total Estimated Non-Residential Sewer Equivalents				1,321
Source: City of St. Helena and HEC.				m equivs

Table B-2
City of St. Helena Wastewater Rate Study
Allocation of Revenue Requirement to Residential and Non-Residential

Item		Fiscal Year Ending										
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Revenue Requirement		\$2,988,676	\$3,429,719	\$4,279,161	\$4,476,847	\$4,542,121	\$4,612,649	\$4,896,715	\$5,110,400	\$5,334,364	\$5,541,161	\$5,735,771
Residential												
Base Costs	29%	\$866,454	\$994,317	\$1,240,581	\$1,297,893	\$1,316,816	\$1,337,263	\$1,419,618	\$1,481,567	\$1,546,497	\$1,606,450	\$1,662,870
Use Costs	28%	\$840,113	\$964,089	\$1,202,866	\$1,258,435	\$1,276,784	\$1,296,609	\$1,376,460	\$1,436,526	\$1,499,482	\$1,557,612	\$1,612,317
Number of Units (single family only)		1,503	1,508	1,513	1,518	1,523	1,528	1,533	1,538	1,543	1,548	1,553
Base Annual Cost		\$576.48	\$659.36	\$819.95	\$855.00	\$864.62	\$875.17	\$926.04	\$963.31	\$1,002.27	\$1,037.76	\$1,070.75
Monthly Base Charge per Residential Unit		\$48.04	\$54.95	\$68.33	\$71.25	\$72.05	\$72.93	\$77.17	\$80.28	\$83.52	\$86.48	\$89.23
Estimated Annual Billed Usage		186,767	187,212	187,658	188,103	188,548	188,994	189,439	189,884	190,329	190,775	191,220
Use Charge per HCF		\$4.50	\$5.15	\$6.41	\$6.69	\$6.77	\$6.86	\$7.27	\$7.57	\$7.88	\$8.16	\$8.43
Non-Residential												
Base Costs	30%	\$896,865	\$1,029,217	\$1,284,124	\$1,343,447	\$1,363,035	\$1,384,200	\$1,469,444	\$1,533,569	\$1,600,777	\$1,662,835	\$1,721,235
Use Costs	13%	\$385,245	\$442,096	\$551,590	\$577,072	\$585,486	\$594,577	\$631,194	\$658,738	\$687,607	\$714,264	\$739,349
Meter Equivalents		1,321	1,321	1,321	1,321	1,321	1,321	1,321	1,321	1,321	1,321	1,321
Base Charge per Meter Equivalent		\$679.18	\$779.41	\$972.45	\$1,017.37	\$1,032.21	\$1,048.23	\$1,112.79	\$1,161.35	\$1,212.25	\$1,259.24	\$1,303.47
Monthly Base Charge per Meter Equivalent		\$56.60	\$64.95	\$81.04	\$84.78	\$86.02	\$87.35	\$92.73	\$96.78	\$101.02	\$104.94	\$108.62
5/8"	1.0	\$56.60	\$64.95	\$81.04	\$84.78	\$86.02	\$87.35	\$92.73	\$96.78	\$101.02	\$104.94	\$108.62
1"	2.4	\$137.63	\$157.94	\$197.05	\$206.16	\$209.16	\$212.41	\$225.49	\$235.33	\$245.64	\$255.17	\$264.13
1.5"	4.8	\$272.67	\$312.91	\$390.41	\$408.45	\$414.40	\$420.84	\$446.75	\$466.25	\$486.68	\$505.55	\$523.31
2"	7.7	\$434.74	\$498.90	\$622.46	\$651.22	\$660.71	\$670.97	\$712.29	\$743.37	\$775.95	\$806.03	\$834.34
3"	14.4	\$812.89	\$932.84	\$1,163.88	\$1,217.65	\$1,235.40	\$1,254.59	\$1,331.85	\$1,389.97	\$1,450.89	\$1,507.13	\$1,560.06
4"	23.9	\$1,353.10	\$1,552.78	\$1,937.35	\$2,026.86	\$2,056.41	\$2,088.34	\$2,216.95	\$2,313.69	\$2,415.09	\$2,508.71	\$2,596.82
6"	47.8	\$2,703.62	\$3,102.59	\$3,871.01	\$4,049.85	\$4,108.89	\$4,172.70	\$4,429.67	\$4,622.97	\$4,825.57	\$5,012.65	\$5,188.69
Use Charge per HCF	Est. Annual Billed Use											
Car Wash	511	\$3.43	\$3.93	\$4.90	\$5.13	\$5.21	\$5.29	\$5.61	\$5.86	\$6.11	\$6.35	\$6.57
Religious Places/Community Centers	1,030	\$3.72	\$4.27	\$5.33	\$5.57	\$5.65	\$5.74	\$6.09	\$6.36	\$6.64	\$6.90	\$7.14
Commercial	15,423	\$4.27	\$4.90	\$6.12	\$6.40	\$6.49	\$6.59	\$7.00	\$7.30	\$7.62	\$7.92	\$8.20
Groceries and Mortuaries	1,054	\$10.30	\$11.81	\$14.74	\$15.42	\$15.65	\$15.89	\$16.87	\$17.60	\$18.38	\$19.09	\$19.76
Laundry	2,125	\$3.81	\$4.37	\$5.46	\$5.71	\$5.79	\$5.88	\$6.24	\$6.51	\$6.80	\$7.06	\$7.31
Mixed Retail w/ Food	2,012	\$6.73	\$7.72	\$9.64	\$10.08	\$10.23	\$10.39	\$11.03	\$11.51	\$12.01	\$12.48	\$12.92
Motel with Food	5,520	\$7.91	\$9.08	\$11.32	\$11.85	\$12.02	\$12.21	\$12.96	\$13.52	\$14.12	\$14.66	\$15.18
Motel without Food	9,340	\$4.59	\$5.26	\$6.57	\$6.87	\$6.97	\$7.08	\$7.51	\$7.84	\$8.19	\$8.50	\$8.80
Restaurant	13,079	\$10.18	\$11.68	\$14.57	\$15.24	\$15.47	\$15.71	\$16.67	\$17.40	\$18.16	\$18.87	\$19.53
Napa Valley College	6,570	\$3.67	\$4.21	\$5.25	\$5.49	\$5.57	\$5.66	\$6.01	\$6.27	\$6.55	\$6.80	\$7.04
Service Station	807	\$4.82	\$5.53	\$6.90	\$7.22	\$7.32	\$7.44	\$7.89	\$8.24	\$8.60	\$8.93	\$9.25
Winery Production (Merryvale/Spottswoode)	953	\$17.31	\$19.87	\$24.79	\$25.93	\$26.31	\$26.72	\$28.36	\$29.60	\$30.90	\$32.09	\$33.22
Sutter Home Winery	1,624	\$4.50	\$5.16	\$6.44	\$6.74	\$6.84	\$6.94	\$7.37	\$7.69	\$8.03	\$8.34	\$8.63
Schools	5,288	\$1.87	\$2.15	\$2.68	\$2.81	\$2.85	\$2.89	\$3.07	\$3.20	\$3.34	\$3.47	\$3.60

Source: City of St. Helena and HEC.

curr alloc rates

Table B-3
City of St. Helena Wastewater Rate Study
Calculated Wastewater Rates - Modified Current Rate Structure

Land Use	Current Rates Effective	2017 2/8/2017	2018 11/8/2017	2019 11/8/2018	2020 11/8/2019	2021 11/8/2020	2022 11/8/2021	2023 11/8/2022	2024 11/8/2023	2025 11/8/2024	2026 11/8/2025	2027 11/8/2026
Residential												
Flat Monthly Charge per Unit	\$47.35	\$48.04	\$54.95	\$68.33	\$71.25	\$72.05	\$72.93	\$77.17	\$80.28	\$83.52	\$86.48	\$89.23
Use Charge per HCF	\$3.94	\$4.50	\$5.15	\$6.41	\$6.69	\$6.77	\$6.86	\$7.27	\$7.57	\$7.88	\$8.16	\$8.43
Non-Residential												
Flat Monthly Charge per Account												
5/8"	\$42.12	\$56.60	\$64.95	\$81.04	\$84.78	\$86.02	\$87.35	\$92.73	\$96.78	\$101.02	\$104.94	\$108.62
1"	\$102.42	\$137.63	\$157.94	\$197.05	\$206.16	\$209.16	\$212.41	\$225.49	\$235.33	\$245.64	\$255.17	\$264.13
1.5"	\$202.92	\$272.67	\$312.91	\$390.41	\$408.45	\$414.40	\$420.84	\$446.75	\$466.25	\$486.68	\$505.55	\$523.31
2"	\$323.53	\$434.74	\$498.90	\$622.46	\$651.22	\$660.71	\$670.97	\$712.29	\$743.37	\$775.95	\$806.03	\$834.34
3"	\$604.94	\$812.89	\$932.84	\$1,163.88	\$1,217.65	\$1,235.40	\$1,254.59	\$1,331.85	\$1,389.97	\$1,450.89	\$1,507.13	\$1,560.06
4"	\$1,006.96	\$1,353.10	\$1,552.78	\$1,937.35	\$2,026.86	\$2,056.41	\$2,088.34	\$2,216.95	\$2,313.69	\$2,415.09	\$2,508.71	\$2,596.82
6"	\$2,012.00	\$2,703.62	\$3,102.59	\$3,871.01	\$4,049.85	\$4,108.89	\$4,172.70	\$4,429.67	\$4,622.97	\$4,825.57	\$5,012.65	\$5,188.69
Use Charge per HCF												
Car Wash	\$2.85	\$3.43	\$3.93	\$4.90	\$5.13	\$5.21	\$5.29	\$5.61	\$5.86	\$6.11	\$6.35	\$6.57
Religious Places/Community Centers	\$3.64	\$3.72	\$4.27	\$5.33	\$5.57	\$5.65	\$5.74	\$6.09	\$6.36	\$6.64	\$6.90	\$7.14
Commercial	\$3.64	\$4.27	\$4.90	\$6.12	\$6.40	\$6.49	\$6.59	\$7.00	\$7.30	\$7.62	\$7.92	\$8.20
Groceries and Mortuaries	\$11.87	\$10.30	\$11.81	\$14.74	\$15.42	\$15.65	\$15.89	\$16.87	\$17.60	\$18.38	\$19.09	\$19.76
Laundry	\$3.34	\$3.81	\$4.37	\$5.46	\$5.71	\$5.79	\$5.88	\$6.24	\$6.51	\$6.80	\$7.06	\$7.31
Mixed Retail w/ Food	\$6.79	\$6.73	\$7.72	\$9.64	\$10.08	\$10.23	\$10.39	\$11.03	\$11.51	\$12.01	\$12.48	\$12.92
Motel with Food	\$8.75	\$7.91	\$9.08	\$11.32	\$11.85	\$12.02	\$12.21	\$12.96	\$13.52	\$14.12	\$14.66	\$15.18
Motel without Food	\$4.35	\$4.59	\$5.26	\$6.57	\$6.87	\$6.97	\$7.08	\$7.51	\$7.84	\$8.19	\$8.50	\$8.80
Restaurant	\$11.68	\$10.18	\$11.68	\$14.57	\$15.24	\$15.47	\$15.71	\$16.67	\$17.40	\$18.16	\$18.87	\$19.53
Napa Valley College	\$3.64	\$3.67	\$4.21	\$5.25	\$5.49	\$5.57	\$5.66	\$6.01	\$6.27	\$6.55	\$6.80	\$7.04
Service Station	\$4.70	\$4.82	\$5.53	\$6.90	\$7.22	\$7.32	\$7.44	\$7.89	\$8.24	\$8.60	\$8.93	\$9.25
Winery Production (Merryvale/Spottswoode)	\$20.94	\$17.31	\$19.87	\$24.79	\$25.93	\$26.31	\$26.72	\$28.36	\$29.60	\$30.90	\$32.09	\$33.22
Sutter Home Winery	\$4.27	\$4.50	\$5.16	\$6.44	\$6.74	\$6.84	\$6.94	\$7.37	\$7.69	\$8.03	\$8.34	\$8.63
Schools	\$3.17	\$1.87	\$2.15	\$2.68	\$2.81	\$2.85	\$2.89	\$3.07	\$3.20	\$3.34	\$3.47	\$3.60

Source: City of St. Helena and HEC.

calc rates



Report to the City Council
Council Meeting of September 26, 2017

Agenda Section: Consent

Subject: Consideration and Proposed Adoption of the Resolution authorizing the creation of the Capital Improvement Project Oak Avenue Storm Drain Repair R18-82 and authorizing the transfer of \$65,000 from Gas Tax revenue to R18-82

CEQA Determination: Exempt from the requirements of CEQA pursuant to Section 15301, Class 1, which exempts the operation, leasing, or minor alteration of existing facilities

Prepared By: Tobias Barr, Project Manager

Reviewed By: Erica Ahmann Smithies, Public Works Director and City Engineer

Approved By: Mark Prestwich, City Manager

BACKGROUND

City staff has recently become aware of a critical condition of the Oak Avenue storm drain system within the vicinity of Spring Street and Mitchell Drive. Portions of the existing corrugated metal pipe have completely deteriorated and undermined the City street. Out of safety concerns, Public Works has placed steel plates over the compromised street sections until long term repairs can be made. If no work is completed prior to this year's rainy season, there is a potential for flooding, significant erosion, and additional undermining of Oak Avenue beyond the currently identified area.

There is no existing Capital Improvement Project (CIP) for storm drain repair and replacement included in the FY17/18 budget. Minor storm drain infrastructure is typically repaired by operations crews and is budgeted for in operations. Additionally, there is no Enterprise Fund for storm drains, as the City doesn't collect any fees to maintain and improve storm drain systems in St. Helena. Funds for storm drain repair are traditionally derived from general fund and gas tax.

DISCUSSION

The full extent of the repairs needed at Oak Avenue is not known at this time, but estimated to be isolated to the vicinity of Spring Street and Mitchell Drive. It is necessary to immediately begin repairs to prevent further damage. The City has an existing on-call contract with G.D. Nielson, which can be utilized for this repair. If Public Works is able to schedule G.D. Nielson for the work, the project will be billed on a time-and-materials basis according to the terms in the City's approved on-call contract with G.D. Nielson. If G.D. Nielson is not able to be schedule for the work, Public Works will negotiate a construction contract with a available contractor in accordance with St. Helena Municipal Code section 3.04.210.

FISCAL IMPACT

The deteriorated storm drain is directly impacting the condition of the street, therefore staff is recommending a fund transfer from Gax Tax to CIP R18-82 in the amount of \$65,000 to make the necessary repairs. If the cost of the project is less, the funds will return to the general Gas Tax revenue account for future street improvement projects.

RECOMMENDED ACTION

Adopt the attached Resolution authorizing the creation of the Capital Improvement Project Oak Avenue Storm Drain Repair R18-82 and authorizing the transfer of \$65,000 from Gas Tax revenue to R18-82.

ATTACHMENTS

[Reso Oak Avenue Stormdrain CIP R18-82 FINAL](#)
[Oak Ave Storm Drain Photo](#)

CITY OF ST. HELENA

RESOLUTION No. 2017-

Resolution Authorizing the Creation of Capital Improvement Project Oak Avenue Storm Drain Repair R18-82 and authorizing Gax Tax Fund Balance Transfer of \$65,000 to R18-82

RECITALS

- A. The City of St. Helena operates and maintains critical storm drain infrastructure throughout the City to safely convey stormwater to avoid damage to property and roads; and
- B. Public Works recently discovered that sections of the existing corrugated metal storm drain on Oak Avenue within the vicinity of Spring Street and Mitchell Drive have completely deteriorated and undermined portions of the City street; and
- C. Out of safety concerns, Public Works has placed steel plates over the compromised street sections until long term repairs can be made; and
- D. If no work is completed prior to this years rainy season, there is a potential for flooding, significant erosion, and additional undermining of Oak Avenue beyond the currently identified area.

RESOLUTION

The City Council of the City of St. Helena hereby resolves as follows:

- 1. Finds the repair of the storm drain system on Oak Avenue to be exempt from the California Environmental Quality Act pursuant to CEQA section 15301, Existing Facilities Class 1 which exempts the operation, repair, maintenance, and permitting of existing facilities involving negligible or no expansion of use including publically owned utilities; and

2. Authorizes the creation of Capital Improvement Project Oak Avenue Storm Drain Repair R18-82; and
3. Authorizes the Finance Director to make the following Fund Balance transfer from the Gax Tax Fund:
 - a. Transfer \$65,000 to CIP R18-82 for Fiscal Year 2017/2018

Approved at a Regular Meeting of the St. Helena City Council on September 26, 2017, by the following vote:

Mayor Galbraith: _____

Vice Mayor White: _____

Councilmember Ellsworth: _____

Councilmember Dohring: _____

Councilmember Koberstein: _____

APPROVED: ATTEST:

Alan Galbraith, Mayor

Cindy Tzaopoulos, City Clerk

Attachment 2
Damaged Oak Avenue storm drain Pipe





Report to the City Council
Council Meeting of September 26, 2017

Agenda Section: New Business

Subject: Introduction and first reading of an ordinance adding Chapter 10.36 to the St. Helena Municipal Code to provide for designated truck traffic routes within the City of St. Helena

CEQA Determination: This project is deemed exempt from the requirements of CEQA under Section 15301, Existing Facilities; and Section 15061(b) (3), which identifies that a rulemaking activity which does not have the potential for causing a significant effect on the environment is therefore, exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant impact on the environment.

Prepared By: Erica Ahmann Smithies, Public Works Director and City Engineer,
William Imboden, Chief of Police

Reviewed By:

Approved By: Mark Prestwich, City Manager

BACKGROUND

This item was initially brought to the City Council at the request of Councilmember Ellsworth to discourage large commercial truck traffic from using residential streets as an alternate route to Highway 29. At its regularly scheduled meeting on July 11, 2017, City Council reviewed a draft ordinance and requested staff to bring it back with considerations included for specific vehicle weight limitations and enforcement.

DISCUSSION

Staff has attached the proposed Ordinance for designated truck traffic routes within the City of St. Helena. The proposed ordinance includes the following additions to the City's Municipal Code:

- Restricts trucks exceeding a maximum weight limit of 10,000 pounds to specific truck traffic routes (defined as Main Street between Chaix Lane and Deer Park

Road) when going through the City limits and utilizing the most direct route when making site specific deliveries

- Authorizes the Police Department to enforce and issue a misdemeanor and \$1,000 fine when a truck violates the ordinance
- Any police officer is authorized to require any person driving or in control of any truck being operated on a street within the City other than on a specific truck route to proceed to any public or private scale available for the purpose of weighing the vehicle to determine whether this chapter has been violated
- Violators will be liable for all damage, clean-up and administrative costs

The Police Department contacted local businesses regarding the possibility of utilizing their permanent scales for weighing trucks thought to be in violation of the weight restrictions. Three businesses have verbally agreed to provide assistance and include: Beringer, Trincherro Family Estates doing business as Sutter Home, and Harold Smith and Sons. The alternative is for the City to purchase portable scales.

To improve awareness and compliance with such an Ordinance, staff is recommending the following public outreach and enforcement strategies:

- Informational mailing to all St. Helena businesses.
- Press Release to local media informing the residential and commercial business community of the new truck ordinance.
- Inclusion of truck ordinance information on the City's website.
- Preparation of an article in the City's new quarterly newsletter.
- Appropriating \$5,450 to fund approximately three weeks of directed enforcement to ensure compliance with Ordinance. Enforcement will consist of having the Police Department bring an officer in on overtime on random days (four hours per day) to conduct enforcement activities.

Staff has provided the following options to Council for their consideration:

1. Move forward with the Ordinance as currently written, and schedule a second reading and adoption of the proposed ordinance at the next City Council meeting.
2. Provide feedback and direction to City staff on the proposed ordinance and make modifications as the City Council determines appropriate.
3. Continue with no specific truck route ordinance.

If Council moves forward with the First Reading, the Ordinance will be presented to Council a second time for adoption. It will take effect and be in force 30 days after its adoption.

This project is deemed exempt from the requirements of CEQA under Section 15301, Existing Facilities; and Section 15061(b) (3), which identifies that a rulemaking activity which does not have the potential for causing a significant effect on the environment is therefore, exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant impact on the environment.

FISCAL IMPACT

The costs associated with preparing the ordinance have been limited to City staff and attorney time. Enforcement of the ordinance will be conducted during normal staff hours and when violations do occur, the drivers will be liable for any additional costs incurred as well as being subjected to a \$1,000 fine. The recommended appropriation of \$5,450 from General Fund Reserves to the Police Department Overtime Fund for directed enforcement/compliance activities will be incorporated into a Resolution brought forward concurrently with a second reading of the Ordinance. In addition, there may be a nominal fee associated with contracting with private businesses for utilizing their scales to confirm truck weights. Agreements for scale use will be brought forward for approval prior to commencement of enforcement. Costs would be recovered if a truck were to be found in violation of the Ordinance.

RECOMMENDED ACTION

Staff recommends that the City Council conduct the first reading of the ordinance, introduce by title only and waive further reading.

ATTACHMENTS

[Attach 1 2017.04.25 Ellsworth Discussion](#)

[Attch 2 St Helena Truck Route Ordinance - Clean](#)

9/15/2017

9.5.Ellsworth A discussion regarding a possible large truck ordinance

A discussion regarding a possible LARGE COMMERCIAL TRUCK ORDINANCE

To ensure the safety and peace of mind in residential neighborhoods, the health of our residents, and to extend the operational life of our residential streets, a new ordinance should be discussed to **prohibit large commercial "through" trucks on our residential streets.**

Oversize trucks have begun to travel on our public residential streets as a short cut to their destinations and to avoid the traffic congestion on Highway 29.

Unnecessary heavy truck traffic on our public residential streets 1) is detrimental to the maintenance and longevity of such streets, taking up public works staff time that is in short supply, 2) impacts our financial budget by ruining roads we cannot afford to keep fixing over and over, 3) creates a nuisance in neighborhoods due to their noise and 4) creates health and safety impacts from diesel emissions near homes and schools and where residents including children are walking and biking.

"Diesel exhaust ranks among the air pollutants that EPA believes pose the greatest public health risks. Exposure to diesel exhaust can cause lung disease and respiratory problems. Diesel exhaust also exacerbates asthma, and long term exposure is thought to increase the risk of lung cancer. Children may be more susceptible to this pollution because they breathe 50 percent more air per pound of body weight than adults." (EPA flyer "Air Pollution and Kids" from the Bay Area Air Quality Management District website)

Many communities have recognized that **large commercial trucks are incompatible with residential neighborhoods** and have enacted ordinances which address this exact issue. These communities employ a method that restricts use of **indirect routes** by oversize trucks to destinations within those cities. They do not forbid large trucks entirely from using city streets to do commerce, but they restrict them to *"direct" routes*. The limiting factor used is "weight loads".

*"Heavy trucks obviously cause more road damage than cars, but how much more? According to a GAO study (Excessive Truck Weight: An Expensive Burden We Can No Longer Afford), road damage from **one 18-wheeler is equivalent to 9600 cars**. The study assumed a fully loaded tractor-trailer at 80,000 pounds, and a typical passenger car at 4,000 pounds. That's 20 times difference in weight, but the wear and tear caused by the truck is exponentially greater." (www.vabike.org/vehicle-weight-and-road-damage)*

The California vehicle code website describes the legislative details for St Helena to restrict large commercial trucks on the city streets.

"The legislative body of any county or city may by ordinance permit the operation and moving of vehicles and loads upon highways under their respective jurisdictions of a maximum gross weight in excess of the maximum gross weight of vehicles and loads specified in this code...." "No ordinance adopted pursuant to Section 35701 shall prohibit any commercial vehicles coming from an unrestricted street having ingress and egress by direct route to and from a restricted street when necessary for the purpose of making pickups or deliveries of goods..." (Chapter 10.16 Commercial Vehicles/Trucks)

file:///S:/PubWorks/Staff%20Reports/2017/09-26-2017/Truck%20Ordinance/9.5.Ellsworth%20A%20discussion%20regarding%20a%20possible%20larg... 1/2

9/15/2017

9.5.Ellsworth A discussion regarding a possible large truck ordinance

The aspect of enforcement also should be included in the discussion. Due to our size, enforcement is not anticipated to be particularly difficult. All truck drivers must carry a Bill of Lading showing where they are going. For example, it would not be hard to ascertain that a truck on Spring Street headed for Madrona Ave is not taking the most direct route from the highway but rather is cutting through our residential streets to get to their destination.

We can benefit from the prior work of other small towns. Towns in California and Texas alike have adopted ordinances which we can review in our study of this matter.

CITY OF ST. HELENA

ORDINANCE NO. _____

**ADDING CHAPTER 10.36 TO THE ST. HELENA MUNICIPAL CODE TO PROVIDE
FOR DESIGNATED TRUCK TRAFFIC ROUTES WITHIN THE CITY OF ST.
HELENA**

The City Council of the City of St. Helena does hereby ordain as follows:

SECTION 1. Findings. In adopting this Ordinance, the City Council finds:

A. California Vehicle Code Division 11, Chapter 1, Article 3 and California Vehicle Code Division 15, Chapter 5, Article 4 provide authority for local agencies to restrict truck traffic.

B. California Vehicle Code section 21101 allows the restriction of certain vehicles, by stating that, "Local authorities . . . may adopt rules and regulations by ordinance or resolution . . . (c) Prohibiting the use of particular highways by certain vehicles" California Vehicle Code section 21104 further states "an ordinance or resolution which is submitted to the Department of Transportation . . . in complete draft form for approval . . . is effective as to any state highway"

C. California Vehicle Code section 35701 allows restriction of vehicles by stating that, "(a) Any city, or county for a residence district, may, by ordinance, prohibit the use of a street by any commercial vehicle or by any vehicle exceeding a maximum gross weight limit . . . (b) The ordinance shall not be effective until . . . signs are erected . . . (c) No ordinance . . . shall apply to any state highway . . . in the National System of Interstate and Defense Highways, except an ordinance which has been approved by a two-thirds vote of the California Transportation Commission."

D. Because of their great weight, research shows that trucks are more damaging to street pavement than passenger vehicles, and vehicle weight contributes to pavement deterioration; thus trucks create a disproportionate share of street maintenance costs. Studies by the American Association of State Highway and Transportation Officials have shown that truck traffic is responsible for substantially more damage than passenger vehicles, and that each doubling of weight on an axle causes a sixteen-fold increase in pavement damage.

E. The establishment of City Truck Traffic Routes is warranted to restrict noise and traffic pollution, minimize pavement damage, and address safety concerns in residential areas.

F. All legal prerequisites to the adoption of this Ordinance have occurred.

SECTION 2. Adding Chapter 10.36. Chapter 10.33 is hereby added to Title 10 of the St. Helena Municipal Code to read in its entirety as shown on Exhibit A, attached hereto and incorporated herein by reference.

SECTION 3. Compliance with CEQA. The City Council hereby finds that the action to adopt this Ordinance to add Chapter 10.36 to the St. Helena Municipal Code is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000, et seq.) (CEQA) because the City Council hereby finds that it can be seen with certainty that there is no possibility the adoption and implementation of this Ordinance may have a significant effect on the environment, and the Ordinance is exempt from CEQA pursuant to CEQA Guidelines section 15061. Additionally, in accordance with CEQA Guidelines section 15301, the action to adopt this Ordinance is categorically exempt from CEQA in that it relates to operation of public streets and will result in negligible or no expansion of existing use.

SECTION 4. Severability. The City Council hereby declares every section, paragraph, sentence, cause and phrase is severable. If any section, paragraph, sentence, clause or phrase of this ordinance is for any reason found to be invalid or unconstitutional, such invalidity, or unconstitutionality shall not affect the validity or constitutionality of the remaining sections, paragraphs, sentences, clauses or phrases.

SECTION 5: Inclusion in the St. Helena Municipal Code. It is the intention of the St. Helena City Council that the text in Exhibit A of this ordinance be made a part of the St. Helena Municipal Code and that the text may be renumbered or relettered and the word "Ordinance" may be changed to "Section," "Chapter," or such other appropriate word or phrase to accomplish this intention.

SECTION 6: Effective Date. This ordinance shall take effect and be in force (thirty) 30 days after its adoption, and a summary of this ordinance shall be published once with the names of the members of the Council voting for and against the ordinance in the St. Helena Star, a newspaper of general circulation published in the city of St. Helena.

THE FOREGOING ORDINANCE was introduced at a regular meeting of the St. Helena City Council on the ____ day of _____, 2017, and was adopted at a regular meeting of the St. Helena City Council on the ____ day of _____, 2017, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

Alan Galbraith, Mayor

ATTEST:

CITY OF ST. HELENA

Cindy Tzafopoulos, City Clerk

I, CINDY TZAFPOULOS, CITY CLERK of the City of St. Helena, California, do hereby certify that the foregoing Ordinance was regularly introduced and placed upon its first reading at a regular meeting of the City Council on the ____ day of _____, 2017. That thereafter said Ordinance was duly adopted and passed at a regular meeting of the City Council on the ____ day of _____, 2017 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

Cindy Tzafopoulos, City Clerk

APPROVED AS TO FORM:

Thomas B. Brown, City Attorney

EXHIBIT A**Chapter 10.36
Designated Truck Traffic Routes**

Sections:

- 10.36.010** **Truck traffic routes.**
- 10.36.020** **Restriction of heavy trucks to "truck traffic routes."**
- 10.36.030** **Inapplicability of truck traffic routes to certain vehicles.**
- 10.36.040** **Truck Parking Permits.**
- 10.36.050** **Enforcement.**
- 10.36.060** **Weigh-in.**
- 10.36.070** **Additional liability and indemnification for damage caused.**
- 10.36.080** **Challenge to administrative citation.**
- 10.36.090** **Remedies cumulative—Actions—Relationship to other laws.**

10.36.010 Truck traffic routes.

The following streets, or portions thereof, located within the city are hereby designated as "truck traffic routes" for the movement of vehicles exceeding a maximum weight limit of 10,000 pounds, and the City Manager is hereby authorized to designate such streets as "truck traffic routes" by appropriate signs:

Street Name	From	To
Main Street (SR29/SR128)	Chaix Lane	Deer Park Road

10.36.020 Restriction of heavy trucks to "truck traffic routes."

When appropriate signs are in place, designating the "truck traffic routes" set forth in Section 10.36.010, the operator of any vehicle exceeding a maximum gross limit of 10,000 pounds shall drive on such routes, and none other, except that nothing in this section shall prohibit the operator of any vehicle exceeding a maximum gross weight of 10,000 pounds coming from a "truck traffic route" having ingress and egress by direct route to and from restricted streets when necessary for the purpose of making pickups or delivery of goods, wares and merchandise, from or to any building or structure located on such restricted streets, or for the purpose of delivering materials to be used in the actual and bona fide repair, alteration, remodeling, or construction of any building or structure upon such restricted streets for which a building permit has previously been obtained therefor, or for parking such vehicle in a location for which a parking permit has been issued pursuant to Section 10.36.040.

For purposes of this section, "direct route" means:

- a) For deliveries more than one-half (1/2) mile off of the nearest point on the truck traffic route, travel is permitted only by the most direct route to the destination.

- b) For deliveries one-half (1/2) mile or less from a driver's chosen point of departure from the truck traffic route, travel is permitted by the most direct route from the chosen point of departure to the destination.
- c) After delivery or pickup, travel is permitted by (i) the most direct route back to the truck traffic route, or (ii) if the next stop is one-half (1/2) mile or less, proceeding to the next stop by the most direct route that does not cross two or more truck traffic routes.

10.36.030 Inapplicability of truck traffic routes to certain vehicles.

The provisions of Sections 10.36.010 and 10.36.020 shall not apply to:

- a) Passenger buses under the jurisdiction of the Public Utilities Commission.
- b) Any vehicle owned by a public utility or a licensed contractor which necessarily is in use in the construction, installation, or repair of any public utility.
- c) School buses while carrying students to and from school.
- d) Pickup trucks. For the purposes of this section, a "pickup truck" means a four-wheeled commercial motor vehicle commonly known as a "pickup truck," equipped with a permanently affixed open-box body and with a manufacturer's rated load capacity not exceeding one ton in weight.
- e) Any vehicle owned, leased, operated, or controlled by any licensed contractor while necessarily in use in the construction, maintenance, or repair of a public works project, or by any highway carrier regulated by the Public Utilities Commission while transporting any materials to or from a public works project, when the bids for such project were opened prior to the adoption of the ordinance establishing this section, unless an alternate direct route is provided substantially within and by the City.
- f) Tow trucks or moving vans providing a service on a street.
- g) Transfer, operator, and contractor trucks, including trucks hauling disposables and recyclables, leaving and returning from a solid waste disposal site.
- h) Street sweepers.
- i) Emergency vehicles.
- j) Recreational vehicles (as defined by California Health and Safety Code section 18009.3).

10.36.040 Truck Parking Permits.

The Public Works Director may issue permits to vehicles subject to provisions of Sections 10.36.010 and 10.36.020 to park such vehicles in locations off "truck traffic routes" as specified in the permit, if the Public Works Director determines that the issuance of such a permit will not result in damage to any city street and will not permit the violation of any city ordinance or state

law. The permit shall be issued for a specified vehicle and for a specified parking area, and shall be visibly displayed on the vehicle at all times.

10.36.050 Enforcement.

The city may enforce this chapter in any manner permitted by law. A violation of this chapter shall be and is hereby declared to be a misdemeanor punishable by a fine not to exceed one thousand dollars (\$1,000), a public nuisance, and contrary to the public interest, and shall, at the discretion of the city and without limitation on any other relief, create a cause of action for injunctive relief. Each day a violation occurs shall constitute a separate offense.

10.36.060 Weigh-in.

Any peace officer is authorized to require any person driving or in control of any vehicle which may be subject to this chapter and that is being operated on a street within the City other than on a truck traffic route, as designated under section 10.36.010 of this chapter, to proceed to any public or private scale available to weigh the vehicle for the purpose of determining whether a violation of this chapter has occurred.

10.36.070 Civil penalty; additional liability and indemnification for damage caused.

- A. In addition to any fine imposed under section 10.36.050 of this chapter, any person who violates this chapter shall be liable and responsible for a civil penalty of one thousand dollars (\$1,000) per day such violation occurs. The city may recover such civil penalty by either civil action or administrative citation. Such penalty shall be in addition to all other costs incurred by the city, including, without limitation, the city's staff time, investigation expenses, and attorney's fees.
- B. In addition to any fine imposed under section 10.36.050 of this chapter, and any civil penalty imposed under section 10.36.070(A) of this chapter, any person operating a vehicle in violation of this chapter shall be liable, and shall indemnify and hold the City harmless, for any damage or liability to public facilities arising out of or related to any such violation. Such liability shall be in addition to all other costs incurred by the city, including, without limitation, the city's staff time, investigation expenses, and attorney's fees. The city may recover such liability, costs, and fees by either civil action or administrative citation.
- C. Where the City proceeds by administrative citation in collecting either the civil penalty imposed by section 10.36.070(A) or the liability for damage caused under section 10.36.070(B), the responsible person must remit payment of the noticed costs, expenses, and/or fees to the City of St. Helena within forty-five (45) days of the issuance of the citation. The City shall provide the responsible person notice of the right to request an administrative hearing to challenge the cost recovery, and the time for requesting that hearing. The payment of any such costs shall be stayed upon a timely request for an administrative hearing made pursuant to section 10.36.080, and if such a request is made, shall remain stayed during the pendency of the administrative hearing process.

10.36.080 Challenge to administrative citation.

In accord with the following provisions, any person dissatisfied with the city's issuance of an administrative citation under section 10.36.070 may request an administrative hearing to challenge the citation:

- A. The responsible person shall have the right to request the administrative hearing within forty-five (45) days of the issuance of the administrative citation and imposition of the civil penalty. To request such a hearing, the responsible person shall notify the city clerk in writing within forty-five (45) days of the issuance of the citation. The appeal notification shall include all specific facts, circumstances, and arguments upon which the appeal is based.
- B. The city manager is hereby authorized to designate a hearing officer to hear such appeal. The city hearing officer shall conduct a hearing on the appeal within ninety (90) days of the request for the hearing unless one of the parties requests a continuance for good cause. The hearing officer shall only consider those facts, circumstances, or arguments that the responsible person has presented in the appeal notification.
- C. The hearing officer shall render a decision in writing within thirty (30) days of the conclusion of the hearing. The hearing officer shall have discretion to reduce the amount of the administrative citation based upon evidence presented by the responsible person that such a reduction is warranted by mitigating factors including, without limitation, lack of culpability and/or inability to pay. Provided, however, that in exercising its discretion the hearing officer should consider the purpose of this chapter to prevent and deter violations and whether the reduction of civil penalties will frustrate that purpose by resulting in the responsible person's enrichment or profit as a result of the violation of this chapter.
- D. Any aggrieved party to the hearing officer's decision on the administrative appeal may obtain review of the decision by filing a petition for writ of mandate with the Napa County Superior Court in accordance with the timelines and provisions set forth in Government Code Section 53069.4.
- E. If, following an administrative hearing, appeal, or other final determination, the responsible person is determined to be liable for the administrative citation, such liability, if unpaid within forty-five (45) days of the notice of the final determination, may be recovered by civil action.

10.36.090 Remedies cumulative—Actions—Relationship to other laws.

The remedies provided under this chapter are cumulative, and shall not restrict the city to any other remedy to which it is entitled under law or equity. Nothing in this chapter shall be deemed to conflict with any penalty or provision under state law, or prohibit any conduct authorized by the state or federal constitutions. If any section, subsection, sentence, clause, phrase, or word of

this chapter is for any reason held to be invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this chapter.



Report to the City Council
Council Meeting of September 26, 2017

Agenda Section: New Business

Subject: Council Discussion and Direction on Traffic Safety Enhancements on Highway 29 and Pratt Avenue Vicinity

CEQA Determination: Not a CEQA project

Prepared By: Allison Mattioli, Management Analyst

Reviewed By: Erica Ahmann Smithies, Public Works Director and City Engineer

Approved By: Mark Prestwich, City Manager

BACKGROUND

On May 9, 2017, the City Council formed a Parking Ad-Hoc Committee and appointed Vice Mayor White, Councilmember Dohring and Public Works Director Ahmann Smithies to discuss parking, delivery, and safety concerns in the residential neighborhoods adjacent to the Las Alcobas Hotel. Locations of concern have been Pratt Avenue, Elmhurst Avenue, Main Street and Park Street.

On July 11, 2017, the Ad-Hoc Committee brought a report before Council regarding the parking concerns near the Las Alcobas Hotel. At that time, the committee also brought forth their recommendation that Las Alcobas, along with Beringer Winery, the City, and Caltrans, should explore a lighted pedestrian crosswalk across Main Street/Highway 29 near Pratt Avenue.

DISCUSSION

With the recent opening of Las Alcobas Hotel, there has been an increase in pedestrians utilizing the non-enhanced crosswalk located at Highway 29 and Pratt Avenue. Numerous St. Helena residents have attended Council meetings and spoken to a number of near-miss accidents at the location, and have requested a reduced speed limit to increase safety for both drivers and pedestrians. The current speed limit throughout this stretch of highway is 35 miles per hour.

Perception is that southbound vehicle traffic increases in speed through the adjacent St. Helena Elm Tunnel, which in turn, increases the potential of vehicle accidents as other vehicles ahead are stopped for pedestrians to clear the crosswalk. This condition also increases the potential risk of vehicle versus pedestrian incidents. Staff is currently working with public safety to collect data on incident response counts throughout this stretch of Highway 29.

As Highway 29 is a State Route, under State jurisdiction, staff contacted Caltrans to discuss a potential speed reduction, traffic calming measures, and/or safety upgrades. Caltrans advised staff that speed limits are based on an Engineering and Traffic Survey (E&TS), and are not at Caltrans' discretion. Staff was also advised that the E&TS is valid for seven to ten years, and as the most recent E&TS on that segment of Highway 29 was completed on March of 2015 (prior to the opening of the hotel), the earliest an updated E&TS could be completed would be in 2022. Staff was further advised that the E&TS is not used to lower speed limits and, on the contrary, may instead justify a speed limit *increase*.

While Caltrans did not recommend an Engineering and Traffic Survey as a method to increase safety, they did provide City staff with feedback and the process for a proposed radar speed feedback sign, an enhanced pedestrian crossing device, or both measures in tandem on Main Street/Highway 29.

A radar speed feedback sign, or radar speed sign, is a traffic calming device designed to slow speeders down by alerting them of their speed. Devices are often equipped with the capacity to collect data for analysis, as well as reporting mechanisms to generate a variety of different reports.

An enhanced pedestrian crossing device, such as a high-intensity activated crosswalk (HAWK) beacon, or a rectangular rapid flash beacon (RRFB), are user-activated supplemental devices which alert drivers to pedestrians. Caltrans recommends the installation of an RRFB, as opposed to a HAWK beacon, as the HAWK system is considered a traffic signal, and therefore associated with higher costs, as well as additional criteria set forth in the California Manual on Uniform Traffic Control Devices (CaMUTCD) such as traffic volumes, vehicle speeds, and roadway width. RRFB amber LED lights can be activated either by a push button, or passively by a pedestrian detection system, and use an irregular flash pattern that is similar to emergency flashers on police vehicles.

Should a radar feedback sign be desired by Council, Caltrans would require an encroachment permit, as well as project plans, and an engineering evaluation/assessment justifying the need for a sign. Caltrans also recommends obtaining support from the Police Department and confirming the location is where speeding is observed on a regular basis.

Should an enhanced pedestrian crossing device be desired by Council, an RRFB would require an encroachment permit from Caltrans as well as an engineering evaluation/assessment justifying the need for the device.

An additional option for Council to consider would be to direct staff to research legislation to implement a speed reduction through the applicable stretch of Highway 29.

FISCAL IMPACT

Public Works budgeted the purchase of five radar feedback signs in Fiscal Year 2017/2018, two of which were slated to be installed on Pratt Avenue, due to the previous concerns with speed at that location. As Pratt Avenue is currently closed at Silverado Trail, and is expected to remain closed for an extended period of time, the issue of speeding vehicles using Pratt Avenue as a thoroughfare to access Silverado Trail has been temporarily mitigated. The two radar signs intended for Pratt Avenue could be installed on Main Street/Highway 29 within the area of Pratt Avenue and the St. Helena Elm Tunnel at no additional cost to the City.

The cost of an RRFB is approximately \$10,000 to \$15,000 for the purchase and installation of two units (one on each side of a street). This includes solar panels for powering the units, pad lighting, indication units (for both sides of the street) with RRFBs in the back and front of each unit, signage on both approaches, all posts, and either passive infrared detection or push buttons with audio instructions.

Caltrans encroachment permit fees are minimal, and vary based on the amount of staff time needed to process the application materials. In addition, there may be the need for a traffic engineer to prepare the engineering evaluation/assessment.

Installation of either device would require the City to assume the maintenance of the device(s).

Discussions involving potential cost-sharing measures have taken place with Las Alcobas, Beringer Winery, and The Culinary Institute of America (CIA), all of which have expressed interest in assisting in the funding of the safety enhancements.

RECOMMENDED ACTION

Staff is seeking Council feedback and direction in regards to traffic safety enhancements on Highway 29 and Pratt Avenue vicinity.

 The image part with relationsl





Status of Elm Tunnel

1. On-going Partnership

- Shared Maintenance
- Annual Inspection

2. Removal

3. Replanting

4. Question & Answer

The image part with relations!

Current Tree Condition





Schedule

- Public Notification
 - City Council Meeting
 - Letter to Local Stakeholders
 - Tree Labeling
 - Traffic Advisory
- Tree Removal
- Tree Replanting

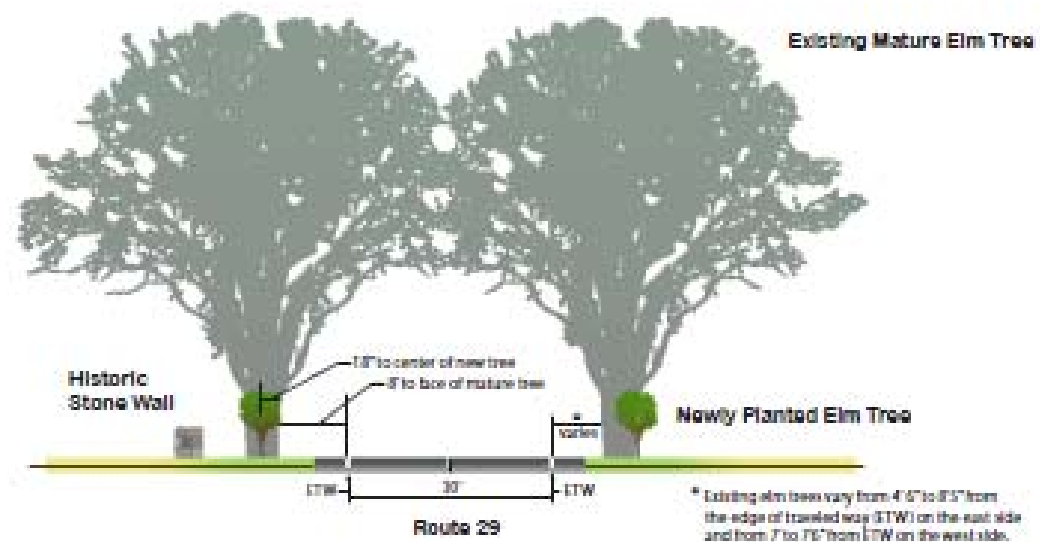


Replanting Effort



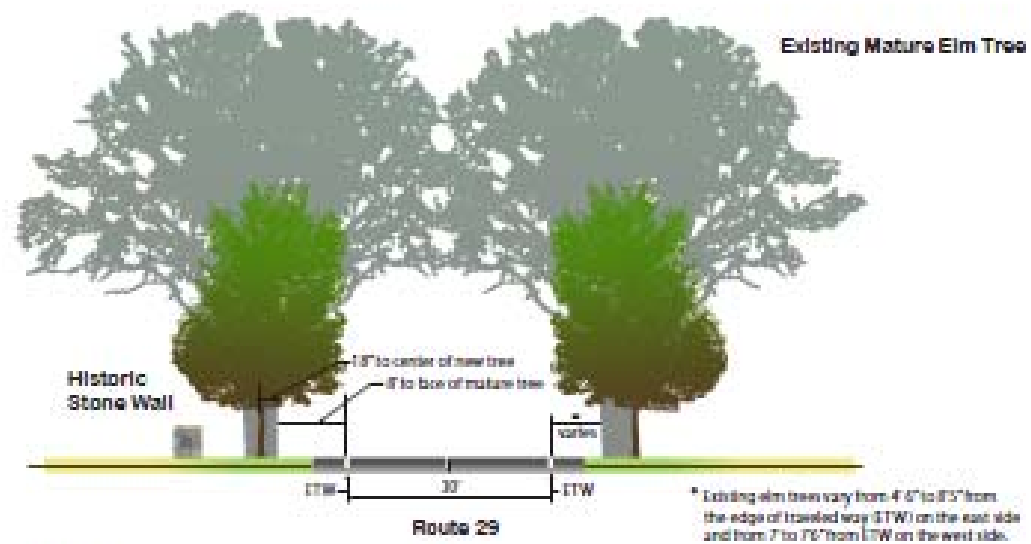
- Frontier Elm
- Accolade Elm

At Planting 0 Year Growth



St. Helena Elm Tunnel

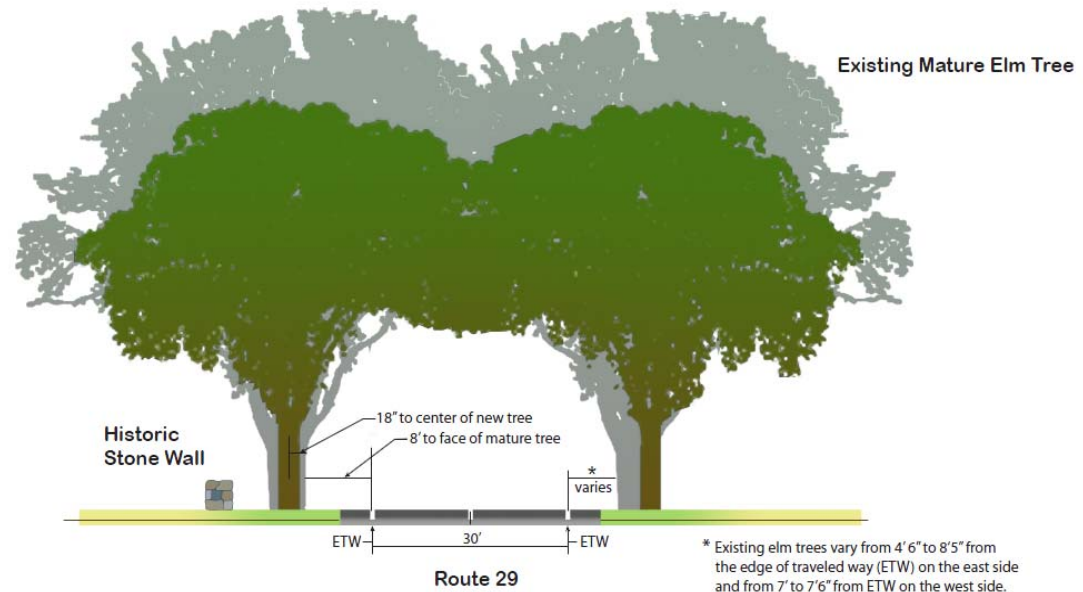
10 Years Growth



St. Helena Elm Tunnel

The image part with relations!

20 Years Growth



St. Helena Elm Tunnel

Questions & Answer

End of Presentation





Report to the City Council
Council Meeting of September 26, 2017

Agenda Section: Business

Subject: Consideration and Proposed Approval of Resolution Authorizing Creation of a Community Engagement Strategy for the Planned Civic Needs Assessment

CEQA Determination: Not a CEQA project

Prepared By: Mark Prestwich, City Manager

Reviewed By: Mark Prestwich, City Manager

Approved By: Mark Prestwich, City Manager

BACKGROUND

On July 11, 2017, the City Council appointed a temporary Council subcommittee consisting of Council Member Koberstein and Council Member Dohring to work with City staff on the preparation of a Facilities Condition and Needs Assessment Request for Proposal (RFP). The RFP was reviewed by the Council on August 22, 2017 and is currently posted to the City's website (submittals are due October 2). The selected consultant will document and analyze the City's existing built facilities to assist the City with prioritizing capital improvements, maintenance needs, and funding requirements. The proposed schedule anticipates a preliminary draft report by late December 2017 with a final draft due January 29, 2018.

In addition to the assisting with preparation of the RFP, the subcommittee was directed to identify areas for coordination and asked to consider options arising from the RFP and financial reports. This direction prompted the subcommittee to consider the unique public engagement opportunities presented by the forthcoming review of civic facilities. Considering the fact that the Needs Assessment would likely result in a discussion of how to prioritize and eventually fund deferred maintenance of civic assets, the subcommittee noted that there appeared to be several potential ways for citizens to participate in a public engagement process yielding numerous benefits for the City.

On September 12, 2017, the subcommittee presented a conceptual public engagement approach to the City Council for feedback. The proposal received enthusiastic support and direction was provided to the subcommittee and City Manager to return to the City Council on September 26, 2017 with a refined recommendation that included a name for a citizens committee.

DISCUSSION

Community Engagement Strategy. The subcommittee recommends a dual approach to community engagement consisting of a Citizens Committee and a variety of public engagement activities. The attached Tentative Community Engagement Calendar (Attachment 1) provides a refined timeline and sequencing of the Needs Assessment and public engagement activities. Each is summarized below:

Citizens Committee. It is recommended the City Council appoint a nine member Citizens Committee representing a broad spectrum of the community. Consistent with the focus of the committee's work, it is suggested the citizens committee be named the St. Helena Asset Planning Engagement (SHAPE) Committee, as their work will be used to shape the future of civic assets. Public Works Management Analyst Allison Mattioli will provide primary staff support to the committee, and will also be supported by Public Works Director Erica Ahmann-Smithies, Finance Director April Mitts and City Manager Mark Prestwich. Once assembled, the Committee will identify a suitable meeting schedule to accomplish their designated work plan within the requested timeline.

The Committee will be tasked with the mission of identifying alternatives to address deficiencies and opportunities identified in the Needs Assessment, challenges identified in the Long Range Financial Forecast (LRFF) and feasibility of concepts identified in the 2009 Visioning Statement (e.g. library expansion, civic building/amphitheater, community center). Additionally, the Committee will be asked to identify financial strategies (along with identifying consequences and trade-offs) for City Council consideration to address identified deficiencies, opportunities and/or utilization of community assets. Committee responsibilities will include receiving briefings on City finances, reviewing Needs Assessment findings, and updating the City's LRFF (including an analysis of deferred street/sidewalk improvements) in collaboration with City staff.

It is also recommended the City secure financial advisory services to assist the Committee with identification and evaluation of alternatives. Desired attributes of the individual or firm selected include a background in municipal finance, real estate and public engagement. City staff will initiate a Request for Proposals (RFP) for these services and it is recommended the Council subcommittee participate in the RFP review process.

It is recommended the City open a two-week application period through Wednesday, October 11, and task the Council subcommittee of Council Member

Koberstein and Council Member Dohring to review applications, interview potential participants, and present a recommended slate of committee members to the Council for approval on October 24. Interviews are anticipated to occur the week of October 16. Selection criteria will include ensuring that a broad cross section of the community and perspectives are represented on the committee.

Public Engagement Track. The public engagement process will further include additional opportunities for community participation. Examples include touring City-owned facilities, participating in community focus groups to discuss Needs Assessment and Committee alternatives, participating in facilitated public workshop(s) to provide feedback on options related to facility needs, and a written public comment period to capture additional community perspectives.

Communication. The City will pursue a number of communication strategies to ensure the community is aware of the public engagement opportunities, Needs Assessment, and related activities. In addition to the use of press releases, social media, and distribution to the business community via the Chamber of Commerce, the City will build a webpage on the City website dedicated to inventorying all documents created and received related to this public engagement process.

FISCAL IMPACT

Facilitation services contemplated for public engagement workshops are already funded via the City's existing agreement with Bread of Life. It is recommended the City seek proposals for financial advisory services to assist the Citizens Committee with the development of alternatives.

RECOMMENDED ACTION

It is recommended the City Council authorize and adopt Resolution creating the St. Helena Asset Planning Engagement (SHAPE) Committee and accompanying public engagement process to seek citizen feedback on the forthcoming Civic Facilities Needs Assessment activities.

ATTACHMENTS

[Public Engagement Strategy](#)

[SHAPE Committee Resolution](#)

Tentative Community Engagement Calendar

Evaluation of Municipal Facility Requirements & Financial Alternatives

	NEEDS ASSESSMENT CONSULTANT	COUNCIL APPOINTED CITIZENS COMMITTEE	PUBLIC ENGAGEMENT
SEPTEMBER			
Week of 9/25		Council Authorizes Committee & Define Objectives	Approval of Public Engagement Strategy
OCTOBER			
Week of 10/2	RFP Responses Due	Recruit Committee Members	
Week of 10/9	RFP Interviews		
Week of 10/16			
Week of 10/23	Award of RFP Contract	Appoint Committee Members	Informational Community Workshop
Week of 10/30	Tour of City-owned facilities	Initial Committee Meeting & Review of Scope	SHAPE Committee Meeting
NOVEMBER			
Week of 11/6	Tour of City-owned facilities	Tour of City-owned facilities	Tour of City-owned facilities
Week of 11/13	Preparation of preliminary draft findings	Briefing on City Finances/LRFF/2009 Visioning	SHAPE Committee Meeting
Week of 11/20		No Meeting	
Week of 11/27		Briefing on City Fees	SHAPE Committee Meeting
DECEMBER			
Week of 12/4		Hold	Community Focus Group Recruitment
Week of 12/11	City hires financial advisor	Receive briefing on preliminary assessment findings	SHAPE Committee Meeting
Week of 12/18		No Meeting	
Week of 12/25		No Meeting	
JANUARY			
Week of 1/1	Financial advisor	Update Long-range Financial Forecast	Informational Workshop on Assessment Findings
Week of 1/8			SHAPE Committee Meeting
Week of 1/15			SHAPE Committee Meeting
Week of 1/22		Development of alternatives	SHAPE Committee Meeting
Week of 1/29			SHAPE Committee Meeting
FEBRUARY			
Week of 2/5		Development of alternatives	SHAPE Committee Meeting
Week of 2/12			Informational Workshop on Draft Committee Findings
Week of 2/19		No Meeting	Community Focus Groups/Public Comment Period
Week of 2/26		No Meeting	Community Focus Groups/Public Comment Period
MARCH			
Week of 3/5		Refinement of alternatives	
Week of 3/12			
Week of 3/19			
Week of 3/26			
APRIL			
Week of 4/2			
Week of 4/9		Presentation of alternatives to City Council	City Council Meeting

CITY OF ST. HELENA

RESOLUTION NO. 2017-

**AUTHORIZING THE ESTABLISHMENT OF
THE ST. HELENA ASSETS PLANNING
ENGAGEMENT (SHAPE) COMMITTEE**

RECITALS

- A. The City Council is planning to conduct a Facilities Condition and Needs Assessment (FCNA) to document and analyze the City's existing built facilities to assist the City with prioritizing capital improvements.
- B. The City Council recognizes the FCNA presents unique opportunities for public engagement yielding numerous benefits to the City.
- C. The City Council desires to create a committee to function in an advisory capacity to the City Council to assist the City in prioritizing and identifying strategies to address civic needs and opportunities.
- D. The general purpose of this committee will be to identify alternatives to address deficiencies and opportunities identified in the FCNA, challenges identified in the Long Range Financial Forecast (LRFF) and feasibility of concepts identified in the 2009 Visioning Statement (e.g. library expansion, civic building/amphitheater, community center, etc.). Additionally, the Committee will be identify financial strategies (along with identifying consequences and trade-offs) for City Council consideration to address identified deficiencies, opportunities and/or utilization of community assets.
- E. The committee will be comprised of nine (9) members who represent a broad cross section of the community and perspectives. All members must be residents of St. Helena. All meetings will be subject to the requirements of the Brown Act, Government Code section 54950 et seq., and as such will be agendized and open to involvement and participation by the public.

RESOLUTION

NOW THEREFORE, the Council of the City of St. Helena resolves as follows:

1. Waives maximum committee requirements established by Resolution 2014-45 and establishes the St. Helena Assets Planning Engagement (SHAPE) Committee consisting of nine (9) members as appointed by the City Council. Committee members shall represent a broad cross section of the community and perspectives. All members shall be residents of St. Helena.

2. All meetings of the SHAPE Committee will be subject to the requirements of the Brown Act, Government Code section 54950 et seq., and as such will be agendized and open to involvement and participation by the public.
3. The SHAPE Committee will provide a final report to the City Council by April 2018. The Committee will be dissolved upon submitting its final report to the City Council.

Approved at a Regular Meeting of the St. Helena City Council on September 26, 2017,
by the following vote:

Mayor Galbraith: _____
Vice Mayor White: _____
Councilmember Koberstein: _____
Councilmember Dohring: _____
Councilmember Ellsworth: _____

APPROVED:

ATTEST:

Alan Galbraith, Mayor

Cindy Tzafoopoulos, City Clerk



Community Engagement

ANALYSIS INFORMATION
Spring 2018 Winter 2017

Needs Assessment	"SHAPE" Citizens Committee	Public Engagement
- Award of contract - Tour of City-owned facilities - Preparation of DRAFT findings	- Recruit Committee members - Tour of City-owned facilities - Overview of City Finances/Fees - Briefing on DRAFT "Needs Assessment" findings	Informational Workshop SHAPE Committee Meetings
- Acceptance of report - Financial advisor	Development of Alternatives Refinement of Alternatives	Focus Groups Informational Workshop Public Comment Period



Report to the City Council
Council Meeting of September 26, 2017

Agenda Section: New Business

Subject: City of St. Helena Municipal Service Review and Sphere of Influence Update

CEQA Determination: Not a CEQA project

Prepared By: Noah Housh, Planning & Community Improvement Director

Reviewed By: Mark Prestwich, City Manager

Approved By: Mark Prestwich, City Manager

BACKGROUND

On September 12, 2017, Napa Local Agency Formation Commission (LAFCO) Executive Officer Brendon Freeman provided the City Council with an informational update on Napa LAFCO's draft Municipal Service Review (MSR) and Sphere of Influence (SOI) Update. Napa LAFCO is responsible for completing municipal service reviews and for determining the City's sphere of influence (probable physical boundary and service area). Napa LAFCO intends to discuss the draft St. Helena MSR/SOI on October 2, 2017 before the public comment period concludes October 13, 2017, with formal action on the city's MSR/SOI planned for December 2, 2017.

DISCUSSION

Given that the document is intended to (among other things) inform decisions on local land use in and around St. Helena, determine the need for public services and facilities, based on current capacity and adequacy of services (provided by the City) and generally forms the basis for specific judgments about City governance, it is critical that the information in the report be as accurate and update-to-date as possible.

The City has completed a preliminary review of the draft MSR/SOI and unfortunately, has found the current draft contains a number of inaccurate and/or out-dated statements (see attachments). Specifically, the City has found inaccuracies in revenue projections, residential and commercial growth projections, City staffing and governance

structures and other elements of City governance included in the report. Attached to this report is a list of some of the items that require revision and/or clarification to ensure the accuracy of the document. Given the scope and breadth of the inaccuracies identified, staff recommends the City request Napa LAFCO postpone their planned October 2, 2017 St. Helena MSR/SOI discussion until the document is accurately updated.

FISCAL IMPACT

Not applicable.

RECOMMENDED ACTION

Authorize staff to communicate preliminary feedback on the draft MSR/SOI to NAPA LAFCo and request a postponement of the planned October 2, 2017 LAFCO discussion of the St. Helena MSR/SOI until an accurate document is presented for review.

ATTACHMENTS

[MSR-SOI Comments](#)

St. Helena MSR/SOI Comments

- Page 2-2 makes reference to Table 2-3 as being staffing levels - Table 2-3 actual refers to Jurisdictional Changes
- Page 2-2 gives the staffing level from the FY 2016 budget Should be updated to FY 2018
- Page 2-13 – the staffing levels should be updated
- Page 2-13 – refers to Figure 2-2 – this should be Table 2-4
- Page 2-13 – says there are 74 employees, the number is inconsistent with what it says in the table above which is 78.68 – in either case, these should be updated.
- Page 2-15 – there were a lot more administrative accomplishments since 2008 - the budget pages track the accomplishments
- Page 4-1 – under customers suggest changing the third sentence to state, “residents of neighboring communities **often** utilize the Recreation Department **and Library** services”
- Page 4-3 – update to FY 15/16 audit financial information (instead of FY 13/14 and 14/15)
- Page 4-12 – The City provides water to 2,549 connections – change number
- Page 5-1 – updated financial information. Also remove comment stating the audit and budget were not on the website.
- Page 5-1 – bottom – add additional fiscal policies
 - Capital Asset and Deprecation
 - Sale of Surplus Property
 - Escheat Policy
- Page 5-2 – update financial information and litigation information
- Page 5-3 – update financial information
- Page 5-4 – update financial information
- Page 5-11 – update financial information
- Page 5-22 – update financial information
- Page 6-3 – item 23 – City did present information on a major recession
- Page 6-3 – item 25 – update financial information
- Page 6-4 – items 35 and 35 – update financial information

1. Starting with the reference on pg. 2-13, the draft SOI/MSR includes numerous references to the City of St Helena General Plan that are incorrect and/or out-of-date. Specifically, the General Plan document is the St Helena 2035 General Plan update.

2. St. Helena Police Department maintains a log of all complaints filed with the Department.

3. Planning and Community Improvement Director is the correct title for the Department head referenced on pg. 2-16.

4. On pages 2-17 and 4-46: it states that the Robert Louis Stevenson Museum is located in a separate building. The Museum shares our building.

5. Also on page 4-46: It states that the Library has a staff of 6 FTE and then goes on to list all 6 full time staff and closes by stating there are 8 part-time employees that equate to 1.99 FTE. This is a confusing way to state the Library has 7.99 FTEs and what they are composed of.

6. General Plan Land Use Graphic on pg. 3-3 is inaccurate in that it includes land use changes proposed in the 2035 General Plan update.
7. The project list on pg. 3-5 is outdated. Turley Flats was approved in 2013 and is under construction; the Our Town St Helena project was approved; 632 McCorkle is an 8-unit project that was also approved and there has been no formal application at 821 Pope St.
8. On pg. 3-5 the residential growth analyzed in the 2035 General Plan EIR is incorrectly identified as residential growth *projections*, when these numbers are in fact identified in the EIR as maximum potential residential growth, intended to facilitate a complete environmental impact analysis under CEQA.
9. The commercial growth numbers (pulled from the General Plan EIR) provided on pg. 3-6 and 3-7 are similarly intended to identify the maximum potential growth to facilitate a complete environmental impact analysis under CEQA. These numbers are in no way projections and are never categorized as such in any City document.
10. Change area graphic 3.4 is out of date. The City Council has eliminated the Low-Medium Density Residential district from the 2035 General Plan Update
11. Fiscal analysis and revenue projects are out-of-date and do not appear to have been updated with the most current information available, particularly the updated revenue projections resulting from the adoption of Measure D.
12. The statement on pg. 3-13 identifying that the decline in the City's growth rate was a result of infrastructure constraints is suspect and should be removed of supported by factual information.
13. Planning Dept. no longer staffs AT/S Committee. PW Staff now has that assignment (pg. 4-42).
14. Project list needs updating (see comment 7 above). Menegon Bldg. is 1380 Main St; Redmond Winery was approved; CIA was denied.
15. Planning staff also serves as Environmental Coordinator for the City and manages the Housing Authority contract (pg. 4-43).
16. Building Department entered into a Council approved agreement with the City of Calistoga for shared Building Official services during illness, vacation and other absences.

**Mayor's Comments on MSR/SOI Administrative Draft
Dated August 25, 2017**

1. Page 2-4: The text under Table 2-2 states that two parcels totaling 95 acres at Bell Canyon are within St. Helena's jurisdictional boundary. This is not

correct. See contrary statement on page 4-9, seventh line from the bottom (“The reservoir is located northeast of St. Helena in the unincorporated area.”)

2. Page 2-5: Figure 2-1 shows land around Bell Canyon Reservoir as being within City Limits. Map needs to be fixed. See point 1 above. See also Figure 7.3 (same map) on page 7-8.
3. Page 2-8: In first indented paragraph, fourth line, change “fie” to “fire (typo).
4. Page 2-10, last line: subject to check, the deferred compensation match is \$150 per month, not \$200.
5. Page 2-17: Have we received awards since 2014? Are the CAFR awards worth mentioning?
6. Page 3-1: The last paragraph lists five approved projects since 2008. These projects are more than “approved”; they are completed. Suggest as follows: “Several residential and commercial projects have been completed since the last Municipal Service Review within the City’s boundary including:”
7. Page 3-5: The fourth bolded point states that 632 McCorkle Avenue consists of ten units. Actual project is 8-units and was approved.
8. Page 3-18: The last line (beginning with “This equates”) states that affordable housing production is within the allowable growth management system limit. Affordable Housing units are specifically exempted from Growth Management Ordinance.
9. Page 4-3: The second paragraph references a 2010 Grand Jury report, and states that we are working (presumably in 2017) to address issues in that report. The issues are not identified. Suggest adding details or deleting the entire paragraph.
10. Page 4-8: The paragraph below Table 4-3 begins with: “Out of the 1950 acre-feet (AF) of total available water supply”. The safe yield is not related to “available “water supply. In any year our water supply may be more or less than 1950 AF. The safe yield sets a top limit on what we wish to supply with the goal to minimize supply problems in drought years. Suggest deletion of the introductory clause.
11. Page 4-8: Typo three lines up from bottom: change “reliable” to “reliably”.
12. Page 4-8: The definition of “safe yield” referenced in footnote 13 should be provided, along with a statement to the effect that it should not be confused with the “safe yield” definition that led to the 1950AF water supply cap. See page 4-16 for our definition of “safe yield.”

13. Page 4-9: The last sentence of the second paragraph under State Project states that our Napa water agreement “is effective through 2034, provided that the SWP maintains the agreement with the City of Napa (Napa County, 2013).” It is not correct that our contract is dependent on Napa maintaining its agreement with the SWP. It appears that the sentence as written is based on a misreading of term 1(b) of the (initial) Water Supply Agreement (September 12, 2006). Our contract (as amended), operates completely independently of water supply that comes to Napa from the SWP. Further, Napa does not contract with the SWP; it contracts with the Napa County Flood Control and Conservation District (“NCFCWCD”), which, in turn, is one of the several Water Districts around the State that contract with the SWP. Suggest deletion of “provided that the SWP etc.” language.
14. Page 4-11: Table 4-4 would benefit from 2016 data and, if the years are water years, 2017 data.
15. Page 4-13: Figure 4-1 presents average annual metered water demand in AF for classes of customers with the average based on fiscal years 2002-2008. A figure based on such stale data is of little or no value. Strongly suggest a revision based on the last available five-year averages.
16. Page 4-14: Figure 4-2 would benefit from 2016 data and, if in water years, 2017 data.
17. Page 4-15: Table 4-5 shows data through only 2009. It should be updated.
18. Page 4-18: Tables 4-7 and 4-8 from the 2010 Water Supply Plan, is out of date. This then led to the Safe Yield Committee and its determination that total demand should not be allowed to exceed 1950AF. See page 4-16.
19. Page 4-28: The paragraph following the four (bolded) points states that the SHPD operates with “unsafe working conditions for officers.” This statement, if correct, is a source of substantial and immediate concern to me, and we should be addressing it at Council. Please review with Chief Imboden.
20. Pages 4-39 & 4-30: The tables show 2014 data. It should be updated. The number of calls has greatly escalated since 2014.
21. Page 4-47: Suggest changing second sentence in first paragraph from “Also, the City is part of Joint Powers Agreements as follows:” to “The City participates in the following:” Some of the listed entities are not JPAs.
22. Page 4-47: In the sixth line down in the paragraph that begins with the Napa Housing Authority, suggest adding “coordination of” after “provide for” and “economical regional waste management services.” The Upper Valley Waste Management Agency does not itself provide waste management services.

23. Page 5-2: The next to last paragraph begins by stating that the most recent auditor's report was for FY 2014/2015. This needs to be updated.
24. Page 5-2: The litigation comments in the last paragraph are outdated and should be removed.
25. Page 5-3: The two (bolded) points at the top of the page are from the 2008 LAFCO report. The text is out-of-date.
26. Page 4-50: Table 4-24 presents stale data and should be updated.
27. Page 4-50: The first sentence under Table 4-24, stating that we have "routinely" adopted CIPS is, regrettably, not correct. My suggestion is that the paragraph be rewritten to discuss the CIP adopted in July 2017.
28. Page 5-1: The second paragraph about budgets and audits is out of date and should be revised.
29. Pages 5-3 through 5-9: The financial data should be updated. Also, as to completed fiscal years, the reserves are known; it would seem inappropriate for those years to present "estimated reserves", as shown in Table 5-5.
30. Page 5-9: The fourth line from the bottom states that the Nigro & Nigro firm "found sloppy accounting practices." This is not a professional statement in my estimation. It should be restated in proper professional language as stated by our outside auditor. Further, the description does not identify the specific years involved. It also seems to me that a sentence or two noting the significant progress since 2014 in implementing additional internal controls would provide important context.
31. Page 5-9: The last sentence about a combined grant seeker and manager now out-of-date. Suggest making clear that the Finance Department has procedures in place to ensure proper grant management.
32. Pages 5-11 & 5-12: Can we add 2016 data to Table 5-6 & 5-7?
33. Page 5-21: Change "General Funds" to "Enterprises" in sentence after the seven enumerated points.
34. Pages 5-25 through 5-36: The data should be updated. Further it is misleading to identify property, sales tax, and TOT revenue as a percentage of total revenue, as opposed to general fund revenue. City-to-city comparisons typically are made by looking at relative contributions of these revenue streams to their respective general funds.
35. Page 6-3: Point 24 is stated backwards. We recently enacted significant rate increases to avoid using General Fund monies to subsidize the Enterprise Funds [These rates are now slated to change again].

36. Page 6-4: Point 37 states that participating agencies provide garbage collection. No agency does so.
37. Page 6-5: The second circle point after 43 states that our City has utilized the General Plan and other planning tools to “[p]romote economic development.” Such a statement is should be backed up with some specific examples.
38. Page 6-5: The fourth circle point after 43 states we have used the General Plan and other planning tools to “Limit the obligations of government by strategic building and maintaining infrastructure through capital planning and investments.” The intent of this statement is unclear. Our General Plan statements are aspirational: e.g., ES1.3 on page 4 P-8 of the May 2016 Draft (“Ensure the long-term infrastructure needs and priorities of the community are met as part of an economic approach to economic vitality and sustainability.”). Aspirational statements are not “limiting.”
39. Page 6-6: Point 50 conveys the impression that the Police Department provides statistical information on a regular basis at our Council meetings. This is not the case. Also, is the statement that such information is not provided by the Department on its webpage correct?
40. Page 7-8: Figure 7-3 incorrectly shows land around Bell Canyon Reservoir to be within City limits. See Points 1 & 2 above.
41. Page 7-16: The second box (“Location”) states that study area #2 is northeast of the City when it is northwest.
42. Appendix E is the LRFF dated October 27, 2015. The LRFF was further updated on February 9, 2016. It seems to me that the update should also be included as an appendix.

Note One: Council member Dohring has contributed to and concurs in these comments.

Note Two: Council member Dohring and I have pointed out text and figures that are out of date. We make no claim that our review has been systematic. Our joint view is that the MSR must be based on currently available information. We think that the City can and should provide the relevant updated documents but it is the obligation of LAFCO Staff to do the updating.

Alan Galbraith
Mayor, City of St. Helena