SPMUD BOARD OF DIRECTORS
REGULAR MEETING: 3:00 PM
December 11, 2014

SPMUD Board Room
5807 Springview Drive, Rocklin, CA 95677

The District's regular Board meeting is held on the first Thursday of every month. This notice and agenda is posted on the District's web site (www.spmud.ca.gov) and posted in the District's outdoor bulletin board at the SPMUD Headquarters at the above address. Meeting facilities are accessible to persons with disabilities. Requests for other considerations should be made through the District Headquarters at (916)786-8555.

AGENDA

I. CALL MEETING TO ORDER

II. ROLL CALL OF DIRECTORS

Director Gerald Mitchell,	Ward 1
Director William Dickinson,	Ward 2
Director John Murdock,	Ward 3
Director Victor Markey,	Ward 4
President James Williams,	Ward 5

III. PLEDGE OF ALLEGIANCE

IV. CONSENT ITEMS

Consent items should be considered together as one motion. Any item(s) requested to be removed will be considered after the motion to approve the Consent Items.

[pg 5 to 19]

ACTION: (Voice vote)
Motion to approve the consent items for the December 11, 2014 meeting

1. MINUTES from the October 2, 2014 Regular Board Meeting.
2. MINUTES from the November 6, 2014 Regular Board Meeting.
3. ACCOUNTS PAYABLE in the amount of $503,495.99through November 30th, 2014.
4. MONTHLY INVESTMENT REPORT in the total amount of $46,820,197.72 through November 30th, 2014.

V. PUBLIC COMMENTS

Items not on the Agenda may be presented to the Board at this time; however, the Board can take no action.

VI. BOARD BUSINESS

Board action may occur on any identified agenda item. Any member of the public may directly address the Board on any identified agenda item of interest, either before or during the Board's consideration of that item.

1. CONSIDERATION OF AN APPEAL OF THE GENERAL MANAGER'S DECISION REGARDING SCADA ANTENNA ON THE MARETA LANE SEWER LIFT STATION

[pg 20 to 21]

ACTION REQUESTED**:** (Voice vote)

Review the District's Report, Hear from the Property Owner and Deny or Grant the Request.

GENERAL MANAGER'S REPORT:

Some of the Mareta Lane property owner's made a request (see attachment 1A) to over-rule the General Manager's decision not to hide the Mareta Lift Station SCADA antenna with a fake tree. We are in the last year of our SCADA upgrades to our remote pumping and metering stations; our SCADA is a radio control system and each site requires an antenna. Board should hear the District's report (SCADA Presentation) and then hear the property owners request and rule on their request.

2. CONSIDERATION OF ACCEPTANCE OF BILL OF SALES

[pg 22 to 24]

ACTION REQUESTED**:** (Voice vote)

Motion to Accept Bills of Sale for Sanitary Sewer Facilities

GENERAL MANAGER'S REPORT:

Attached are the Bills of Sale with location map for the following completed project:

A. Avalon Subdivision - Phase 1: a 76 EDU single-family residential development on the south side of Rocklin Rd. near Grove St. Phase 1 of the development includes 30 sewer connections, 8 manholes and 1123 feet of public sewer main.

The project has been completed in accordance with SPMUD standards. All field and admin items have been addressed to the satisfaction and requirements of SPMUD.

3. CONSIDERATION OF A REPORT ON THE LOOMIS DIVERSION TRUNK SEWER ROUTE STUDY

[pg 25 to 27]

ACTION REQUESTED**:** (none)

Receive the Route Study

GENERAL MANAGER'S REPORT:

Attachment 3 is the District's staff report and exhibits for an engineering report on the best route alignment for the Loomis Diversion Sewer. The District agreed to fund and conduct the study for the Town of Loomis; the report has been given to the Town for their use in the CEQA process. The Board does need to take any action on the Study, this is for information only.

4. CONSIDERATION OF A POLICY STATEMENT FOR FUNDING OF DISTRICT ASSETS

[pg 28 to 29]

ACTION REQUESTED**:** (voice vote)

Motion to approve a Policy Statement for Funding of District Assets

GENERAL MANAGER'S REPORT:

It has historically been the District's policy to "pay as we go" and anticipate future expenditures to avoid debt financing by collecting revenues adequate to enlarge the system, renew and replace facilities, and day-to-day operations and maintenance of the sewer system. This policy defines our funding sources and uses and provides staff with Board guidance on how to establish procedures to execute this policy. This policy statement has been reviewed and approved by the SPMUD Fee Committee (Williams/Dickinson).

5. CONSIDERATION OF GENERAL MANAGER' S REPORT AND RECOMMENDATION ON SEWER SERVICE REVENUE ANALYSIS.

[pg 30 to 49]

ACTION REQUESTED**:** (Voice vote)

Motion to Approve Recommendations on the Sewer Revenue Analysis

GENERAL MANAGER'S REPORT:

The District needs to revise its Sewer Use Ordinance and a decision on any changes to how we establish our service charges is necessary. Attachment 4 is my GM Report & Recommendation on the sewer revenues. The presentation will be provided separately. The report discusses the actions involved in setting our service fees, an analysis of the "Flow Monitoring Study" and a look at the revenues by our main customer types (residential and non-residential). The report makes seven recommendations based on the analysis of the information provided in the report. These recommendations will have no financial on our residential customers, however, # 4&5 will having a financial affect on our non-residential customers (5% of our customer base). These recommendations will result in about a 2% increase our service fee revenues and would help in deferring any service fee increase. The Board should review and discuss the report and approve the recommendations with or without changes.

VII. REPORTS

The purpose of these reports is to provide information on projects, programs, staff actions and committee meetings that are of general interest to the Board and public. No decisions are to be made on these issues.

[pg 50 to 55]

1. Attorney (A. Brown)
2. Superintendent (J. Allen)
3. General Manager (C. Clark)
    1) FSD, ASD & TSD Reports
    2) Information items
4. Director's Comments:

Directors may make brief announcements or brief reports on their own activities. They may ask questions for clarification, make a referral to staff or take action to have staff place a matter of business on a future agenda.

VIII. ADJOURNMENT

If there is no other Board business the President should adjourn the meeting to its next regular meeting on January 11, 2014.

BOARD MINUTES
SOUTH PLACER MUNICIPAL UTILITY DISTRICT

Meeting	Location	Date	Time
Regular	District Office	October 2nd, 2014	4:00 p.m.

I. CALL MEETING TO ORDER: The Regular Meeting of the South Placer Municipal Utility District Board of Directors was called to order with President Williams presiding at 4:00 p.m.

II. ROLL CALL OF DIRECTORS:

Present: Will Dickinson, Vic Markey, Jerry Mitchell, John Murdock, Jim Williams

Absent: None
Vacant: None

Staff: Charles Clark, General Manager, Secretary of the District
Jody Allen, Superintendent
Joanna Belanger, Administrative Services Manager
Adam Brown, Legal Counsel
Eric Nielsen, District Engineer
Gary Gibson, Field Services Manager
Sam Rose, Assistant Superintendent

Others: None

III. PLEDGE OF ALLEGIANCE: President Williams led the Pledge of Allegiance.

IV. CONSENT ITEMS:

1. MINUTES from the September 4, 2014 Regular Board Meeting.
2. MINUTES from the September 24 & 25, 2014 Special Board Meeting.
3. ACCOUNTS PAYABLE in the amount of $369,718.14 through September 25th, 2014.
4. MONTHLY INVESTMENT REPORT totaling $44,731,041.47 through September 25th, 2014.

Director Mitchell asked for the Investment report to be pulled from the Consent items. Director Dickinson made a motion to approve items 1 through 3 on the consent calendar, a second was made by Director Mitchell the motion carried 5-0. Further discussion was made by Director Mitchell regarding the investments in each account, and the potential interest that may be made if funds were placed in the Placer County Treasury instead of the LAIF account. President Williams stated that we could study the amount held in each account. General Manager Clark stated that there is a limit of $40 Million in each account, also stating that liquidity of the LAIF funds was important for day to day business operation needs. Ms. Belanger mentioned that as part of the strategic plan, staff would be assessing all investments and bringing a report back to the board for further review of investment options. Director Mitchell made a motion to accept the monthly investment report, a second was made by Director Murdock, the motion carried 5-0.

V. PUBLIC COMMENTS:

President Williams opened the Public Comments, hearing none the public comments were closed.

At 4:40 p.m. the Board reconvened inside the Board room after completing the review of maintenance equipment, at this time the President reopened the public comment session. Mr. Hemang Trivedi, owner of the Rocklin Park hotel located at 5450 China Garden Road, Rocklin addressed the board with regards to

a request for a grant to exemption from submitting the quarterly application for Unoccupied Use credit. He stated that the restaurant has not been in use for over five years, and asked that they do not have to complete this form, indicating that he had missed a couple of payments and application deadlines. President Williams stated that the board could not act on any item that was not on the agenda. General Manager stated that the ordinance requires the quarterly submission for a credit of unoccupied use. If this requirement were to be waived, it would take a change of the District Ordinance. He further stated that the District used to allow a once a year submittal of this form, however some businesses didn't renew the form or put the business back into use and didn't tell the district. The correction was to make the form a quarterly submittal. President Williams asked if this was a complicated form, Ms. Belanger indicated it is a one page form. Mr. Trivedi stated that the issue is the timeline for submittal of the unoccupied use application, stating that the window of time is short, when it needs to be submitted in a one week window or it isn't approved. Ms. Belanger stated that the form hasn't being submitted on a timely basis by Mr. Trivedi, or payments are not being made in full to remove the past due amounts, therefore precluding staff from approving the application. President Williams directed staff to bring this to the board as an action item at the November 6th, Board meeting.

VI. BOARD BUSINESS:

1. CONSIDERATION OF REVIEW OF DISTRICT OPERATIONS AND MAINTENANCE EQUIPMENT AND PROCEDURES

GM Clark stated that that the field maintenance crew were set-up to demonstrate the televising and flushing equipment on Springview Drive, and other large items of equipment were displayed in the yard for the Board's review. At this time the board exited the building to view the demonstration.

2. CONSIDERATION OF REVIEW OF "WILL SERVE LETTER" PROCEDURE:

GM Clark introduced this item as further discussion of the Will Serve policy. The statement comes straight from the District Ordinance, and the procedures that are followed. He further stated that the real issue is how long a Will Serve letter is good for. It is currently good for 365 days, should it instead be a capacity issue, but we should be looking at other options for our procedures.

Director Dickinson asked if there is a need for the expiration date on a Will Serve letter. Legal Counsel Brown stated that a firm deadline serves a good purpose. President Williams asked if Conveyance and Treatment should be added to be very clear in the language. All agreed.

Director Mitchell stated that he likes the idea that a date remains on the letter, as so many factors can change over time. He also asked how the review and approval occurs and if there were specific levels of approvals. Assistant Superintendent S. Rose stated that the TSD department is working towards a quality control process. Director Mitchell asked if there was an S.O.P. to hold people accountable, and a formal process. Director Dickinson suggested the paragraph that states "this letter does not constitute a reservation capacity" should be bolded. Legal Counsel Brown stated that he is working with staff to clarify the language in the Will Serve Letters.

VII. REPORTS:

1. District Legal Counsel (A. Brown): Legal Counsel Brown stated he had no report but would be providing a report on the Brown Act at the November meeting.

2. Superintendent (J. Allen): Superintendent Allen stated that staff continues to train on the new CCTV truck. District Engineer Nielsen stated that he is working with the operators for the new IT Pipes program.

3. General Manager (C. Clark):

A. ASD, FSD & TSD Reports: GM Clark indicated that ASD, FSD and TSD reports were included in the materials, and that staff was available to answer any questions from the Board.

B. Information Items: GM Clark indicated that a number of employees had attended the CWEA conference in Sacramento. He stated that Carie Huff had started as the new Engineering Technician II in TSD, which raises the level of professionalism dramatically within the department. He updated the Board of succession planning within the TSD and FSD departments, keeping things moving all in the transitions. An informal workshop on the Loomis Diversion Line had been held with staff, consultants and the Loomis Town Manager. Director Mitchell asked about the scheduled formal Loomis Diversion workshops and any dates that had been set. He stated there is a proposed Special Benefit District, but wondered if the map of the area of enhancements will be included in the November Public Hearings. GM Clark stated that there are a lot of unknowns, and that the Special Benefit Area (SPA) hasn't yet been established. Legal Counsel Brown and GM Clark continue to work on the Resolution for the SBA, to hopefully be brought back to the November meeting.

4. Directors Comments: Director Murdock thanked the Maintenance Crew for their demonstration of the equipment. He asked if security cameras could be considered for the Corporation Yard, and questioned why the storage sheds were open by over two feet at the top of the gates. Superintendent Allen replies that he would gather three bids prior to the mid-year budget for the Boards review.

VIII. CLOSED SESSION

I. CLOSED SESSION

Closed session per Government Code 54957: Public employment for General Manager Position.

The Board convened into closed session.
Legal Counsel Brown reported out of Closed Session at 6:20 p.m. that the Board heard a report regarding two of the candidates for the General Manager position, and directed the committee to work with the consultant in negotiating a package for compensation with the chosen candidate.

IX. ADJOURNMENT

The meeting was adjourned at 6:25 p.m. to the next regularly scheduled meeting on November 6th, 2014 at 4:30 p.m.

Charles W. Clark, Secretary of the District

BOARD MINUTES
SOUTH PLACER MUNICIPAL UTILITY DISTRICT

Meeting	Location	Date	Time
Regular	District Office	November 6th, 2014	4:30 p.m.

I. CALL MEETING TO ORDER: The Regular Meeting of the South Placer Municipal Utility District Board of Directors was called to order with President Williams presiding at 4:30 p.m.

II. ROLL CALL OF DIRECTORS:

Present: Will Dickinson, Vic Markey, Jerry Mitchell, Jim Williams

Absent: John Murdock
Vacant: None

Staff: Charles Clark, General Manager, Secretary of the District
Jody Allen, Superintendent
Joanna Belanger, Administrative Services Manager
Adam Brown, Legal Counsel
Eric Nielsen, District Engineer
Gary Gibson, Field Services Manager
Sam Rose, Assistant Superintendent

Others: None

III. PLEDGE OF ALLEGIANCE: Vic Markey led the Pledge of Allegiance.

IV. CONSENT ITEMS:

1. MINUTES from the Oct. 2, 2014 Regular Board Meeting & Oct 6, 2014 Special Board Meeting.
2. ACCOUNTS PAYABLE in the amount of $345,861.21 through October 30, 2014.
3. MONTHLY INVESTMENT REPORT in the total amount of $46,004,207.05 through October 31, 2014.

Director Dickinson asked for minutes from October 2nd to be pulled from the Consent items for a mistake in one paragraph. Director Dickinson made a motion to approve items 2 & 3 on the consent calendar, a second was made by Director Mitchell the motion carried 4-0. Director Dickinson stated that the Minutes packet from the October 2nd board meeting was missing a sentence in the second paragraph. Director Mitchell made a motion to bring back the October 2nd minutes for approval at the December meeting and accept the October 6th Minutes as presented, a second was made by Director Dickinson the motion carried 4-0.

V. PUBLIC COMMENTS:

President Williams opened the Public Comments. Ms. Irene Habe, resident of Mareta Lane in Loomis voiced her concerns regarding the antenna SPUMD would like to install at the lift station on Mareta Lane. Ms. Habe stated that the proposed antenna is about 25 feet tall, and an eyesore for the neighborhood. She asked that the District look at alternative solutions before installing the antenna. President Williams could take action once a report was brought back to the Board. Dan Gibson, resident of Mareta Lane facing the pump station, stated that the antenna which was put up for a short time is truly an eyesore. He asked for any help that the District can provide to find other solutions would be appreciated.

VI. BOARD BUSINESS:

1. CONSIDERATION OF AN APPEAL OF THE GENERAL MANAGER'S DECISION REGARDING WAIVER OF CONDITIONS FOR UN-OCCUPIED CREDIT STATUS:

General Manager Clark reported that a chronology and report had been provided by Ms. Belanger. Ms. Belanger reported that the Change in Use application form is utilized to make an adjustment to a customers' account, and reflect a credit should there be an unoccupied change use at the property. She further stated that the District has a number of customers who utilize this process, however at this time there are only two, other properties have either sold or capped off the sewer completely. Mr. Trivedi submitted his application since closing the kitchen of the restaurant at the Rocklin Park Hotel. However, he has been late in submitting his requests. We request that the form is submitted ahead of the billing cycle in order to apply the credit prior to the bills being mailed. Ms. Belanger further reported that staff has worked with Mr. Trivedi and explained the application process, Inspectors have met with him at his business and explained the need for routine inspections to ensure the restaurant is not in use. Ms. Belanger reported that Mr. Trivedi's account is now past due, stating that payments being made were lower than the actual billing.

Director Dickinson asked for clarification on the number of payments the business is behind on, and clarified that a credit is prohibited because the account is in arrears. Director Mitchell asked about the date of submittal for this type of unoccupied use request. GM Clark reported that the policy was adopted by the Board in December 2011, and provided a brief history of how the policy was established. Ms. Belanger reported that the process is simple, with acceptance of request forms being received via fax, email or mail. She confirmed that the form can be received early as long as it is received prior to the billing cycle.

Mr. Hemang Trivedi of the Rocklin Park Hotel spoke to state his case and dispute the process. He stated that the application for unoccupied use is a purely a paper exercise, as there is no inspection of the property each billing cycle. He indicated that the timeline is too short and asked for flexibility in the timing of an application. Mr. Trivedi further asked that a credit be offered to him even if the application is received late. Legal Counsel Brown stated that the quarterly reporting policy is for the property owner to make the representation to the District of its unoccupied use. GM Clark indicated prior to this unoccupied use policy being established businesses changed use and didn't inform the district. This led to businesses receiving credits when they weren't actually eligible to. Director Markey asked how we would know if a business was in compliance without inspecting the business. GM Clark indicated that this is why the District instituted the policy for quarterly resubmittals.

President Williams asked what Mr. Trivedi was actually requesting the board to do for him. Mr. Trivedi replied that he has no problem in paying the quarterly bill, however he doesn't feel that the timeline is fair for the unoccupied use requests, stating that he forgets to send in the form. President Williams stated that the form should be submitted early so that staff can apply the credit before the billing cycle. Director Dickinson asked to float an idea of giving the General Manager authority to allow a single waiver for a late submittal of the Unoccupied Use form. He stated that staff has gone out of their way to be supportive and helpful in explaining the process to the customer.

Director Mitchell stated that a business should schedule their own deadlines. The form and process is easy to follow, a one page form and that he is opposed to changing the policy at this time or providing

relief from the current condition. Director Markey agreed that having a schedule is good practice for a business and that he agrees that there should be no allowance for the late submittals.

Mr. Trivedi added that the form was rejected due to procedural grounds, the restaurant is not in use and the credit claim is valid, further inferring that the inflexible deadline is the problem. President Williams reiterated the Districts process and reasons for having the short timelines. Director Mitchell made a motion to deny the request, a second was made by Director Markey and the motion carried 4-0. Director Dickinson asked that the General Manager bring back the policy to the Board for future discussion at a later date.

2. CONSIDERATION OF AN AGREEMENT TO DEFER PAYMENT OF PARTICIPATION FEE for Brian Schultz, owner of the Studio Movie Grill:

GM Clark introduced this item for deferred participation charges for the Studio Movie Grill located in the new Target shopping center at i-80 and Sierra College. He agreed that this business meets all of the criteria for deferring the charges. Staff has made the determination that the business will be charged at the Restaurant rate, and the amount owed is $536,783.34 to be paid in twenty quarterly payments at 4.5% interest per Res. 13-08. With this agreement the District will collect an additional $52,755 in interest over the life of the agreement.

Dave Olsen, Director of Development for the Movie Studio Grill stated that this was the first theater of its kind in California, with others planned in the near future. He stated that the owner, Brian Schultz had met with staff and voiced his concerns with how the business was being assessed. He described the business concept, explaining that the primary function of the business is to show first run movies, however the customer can also order a meal, with more options than the concessions at regular movie theaters.

Mr. Olsen stated that the business wasn't anticipating an additional assessment to be paid over and above the fees already paid by the shell contractor of the shopping center – and would like to revisit the assessment. Director Dickinson clarified that the action requested on the Agenda was only for the deferment of participation fees. GM Clark replied that the owner has indicated that they may come back and request a reduction in fees. The request for a deferred payment of these fees is to allow the business the ability to hook up to the sewer. In the future we can address the business hybrid. GM Clark indicated that staff had reviewed the 3 inch water service and the size of the kitchen, along with the number of seats available and the business is a restaurant that shows movies, versus a movie theater that serves food. The Developer of the building paid the minimum charges for the building, and this determination is made now that the actual business has been identified. President Williams stated that this agreement gives the business time to open and bring back an appeal at a later date Director Mitchell stated that this business is a unique one for Rocklin and valuable to the Community, we should look at the facility and determine if charges are fair and equitable.

Director Dickinson made a motion to move approval for the deferred Participation Fee agreement, a second was made by Director Mitchell and the motion carried 4-0.

3. CONSIDERATION OF ADOPTING A RESOLUTION OF SUPPORT TO LAFCO FOR ANNEXATION

GM Clark reported that this item will be deferred until the next meeting by the request of the owners who are continuing to iron out items related to the annexation with Placer County.

4. CONSIDERATION OF AWARD OF THE LOWER LOOMIS TRUNK SEWER LINER CONTRACT

GM Clark reported that three bids had been received for the Lower Loomis Liner project. The bids were almost half of the budgeted cost for the project. SAK Construction had the winning bid, they will be lining almost two miles of pipe at a cost of $365,886. GM Clark indicated that this is one of the Districts oldest pipes, and this liner should extend the life by approximately 50 yrs. Director Dickinson made a motion to authorize the award of the contract to SAK Construction, a second was made by Director Markey and the motion carried 4-0.

VII. REPORTS:

1. District Legal Counsel (A. Brown): Legal Counsel Brown stated he had been monitoring pending claims and preparing revisions to the will serve letter, and assisting the Committee for the General Manager recruitment.

2. Superintendent (J. Allen): Superintendent Allen reported on advancements for the website video clips and provided further information regarding the antenna at Mareta Lane. Discussion continued with regards to SCADA and the WDR requirements for real time reporting. GM Clark indicated that a report would be brought back in December with further information, site studies and photos for the Board to make an informed decision.

3. General Manager (C. Clark):

A. ASD, FSD & TSD Reports: GM Clark indicated that ASD, FSD and TSD reports were included in the materials, and that staff was available to answer any questions from the Board. Director Mitchell asked for an update on Tyler and Lucity, and the status of the website. Ms. Belanger reported the website would be "live" in Mid-November.

B. Information Items: GM Clark requested moving the December meeting to the second week of December at an earlier time. After some discussion the meeting was set for December 11th, at 3:00 p.m.

GM Clark indicated that he would be participating in a partner meeting on November 7th. With the boom in development it appears that the expansion of the Pleasant Grove WWTP will occur sooner. He suggested that the Board may wish to establish a committee for the negotiations related to financing and capacity that the District wants to buy.

GM Clark reported that a stakeholders meeting for the Loomis Diversion Line is scheduled for November 13th. He stated that the route study for the diversion line may be ready for presentation at the December Board meeting.

4. Directors Comments: Director Mitchell stated that he feels the Board can continue to make improvements to policies and raise standards by continued attendance at SDRMA workshops and training sessions. President Williams reported that the 2x2 meetings have been productive for the Loomis Diversion Line, and the next steps will be to discuss costs and financing of the project.

VIII. ADJOURNMENT

The meeting was adjourned at 6:25 p.m. to the next regularly scheduled meeting on December 11th, 2014 at 3:00 p.m.

Charles W. Clark, Secretary of the District

South Placer Municipal Utility District, CA

Check Report

By Check Number

Date Range: 11/01/2014 - 11/30/2014

Vendor Number	Vendor Name	Payment Date	Payment Type	Discount Amount	Payment Amount	Number
Bank Code: AP Bank-AP Bank						
1007	Advanced Integrated Pest	11/04/2014	Regular	0.00	101.00	5286
1022	AT&T	11/04/2014	Regular	0.00	46.19	5287
1004	AT&T	11/04/2014	Regular	0.00	63.32	5288
1070	Clean It Janitorial Service LLC	11/04/2014	Regular	0.00	459.00	5289
1080	CWEA	11/04/2014	Regular	0.00	391.00	5290
1087	Dawson Oil Co.	11/04/2014	Regular	0.00	64.69	5291
1093	DMG Lawn Maintenance	11/04/2014	Regular	0.00	325.00	5292
1110	Fastenal	11/04/2014	Regular	0.00	6.46	5293
1113	Ferguson Enterprises, Inc. 1423	11/04/2014	Regular	0.00	451.50	5294
1122	General Wholesale	11/04/2014	Regular	0.00	364.64	5295
1142	Homewood Building Supply	11/04/2014	Regular	0.00	101.65	5296
1157	Jason Larick	11/04/2014	Regular	0.00	214.99	5297
1163	Joe Gonzalez Trucking, LLC.	11/04/2014	Regular	0.00	1,440.52	5298
1174	KBA Docusys, Inc.	11/04/2014	Regular	0.00	390.11	5299
1175	Kee & Associates	11/04/2014	Regular	0.00	1,790.00	5300
1199	Meek's Lumber & Hardware	11/04/2014	Regular	0.00	182.17	5301
1207	Municipal Maintenance Equipment	11/04/2014	Regular	0.00	207.66	5302
1219	Pacific Corrugated Pipe Co.	11/04/2014	Regular	0.00	2,555.18	5303
1218	PCWA	11/04/2014	Regular	0.00	72.48	5304
1221	PG&E	11/04/2014	Regular	0.00	4,087.31	5305
1268	Rocklin Windustrial Co.	11/04/2014	Regular	0.00	346.68	5306
1287	Sierra Safety	11/04/2014	Regular	0.00	41.28	5307
1396	Sierra Trench Protection	11/04/2014	Regular	0.00	80.63	5308
1291	Special District Risk Management Authority	11/04/2014	Regular	0.00	500.00	5309
1299	Staples Contract & Commercial	11/04/2014	Regular	0.00	526.57	5310
1305	Sunbelt Rentals, Inc.	11/04/2014	Regular	0.00	1,136.09	5311
1327	US Bank Corporate Payment	11/04/2014	Regular	0.00	3,636.84	5312
	Void	11/04/2014	Regular	0.00	0.00	5313
	Void	11/04/2014	Regular	0.00	0.00	5314
1345	WECO	11/04/2014	Regular	0.00	172.96	5315
1128	Golden 1 Credit Union	11/05/2014	Regular	0.00	1,447.36	5316
1068	City of Roseville	11/06/2014	Regular	0.00	237,501.84	5333
1465	Marlin Wells Seamless Rain Gutters	11/06/2014	Regular	0.00	690.00	5334
1466	Roger Cook, General Contracting	11/06/2014	Regular	0.00	27,110.36	5335
1468	Edward Fardos	11/07/2014	Regular	0.00	8,400.00	5336
1021	ARC	11/13/2014	Regular	0.00	102.06	5337
1023	AT&T	11/13/2014	Regular	0.00	37.02	5338
1004	AT&T	11/13/2014	Regular	0.00	8.99	5339
1026	AUS Sacramento MC Lockbox	11/13/2014	Regular	0.00	1,019.39	5340
1058	Carquest Auto Parts	11/13/2014	Regular	0.00	93.25	5341
1059	Cashier, Department of Pesticide Regulation	11/13/2014	Regular	0.00	120.00	5342
1086	Dataprose	11/13/2014	Regular	0.00	13,621.86	5343
1108	Everything Radios, Inc.	11/13/2014	Regular	0.00	479.61	5344
1131	Granite Business Printing	11/13/2014	Regular	0.00	116.10	5345
1139	Hill Rivkins Brown & Associates	11/13/2014	Regular	0.00	4,264.00	5346
1140	Holt of California	11/13/2014	Regular	0.00	2,806.29	5347
1146	InSight Mobile Data Inc.	11/13/2014	Regular	0.00	330.00	5348
1188	Lucity, Inc.	11/13/2014	Regular	0.00	6,298.10	5349
1207	Municipal Maintenance Equipment	11/13/2014	Regular	0.00	15.17	5350
1218	PCWA	11/13/2014	Regular	0.00	622.74	5351
1232	Pitney Bowes, Inc.	11/13/2014	Regular	0.00	32.24	5352
1261	Riebes Auto Parts	11/13/2014	Regular	0.00	160.52	5353
1268	Rocklin Windustrial Co.	11/13/2014	Regular	0.00	354.83	5354
1333	SPOK, Inc.	11/13/2014	Regular	0.00	41.55	5355

Vendor Number	Vendor Name	Payment Date	Payment Type	Discount Amount	Payment Amount	Number
1297	Stanley Convergent Security Solutions, Inc.	11/13/2014	Regular	0.00	26.50	5356
1299	Staples Contract & Commercial	11/13/2014	Regular	0.00	203.68	5357
1306	Superior Equipment Repair	11/13/2014	Regular	0.00	2,826.30	5358
1029	Thomson Reuters/Barclays	11/13/2014	Regular	0.00	295.00	5359
1338	Verizon Wireless	11/13/2014	Regular	0.00	230.46	5360
1345	WECO	11/13/2014	Regular	0.00	1,338.27	5361
1128	Golden 1 Credit Union	11/19/2014	Regular	0.00	1,447.36	5449
1240	Placer County Personnel	11/19/2014	Regular	0.00	3,414.04	5450
1246	Prudential Municipal Pool	11/19/2014	Regular	0.00	152.98	5451
1022	AT&T	11/20/2014	Regular	0.00	183.65	5452
1360	Bob Murray & Associates	11/20/2014	Regular	0.00	384.00	5453
1073	Consolidated Communications	11/20/2014	Regular	0.00	881.61	5454
1080	CWEA	11/20/2014	Regular	0.00	937.00	5455
1087	Dawson Oil Co.	11/20/2014	Regular	0.00	3,165.13	5456
1112	FedEx	11/20/2014	Regular	0.00	59.38	5457
1153	James Byrd Smoke Testing	11/20/2014	Regular	0.00	250.00	5458
1173	KBA Docusys	11/20/2014	Regular	0.00	235.61	5459
1181	Landscape Spray Solutions	11/20/2014	Regular	0.00	250.00	5460
1218	PCWA	11/20/2014	Regular	0.00	511.83	5461
1244	Preferred Alliance	11/20/2014	Regular	0.00	155.26	5462
1268	Rocklin Windustrial Co.	11/20/2014	Regular	0.00	8.15	5463
1280	SAM's Club/Synchrony Bank	11/20/2014	Regular	0.00	476.08	5464
1299	Staples Contract & Commercial	11/20/2014	Regular	0.00	328.80	5465
1303	State Water Resources Control Board	11/20/2014	Regular	0.00	11,195.00	5466
1306	Superior Equipment Repair	11/20/2014	Regular	0.00	559.62	5467
1325	Tyler Technologies, Inc.	11/20/2014	Regular	0.00	22,560.59	5468
1343	Water Works Engineers, LLC	11/20/2014	Regular	0.00	4,022.39	5469
1141	Home Depot Credit Service	11/24/2014	Regular	0.00	513.83	5477
1161	Joanna Belanger	11/24/2014	Regular	0.00	296.31	5478
1199	Meek's Lumber & Hardware	11/24/2014	Regular	0.00	6.09	5479
1207	Municipal Maintenance Equipment	11/24/2014	Regular	0.00	62.44	5480
1221	PG&E	11/24/2014	Regular	0.00	3,754.81	5481
1253	Recology Auburn Placer	11/24/2014	Regular	0.00	297.02	5482
1287	Sierra Safety	11/24/2014	Regular	0.00	75.65	5483
1299	Staples Contract & Commercial	11/24/2014	Regular	0.00	92.58	5484
1098	EDD (EFT)	11/07/2014	Bank Draft	0.00	71.79	DFT0000779
1149	Internal Revenue Service	11/07/2014	Bank Draft	0.00	20.34	DFT0000780
1149	Internal Revenue Service	11/07/2014	Bank Draft	0.00	175.47	DFT0000781
1045	Cal Pers 457 Plan (EFT)	11/07/2014	Bank Draft	0.00	500.00	DFT0000783
1135	Hartford Mgt. (EFT)	11/07/2014	Bank Draft	0.00	4,790.00	DFT0000784
1229	Pers (EFT)	11/07/2014	Bank Draft	0.00	147.25	DFT0000785
1229	Pers (EFT)	11/07/2014	Bank Draft	0.00	312.81	DFT0000786
1229	Pers (EFT)	11/07/2014	Bank Draft	0.00	652.69	DFT0000787
1229	Pers (EFT)	11/07/2014	Bank Draft	0.00	3,910.01	DFT0000788
1229	Pers (EFT)	11/07/2014	Bank Draft	0.00	8,157.73	DFT0000789
1229	Pers (EFT)	11/07/2014	Bank Draft	0.00	558.38	DFT0000790
1229	Pers (EFT)	11/07/2014	Bank Draft	0.00	880.00	DFT0000791
1229	Pers (EFT)	11/07/2014	Bank Draft	0.00	625.12	DFT0000792
1229	Pers (EFT)	11/07/2014	Bank Draft	0.00	625.12	DFT0000793
1149	Internal Revenue Service	11/07/2014	Bank Draft	0.00	7,940.16	DFT0000794
1098	EDD (EFT)	11/07/2014	Bank Draft	0.00	2,359.01	DFT0000795
1098	EDD (EFT)	11/07/2014	Bank Draft	0.00	640.33	DFT0000796
1149	Internal Revenue Service	11/07/2014	Bank Draft	0.00	2,032.06	DFT0000797
1149	Internal Revenue Service	11/07/2014	Bank Draft	0.00	7,228.94	DFT0000798
1045	Cal Pers 457 Plan (EFT)	11/21/2014	Bank Draft	0.00	500.00	DFT0000801
1135	Hartford Mgt. (EFT)	11/21/2014	Bank Draft	0.00	4,440.00	DFT0000802
1229	Pers (EFT)	11/21/2014	Bank Draft	0.00	147.25	DFT0000803
1229	Pers (EFT)	11/21/2014	Bank Draft	0.00	312.81	DFT0000804
1229	Pers (EFT)	11/21/2014	Bank Draft	0.00	652.69	DFT0000805
1229	Pers (EFT)	11/21/2014	Bank Draft	0.00	3,910.01	DFT0000806
1229	Pers (EFT)	11/21/2014	Bank Draft	0.00	8,157.73	DFT0000807

Vendor Number	Vendor Name	Payment Date	Payment Type	Discount Amount	Payment Amount	Number
1229	Pers (EFT)	11/21/2014	Bank Draft	0.00	558.38	DFT0000808
1229	Pers (EFT)	11/21/2014	Bank Draft	0.00	880.00	DFT0000809
1229	Pers (EFT)	11/21/2014	Bank Draft	0.00	625.12	DFT0000810
1229	Pers (EFT)	11/21/2014	Bank Draft	0.00	625.12	DFT0000811
1149	Internal Revenue Service	11/21/2014	Bank Draft	0.00	8,317.92	DFT0000812
1098	EDD (EFT)	11/21/2014	Bank Draft	0.00	2,482.54	DFT0000813
1098	EDD (EFT)	11/21/2014	Bank Draft	0.00	633.61	DFT0000814
1149	Internal Revenue Service	11/21/2014	Bank Draft	0.00	2,120.38	DFT0000815
1149	Internal Revenue Service	11/21/2014	Bank Draft	0.00	7,455.59	DFT0000816
1149	Internal Revenue Service	11/21/2014	Bank Draft	0.00	367.66	DFT0000818
1098	EDD (EFT)	11/21/2014	Bank Draft	0.00	88.50	DFT0000819
1098	EDD (EFT)	11/21/2014	Bank Draft	0.00	29.65	DFT0000820
1149	Internal Revenue Service	11/21/2014	Bank Draft	0.00	85.98	DFT0000821
1149	Internal Revenue Service	11/21/2014	Bank Draft	0.00	355.17	DFT0000822
1015	American Fidelity Assurance	11/21/2014	Bank Draft	0.00	1,063.83	DFT0000823
1230	Pers (EFT)	11/21/2014	Bank Draft	0.00	31,670.73	DFT0000824
1098	EDD (EFT)	11/21/2014	Bank Draft	0.00	-63.05	DFT0000835
1149	Internal Revenue Service	11/21/2014	Bank Draft	0.00	-175.46	DFT0000838

Bank Code AP Bank Summary

Payment Type	Payable Count	Payment Count	Discount	Payment
Regular Checks	143	87	0.00	386,626.62
Manual Checks	0	0	0.00	0.00
Voided Checks	0	2	0.00	0.00
Bank Drafts	44	44	0.00	116,869.37
EFT's	0	0	0.00	0.00
	187	**133**	**0.00**	**503,495.99**

Fund Summary

Fund	Name	Period	Amount
100	GENERAL FUND	11/2014	503,495.99
			503,495.99

South Placer Municipal Utility District, CA

Detail Report
Account Summary
Date Range: 11/01/2014 - 11/30/2014

Account	Name	Beginning Balance	Total Activity	Ending Balance
Fund: 100 - GENERAL FUND				
100-11006	CASH ACCOUNT - US BANK	5,721,622.18	694,100.86	6,415,723.04
100-12002	ACCOUNTS RECEIVABLE - SEWER	2,036,680.36	-1,048,865.69	987,814.67
100-12004	ACCOUNTS RECEIVABLE - UNAPPLIED UTILITY CREDITS	39,443.03	-47,156.49	-7,713.46
100-20001	ACCOUNTS PAYABLE	-57,811.69	-44,996.53	-102,808.22
100-21001	FEDERAL WITHHOLDING	1,875.19	-1,818.03	57.16
100-21002	STATE WITHHOLDING	674.94	-671.67	3.27
100-21009	PY CORRECTION LIABILITY	-381.08	205.88	-175.20
100-21010	ACCRUED SALARIES	12,779.02	-12,891.36	-112.34
100-21012	ACCRUED FICA	-8,984.57	-504.78	-9,489.35
100-21013	ACCRUED SUPPLEMENTAL INSURANCE	-448.66	-0.09	-448.75
100-21014	ACCRUED SDI	0.36	0.00	0.36
100-21016	ACCRUED PERS LIABILITY	3,922.60	-4,641.63	-719.03
100-21018	ACCRUED INSURANCE LIABILITY	-23,076.47	-497.94	-23,574.41
100-21019	ACCRUED DEFERRED COMP LIABILITY	1,045.00	-2,595.00	-1,550.00
100-22300	Refund Account Payables	0.00	8,400.00	8,400.00
100-38000	TRANSFER TO/FROM OTHER FUNDS	2,476,246.02	194,246.19	2,670,492.21
100-41002	SEWER SERVICE CHARGES	-2,059,220.55	-6,344.10	-2,065,564.65
100-41003	SEWER SERVICE CHARGES - COMMERCIAL	-560,075.14	-2,030.10	-562,105.24
100-44200	PROJECT PROCESSING FEES	-45,902.69	-210.00	-46,112.69
100-44201	INSPECTION FEES	-8,375.00	-7,205.00	-15,580.00
100-44202	PLAN CHECK FEES	-740.00	-2,440.00	-3,180.00
100-44600	MISCELLANEOUS REVENUE	-18,447.91	-1,716.00	-20,163.91
100-A02-50100	SALARIES	100,282.92	49,470.79	149,753.71
100-A02-50201	FICA - SOCIAL SECURITY	9,356.11	2,049.94	11,406.05
100-A02-50307	RETIREMENT 457	4,300.00	1,400.00	5,700.00
100-A02-50401	CALPERS RETIREMENT	22,256.09	10,696.23	32,952.32
100-A02-50901	INSURANCE BENEFITS	44,820.48	9,027.19	53,847.67
100-A02-60101	GENERAL OFFICE EXPENSE	5,722.90	1,199.34	6,922.24
100-A02-60201	PROFESSIONAL SERVICES - ADMINISTRATION	48,561.34	4,648.00	53,209.34
100-A02-61000	PROFESSIONAL DEVELOPMENT	9,327.82	2,595.03	11,922.85
100-A02-61400	BILLING EXPENSE	38,002.75	42.50	38,045.25
100-A02-61500	PROPERTY & LIABILITY INSURANCE	92,750.05	500.00	93,250.05
100-A02-61700	GOVERNMENT FEES/PERMITS/ADMIN CHARGES	7,201.83	11,195.00	18,396.83
100-F01-50100	SALARIES	265,982.51	69,194.17	335,176.68
100-F01-50201	FICA - SOCIAL SECURITY	22,986.18	5,276.49	28,262.67
100-F01-50307	RETIREMENT 457	6,700.00	1,350.00	8,050.00

Account	Name	Beginning Balance	Total Activity	Ending Balance
100-F01-50401	RETIREMENT PERS	67,067.82	15,145.38	82,213.20
100-F01-50901	INSURANCE BENEFITS	85,232.92	16,474.30	101,707.22
100-F01-60100	OPERATING SUPPLIES/MAINTENANCE	87,260.92	-37,499.48	49,761.44
100-F01-60400	GAS & OIL - MAINTENANCE	18,304.96	3,165.13	21,470.09
100-F01-60500	VEHICLE REPAIR/MAINTENANCE	16,031.38	1,992.14	18,023.52
100-F01-60700	UTILITIES	35,944.97	7,572.33	43,517.30
100-F01-61000	PROFESSIONAL DEVELOPMENT	3,586.78	2,314.63	5,901.41
100-F01-62000	LIFT STATION MAINTENANCE	5,382.95	530.00	5,912.95
100-F01-62100	PLANT MAINTENANCE & OPERATIONS	310.52	40,944.04	41,254.56
100-T03-50100	SALARIES	145,313.54	44,057.88	189,371.42
100-T03-50201	FICA - SOCIAL SECURITY	12,494.89	3,368.21	15,863.10
100-T03-50307	RETIREMENT 457	4,050.00	900.00	4,950.00
100-T03-50401	RETIREMENT PERS	36,401.20	8,993.50	45,394.70
100-T03-50901	INSURANCE BENEFITS	47,227.55	10,852.18	58,079.73
100-T03-61000	PROFESSIONAL DEVELOPMENT - TECH SERVICES	6,166.56	176.56	6,343.12
	Total Fund: 100 - GENERAL FUND:	**8,759,852.88**	**0.00**	**8,759,852.88**
Fund: 300 - CAPITAL OUTLAY				
300-38000	TRANSFER TO/FROM OTHER FUNDS	-2,508,287.91	-194,246.19	-2,702,534.10
300-42001	CONNECTION FEES SEWER	-342,033.38	54,361.84	-287,671.54
300-A02-71201	ADMIN COMPUTER WRKST	163.65	413.36	577.01
300-A02-71203	SOFTWARE UPGRADES	50,198.17	400.00	50,598.17
300-F01-71308	REMOTE SITE CONTROLS IMPROVEMENTS - SCADA	3,600.00	24,489.35	28,089.35
300-F01-71315	REPLACEMENT 580 SUPER E BACKHOE	0.00	83,366.25	83,366.25
300-T03-71405	SYSTEM REHABILITATION	46,319.29	27,193.00	73,512.29
300-T03-71409	LOWER LOOMIS DIVERSION SEWER - PRELIM STUDY	52,928.05	4,022.39	56,950.44
	Total Fund: 300 - CAPITAL OUTLAY:	**-2,697,112.13**	**0.00**	**-2,697,112.13**
	Grand Totals:	**6,062,740.75**	**0.00**	**6,062,740.75**

Fund Summary

Fund		Beginning Balance	Total Activity	Ending Balance
100 - GENERAL FUND		8,759,852.88	0.00	8,759,852.88
300 - CAPITAL OUTLAY		-2,697,112.13	0.00	-2,697,112.13
	Grand Total:	**6,062,740.75**	**0.00**	**6,062,740.75**

MONTHLY INVESTMENT REPORT

SOUTH PLACER MUNICIPAL
UTILITY DISTRICT

Local Agency Investment Fund As of November 30th, 2014	**$9,500,831.18**
Average Interest for Month Ended November 30th, 2014	0.26%
Placer County Treasury As of October 31st, 2014	**$34,910,234.73**
Effective Rate of Return for Month Ended October 31st, 2014	0.95%
Checking Account Balance (U.S. Bank) As of November 31st, 2014	**$2,409,131.81**

Investments are in compliance with SPMUD Resolution No. 12-16, and have the ability to meet the next six months of cash flow requirements.

Attachment 1 A

November 16, 2014

RE: Antenna Installation at LS #7

Dear Mr. Clark,

We represent a number of residents of Mareta Lane in Loomis residing near your LS #7 facility that oppose the installation of a communications antenna at the LS #7 site. This opposition relates to the unaesthetic nature of a sizable antenna that is being proposed for installation at the site. This site is just off the sidewalk on my property.

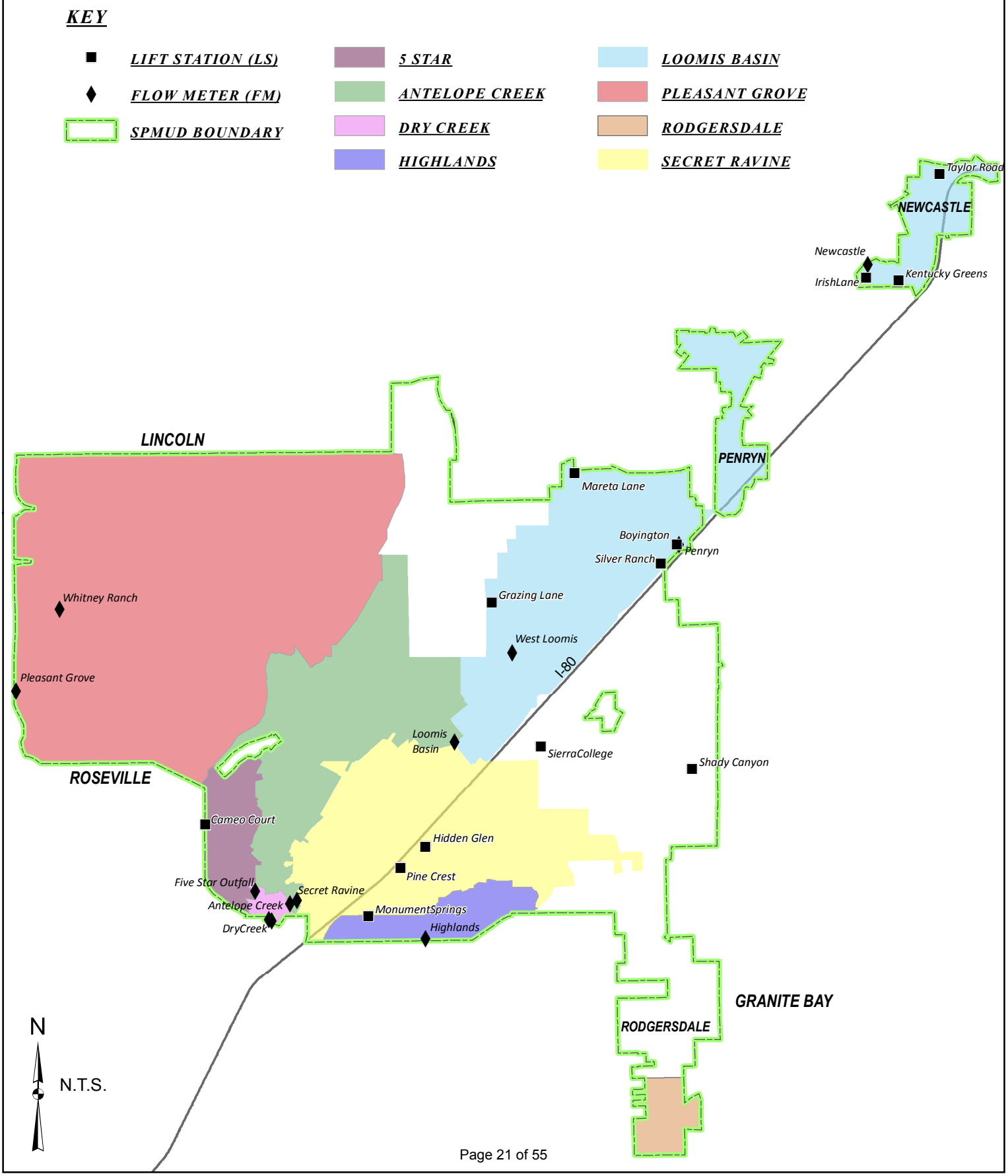
We are asking if an alternative solution can be successfully implemented that meets your needs without the need for the installation of a large bright metal pole towering at the end of our street in our front yards. This would be an eyesore for many at the end of our street.

Appreciate your consideration of our request, we look forward to finding out what can be done to remedy this situation.

Thank you,

Steve and Irene Hape
5713 Mareta Lane
Loomis, CA 95650

SPMUD SEWER SHEDS



South Placer Municipal Utility District
5807 Springview Drive
Rocklin, CA 95677
(916) 786-8555

Date: December 2, 2014

To: Charles Clark – General Manager

Via: Eric Nielsen – District Engineer EN

From: Carie Huff – Engineering Technician II CH

Subject: Bill of Sale for the December 11th, 2014 Board Meeting

Avalon Subdivision – Phase 1

The Avalon subdivision is located in Rocklin just off Rocklin Road between Autumn Crossing Lane and Grove Street. Avalon consists of 76 single-family residential homes for a total of 76 EDU's. However, Standard Pacific Homes requested that the project be phased so that the model homes could be connected prior to recordation of the final map (anticipated to be in January 2015). Phase 1 of the Avalon improvements includes 30 single family homes (30 EDU's) with the following infrastructure:

- Installation of one thousand one hundred and twenty three (1,123) linear feet of sanitary sewer pipe
- Installation of eight (8) manholes

This project has been completed in accordance with SPMUD standards. All field and administrative items for Phase 1 of the improvements have been completed to the satisfaction and requirements of SPMUD. Acceptance of the Bill of Sale is recommended.

ATT. 2

BILL OF SALE

Standard Pacific Corp. does hereby grant, bargain, sell and convey to SOUTH PLACER MUNICIPAL UTILITY DISTRICT all of its rights, title and interest in and to all public sewer pipes, lines, mains, manholes, and appurtenances installed by its contractor in that subdivision/project commonly known as Avalon.

Grantor herein does hereby warrant and guarantee to SOUTH PLACER MUNICIPAL UTILITY DISTRICT that all of the personal property described herein consisting of sewer pipes, lines, mains, manholes, and appurtenances are free and clear of all mechanics liens and encumbrances of any type, nature or description whatsoever.

Dated this November 20, 2014

By: Standard Pacific Corp.

Rachel Corona

Signature

Rachel Corona, Authorized Representative

Name (Please Type or Print)

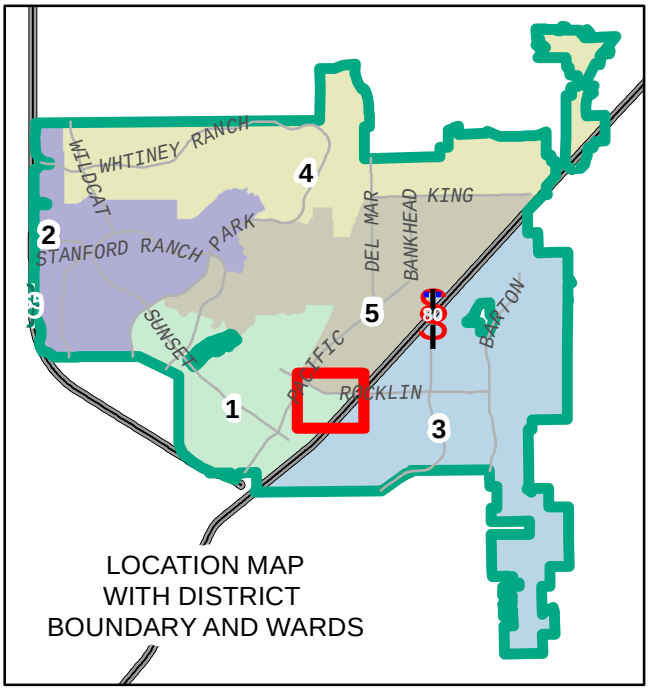
11/26/14

0 300 600 1,200 Feet

1 in = 600 ft

Avalon Subdivision - Phase 1

30 Residential EDUs



LOCATION MAP
WITH DISTRICT
BOUNDARY AND WARDS

Date: 12/1/2014

Author: Aaron Moore

Document Path: G:\spmud_gis\mxd\Aaron\Bill of Sale\Avalon_Ph1.mxd

STAFF REPORT

TO: Board of Directors

FROM: Eric Nielsen – District Engineer

VIA: Charley Clark – General Manager

DATE: December 3, 2014

SUBJECT: Loomis Diversion Route Study

Background

The District retained the services of Water Works Engineers to conduct a route study for the Loomis Diversion Pipeline. Water Works began working on the study on July 1, 2014 and completed the study on November 14, 2014. The purpose of the route study was to identify a set of potential pipeline alternatives to divert wastewater flows from the trunk line north of Raley's on Horseshoe Bar to the trunk line located at the southern end of Dias Lane.

The route study details the research, field investigation, and analysis of each pipeline alternative related to the topography, hydraulic capacity, environmental constrains, geological constraints, easement procurement, outside utility coordination, constructability, and operation and maintenance concerns. This analysis was used to develop preliminary costs for each alternative and provide a recommended alternative.

Findings

A total of seven major pipeline alternatives were evaluated in the route study including combinations of gravity pipeline and lift station options. The recommended alternative is shown in Figure 4 from the route study and is attached to this report. The recommended alternative flows entirely by gravity through the Turtle Island/Loomis 65 property, then west along Brace Road, and then south down Dias Lane. The total length of the recommended alternative is 7,233 lineal feet and the average depth is approximately 13-feet. The maximum depth of cover for this alternative is 22-feet, which occurs near the intersection of Brace Road and Dias Lane.

The estimated cost for the recommended alterative is $3,290,000, which includes equipment, material, labor, overhead and profit, bonding, insurance, design contingency, construction contingency, environmental permitting, agency coordination, and easement procurement. A summary of the estimated costs for all of the evaluated alternatives is attached to this report.

Actions and Next Steps

The firm Hauge Brueck Associates is working for the Town of Loomis to prepare the CEQA documentation for the Loomis Diversion Pipeline. The completed route study has been provided to the Town of Loomis and Hauge Brueck Associates to support that effort. The District will continue to provide support to the CEQA documentation process over the next several months until that process is completed.

SOUTH PLACER MUNICIPAL UTILITY DISTRICT

Figure 4: Alternative I Plan

Loomis Diversion Line Route Study

WATERWORKS ENGINEERS

Table 37: Total Project Cost

Cost Categories	Alternative I			Alternative II		Alternative III					
	Option A	Option B	Option C	Option A	Option B	Option A	Option B	Option C	Option D	Option E	Option F
Equipment, Material & Labor	$1,860,000	$2,190,000	$3,550,000	$1,920,000	$2,220,000	$2,970,000	$3,260,000	$2,910,000	$3,200,000	$2,510,000	$2,840,000
Overhead, Profit, Bonding, Insurance	$360,000	$420,000	$680,000	$370,000	$430,000	$570,000	$620,000	$560,000	$610,000	$480,000	$540,000
Design Contingency (20%)	$450,000	$520,000	$850,000	$460,000	$530,000	$710,000	$780,000	$690,000	$760,000	$600,000	$680,000
Total Bid Cost	**$2,670,000**	**$3,130,000**	**$5,080,000**	**$2,750,000**	**$3,180,000**	**$4,250,000**	**$4,660,000**	**$4,160,000**	**$4,5700,000**	**$3,590,000**	**$4,060,000**
Construction Contingency (10%)	$270,000	$320,000	$507,000	$280,000	$320,000	$430,000	$470,000	$420,000	$460,000	$360,000	$410,000
TOTAL "HARD" COST	**$2,940,000**	**$3,450,000**	**$5,590,000**	**$3,030,000**	**$3,500,000**	**$4,680,000**	**$5,130,000**	**$4,580,000**	**$5,030,000**	**$3,950,000**	**$4,470,000**
O&M	$73,000	$73,000	$73,000	$78,000	$78,000	$822,000	$822,000	$822,000	$822,000	$62,000	$62,000
Environmental	$120,000	$120,000	$120,000	$270,000	$270,000	$150,000	$150,000	$150,000	$150,000	$120,000	$120,000
Agency Coordination/Special Inspection	$65,000	$65,000	$65,000	$53,000	$53,000	$68,000	$68,000	$55,000	$55,000	$55,000	$55,000
ROW/Easements	$93,000	$93,000	$93,000	$205,000	$205,000	$111,000	$111,000	$116,000	$116,000	$116,000	$116,000
TOTAL "SOFT" COST	**$350,000**	**$350,000**	**$350,000**	**$610,000**	**$610,000**	**$1,150,000**	**$1,150,000**	**$1,140,000**	**$1,140,000**	**$350,000**	**$350,000**
TOTAL COST	**$3,290,000**	**$3,800,000**	**$5,940,000**	**$3,640,000**	**$4,110,000**	**$5,830,000**	**$6,280,000**	**$5,720,000**	**$6,170,000**	**$4,300,000**	**$4,820,000**

POLICY STATEMENT FOR FUNDING OF DISTRICT ASSETS

Date: December 2014

By: Charles W. Clark, P.E.

I. Purpose

In order to meet the District's mission to protect the quality of our natural waters & waterways, provide cost –effective sewer service that protects the health & welfare of those relying on our sewer system, and preparing for our future needs; the District must set policy on how it will fund the day-to-day operations, routine maintenance & repair, rehabilitation & replacement, and expansion & enlargement of District infrastructure and appurtenances.

II. Policy

It is the District's policy to "pay as we go" and anticipate future expenditures to avoid debt financing. Therefore it shall collect revenues adequate to enlarge the system, renew and replace facilities, and day-to-day operations and maintenance of the sewer system. The District will use an "Aggregate Expense" method to determine charges, such that all expenses are distributed over the entire District. The Board will establish fees and charges to provide a continuous revenue source while maintaining reasonable rates.

This policy does not include treatment infrastructure because there are separate Regional Participation Charges (RPC) that fund regional treatment and infrastructure capital costs.

III. Funding Sources

The District has two (2) broad revenue categories: *Operational* and *Non-Operational.*

A. Operational sources are:
   1. Monthly Service Charge (MSC): collected quarterly from current customers
   2. Local Participation Charges (LPC): collected from Developments when they connect to the system.
   3. New Development Contributions: the expansion of sewer infrastructure and appurtenances necessary to serve development that the Developer funds, constructs and dedicates to the District.
   4. Permit/Inspection/Project Processing Fees are collected from existing and future customers on a project-by-project basis.

B. Non-Operational sources are:
   1. Taxes: the District receives a pro rata share of the County property taxes
   2. Interest: our return on investment of District reserve funds
   3. Other – Misc. payments, rebates, incentives, awards, annexation fees, etc.

IV. Funding Uses

A. Operational Sources are used in the following ways:
   1. Monthly Service Charge (MSC) is used to fund day-to-day operations, maintenance, rehabilitation and replacement of the sewer system. MSC does not fund the replacement

of existing infrastructure identified in the SECAP to be enlarged and will be funded by the LPC (see item 2 below).

a) Operations: the day-to-day expenses to administer and perform all the necessary functions to operate the District.
b) Maintenance: day-to-day expenses to maintain and repair the existing infrastructure and appurtenances for them to perform their intended function (inspection, cleaning and repair).
c) Rehabilitation: expenses necessary to maintain the useful capacity of facilities (root control, excavate & replace, point/joint repairs, pipe lining); this includes lift station, manhole and service lateral rehabilitation projects.
d) Replacement: expenses for existing infrastructure and appurtenances for the eventual replacement of the asset at the end of its useful life.

2. Local Participation Charge (LPC) is collected from developers and property owners for the right to participate in the sewer system and to mitigate the impact on system capacity. The District's System Evaluation and Capacity Assurance Plan (SECAP) is used to determine future enlargements of both existing trunk sewer pipe and trunk sewer pipe within the new development. The LPC is used to fund the following items:
   a) Enlarging Existing Facilities: Costs for existing facilities identified in the SECAP as needing to be upsized to serve future development.
   b) Enlarging Future Facilities: Differential costs for future facilities constructed by New Development and identified in the SECAP as needing to be a larger diameter than required to only serve the new development.
   c) Additional Facilities: A proportionate share of the costs for District building(s), fleet, etc. needed to support a larger collection system.
   d) Administration: The costs to fund the District efforts to manage the SECAP (i.e., analyze the capacity of system, identify required sewer trunk diameters, coordinate with Development to implement).

3. New Development Contributions are the sewer works constructed by developments to provide service to that development, including the trunk sewer that is necessary for future development. These assets are then used to serve customers in that development and any future customers that utilize that infrastructure.

   At the discretion of the General Manager, Development may enter into a reimbursement agreement per the District's separate reimbursement policy.

4. Permit/Inspection/Project Processing Fees are used to fund the specific services for which they are collected and recover the cost associated with the regulated use.

B. Non-Operational Sources are used at the discretion of the Board of Directors to supplement any of the funds listed above or provides a public service to the District's customers.

V. MISCELLANEOUS

All costs required to meet regulatory requirements, such as compliance orders (e.g., waste discharge requirements, consent decree, cease and decease order), shall be apportioned for payment from either District O&M funds or the LPC, at the District's discretion, and based on the requirements of the order (e.g., increased maintenance, rehabilitation or enlarging).

General Manager's Report & Recommendation

Subject: **Sewer Service Revenue Analysis**

Date: December 2014
Prepared For: SPMUD Board of Directors
Prepared By: Charles W. Clark, P.E., General Manager

1. Purpose

This report will be used by the Board to establish the SPMUD Policy Statement for our revenue program, and provides the Board with information related to sewer service charges and my recommendations on service fee adjustments to meet expenses.

2. Discussion

The District's current revenue policy was established in 1976 to insure that rates and charges were sufficient to meet annual operating expenses and capital expenditures; this policy has been reviewed and updated every five years as the District's Five-Year Financing Plan. The program has evolved over the years and has served the District well. A Fee Committee was appointed in February 2013 to review our current fee policies and see if the District might find a way to improve our business processes in this area.

This 1976 Revenue Program introduced the equivalent dwelling unit (EDU) term and was defined as the service charge a residence will pay to meet the district's annual revenue needs. Our non-residential charges are based primarily on square footage; the over-riding reason for selecting this method was <u>ease of enforcement</u>. These non-residential charges are based on some conversion factor applied to the EDU rate. The District established three conversion factors at the time: LOW (1/3 EDU/1000SF); HIGH (2/3 EDU/ 1000SF); and OTHER (based on "other" factors). We are still using this basic system, but it has evolved into multiple factors with over 40 different sub-categories and has become a problem to implement and manage.

The following information/data was used in my analysis to draw my conclusions:

A. Sanitary Sewer Service is not a metered utility; there is no practical, cost effective way to measure the strength and flow (S&F) of *individual* customer sewer discharges. With this in mind, Section 12812 of the MUD Act states in part that: … the Board shall establish rules to apportion the sewer O&M expenses based on the characteristics of sewage from each public agency.

B. Cost of Service (COS): This is the annual revenues needed to provide sanitary sewer service to our customers in a safe and reliable manner; that complies with State and Federal regulations, protects the public health and prevents sewer overflows into our water environment. This includes all administration, operations, maintenance, repair, improvement, and treatment expenses:
    a. Service charges are calculated based on the COS (minus non-operational revenues used) divided by total EDUs in the system.
    b. Service charges pay for about 80% of the COS, the remainder is covered by taxes and the interest on our investments and other revenues.

C. Sewage Treatment: SPMUD sewage is collected and transported to one-of-two Regional Waste Water Treatment Plants (RWWTP) in Roseville.

a. Treatment Capacity (TC) is the rated treatment capacity of the RWWTP expressed in million gallons per day (MGD). The District has an allocation of 25.76% of the total TC or 5.41 MGD based on the combined RWWTP rated TC of 20.00 MGD.
b. The RWWTP annual operation and maintenance (O&M) expenses for treatment and disposal is not based on individual customer sewer discharges, but on the District's share of the annual expenses at the RWWTP in proportion to the total annual flow into the RWWTP from all three partners. This is around 25% and the same percentage is used to fund the RWWTP yearly repair and rehab projects.

D. Participation Charge(s) (PC): This is the charge 'future' and 'change of use' customers must pay to participate in the use of the District's facilities and services. There are two separate PC (Local and Regional):
   a. Local PC: new connections pay for the "Right to Participate" in the District's sewer system and has three components:
      1) Improvements to the existing infrastructure to meet future development needs,
      2) Differential cost to upsize infrastructure required in the new development, and
      3) Equal-share for upsizing the existing supports facility assets to meet future development needs.

   Notes:
      i. The District can't sell system capacity that does not exist.
      ii. There is no component for constructing new sewers required only for development,
      iii. The MUD Act prohibits the use existing customer's service charge to fund expenses for development.
   b. Regional PC: pays for the "Right to Participate" in the RWWTP and likewise has three components:
      1) Purchase of excess TC
      2) Repayment of the existing Bonds
      3) Fund improvements to the RWWTP and related regional facilities.

   The District collects the Regional PC and sends it to the South Placer Wastewater Authority (SPWA) who sets this fee and deposits it into the SPMUD Rate Stabilization Fund (RSF).

E. Sewer flows are lower today due to water conservation efforts:
   a. In 2003 our average sewer discharge per EDU was 235 gals per day (gpd).
   b. Today our average discharge per EDU was 150 gpd (a 64% reduction).
   c. Sewage strength is more concentrated in the reduced flows thereby increasing treatment cost per gallon of flow.
   d. These low flows and higher strengths are increasing O&M cost/gal for our collection system.

F. The 'Affordability' issue (i.e. sewer service cost vs. customer financial challenges) is not addressed in this report because:
   a. There is no technical solution to the affordability issue; a policy would have to be set to *deviate* from the COS method.
   b. The main challenges are: a) with declining revenue, who picks up the cost; b) how to qualify customers; c) how to implement such a deviation; and d) should we charge those who can afford it more?

G. Our current revenue policy is one of an "equal distribution of revenues needed" to recover our COS and expressed in EDU's. This generally means that there are built in inequities such that:
   a. Residential customers: they receive equal benefit in that everyone's sewage is collected, transported, treated and disposed of at the same unit cost regardless of each customer's actual impact to the system.

b. Non-residential customers: are converted to EDU. There is such a broad spectrum of non-residential customers that to try and use their individual, unmetered sewage flows as a basis for their impact on our COS would require a level of effort that is disproportionate to any benefit to the District. Therefore we use square footage, type of activity and judgment to apportion their share.
c. Reducing the charge to one customer class might increase the cost to the other customers because our fee is based on our COS and must remain revenue natural. Therefore, this system may not seem "fair" to individual customers but it is 'fairly' applied to all customers.

3. Sewage Data Collection

Staff, working with our Engineering consultant, conducted several District wide sewer flow studies to get up to date *'Sewage Strength and Flow' (S&F)* data that was considered as a part of this analysis. In May of 2013, an S&F monitoring and sampling study was conducted looking at various representative sites throughout the district. The original data collected created additional questions, so additional sampling and analysis was conducted thru the fall of 2013. The draft *SPMUD Temporary Flow Monitoring Study Technical Memorandum* (TM) dated November 2013 [without appendices] (Attachment B), collected and analyzed sewer S&F data in representative areas by residential and non-residential user types throughout the District.

The data and conclusions reached from the TM and the information discussed above are used in the following analysis:

a. The critical customer flow factor for establishing the impact on the sewer collection system is the peak daily flow per EDU (Peak Q) because this factor (combined with other peaking factors) is used to determine capacity requirements (pipe size);
b. Average daily flow per EDU (Ave Q) is a conversion of the District's total annual flow going to the RWWTP divided by the total EDU the District has paid for. Average daily flow is useful for reporting and comparison purposes at the RWWTP, but because Ave Q varies greatly from customer to customer, a weighted average is used to determine the standard S&F per EDU.
c. Sewage strength is calculated using a combination of factors required to treat the sewage to an acceptable level (based on the combination of chemical, biological and solids components). The sewer strength is expressed in scientific terms as: Chemical Oxygen Demand (COD), Total Suspended Solids (TSS) & Total Kjeldahl Nitrogen (TKN). The cost to treat the sewage is included in the EDU rate and makes up about half of the EDU ($14/$28); this is important in high strength customers like restaurants and industrial users to help determine their share of the COS.

4. Analysis

The cost to collect, transport, treat and dispose of sewage using strength and flow (S&F) analysis as defined in our Sewer Code, uses the sewer industry standards and actual data from the RWWTP. The equation is comprised of three elements; flow, biological demand and solids removal. The constants are derived by allotting 25% for flow with a 55/45 split for biological/solids at WWTP & 100% of flow for sewer collection. This results in a cost break down of 62% for flow (Q), 21% for biological (COD) and 17% for solids (TSS); the formula below can be used to compare the relative cost impact:

$$S\&F = \frac{Q_1}{Q_2}\left[.62 + .21\left(\frac{COD_1}{COD_2}\right) + .17\left(\frac{TSS_1}{TSS_2}\right)\right]$$

Where: 1 is actual value and 2 is the standard value

The following summarizes my findings based the formula above and data in the TM:

A. RESIDENTIAL CUSTOMERS:

Several types of residential units were evaluated: two different detached home residential communities, a community of large detached homes and one large multi-family residential community (apartments).

Single Family Residence (SFR): staff looked at two different detached home communities totaling 569 units, one built in the 1960's & '70's and the other in the 1990's and early 2000's, and provided the following on average: Peak Q = 369 gpd/EDU & Ave Q =165 gpd/EDU. The sample of homes used were in Stanford Ranch (Site 1 of the study) (ave. home: size=1300-2200sf; age= 10-25yr) and the Whitney Blvd. area (ave. home: size=1100-2000sf; age= 35-50yr) is used as the standard for one SFR. The average sewage strength expressed in biological/solids/chemical [COD/TSS/TKN] for our SFR is 390/36/44.

Multi-Family Residences (MFR): Peak Q = 495gpd/EDU & Ave. Q = 95gpd/EDU for 344 units.
So MFR have a 34% higher peak Q [495/369] but had a 42% lower ave Q [95/165]. Their sewage strength [470/56/52] is 50% greater, therefore, when compared in terms of S&F: MFR have a 40+% (1.4X) greater impact on sewer collection vs. the SFR.

Large Single Family Residences (LSFR): this community (77 units) was sampled three different times and averaged: Peak Q = 547gpd/EDU & Ave. Q = 272gpd /EDU;
So LSFR have 48% higher peak Q [547/369] and 65% higher ave. Q [272/165]; but the strength [280/28/34] is about 30% lower, therefore: LSFR have 56% (1.5X) greater impact to the District system as a SFR.

Standard Residential EDU

Using the information above, I calculated a weighted average using the number of residential units in each of the communities; with the values shown in the table below (see Attachment A of this report for additional information on the impact analysis):

RESIDENTIAL SEWER STRENGTH AND FLOW ANALYSIS											
Residential Community	Units	Flow Weight Factor (WF)	Peak Daily Flow Q-p	Q-p w/ WF	Ave. Daily Flow Q-a	Q-a w/ WF	COD WF	COD	COD w/ WF	TSS	TSS w/ WF
Whitney Blvd	287	29%	383	110.9	180	52.1					
St. Francis Woods	78	8%	547	43.1	272	21.4	11%	280	31.0	28	3.1
Sanford Ranch	282	28%	355	101.0	150	42.7	40%	390	156.2	36	14.4
Sunset Apt	344	35%	495	171.8	95	33.0	49%	470	229.7	56	27.4
			445	426.8	172.3	149.2		380	416.9	40	44.9
			STANDARD VALUES FOR S&F EQUATION								
				Q-p		Q-a			COD		TSS
				425		150			425		50

Therefore, the standard values for a residential dwelling unit for the District will be assigned a peak flow of 425 gallons per day (gpd); an average flow of 150gpd; and sewer strength of 425mg/L for COD & 50mg/L for TSS.
As such, non-residential customers not meeting this domestic strength standard will be evaluated using the S&F equation based on these standard values.

B. NON-RESIDENTIAL CUSTOMERS (NRC)

For Commercial (non-restaurant): for NRC discharging domestic strength sewage, the report collected a lot of data with a wide range of results; however the average impact on the sewer collection system for non-residential, domestic strength customers is 0.5 EDU /1000sf.

For Restaurants: restaurant flows ranged from 1300 to 4800 gpd (9 to 32 times a SFR), the average Peak Q = 1340gpd/EDU and Ave. Q = 305gpd/EDU. Then restaurants have a three times greater peak daily flow [1340/450]; twice the average daily flows [305/150], and three times greater [1400/140/93] an average strength than the SFR. Therefore, using these values, restaurants have a range of 2 to 11 times the impact on both the collection and treatment systems as other NRC with domestic strength discharges. Using the S&F formula restaurants on average are 3.64 EDU/1000sf.

For all other NRC: Case by Case, based on General Manager Studies using the S&F equation and any other relevant factors that would affect either the collection system or the RWWTP.

5. Financial

The District collected over $10.26 Million in service charge in FY13 from 20,600 customers (30,500 EDU). The 1060 commercial customers make up 5% of connections (1060/20,600) but account for about 20% of the service charge revenues (6000/30,500 EDU) and pay over two million dollars per year. Our education facility customers make up about 2.6% of connections (800 EDU) and pay about ¼ million dollars each year. The remaining 18,800 or 91% are residential customers, of which, about 22% (4400 EDU) live in MFR units and about 78% (14,400) live in SFR. Our COS for FY13 was $10.7 million.

The RWWTP FY13 total annual O&M costs were $20.92M with our proportional volumetric share at 24.45% (1,571Mgal / 6,426Mgal) or $5.11M. This equates to $14 of the $28 monthly service fee (50%) and 141.1 gpd/EDU {([1,570.85Mgal/yr] / 30,500EDU) / 365dy/yr}; as compared to our 150gpd/EDU, the 9 gpd difference is due to our paying for more EDU than are actually discharging to the RWWTP.

6. Conclusions

The District is required by the MUD Act to collect service charges from its customers sufficient to meet its revenue needs. These needs are fairly consistent from year to year and the MUD Act requires the Board to establish the rules to determine the apportionment of these expenses. In 1976, the Board determined that an EDU would be the unit cost, and any residence (regardless of size or system impact) would be charged one EDU. Non-residential customers would be charged based on square footage times a conversion factor of 1/3 or 2/3 EDU per 1000SF; this has since morphed into 40 sub-conversion factors and needs to be simplified.

This being said, a flat cost/unit apportionment is still the best way to pay for sewer service because the District's COS is expense based and not flow based. These annual revenue needs are divided into three categories: [1] Capital outlays, [2] Operations & Maintenance, and [3] RWWTP costs. The COS has historically been fairly applied and equally distributed over all our customers based on the rules determined by the Board as expressed in Equivalent Dwelling Unit or EDU (currently one EDU = $28/mo).

The TM evaluated both residential and non-residential customers and reported their findings for flow in terms of gallons per day per EDU (gpd/EDU) and strength in terms of COD, TSS & TKN in mg/L. The results of the TM indicate that these units of measure are useful in very broad terms to determine the number of EDUs to be apportioned to non-residential customers.

For residential: the TM looked at three residential types; single-family residence (SFR), multi-family residence (MFR) and large single-family residence (LSFR). The MFR have a 40% greater impact than a SFR, and LSFR have a 56% greater impact than the standard SFR based on peak daily flow. Based on this analysis the strength and flow values for a "Standard EDU" should be defined as having an average daily flow of 150 gpd with a peak flow of 425 gpd (2.8 diurnal peaking factor) and a strength expressed in COD/TSS/TKN of 425/50/50 (mg/L).

For the non-residential customers who meet this domestic strength discharge requirements should be apportioned a service fee at one-half EDU per one-thousand square feet (0.5 EDU/1000sf). For restaurants, the analysis determined that they should be apportioned a service charge of 3.64 EDU per thousand square feet (3.64EDU/1000sf). All other non-residential customers' service charge should be determined based on case-by-case studies conducted by the General Manager. In no case should any occupied unit either residential or non-residential pay less than one EDU. Making these changes would cause a 2% increase in our annual revenues; about half of our NRC will see an increase in their monthly service charge.

The 1976 Revenue Program originally selected square footage times a conversion factor for commercial customers as the best way to charge non-residential customers; with "ease of enforcement" as the overriding reason. The District also made a determination in 1976 that this simple method to recoup its COS was better for our customers as a whole by keeping the District's overall service fee cost low and outweighed any perceived benefit of a more "fair" (and more difficult to administer and enforce) method, since the district would have to depend on other agencies (Placer Co., City of Rocklin, Town of Loomis, City of Roseville and PCWA) if the Board decided to use a different method, say building permits, fixture counts, land use, treatment impact or water use. This was true in 1976 and it is still true today.

7. Recommendation

Based on the finding of this report, the General Manager recommends that the District do the following:

1. Make no change to the way we charge residences for our service (1 EDU/residence).
2. Change the definition of EDU from Equivalent Dwelling Unit to "Equal Distribution Unit" to better reflect that this is an apportioned charge to collect the revenues needed to fund our COS.
3. Don't provide an "Affordability" discount at this time.
4. For commercial users who meet the domestic strength requirements, the service fee should be apportioned based on 0.5 EDU/1000 SF, with a minimum of one EDU per user.
5. For restaurants, the apportionment should be based on 3.64 EDU/1000 SF instead of the current 2 EDU/1000sf.
6. For non-residential customers who do not meet the domestic strength requirements, the service fee should be based on the "Strength and Flow Equation" from studies by the General Manager to apportion the number of EDU and place them into the 'other' category.
7. Change the Sewer Code to incorporate the findings of this Report and Recommendation.

ATTACHMENTS

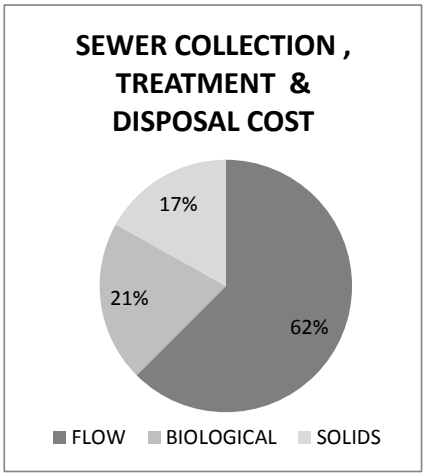
A. GM Impact Analysis
B. SPMUD Temporary Flow Monitoring Study Technical Memorandum (TM) [without Attachments]

ATTACHMENT A

GENERAL MANAGER SEWER IMPACT ANALYSIS

The cost to collect, transport, treat and dispose of sewage can be determined using the strength and flow equation (S&F) as defined in our Sewer Code using sewer industry standards and data from the RWWTP. The equation is comprised of three sewage elements; The flow (Q), biological (COD) and solids (TSS). Constants in the equation are derived by allotting costs at 25% for flow with a 55/45 split for biological/solids treatment at WWTP & 100% of flow for sewer collection. This results in a cost break down of 62% for Q, 21% for COD and 17% for TSS; the formula is used to compare the relative cost impacts of sewer discharges that do not meet domestic strength requirements:

$$S\&F = \frac{Q_1}{Q_2}[.62 + .21(\frac{COD_1}{COD_2}) + .17(\frac{TSS_1}{TSS_2})]$$



Where: 1= actual value and 2= the standard value
The constants are based on the RWWTP treatment & SPMUD collection data as shown below:
Allow 25% of flow & 55/45 biological/solids split at WWTP & 100% flow for collection

then flow component is:	100+25/200=	62.5%	FLOW
biological is 55% of remainder:	(1-.625) X 0.55=	20.6%	BIOLOGICAL
solids is 45% of remainder:	0.375 X 0.45=	16.9%	SOLIDS

RESIDENTIAL STRENGTH AND FLOW ANALYSIS

Community	Units	weight factor (WF)	Peak Q from TM	Peak Q w/ WF	Ave Q from TM	Ave Q w/WF	COD & TSS WF	COD from TM	COD w/WF	TSS from TM	SOLIDS w/WF	TKN from TM	TKN w/ WF
Whitney Blvd	287	29%	383	110.9	180	52.1							
St. Francis Woods	78	8%	547	43.1	272	21.4	11%	280	31.0	28	3.10227	34	3.767
Sanford Ranch	282	28%	355	101.0	150	42.7	40%	390	156.2	36	14.4205	44	17.625
Sunset Apt	344	35%	495	171.8	95	33.0	49%	470	229.7	56	27.3636	52	25.409
w/ Whitney	991		445	426.8	172.3	149.2		380	416.9	40	44.8864		46.801
w/o Whitney	704												

STANDARD VALUES FOR EQUATION

Q-peak	Q-ave	COD	TSS	TKN
425	150	425	50	50

Restaurant FLOW ANALYSIS

Restaurant	Pd. EDU	Q_ave /EDU	WF	Q_ave w/WF	Q-rest / Q-ave
Chevy's	14	370	34%	126.3	247%
Mel's	13	270	32%	85.6	180%
Skipolini's	8	300	20%	58.5	200%
Carl's	6	240	15%	35.1	160%
	41	295		**305.6**	

Average COD=1400 & TSS=140

therefore:

$$S\&F = \frac{Q_1}{Q_2}[.62 + .21(\frac{COD_1}{COD_2}) + .17(\frac{TSS_1}{TSS_2})] \text{ -->}$$

=305/150[.62+.21(1400/425)+.17(140/50)]= 2.0333 [.62+.69+.47]
= 2.03[1.78]
= 3.6134

RESTAURANT FACTOR
3.6 EDU PER 1000SF

WATERWORKS ENGINEERS

SOUTH PLACER MUNICIPAL UTILITY DISTRICT
Temporary Flow Monitoring Study
Technical Memorandum

Date: November 2013

Prepared by: Eric Nielsen, P.E.
Michael Fisher, P.E.

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CHAPTER 1: Introduction

1.1 District Information

South Placer Municipal Utility District (SPMUD or District) was established in 1956 under the State of California Municipal Utility District Act and is one of five municipal utility districts in the state. Under the Public Utilities Code of the State of California, Division 6, municipal utility districts are allowed to provide any number of utility services (e.g., sewer, water, light, power, heat, transportation, refuse, and communications). However, the District was formed and currently focuses on the collection and conveyance of wastewater from the communities it serves. Today the District serves the communities of Rocklin, Loomis, Penryn, Newcastle, and portions of Granite Bay and unincorporated Placer County. The District owns, operates and maintains approximately 250 miles of mainline pipe (ranging from 4-inch to 42-inches in diameter), over 5000 manholes, thirteen lift stations, and ten permanent flow metering stations, which make up the collection system.

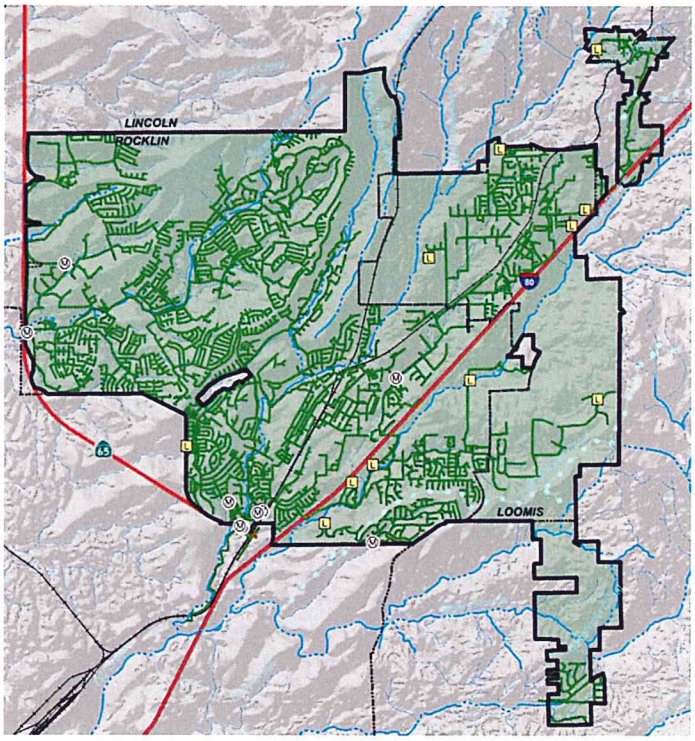

Figure 1-1. SPMUD District Boundary

1.2 Study Purpose

Water Works Engineers (WWE) was contracted by the District to collect and analyze data to quantify the impact the various users within the District have on the collection system. The District has consistently applied a method defined in the 1970's to assign equivalent dwelling units (EDUs) to its customers. However, the District has undergone significant changes from that time until now due to development and the evolution of the types of uses that connect to the system. The District wanted to reassess the validity of the method for assigning EDUs by collecting various quantifiable data on the users. This data was then used to define the impact each user type (e.g., restaurant, office building, fitness center, multi-family residence, single-family residence) has on the improvement and/or operation and maintenance of the collection system. The intent of this study was to identify discrepancies between the impact a type of user has on the system and the associated EDUs (i.e., charges and fees).

CHAPTER 2: Background

2.1 1976 Revenue Program Report

The District conducted a flow monitoring study and wrote a revenue program report in 1976 to define the method by which equivalent dwelling units (EDUs) are assigned to parcels connected to the District collection system. This report is included in this technical memorandum in **Appendix B**. The report made recommendations that have guided the means for collecting revenues to operate and improve the collection system, which include the following:

- Tax properties proportional to its assessed valuation,
- Collect sewer service charges per assigned EDU,
- Charge commercial users based on the area (i.e, square footage) of the establishment,
- Collect connection charges per assigned EDU, and
- Focus most operating and capital costs from property taxpayers to actual users.

One of the main objectives of the report was to develop a revenue program that conformed to the requirements for receiving federal/state capital grant monies. These requirements were:

- The District needed to obtain its operating and maintenance (O&M) revenues primarily from service charges and not property taxes, and
- The District needed to collect as part of its O&M expenses, annual capital depreciation of its depreciable assets.

The report calculated the annual O&M costs of the District collection system and allocated these costs to different types of users based on the amount of flow and the concentration of pollutants (i.e., biochemical oxygen demand (BOD), and suspended solids (SS)). The report considered two methods for charging commercial users. The first method considered basing the number of assigned EDUs off of the building square footage while the second method based the number of EDUs off of the number of fixture units in the building. The first method was selected and the table below summarizes the recommended categories for assigning EDUs.

Table 1. 1976 Recommended Categories of Users and Associated Number of EDUs

Residential	Low Density (1/3 EDU per 1000 sqft)	High Density (2/3 EDU per 1000 sqft)	High Strength Commercial
Single Family Multi-family	Auditoriums Banks/Financial Offices Beauty Salons/Barbers Churches Parking Garages Offices Retail Stores Theaters Warehouses	Bars Hotels/Motels Mortuaries Medical/Dental Offices Schools Service Stations	Laundromats Markets Restaurants

This report was the last time that a study was conducted to assess the impact of different users on the collection system and the results of this study have guided the methods to allocate costs to users. However, the District has undergone a significant amount of development since the time of this study. The total number of EDUs in the District at the time of the study was 3100. Currently there are close to ten times as many EDUs in the District with approximately 30,000 EDUs. The number of restaurants in the District in 1976 was sixteen. Both the number and types of restaurants have increased significantly since that time.

2.2 Ordinance No. 09-02

As the District has grown and evolved since the time of the 1976 Revenue Program Report, it has developed an ordinance to direct the way in which EDUs are assigned to users connected to its collection system. This ordinance has evolved over time to address the changes in numbers and types of users to the system. The method for determining the number of EDUs for various uses is defined in the SPMUD Ordinance No. 09-02 Section 3.02 titled *Charges and Fees*. This section of the District ordinance is located in **Appendix C** of this technical memorandum. Table 2 below summarizes the current categories used for assigning EDUs to users.

Table 2. Summary of Customers Types and Associated EDUs in Current District Ordinance

Low Occupancy	Low-Density	Residential	Medium Density	High Density
1 EDU per 5 employees	1/6 EDU per 1000 sqft	1 EDU per unit	1/3 EDU per 1000 sqft	2/3 EDU per 1000 sqft
Parking Garage Distribution Facility Storage	Church (w/o kitchen)	Single Family Multi-family	Church (w/ kitchen) School (w/o cafeteria) Bowling (w/o showers) Day Care (w/o kitchen) Fitness (w/o showers) Chiropractic Offices / Bank Retail Store Theater Auditorium / Hall	Barber/Beauty School (w/ cafeteria) Bowling (w/ kitchen) Day Care (w/ kitchen) Fitness (w/ showers) Medical / Dental Service Station Pet Grooming Veterinary Clinic Bar / Coffee Shop

Special Commercial Users					
User	Unit	EDUs/ unit	User	Qualifier	EDUs/ 1000 sqft
Car Wash	Automatic Stall	8	Market/ Mini-Market	(w/o Disposal)	2/3
	Self-Service Stall	2		(w/ Disposal)	2
Laundromat	Washer	2/3	Restaurant (FSE)	(FOG producing)	2
Hospital	Licensed Bed	1/2		(limited food prep)	1
Rest Home	Licensed Bed	1/2		(Outside dining w/ cover)	2
Camping / RV	Site	1		(Outside dining w/o cover)	1
Hotel / Motel	Unit w/ kitchen	1	Mortuary	-	2
	Unit w/o kitchen	1/2			

CHAPTER 3: 2013 Flow Monitoring and Water Quality Study

This chapter describes the objectives, efforts, results, and recommendations of this study.

3.1 Objectives

The District identified a number of objectives it intended to achieve as a result of this study. The objectives guided the planning and execution of the efforts of the study to collect and analyze data. These objectives are listed in the bulleted section below and explained in greater detail.

- Charges and fees to users are in line with the user's impact to the collection system.
    - The primary objective of this study is to interrogate the current method for assigning EDUs to users against quantifiable data to align the charges and fees of a user with the impacts of that user to the District's collection system.
- Remain revenue neutral with respect to charges and fees.
    - The District's ability to provide the existing level of service is directly tied to the current capital and operating budgets. To ensure that the District is able to maintain the same high level of service to its customers, any recommendations generated from this report must be revenue neutral. This study however, will not examine the financial impacts of potential changes in detail. If recommendations from this study have the potential to create significant impact to the District's revenue program, additional efforts will need to be made outside of this study to define the limits of those impacts.
- Any changes to the current method of assigning charges and fees must be justifiable.
    - If the study identifies and recommends changes to the current District ordinance, those changes must be justifiable based on quantifiable, defendable, documented data.

3.2 Scope of Study

The primary purpose for this study was to identify the impact of various types of users to the collection system to assess if the current method and means for collecting charges and fees is applied appropriately. This study defined the impact of a user on the system by the following:

1. The volume of wastewater discharged by the user into the system, and
2. The strength of the wastewater discharged in to the system.

The volume of wastewater discharged into the system is imperative to the District because the District's assets (i.e., pipelines, pump stations) are sized to convey a planned amount of flow. The projects to build these assets and to improve/upsize assets to accommodate increased amounts of flow, are paid for with District funds.

The strength of wastewater discharged to the system is important to the District because it can correlate with the need for, and the amount of operation and maintenance activities requiring District resources. For example, high strength wastewater may indicate a high level of fats, oils, and grease which tend to collect on pipelines and restrict the capacity of the pipeline to convey flow. District maintenance workers must routinely locate and clean these pipelines before potential blockages occur. Additionally, higher strength wastewater requires improved

treatment processes at the treatment plants that receive the District's flow. The cost for needed improvements at those treatment plants are paid, in part, with District funds.

3.3 Monitoring Locations

WWE met with District staff to discuss potential locations to deploy temporary flow monitors and water quality samplers to collect data to quantify the impact of various types of users. After discussing a number of potential locations, the project team settled on nine locations that best represented the types of users to be studied, and that would likely provide the best data. These locations are listed in Table 3 below. Figures of these locations and their respective sewersheds are located in **Appendix D**.

Table 3. List of Temporary Flow Monitoring and Water Quality Sampling Sites

Site	Location	Manhole	Address	Type
1	Stanford Ranch	L5-24	Near Intersection of Farrier Rd. / Devon Dr.	Residential (Low Density)
2	California Fitness	Private Manhole in Parking Lot	2165 Sunset Blvd.	Fitness (w/ showers)
3	Sunset Summit Apartments	Private Manhole near L5-9	2151 Sunset Blvd.	Residential (High Density)
4	Whitney Ranch Medical Center	O3-35	550 West Ranch View Dr.	Medical / Dental
5	Atherton Business Park	L2-19	Near Intersection of Atherton Rd. / Menlo Dr.	Office Building
6	Strike's Bowling	Private Manhole near L3-56	5681 Lonetree Blvd.	Bowling (w/ kitchen)
7	Mel's, Skipolini's, Chevy's, Carl's Jr.	K3-94	Near 6608 Lonetree Blvd.	Restaurant (FOG producing)
8	St. Francis Woods	I11-69	Off of Monte Claire Rd.	Residential (Very Low Density)
9	Save Mart, Cleaners, Mail Center, Salon	M6-120	3021 Stanford Ranch Rd.	High Density

V&A Consulting Engineers, Inc. (V&A) provided the flow monitoring services for this study. The temporary flow monitors were deployed at the various locations for a period of two weeks (April 18, 2013 – May 5, 2013) to quantify the flow rate of wastewater entering the collection system over time. At the end of the two week period, temporary automated composite water sampling equipment was installed at the flow monitoring sites. The sampling equipment collected a flow-paced composite sample of the wastewater over a 24-hour period to get an average wastewater strength. The collected samples were delivered to a local qualified commercial laboratory for testing for chemical oxygen demand (COD), total suspended solids (TSS), and total Kjeldahl nitrogen (TKN) to characterize the waste. The results of the flow monitoring and wastewater sampling activities are found in **Appendix A**.

3.3.1 Monitoring Locations Not Used

The results of two flow monitoring sites were removed from this study after reviewing the flow data collected from those sites. The table below summarizes the data collected with the temporary sewer flow monitors and information obtained from Placer County Water Authority (PCWA, the local water agency) during the monitoring period.

Table 4. Flow Monitoring Sites Removed from Study

Site	Location	Approx. EDUs	ADWF (gpd)	Avg Q /EDU (gpd)	Avg Water Use (gpd)	% of Water into Coll. Sys.
2	California Fitness	29	31,850	1,100	7,920	400% [1]
6	Strike's Bowling	43	2,100	50	13,300 [2]	20%

ADWF = Average Dry Weather Flow of wastewater
1 = The amount of water leaving California Fitness is four times greater than the amount of water in through the PCWA water meter.
2 = The potable water meter data from PCWA for Strike's was by far the most variable across recording periods.

The flow recorded from site 2 (California Fitness) appeared abnormally high. The flow from the one building was equivalent to approximately a subdivision of 167 single-family homes (assuming 200 gpd/EDU). Additionally, the amount of water discharged to the sewer collection system, as measured by the portable flow monitor, was four times greater than the amount of potable water entering the building through the PCWA water meter. A subsequent site visit and additional analysis of the data did not provide reasons as to why more water leaves the site than enters it. For this reason, the data collected for site 2 was deemed unreliable and was not used for comparisons in this study.

The flow recorded from site 6 (Strike's Bowling) appeared abnormally low. The flow from the one building was equivalent to approximately 10 single-family homes (assuming 200 gpd/EDU). This alone does not appear to be an unreasonable conclusion. However, when compared to the amount of potable water used at this site over the same period, only 20% of the water passing through the PCWA water meter is discharged to the sewer collection system. Strike's Bowling consists of bowling lanes, a restaurant, two bars, and an arcade. The majority of the water (i.e., 90%) used in all of these facilities is discharged into the sewer system. Strike's Bowling does have a small amount of landscaping around the perimeter of the building that could account for a portion of the water that is not discharged to the collection system. This, however, could not account for the discrepancy between the potable water meter and sewer flow monitor exhibited during this period of observation. For this reason, the data collected for site 6 was deemed unreliable and was not used for comparisons in this study.

3.3.2 Additional Monitoring Data Collected

Additional flow monitoring data was collected after May 5, 2013 to compare to the initial flow monitoring results for the residential sites. Initial flow monitoring results for residential usage types were questioned and it was decided to collect additional data for comparison. Site 8 (St. Francis Woods) was monitored repeatedly from the same manhole. Site 11 (Farrier Dr.) was monitored from a manhole just upstream of site 1 (Stanford Ranch) to check the flows obtained during the initial field investigation. Site 10 (Whitney Blvd.) was included to provide another data point for the single-family residential usage type. The additional flow monitoring was conducted by

V&A and SPMUD. The table below summarizes the additional flow monitoring efforts and results. These results were added to the analysis conducted as part of this study.

Table 5. Additional Flow Monitoring Data

Site	Location	MH	EDUs	Dates	By	Peak Q /EDU (gpd)	Avg Q /EDU (gpd)	Peak Factor	Category per District Ordinance
8	St. Francis Woods	I11-69	78	7/3-7/7	SPMUD	455	200	2.3	Residential (Large)
				9/3-9/26	SPMUD	540	310	1.7	
				9/27-10/17	V&A	645	305	2.1	
10	Whitney Blvd.	K7-74	287	7/17-7/20	SPMUD	270	130	2.0	Residential (Single-)
				7/29-8/23	SPMUD	495	230	2.2	
11	Farrier Dr.	L5-26	282	7/25-7/28	SPMUD	355	150	2.4	Residential (Single-)

While the data collected from these flow monitoring deployments show some consistency, it is important to point out that due to the temporal variability of flows, the inherent difficulty involved with precisely setting up a temporary flow monitor, and the small diameter pipelines examined in this study, results can vary as seen at all of the sites. However, given the additional data points provided by these flow monitoring efforts, trends were identified to provide meaningful results for this study.

3.4 Comparisons

This section contains the analysis of the data collected during the flow monitoring and wastewater sampling activities and makes comparisons to assess the impact of one user-type against another.

3.4.1 Wastewater Flow Rates

Peak flow rates are important to the District because peak flow rates stress the design capacity of the collection system. Table 6 shows the nine monitored locations sorted according to the peaking factor witnessed during the period of data collection. The peaking factor was determined by dividing the instantaneous peak flow rate by the average flow rate over the monitoring period. Some locations experienced dramatic peaking factors (i.e., peaking factors greater than 5). This is in part due to the very small sewersheds and the hours of operation of the selected flow monitoring locations (i.e., Atherton Business Park, and Whitney Ranch Medical Center). The peaking factor tended to be lower at locations with large sewersheds (i.e., St. Francis Wood and Stanford Ranch). The data from the Sunset Summer Apartments was an exception. That location had a fairly large number of existing upstream EDUs and it still exhibited a large peaking factor. This may indicate that multi-family residential users have a propensity for larger peaking factors due to the higher density of individuals connected into the same location of the collection system.

Although an EDU, as determined by the District, represents more than just a standard unit of flow (i.e., it is based on both the volume and strength of wastewater entering the collection system), it can be used to provide a standard unit of flow to compare from one site to the next. Examining the sites in Table 6 shows that the peak flow per EDU from most sites falls within a range approximately of 350 – 650 gpd/EDU. Three sites stand out as

exceptions. Sites 7 (the restaurants site), site 9 (the grocery store and strip mall) have peak flows over 1000 gpd/EDU, which indicates that they have a larger flow-based impact than the number of assigned EDUs would designate. Site 4 (the medical center) has a peak flow around 200 gpd/EDU, which indicates a lower than normal flow-based impact to the system. The impact of these sites due to the strength of wastewater will be explored in the next section.

Table 6. Flow Monitoring Locations Sorted by Wastewater Peaking Factor

Site	Location	Peaking Factor	Approx. EDUs	Peak Q /EDU (gpd)	Avg Q /EDU (gpd)	Category per District Ordinance
5	Atherton Business Park	7.7	55	540	70	Medium
4	Whitney Ranch Medical Center	5.5	44	220	40	High
3	Sunset Summit Apartments	5.2	344	495	95	Residential (Multi-)
7	Mel's, Skipolini's, Chevy's, Carl's Jr.	4.4	41	1340	305	Special
9	Save Mart, Cleaners, Mail Center	3.4	54	1060	315	High
1	Stanford Ranch	2.2	312	635	290	Residential (Single-)
8	St. Francis Woods	2.1	78	645	305	Residential (Large)
10	Whitney Blvd.	2.2	287	495	230	Residential (Single-)
11	Farrier Dr. (Stanford Ranch)	2.4	282	355	150	Residential (Single-)

3.4.2 Strength of Wastewater

Table 7 below shows the locations monitored in order of the concentration of chemical oxygen demand (COD) measured from the wastewater samples collected at each site. As anticipated, the strength of wastewater from residential users is lower in concentration of COD, TSS, and TKN than the other commercial users studied. The two locations with the highest strength of wastewater as characterized by this study are site 7 (the restaurants site) and site 9 that collects flow from the grocery story Save Mart, which contains departments for deli, bakery, and meat. The order of locations in Table 7 (i.e., the impact of each site based on the strength of the wastewater it discharges) matches well with the categorization of users in the existing District ordinance.

Table 7. FM Locations Sorted by Chemical Oxygen Demand (COD)

Site	Location	COD (mg/L)	TSS (mg/L)	TKN (mg/L)	Category per District Ordinance
7	Mel's, Skipolini's, Chevy's, Carl's Jr.	1400	140	93	Special
9	Save Mart, Cleaners, Mail Center	1000	140	37	High
5	Atherton Business Park	680	170	120	Medium
4	Whitney Ranch Medical Center	510	59	83	High
3	Sunset Summit Apartments	470	56	52	Residential (Multi-Family)
1	Stanford Ranch	390	36	44	Residential (Single-Family)
8	St. Francis Woods	280	28	34	Residential (Large Homes)

3.4.3 Residential Users

Table 8 compares the three types of residential uses monitored as part of this study (i.e., multi-family, single family, and large home single family residential).

Table 8. Comparison of Residential Uses

Site	Location	Peak Q/EDU (gpd)	Avg Q/EDU (gpd)	COD (mg/L)	TSS (mg/L)	TKN (mg/L)	Residential Category
3	Sunset Summit Apartments	495	95	470	56	52	Multi-Family
1	Stanford Ranch	355	150	390	36	44	Single-Family
8	St. Francis Woods	645	305	280	28	34	Large Homes

Currently all three residential usage types are assigned one EDU per residence per the District ordinance for the purpose of assigning charges and fees. One of the objectives of the study was to compare the impact each type of residential use has on the collection system to see if a variation in charges and fees is warranted. Examining the data regarding flow rates from each type shows that the average flow rate from apartments is a third of the flow rate from large single-family residences (site 8). However, the peak flow per EDU is similar for all three residential usage types. The apartments exhibited a large peaking factor, so although the average flow is lower than the other residential usage types, the peak flow is similar. The capacity of the sewer (i.e., the size of sewer infrastructure) is designed based on peak flow rates and thus peak flows have a larger impact on the cost of the collection system and should be used as the basis of comparison between flows.

When comparing the strength of wastewater, we see that the apartments have the highest concentration of constituents and the large single-family residences have the lowest. However, the difference between these concentrations is not large and may be due to the fact that these constituents are diluted as the rate of flow increases from activities with lower concentrations of constituents (e.g., showers, baths).

Because the peak flow and strength of wastewater is similar between the surveyed residential usage types, it is recommended that no change be made to the way that residential customers are assigned EDUs for charges and fees.

3.4.4 Commercial Users

Table 9 compares the commercial users monitored during this study. The table shows the approximate number of EDUs for each location as previously assigned by the District, the average dry weather flow, the average flow per EDU, the average potable water usage during the period of monitoring, the percentage of potable water returned to the collection system, and the number of fixtures as counted during site visits to each establishment.

It is important to note that the flow locations with some of the highest assigned EDUs (i.e., Atherton Business Park, and Whitney Ranch Medical Center) have the lowest average flow rates per EDU. Additionally, both the Atherton Business Park and Whitney Ranch Medical Center have relatively low wastewater strengths. The combination of low flow rates and relatively low wastewater strengths may justify altering the number of assigned EDUs to these locations. There are very few medical centers within the District, so this would not represent a

significant impact. However, there are a number of office spaces within the District and before deciding to apply a new standard for assigning EDUs to offices, it is recommended that the District collect additional data from other business parks to verify these findings.

Table 9. Comparison of Commercial Users

Site	Location	Approx. EDUs	ADWF (gpd)	Avg Q /EDU (gpd)	Avg Water Use (gpd)	% of Water into Coll. Sys.	Showers	Toilets	Urinals	Faucets	Washer
9-a	Save Mart	40	16,875	315	1,440	NA	0	4	1	26	0
9-b	Strip Mall [1]	14			NA	NA	-	-	-	-	-
7-a	Chevy's	14	5,220[2]	370	4,750	90%	0	7	2	17	1
7-b	Original Mel's	13	3,480[2]	270	3,170	90%	0	6	1	12	1
7-c	Skipolini's	8	2,370[2]	300	2,160	90%	0	6	1	15	1
7-d	Carl's Jr.	6	1,420[2]	240	1,300	90%	0	3	1	5	0
5	Atherton Business Park	55	3,860	70	NA	NA	-	-	-	-	-
4	Whitney Ranch Med.	44	1,800	40	2,300	80%	-	-	-	-	-

ADWF = Average Dry Weather Flow of wastewater
NA = Not Available
1 = Four stores contribute to the measured flow (i.e.,Fresh Cleaners, AIM Mail Center, Great Clips, US Bank Admin Offices).
2 = The flow from these four restaurants were monitored together. The ADWF was estimated based on metered potable water use.

CHAPTER 4: Conclusion

This study attempted to quantify the impact of various usage types discharging to the District's collection system based on the flow and strength of wastewater. A summary of the results of this study and potential changes to the method of assigning EDUs to the studied usage types is summarized below in Table 10. Water Works Engineers recommends that the District consider the data and potential adjustments to the current methods for assigning EDUs outlined below.

Table 10. Usage Types Analyzed

Usage Type	Impacts			Potential Adjustment to EDUs
	Peak Q per EDU	Avg Q per EDU	Strength	
Residential (High Density)	High	Low	-	None
Residential (Low Density)	-	-	-	None
Residential (Very Low Density)	-	-	-	None
Restaurant (FOG producing)	High	-	High	Increase
High Density (Grocery)	-	-	High	None
Medical / Dental	Low	Low	-	Decrease
Office Building	-	Low	-	Decrease
Fitness (w/ showers)	Inconclusive data			
Bowling (w/ kitchen)	Inconclusive data			

Careful consideration will need to be given to these recommendations since the District intends to only make changes to the process of assigning EDUs that are revenue neutral. The study found that two usage types (medical/dental and office buildings) may currently be assigned EDUs that are higher that the observed impacts. Decreasing the assigned EDUs of these usage types will require the increase of assigned EDUs to another usage type (potentially customers with a restaurant usage type) to offset the associated loss of revenue. WWE recommends identifying the number of customers with usage types the District may consider changing, to quantify the potential financial impact, before a decision is made to alter the process of assigning EDUs.

Additionally, the data from this study can be used in the future to determine the appropriate category, and thus, the appropriate number of EDUs to assign to new users connecting to the collection system. This study can provide additional data points (i.e., flow rates, potable water usage, fixture counts) to document and justify the reasons for assigning EDUs with the intent of assisting the District in fairly and consistently assigning EDUs based on the impact of the user to the collection system.

INTRODUCTION

Scope and Purpose

V&A has completed sanitary sewer flow monitoring and wastewater sampling at nine locations within the District. Flow monitoring occurred over a 2-week period from April 17 to May 6, 2013. The purpose of this study was to measure sanitary sewer flows at the given flow monitoring sites and conduct analyses pertaining to capacity. V&A was also tasked with installing samplers to collect a composite 24 hour sample. Those samples were then tested at a local laboratory. A vicinity map of the project area is illustrated in Figure 1. Table 3 lists the flow monitoring and sampling sites. Detailed descriptions of the individual flow monitoring sites, including photographs, are included in *Appendix A*.

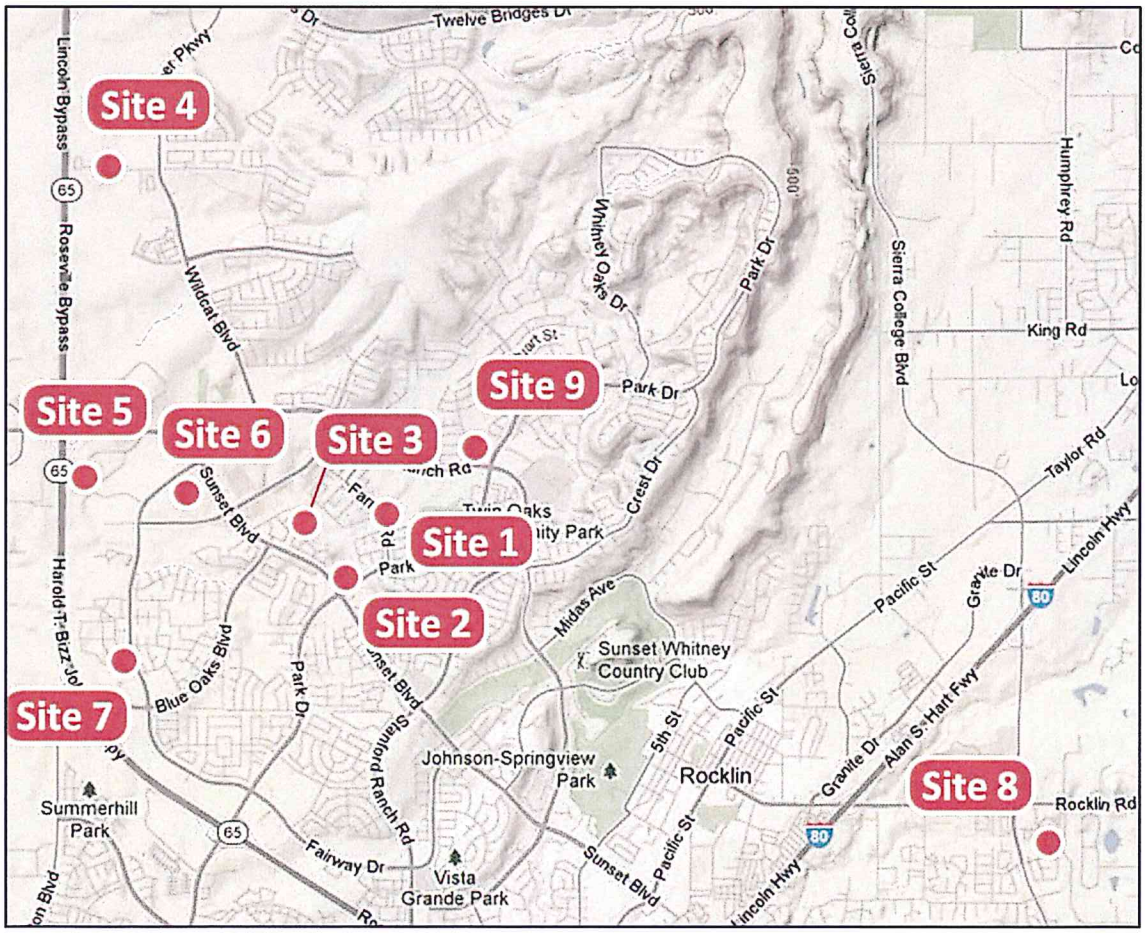

Figure 1. Project Area Vicinity Map

ITEM VII. REPORTS

ITEM VII.2. SUPERINTENDENT REPORT

To: South Placer MUD Board of Directors

Via: Charles Clark, GM

From: Jody Allen, Superintendent

Date: 12/5/14

Subject: Monthly Board Report - Capital Budget Items & Staff Report

1. We took delivery of our new Case 570NXT Loader with Box scraper, and received the required Safety training by the manufacturer's representative. The old Case Backhoe that the Board approved on this past years Surplus list has been delivered to the auction house awaiting an out-of-state sale.
2. The District has contracted with a local contractor to modify one of the Corporation Yard work stations into an office space, with a door and side-light. This work is in alignment with our on-going succession plan. Work is slated to begin the week of December 15th. Due diligence was performed to receive bids on this small project, and GJ Builders came in with the lowest bid of $6,620.00.
3. Stand-by call-outs were very minimal over the Thanksgiving Holiday, thanks in part to the significant effort of pro-active maintenance to service laterals, as noted on Gary's Field Services Report. Also, we came through un-scathed by the series of storms that pummeled our service area, on December 3rd. Operations were normal, with no power interruptions requiring emergency back-up power generation to our Lift Stations.

ITEM VII.3. *GENERAL MANAGER REPORT*

To: Board of Directors

From: Charles Clark, GM

Date: 12/5/14

Subject: General Manager Staff Report

1) **DEPARTMENT REPORTS**

Attached are the FACILITY SERVICES DEPARTMENT [Item 3A], ADMINISTRATIVE SERVICES DEPARTMENT [Item 3B] and TECHNICAL SERVICES DEPARTMENT [Item 3C] monthly status reports for the Boards information. The Department Managers are prepared to answer any questions from the Board.

2) **INFORMATION ITEMS**

a. Herb Niederberger started on December 2 as your new General Manager and we are in the process of transferring authority.
b. I am recovering from foot surgery I had on November 20th.
c. My Retirement Dinner will be on Thursday December 18th and my last day of work is December 30th.
d. The District will be open on the Fridays after Christmas and New Years with minimum staff.
e. Last Ad Hoc Committee Meetings:

1.LOOMIS 2x2 [Jim/Vic]	2.GM SEARCH [Jim/Will]	3.FEE [Will/Jim]	4.PRESIDENT [Jim/John]	5.IT [John/Vic]
Oct. 29	Oct. 15	Oct. 29		
Nov. 13	dissolved	Nov.17	Dec. 10	June 12

Notes on committees:

1. **Town of Loomis Sewer Capacity 2X2**: the Loomis diversion sewer route study was presented to the Loomis stakeholders on Nov. 13th and was given to the Town of Loomis to be used in their CEQA process. The CEQA is currently scheduled to be complete in the May timeframe.
2. **GM Search**: The new GM, Herb Niederberger started December 2nd. This committee was dissolved at the Nov. 6, Board meeting.
3. **Fee Policy:** met on October 29th and November 17th to review the new asset funding policy; staff is evaluating the local participation fee and it's analysis of the monthly service fee.
4. **President:** standing committee that meets at least once a year for the President and Vice-President to discuss the up-coming years activities.
5. **IT:** progress continues to be made on the implementation of the various components of the IT Master Plan. See ASD & TSD reports for progress on the two main data base.

ITEM VII.3A FACILITY SERVICE DEPARTMENT REPORT

To: South Placer MUD Board of Directors

Via: Charles Clark, GM

From: Gary Gibson, FSM

Date: 12/5/14

Subject: Monthly Board Report

1. **CCTV:** With the two TV trucks operating part time over the past month, crews TV inspected over 3 miles of mainline. As part of the TV work, 82 manholes were also inspected for condition. In addition to this, a TV crew assisted in inspecting 128 – four (4") service laterals totaling approximately 4500' and followed that up with hand-rodding in preparation for our springtime lateral root foaming program.

2. **Flushing (HVVC**): Crew continue to focus on flushing line segments identified with roots at joints, via TV inspections in the core downtown areas of Rocklin and Loomis in preparation for our springtime root foaming application. Including monthly "Hot Spot" flushing, just under 3.5 miles of hydro cleaning was completed for the month.

3. **Construction**: Crew performed two (2) mainline pipe repairs, one a severe offset joint at an outside drop in Rocklin and the other, a cracked hammer tap in Loomis. Crews spent considerable time walking trunk lines assuring bolt down manhole covers were secure for the winter along creek sheds, conducting pre-storm creek crossing and easement checks and assisting in locating and improving accessibility to PLCOs for the rodding and lateral TV inspection crew. Additional slope improvement work was completed along creek bank in the corporation yard to provide stability for the north area storage upgrade.

ITEM VII.3B ASD REPORT

To: Board of Directors

From: Joanna Belanger, Administrative Services Manager

Via: Charley Clark, General Manager

Date: 12/5/14

Subject: Administrative Services Department Monthly Report

Website

The District website has been updated and is now "live" on the web. Staff continues to work with the web designers to complete minor changes. There are also additional video clips to be uploaded to the site. Other edits include alterations to photographs and formatting. Next steps include staff training for access to the web pages, to allow for minor additions and deletions and uploading of Agenda materials or public notices. Staff will present an overview of the website and the video clips at a meeting in the New Year.

Audit

Stroub & Associates are preparing the final Audit report. We had expected to present the report at the December meeting, unfortunately with the timeline of the Thanksgiving Holiday the report is expected after the Agenda for this meeting is posted.

Administrative Processes

I am working on streamlining work processes with the final implementation of the Tyler software. We are beginning to prepare the standard operating procedures and manuals for each process within the system. When Lucity is launched integration will be programmed between Tyler and Lucity to further simplify districtwide integration.

Strategic Planning

Strategic planning tasks programmed to be completed over the next two quarters include interior painting of the Headquarter building, an evaluation of the Telephone system, options for Voice over IP (VOIP), a review of financial investments and the investment policy to optimize financial growth, standardization of meeting formats and materials along with the standardization of electronic filing protocols.

ITEM VII.3C TSD REPORT

To: Board of Directors

From: Sam Rose, Technical Services Manager

VIA: Charley Clark, General Manager

Date: 12/5/14

Subject: Technical Services Department Monthly Report

1. IT Master Plan

Staff continues to works towards Phase One Implementation, which will include discontinued use of the existing (WWMS) database and implementation of the Lucity database, which will be developed to the point it will include all of the modules/functions of the (current) WWMS database. Development/implementation of additional modules and functions will follow until full implementation is reached – anticipated to be spring 2015. Lucity training has begun for Supervisors.

2. Elliott Homes Temporary Lift Station Upgrades

The contractor has estimated completion of project, except for the installation of the emergency generator, in three (3) weeks. The delivery of the generator has been delayed at the manufacturer. The District will require Elliott Homes to provide emergency generation capabilities in the interim.

3. Loomis Diversion Line – Route Study

The Route Study is complete and an informational meeting was held for stakeholders on November 13, 2014. Waterworks Engineers provided a brief overview of the study and then responded to questions.

4. System Evaluation and Capacity Assurance Plan (SECAP) Development

Technical Services department has begun development of the SECAP, which is a planning document that identifies Capital Improvement Projects (CIP's) that are intended to ensure hydraulic capacity of existing system as well as design criteria for future development. Staff is working towards developing a document outline that contains the components of the SECAP that will support the efforts of the Board's Fee Committee. Anticipated completion of this step is mid-December, 2014.

5. Foothill Trunk Sewer Upsizing Project

The project is underway and Waterworks Engineers are in the Data Collection/Analysis stage.

The proposed schedule is below:

Foothill Trunk Sewer Upsizing Project (continued)

Schedule

		Start	End
1.	Kick-Off Meeting		10/16/2014
2.	Data Collection, Analysis & Alternatives (30% design)	10/01/2014	12/12/2014
3.	CEQA Compliance: IS/MND	12/15/2014	05/15/2014
4.	60% Design and Basis of Design Report	12/15/2015	01/30/2014

6. Loomis 10-Inch CIPP Project

The contract to install the liners in the Lower Loomis trunk was awarded to SAK Construction during the November regular board meeting. The contract is executed and SAK has indicated they will begin the project March, 2015.