METRO TAC AGENDA
(Technical Advisory Committee to Metro JPA)

TO: Metro TAC Representatives and Metro Commissioners

DATE: Wednesday, July 17, 2013

TIME: 11:00 p.m. to 1:30 p.m.

LOCATION: MWWD, 9192 Topaz Way, (MOC II Auditorium) – Lunch will be provided

PLEASE DISTRIBUTE THIS NOTICE TO METRO COMMISSIONERS AND METRO TAC REPRESENTATIVES

1. Review and Approve MetroTAC Action Minutes for the Meetings of May 15, 2013 (**Attachment**)
2. Metro Commission/JPA Board Meeting Recap (Standing Item)
3. Action: Pt Loma Permit and Regional Water Reuse Concept Update (**Attachment**)
4. Metro Strength Based Billing Evaluation Draft Report (Standing Item) (**Attachment**)
    - Billing Study Implementation Plan Metro Strength Based Billing Evaluation Draft Report (Standing Item) (**Attachment**) (Huy Nguyen)
5. Recycled Water Pricing Study (**Attachment**) (Lee Ann Jones-Santos)
    - Correspondence with PUD Staff 2009 & 2010 Regarding Recycled Water Pricing Study
    - Letters from Wholesale Customers to IROC & NR&C June & July 10, 2013
    - City Staff Report to NR&C July 2, 2013
    - Recycled Water Pricing Study Report Addendum July 2, 2013
    - Recycled Water Pricing Study Presentation to IROC June 24, 2013
    - Recycled Water Pricing Study Report June 19, 2013
6. Metro Wastewater Update (Standing Item)
7. Metro Capital Improvement Program and Funding Sources (Standing Item) (**Attachment**) (Guann Hwang)
    - CIP prioritizations
8. 2013 Transportation Rate Update (Dan Brogadir, Al Lau, Edgar Patino)
9. SCAP Collection System Questions Regarding to Discharge from Fire Sprinkler (**Attachment**) (Tom Howard)
10. RWQCB Settlement Order (**Attachment**) (Leah Browder)
11. MetroTAC Work Plan (Standing Item) (**Attachment**)
12. Financial Update (Karyn Keese)

13. Review of Items to be Brought Forward to the next Metro Commission/Metro JPA Meeting (**August 1, 2013**)

14. Other Business of Metro TAC

15. Adjournment (To the next Regular Meeting, August 21, 2013)

Metro TAC 2013 Meeting Schedule

January 16	May 15	September 18
February 20	June 19	October 16
March 20	July 17	November 20
April 17	August 21	December 18

AGENDA ITEM 3
Attachment

METRO WASTEWATER JPA

WATER REUSE AS A STRATEGY TO SECURE SECONDARY EQUIVALENCY AT POINT LOMA WASTEWATER TREATMENT PLANT

EXECUTIVE SUMMARY

The Point Loma Wastewater Treatment Plant (PLWTP) is operated by the City of San Diego and currently serves the City of San Diego and 12 member agencies throughout the County.

PLWTP is permitted to treat up to 240 million gallons of wastewater a day and has operated at levels greater than 180 mgd while meeting or exceeding all general and specifically negotiated regulatory requirements necessary to maintain a permit waiver thereby allowing it to remain as a smaller advanced primary treatment plant.

Members of the Metropolitan Wastewater Joint Powers Authority (JPA) believe that permanent acceptance of a smaller PLWTP as an advanced primary treatment plant can be achieved through development and implementation of a comprehensive, systematic Regional Water Reuse Plan. This Plan must increase public awareness, further catalyze customer action through individual water conservation and water reuse; consider opportunities for storm water capture, and the use of gray water and rainwater; expand recycled water opportunities; and implement a variety of agency-specific and collaborative large-scale potable water reuse projects including Indirect Potable Reuse (IPR) resulting in a significant off-loading of the treatment demand on PLWTP.

A successful effort would secure state and federal legislation accepting secondary equivalency at a smaller PLWTP making future permit waiver processes unnecessary and avoiding, on behalf of our ratepayers, not only the estimated $3.5 billion dollar capital/financing expense of upgrading PLWTP to secondary treatment (not to mention millions of dollars in annual operating costs), but perhaps also alleviating potable water demands to such a degree as to allow a smaller Sacramento delta option and fewer desalination projects (avoiding additional billions of dollars in capital, operating, and energy costs, as well as carbon generation).

THE CASE FOR SECONDARY EQUIVALENCY AT POINT LOMA

City of San Diego Water and Wastewater Utilities

The current practice of the City of San Diego ("the City") is to procure raw water, treat it to drinking water standards and distribute it throughout the City. The City also collects and treats wastewater for its residents and businesses and for a number of other agencies and discharges treated wastewater to the ocean. These participating agencies make up about 35% of the flow in the system and are represented by the Metro Wastewater Joint Powers Authority ("JPA") which is comprised of the County of San Diego and the surrounding cities of Chula Vista, Lemon Grove, El Cajon, Coronado, Del Mar, Imperial Beach, La Mesa, National City, and Poway, and the Otay and Padre Dam Water Districts. The City wastewater system also produces reclaimed water for use in

irrigation and industrial purposes, and distributes through its own separate piping system (purple pipe).

The City's wastewater system consists of the following Municipal and Metropolitan wastewater infrastructure: a Municipal wastewater system of pipelines and pump stations which collects and sends wastewater to the Metropolitan (Metro) wastewater system for treatment and discharge to the ocean. The Metro system consists of

- several large pipelines and pump stations,
- three treatment plants,
- a biosolids (sludge) processing plant (the Metro Biosolids Center) and
- two ocean outfalls.

The Point Loma Wastewater Treatment Plant (PLWTP) is permitted as a 240 million gallons per day (mgd) advanced primary (chemically enhanced) plant which discharges treated wastewater through the Point Loma Ocean Outfall (PLOO) 4.5 miles out in the ocean in 320 feet of water.

The North City Water Reclamation Plant (NCWRP) is a 30 mgd tertiary treatment plant which produces reclaimed water. Since the NCWRP does not have its own outfall, wastewater not needed for reclaimed water customers is treated to a secondary level and pumped to the PLWTP.

The South Bay Water Reclamation Plant (SBWRP) is a 15 mgd tertiary treatment plant which produces reclaimed water. Wastewater not needed for reclaimed water customers is treated to a secondary level and discharged through the South Bay Ocean Outfall (SBOO).

Wastewater Treatment

Wastewater treatment is basically the process of removing solids from the wastewater. All treatment plant processes typically begin with screens to remove debris such as pieces of wood, followed by removal of grit (mainly sand).

A Primary treatment plant then removes solids which are heavy enough to settle out of the wastewater by gravity.

Advanced Primary treatment plants such as the PLWTP then use chemicals to cause lighter solids to clump together and settle out by gravity.

A Secondary treatment plant has a primary level of solids removal followed by a biological treatment which removes lighter biological matter in the wastewater.

A Tertiary treatment plant like the NCWRP and the SBWRP has both Primary and Secondary treatment followed by filtration such as through anthracite coals beds. The required levels of treatment are typically measured by Total Suspended Solids (TSS) and Biological Oxygen Demand (BOD). The BOD is a measure of how much dissolved oxygen the treated wastewater might remove from the receiving water, such as the ocean.

Wastewater Treatment Regulation

The federal Clean Water Act passed in 1972 required that all wastewater treatment plants be permitted every five years. The permitting process in California involves the Environmental Protection Agency (EPA), the local Regional Water Quality Control Board

(RWQCB), the State Water Resources Control Board and the California Coastal Commission (CCC).

The Clean Water Act also required wastewater treatment plants to treat wastewater at least at a secondary level. The actual required treatment is based on what is needed to protect the receiving waters, such as lakes, rivers and the ocean. A number of dischargers are required to go to higher levels of treatment than secondary.

Several years after the Clean Water Act was enacted, it was amended to allow dischargers to receive a modified permit (waiver of secondary) if dischargers could demonstrate they could safely discharge wastewater to the receiving water at a treatment level lower than secondary such as Advanced Primary. In practice, permits were based on what was actually needed to protect the receiving waters--secondary in many cases, above secondary in other cases and below secondary in some cases.

Initially, the City of San Diego applied for a modified permit for the PLWTP but later withdrew the application and began planning to convert the PLWTP to secondary. Subsequently the window of time in the Clean Water Act for applying for a modified permit closed, and the EPA and several environmental groups sued the City for not being at secondary at the PLWTP. In 1994, the federal Ocean Pollution Reduction Act (OPRA) was passed. OPRA was sponsored by then-Congressman Filner and provided an opportunity for the City to apply for a modified permit for the PLWTP. In return, the City agreed to construct 45 mgd of reclaimed water capacity. This resulted in the construction of the NCWRP, the SBWRP and the SBOO. The City applied for and was granted a modified permit for the PLWTP in 1994.

Point Loma Wastewater Treatment Plant Permits

The City must apply for a new permit or modified permit every five years for the PLWTP. In order to gain support from the local environmental community for the modified permit sought every five years, the City has agreed to do a number of studies. Each study was reviewed by environmental groups and their experts.

The City conducted a refined estimate of costs to convert the PLWTP to secondary. The PLWTP is hemmed in by the Navy, the Cabrillo National Monument, the ocean and a cliff. This leads to higher costs for the addition of secondary treatment. The initial study indicated a capital cost of $1 billion which has recently been escalated to $1.4 billion in today's dollars, not including financing costs. In addition, secondary treatment requires a great deal of electricity. Operating costs were initially estimated at $40 million annually.

The City also conducted a comprehensive review of its Ocean Monitoring Program. In order to apply for a permit, dischargers must demonstrate the effect of their discharge on the receiving water. The City continuously collects data from the ocean near the discharge point of the outfall, measuring impacts on sediments, water quality, and aquatic and plant life. The City hired experts from well-known scientific organizations such as Scripps and Woods Hole to review the Ocean Monitoring Program and provide recommendations to make it more comprehensive. All the recommendations were implemented.

The City also agreed to conduct studies and projects to optimize wastewater reuse, although it was already producing reclaimed water at the NCWRP and the SBWRP. The

Recycled Water Study looked at the feasibility of expanding recycled water use and producing potable water from wastewater. The Recycled Water Study concluded that since most of the recycled water uses in the area were seasonal irrigation requiring separate pipelines from the existing water system, increasing wastewater reuse would be more productive through pursuing potable reuse.

Potable Reuse can be either Indirect or Direct Potable Reuse.

- Indirect Potable Reuse (IPR) includes advanced treatment of wastewater followed by discharge to, for example, a drinking water reservoir and then to a water treatment plant.
- Direct Potable Reuse (DPR) sends advanced treated wastewater directly to a water treatment plant.

The Recycled Water Study outlined a concept whereby almost 100 mgd of wastewater otherwise planned to be treated at the PLWTP could be diverted upstream of the PLWTP to either Advanced Water Treatment Facilities (IPR) or to South Bay wastewater treatment plants. This would allow the permitted capacity of the PLWTP to be reduced from 240 mgd to 143 mgd.

The City then looked at the feasibility of treating wastewater to a potable level. A one mgd demonstration project was conducted at the NCWRP and a study was made of San Vicente Reservoir. The study and demonstration project showed that wastewater could be treated at the NCWRP to a level sufficient for safe discharge to San Vicente Reservoir for subsequent treatment at a water treatment plant. The process would be Indirect Potable Reuse (IPR). Water produced at the demonstration site was almost the same quality as distilled water.

The current modified permit for the PLWTP expires on July 31, 2015. The application for a new permit must be submitted no later than January 2015. It takes approximately one year to collect and assemble the data required for the permit application. That process is expected to start in January 2014.

THE CASE FOR POTABLE REUSE AS A STRATEGY

Potable Reuse/Secondary Equivalency Program Concept

The San Diego region is semi-arid and needs the most cost effective and diverse system of water supply it can achieve. Potable water reuse of wastewater, either Indirect or Direct, appears to be a competitive choice in producing a new water supply. The region also needs a wastewater treatment system that protects the ocean environment.

The capital and operating costs of providing additional water for the region will have a significant impact on water ratepayers. In addition, if the City was ever required to convert the PLWTP to secondary, the capital and operating costs would likewise be significant to the wastewater ratepayers. In almost every case, water and wastewater ratepayers are the same people. By considering combined water supply and wastewater treatment needs, there is an opportunity to reduce the impact to ratepayers by billions of dollars in capital and financing costs, and tens of millions of dollars in annual operating and energy costs. An additional benefit would be a reduction in environmental impacts because much less energy production would be needed.

The Recycled Water Study outlines a concept whereby almost 100 mgd of actual and planned wastewater flow is diverted upstream from the PLWTP to either potable reuse or to South Bay wastewater treatment plants. This concept includes 83 mgd of Advanced Water Treatment (IPR) and could reduce the permitted capacity of the PLWTP from 240 mgd to 143 mgd. The environmental impact of a 143 mgd Advanced Primary Plant at Point Loma would be similar to or less than the impact of a 240 mgd Secondary Plant (Secondary Equivalency).

Since the historic flows through the PLWTP have exceeded 180 mgd and the comprehensive Ocean Monitoring Program has shown no detrimental impact to the ocean environment, there would be no value in converting the remaining flow at the PLWTP (say 143 mgd) to secondary. Even converting 143 mgd of capacity at the PLWTP would result in hundreds of millions in capital costs, tens of millions in annual operating costs and the environmental impacts of producing the energy to operate the secondary plant.

Rather than planning for one wastewater or water project at a time, the region's needs for wastewater treatment and additional water supply should be planned programmatically together over a longer period of time. Conceptually, almost 100 mgd of potable reuse and diversion of wastewater to South Bay could be implemented over a specific timeframe and combined with lowering the permitted capacity of the PLWTP to143 mgd, for example. In return, action would be taken to allow the PLWTP at the lower capacity to remain at Advanced Primary treatment. The PLWTP would still be required to get a new permit every five years and demonstrate through the City's comprehensive monitoring program that it was not harming the ocean environment.

CONCLUSION

As representatives of our region's ratepayers, we are at a critical juncture. The choices we make as a result of actions we take or, perhaps, opportunities missed due to our inaction, will have environmental and fiscal ramifications for many generations to come.

The Metropolitan Wastewater JPA supports the development of a Regional Water Reuse Plan so that both new, local, diversified water supply including potable reuse is created and maximum offload at Point Loma is achieved to support state and federal legislation accepting a smaller PLWTP as a secondary equivalent.

Success ultimately minimizes wastewater treatment costs and lessens the need for new water supply sources due to expanded water reuse thereby most effectively applying ratepayer dollars.

Metro JPA Goal: Create a regional water reuse plan so that both a new, local, diversified water supply is created AND maximum offload at Point Loma is achieved to support legislation for permanent acceptance of Point Loma as a smaller advanced primary plant. Minimize ultimate Point Loma treatment costs and most effectively spend ratepayer dollars through successful coordination between water and wastewater agencies.

AGENDA ITEM 4
Attachment

		Metro Billing TM Summary of Conclusions and Recommendations		Comment Response and Implementation		
Category	Item	Findings/Conclusions	Recommendations	Comment	Response/Action	Implementation
Flow Measurement Locations	1	Unmetered flow contribution is significant for some agencies.	For consistency, the City can continue to use its current criteria for installing flow meters in sewers where the flow reaches or surpasses 0.2 mgd (which is 750 EDU based on UGR of 265 gpd/EDU) to determine which area should be metered. Each affected PA should collaborate with the City in determining the appropriate metering location.			Accepted TM recommendation. Estimated cost: $80,600 to $160,200 per year for 5 – 10 additional permanent meters
	2	The current Unit Generation Rate (UGR) value of 265 gpd/EDU applied to unmetered areas is appropriate for most areas. UGRs can differ between agencies, depending on the water conservation and general water use practices followed by neighborhoods and the tightness of the pipeline to prevent infiltration and inflow (I/I).	UGRs should be re-evaluated periodically to determine if currently applied values continue to be representative of the last 5 years. Confidence in flow calculations for unmetered areas can increase and it may eliminate the need to install costly metering locations. PA's could independently conduct studies to determine the appropriate UGRs specific to their service areas and seek an agreement with the City to use a different UGR value for unmetered flows in their area.	Padre Dam's comment No.1: TM uses 265 gpd/EDU for unmetered areas. Padre Dam measured the flow during its Wastewater Characterization Study in 2010 at Simeon Drive to be 0.076 mgd average daily flow. There are 413 EDU's in the Simeon Drive basin which results in 184 gpd/EDU. Suggest that a new meter should be installed (PD 3) for Simeon Drive. Otherwise, the unmetered flow for Simeon Drive should be adjusted downward to reflect actual measurements conducted by Padre Dam (185 gpd/EDU).	Temporary meters will be installed to quantify flows of both Simeon Drive and Cowles Mountain house count areas. Typical annual wet weather flow volume should also be considered. This issue will be revisited at a later time on a case by case basis. All affected agencies shall be in agreements.	Implemented per response. Estimated cost: $5,200/ea. Temp. meter for 3-month monitoring
	3	The recycled water produced at the North City WRP and distributed to nearby City customers is not considered when determining City flows reaching sample location SD1B. In addition MBC centrate should be subtracted as it has been recently done since FY2010.	The recycled water produced at the North City WRP should be added to the San Diego flow determined for SD1B. The flow addition can be done at the end of the year in a same manner the MBC centrate flow deduction is made.	Padre Dam's comment No.9: "San Diego's loadings increased more than other PA's because not only the San Diego's wastewater strength increased based on latest 5-year data evaluation with the new method, but also its net flow contribution increased by about 5 mgd to better estimate the wastewater generation in the North City basin." per TM on page 44. Missing 5 mgd is a considerable error and should be looked at how this could affect the amount paid in the past.	For going forward billing, North City flow has now been properly accounted for in the San Diego total flow. PUD is looking into various possibilities to address the concerns regarding NC and the effects on the past Metro Billing.	Implemented per response. Estimated cost: Unknown
Sampling Locations	4	**Lemon Grove.** Due to recent changes in Lemon Grove sewer system, the current sampling location, LG1, represents 9% of the total agency flow; whereas, LG2, which is metered for flow but not sampled, makes up about 46% of the agency flow.	Collect wastewater samples at LG2 instead of LG1 to obtain data that are more representative of flows from Lemon Grove.			Accepted TM recommendation. Estimated cost: $0
	5	**San Diego.** The City has 12 sampling locations throughout its main service area. SD11 and SD12 are among the current sampling locations and each represent only 0.6 and 0.2 % of the total City flow, respectively. Comparatively, no wastewater samples are collected from flow metering locations SD19 and SD2B where up to 13 and 3 percent, respectively, of approximately 110 mgd (FY 2011 flow) of the total City flow is passing. Two locations, SD11A and SD18 combined capture the flow of SD11 prior to flow diversion to South Bay Water Reclamation Plant in 2002. This is about 4 mgd or 3.5 percent of the total net City flow. Alternatively, SD11A and SD18 can be included in the monitoring program.	Unless there is a specific reason for these locations to not be sampled, data collected at locations SD19 and SD2B would produce more representative data for San Diego. It is recommended to discontinue monitoring at SD11 and SD12 if monitoring is established at SD19 and SD2B. SD11A and SD18 should be considered for sampling. This change would increase the total number of City-specific sampling locations to 14, but would provide a better representation of City flows. If the City wishes to stay with 12 sampling locations due to cost issues, then we recommend discontinuing sampling at SD2A or SD8 (both contribute only about 1 percent each of the total net City flow).		Due to traffic safety issue along SD2B sewer line and more than half of SD19 flow comes from the PAs, therefore these 2 meters are not ideal sampling locations but San Diego will consider sample at SD11A and SD18 and discontinue sampling at SD11.	Accepted TM recommendation. Estimated cost: $0
	6	**National City.** National City is mainly comprised of single and multiple family homes with some transport, industrial and commercial land uses. Location NC5, where wastewater samples are collected, represents approximately 19% of the net agency flow. But, the dominant land use type specific to this catchment area is transport. Sampling at a location where the dominant land use type is not residential is not considered a representative location for National City.	The City should consider collecting wastewater samples at NC3B. Wastewater passing through this location comprises about 16% of the total agency flow. In addition, the land use types within its catchment area better represents the majority of National City land uses. Sampling at both NC5 and NC3B is recommended to better represent the National City discharges.	National City's comment No.1: National City suggested to leave NC5 as is but would agree to add NC3B as a new sample location.	After further evaluating the NC5 basin, even it has a mix land use but the residential flow is still dominating in this basin. PUD concurs with NC to just add NC3B as an additional sampling point.	Implemented per response. Estimated cost: $16,200/first 2 years and $3,600/year after that.

		Metro Billing TM Summary of Conclusions and Recommendations		Comment Response and Implementation		
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Monitoring of Wastewater from Padre Dam MWD	7	The results of the short-term sampling and monitoring event conducted in October 2012 suggest that concurrent sampling and monitoring at LS2 and PD1B adequately captures waste streams from the Ray Stoyer WRF and bypass flows at the IPS. It was noted that average COD and TSS concentrations (889 and 433 mg/L, respectively) measured at PD1B during this sampling event were much higher than the historical average COD and TSS concentrations (590 and 236 mg/L, respectively) the City has been using for billing purposes. The difference is considered significant.	Concurrent monitoring of LS2 and PD1B should be performed (without the need to monitor at MSS) since the short-term sampling and monitoring performed under this project proved that LS2 and PD1B, when sampled and monitored concurrently, adequately represents discharges from the Padre Dam MWD. The best approach to capture the PD1B loads accurately would be to disregard the historical COD and TSS measurements at PD1B and start fresh. In order to form a baseline quickly, a more frequent (monthly or bi-monthly) sampling program can be instituted in the initial 2 years. After collecting about 24 data points, quarterly sampling can be reinstated to reduce cost.	Padre Dam's comment No.2: The inequity in this approach is amplified given two factors: 1. Flow rates continue to decline system-wide with an increase in concentrations of COD and SS (other billing points in the system that utilize data over the past 5 years would not be affected as much as data collected over the last 2 years. 2. The proposed change in testing of COD by emulsifying or homogenization the samples prior to testing will increase the concentrate of COD results. If Padre Dam has more tests using this method than other points in the system, our concentrations will have an unfair higher average. It appears that the most recent COD samples were emulsified prior to testing, whereas historical COD testing do not include emulsification. Emulsification would provide a higher value of COD; therefore, it would not provide an appropriate comparison to draw the reported conclusion. The approach of performing more tests (monthly or bi-monthly would be acceptable if ALL locations in the Metro system followed the same approach (same time interval & frequency, same test method & procedures).	PUD agreed that the approach of performing monthly/bimonthly samplings and disregard historical sample data for all locations in the Metro system. This approach is the cleanest way to reset the historical strength data and it would be fair to all agencies. PUD is committed to this option which it will perform monthly sampling for 1st year, bi-monthly sampling for 2nd year and resume back to a quarterly sampling program afterward for all Metro sampling locations. The cost associated with this demanding schedule will also be greatly increased.	Implemented per response. Estimated cost: $330,000 to $380,000 (additional cost to the existing program for 2 years only)
	8	Wastewater strength determined at PD2 and at a manhole receiving discharges from Simeon Drive (as part of the 2010 Wastewater Characterization Study conducted by Padre Dam MWD) are about 20 and 30% lower than the COD and TSS concentrations used to represent Padre Dam MWD's wastewater strength in FY 2011 using data based on PD1B. Applying the calculated representative TSS and COD values for wastewater generated downstream of PD1B will result in over estimating loads from these areas.	It is recommended to collect samples at PD2 for wastewater characterization in addition to flow measurement. Limited number of sampling, e.g., 5 to 7 days) would be sufficient to characterize the wastewater since it is mainly from residential community. The concentrations found there could represent Cowles Mountain and the Padre Dam residential flows that go to PD2. This would eliminate the potential overestimation of the load from these locations by the current application of the concentrations found at PD1B.	Padre Dam's comment No.8: Should incorporate same methodology at Simeon Drive in addition to the installation of a new flow meter.	One-time samples will also be collected at Simeon Drive to characterize the wastewater of this lower basin. The established concentrations will be periodically recalibrated.	Implemented per response. Estimated cost: $6,300/site for 7 days
Monitoring of Wastewater from Otay WD	9	Since 1993, Otay WD estimates the WAS TSS load in the RWCWRF based on plant influent flow according to a guideline found in a textbook. This method was preferred because the waste activated sludge discharge did not have to be analyzed for TSS. Today, Otay WD collects a daily grab of the WAS and analyzes for process control purposes.	Otay WD should report the TSS and BOD loadings associated with the WAS based on measured flow and TSS concentration. Otay WD indicated that future reports to the City will utilize measured values in determining loads.			Accepted TM recommendation. Estimated cost: $0
	10	The current method of assuming BOD load in WAS is half of the TSS load may be conservative; actual BOD load may be less. In addition, the BOD of the screenings is assumed to be equal to its TSS content, which may also be an over estimation.	Otay WD should revise the current textbook-based equations being employed to estimate loadings using actual measured values. They could either continuously take samples of the sludge or perform a short-term sampling program (5 to 10 samples) and analyze it for BOD and TSS to arrive at a TSS to BOD ratio that can be confidently applied for estimating loads.			Accepted TM recommendation. Estimated cost: $0
	11	Equations used in the current mass balance calculation spreadsheet are set assuming the RWCWRF is on-line all year-long. This setup causes erroneous calculation of the annual TSS and COD concentrations used for loading estimates when the plant is off-line.	BC recommends the City use the average RWCWRF influent concentrations for the days the plant is on-line as reported by the Otay WD, or revise the mass balance calculations to be based on yearly total flows and loads instead of yearly average values. This will eliminate any calculation errors due to plant off-line periods.			Accepted TM recommendation. Estimated cost: $0

		Metro Billing TM Summary of Conclusions and Recommendations		Comment Response and Implementation		
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	12	Wastewater contribution from East Otay Mesa to the Metro System was minimal and had not been monitored until 2009. Wastewater TSS and COD concentrations are monitored at a sampling and metering location at the Otay Mesa Energy Center. Average COD and TSS concentrations reported here are used to represent the residential wastewater discharges from Easy Otay Mesa. These concentrations are significantly lower than the typical concentrations observed at other locations in the County with residential flows.	The plan is to re-initiate the sampling program at a more representative sampling location when the flows increase from East Otay Mesa. Meantime, it is suggested to use more representative COD and TSS concentrations for the residential discharges such as the average concentrations reported for Winter Gardens or Lakeside/Alpine.			Accepted TM recommendation. Estimated cost: $0
Monitoring of Wastewater from County of San Diego	13	Spring Valley SD is neighbored by several agencies, including the cities of El Cajon, La Mesa, Lemon Grove, National City, Chula Vista, and San Diego, and the Otay WD. All the neighboring agencies, except City of El Cajon, discharge wastewater within the district boundaries which is eventually conveyed to the Metro System. Otay WD discharges both sludge and sewer flows bypassed at the RWCWRF and therefore considerably different than typical domestic wastewater. COD and TSS loads contributed by the Otay WD are subtracted from the Spring Valley SD loads. Other significant inter-agency flow contributors include the cities of Chula Vista and San Diego.	Land use types among Spring Valley, Chula Vista, and San Diego communities are not considered significantly different that additional sampling locations are necessary, but load calculations for Spring Valley SD could be refined with additional sampling. BO1 could be sampled to better define the characteristics of wastewater from San Diego while CV7 and another location such as CV10, CV12 or CV 9 could be sampled to characterize Chula Vista discharges.	La Mesa's comment No.1: The report (Section 2.1.1) suggests that the City of La Mesa should consider metering flows to SVSD. BC does not seem to have been provided LM2 and LM5 meter data to evaluate and incorporate into their report. The City of La Mesa requests the study to evaluate, incorporate and provide information regarding this issue. In 1990s, the City through Metro did in fact have two flow meters (LM2 and LM5) installed on Bancroft Drive and Campo Road. The City of La Mesa requests LM2 and LM5 meters to be included in the current study. These meters measure the flows from the City to the SVSD and cover substantial number of EDUs from La Mesa to Spring Valley. The City has started to negotiate with SVSD to finalize an interagency formula. The City also proposes to include testing of the sewer at LM2 and the results to be used as typical sewer characteristic from La Mesa to SVSD La Mesa's comment No.2: Section 3.3 "County of San Diego, Spring Valley Sanitation District" would need correction as per comment No. 1 above. La Mesa's comment No.3: Referring to Section 2.1.1 and Table 2-2, the report should delete LM flows to LG from the table. The noted flow in the table is total flow amount from nine different interagency connections and each individual connection does not meet with the proposed metering criterion in the report.	The current La Mesa's metro billing formula does not use LM2 or LM5 meter data but has EDU's count instead. The Metro formula correctly reflects the flows required to calculate sewage transportation costs between Participating Agency and the City of San Diego or among agencies. Un-metered flow (house-counts) may change over time; it is the responsibility of the impacted Agencies to determine, confirm, modify and come to agreement on house-counts for inter-agency flow and report those changes to City of San Diego. Meters LM2 and LM5 can be incorporated into the formula if both La Mesa and Spring Valley agree. The formula must be signed off by the affected agencies. Land use types among the agencies contributing flows to Spring Valley are not considered significantly different to require additional sampling locations include LM2 and LM5.	Implemented per response. Estimated cost: $0
Calculation of the Agency Representative Wastewater Strength Data	14	For agencies where the inter-agency loadings are expected to be significantly different in strength, loadings from the inter-agency flows are subtracted from the agency loadings. The representative COD and TSS concentrations are then calculated based on the net agency flow. Representative COD and TSS concentrations for Coronado, El Cajon, Padre Dam and Spring Valley are calculated based on this concept. Navy Base flows and loads are subtracted from Coronado flows and loads while Lakeside/Alpine and Winter Gardens (County of San Diego) flows and loads are subtracted from El Cajon and Padre Dam flows and loads, respectively. Similarly, Otay WD loads, including the waste solids from the RWCWRF, are subtracted from the Spring Valley loads.	Concurrent sampling and monitoring at the sampling locations for Navy Base and Coronado (C1M and C3); Lakeside/Alpine and Padre Dam (LS2 and PD1B); and Winter Gardens and El Cajon (WG1M and EC1) are strongly recommended to maintain direct correlation between data used for estimating the agency's contributions. Concurrent sampling for discharges to the Spring Valley trunk sewer can be challenging since there are many inter-agency discharges. However, the two major contributors are cities of San Diego and Chula Vista. As suggested earlier, wastewater characterization sampling at the San Diego metering location BO1, and at two Chula Vista metering locations (CV7 and one of either CV10, CV12, or CV9) can be implemented to better define the characteristics of wastewater from there agencies. When this happens, concurrent sampling at SV8, BO1, and the two Chula Vista sampling locations is recommended.			Accepted TM recommendation. Estimated cost: $32,400/ first 2 years and $7,200/year after (probability of sampling failure for the concurrently sampling sites)

		Metro Billing TM Summary of Conclusions and Recommendations		Comment Response and Implementation		
Category	Item	Findings/Conclusions	Recommendations	Comment	Response/Action	Implementation
Sampling and Analysis Procedures	15	Analysis method SM 5220 for COD analysis state that blending (homogenization) is needed for samples containing suspended solids prior to conducting the test. Homogenization is an important sample preparation step to reduce variability in the analysis results. Currently the IWL does not follow the homogenization procedure, which might be contributing the variable analysis results.	It is recommended that IWL perform homogenization step prior to analysis for COD analysis.	Padre Dam's comment No.3: This approach is acceptable if the number of data points utilizing this method were the same for ALL locations in the METRO System.	PUD's IWL has already started to perform homogenization step prior to COD analysis for all Metro sampling locations.	Accepted TM recommendation. Estimated cost: included in item 7
Statistical Data Evaluation	16	Statistical analysis is performed on the concentrations, which is highly dependent on wastewater flow. Since loading is directly tied to billing, it should be used basis for the statistical analysis.	Since loading is directly tied to billing, it should be used as the basis for the statistical analysis.			Accepted TM recommendation. Estimated cost: $0
	17	Although the criterion for acceptance is defined as 95% of the data, less data (as low as 85%) have been accepted for most data sets with the current method. The iterative process of reestablishing the upper and lower limits after rejection of outliers results in ever tighter bounds and large quantities of data are thrown out.	It is suggested not to follow the iterative process and base the statistical evaluation on the whole data set. It is found more reasonable to set the lower and upper boundaries for data rejection to 5% of the top and bottom of the whole data set. This would capture 90% of the data and throw 10% (5% from the top and 5% from the bottom).			Accepted TM recommendation. Estimated cost: $3,000/one-time
Evaluation of a Representative Time Period for Load Calculations	18	The historical wastewater flow trend varies for each agency, but it is generally in a stable or decreasing pattern after 2006 potentially due to conservation. Decreasing flow and increasing COD and TSS concentration trends are noted for most agencies while no obvious changes have been noted for few of them. The decreasing flow and increasing concentration trends are likely a consequence of water conservation.	It is recommended to use the latest 5-year running average instead of averaging the historical data. Using a 5-year running average will ensure that the data used for billing represents current conditions. The currently practice of quarterly sampling produces 20 data points over a five year period. This is considered adequate. Similar to what is practiced by the City of Los Angeles, the City may consider sampling new dischargers for the first two years and rely on quarterly sampling during subsequent years. Increased sampling frequency could also be temporarily instituted if the wastewater characteristics (flow or strength) have drastically changed at an existing location due to flow diversion or the addition or deletion of a significant tributary discharge.	Padre Dam's comment No.4: Recommendation is to use the latest 5-year running average instead of averaging the historical data. This would be acceptable as long as all monitoring points are tested in the same year and with the same testing methods. This approach is acceptable if the number of data points utilizing this method were the same for ALL locations in the METRO System.	This will be implemented to all Metro sampling locations.	Implemented per response. Estimated cost: $0
Review of Practices in Similar Agencies	19	Billing practices of Orange County Sanitation District and City of Los Angeles, the two agencies of similar size and complexities were reviewed. The objective was to report the billing methods practiced in other, similar agencies. Information gathered could lead to recommending and possibly applying practices that have proven successful at these agencies.	Consider increasing the frequency of sampling to monthly or bi-monthly for the first 1 to 2 years for new dischargers or when existing dischargers make significant operational changes that ultimately impact the quality of their discharge quality. The frequency could be reduced to quarterly sampling during subsequent years. This could also be performed for agencies, such as Padre Dam MWD and Otay MWD, who discharge treatment waste that are much different from the majority of discharges from other Metro System dischargers. Consider a similar increased sampling frequency when the wastewater characteristic at an existing monitoring location is expected to change because of the addition or deletion of a significant tributary discharge or if flow diversion occurs. Consider reducing the averaging times to 3 to 5 years rather than using the entire historical data.			Accepted TM recommendation. Estimated cost: $9,000/site (additional cost to the existing cost)

AGENDA ITEM 7
Attachment

City of San Diego
Public Utilities Department

CIP Prioritization Method
(Wastewater)

Public Utilities Department
Wastewater CIP Project Prioritization
Criteria & Performance Measures

Council Policy 800-14 (Criteria)	*Sub-criteria #*	*Department's Sub-criteria*	*Department's Sub-Weight*	*Performance Measures*
Health and Safety Effects (25%)	1	Reduce Potential Hazards to Customers and Employees	12%	1 - 5
	2	Eliminate structural integrity problems	12%	
	3	Reduce Seismic Risk	12%	
	4	Reduce or Eliminate Potential Overflows	28%	(Risk Matrix)
	5	Minimize the Amount and Duration of Service Interruptions to Customers	19%	
	6	Meet Water Quality Standards	13%	1 - 5
	7	Reduce Potential Impacts to Public and Private Property	4%	(Risk Matrix)
Regulatory or Mandated Requirements (25%)	8	Comply with Regulatory Requirements	39%	1 - 5
	9	Comply with City Council Mandates	18%	
	10	Comply with Court-Ordered Mandates	28%	
	11	Comply with System Performance Criteria	15%	
Implication of Deferring the Project (15%)	12	Reduce Impacts on Other Projects	18%	1 - 5
	13	Reduce O&M Costs in the Long-Term (beyond four years) by Implementing Project	32%	
	14	Reduce or Eliminate Fines Due to Violations of Permits and Non-Compliance with Regulations	18%	
	15	Unplanned Expenses Due to Repairs and Emergencies that Could be Avoided by Implementing Project	32%	(Risk Matrix)
Annual Recurring Costs or Increased Longevity of Assets (10%)	16	Increases Longevity of Asset	40%	1 - 5
	17	Reduce Annual O&M Costs in the Short-Term by Implementing Project	60%	
Community Investment (10%)	18	Minimize Loss of Economic Activity Due to Facilities Failure	40%	(Risk Matrix)
	19	Reduce Environmental Impacts	36%	1 - 5
	20	Make Efficient Use of Natural Resources	13%	
	21	Direct Benefits to the Community	11%	
Implementation (5%)	22	Agreement with General Plan and Community Plans	100%	1 - 5
Project Cost and Grant Opportunities (5%)	23	Potential Grants/Loans	54%	1 - 5
	24	Capital Costs	46%	$
Project Readiness (5%)	25	Time Required for Project to Complete its Current Phase	100%	1 - 5

Public Utilities Department
Wastewater Facilities
Capital Improvement Program (CIP) Prioritization Matrices

Asset Risk Matrix Index - The risk matrix applies to the following five sub-criteria:

4) Reduce or Eliminate Potential Overflows
5) Minimize the Amount and Duration of Service Interruptions to Customers
7) Reduce Potential Impacts to Public and Private Property
15) Unplanned Expenses Due to Repairs and Emergencies that Could be Avoided by Implementing Project
18) Minimize Loss of Economic Activity Due to Facility Failure

Asset Risk Matrix Index					
			Consequence of Failure (Anticipated) [1]		
			High Volume	Medium Volume	Low Volume
			3	2	1
Probability of Failure (Anticipated)	Likely to Fail	3	9	6	3
	Less likely to Fail	2	6	4	2
	Unlikely to Fail	1	3	2	1

1 - Consequences of Failure is based on the size of facility; Pipeline will base on the following volume:
(High = greater/equal to 54"; Medium = 15" to 48"; Low = Less than 15" (group job)

Per Facility Condition:

Probability of Failure Score				
Facility Type		**1**	**2**	**3**
Pipeline[2]	Age	< 35 years old	36-50 years old	> 50 years old
	Material	PVC	VC	CP
	d/D	Non-Critical	Semi-Critical	Critical
	Condition	Maintenance	Rehab and/or Point repair	Replace
	Mantenance Frequer	12+ Months	6 - 12 Months	0 - 6 Months
Pump Station		Assessment Data		
Treatment Plant		Assessment Data		

2 - Probability of failure is based on facility condition; For pipeline will base on the table if CCTV data is not available

Per Facility Size and/or Location:

Consequence of Failure Score				
Facility Type		**1**	**2**	**3**
Pipeline	Size of Facility Or Location	Less than 15" (group job) *OR* Right of Way	15" to 48" *OR* Near Body of Water **OR** Canyon	Greater/equal to 54" *OR* Near Body of Water **AND** Canyon
Pump Station	Average Flow Or Location	Low *Or* Right of Way	Medium *Or* Near Body of Water **OR** Canyon	High *Or* Near Body of Water **AND** Canyon

Per Facility Redundancy:

Redundancy Score			
Facility Type	**0.1**	**0.5**	**1**
Pipeline	Full Redundancy	Some Redundancy	No Redundancy
Pump Station			
Treatment Plant			

Public Utilities Department
Wastewater Facilities
CIP Prioritization Criteria Scales

Criteria	*Sub-criteria #*	*Sub-criteria*	*Sub-Weight*	*Scale*	*Scale*	*Better*	*Better*	*Better*	*Best Score in Scale*
Health and Safety Effects (25%)	1	Reduce Potential Hazards to Customers and Employees	12%	1 - 5	1 = There is no element of the project that removes a hazard. Structural or seismic related hazards are not counted since they are part of separate criteria.	NA	3 = Removes Hazards with Consequences within Site. Structural or seismic related hazards are not counted since they are part of separate criteria.	NA	5 = Removes Hazards with Consequences In Large Area. Structural or seismic related hazards are not counted since they are part of separate criteria.
	2	Eliminate structural integrity problems	12%	1 - 5	1 = No Structural Integrity Improvements. Counted structural elements that could represent a health hazard.	NA	NA	NA	5 = Structural Integrity Improvements. Counted structural elements that could represent a health hazard (eg. pump station and wwtp structures, and large diameter pipelines).
	3	Reduce Seismic Risk	12%	1 - 5	1 = No Seismic Improvements. Non-seismic related structural improvements are not counted since they are counted in a separate criterion.	NA	NA	NA	5 = Seismic Improvements. Non-seismic related structural improvements are not counted since they are counted in a separate criterion.
	4	Reduce or Eliminate Potential Overflows	28%	(See Matrix)	See Matrix	See Matrix	See Matrix	See Matrix	See Matrix
	5	Minimize the Amount and Duration of Service Interruptions to Customers	19%	(See Matrix)	See Matrix	See Matrix	See Matrix	See Matrix	See Matrix
	6	Meet Water Quality Standards	13%	1 - 5	1 = Doesn't Help Meet Standards	NA	3=Helps meets standards for receiving water bodies, or has some improvements to water quality related to constituents.	NA	5 = Helps Meet Standards by addressing a specific pollutant or improving treatment processes.
	7	Reduce Potential Impacts to Public and Private Property	4%	(See Matrix)	1 = See Matrix	See Matrix	See Matrix	See Matrix	9 = See Matrix
Regulatory or Mandated Requirements (25%)	8	Comply with Regulatory Requirements	39%	1 - 5	1 = Not Mandated or not directly addressing a mandate. The mandate needs to be not related to meeting water standards since that is addressed in a separate criterion.	NA	3=Mandated, Meet EPA regulatory requirement. Projects with regulatory requirements but not specifically mandated	NA	5 = Mandated,eg. Meet EPA, RWQCB deadline (eg. sewer group jobs)
	9	Comply with City Council Mandates	18%	1 - 5	1 = Not Mandated	NA	3 = Projects comply with Council Policies (such relocate sewer facilities out of canyon)	NA	5 = Mandated, Projects mandated by Council.
	10	Comply with Court-Ordered Mandates	28%	1 - 5	1 = Not Mandated	NA	NA	NA	5 = Yes
	11	Comply with System Performance Criteria	15%	1 - 5	1 =No,Project does not help meet any of the performance criteria	NA	3= Yes,Project helps meet 1 performance criteria	NA	5 = Yes, Project helps meet more than 1 performance criteria

Public Utilities Department
Wastewater Facilities
CIP Prioritization Criteria Scales

Criteria	*Sub-criteria #*	*Sub-criteria*	*Sub-Weight*	*Scale*	*Scale*	*Better*	*Better*	*Better*	*Best Score in Scale*
Implication of Deferring the Project (15%)	12	Reduce Impacts on Other Projects	18%	1 - 5	1 = No Impacts	2=Impacts to other projects/facilities in the long-term (needed after 5-10 yrs)	3= Projects that support optimal usage of existing facilities or other projects at present or in the near future	4=Projects needed to implement other projects in the short term (Parent to 1 project)	5=Projects needed to implement more than one project in the short term (Parent to more than 1 project)
	13	Reduce O&M Costs in the Long-Term (beyond four years) by Implementing Project	32%	1 - 5	1 = Possible or known Increase	2 = No reduction or some reduction, but difficult to quantify (savings could be offset by additional O&M costs)	3 = Some Reduction in small scale (small facility or minimum reductions or partnering, sold unused realstate for revenue.	4 = O&M long-term savings is clearly evident (due to nature of project or if project objective is primarily long term O&M savings), but facility is small.	5 = Significant O&M long-term savings is clearly evident (due to nature of project or if project objective is primarily long term O&M savings).
	14	Reduce or Eliminate Fines Due to Violations of Permits and Non-Compliance with Regulations	18%	1 - 5	1 = No Fines Involved	NA	3 = Potential for fines	NA	5 = Fines Involved
	15	Unplanned Expenses Due to Repairs and Emergencies that Could be Avoided by Implementing Project	32%	(See Matrix)	See Matrix	See Matrix	See Matrix	See Matrix	See Matrix
Annual Recurring Costs or Increased Longevity of Assets (10%)	16	Increases Longevity of Asset	40%	1 - 5	1 = No additional longevity	NA	3=Minor increase in longevity	NA	5 = Significant increase in longevity
	17	Reduce Annual O&M Costs in the Short-Term by Implementing Project	60%	1 - 5	1 = No additional costs being incurred; Improve Equipment Efficiency/System Efficiency/Inflow & Infiltration	NA	3=Minor costs incurred; Improve Equipment Efficiency/System Efficiency/Inflow & Infiltration	NA	5 = Significant additional costs being incurred; Improve Equipment Efficiency/System Efficiency/Inflow & Infiltration
Community Investment (10%)	18	Minimize Loss of Economic Activity Due to Facilities Failure	40%	(See Matrix)	See Matrix	See Matrix	See Matrix	See Matrix	See Matrix
	19	Reduce Environmental Impacts	36%	1 - 5	1 = Signifficant negative Impacts	2=Some negative impacts either locally or regionally	3 = Neutral or net zero impacts	4 = positive impacts locally or regionally	5 = Positive impacts locally and regionally
	20	Make Efficient Use of Natural Resources	13%	1 - 5	1 = Negative impacts on resource consumption	NA	3 = Neutral	4 = Slightly promotes efficient use of resources	5 = Significantly promotes efficient use of resources
	21	Direct Benefits to the Community	11%	1 - 5	1 = Negative Impacts on the Community	NA	3 = No impacts	NA	5 = Positive impacts to community such as providing the community with new liesure center or includes removal of an unnecesary structure (PS abandonment will improve the site by reducing noise, odor, vadalism or improve landscape).
Implementation (5%)	22	Agreement with General Plan and Community Plans	100%	1 - 5	1 = Not in Agreement	NA	NA	NA	5 = In Agreement
Project Cost and Grant Opportunities (5%)	23	Potential Grants/Loans	54%	1 - 5	1 = No Potential Grants/Loans	NA	3 = Some Potential Grants/Loans	NA	5 = Commonly Eligible for Grants/Loans
	24	Capital Costs	46%	$	Capital Costs	Capital Costs	Capital Costs	Capital Costs	Capital Costs
Project Readiness (5%)	25	Time Required for Project to Complete its Current Phase	100%	1 - 5	1 = Concept	2 = Feasibility Study	3 = Preliminary Design/Pilot Study	4 = Final Design	5 = Ready to Bid

CIP Prioritization Project
Project Scoring Form

Project Proponent	
Project ID	
Project Name	
Project Type	
Project Description	**Background:** **Scope:**

Subcriteria #	***Score Type***	***Matrix***			***Raw***	**Justification**
		P	***C***	***R***		
1	Reduce Potential Hazards to Customers and Employees					
2	Eliminate Structural Integrity Problems					
3	Reduce Seismic Risk					
4	Reduce or Eliminate Potential Overflows					
5	Minimize the Amount and Duration of Service Interruptions to Customers					
6	Meet Water Quality Standards					
7	Reduce Potential Impacts to Public and Private Property					
8	Comply with Regulatory Requirements					
9	Comply with City Council Mandates					
10	Comply with Court-Ordered Mandates					
11	Comply with System Performance Criteria					
12	Reduce Impacts on Other Projects					
13	Reduce O&M Costs in the Long-Term (beyond four years) by Implementing Project					
14	Reduce or Eliminate Fines Due to Violations of Permits and Non-Compliance with Regulations					
15	Unplanned Expenses Due to Repairs and Emergencies that Could be Avoided by Implementing Project					
16	Increases Longevity of Asset					
17	Reduce Annual O&M Costs in the Short-Term by Implementing Project					
18	Minimize Loss of Economic Activity Due to Facilities Failure					
19	Reduce Environmental Impacts					
20	Make Efficient Use of Natural Resources					
21	Direct Benefits to the Community					
22	Agreement with General Plan and Community Plans					
23	Potential Grants/Loans					
24	Capital Costs					
25	Time Required for Project to Complete its Current Phase					

P - Probability of Failure (Anticipated)
C - Consequence of Failure (Anticipated)
R - Redundancy

CURRENT

CITY OF SAN DIEGO, CALIFORNIA

COUNCIL POLICY

SUBJECT: PRIORITIZING CIP PROJECTS
POLICY NO: 800-14
EFFECTIVE DATE: May 30, 2008

BACKGROUND:

The City of San Diego's Capital Improvement Program (CIP) is implemented through an interrelationship of client departments, service departments, new and redevelopment, and multiple funding sources. Capital investments are necessary for the construction of all parts of municipal infrastructure. Major infrastructure within the City's area of responsibility includes streets and related right-of-way features; storm water and drainage systems; water and sewer systems; public buildings such as libraries, recreational and community centers, police and fire stations, and lifeguard facilities; and parks. Decisions about capital investments affect the availability and quality of most government services. The municipal infrastructure is often taken for granted, yet it is vital to the city's economy, with implications for health, safety, and quality of life.

The commitment of resources to the CIP projects within the City has traditionally not had the benefit of a comprehensive evaluation to determine overall needs so that projects can be ranked in priority order, and efficiently funded. This approach may have unintentionally limited the overall effectiveness of available CIP resources by providing projects with less funding than ~~is~~ needed to accomplish major project requirements, such as planning and design. This has limited the City's ability to compete for outside grant funding, since grant programs often place emphasis on having the design and associated activities completed.

PURPOSE:

The purpose of this policy is to establish an objective process for ranking CIP projects to allow decision-makers to have a basis for choosing the most compelling projects for implementation. This prioritization process will allows for the analytical comparison of the costs and benefits of individual projects, as well as an opportunity to evaluate projects against one another on their relative merits. Ideally, it will provide a citywide perspective, explore various financing options, and facilitate project coordination. All projects being considered for funding will be prioritized in accordance with the guidelines of this policy. It is proposed that this single CIP prioritization policy address all funding sources and asset classes, including enterprise funded projects (golf, water, sewer, airport facilities, undergrounding and landfill) and transportation and drainage projects. The goal of this policy is to establish a capital-planning process that ultimately leads to policy decisions that optimize the use of available resources, resulting in the maximum benefit from the projects delivered.

IMPLEMENTATION:

In order to implement a prioritization system, there must be an understanding of the constraints associated with each project's funding source(s), asset type (project category), or phase of development. Projects will not compete across the different funding sources, the different project categories, or the different project phases – however projects within each of these areas will be evaluated according to the guidelines outlined below.

A. Project Funding

Projects within restricted funding categories will compete only with projects within the same funding category. Prioritization within these restricted funding categories will occur in accordance with this CIP prioritization policy. For example, water system CIP projects are funded with enterprise funds paid by water ratepayers. All water CIP projects will be prioritized in accordance with the prioritization policy, but will not compete for funding with projects not funded by Water Enterprise funds.

The following is a partial listing of restricted funding categories:

1. Community Development Block Grants
2. Developer Impact Fees
3. Enterprise Funds (Airport, Environmental Services, Golf, Utilities Undergrounding, Metropolitan Wastewater, and Water)
4. Facilities Benefit Assessments
5. Grants
6. State and Federal Funds
7. TransNet Funds

Projects that are not within a restricted funding category will compete within capital outlay funds/general obligation funds in accordance with this CIP prioritization policy. Although capital needs from the restricted funds or revenue-producing departments are often separate from the General Fund, the capital investments of all City departments should be planned together to allow better coordination of capital projects in specific parts of the City over time. Citywide coordination of capital project planning can increase the cost-effectiveness of the City's capital programs by allowing more efficient infrastructure investments.

B. Project Categories

To ensure that the comparison is conducted between similar types of projects, the CIP projects shall be separated into categories according to the predominant type of asset in the project. Project categories shall include the below alphabetically listed asset types:

- **Airport Assets**
- **Buildings -** Facilities and structures, with the following project subcategories:
  - Community support facilities and structures
  - Fire facilities and structures
  - Libraries
  - Metropolitan Wastewater department facilities and structures (e.g., treatment plants - and pump stations)
  - Operations facilities and structures (e.g., maintenance shops and offices)
  - Other City facilities and structures
  - Park & Recreation facilities and structures
  - Police facilities and structures
  - Water department facilities and structures (e.g., treatment plants, pump stations, reservoirs, dams, standpipes)
- **Drainage -** Storm drain systems including pipes, channels, Best Management Practices (BMPs) and pump stations
- **Flood Control Systems**
- **Golf Courses**
- **Landfills -** Landfills and supporting facilities and structures
- **Parks -** Parks and open space
- **Reclaimed Water System**
- **Transportation -** Transportation facilities, with the following project subcategories:
  - Bicycle Facilities (all classifications).
  - Bridge Replacement, Retrofit, and Rehabilitation.
  - Erosion control, slope stabilization, and retaining walls supporting transportation facilities.
  - Guardrails, Barrier Rails, and other structural safety enhancements.
  - New Roads, Roadway Widening, and Roadway Reconfigurations.
  - Street Enhancements including medians and streetscape.
  - New Traffic Signals.
  - Pedestrian Accessibility Improvements including curb ramps.
  - Pedestrian Facilities including sidewalks but not curb ramps.
  - Street Lighting including mid-block and intersection safety locations.
  - Traffic Calming, Flashing Beacons, and other speed abatement work.
  - Traffic Signal Interconnections and other signal coordination work.
  - Traffic Signal Upgrades and Modifications..

- **Wastewater** - Wastewater collection systems
- **Water** - Water distribution systems

CIP budgets shall reflect project allocations according to these categories. These project categories shall include resource allocation for all project components, including environmental mitigation, property acquisition, and all other activities necessary to complete the project.

C. Project Phases

To ensure that the prioritization is conducted between projects with a similar level of completion, all CIP projects shall be separated into the following standard phases of project development within each project category:

1. Planning –includes development of a feasibility study, detailed scope, and budget.
2. Design - includes development of the environmental document, construction plans and specifications, and detailed cost estimate.
3. Construction - includes site preparation, utilities placement, equipment installation, construction, and environmental mitigation.

To initiate an effective capital project process, a revolving fund will be established for capital planning, to allow improved development of the scope, feasibility and funding requirements of projects prior to them becoming a CIP. The implementation of a capital planning process will result in better information, planning, and analysis of proposed capital projects. A goal of 5% is established as the minimum of CIP resources allocated to projects in the Planning phase.

D. Prioritization Factors

The City must prioritize capital needs to assist in the determination of which projects will receive available funding and resources, and/or compete for bond funding based on criteria that is aligned with Departmental priorities, the Mayor's long-term plans, and City Council's objectives.

For all non-transportation projects (See Section B. Project Categories), the following are the prioritization factors (listed in order of importance):

1. **Health & Safety Effects:** This criterion will include an assessment of the degree to which the project improves health and safety factors associated with the infrastructure asset. For example, projects that result in the reduction in accidents, improved structural integrity, and mitigation of health hazards would score higher. The evaluation of this criterion will constitute twenty-five percent (25%) of the project's total score.

2. **Regulatory or mandated requirements:** This criterion will include an assessment of the degree to which the project is under a regulatory order or other legal mandates. For example, projects that are required by consent decrees, court orders, and other legal mandates would score higher. The evaluation of this criterion will constitute twenty-five percent (25%) of the project's total score.

3. **Implication of Deferring the Project:** This criterion will include an assessment of the consequences of delaying a project. For example, projects that would have significantly higher future costs, negative community impacts, or negative public perception, should they be deferred, would score higher. The evaluation of this criterion will constitute fifteen percent (15%) of the project's total score.

4. **Annual recurring cost or increased longevity of the capital asset:** This criterion will include an assessment of the degree to which the project reduces operations and maintenance expenditures by the City. For example, a roof replacement project that reduces both maintenance requirements and energy consumption or a storm drain replacement project that reduces the need for periodic cleaning would score higher. On the other hand, a new library that increases maintenance, energy and staffing costs would score lower. The evaluation of this criterion will constitute ten percent (10%) of the project's total score.

5. **Community Investment:** This criterion will include an assessment of the degree to which the project contributes toward economic development and revitalization efforts. For example, a project within an approved Redevelopment Area or Community Development Block Grant eligible area would score higher. The evaluation of this criterion will constitute ten percent (10%) of the project's total score.

6. **Implementation:** This criterion will include an assessment of the degree to which the project is in compliance with the General Plan, Community Plan, or approved City-wide master plan. An assessment of other issues involved in completing the project (e.g., significant environmental issues, project complexity, and level of public support) will also be included in this criterion. For example, projects that would benefit the City of Villages Strategy, further smart growth, or receive overwhelming support from the community would score higher, while projects that would significantly impact the environment and trigger high mitigation requirements would score lower. The evaluation of this criterion will constitute five percent (5%) of the project's total score.

7. **Project Cost and Grant Funding Opportunity:** This criterion will include an assessment of the amount of funding needed to complete the current project phase and the entire project, and shall also include assessment of the amount of City funding in the project compared to the amount of funding provided by grant funds from outside agencies. For example, a project that would bring grant funds from an outside agency into the City would score higher, while a project that relies only on City funds would score lower. The evaluation of this criterion will constitute five percent (5%) of the project's total score.

8. **Project Readiness:** This criterion will include an assessment of the time required for a project to complete its current project phase (i.e., planning, design or construction). For example, a project with a completed environmental document or community outreach would score higher, while a highly complex project requiring longer design time would score lower. The evaluation of this criterion will constitute five percent (5%) of the project's total score.

For transportation projects (See Section B. Project Categories), the following key prioritization factors will be used in lieu of the above factors:

1. **Health & Safety:** This criterion shall include an assessment of the degree to which the project improves the safety of the public using the facility. This criterion also includes an assessment of the degree that a project is under a regulatory order or other legal mandates relating to public safety. For example, projects that result in reduction in traffic accidents, improved seismic safety rating of a bridge, upgrade of an undersized storm drain to address flooding problems, and reduction of response times by emergency vehicles would score higher. The evaluation of this criterion will constitute twenty-five percent (25%) of the project's total score.

2 **Capacity & Service (Mobility):** This criterion shall include an assessment of the degree to which the project improves the ability of the transportation system to move people under all modes of travel including vehicle, transit, bicycle, and pedestrian usage. This criterion will also include an assessment of the degree to which the project improves the overall connectivity and reliability of the City's transportation system. For example, projects that reconfigure intersections to reduce delays, improve a parallel road to bypass a congested intersection, and interconnect traffic signals to reduce travel time along a congested corridor would score higher. The evaluation results of this criterion shall constitute twenty percent (20%) of a project's total score.

3. **Project Cost and Grant Funding Opportunity:** This criterion shall include an assessment of the amount of funding needed to complete the current project phase and the entire project, and hall also include assessment of the amount of City funding in the project compared to the amount of funding provided by grant funds from outside agencies. For example, a project that would bring grant funds from an outside agency into the City would score higher, while a project that relies only on City funds would score lower. The evaluation of this criterion shall constitute twenty percent (20%) of the project's total score.

4. **Revitalization, Community Support & Community Plan Compliance:** This criterion shall include an assessment of the degree to which the project is in compliance with the General Plan, Community Plan, Regional Transportation Plan, or an approved City-wide master plan. This criterion shall also include an assessment of the degree to which the project is officially supported by the Community Planning Group(s), the Councilmember(s), or a Regional Agency (such as SANDAG). This criterion shall also include an assessment of the degree to which the project contributes towards economic development and revitalization efforts. For example, projects that benefits a pilot village in the City of Villages strategy or furthers smart growth, implements a portion of the City-wide master plan or corridor study, has overwhelming and documented support from the community, implements a portion of an approved Redevelopment Area infrastructure plan, and provides transportation facilities for a Community Development Block Grant eligible area would score higher. The evaluation results of this criterion shall constitute fifteen percent (15%) of a project's total score.

5. **Multiple Category Benefit:** This criterion shall include an assessment of the degree to which the project provides highly rated facilities for multiple project categories (see Section B for project categories). For example, a roadway project that also provides for the replacement of a deteriorated storm drain, a streetscape project that also provides street lighting at critical intersections, and a bikeway project that provides slope stabilization at an area of known erosion problems would score higher. The evaluation of this criterion shall constitute ten percent (10%) of the project's total score.

6. **Annual recurring cost or increased longevity of the capital asset:** This criterion shall include an assessment of the degree to which the project reduces operations and maintenance expenditures by the City. For example, a roadway widening project that replaces an area of pavement in poor condition or that installs a highly rated traffic signal would score higher, while a project with equipment that requires frequent maintenance would score lower. The evaluation results of this criterion shall constitute five percent (5%) of a project's total score.

7. **Project Readiness:** This criterion shall include an assessment of the time required for a project to complete its current project phase (i.e., planning, design or construction). For example, a project with a completed environmental document or community outreach would score higher, while a highly complex project requiring longer design time or significant environmental mitigation would score lower. The evaluation results of this criterion shall constitute five percent (5%) of a project's total score.

E. Implementation Process

1. Using the project categories (funding & project), phases, and criteria, the Mayor shall develop a prioritization score for each CIP project. The Mayor shall then rank all CIP projects within their respective categories (funding & project) and phases according to their project score. In case of ties, the Mayor shall evaluate the overall infrastructure deficiency within the communities for each project as the deciding factor.
2. The resultant ranking list for each category and phase of CIP projects shall be reported by the Mayor to the Council as part of the annual CIP budget, with recommendations for funding.
3. Upon approval of the CIP budget by the Council, the Mayor shall pursue the completion of each project phase according to the priority ranking resulting from this prioritization process up to the total amounts authorized by Council for each project category. The Mayor shall also utilize the resultant priority ranking for the pursuit of all outside grant funding opportunities.
4. The Mayor will update the priority score as the conditions of each project change or other new information becomes available. For instance, if grant funding becomes available for a lower ranked project, the priority score would be re-evaluated with this new information. When changes occur that would alter a project's priority ranking, the priority list will be revised. The City Council will receive an informational brief of changes to the priority list at mid-year, and the annual update of the list will be part of the budget process. . Similarly, resources shall not be withdrawn from a project prior to the completion of its current phase, unless reallocation is authorized by the annual appropriation ordinance or approved by Council.
5. Implementation of this Council Policy is not intended to release or alter the City's current or future obligations to complete specific CIP projects by specified deadlines, as may be imposed by court order, or order of any federal, state or local regulatory agency.

HISTORY:
Adopted by Resolution R-302291 on 01/16/2007
Amended by Resolution R-303741 on 05/30/2008

PUBLIC UTILITIES DEPARTMENT
Metro CIP Projects FY2014 - 2018
Expenditure Projection as of July 2013

Parent WBS	Project ID	Project Title	Status	Start Construction	Finish Construction	Total Project Cost	FY 14	FY 15	FY 16	FY 17	FY 18
ABO00001		**Annual Allocation Metro Treatment Plants** This annual allocation provides for improvements and modifications to the existing Metro facilities to implement operating efficiencies, optimization of existing facilities and compliance with revised regulatory and operational plan requirements.					**$ 4,396,320**	**$ 4,491,819**	**$ 3,248,614**	**$ 2,208,347**	**$ 780,000**
	B11076	**PTLWTP PC 6 Transformer Cabinet & Switch (GRC)** This project will replace the transformer cabinet and switchboard for Power Center 6 at the Point Loma Wastewater Treatment Plant.	Under Construction	May-13	Sep-13	$ 400,000	$ 48,075	$ -	$ -	$ -	$ -
	B10085	**PTL Sedimentation Basins Equip Refurbish (D/B)** This project will replace the mechanical and electrical equipments in all twelve sedimentation basins at the Point Loma Wastewater Treatment Plant.	Under Construction	Aug-12	Aug-13	$ 7,954,500	$ 2,779,237	$ -	$ -	$ -	$ -
	B11139	**North City Cogeneration Facility (D/B)** This project is for the purchase and installation of a 1.6 Megawatt engine generator at the North City Water Reclamation Plant.	Under Construction	Sep-12	May-13	$ 4,200,000	$ 300,000	$ -	$ -	$ -	$ -
	B10178	**MBC Chemical System Improvements Phase 2** This project provides improvements to the chemical handling/feed systems at MBC, including the relocation and reroute of electrical wiring and conduits, relocation of valve actuators and installation of platforms to access valve actuators.	Design	Aug-14	Aug-15	$ 4,446,000	$ 800,000	$ 2,800,000	$ 367,788	$ -	$ -
	888053	**Emergency Strobe Lights at MBC, NCWRP & SBWRP (JOC)** This project will install strobe lights at the process areas within the Metro Biosolids Center, North City, and South Bay plants to alert operations staff of emergency events.	Planning	May-15	Feb-16	$ 360,000	$ 42,875	$ 47,000	$ 170,125	$ 100,000	$ -
	B00318	**MBC - Biosolids Receiving Tanks Isolation and Drain (JOC)** This project will install tank isolation and drain valves for emergency and/or seismic events.	Planning	Sep-15	Jul-16	$ 200,000	$ 41,133	$ 58,867	$ 50,000	$ 50,000	$ -
	888062	**MBC - Dewatered Biosolids Storage & Loading - AHU Piping Modifications** This project will reroute piping, relocate leaky valves and provide condensate pan/drain from AHU.	Planning	Dec-15	Dec-16	$ 300,000	$ 54,167	$ 53,478	$ 152,355	$ 40,000	$ -
	888063	**Pump Stations 1 & 2 Roofing Project (D/B)** This project will design new drainage system for the PS1 and PS2 main operation building.	Planning	Dec-15	Dec-16	$ 500,000	$ 62,500	$ 145,145	$ 192,355	$ 100,000	$ -
	888064	**MBC - Cooling Water System Chillers Upgrade (D/B)** This project will replace chillers, primary and secondary feed pumps, control valves and operators, piping, and the control system.	Planning	Dec-15	Dec-16	$ 1,800,000	$ 133,333	$ 374,311	$ 692,355	$ 600,000	$ -
	888011	**NCWRP - Primary Sedimentation Tanks Odor Control System Upgrades** This project will upgrade the odor scrubbers to treat foul air with 0-100 ppm H2S by adding one unit each of the carbon and packed chemical absorbers along with increased foul air volume withdrawal from the tanks.	Planning	Jan-16	Jul-16	$ 440,000	$ 25,000	$ 62,026	$ 252,974	$ 100,000	$ -
	888004	**PLWTP Hydroelectric Generator Isolation Valve & Penstock Restoration** This project will replace the 84-inch butterfly valve with an 84-inch gate valve and upgrade the penstock.	Planning	Feb-16	Aug-17	$ 2,500,000	$ 100,000	$ 780,992	$ 1,022,479	$ 496,529	$ 100,000
	888041	**MBC - Area 76: Control Room Emergency Air Supply** This project will provide HVAC capability for the control room (Area 76) during emergency power shutdown.	Planning	Apr-15	Oct-15	$ 80,000	$ 10,000	$ 70,000	$ -	$ -	$ -
	888002	**NCWRP Grit Accumulation at the Headworks and Gates Upgrades** This project will modify the headworks influent channels to increase flow velocities and air flows to prevent grit accumulation. This project also includes the repair or replacement of nine existing sluice gates at screen inlets and outlets as well as grit tank inlets.	Planning	Jun-17	Dec-17	$ 250,000	$ -	$ -	$ 50,000	$ 50,000	$ 150,000
	888024	**MBC - Valve Access Platforms Installation in Biosolids Storage Building (D/B)** This project will install scaffolding, platforms and/or catwalks to provide access for valves maintencance.	Planning	Jan-17	Feb-18	$ 1,000,000	$ -	$ 100,000	$ 208,182	$ 311,818	$ 380,000
	888056	**NCWRP - Grit Piping Y-Access Ports (JOC)** This project will install Y-access ports (cleaning ports) to improve pipe cleaning of the existing 4-inch discharge grit piping.	Planning	Dec-17	Jun-18	$ 50,000	$ -	$ -	$ 5,000	$ 45,000	$ -
	888057	**NCWRP - Vault Drainage System Implementation (JOC)** This project will provide drain system to prevent potential flooding and damage of mechanical and electrical equipment.	Planning	Dec-17	Jun-18	$ 200,000	$ -	$ -	$ 20,000	$ 30,000	$ 150,000
	888058	**NCWRP - Utility Trench Cover Replacement (JOC)** This project will replace the existing covers with lighter covers that can be removed without difficulty. The traffic load design for the covers has to be re-evaluated.	Planning	Jan-18	Aug-18	$ 100,000	$ -	$ -	$ 10,000	$ 90,000	$ -
	888059	**NCWRP - Butterfly Valve Upgrade (JOC)** This project will upgrade the existing 24-inch butterfly valve to 36 or 48-inch on the tertiary filter's 48-inch main effluent pipe.	Planning	Jan-18	Aug-18	$ 50,000	$ -	$ -	$ 5,000	$ 45,000	$ -
	888060	**PLWTP - Primary Sedimentation Tank Odor Control Facilities (JOC)** This project will provide protective coatings on the ducting, tanks and appurtenant equipment to prevent further equipment deterioration.	Planning	Jan-18	Aug-18	$ 200,000	$ -	$ -	$ 50,000	$ 150,000	$ -

Parent WBS	Project ID	Project Title	Status	Start Construction	Finish Construction	Total Project Cost	FY 14	FY 15	FY 16	FY 17	FY 18
ABP00002		**Annual Allocation MWWD Pump Stations**					**$200,000**	**$370,546**	**$605,472**	**$2,040,689**	**$ 503,293**
	888049	**PS 1 & 2 Main Pump Header Pipe Support Rehabilitation (D/B)** This project will install new pipe support system which includes seismic upgrades at PS1 and PS2	Planning	Jan-16	Jul-17	$ 1,000,000	$ 100,000	$ 126,018	$ 250,000	$ 523,982	
	888050	**PS 1 & 2 Screenings Conveyor Overhaul, Screen Supporting System and Influent Gate Replacements** This project will overhaul the existing conveyor and replace the influent gates.	Planning	Jul-16	Dec-17	$ 2,720,000	$ 100,000	$ 244,528	$ 355,472	$ 1,516,707	$ 503,293
AJB00001		**Annual Allocation MWWD Trunk Sewers**					**$1,482,445**	**$4,371,655**	**$2,090,552**	**$508,609**	**$661,681**
	B11098	**PS-2 Force Main 1 Siphon & WPLIS Repair** This project consists of two phases: Phase A will repair the damaged liner on the Pump Station 2 Rosecrans Force Main Siphon. Phase B consists of repairing the damaged liner and underlying reinforced concrete pipe (RCP) on the West Point Loma Interceptor Sewer (WPLIS).	Prepare Contract Documents	Jan-14	Jul-14	$1,500,000	$ 1,000,000	$ 410,000			
	B11025	**Rose Canyon Trunk Sewer (RCTS) Joint Repair** This project will repair 1,281 PVC welded pipe joints for pipe diameters ranging from 54-inch to 72-inch.	Planning	Jul-14	Dec-15	$6,233,000	$ 482,445	$ 3,900,000	$ 1,822,496	$ -	$ -
	888046	**NMI/SMI Junction Structure Rehabilitation (D/B)** This project will replace corroded concrete and stop log guide rails.	Planning	Jul-16	Dec-17	$1,500,000	$ -	$61,655	$268,056	$508,609	$661,681
Standalone Projects											
S00315	S00315	**PLWWTP Grit Processing (GIP)** The Grit Processing Improvements project will include reconstruction of the old south grit tanks and their adjacent pump gallery, replacement of the headworks building that was constructed in 1962 with a new drive-through facility, expansion of an existing odor removal system and replacement of auxiliary equipment.	Under Construction	Mar-11	Sep-14	$ 34,614,085	$ 9,418,600	$ 5,676,441	$ -	$ -	$ -
L10000	L10000	**Ovation Upgrades (Metro Facilities Control System)** This project provides for replacement and upgrade of existing control systems at various Metropolitan Wastewater treatment and pump station facilities. These include the Point Loma Treatment Plant (PLWTP) and North City Water Reclamation Plant (NCWRP).	Under Construction	Aug-11	Jun-14	$ 7,250,000	$ 2,444,623	$ 680,506	$ -	$ -	$ -
S00339	S00339	**MBC Dewatering Centrifuges Replacement (D/B)** This project provides for the replacement of six of the eight existing dewatering centrifuges with six larger capacity units to handle larger future biosolids flows. The existing units are also near the end of their useful life.	To be awarded	Jun-13	Dec-15	$ 12,000,000	$ 3,000,000	$ 4,000,000	$ 3,000,000	$ 1,376,383	$ -
S00322	S00322	**MBC - Biosolids Storage Silos** This project provides for two additional biosolids storage silos (numbers 9 and 10).	To be awarded	Sep-13	Oct-14	$ 8,707,993	$ 4,527,083	$ 2,261,852	$ -	$ -	$ -
S00309	S00309	**NCWRP Sludge PS Upgrade (GRC)** This project will replace the existing sludge pump at North City and four air release valves on the 12-inch sewer main coming from MBC facility.	Design	Sep-13	Mar-14	$ 636,294	$ 133,227	$ -	$ -	$ -	$ -
S00310	S00310	**SBWRP Demineralization (D/B)** This project will relocate two Electrodialysis Reversal (EDR) trailer units from NCWRP to SBWRP.	RFP Process	Feb-14	Oct-14	$ 3,279,133	$ 2,500,000	$ 378,734	$ -	$ -	$ -
S12036	S12036 [(1)]	**Backup Generators at SPS's, TP, & EMTS (D/B)** This project will purchase and install seven generators and associated equipment for permanent power connections to existing sewer pump stations 1, 64, 65, Penasquitos, the North City Reclamation Plant, and the Environmental Monitoring Technical Services Laboratory.	Design	Mar-14	Oct-14	$ 8,236,222	$ 667,481	$ 2,291,437	$ -	$ -	$ -
S00323	S00323	**MBC Odor Control Upgrade** This project provides for upgrading the odor control system fans and ducting to reduce system headlosses and improve overall foul air collection efficiency at the various process areas. Access platforms will also be installed at monitoring instruments and damper locations.	Design	Sep-14	Dec-15	$ 6,200,000	$ 200,000	$ 3,337,842	$ 1,382,467	$ 342,754	$ -
S00319	S00319	**EM&TS Esplanade & Steam Line Relocation** This project provides for the design and construction of a boat dock, an esplanade (park) within an approximately 1.25 acre parcel located between the existing Public Utilities laboratory and adjacent boat channel, as well as under-grounding approximately 600 feet of an above ground steam line situated along the boat channel.	Planning	Dec-14	Dec-15	$ 2,304,000	$ 222,167	$ 1,447,251	$ 444,764	$ -	$ -
S00312	S00312	**PS2 Power Reliability & Surge Protection** This project will remove two existing natural gas reciprocating engines and install two 4.6 megawatt (MW) natural gas turbine generators and one 206 kilowatt (kW) diesel startup generator at Pump Station 2. The two existing engine drives will be replaced with new electric motors. This new configuration will provide the required surge protection against an electrical utility outage and comply with Environmental Protection Agency (EPA) recommendation of standby power for essential facilities.	Design	Nov-15	May-17	$ 31,200,000	$ 675,600	$ 3,000,000	$ 22,000,000	$ 4,656,479	$ -
S00317	S00317	This project will rehabilitate the remaining 5,000 feet of the 108 inch pipeline from Winship Lane to Pump Station 2.	Planning	Apr-16	Nov-17	$ 9,214,957	$ 100,000	$ 397,445	$ 1,007,769	$ 6,659,743	$ 1,050,000
S00314	S00314	**Wet Weather Storage Facilities - Live Stream Discharge** This project will construct a dechlorination facility at the MBC site to discharge reclaimed water from the North City Reclamation Plant during heavy rain events when pump station 2 capacity is approached.	Planning	Jul-16	Jan-18	$ 5,000,000	$ -	$ 100,000	$ 258,732	$ 1,592,992	$ 3,048,276
S14000	S14000 [(2)]	**EAM ERP Implementation (Metro)** This project provides for the establishment of an integrated, real-time SAP ERP Enterprise Asset Management (EAM) software solution that builds upon the existing Citywide SAP ERP platform. The major legacy maintenance and asset management systems to be replaced within the scope of this project are SWIM, EMPAC, and PSTools. Approximately 34 percent of all Metro Sewer Utility Fund expenditures related to this project are funded by Participating Agencies.	Planning	Jul-13	Jun-16	$ 2,833,160	$ 1,238,160	$ 1,203,400	$ 391,600	$ -	$ -
Grant Total							**$ 31,205,706**	**$ 34,008,928**	**$ 34,429,970**	**$ 19,385,996**	**$ 6,043,250**

NOTE:

(1) The total project cost is $17,745,600; $8,236,222 for Metro and $9,509,378 for Muni.

(2) The total project cost is $12,878,000; $2,833,160 for Metro, $4,893,640 for Muni, and $5,151,200 for Water.

AGENDA ITEM 9
Attachment

SCAP Collection Systems Question related to discharge from Fire Sprinklers
June 3, 2013

One of our member agencies requested responses from our members regarding discharge of fire sprinkler water into the sewer system. The following is a summary of the thoughtful responses received. Our thanks to everyone that responded.

Questions:

1. **Does your agency allow the discharge of water from fire sprinkler systems into the sewer for the purpose of flushing the system of old water?**

2. **If you do, what are your requirements, if any, to do so? Does anyone have an ordinance that addresses this issue?**

3. **If you don't, how does your agency handle this request from homeowners and commercial customers needing to perform this maintenance activity?**

Responses

Olivenhain Municipal Water District – San Diego County

OMWD does not have any specific ordinances or rules related to fire sprinkler system discharges per se, but if someone were to initiate such a discharge and the water had elevated levels of contaminants (presumably metals) in it then this could be considered to be an illegal discharge under our standard prohibitions against such discharges.

Whether we would ever know is another question entirely.

Las Virgenes Municipal Water District – Los Angeles County

This type of water should be discharged like pool water, cooling water, groundwater etc… to the storm drain. Our ordinance generally prohibits all types of clean water discharges to the plant. (see LVMWD Title 5 Article 2, 5-4.202 – 5.4.205)

Western Municipal Water District – Riverside County

WMWD has an ordinance that regulates wastewater discharges and the use of our sanitary sewer system. The ordinance does not specifically address fire sprinkler system discharge, but it does contain prohibitions on categories of discharge, such as pH level, odor, or anything that could interfere with operation of the sewer system. One specific prohibition that could be used to prohibit fire sprinkler discharges reads:

"3.1.2.A No Person shall introduce or cause to be introduced into the District's Sanitary Sewer System the following pollutants, substances, material or wastewater:"

12. Unpolluted water including, but not limited to, storm water, surface water, ground water, artesian well water, roof runoff, subsurface drainage, condensate, deionized water, and single pass cooling water, unless specifically authorized by the General Manager.""

We have not received requests to discharge fire sprinkler system discharge into our sewer system, as far as I know.

El Toro Water District – Orange County

Attached BMPs for Industrial/Commercial Fire Sprinkler Testing and Maintenance from OC Watersheds. I'm not aware of a District ordinance dealing with fire sprinkler water and haven't had any specific requests to drain fire sprinkler water to the sewer. However, the District would handle on a case-by-case basis and would do the same as a customer draining pool water to the sewer by sampling and testing the water before accepting it.

The Regional and City requirements would have to be met before any discharge to the storm drain could be considered.

City of San Diego – San Diego County

San Diego does allow the discharge for maintenance purposes….but we don't bill fire meter accounts, so these discharges go unbilled. Our only requirement is that the flow rates not exceed the capacity of the downstream collection system.

San Diego does not have an ordinance that addresses this issue

We made a presentation at the Industrial Environmental Association (IEA) several years ago for the purpose of addressing this issue; we also discussed our policy with the Fire Haz Mat coordinator. Note that some discharges may be in excess of 1000 gpm.

City of Santa Monica – Los Angeles County

We are in the process of updating our existing City Code to match the new MS4. Relevant City of Santa Monica Municipal Code (SMMC) Sections are 5.20 and 7.10.

Per the new MS4 regulations swimming pool water in the City of Santa Monica can either be spread on permeable landscaped areas, or diverted to the sanitary sewer or the storm drain. If diverted to the storm drain or sanitary sewer the water must first be dechlorinated/debrominated and pre-notification will be required. Uncontained water shall not be allowed to flow across public sidewalks or alleyways (i.e. must have hose to gutter).

Filter backwash from pools, spas or fountains, or pool/spa/ fountain water containing bacteria, wastes, algaecides or other chemicals, including salts from "salt water" pools in excess of applicable water quality standards must be disposed to the sanitary sewer.

The routine maintenance and flushing of fire suppressing system lines is considered to be a non-exempt (i.e. non-emergency) discharge under the new MS4 regulations. We therefore require all such water to be diverted to the sanitary sewer.

City of Los Angeles – Los Angeles County

Attached is the City of Los Angeles' response to the SCAP member question(s) regarding fire sprinkler flush water.

City of Los Angeles Response To SCAP Collection Systems Committee Members and Wastewater Pretreatment Committee Members Regarding Fire Sprinkle Flush Water Discharge to the City's Sewer System:

1. **We have a question around fire sprinkler systems and the discharge of water from them for maintenance purposes. Specifically, does your agency allow the discharge of water from fire sprinkler systems into the sewer for the purpose of flushing the system of old water?**

   The first option is to require the user to discharge to the storm water collection system. However, if the flush water cannot meet NPDES pollutant limitations and treatment is not an option, then the flush water is deemed industrial wastewater because of the presence of a mitigating pollutant.

2. **If you do, what are your requirements, if any, to do so? Does anyone have an ordinance that addresses this issue?**

   Since the flush water is deemed industrial wastewater, the flush water is subject to the local Sewer Use Ordinance. If the user is already permitted to discharge industrial wastewater to the sewer system at the same facility where the sprinkler maintenance is to take place, the user will need to notify (date, duration, flow rate (gpm)) the control authority of the intent to discharge. If the flow is excessive, a sewer capacity evaluation may need to be performed.

   If the discharge of flush water is a one time discharge occurring at a facility where there is no industrial wastewater permit because there are no wastewater generating operations at the site, the user can request a one time discharge/event and submit a letter in writing with location, date and time of discharge, flow rate, connection, etc... If the flow rate is excessive, then a sewer capacity availability evaluation must be performed prior to discharging to eliminate the potential to cause a sewer spill.

3. **If you don't, how does your agency handle this request from homeowners and commercial customers needing to perform this maintenance activity?**

   Home owners are not required to obtain an industrial wastewater permit. Commercial customers that are subject to the local Sewer Use Ordinance will follow the same guidance as specified in 1. and 2. above.

AGENDA ITEM 10
Attachment

THE CITY OF SAN DIEGO

May 31, 2013

Ms. Leah Browder
Director of Public Works
City of Poway
P.O. Box 789
Poway, CA 92074-0789

Dear Ms. Browder:

Subject: San Diego Regional Water Quality Control Board (RWQCB), Order No. R9-2013-0032 Administrative Civil Liability, Settlement Order

As you know, on September 8, 2011, the County suffered a regional electrical power outage. All power was lost to wastewater facilities that relied on dual electrical feeds and as a consequence spills occurred at Sewer Pump Stations 1 and 64. The spill at Pump Station 64 resulted in the release of 2.4 million gallons of sewage into Penasquitos Creek and ultimately Los Penasquitos Lagoon. The City was able to pump a mixture of sewage and creek water from the Penasquitos Creek, recovering approximately 931,550 gallons of sewage.

The discharge of untreated sewage is a violation of State Water Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, and San Diego Water Board Order No. R9-2007-0005, Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region. The City received an Investigative Order from the California RWQCB pertaining to the sewage spill. The City submitted a technical report to the RWQCB on October 14, 2011, and a final monitoring report on February 17, 2012. These reports provided information to the RWQCB to evaluate the nature, circumstances, extent and impacts of the discharge of untreated sewage.

The California Water Code provides for various enforcement options, including civil monetary remedies for violations which may be assessed on a per gallon basis, and may not exceed $10 for each gallon of waste discharged. The City negotiated a settlement with the RWQCB on an Administrative Civil Liability for the spills of September 8, 2011. This agreement was approved by the RWQCB on May 8, 2013. The settlement entails a liability of $1,245,414, with one half or $622,707 to be paid to the State and the other half to be applied to an Enhanced Compliance Action for the installation of

ASSISTANT PUBLIC UTILITIES DIRECTOR
9192 Topaz Way • San Diego, CA 92123
(858) 292-6401

emergency backup generators. The City of San Diego has already paid half the liability and once the City completes the generator project, the RWQCB will waive the remaining balance.

We are requesting that the City of Poway pay a fair share of the administrative civil liability. Based on the apportionment of the liability to the Pump Station 64 spill, and Poway's percentage of flow to Pump Station 64, this amounts to $68,131.

Please feel free to contact Edgar Patiño at (858) 292-6321 if you have questions or require further information regarding this matter.

Sincerely,

Ann Sasaki
Assistant Public Utilities Director

EP:hkh

Enclosures:

1. San Diego Regional Water Quality Control Board Order No. R9-2013-0032
2. City of Poway Invoice

INVOICE

City of San Diego
PO Box 129030
San Diego CA 92112-9030

Return Service Requested

CITY OF POWAY
DIRECTOR OF PUBLIC WORKS
13325 CIVIC CENTER DR
POWAY CA 92064

Invoice No:	1000078823
Invoice Date:	May 31, 2013
Business Partner No:	9000000612
Contract Account No:	500000001915
Reference:	XXXXXX1305311145
Invoice Amt(USD):	$ 68,131.00
Payment Due:	Jul 3, 2013
City Contact Name:	Hana Hanigan
City Contact Phone No:	858-292-6326

Description

San Diego Regional Water Quality Control Board (RWQCB),
Order No. R9-2013-0032 Administrative Civil Liability
Sewer Pump Station 64 spill due to regional electrical
power outage on September 8, 2011

Invoices that remain unpaid after the due date will be referred to the City Treasurer for collections. Unpaid balances are subject to a collection referral fee of 10% or $25, whichever is greater, up to a maximum of $1,000, and interest. As required by law, you are hereby notified that a negative credit entry reflecting on your credit report may be submitted to a credit reporting agency if the amount is not paid by the due date.

Return this Portion with Payment. Make Check Payable to **City Treasurer**.

☐ New Address or Phone Number? Check this Box and Enter your New Information on Reverse Side

MAIL PAYMENT TO:

City of San Diego
PO Box 129030
San Diego, CA 92112-9030

Invoice No:	1000078823
Invoice Date:	May 31, 2013
Business Partner No:	9000000612
Contract Account No:	500000001915
Reference:	XXXXXX1305311145
Invoice Amount(USD):	$ 68,131.00
Payment Due:	Jul 3, 2013

0171 1 500000001915 1000078823 1 XXXXXX1305311145 000006813100 2 1

San Diego Regional Water Quality Control Board Order No. R9-2013-0032
Discharge of Untreated Sewage/Loss of Power
September 8, 2011

Spilled Wastewater			
Pump Station 1 (Metro)	0.19	MG	11.41%
Pump Station 64 (Muni)	1.50	MG	88.59%
Total	1.69	MG	100.00%

Fiscal Year 2012 Flow			
Del Mar Flow	208	MG	2.33%
Poway Flow [2]	1,100	MG	12.35%
San Diego Flow	7,599	MG	85.32%
Pump Station 64 & Peñasquitos Total Flow	8,906	MG	100.00%

Assessment		
Pump Station 64 & Pump Station 1 [1]	$ 1,245,414	100.00%
50% Conditional Wavier	$ 622,707	50.00%
Pump Station 1 (Metro)	$ 71,027	11.41%
Pump Station 64 (Muni)	$ 551,680	88.59%
Total	$ 622,707	100.00%

Muni Apportionment		
Del Mar's	$ 12,857	2.33%
Poway's	$ 68,131	12.35%
San Diego's	$ 470,691	85.32%
Total	$ 551,680	100.00%

[1] RWQCB will waive 50% of the assement upon the City's Completion of the Power Reliability Project currently in progress.

[2] Under normal conditions Poway's flow uses Penasquitos PS; however, during pump station shutdowns the flows use Pump Station 64.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

In the matter of:	
City of San Diego	**Order No. R9-2013-0032**
PERTAINING TO THE DISCHARGE OF UNTREATED SEWAGE TO LOS PENASQUITOS CREEK, LOS PENASQUITOS LAGOON, AND THE PACIFIC OCEAN ON SEPT. 8, 2011, CAUSED BY LOSS OF POWER AT PUMP STATION 64	**Settlement Agreement and Stipulation for Entry of Order**

Section I: INTRODUCTION

This Settlement Agreement and Stipulation for entry of Administrative Civil Liability Order (Stipulated Order or Order) is entered into by and between the Assistant Executive Officer of the Regional Water Quality Control Board, San Diego Region (San Diego Water Board), on behalf of the San Diego Water Board Prosecution Staff (Prosecution Staff), and the City of San Diego (Respondent) (collectively the Parties) and is presented to the San Diego Water Board, or its delegate, for adoption as an order by settlement, pursuant to Government Code section 11415.60.

Section II: RECITALS

1. Respondent owns and operates its sewage collection system. The system is comprised of approximately 3,002 miles of gravity sewer lines and 145 miles of forced mains and other pressure systems, and it serves approximately 2,140,000 people. Respondent's sewage collection system is regulated (WDID No. 9SSO10658) by State Water Board Order No. 2006-003-DWQ, *Statewide Waste Discharge Requirements for Sanitary Sewer Systems*, and San Diego Water Board Order No. R9-2007-0005, *Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*.

AGENDA ITEM 11
Attachment

MetroTAC
2012/13 Work Plan
May & June 2013 (Revised Per Metro TAC)

MetroTAC Items	Description	Subcommittee Member(s)
JPA Website Update	*5/13: The Metro TAC would like to update the current website as it is outdated. A review of the current website and its limitations will be on the Metro TAC agenda in the next couple months.*	
2013 Transportation Rate Update	*5/13: PUD staff is proposing slightly revising the methodology and increasing the transportation rate. Subcommittee met with PUD staff on 6/12/13 to review calculations.*	*Al Lau* *Dan Brogadir* *Karyn Keese*
PLWTP Permit Ad Hoc TAC	*6/13: Ad Hoc created by JPA at their special June workshop. Goal: Create regional water reuse plan so that both a new, local, diversified water supply is created and maximum offload at Point Loma is achieved to support federal legislation for permanent acceptance of Point Loma as a smaller advanced primary plant. Minimize ultimate Point Loma treatment costs and most effectively spend ratepayer dollars due to successful coordination between water and wastewater agencies. Ad Hoc has been meeting all month and has developed a Concept Paper. Ad Hoc will be giving presentations to PAs City Councils/Board of Directors during July 2013.*	Greg Humora Leah Browder Mark Watton Scott Tulloch Rick Hopkins Jim Smyth Karyn Keese
IRWMP	Bob Kennedy attended the Regional Advisory Committee (RAC) meeting of April 3, 2013. Minutes from this meeting are attached. *6/5/13: Bob Kennedy attended Meeting #43. Minutes are attached to this work plan.*	Bob Kennedy Greg Humora
Fiscal Items	The Finance committee will continue to monitor and report on the financial issues affecting the Metro System and the charges to the PAs. The debt finance and reserve coverage issues have been resolved. Refunds totaling $12.3 million were sent to most of the PA's.10/26/11: 2010 will be the first year where the PAs will be credited with interest on the debt service reserve and operational fund balances. Interest will be applied as an income credit to Exhibit E when that audit is complete.	Greg Humora Karen Jassoy Karyn Keese
Recycled Water Revenue Issue	Per our Regional wastewater Agreement revenues from SBWTP are to be shared with PA's. 4/11: City has agreed to pay out revenue to Wastewater Section and PA's credit will be on the Exhibit E adjustments at year end Open issues: Capacity reservation lease payments and North City Optimized System Debt service status. 12/11: Letter sent to San Diego regarding outstanding recycled water revenue issues. 2/13: Karyn Keese continues to meet with City staff to determine the basis of the water department's administrative charges.4/13: Need Metro TAC member for subcommittee	Karyn Keese
Water Reduction - Impacts on Sewer Rates	The MetroTAC wants to evaluate the possible impact to sewer rates and options as water use goes down and consequently the sewer flows go down, reducing sewer revenues. Sewer strengths are also increasing because of less water to dilute the waste. We are currently monitoring the effects of this. 2/2011:wastewater revenues are declining due to conservation and flow reductions and agencies are re-prioritizing projects to be able to cover annual operations costs	Eric Minicilli Bob Kennedy Karyn Keese

MetroTAC Items	Description	Subcommittee Member(s)
"No Drugs Down the Drain"	The state has initiated a program to reduce pharmaceuticals entering the wastewater flows. There have been a number of collection events within the region. The MetroTAC, working in association with the Southern California Alliance of Publicly-owned Treatment Works (SCAP), will continue to monitor proposed legislation and develop educational tools to be used to further reduce the amount of drugs disposed of into the sanitary sewer system. 8/2010: County Sheriff and Chula Vista have set up locations for people to drop off unwanted medications and drugs.4/11: Local law enforcement has taken a proactive role and is sponsoring drug take back events. 3/11: TAC to prepare a position for the board to adopt; look for a regional solution; watch requirements to test/control drugs in wastewater. 10/26/11: A prescription drug take back day is scheduled for 10/29/11. Go to www.dea.gov to find your nearest location.4/12: East County to host a prescription drug take back 4/28/12. 4/27/13 is scheduled to be a county wide take back day. Locations can be found on the DEA website.	Greg Humora
Strength Based Billing Evaluation	3/20/13: Brown and Caldwell presented their draft results to Metro TAC. This has been added as a standing item to the Metro TAC agenda for discussions on the recommendations.	
Grease Recycling	To reduce fats, oils, and grease (FOG) in the sewer systems, more and more restaurants are being required to collect and dispose of cooking grease. Companies exist that will collect the grease and turn it into energy. MetroTAC is exploring if a regional facility offers cost savings for the PAs. The PAs are also sharing information amongst each other for use in our individual programs. 3/11: get update on local progress and status of grease rendering plant near Coronado bridge	Eric Minicilli
Padre Dam Mass Balance Correction	11/11: Padre Dam has been overcharged for their sewage strengths since 1998. Staff from City of San Diego presented a draft spreadsheet entitled Master Summary Reconciliations Padre Dam Mass Balance Corrections Calculation. Rita Bell and Karyn Keese were elected to review the documentation and report back to Metro TAC. 2/12: Audit complete. Item added as Standing to Metro TAC agenda.4/12: This issue is scheduled as a standing item and discussed at each Metro TAC meeting until it is resolved. Currently Metro TAC is focusing on the statue of limitations. 2/13: The PAs have received a joint letter from Padre Dam/City of San Diego. The PA's attorneys group continues to meet on this issue. 3/13: The attorney's group has requested an extension to 4/23/13 to respond to San Diego's letter. 5/13: The attorney's group has submitted a letter to Padre Dam and San Diego.	Rita Bell Karyn Keese
Waiver and Recycled Water Study Implementation	11/12: Metro TAC requested a timeline from City staff including milestones for the waiver process. The waiver is due no later than 7/30/15. However, the application needs to be submitted six months prior to the July date (2/1/15). Preparation of the waiver will begin in the early part of FYE 2014. 2/13: City staff has met to start coordination of the waiver process. Staff in attendance included Roger Bailey, Marsi Steirer, Guann Hwang, Steve Meyers, and Allan Langworthy. *5/13: Scott Tulloch has briefed Metro TAC and the Metro Commission/JPA on the waiver's history and secondary equivalency. A JPA workshop to be held in June to further discuss. Scott Tulloch is preparing a briefing paper for the Commission's use.6/13: JPA workshop held and PLWTP Steering Committee and Ad Hoc TAC were appointed.*	Greg Humora Leah Browder Scott Tulloch Karyn Keese
City of San Diego Recycled Water Pricing Study	San Diego is working on a rate study for pricing recycled water from the South Bay plant and the North City plant. Metro TAC, in addition to individual PAs, has been engaged in this process and has provided comments on drafts San Diego has produced. We are currently waiting for San Diego to promulgate a new draft which addresses the changes we have requested. 10/26/11: draft study still not issued. *5/13: Recycled Water Study to be on July 2013 Metro TAC agenda per PUD staff.6/24/13: Recycled Water Pricing Study goes to IROC. 7/10/13: Recycled Water Study goes to NR&C*	Karyn Keese Rita Bell

MetroTAC Items	Description	Subcommittee Member(s)
City of San Diego Revised Procurement Process	8/12: San Diego City Engineer James Nagelvoort reported on recent changes to San Diego's procurement process to move projects through more quickly. Technically any CIP projects under $30 million may no longer need to be reviewed by the Metro TAC or JPA prior to City Council approval. Chairman Humora requested San Diego prepare a summary of the recent changes and the decision points for consideration of the TAC at the September meeting. 10/4: Metro Commission requests further review by TAC to recommend an appropriate level for CIP's to be brought forth to the Commission. 11/12: MetroTAC recommended leaving the thresholds as they are today and therefore everything will go through TAC and then to the JPA for formal action. The policy will be placed on the JPA website. The Metro Commission approved the policy at their November 2012 meeting. San Diego's CIP will become a standing item on the Metro TAC agenda.	Metro TAC
Salt Creek Diversion	9/2010: OWD, Chula Vista and San Diego met to discuss options and who will pay for project; Chula Vista and OWD are reviewing options. 2/2011: OWD and PBS&J reviewed calculations with PUD staff; San Diego to provide backup data for TAC to review. This option is also covered in the Recycle Water Study.10/26/11: Back-up information has still not been received from staff. 8/12: San Diego to conduct business case evaluation and add to Capital Improvement Program as recommend by Metro Commission to San Diego City Council on July 17, 2012 in support of the Recycled Water Study.	Roberto Yano Bob Kennedy Karyn Keese Rita Bell
Recycled Water Study Cost Allocation	A small working group was formed to discuss options to allocate PLWTP offset project costs among the water and wastewater rate payers; Concepts will be discussed at TAC and JPA Board in near future.7/12: Subcommittee to meet with PUD staff & consultants to review TM 8 and economic model.8/12: Subcommittee has meet with City staff and consultants. Economic model has been received. City will not pursue cost allocations until Demonstration Project is complete due to staffing constraints. *6/13: Ad Hoc TAC has started work on cost allocation concept.*	Greg Humora Leah Browder Mark Watton Scott Tulloch Rick Hopkins Jim Smyth Karyn Keese
Board Members' Items		
San Diego Wastewater 50th Anniversary Celebration	*5/13: Cheryl Lester presented the draft plan for the Anniversary celebration. She requested Metro Commission/JPA participation. Commission Parks will represent the Commission/JPA.*	*Sherryl Parks*
Rate Case Items	1/12: San Diego is in the process of hiring a consultant to update their rate case. As part of that process, Metro TAC and the Finance Committee will be monitoring the City's proposals as they move forward. 6/12: San Diego hired Black & Veatch as their rate consultant. 2/13: Preliminary results were reported at the IROC Meeting of 2/19/13. Karyn Keese will be working with the IROC Finance Committee to review details. 3/13: Karyn Keese attended a joint workshop with IROC to review the draft revenue requirement for the Rate Case. 4/13: Next meeting with IROC on the rate case is 5/20/13. *5/13: Next special meeting with IROC is June 24, 2013. 6/13: San Diego is only moving forward with Water Rate Case due to needed rate increase. Wastewater does not appear to need a rate adjustment for two years.*	Karyn Keese
Exhibit E	Metro TAC and the Finance Committee are active and will monitor this process. Individual items related to Schedule E will come directly to the Board as they develop. 2/13: 2010 and 2011 audits are ongoing. 3/13: The 2010 audit is complete and has been presented to Metro TAC & the Finance Committee. Will move forward to Commission at 6/13 meeting. 2011 field work is complete. 2012 sample selected.	Karen Jassoy Karyn Keese

MetroTAC Items	Description	Subcommittee Member(s)
Future bonding	Metro TAC and the Finance Committee are active and will monitor this process. Individual items related to bonding efforts will come directly to the Board as they develop. 10/26/11: San Diego is issuing an RFP for a cost of service study to support a future bond issue potentially in mid-2013. Kristin Crane to sit on the selection panel. 2/1 3: San Diego's preliminary rate case does not show the issuance of additional debt until FY 2018.	Karen Jassoy Karyn Keese Kristen Crane
Changes in water legislation	Metro TAC and the Board should monitor and report on proposed and new legislation or changes in existing legislation that impact wastewater conveyance, treatment, and disposal, including recycled water issues	Paula de Sousa
Border Region	Impacts of sewer treatment and disposal along the international border should be monitored and reported to the Board. These issues would directly affect the South Bay plants on both sides of the border. 2/12: This Item does not have a champion. Should we remove?	
SDG&E Rate Case	8/19: Karyn to check with Paula regarding latest SDG&E issues.11/12: Sophie Akins from BBK will present updated information to Metro TAC.	Paula de Sousa
Metro JPA Strategic Plan	6/12: Chairman Ewin to establish a subcommittee to monitor the progress of strategic plan initiatives.	*Who should take over?*

Completed Items	Description	Subcommittee Member(s)
Debt Reserve and Operating Reserve Discussion	In March 2010, the JPA approved recommendations developed by Metro JPA Finance Committee, MetroTAC, and the City of San Diego regarding how the PA's will fund the operating reserve and debt financing. MetroTAC has prepared a policy document to memorialize this agreement. **Project complete: 4/10**	Scott Huth Karyn Keese Doug Wilson
State WDRs & WDR Communications Plan	The Waste Discharge Requirements (WDRs), a statewide requirement that became effective on May 2, 2006, requires all owners of a sewer collection system to prepare a Sewer System Management Plan (SSMP). Agencies' plans have been created. We will continue to work to meet state requirements, taking the opportunity to work together to create efficiencies in producing public outreach literature and implementing public programs. **Project complete: 5/10**. 2/12: State has proposed new WDR regulations. Metro TAC will not reopen but Dennis Davies will stay on top of the issue.	Dennis Davies
Ocean Maps from Scripps	Schedule a presentation on the Sea Level Rise research by either Dr. Emily Young, San Diego Foundation, or Karen Goodrich, Tijuana River National Estuarine Research Reserve **Project complete: 5/10**	Board Member Item
Secondary Waiver	The City of San Diego received approval from the Coastal Commission and now the Waiver is being processed by the EPA. The new 5 year waiver to operate the Point Loma Wastewater Treatment Plant at advanced primary went into effect August 1, 2010. **Project complete 7/10**	Scott Huth
Lateral Issues	Sewer laterals are owned by the property owners they serve, yet laterals often allow infiltration and roots to the main lines causing maintenance issues. As this is a common problem among PAs, the MetroTAC will gather statistics from national studies and develop solutions. 4/11: There has been no change to the issue. We will continue to track this item through SCAP and report back when the issue is active again. **Efforts closed 3/11**	Tom Howard Joe Smith
Advanced Water Purification Demonstration Project	San Diego engaged CDM to design/build/operate the project for the water repurification pilot program. *2/8/11: Equipment arrived 3/2011; tours will be held when operational (June/July 2011 timeframe*). 2/12: Tours are available. San Diego whitepaper on IPR distributed to Metro TAC members. **Closed 4/18/12**	Al Lau
SDG&E Rate Case	SDG&E has filed Phase 2 of its General Rate Case, which proposes a new "Network Use Charge" which would charge net-energy metered customers for feeding renewable energy into the grid as well as using energy from the grid. The proposal will have a significant impact on entities with existing solar facilities, in some cases, increases their electricity costs by over 400%. Ultimately, the Network Use Charge will mean that renewable energy projects will no longer be as cost effective. SDG&E's proposal will damage the growth of renewable energy in San Diego County. A coalition of public agencies has formed to protest this rate proposal.2/12: PUC has not accepted SDG&E's filing. Metro TAC move to close this item. Will continue to monitor this.8/19: Karyn to check with Paula regarding latest SDG&E issues.	Paula de Sousa
Metro JPA Strategic Plan	2/2011: committee to meet 2/28/11 to plan for retreat to be held on 5/5/11 Retreat held and wrap up presented to the Commission at their June Meeting. JPA strategic planning committee to meet to update JPA Strategic Plan and prepare action items. 1/12: Draft strategic plan reviewed by Board and referred to Metro TAC for input. MetroTAC has created a subcommittee to work on this project. 2/12: Metro TAC has completed their final review. Forwarded to Commission. 4/12: Adopted at April 2012 Metro JPA Meeting. Project complete.	Augie Caires Ernie Ewin

Completed Items	Description	Subcommittee Member(s)
Recycled Water Study	As part of the secondary waiver process, San Diego agreed to perform a recycled water study within the Metro service area. That study is currently underway, and MetroTAC has representatives participating in the working groups. TM #8 Costs estimates are out and PAs provided comments on TM#8 and have asked for a technical briefing. 10/16/11: Final draft of report is due out in November 2011.1/12: Final draft of report is due in March 2012.3/12: Final draft available for comments until 3/19/12 4/12: PUD staff to give presentation to Metro JPA at their May meeting. 5/12 PUD staff presented the Recycled Water Study to the Metro JPA at their May meeting. Metro JPA approved the Study as a planning document. Study to move forward to SD City Council in July 2012 with letter of support from JPA. 7/12: City of San Diego approved the Recycled Water Study; Study submitted on time to Coastal Commission. Final report uploaded to JPA website.11/12: San Diego received a letter from the Coastal Commission. Metro Commission consensus was that based on the tone of the Coastal Commission letter the region may be seeing some time line changes relative to San Diego's projections on the implementation of IPR and that the MetroTAC needs to manage all aspects including the Coastal Commission and multiple issues such as desalination water, Coastal Commissions attitude at this point and pending IPR programs we have heard about.	Scott Huth Al Lau Scott Tulloch Karyn Keese
IRWMP	4:12: Metro TAC received a presentation from Cathy Pieroni (City of San Diego) on the Integrated Regional Water Management Program (IRWMP). Group is still relatively informal but plans to become more structured during its upcoming 2 year plan update. There is a governance & finance work group that starts in the 3rd quarter of 2012 and at that point the JPA role will be examined. Padre Dam and Chula Vista are regular participants. 9/19: Cathy Pieroni gave an update. Recommendation by IRWM to the RAC to include a seat for the Metro JPA. Bob Kennedy will attend the October 3, 2012 meeting representing the JPA. 11/12: At their November 2012 meeting the Metro Commission unanimously appointed Bob Kennedy of Otay Water District as primary and Metro TAC Chairman Greg Humora as alternate to the IRWMPRAC. 2/13: On February 6, 2013 Bob Kennedy attended the IRWMP meeting. Metro JPA has been added as a permanent member of the Water Quality subcommittee of the RAC. The City of San Diego presented an overview of the Recycled Water Study. Next meeting scheduled for April 3, 2013. Closed 4/12 as the Metro JPA has become a member.	Bob Kennedy Greg Humora
Role of Metro JPA regarding Recycled Water	As plans for water reuse unfold and projects are identified, Metro JPA's role must be defined with respect to water reuse and impacts to the various regional sewer treatment and conveyance facilities 2/12: Scott Huth removed as member due to new position. JPA/Metro TAC needs to appoint a new representative. 4/13: Scott Tulloch added to this subcommittee. Metro TAC member needed. *5/13: Greg Humora added to this work group.6/13: This group was formalized by the JPA as the PLWTP Ad Hoc Technical Advisory Committee.*	Greg Humora Karyn Keese Scott Tulloch

San Diego Integrated Regional Water Management
Joint Public Workshop & Regional Advisory Committee Meeting #43
June 5, 2013

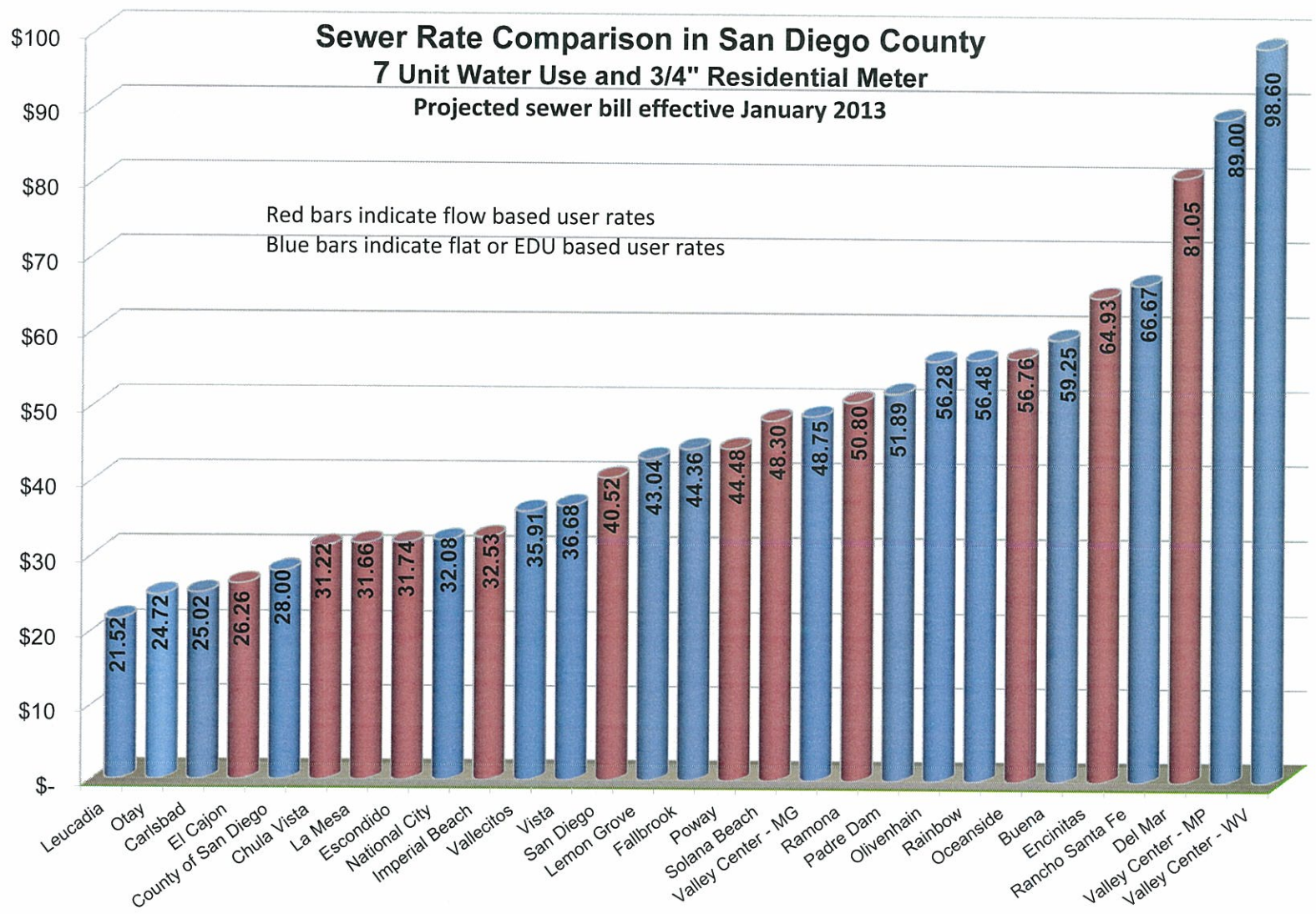
Background
The Regional Water Management Group for IRWM Program was established in 2005. This group is made up of Marsi Steirer for the City of San Diego, Troy Bankston for the County of San Diego, and Ken Weinberg of the Water Authority. This was Marsi Steirer's first meeting as Chair, Ken Weinberg is Co-Chair.

A year later, they established the Regional Advisory Committee (RAC) to assist the Regional Management Group with the original IRWM Plan and to assist on prioritization of Prop 50 funding application. The RAC is made up of 4 groups; Water Supply, Water Quality, Natural Resources and Watersheds, with the recent reorganization, they added the Metro JPA representative to the Water Quality Group. The RAC meet quarterly but the groups meet individually more often.

San Diego Integrated Regional Water Management (IRWM) UPDATE
At the Regional Advisory Committee meeting of June 5, 2013, the proposed revision to the IRWM Plan Update for the last workgroup was presented. Proposed modifications to the section on Integrated Flood Management Planning Study and implementation action items were discussed.

The draft IRWM Plan will go out for public review on June 20 with final comments due by July 31, 2013. The plan is scheduled to be adopted by October 31, 2013. The draft is available at:
http://www.sdirwmp.org/2013-irwm-plan-update-workgroups

Next meeting scheduled for August 7, 2013.


Sewer Rate Comparison in San Diego County
7 Unit Water Use and 3/4" Residential Meter
Projected sewer bill effective January 2013
Red bars indicate flow based user rates
Blue bars indicate flat or EDU based user rates
$100
$90
$80
$70
$60
$50
$40
$30
$20
$10
$-
21.52
24.72
25.02
26.26
28.00
31.22
31.66
31.74
32.08
32.53
35.91
36.68
40.52
43.04
44.36
44.48
48.30
48.75
50.80
51.89
56.28
56.48
56.76
59.25
64.93
66.67
81.05
89.00
98.60
Leucadia
Otay
Carlsbad
El Cajon
County of San Diego
Chula Vista
La Mesa
Escondido
National City
Imperial Beach
Vallecitos
Vista
San Diego
Lemon Grove
Fallbrook
Poway
Solana Beach
Valley Center - MG
Ramona
Padre Dam
Olivenhain
Rainbow
Oceanside
Buena
Encinitas
Rancho Santa Fe
Del Mar
Valley Center - MP
Valley Center - WV

Metro TAC
Participating Agencies
Selection Panel Rotation

Agency	Representative	Selection Panel	Date Assigned
Padre Dam	Neal Brown	IRWMP – Props 50 & 84 Funds	2006
El Cajon	Dennis Davies	Old Rose Canyon Trunk Sewer Relocation	9/12/2007
La Mesa	Greg Humora	As-Needed Piping and Mechanical	11/2007
National City	Joe Smith	MBC Additional Storage Silos	02/2008
Otay Water District	Rod Posada	As-Needed Biological Services 2009-2011	02/2008
Poway	Tom Howard	Feasibility Study for Bond Offerings	02/2008
County of San Diego	Dan Brogadir	Strategic Business Plan Updates	02/2008
Coronado	Scott Huth	Strategic Business Plan Updates	09/2008
Coronado	Scott Huth	As-needed Financial, HR, Training	09/2008
PBS&J	Karyn Keese	As-needed Financial, Alternate HR, Training	09/2008
Otay Water District	Rod Posada	Interviews for Bulkhead Project at the PLWTP	01/2009
Del Mar	David Scherer	Biosolids Project	2009
Padre Dam	Neal Brown	Regional Advisory Committee	09/2009
County of San Diego	Dan Brogadir	Large Dia. Pipeline Inspection/Assessment	10/2009
Chula Vista	Roberto Yano	Sewer Flow Monitoring Renewal Contract	12/2009
La Mesa	Greg Humora	Sewer Flow Monitoring Renewal Contract	12/2009
Poway	Tom Howard	Fire Alarm Panels Contract	12/2009
El Cajon	Dennis Davies	MBC Water System Improvements D/B	01/2010
Lemon Grove	Patrick Lund	RFP for Inventory Training	07/2010
National City	Joe Smith	Design/Build water replacement project	11/2010
Coronado	Scott Huth	Wastewater Plan update	01/2010
Otay Water District	Bob Kennedy	RFP Design of MBC Odor Control Upgrade/Wastewater Plan Update	02/2011
Del Mar	Eric Minicilli	Declined PS 2 Project	05/2011
Padre Dam	Al Lau	PS 2 Project	05/2011
County of San Diego	Dan Brogadir	RFP for As-Needed Biological Services Co.	05/2011
Chula Vista	Roberto Yano	North City Cogeneration Facility Expansion	07/2011
La Mesa	Greg Humora	confined space RFP selection panel	10/2011
Poway	Tom Howard	COSS's for both Water and WW	10/2011
El Cajon	Dennis Davies	Independent Accountant Financial Review & Analysis – All Funds	01/2012

Lemon Grove	Mike James	MBC Dewatering Centrifuges Replacement (Passed)	01/2012
National City	Joe Smith	MBC Dewatering Centrifuges Replacement (Passed)	01/2012
Coronado	Godby, Kim	MBC Dewatering Centrifuges Replacement (Passed)	01/2012
Otay Water District	Bob Kennedy	MBC Dewatering Centrifuges Replacement (Accepted)/Strategic Planning Rep	01/2012
Del Mar	Eric Minicilli	New As Need Engineering Contract	02/2012
Padre Dam	Al Lau	PA Rep. for RFQ for As Needed Design Build Services (Passed)	05/2012
County of San Diego	Dan Brogadir	PA Rep. for RFQ for As Needed Design Build Services (Cancelled project)	05/2012
Chula Vista	Roberto Yano	As-Needed Condition Assessment Contract (Accepted)	06/2012
La Mesa	Greg Humora	New programmatic wastewater facilities condition (Awaiting Response)	11/2012
Poway	Tom Howard	Optimization Review Study	01/2013
El Cajon	Dennis Davies		
Lemon Grove	Mike James		
National City	Joe Smith		
Coronado	Godby, Kim		
Otay Water District	Bob Kennedy	Strategic Planning (Volunteered, participated last year)	01/2013
Del Mar	Eric Minicilli		
Padre Dam	Al Lau		
El Cajon	Dennis Davies		
Lemon Grove	Patrick Lund		
National City	Joe Smith		
Coronado	Scott Huth		
Otay Water District	Bob Kennedy		
Del Mar	Eric Minicilli		
Padre Dam	Al Lau		
County of San Diego	Dan Brogadir		
Chula Vista	Roberto Yano		
La Mesa	Greg Humora		