



METRO TAC AGENDA
(Technical Advisory Committee to Metro JPA)

TO: Metro TAC Representatives and Metro Commissioners

DATE: Wednesday, November 16, 2011

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 [October 19, 2011](#) **(Attachment)**
2. Metro Commission/JPA Board Meeting Recap (Standing Item)
3. Financial Update (Karyn Keese)
4. Records Retention (Karyn Keese)
5. Public Utilities Capital Improvement Program Audit Report September 2011 **(Attachment)**
6. Metro CIP, 2012 and Forecast
7. Pump Station #2 Power Reliability and Surge Protection Project
8. Metro Wastewater Update
9. MetroTAC Work Plan (Standing Item) **(Attachment)**
10. Municipal Transportation Agreements (Standing Item) (Edgar Patino)
11. Review of Items to be Brought Forward to the Metro Commission/Metro JPA Meeting of [January 5, 2012](#)
12. Other Business of Metro TAC
13. Adjournment ([To the next Regular Meeting, December 21, 2011](#))

Metro TAC 2011 Meeting Schedule

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

AGENDA ITEM 1

Attachment

AGENDA ITEM 5

Attachment

Office of the City Auditor

City of San Diego

Public Utilities

Capital Improvement Program:

Steps Have Been Taken to Implement Asset Management and Planning, but Improvements Are Needed to More Effectively Manage Projects

Presentation to Metro Commission
Technical Advisory Committee
November 16, 2011



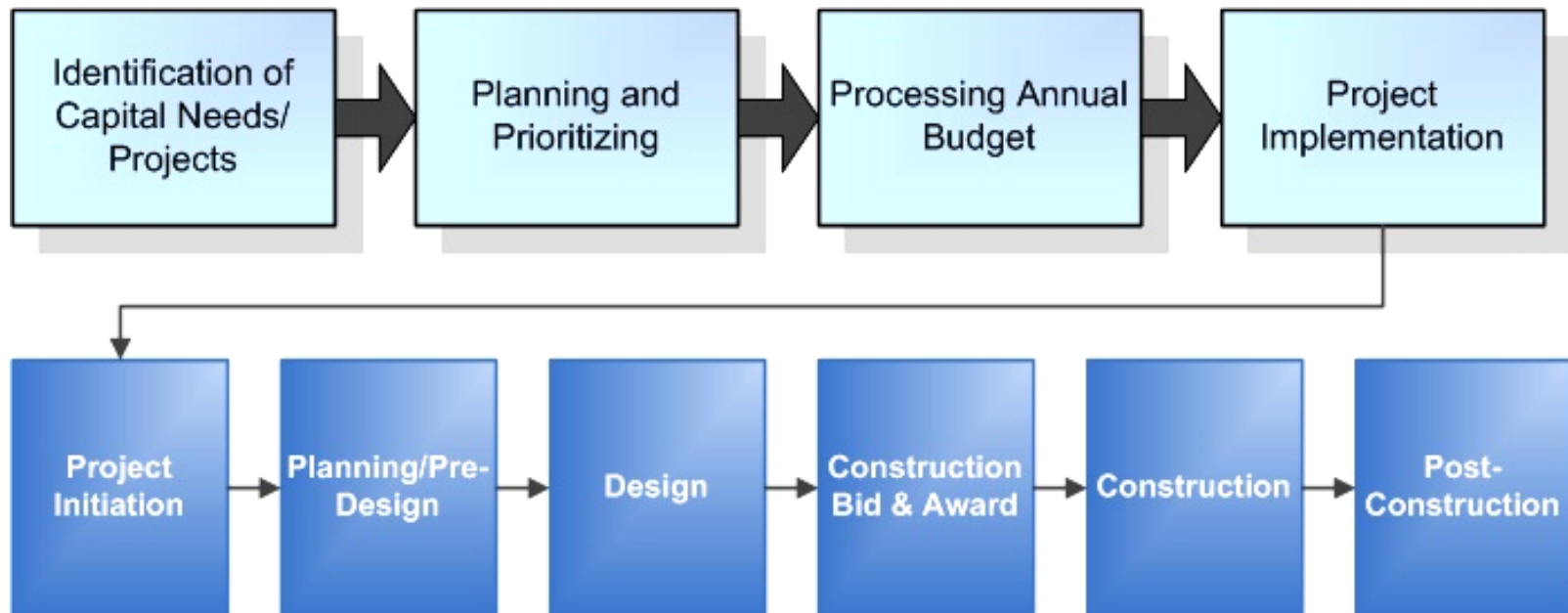
Independent • Objective • Accurate

Objectives, Scope, and Methodology

- Our overall objective was to assess the effectiveness and efficiency of the Public Utilities' Capital Improvement Program (CIP).
- To answer this question, we reviewed the (1) Public Utilities' Asset Management Program and Capital Planning; (2) Public Works/Engineerings' project delivery costs and project charges; and (3) Comptroller's Office's development of overhead rates for City Departments.
- We analyzed financial data; reviewed best practices for asset management, capital planning, and project management; and assessed project delivery data.

Background

CIP Process



Summary of Findings

1. **Public Utilities Has Taken Steps to Implement Asset Management, but Efforts Are Not Comprehensive**
2. **Improvement Is Needed for Wastewater Master Plan and Communicating Capital Needs to Stakeholders**
3. **Project Delivery Costs Are Higher Than Statewide Average for Smaller Projects, and Projects Managers Are Not Consistently Charging Appropriate Line Items Elements of Projects**
4. **The City Is Not Charging Overhead, Which Impacts Public Utilities' and Other Departments' Forecasts of Future Project Costs**

Asset Management Best Practices

Strategy, Mission, Goals and Objectives	Establish departmental goals; desired customer level of service; target levels of condition; asset management goals and performance measures.
Asset Inventory	Collect and organize detailed information on assets, including asset hierarchy; descriptive information—such as age, material, location, and repair history; and map assets in GIS.
Asset Condition and Performance	Assess assets' physical condition ; expected remaining useful life; value; performance; risk to identify existing and predicted problems/needs.
Alternatives Evaluation and Risk Assessment	Consider and assess all options to address existing or predicted needs, including evaluating life cycle costs; investment alternatives; and assess risk to determine criticality.
Implementation Plan	Prepare asset management plan using short-, mid-, and long-range initiatives to ensure that funds and staff are available.
Performance Monitoring	Develop performance measures related to goals and service levels and monitor and report outcomes to stakeholders.

Improvements for Asset Management

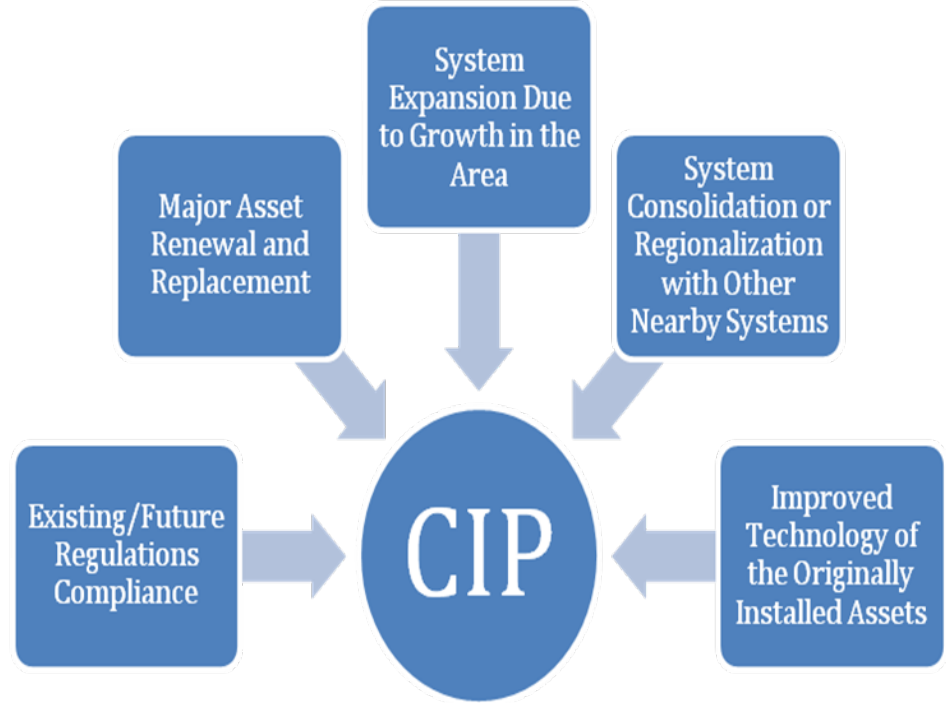
- The Department has taken various steps toward implementing asset management, but there are opportunities for improvement.
 - ♦ Lacks targets for acceptable asset condition levels and has not completed an asset management plan, but officials expect to complete the plan by the end of fiscal year 2012.
 - ♦ Recently made the decision to implement SAP EAM (a module for the City's financial system) to replace its three primary maintenance management systems—SWIM, EMPAC, and PS Tools.
 - ♦ Has assessed the physical condition of many above-ground assets, but has only assessed about one percent of its water transmission pipes.

Improvements for Asset Management

	Asset Category	Total Asset	Amount Assessed	Percentage Assessed
Wastewater	Large Pump Stations	8	2	25
	Small Pump Stations	75	75	100
	Ocean Outfalls	2	2	100
	Pipeline	3,000 miles	1,610 miles	54
	Treatment Facilities	4	3	75
Water	Dams	11	11	100
	Water Reservoirs	27	11	41
	Water Pump Stations	46	24	52
	Transmission Pipeline	505 miles	5.5 miles	1
	Distribution Pipeline	2,958 miles	0	0
	Reclaimed Water Pipes	83 miles	0	0
	Treatment Facilities	3	3	100

Drivers of Capital Planning

Master planning and capital improvement planning provide an overall perspective of developments in the City so that decision-makers can take a long-range view of future needs, projects, and priorities.



Various levels and types of planning are needed, including long-range master plans, mid-range capital improvement and financing plans, and the annual CIP budget.

Improvements for Capital Planning

- Public Utilities has developed three master plans to address capital needs—the Water Facilities Master Plan, Draft Metropolitan Wastewater Plan, and Municipal Wastewater Collection System Master Plan.
 - ♦ Only the Water Facilities Master Plan is comprehensive and in-line with best practices.
- While Public Utilities' master plans include an extensive planned infrastructure replacement program over the next 20 years, the Department is not reporting a backlog of projects that it is unable to implement due to funding constraints.

Improvements for Project Delivery

- City's average project delivery cost is just one percent higher than the statewide average of 25 percent.
- For smaller projects (between \$100,000 and \$2 million), average delivery costs are 47 percent of total costs—14 percent higher than the statewide average.
 - ♦ Officials believe project delivery costs are higher for small projects due to several uncontrollable factors, such as the City's limited access to public bond markets from 2004 to 2008.
- Public Works/Engineering does not review and report project delivery costs for each project or generating summary reports at project completion.

Improvements for Project Delivery

- Because of their scale and cost, capital projects can represent a significant risk for local governments.
 - Organizations should establish policies and procedures to support effective capital project monitoring and reporting to mitigate such risks, improve financial accountability, and enhance operational effectiveness.
- We found many projects with inaccurate project charges and the layout and functionality of the City's financial system poses much inefficiency with managing project budgets.
- This is because there is a lack of documented policies and procedures and there was a lack of training when the City switched from its prior financial system to SAP in fiscal year 2009.

City Not Charging Overhead

- We found that the City has not charged overhead since the beginning of fiscal year 2012, because it lacks an effective methodology for doing so.
- In previous years, the Comptroller's Office's methodology was based on reports from the City's former financial system.
 - ♦ The Comptroller's Office's cannot use this same methodology for fiscal year 2012 because the City's new financial system—SAP—does not require specific job orders for billing direct and indirect costs which has been a key driver to determining overhead rates for each department.
- Comptroller's officials told us they are working to develop a new methodology and expect it to be in place by the end of October 2011.

Recommendations - Recap

- We made a total of 18 recommendations to the Administration to improve asset management, planning, and project delivery of Public Utilities CIP projects.
- The City Administration:
 - Agreed with 10 recommendations;
 - Partially agreed with 4 recommendations; and
 - Disagreed with 4 recommendations (4, 15, 16, and 17) , in two cases they disagree and say that action is complete (4 and 15).
- Public Utilities and Public Works/Engineering are generally agreeing with recommendations and open to improvement, but the Administration is not acknowledging the issues we identified with SAP and appears unwilling to provide Departments with the tools needed.

Recommendations - Disagreement

4. Assess whether the current criteria and process for determining whether to develop a full Business Case Evaluation (BCE) for a project is sufficient to ensure that all appropriate capital projects are justified.
 - ♦ Ensure that BCE abstracts consistently include the necessary financial and other data to support business decisions. *(Disagree. Action completed.)*
15. Establish a policy and guidelines to streamline the process to identify costs related to construction management and the construction contract that requires:
 - ♦ all city labor for construction management, excluding city forces, to be charged to Construction Administration (WBS .06.02);
 - ♦ all construction contract vendor payments to be charged to Field Construction (Work Breakdown Structure 06.01.02); and
 - ♦ the correction of all inaccurate charges within a timely manner. *(Disagree. Action completed.)*
16. Establish a more effective process for obtaining input from Public Works/Engineering regarding SAP concerns impacting project management and address high priority issues expeditiously. *(Disagree)*
17. Develop and implement a tool to allow budget-to-date actual expenditures, such as for planning, design, and construction, to be available in one document or report. *(Disagree)*

Contact

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Recommendations

1. Work with Public Works/Engineering and Development Services to develop a documented process that insures all information and documents on completed project are provided to Public Utilities in a timely manner and include this in service level agreements with these departments.
 - ♦ The process should include a control for Public Utilities to ascertain that Public Works/Engineering and Development Services are providing all information within the agreed upon timeframe. *(Agree)*
2. Determine the frequency of which the condition of appropriate assets should be assessed and establish a schedule for these assessments, particularly for water transmission mains.
 - ♦ Reassess the most cost effective approach for assessing the condition of and prioritizing water distribution pipes as the Department develops its replacement program for asbestos cement pipes, such as the use of predictive software to forecast asset condition. *(Agree)*
3. Develop a schedule for implementation of SAP Enterprise Asset Management (EAM) and provide updates on progress to the Independent Rates Oversight Committee (IROC) and other stakeholders.
 - ♦ To ensure that all City departments, including Public Utilities, derive benefits from the Departments SAP EAM implementation, coordinate with ONESD's efforts to merge with the existing EAM system for streets and storm water. *(Agree)*
5. Provide input to the Capital Improvement Program Review and Advisory Committee (CIPRAC) regarding the prioritization ranking tool, so that appropriate changes can be made to Council Policy 800-14. *(Partially agree. Action Completed.)*

Recommendations

6. Complete a consolidated asset management plan and ensure it is in line with best practices and includes a schedule for implementation with a combination of short-, mid-, and long range initiatives to ensure that funds and staff availability are not barriers to successful implementation. *(Partially agree.)*
 - ♦ Ensure that the plan includes:
 - ✦ measurable goals and objectives;
 - ✦ clear, numeric goals for the target level of condition the Department wants to achieve for certain assets; and
 - ✦ performance measures that are linked with these goals.
 - ♦ Monitor and report out performance measures to the Independent Rates Oversight Committee, City Council, customers, and other stakeholders.
7. Develop a comprehensive Wastewater Master Plan based on a full assessment of the wastewater system's needs and best practices when it updates this plan in three to five years.
 - Provide links to other plans or documents when best practice elements are excluded from master plans. *(Agree.)*
8. Conduct regular updates to master, CIP, and financing plans.
 - ♦ Update water and wastewater master plans every three to five years. *(Partially agree.)*
9. Include the basis for determining the funding mix in future Master Plans, CIP plans, or a financing plan and make these available to the public. *(Agree. Action Completed.)*

Recommendations

10. Improve the Department's strategy for communicating capital needs to stakeholders, including providing estimated deferred maintenance and unfunded needs if needed rate increases are not secured and implications of deferring projects. *(Partially agree. Action completed.)*
11. Revise the service level agreement with the Public Utilities Department to describe specific requirements to monitor and report project delivery costs. *(Agree.)*
12. Develop project-level delivery costs progress reports from the Project Portfolio Management Integrator or other sources to track, monitor, and report planned versus actual costs on a monthly basis for all active projects. *(Agree.)*
13. Report final project delivery costs versus total construction costs at the completion of each project. Annually, compile, consolidate, and analyze performance data of completed projects to identify inefficiencies and enhance performance and value, such as by developing a Process Improvement Plan as recommended by project management guides and standards. *(Agree.)*
14. Develop a regulation process narrative that outlines charges that are appropriate direct expenses. *(Agree.)*
18. Develop an effective methodology for developing overhead rates and make retroactive adjustments if needed to ensure that departments correctly receive overhead funds as budgeted and billed in fiscal year 2012. *(Agree.)*

AGENDA ITEM 9

Attachment

**MetroTAC
2010/2011 Work Plan**

MetroTAC Items	Description	Subcommittee Member(s)
Advanced Water Purification Demonstration Project	San Diego engaged CDM to design/build/operate the project for the water repurification pilot program. <i>2/8/11: Equipment arrived 3/2011; tours will be held when operational (June/July 2011 timeframe)</i>	Al Lau
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. <i>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.</i>	Greg Humora Scott Huth Karen Jassoy Karyn Keese
Recycled Water Revenue Issue	Per our Regional wastewater Agreement revenues from SBWTP are to be shared with PA's. <i>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</i> Open issues: Capacity reservation lease payments and North City Optimized System Debt service status.	Scott Huth Scott Tulloch 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. <i>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</i>	Eric Minicilli Manny Magaña Karyn Keese
"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. <i>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. Goto www.dea.gov to find your nearest location.</i>	Greg Humora
Flushable Items that do not Degrade	Several PAs have problems with flushable products, such as personal wipes, that do not degrade and cause blockages. MetroTAC is investigating solutions by other agencies, and a public affairs campaign to raise awareness of the problems caused by flushable products. We are also working with SCAP in their efforts to help formulate state legislation to require manufacturers of products to meet certain criteria prior to labeling them as "flushable." Follow AB2256 and offer support.	Eric Minicilli
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. <i>3/11: get update on local progress and status of grease rendering plant near Coronado bridge</i>	Eric Minicilli

MetroTAC Items	Description	Subcommittee Member(s)
"Power Tariff"	Power companies are moving to a peak demand pricing scheme which negatively impacts PAs with pump stations and other high energy uses. MetroTAC wants to evaluate the new legislation and regulations, and to identify and implement cost savings efforts for the PAs. (8/2010): John Helminski at the City of San Diego is working on a sustainability project for CoSD 3/11: <i>Prepare a position paper for the JPA board to consider 4/11: John Helminski no longer works for the City. Request update from Paula.</i> 5/31/11: Roberto Yano met with SCAP representatives. Each agency should meet with their SDG&E representative to determine if there are special programs or incentives they can qualify for .Per SCAP there is no new legislation.10/26/11: We will continue to track this item through SCAP and report back when the issue is active again.	Tom Howard Paula de Sousa Roberto Yano Suggest closing this item.
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.	Scott Huth Al Lau Karyn Keese Jennifer Duffy
Recycled Water Rate Study	San Diego is working on a rate study for pricing recycled water from the South Bay plant and the North City plant. MetroTAC, in addition to individual PAs, have been engaged in this process and have 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	Karyn Keese Scott Huth Rita Bell
Metro JPA Strategic Initiatives	MetroTAC to develop success measures for the JPA strategic initiatives and suggest a schedule to complete certain items.	Scott Huth Dan Brogadir Karyn Keese
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.	Roberto Yano Manny Magaña 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.	Scott Huth Roberto Yano Al Lau Karyn Keese
Board Members' Items		
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.	Augie Caires Ernie Ewin
Rate Case Items	San Diego is starting the process for their next five-year rate case. As part of that process, MetroTAC and the Finance Committee will be monitoring the City's proposals as we move forward.	Karyn Keese
Schedule E	MetroTAC 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.	Karen Jassoy Karyn Keese

MetroTAC Items	Description	Subcommittee Member(s)
Future bonding	MetroTAC 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.	Karen Jassoy Karyn Keese Kristen Crane
Changes in water legislation	MetroTAC 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
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	Scott Huth Karyn Keese
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.	
IROC Performance Audits	Work with IROC to identify areas to be audited; participate in audit process. 8/20/10: provide the top 5 areas to audit by September IROC meeting.	Augie Caires
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.	Paula de Sousa

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	Dennis Davies Patrick Lund
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