ATTACHMENT C

City of San Diego Public Utilities Department Draft Metropolitan Wastewater Plan (May 2011)

NO.	Originator	Reference	Padre Dam and Otay Water Comments (As of 6/13/2011)	City Reponses (As of March 2012)
PA-1	Padre Dam/Otay	General	The City of San Diego is nearly complete with the draft Recycled Water Study effort required as a part of support by various environmental groups for the most recent USEPA waiver for the Point Loma WWTP. The draft May 2011 Metro WW Plan does not consider or recognize the content of the draft Recycled Water Study and the impacts that the options presented in that report would have on the information etc. in the draft May 2011 report. *The draft May 2011 report needs to be revised to address what impacts the various options in the draft Recycled Water Study have on the Metro WW plans.*	The RWS is expected to be approved by the City Council sometime in June 2012. Once the RWS is approved and the final decision on the approved alternatives and implementation plan is made, the City will evaluate for potential impacts to the Metro system and will update the 2012 MWP accordingly. Our objective is not to rehash or duplicate any efforts of the RWS. We have added a section in the MWP mentioning the on-going effort of the RWS and the future incorporation of applicable RWS recommendations.
PA-2	Padre Dam/Otay	General Comment	The City of San Diego is nearly complete with the draft Recycled Water Study (RWS) effort required as a part of support by various environmental groups for the most recent USEPA waiver for the Point Loma WWTP. The Participating Agencies (PA's) of the Metro System prepared a White Paper in response to the draft RWS effort. The City staff has a copy of the White Paper. The White Paper contains various other options that the PA's have identified that the PA's know meet the intent of the RWS purpose and objectives. The White Paper options are not considered within the content of the draft May 2011 Metro WW Plan. *The May 2011 Metro WW Plan should consider and recognize the content of the White Paper options and their impacts that would have on the information etc. in the draft May 2011 report.*	The RWS and PA's White Paper have proposed various options for implementing secondary treatment at the PLWTP . These options are considered valid for planning purposes and will be evaluated once more detailed information such as PA Options and the final decision on RWS approved alternative(s) and implementation plan are ~~is~~ available. As for current planning, the MWP will continue to assume PLWTP as advanced primary. Alternatives for secondary treatment will be included in a separate report such as the RWS.
PA-3	Padre Dam/Otay	General Comment	The draft May 2011 Metro WW Plan report should be deemed incomplete for it does not address both the draft Recycled Water Study and the PA's White Paper options which are viable and less costly than those contained within the draft Recycled Water Study. *The options addressed within these two documents will have significant impacts upon the future of the Metro System and these impacts must be addressed accordingly within the draft May 2011 Metro WW Plan report.*	See the Response to PA-1 and PA-2
PA-4	Padre Dam/Otay	Page ES-1	It is short sighted to assume that the Point Loma WWTP will remain as a advanced primary treatment facility at 240 mgd throughout the planning horizon for the May 2011 draft Metro WW Plan report. *The report needs to consider that it is possible that treatment at the Point Loma facility could be required to go the secondary at some level. Planning for that possibility is important.*	As for current planning, the 2012 MWP will continue to assume PLWTP as advanced primary. Alternatives for secondary treatment will be included in a separate report such as the RWS. A section has been added in the 2012 MWP that discusses past efforts of evaluating secondary treatment for the PLWTP. Also, please see the PA-1 and PA-2 Responses
PA-5	Padre Dam/Otay	Page ES-1	Address and discuss the likely hood of obtaining a live stream discharge permit from the RWQCB for 16 mgd at the NCWRP. This option was not covered within the draft Recycled Water Study (RWS). *If it is a viable option that the City is considering, then the RWS must address the NCWRP live stream discharge concept.*	• This is an emergency stream discharge permit. The purpose of its use is to relieve the metro sewer system capacity during extreme wet weather flow conditions. It's not a live stream like Santee lake. The City has been working with the RWQCB on the permit requirements for this project. • A brief description of the project purpose has been added to the 2012 MWP.
PA-6	Padre Dam/Otay	Page ES-1	The City needs to address and recognize that the OPRA requirement not only required the construction of 45 mgd of recycled water production capacity but also intended the marketing and reuse of the 45 mgd. *This has been and continues to be the "white elephant" that has to be addressed in an appropriate manner.*	The marketing and reuse of recycled water have been assessed and addressed in the RWS. The City has complied with the OPRA requirement to construct 45 mgd of water reclamation capacity. There is no such mandate of reuse 45 mgd.
PA-7	Padre Dam/Otay	Page ES-2	Update all of the cost estimates to today's (2011) dollar values. Do not use 2006 value dollars.	Addressed - All costs have been adjusted to 2012 ENR LA CCI
PA-8	Padre Dam/Otay	General Comment	The draft May 2011 Metro WW Plan report should be deemed incomplete for it does not address recycled water supply needs of wholesale customers such as Otay WD, City of Poway, etc. *Please address recycled water supply needs from the NCWRP and the SBWRP.*	See the Response to PA-6
PA-9	Padre Dam/Otay	General Comment	The Padre Dam MWD and the Helix WD are diligently pursuing the El Monte Valley project. Wastewater diversion into the Metro System will be reduced by a significant amount if the project becomes a reality. *The El Monte Valley Project must be addressed accordingly.*	At the preliminary analysis level (no model simulation), this project (5 mgd) will not impact or offload the PLWTP in the Metro system significantly due to the following reasons: • Mass emission rate - the sludge still returns to the sewer system and ultimately the PLWTP for treatment. • Hydraulic relief - during peak wet weather flow events, the 5 mgd has a minimal relief or impact to the Metro capacity. However, the RWS has included this project in the study and it is deemed as a feasible project. The 2012 MWP will be updated with the approved RWS alternatives including this project at the appropriate time. Please see the Response to PA-1
PA-10	Padre Dam/Otay	General Comment	The Otay WD is in need for a commitment from the City for a sufficient quantity of recycled water supply from the SBWRP both near term and long term on the order of at least 18 mgd and a commitment on assurance of a fair and reasonable price at a whole rate for the recycled water. Without such commitments the future of recycled water sales to Otay WD from the SBWRP are in jeopardy. Short wastewater flow diversions to the SBWRP, such as the City of Chula Vista Salt Creek diversion, need to occur within a few of years so that sufficient supply to Otay can be achieved to meet projected recycled water demands. *Address these facts within the report.*	• The recycled water supply to Otay from SBWRP has been addressed in the RWS study as stated "The City supplies recycled water to Otay through 2026 in accordance with the current agreement between City and Otay." • For the Salt Creek Diversion issue, there are no reliefs to offload the PLWTP in terms of mass emission rate, minimal relief for the hydraulic capacity, and non-regional benefits. The conveyance constraints will limit the operation of diversion to the summer months only. • We consider the cost of recycled water to be outside the scope of this 2012 MWP.
PA-11	Padre Dam/Otay	General Comment	The previous 2003 master plan which is the foundation for this plan is not available. *Suggest both be made available online for staff and others to reference.*	Addressed - staff will provide upon request
PA-12	Padre Dam/Otay	General Comment	The MWP needs to address the improvements proposed to USEPA as part of the last 5-year permit cycle. Include modified NPDES and 301 (h) Tentative Decision Document (TDD). *This document could serve as a tool to set the City up for success if it integrates the many studies underway and focus on the goal of achieving a future modification to the NPDES permit.*	In the modified NPDES and TDD, the City proposed improvements were to continue maintaining the ongoing program to bring additional recycled water users online in order to reduce dry-weather flow from the NCWRP basin to the PLWTP and to perform a follow up study on the prototype effluent disinfection facilities at the PLWTP. The City has been working on and addressing this commitment by conducting the RWS, bringing additional recycled water users online, and evaluating the disinfection facilities since the permit issuance. A summary of the TDD recommendations have been added to the report.
PA-13	Padre Dam/Otay	General Comment	The report focuses on MER as the single issue the City has to meet the current requirements of the modified NPDES permit. *The commitment made to USEPA to reduce flow to the PLWTP and perform other improvements are not addressed in this report.*	The RWS includes options that could offload and improve the water quality at the PLWTP.
PA-14	Padre Dam/Otay	General Comment	The planning horizon of this plan is identified as 2050 however *it doesn't include any scenario planning beyond current modified NPDES permit.*	One of the main assumptions of the MWP is that the City will continue acquiring the modified NPDES permit. Once the RWS or current studies by PAs are finalized and are deemed viable scenarios for the Metro system, the 2012 MWP will be updated accordingly. Alternatives for secondary treatment will be included in a separate report.

NO.	Originator	Reference	Padre Dam and Otay Water Comments (As of 6/13/2011)	City Reponses (As of March 2012)
PA-15	Padre Dam/Otay	General Comment	Little cost impact analysis is included. (1) *How has the change in flow and strength affected treatment costs?* *(2) What improvements will be needed if the City doesn't meet the commitment to increase the use of recycled water and isn't granted a modification to the NPDES permit? The cost impact could be substantial.*	Response corresponded to comment items: (1) We considered treatment costs to be outside of this MWP. (2) The City has added additional recycled water users since the permit issuance which met the commitment of increasing the use of recycled water. Please see Response to PA-13
PA-16	Padre Dam/Otay	General Comment	The City of San Diego's Recycled Water Demand and Delivery study is not referenced and the improvements recommended in the study are not included in the MWP. *The improvements that are recommended need to be coordinated with those proposed with the MWP.*	See the Response to PA-1
PA-17	Padre Dam/Otay	General Comment	The City is updating their 2010 Urban Water Management Plan that is addressing the Senate Bill requirement to reduce per capita water use by 20% by 2020 (SBX 7-7). *How is reduced water demand factored into this plan?*	This reduced water demand may reduce the UGR in short-term but for long-term planning purposes it is advantageous to use the higher UGR (per capita generated) and concentration to assure contingency.
PA-18	Padre Dam/Otay	General Comment	Report is hard to read, need to organize the text better and provide better transitions and logic of the report.	Addressed
PA-19	Padre Dam/Otay	Page ii	Table of contents Section 6.0 has an "Error" statement.	Addressed
PA-20	Padre Dam/Otay	ES-1, first paragraph, first sentence	States that "This plan presents an update to the November 2003 Metropolitan Wastewater Plan (MWP) which was based on the SANDAG 2020 (Series 9) flow projections." *SANDAG does not make flow projections; delete the word "flow" from the sentence.*	Executive Summary has been revised.
PA-21	Padre Dam/Otay	ES-1 , first paragraph, second sentence	States a requirement of 13,598 metric tons per year, but does not state where this requirement is from (RWQCB, EPA, OPRA?). *State source of the requirement*	Addressed
PA-22	Padre Dam/Otay	ES-1, third paragraph, second sentence	States "Table ES-1 assumes the current Ocean Pollution Reduction Act (OPRA) regulation will apply throughout the planning horizon." If the planning horizon is 2050 and it is assumed a waiver will be obtained from EPA not to go to secondary treatment by the year 2050, *explain why this assumption is reasonable.*	The MWP is based on the assumption that the City will continue to receive modified permits for the PLWTP. The City has been continuously complying with the current modified permit. Alternatives for secondary treatment will be included in separate reports such as the RWS.
PA-23	Padre Dam/Otay	ES-1, third paragraph, last sentence	States "Table ES-1 also shows facilities that are required if the 16 MGD live stream discharge is permitted at the NCWRP." *Describe these facilities in this report and regulatory compliance requirements to obtain the live stream discharge permit.*	Descriptions were added. Please see Response to PA-5
PA-24	Padre Dam/Otay	ES-1, fourth paragraph, second sentence	States that upgrades are addressed in each facility's master plan. *Summarize in this report what these proposed upgrades in a succinct manner.*	Please see Appendix E
PA-25	Padre Dam/Otay	ES-1, fourth paragraph, third sentence	*Define MBC in acronym definition.*	Addressed
PA-26	Padre Dam/Otay	ES-1, fourth paragraph, fifth sentence	States "An additional $32 million (2011 dollars) could be required for future facilities that may be needed in the distant future…). *Define how far into the future distant means.*	Please see Appendix E
PA-27	Padre Dam/Otay	ES-1, fifth paragraph, first sentence	States "The OPRA requirement of 45 mgd water reclamation capacity was met with the construction of the 30 mgd North City Water Reclamation Plant and the 15 mgd of South Bay Water Reclamation Plant." An additional OPRA requirement is to market and reuse the 45 mgd. *Address this OPRA requirement and the status of meeting the requirement.*	See the Response to PA-6
PA-28	Padre Dam/Otay	ES-1, fifth paragraph, second sentence	Add PDMWD's Santee treatment plant as a facility that could be expanded to offload flows from the Metro system. A single 20 MGD PDMWD facility would replace both MVWTP and a 7 MGD seasonal storage facility at a lower capital & O&M cost. *This would represent significant savings to the entire Metro System and the PA's.*	• Please see Response to PA-1 • If PDMWD is committed to planning and building the sludge processing facility along with the 20-MGD facility and providing sufficient analysis to show it is feasible for implementation then the 2012 MWP will be updated accordingly. At this time, we do not have sufficient information on this PDWMD proposed facility expansion that is suggested to include it in the MWP.
PA-29	Padre Dam/Otay	ES-2, first paragraph, last sentence	States "Estimates of capital cost for such a scenario are approximately $2.5 billion in February 2006 dollars." *Need to apply ENR factor to get 2011 dollars.*	Addressed - Executive Summary has been revised.
PA-30	Padre Dam/Otay	ES-2, second paragraph, last sentence	States "Depending on the availability of Navy land, the cost is estimated to be between $700 million (with Navy land) to $1.2 billion (without Navy land) in 2006 dollars." *(1) Update to 2011 dollars.* *(2) Also discuss the probability to obtain Navy land for the necessary upgrades. If the likelihood is low, then the report should focus on the higher cost estimate.*	(1) the costs have been adjusted to 2012 ENR LA CCI. (2) Texts have been added to include the BAF costs without the Navy land.
PA-31	Padre Dam/Otay	ES-2, last paragraph	States "BAF is a viable secondary treatment alternative for PLWTP, and the implementation of the BAF alternative at PLWTP will eliminate some of the facilities specified in Table ES-1. *Thus a revision to this MWP would be required." If BAF would save 1.3 B ($2.5B - $1.2B), why wouldn't this revision to the MWP include BAF?*	Since the RWS has included the BAF as part of the proposed conversion of PLWTP to secondary treatment. The inclusion of the BAF in the 2012 MWP will be determined once RWS alternative(s) are approved. At this time, a description of the technology and pilot study has been added to the 2012 MWP.
PA-32	Padre Dam/Otay	ES-3, Table ES-1	Add column for Capital Costs for each facility with a total sum at the bottom.	Addressed
PA-33	Padre Dam/Otay	ES-3, Table ES-1	*Provide an appendix to give more details on the proposed project scope, cost, and map at each facility.*	Addressed - See Section 6
PA-34	Padre Dam/Otay	ES-3, Table ES-1	*Where are the 7 MG and 14 MG Wet Weather Storage Facilities located? Could not find locations anywhere in the report.*	See page ES-7, Figure ES-1 - showed as a proposed facility at PS2
PA-35	Padre Dam/Otay	ES-3, Table ES-1	This report should explore options to offload PLWTP on a regional basis including PDMWD's Santee WRF.	See the Response to PA-1 and PA-9
PA-36	Padre Dam/Otay	ES-3, Table ES-1	Where is the cost of proposed upgrades, rehabilitations and replacement of existing facilities?	Please see revised table ES-2
PA-37	Padre Dam/Otay	ES-5, Table ES-2	Add a total at the bottom of the cost column.	Addressed
PA-38	Padre Dam/Otay	ES-5, Table ES-2	Need a better timeline or explanation on "TBD".	Addressed - See appendix E
PA-39	Padre Dam/Otay	ES-6, Table ES-3	On line item "Vault Drainage System Implementation" has total dollar amount of "TBD". *Show an initial estimate to relay a relative magnitude of this project.*	Addressed - See appendix E
PA-40	Padre Dam/Otay	ES-6, Table ES-3	Six start dates indicate TBD. *Why can't a start date be estimated?*	Addressed - See appendix E
PA-41	Padre Dam/Otay	Section 1.1	*The purpose of this plan is not well defined and since it isn't available to the public, it isn't clear who will use it.*	Addressed
PA-42	Padre Dam/Otay	1-1, Section 1.2, first paragraph	Replace "2003 WMP" with "2003 MWP".	Addressed
PA-43	Padre Dam/Otay	1-1, Section 1.2, second paragraph	Lists highlights of the 2003 MWP and shows item 1 to be construction of a secondary treatment facility in South Bay by 2018. *This should be shown in the ES Tables.*	This is already in table ES-2 (item 3) under column "ONLINE BY (2003 MWP)"

NO.	Originator	Reference	Padre Dam and Otay Water Comments (As of 6/13/2011)	City Reponses (As of March 2012)
PA-44	Padre Dam/Otay	1-1, Section 1.2, third paragraph	Lists highlights of the 2011 MWP, item 2 describes 7 MG and 14 MG Wastewater Storage Facilities with different years of construction. *This paragraph is very confusing and does not appear to be consistent with the ES.*	• The years listed in the highlights match table ES-2 • Paragraph has been revised
PA-45	Padre Dam/Otay	Section 1.2	Under highlights of the 2011 MWP first item the need for additional recycled water from the SBWRP should be considered. Also, given the need to divert wastewater away from the Point Loma WWTP as per the Recycled Water Study shows a need for additional treatment at the SBWRP sooner not later.	Please see the Response to PA-1
PA-46	Padre Dam/Otay	Section 1.2	*Provide copies of the references listed with the MWP. See general comments for reference documents relevant to this plan.*	Documents can be provided upon request.
PA-47	Padre Dam/Otay	Section 1.2	*Omit highlight reference to 2003 MWP.*	Addressed - Section has been revised
PA-48	Padre Dam/Otay	Section 1.2	Highlight number 1 of this MWP contradicts City proposal made to USEPA during the last 5-year permit cycle. *Consider omitting highlights. See TDD for details of proposed improvements.*	Please see Response to PA-13, the TDD required the City to report the Recycled Water Study results back to the Coastal Commission and will continue efforts to bring new recycled water users online.
PA-49	Padre Dam/Otay	Section 1.2	*Highlight number 2 doesn't make sense. WWSF is not defined. Consider omitting highlights.*	Paragraph has been revised
PA-50	Padre Dam/Otay	Section 1.2	Highlight number 4 is confusing. *Simplify or consider omitting highlights.*	Paragraph has been revised
PA-51	Padre Dam/Otay	Section 1.2	No introduction of Table 1.1. *What is it for?*	Addressed - sentence added for introduction to table 1-1
PA-52	Padre Dam/Otay	Section 1.3	Many of the elements described in this section are not included in the MWP including: · Discussion on markets for reclaimed water · New technologies · Local issues important to the PA's	See the Response to PA-1
PA-53	Padre Dam/Otay	1-3, Section 1.3.1, first two sentences	States "Per capita wastewater flows have been declining since the early 1990s which primarily reflects the success of the City's water conservation programs implemented in response to drought conditions. Another factor that contributed to the decrease is the increasing cost of potable water." Price and conservation go hand in hand. *Revise text to better define the relationship.*	Addressed
PA-54	Padre Dam/Otay	1-3, Section 1.3.1, third sentence	*(1) What is the timeframe for "new" data? Define the frequency of monitoring on a "regular basis".* *(2) Re-write third and fourth sentence to clearly explain why the "projections" assist in determining location, sizing, and staging.*	Response corresponded to comment items: (1) Replace with "annual basis" (2) Addressed
PA-55	Padre Dam/Otay	Section 1.3.1	*Replace City with "regional conservation programs"*	Addressed
PA-56	Padre Dam/Otay	Section 1.3.1	Include specific information on the measured reduction in flow and the load projections. *How will state legislative requirement SBX 7-7 to reduce per capita use by 20% by 2020 impact both projections?*	Addressed
PA-57	Padre Dam/Otay	Section 1.3.1	*Describe the new flow monitoring program generating the new flow data.*	Addressed
PA-58	Padre Dam/Otay	Section 1.3.1	*Describe how the changes in flow and load will impact NPDES and TDD requirements.*	• The recent trend indicates a flow decrease and load increase would impact the NPDES TSS discharge and system hydraulics. However, this MWP assumed the conservative approach by using the highest concentration observed in the last 5 years and 10-year return AADF (accepted by Metro TAC) which would provide sufficient safety factor for these planning purposes. • Addressed - above description is being mentioned throughout the report in the appropriate section.
PA-59	Padre Dam/Otay	Section 1.3.1	*How will current billing to PA's be affected by the change in flow and load. Will cost to treat lower flow with higher load change?*	The PA's billing is considered to be outside the scope of the 2012 MWP and should be handled separately.
PA-60	Padre Dam/Otay	Section 1.3.2	*Include reference to TDD mentioned earlier. The City proposed improvements in the TDD that need to be addressed in the MWP.*	See the Response to PA-12 & PA-48
PA-61	Padre Dam/Otay	Section 1.3.2	Second paragraph; Mixing past tense with future dates makes this section difficult to follow. *Consider adding a simple table for each year of the permit to identify the target limits. What happens after this next 5-year cycle?*	Paragraph has been revised. The PLWTP will remain a CEPT facility in accordance with the 2012 MWP.
PA-62	Padre Dam/Otay	1-3, Section 1.3.2, first sentence	States "In June 2010, the California Regional Water Quality Control Board (San Diego Region) and the US Environmental Protection Agency Region IX (USEPA) Joint announced the decision to approve the City's request for a renewal NPDES permit Section 301 (h) and (j)(5) modification from secondary treatment of discharges from the Point Loma Wastewater Treatment Plant (PLWTP)." *Verify that the June 2010 date is correct.*	Paragraph has been revised.
PA-63	Padre Dam/Otay	1-3, Section 1.3.2, second paragraph	Ensure you are appropriately using the phrase "In general" regarding the NPDES permit. *Verify that the TSS effluent limit is reduced by only "1 mt/yr".*	Paragraph has been revised.
PA-64	Padre Dam/Otay	Section 1.3.3	The recycled water requirements are more complicated than described. The City also received approximately $69.5 M in construction grants from the USEPA for the construction of the NCWRP. Conditions of that grant included the following goals: (1) A minimum of 75% of the plants design capacity (at least 22.5 MGD) mus be treated at NCWRP. Of these flows the City will beneficially reuse 10% upon certification (2) The City will attempt to reuse 25% of the flows (5.6 MGD) into the plant by 12/31/2003 (3) The City will attempt to reuse 50% of the flows (11.25 MGD) into the plant by 12/31/2010 (4) As long as the City is making attempts at maximizing beneficial reuse of recycled water, the EPA does not include penalties for failing to meet the 50 percent reuse goal. In FY 2008, an average of 6.25 MGD of recycled water was used from the NCWRP, including in-plant usage.	The City has reported on the condition of the grant requirements to the EPA. The NCWRP is currently treating approximately 9 mgd or 40% of total plant flow to tertiary treatment standards. The approximate 9 mgd is treated to meet the City recycled water customers and plant use demands. Given the condition of the current reclaimed water demands, the City has realized that the effort to meet the condition of the grant specified goals was proven too costly and inefficient. We have informed EPA that NCWRP is temporarily reduced total treatment of 22.5 mgd to the amount needed to meet the current demands. This change will not have any impact on the City's ability to meet current or future demands for reclaimed water and the City will still maintain its commitment to maximizing reclamation and beneficial reuse. This treatment reduction will save operational costs and benefit the ratepayers.
PA-65	Padre Dam/Otay	Section 1.3.3	In the TDD, the City proposed to bring additional recycled water users online to reduce dry-weather flows from both reclamation plants. The TDD is dated 12/2/2008 so progress is needed soon for the next 5-year cycle.	See the Response to PA-6, the City has been bringing new recycled water users since the TDD.

NO.	Originator	Reference	Padre Dam and Otay Water Comments (As of 6/13/2011)	City Reponses (As of March 2012)
PA-66	Padre Dam/Otay	Section 1.3.3	Describe recycled water demand for both reclamation plants and how it has changed due to conservation efforts. For example, the City has only two commercial recycled water accounts served from the SBWRF. IBWC can now produce recycled water so demands are expected to decrease. *What is the City doing to increase the beneficial reuse for the next 5-year cycle?*	See the Response to PA-6
PA-67	Padre Dam/Otay	Section 1.3.4	*More information is needed to identify the studies performed in support of this MWP.*	Addressed - this section has been expanded.
PA-68	Padre Dam/Otay	Section 1.3.4	*More information on spill prevention should be provided as well as historic data documenting the progress made to date.*	• The peak flow management strategy was implemented in 2003 and actually activated on Feb 21, 2005 to prevent the overflow in the north metro interceptor. • In addition to I/I annual evaluation of the overall system, the City has an aggressive trunk sewer cleaning program and a state of the art spill detection system which assists in Spill Prevention.
PA-69	Padre Dam/Otay	Section 1.3.5	The City proposed prototype effluent disinfection facilities at the PLWTP in the TDD. City also committed to do follow up studies. *What is status of this work? What future modifications are proposed?*	The City has been working on and continuing this effort on making adjustments to the prototype. There are no proposed modifications at this time.
PA-70	Padre Dam/Otay	1-4, Section 1.3.3, first paragraph	States "The OPRA legislation requires the City to provide a total of 45 mgd water reclamation capacity by the year 2010. This requirement was met with the construction of the 30 mgd NCWRP and the 15 mgd South Bay Water Reclamation Plant." This is true for capacity but text should also address actual RW use.	See the Response to PA-6
PA-71	Padre Dam/Otay	1-4, Section 1.3.4, first paragraph	Section addresses Hydraulic Limitation and Spill Prevention. *Measures should also include a program to limit I&I which is cheaper than building new facilities.*	Addressed
PA-72	Padre Dam/Otay	1-4, Section 1.3.4, first paragraph	*Provide brief description on why the "2011 MWP recognizes that higher than expected flows occur during storm events."*	Addressed
PA-73	Padre Dam/Otay	1-4, Section 1.3.4, first paragraph, last sentence	Mentions "... peak flow management strategy,..." *Define/discuss what the peak flow management strategy is.*	Addressed
PA-74	Padre Dam/Otay	1-4, Section 1.3.5, third paragraph	*Better explain the BAF system with regard to it being "robust".*	The reference to "robust" in the BAF has been removed in the MWP. The MWP assumed the PLWTP as a CEPT facility and BAF brief descriptions have been added. Any detailed study or evaluation of secondary treatment for PLWTP will be addressed in a separate report or study.
PA-75	Padre Dam/Otay	2-1, Section 2.1, second paragraph	States "These are three modifications reflected in the 2011 flow projections that attribute to the decrease in projected flow:" *What about recognition for what I&I reductions will do to the flows?*	Addressed - this Section has been expanded.
PA-76			Change "The residential population has dropped" and "The employment population has dropped" to "The residential population is projected to drop" and "The employment population is projected to drop".	Addressed
PA-77	Padre Dam/Otay	2-1 and 2-2, third bulleted item	This text is convoluted and not clear. These flow rates should be better defined. The flow rates stated seemed to correspond to annual average daily flow for dry year vs. annual average daily flow for wet year. *Please confirm.*	Addressed
PA-78	Padre Dam/Otay	Section 2.1	SANDAG's demand projections do not factor in the conservation targets of SDX 7-7. *Discussion should be included.*	Please see Response to PA-17
PA-79	Padre Dam/Otay	Section 2.1	First bullet; *Description is confusing. Show in table the differences over time.*	Addressed
PA-80	Padre Dam/Otay	Section 2.1	Second bullet; *Explain what a UGR is and show how the unit generation rate has changed over time (at least last 15 years) as a result of lower water use. Is the UGR expected to change over time? How could SBX 7-7 affect this rate and projections?*	A chart has been added to depict the UGR historical data. Please see Response to PA-17
PA-81	Padre Dam/Otay	Section 2.1	Table 2.1 For year 2010 the actual flows by FY and the FY 2011 AADF Projections should be the same number not 40 plus mgd difference for 166 to 204 in the same year. This makes no sense. *Revise.*	Added a description below. The actual FY10 annual average flow is 166 MGD while the projected FY10 flow is 201 MGD. The actual flow is the measured flow during that FY and it could be associated with 1-year return flow or 2 year return flow (wet weather component). The projected flow includes the wet weather flow of a 10-year return flow which can occur at any time, which the system should be designed for.
PA-82	Padre Dam/Otay	Section 2.1	Figure 2.1 *Is the projection that daily flows have increased in one year from 166 MGD to over 200 MGD realistic for planning purposes?*	See response to comment PA-81 and also see the latest projections in FY2011 column. The flow increase is projected to be 1.2 mgd per year between 2011 and 2015. Based on historical storm events, during a sizeable storm event, the peak wet weather flow in the system is about twice the peak dry weather flow.
PA-83	Padre Dam/Otay	Section 2.1	Figure 2.2 SANDAG's growth projections also include a reduction in the number of single family homes and more multi-family homes. *This should also lower the UGR.*	UGR was established based on population and flow generation per capita instead of EDU. Also, this is explained in Section 2.1
PA-84	Padre Dam/Otay	Section 2.2	*If the last five FY were used to calculate load projections, why does Figure 2.3 show a significant increase in the annual load? This appears as unrealistic.*	Chart has been revised in terms of TSS. This is based on the highest concentrations of the last five years. Please note that this is a 10-yr return AADF used for planning purposes and the load increase is proportional to the flows.
PA-85	Padre Dam/Otay	2-2, last sentence	States "A detailed description of flow projection method is presented in APPENDIX A for reference." *Appendix A is not clear, needs more detail on source of numbers.*	We believe the content is appropriate
PA-86	Padre Dam/Otay	2-3, Table 2.1	*Under column for Calendar Year, missing years 2004 and 2006 through 2009.*	The flow projections are presented on five year intervals from 2000 to 2020. The 2003 data point was included only to represent the projections made in the 2003 MWP. The 2003 data point remains in order to compare this 2012 MWP to the 2003 report.
PA-87	Padre Dam/Otay	2-3, Table 2.1	Under column for FY 2011 AADF Projections, explain the rationale for using a flow that is approximately 40 mgd greater than the actual flow measured for Calendar Year 2010. *This then becomes the starting point for the flow projections.*	Please see Response to PA-81 & PA-82
PA-88	Padre Dam/Otay	Section 2.3	*What benefit is the City seeing after many years of VC sewer replacement with PVC? Has this changed the I/I rate for these segments?*	This has been addressed in Section 1.3.4 for I/I related comments
PA-89	Padre Dam/Otay	Section 2.3	*Is the assumption of a 1.5% growth per year accurate for basins that are mostly built out? Explain why the growth rate for I/I tied to population was flawed.*	SANDAG projected population growth to be a rate of about 1% per year. A hydrologic modeling study concluded that I/I increases at a rate of 1.5% per year. So it is a half of a percent more than the growth rate. Even the City of SD has a pipeline replacement program of 45 miles per year, I/I remains high. I/I reduction is a metro effort. I/I tied to population was flawed. I/I has some correlation to population but is not 100% correlated. I/I is correlated to the length and condition of the pipes.
PA-90	Padre Dam/Otay	Section 2.3	*Discussion on project alternatives that would reduce the flow and load at the PLWTP are needed. See comments below for project alternatives for Section 3.3.*	Please see Response to PA-1
PA-91	Padre Dam/Otay	2-4, Table 2.2	Move up to discussion of UGR.	We believe that the table 2-2 is placed in appropriate location

NO.	Originator	Reference	Padre Dam and Otay Water Comments (As of 6/13/2011)	City Reponses (As of March 2012)
PA-92	Padre Dam/Otay	2.4, Table 2.2, second foot note	States "(2) Highest UGR is based on the highest actual UGR experienced within the system for the past 5 years from 2006-2010." UGR is calculated based on actual flow observed not "experienced". *Why not take 75 percentile of the past 5 years average, especially if you see a declining trend in UGR with slight population increase?*	• The word "experienced" is replaced with "observed" • We believe that to be consistent in comparing and to be conservative for planning purposes, using the highest UGR is appropriate
PA-93	Padre Dam/Otay	Figure 2.4	Include historic data as a reference.	This is based on hydrologic model output and the data is embedded within the model.
PA-94	Padre Dam/Otay	2-5, Figure 2.1	The 2011 10-YR Return AADF Projection at year 2010 starts approximately 34 mgd above the actual flow for 2010. This is extremely conservative. *Start projection at the point of actual flow recorded for 2010 which appears to be approximately 165 mgd.*	Please see Response to PA-81 & PA-82
PA-95	Padre Dam/Otay	2.6, Figure 2.2	*Explain what the SANDAG series are that are listed in the report so the non-technical readers will understand their meanings & planning implications.*	Addressed
PA-96	Padre Dam/Otay	2-7, Section 2.2	States that "Figure 2.3 indicates that TSS and BOD loads have varied considerably in the past". *Need to better define the past. Over the last 10 years the variation has not been "considerable". Also, has TSS and BOD varied as compared to each other or individually?*	Please see fig. 2-2 for historical UGRs
PA-97	Padre Dam/Otay	2-7, Section 2.2	This is the first time COD is described. Previous paragraph discussed BOD is part of permit requirement. *Need to explain the relationship between COD to BOD and how it ties to the permit requirements.*	Addressed - COD is removed from the MWP.
PA-98	Padre Dam/Otay	2-7, Section 2.2, second paragraph, last two sentences	Read "The TSS and BOD concentrations applied to this MWP report were 297 mg/l TSS and 297 mg/l BOD. It is coincidental that both concentrations are the same." There are differences in the historical fluctuations in TSS and BOD strength (not directly related), even though their concentrations happen to coincide at one point in time, *if the above text is correct, how can they be projected to be the same in the future?*	The highest system wide concentration of TSS and BOD based on data for the last 5 years is 297 mg/l for both. For planning purposes, in this report, the highest concentrations observed in the last 5 years are used as the basis/assumption for projection. The conservative values are used to assure sufficient contingency. For consistency with past MWP, this methodology will be applied to the 2012 MWP and the concentration values are assumed constant in the future.
PA-99	Padre Dam/Otay	2-7, Section 2.3, third paragraph, second and third sentences	States "Rainfall dependent I/I and groundwater infiltration were separately modeled, accounting for the effects of antecedent rainfall. The antecedent rainfall effect is what accounts for the dramatic increase in I/I (expressed as a percentage of rainfall) that occurs if a storm event is preceded closely by other storms as opposed to occurring after a dry weather period." *What about attenuation between the two factors?* *There are attenuations even after consecutive rain events. Additionally, if the pipe is full, then infiltration stops. You can't add groundwater infiltration and storm events directly otherwise it is too conservative.*	The GWI is assumed to be 2.2% of the dry weather base flows which are based on the actual flow meter data. We are aware of the attenuation between the two factors. The system wide model can simulate this attenuation. Since this is based on a long-term planning horizon and the basis of a 10-year return AADF (which is a combination of both factors), this will have minimal impact.
PA-100	Padre Dam/Otay	2-9, Figure 2.3	Explain how the projected load (beyond 2010) was determined.	Address - Based on projected flow and highest concentrations observed in the last five years
PA-101	Padre Dam/Otay	2-10, second paragraph	States "In the 2003 MWP, the I/I component was generally assumed for planning purposes that rate of I/I will increase proportionally to the population growth. After 2003 MWP, the I/I component was reevaluated using the hydrological model that based on the historical flow monitoring data from the wet years of 1998 and 2005 to quantify the average annual increase in I/I. Over those seven years, the hydrological model indicated that I/I appeared to have increased by about 1.5 percent per year. For the 2011 MWP, a rate of increase in I/I of 1.5 percent per year was assumed for projected peak flows. This rate of increase is considered to be conservative as it does not account for any potential reductions in I/I as a result of the sewer rehabilitation and replacement projects that will be performed in the service area. Representative results of the peak flow analysis are shown in Figure 2.4." *This appears to be extremely conservative. Not only is I/I projected to increase, there is no mention of an I/I reduction plan and what effect the I/I reduction improvements would have on the flow rate. It is much more cost effective to reduce the I/I than to build facilities to handle the increased flow.*	Please see Section 1.3.4
PA-102	Padre Dam/Otay	2-11, Figure 2.4	*Explain where the flows shown in this Figure are located (Point Loma or total system?).*	Addressed
PA-103	Padre Dam/Otay	Figure 3.1	*The single year jump of over 4,000 mt. is not realistic. Include data for calendar year 2010.*	Please see Response to PA-84
PA-104	Padre Dam/Otay	3-1, Section 3.1, second paragraph, second section	States "The model predicts the effluent loadings for any given year, considering the changing makeup of the influent streams as new facilities are brought into service." *Explain what type of new facilities would change the global makeup of the influent significantly.*	Addressed
PA-105	Padre Dam/Otay	3-1, Section 3.2, first two sentences	State "Historical performance of the PLWTP suggests that the regulatory requirements of 80 percent TSS removal and 58 percent BOD removal are achievable on a long-term basis. The primary requirement driving the need for new treatment facilities is the MER limit for annual TSS discharged from the Point Loma Ocean Outfall." *(1) State that these removal rates are for advance primary treatment.* *(2) If PLWTP can consistently meet regulatory requirement then why is EPA pushing for an upgrade of treatment facilities. Need more context and explanation on this paragraph.*	Text will be modified to reflect suggestions. Note that Chemical Enhanced Primary Treatment (CEPT) is also referred to as "Advanced Primary Treatment" wherever referenced in the report.
PA-106	Padre Dam/Otay	3-1, Section 3.2, bullet item number 3	*Discussion on "low end" and "high end" rates, 5 and 10 year averages and years of remaining compliance are confusing and do not match the graphical representation on Figure 3.1.*	Addressed
PA-107	Padre Dam/Otay	3-3, Figure 3.1	*Explain the spike in the projected TSS mass emission rate between years 2009 and 2010. Provide a legend that clearly defines the lines on the graph.*	Addressed
PA-108	Padre Dam/Otay	3-4, Section 3.3, first paragraph	States "The year in which the MER limit will be reached is sensitive to several variables and assumptions in the analysis that are uncertain at this time. The timing of implementing the proposed facilities to meet the MER limit due to uncertainty can potentially influence by a number of factors." *Paragraph is unclear, rephrase. Provide explanation on these uncertainties and factors.*	Addressed

NO.	Originator	Reference	Padre Dam and Otay Water Comments (As of 6/13/2011)	City Reponses (As of March 2012)
PA-109	Padre Dam/Otay	Section 3.3	Factors which provide the City longer time to implement proposed facilities include; *(1) Increase recycled water sales and production from the SBWRP* *(2) Route more wastewater to the SBWRP to offset the PLWTP. Unlike the NCWRP, secondary treatment would go directly to the SBOO bypassing the PLWTP. This is also a cheaper option than what the City is now doing at the NCWRP.* *(3) Increase recycled water sales and production from the NCWRP* *(4) San Pasqual Conjunctive Study may allow flows from Rancho Bernardo be routed to HARRF.* *(5) East county alternative to divert ~20MGD away from the PLWTP* *(6) Upstream reclamation plant at Qualcomm* *(7) City of Chula Vista 6-MGD reclamation plant* *(8) Expansion of the Otay WD Ralph W. Chapman WRF to offload SVSD* *(9) A copy of PA options prepared for Metro JPA TAC is included with these comments.*	(1) Please see Response to PA-6 (2) Please see Response to PA-1 and PA-10 (3) Please see Response to PA-6 (4) We will evaluate the study once it is finalized. (5),(6),(7) and (8) This is included in the RWS. Please see the Response to PA-1
PA-110	Padre Dam/Otay	3-4, Section 3.3, second paragraph, first bullet	States the assumption that "The City is able to obtain a higher MER limit than 13,598 mt/yr in its next permit" *Obtaining an increase in the MER is an unlikely possibility*	Addressed
PA-111	Padre Dam/Otay	3-4, Section 3.3, third paragraph, and first bullet	States "On the other hand, factors under which will provide the City shorter time to act before the MER limit is reached are as follows: • The influent TSS load increases faster than anticipated, due to either faster growth in population or industry and/or higher per capita loads." *This assumption is not likely to happen.*	Addressed - The growth may not be as aggressive as the historical housing boom. However, industrial growth can contribute higher concentrations of TSS, which would impact the loads.
PA-112	Padre Dam/Otay	3-4, Section 3.3, third paragraph, and second bullet	States "On the other hand, factors under which will provide the City shorter time to act before the MER limit is reached are as follows: • Water treatment plants upgrade their treatment processes and are allowed to discharge their sludge to the sewer system. Current planning assumes that no additional water treatment sludge will be discharged into the Metro system" *Why list this as a factor if there are no plans to discharge sludge into the sewer system?*	Addressed
PA-113	Padre Dam/Otay	3-4, Section 3.4, last sentence	States "Even though NCWRP's existing footprint is sufficient for expansion to accommodate additional flows, the MVWTP was proposed to precede the NCWRP Phase II because the projected wastewater flow generated in the North City Basin is insufficient to meet the proposed additional 10 mgd capacity of NCWRP Phase II." *This report should examine regional approaches to offload PLWTP and reduce overall cost of Metro System. A 20 MGD facility in Santee would reduce the overall cost of system significantly.*	These regional approaches were included in the RWS. Please see Response to PA-1
PA-114	Padre Dam/Otay	4-1, Section 4.2, paragraphs thee and four	State that PS2 was originally design for 432 mgd but historical data indicate it only has the capacity of 413 mgd. *Why should the participating agencies pay for any costs associated with the impacts of this shortfall in capacity? Especially, the report inferred that this shortfall caused upstream transmission bottlenecks.*	Addressed
PA-115	Padre Dam/Otay	4-2, second paragraph	States "Using the system wide TSS removal rate experienced in the last ten years without live stream discharge, the construction of a total of four Wet Weather Storage Facilities would be required (See Figure 4.1)." *It is unlikely a live stream discharge (NPDES) permit from the RWQCB given the current effluent quality at NCWRP unless significantly investment is made to treatment processes.*	Please see response to PA-5
PA-116	Padre Dam/Otay	4-2, Section 4.4	*What about a program to reduce I&I as a hydraulic relief strategy?*	Please see Section 1.3.4
PA-117	Padre Dam/Otay	4-2, Section 4.4	States "NCWRP currently has no outfall or sufficient baseline demand and therefore provides only limited hydraulic relief to the downstream facilities, as outlined in the Peak Flow Management Strategy." *This is one of the biggest problems with expanding NCWRP as it will only provide limited hydraulic relief to downstream facilities. Consideration should be given to expanding the PDWMD's Santee Plant as it will provide substantial hydraulic relief to downstream facilities and will negate the need to build a MVWTP in the future.*	This has been addressed in the RWS. Please see the Response to PA-1
PA-118	Padre Dam/Otay	Section 4.3	*Explain the live stream discharge option proposed in this section or provide a link for reader to get details.*	Staff is still working with the RWQCB on the proposed options to define the requirements. Future MWP will incorporate this once the final decision is made.
PA-119	Padre Dam/Otay	Section 4.4	*See other options noted in Section 3.3 above.*	Please see response to PA-109
PA-120	Padre Dam/Otay	Section 4.4	*Diverting flow to the SBWRP appears to solve several issues for the City at once. It reduces flow to the PLWTP, provides wet weather storage, and provides hydraulic relief. Flow to the SBWRP could be diverted with very little expense today and should be a priority project with this MWP.*	This is included in the RWS. Please see Response to PA-1 and PA-10
PA-121	Padre Dam/Otay	4-4, Figure 4.1	Figure 4.1 shows Wet Weather Storage Requirement/Availability. Better I&I control is a better strategy than providing more expensive Wet Weather Storage. *Consider an aggressive I&I control program*	Please see Section 1.3.4
PA-122	Padre Dam/Otay	4-5, Figure 4.2	*This figure shows Wet Weather Storage Requirement/Availability should live stream discharge be obtained at NCWRP. It is unrealistic to carry forward the alternative with live stream discharge at NCWRP. Padre Dam is the only facility in San Diego County that has a live stream discharge permit due to its impeccable compliance records for the past 50 years.*	This is an emergency stream discharge which is different from Padre Dam's discharge. Will change the text to reflect the actual intent of the project.
PA-123	Padre Dam/Otay	Section 5	*Include PA options prepared for Metro JPA TAC from Section 3.3 comments above.*	This has been addressed and included in the RWS. Please see the Response to PA-1
PA-124	Padre Dam/Otay	5-1, Section 5.1, first paragraph	*Discusses Wet Weather Storage facilities at PS2 but does not address costs for these facilities.*	Addressed
PA-125	Padre Dam/Otay	5-1, Section 5.4	*By building a plant at Santee you would eliminate the need to construct the Mission Valley Treatment Plant.*	This has been addressed and included in the RWS. Please see the Response to PA-1
PA-126	Padre Dam/Otay	5-2, Section 5.6	*This section addresses the Mission Valley Sludge Pipeline. This pipeline will not be needed if a 20 mgd plant is built at Santee.*	This has been addressed and included in the RWS. Please see the Response to PA-1
PA-127	Padre Dam/Otay	Section 5.3	*Include City of Chula Vista Salt Creek interceptor flow diversion (~3.2 MGD) to the SBWRP as a project.*	This is included in the RWS. Please see the Response to PA-1 and PA-10
PA-128	Padre Dam/Otay	5-3, Section 5.13	In discussing the Point Loma Parallel Ocean Outfall, it is stated that the existing outfall was constructed in the 1960's and that the pipe will reach its useful life in the future. *When in the future is this facility planned to be replaced or paralleled?*	Addressed

NO.	Originator	Reference	Padre Dam and Otay Water Comments (As of 6/13/2011)	City Reponses (As of March 2012)
PA-129	Padre Dam/Otay	6-1, Section 6.3	*When discussing Large Pump Stations Planned Improvements/Upgrades also address improvement/upgrades to the force mains associated with these facilities.*	Addressed
PA-130	Padre Dam/Otay	6-3, Table 6.5	This Table addresses the East Mission Gorge Pump Station Projects. In the Status Column instead of saying Future, *give estimated year. Add line items for pump, mechanical, electrical, I&C and odor control replacement/rehabilitation.*	Addressed
PA-131	Padre Dam/Otay	Appendix A	*This appendix is not written clearly.*	Please see response to PA-85
PA-132	Padre Dam/Otay	Appendices	*Include backup documentation for each of the 6 items mentioned in Appendix A.* *Suggest this report also include Modified NPDES and TDD since the City proposed to build the improvements or perform the studies noted in these documents.*	NPDES (181 pages) and TDD (108 pages) and other Appendix documents are too excessive in length to append to the report. NPDES permit and TDD can be downloaded from the City and USEPA websites.