



**METRO TAC AGENDA**  
**(Technical Advisory Committee to Metro JPA)**

**TO:** Metro TAC Representatives and Metro Commissioners

**DATE:** Wednesday, September 15, 2021

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

**LOCATION:** The health and well-being of the MetroTAC members/alternates and participating staff during the COVID-19 outbreak remains our top priority. The MetroTAC is taking steps to ensure the safety of all involved by holding its September meeting electronically via Zoom.

E-mail containing information on how to participate in the meeting will be distributed to the MetroTAC members e-mail list and approved San Diego City Staff by Monday, September 13, 2021 at 5:00 p.m. If you do not receive the e-mail, please contact Lori Peoples at [lpeoples@ci.chula-vista.ca.us](mailto:lpeoples@ci.chula-vista.ca.us) PRIOR to the meeting date

- 
1. Review and Approve MetroTAC Action Minutes for the Meeting of July 21, 2021 (**Attachment**)
  2. Metro Commission/JPA Board Meeting Recap (Standing Item)
  3. **ACTION:** Consideration and Possible Action to Recommend to the Metro Commission/Metro Wastewater JPA, Approval of California Water Technologies LLC Contract for Ferrous Chloride for use at Water Treatment Plants over next 5 Years (Craig Boyd) (**Attachment**)
  4. **ACTION:** Consideration and Possible Action to Recommend to the Metro Commission/Metro Wastewater JPA, Approval of Hawthorne Machinery Company Contract for Parts, Technical and Repair Services for Caterpillar Co-Generation Engines, Backup Generators, and Associated Switchgear located at Various Public Utilities Facilities (Craig Boyd) (**Attachment**)
  5. **DISCUSSION/ACTION:** Consideration and Possible Action for the Establishment of a MetroTAC Working Group (CV, LM, NC expressed interest) on the Proposed Mutual Aid Agreement with Wastewater Agencies (Dan Brogadir/Peejay Tubongbanua)
  6. **UPDATE:** Industrial Wastewater Control Committee (Beth Gentry) (**Attachments**)
    - a. Follow Up Performance Audit PUD IWCP Part I
    - b. Follow Up Performance Audit PUD IWCP Part II
    - c. Industrial User Fee – SD Outreach
    - d. Memo to Chair Jones – Industrial Wastewater Discharge Permit Inventory Status
  7. **UPDATE:** Metro Wastewater (Financial) (Standing Item) (Edgar Patino)
  8. **UPDATE:** Metro Wastewater (General) (Standing Item) (Tom Rosales)
    - a. Replacement of Pt. Loma Treatment Plant Road
    - b. April 10, 2020 Spill Update

9. **UPDATE**: Metro Capital Improvement Program and Funding Sources (Standing Item) (Tung Phung) (**Attachment**)
10. **UPDATE**: Pure Water Program (Standing Item) (John Stufflebean)
11. **UPDATE**: Financial (Standing Item) (Karyn Keese)
12. **REPORT**: IRWMP Update (Standing Item) (Beth Gentry)
13. MetroTAC Work Plan (Standing Item) (Roberto Yano) (**Attachment**)
14. Review of Items to be Brought Forward to the Regular Metro Commission/Metro JPA Meeting (**October 7, 2021**)
15. Other Business of Metro TAC
16. Adjournment ([To the next Regular Meeting October 20, 2021](#))

<b><u>Metro TAC 2021 Meeting Schedule</u></b>		
January 18	May 19	September 15
February 17	June 16	October 20
March 17	July 21	November 17
April 21	August 18	December 15

January 18	May 19	September 15
February 17	June 16	October 20
March 17	July 21	November 17
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# ATTACHMENT 1

## ACTION MINUTES FOR THE MEETING OF JULY 21, 2021



**Metro TAC**  
(Technical Advisory Committee to Metro Commission/JPA)

**ACTION MINUTES**

**DATE OF MEETING:** July 21, 2021

**TIME:** 11:00 AM

**LOCATION:** Zoom Meeting held On Line

**MEETING ATTENDANCE:**

Beth Gentry, Chula Vista  
Ed Walton, Coronado  
Yazmin Arellano, El Cajon  
Blake Behringer, El Cajon  
Dennis Davies, El Cajon  
Eric Minicilli, Imperial Beach  
Mike James, Lemon Grove  
Mike Stauffer, Lemon Grove  
Hamed Hashemian, La Mesa  
Steven Beppler, Otay WD  
Allen Carlisle, Padre Dam MWD  
Mike Hindle, Padre Dam MWD  
Karen Jassoy, Padre Dam MWD  
Mark Niemiec, Padre Dam MWD  
Angela Martinez, Poway  
Troy DePriest, Poway  
Dan Brogadir, County of San Diego  
P.J. Tubongbanua, County of San Diego

John Stufflebean, City of San Diego  
Tom Rosales, City of San Diego  
Edgar Patino, City of San Diego  
Charlette Strong Williams, City of San Diego  
Peter Vroom, City of San Diego  
Lisa Celaya, City of San Diego  
Adam Jones, City of San Diego

Ken Schiff, So. Cal Costal Water Research Project

Mark Elliott, Jacobs

Doug Owen, Stantec

Huy Nguyen

Karyn Keese, the Keze Group  
Scott Tulloch, NV5  
Carmen Kasner, NV5  
Dexter Wilson, Wilson Engineering  
Lori Anne Peoples, MetroTAC

Due to the absence of Metro TAC Chair Roberto Yano, Vice Chair Eric Minicilli chaired the meeting.

**1. Review and Approve MetroTAC Action Minutes for the Meeting of May 19, 2021**

**ACTION:** Motion by Dan Brogadir, seconded by Eric Minicilli, the Minutes be approved. Motion carried unanimously.

**2. Metro Commission/JPA Board Meeting Recap**

The Metro JPA did not meet, thus there was no report.

**3. INFORMATION: Review of Amended Restated Agreement No. 1**

Dexter Wilson, Wilson Engineering provided an overview of the Power Point presentation attached to the agenda.



Hamed Hashemian inquired as to when the PAs would start paying. Karyn Keese noted that they are currently paying.

Beth Gentry requested Karyn Keese provide the totals to date. Karyn stated she was missing the first couple of years which would be small costs. During the 2020 Audit, the Auditors are going back and will add this into a foot note.

**4. PRESENTATION: San Diego River Investigative Order – Southern California Coastal Water Research Project (SCCWRP)**

Tom Rosales, City of San Diego introduced Ken Schiff who shared his presentation which was attached to the agenda. The investigative order was issued to quantify the quantity the human fecal amount in the San Diego River. All Stakeholders are collecting, reviewing and sharing data with each other. Ken is leading the effort with the purpose to determine the impact of sewer on the San Diego River.

**5. UPDATE: Industrial Wastewater Control Committee**

Beth Gentry provided the following update:

The committee met on 7/14/2021 and discussed the following:

**1. Industrial Waste Discharge Permit Fees**

6/23 SD Budget Committee was presented with the proposed IWD Permit Fees  
July – SD CC Consideration of Public Hearing  
Mid-Sept. – Public Hearing for the IWD Permit Fees (and WW / W rates for Muni Customers)

Staff Recommendation:

- Rate recover delayed and set to start July 1, 2022
- Rate increases will be in 25% increments with full recovery over 4 years

**2. Standardized Metro Industrial Waste Discharge Services (e.g. permit reviews, applications, and monitoring)**

Greg Moser from Procopio provided a draft agreement and discussion on aspects of the agreement. He noted it was in draft so not being shared, however, he requested to be contacted if anyone was interested in being part of the development. Committee members are reviewing it and will discuss at the next meeting. A second round of comments is likely before we present anything to the group.

Key items include language to ensure enforcement of permits, [future billing mechanics], what form the contract will take [part of the larger agreement, per Section 2.9 or separate agreements with individual PA's, a separate agreement for discharges only, etc.]

**3. Coordination with San Diego on Industrial Discharge Permitting**

Reminder that San Diego (Joy Newman) requested each PA provide procedures on how entities are referred to SD for permitting, due by Sept. 1. This is required for either their procedural audit to or the Pure Water pretreatment program.

**4. Local Limits update to be coordinated soon with Stantec/Brown and Caldwell**

Next Committee Meeting TBD, likely week of Aug. 9<sup>th</sup>.

## **6. Metro Wastewater Update (Financial)**

Edgar Paterno City of San Diego shared that the quarterly billing statements would be going out next week and requested everyone watch out for them.

Adam Jones, City of San Diego stated that in follow up to Beth's item, the Budget Committee heard the item on the 23<sup>rd</sup> and City Council heard it the proposal yesterday on July 20<sup>th</sup> and they had one change. Staff had initially asked for September 14<sup>th</sup> to be the date in which the Council would consider the rate adjustments as well as the IWCP fee adjustment proposal, due to the pending Gubernatorial Recall Election being scheduled for that day the City Council asked it be delayed until September 21<sup>st</sup>. They unanimously passed the noticing and on the 21<sup>st</sup> of September will hear both. One item Beth requested he cover was that there was an Attachment #3 included in the items that went to Budget Committee and City Council that was the Cities Cost of Service consultant Raftis providing an update to City Council on changes the City incorporated into its Cost of Service Study to account for the Review done by Stantec. One of those items is related to the IWCP fees. When the City released their initial Cost of Service there had been an assumption that full cost recovery would occur in the first year. Based on the proposal that Staff put forward, that is not the case. Staff has removed the assumptions of adjustments from the IWCP from rate model and the memo confirms what Staff agreed to.

## **7. Metro Wastewater Update (General)**

Tom Rosales; City of San Diego provided a brief report on the following:

### **a. Replacement of Pt. Loma Treatment Plant Road**

Tom stated that there was lots going on regarding the erosion on the road. They were coordinating with the Navy and National parks Service and coordinating with them working on the framework to move to mid range and long term solutions with consultant HDR. The second draft of the framework is in review now. Working through some contract issues. New information is that there are mostly undisturbed areas other than the roadway. Park Services has reached out to the State Historic Preservation Office and they have provided numerous additional steps needed to look at archeological objects in the area. They have requested we invite 16 different Tribes/Bands to have formal consultation. So far they have only heard from the San Pasqual and Viejas Bands. This will cause delays in the project due to protocols monitoring protocol. The next step would be to incorporate monitoring data which cannot be done with out the Tribes/Bands, State Historic Preservation Office, Navy and National Parks Service own Federal review. They don't think they will be able to start now until the September/October timeframe.

### **b. April 10, 2020 Sanitary Overflow Incident Update**

Tom noted that there was nothing new on the spill other than the last report that they held an online Zoom meeting with the Regional Board and have responded to their questions back in June and are pending a response back from the Regional Board.

## **8. Metro Capital Improvement Program and Funding Sources**

There was no report.

## **9. Pure Water Program Update**

John Stufflebean City of San Diego noted that in terms of the Pure Water Program, they are under construction with just under a billion dollars of contracts awarded. Several of the contracts are on the verge of being awarded. He then introduced Doug Owen of Stantec who provided a verbal overview of the presentation on the equalization cost without pure water (copy of the presentation attached to the agenda). Doug noted that one of the elements they have been doing as they were proceeding along was looking at the overall approach to Phase II other kinds of impacts and potential conversion to secondary. They know they are going to need equalization in the system associated with this. They want to be able to mitigate any overflow or other kinds of spill events, so the analysis they undertook was to evaluate based on different approaches to pure water and different diversions they have upstream in order to capture pure water and how that effects the equalization needs and how does that impact the overall wastewater costs compared to if they didn't have pure water. He acknowledged Dexter Wilson and Scott Tulloch for their assistance and input to this. Almost all of the heavy lifting was done with the City of San Diego and Victor Occiano who could not make it today. He then proceeded to review the 4 scenarios they evaluated, reviewing each individually. Then he presented the projected peak wet weather diurnal flow with PS1EQ for each scenario without pure water and with pure water. Next he reviewed the Metro System upgrades for peak wet weather – high level cost estimate. Next he presented the comparisons for Metro System upgrades. Lastly he noted that the total for the City with Phase 1 and II combined would be 83 with the 11 mgd from east county you could see the same trends and can save money with pure water as long as they can keep with chemically enhanced primary treatment, and if we have to convert to secondary treatment at Pt. Loma, the costs are higher.

John stated that this is in addition to the \$2 billion they will save by not doing secondary at Pt. Loma. Talking about the cap which was \$1.8 billion and has now gone up to \$1.95 billion but in addition to that we are saving over another \$2 billion on equalization costs under the assumptions used here which is really good news for the justification for doing Pure Water from the sewer aspect.

Dexter Wilson stated that when we look at our situation today, with peak wet weather flows require Pump Station II to run 24 hrs a day at the 432 and because it is running and no equalization is built, we are storing today flow in the interceptors to be pumped out because right now the 432 does not meet our peak needs. The curves used are extrapolated out and you are looking at 20/50 flows. Huy Nguyen stated that what Dexter said was correct with the assumption of a 1% increase per year as we are getting a more robust CIP program to reduce the ironite rate rather than 1.5% at the base flow to get that curve. Per Dexter, if Pure Water wasn't being built before 2050 we would have to have this amount of storage in place to handle the flows. Thus this is providing additional financial justification for the Pure Water program because Pure Water greatly reduces this need for equalization. Lastly, Dexter these costs being used to estimate this storage are due to land constraints near Pump Station II and the storage costs are very high. For the purposes of what is being shown, he feels the costs are appropriate.

## **10. Financial Update:**

Karyn Keese stated that she was going to include Pure Water in the monthly updates as it is the majority of work she and Dexter are working on. Additionally she noted that on the Audit for FY 2020 fieldwork will be started (samples are collected and reviewed to make sure costs are applied correctly); they are still waiting on FY 2019 Audit to be finalized and expect this to be done September/October; she is working on creating a detailed action plan for the Amended Restated Agreement and Dexter has reviewed 7 of 11 of the Pure Water contracts awarded and is working on cost splits.

#### **11. REPORT: IRWMP - Integrated Regional Wastewater Management**

Beth Gentry; City of Chula Vista provided the following report:

The IRWM RAC met on 6/2/2021.

Mini-Funding Fair after this meeting 1:30 to 3:30 via zoom. Information was sent out to TAC members via Lori this morning.

##### SDIRWM: State Budget Updates

SB 129, the Budget Act of 2021, Section 112 includes \$200 million to support “watershed management projects that provide multiple benefits including, but not limited to, improved integration of groundwater and surface water management, other water supply benefits, and ecosystem improvements. Projects shall enhance regional drought resilience and align with the goals and objectives of the integrated regional water management plan.” The language further states the funds appropriated to support multiple-benefit projects shall be available to several agencies and organizations, including regional water management groups. Next in the process are budget trailer bills giving more specific instructions about all the money in SB 129 is to be allocated. IRWM RAC is advocating for a budget trailer bill that includes Section 112 and directs DWR to allocate the \$200 million for IRWM Program grants. San Diego and the other 47 RWMGs cover 99 percent of California’s population. The RWMGs have an established track record of supporting the development of multiple-benefit projects that enhance regional drought resilience in the face of climate change, especially in under-served communities.

##### Topics Covered during the IRWM RAC meeting:

- Regional Conveyance System Study by Kelly Rodgers (Director of the Colorado River Program at the SD County Authority)
- Project Completion Report – Healthy Water for Forester Creek by Sarah Hutmacher, The San Diego River Park Foundation [Sarah@sandiegoriver.org](mailto:Sarah@sandiegoriver.org)
- Statewide IRWM Update
- Justice, Equity, Diversity & Inclusion (JEDI) Workgroup Update. Brook Sarson is the JEDI Workgroup Chair and is from the San Diego Sustainable Living Institute. She presented the definitions of JEDI to the RAC which after significant discussion were voted on and approved for submittal to RWG (Regional Working Group).
- Grant Administration A total of \$111.7M awarded in grant money (Prop 84, Prop 1).
- Public Comments. No time.
- Next Meeting: August 4, 2021

#### **12. ACTION: Consideration and Possible Action to Recommend to the Metro Comm/Metro Wastewater JPA approval of Reimbursement to Imperial Beach for the Purchase of**

### **Computer Equipment for Board Secretary**

Karyn Keese stated that this was a discussion item with MetroTAC and the JPA during the past budget cycle. A brief background is that the City of Chula Vista has been sponsoring the Board Secretary but the City is not available to provide support when needed. The Board Secretary makes a quarter of the other contractors so it was decided to purchase a computer, software, cloud support, install everything and train Lori in the use of the new items. Imperial Beach stepped up to this task. Although this is more of an information item when we brought it forward we did not have all the costs associated with it and our Treasurer requested this be voted on. So with a cost estimate of \$2,800 for the computer, dock station, keyboard mouse, monitor and printer and the monthly costs for Microsoft 365 and annual Adobe Pro, Cloud storage are approximately an additional \$300/year is about \$3,000. annually.

**ACTION:** Motion by Hamed Hashemian, seconded by Ed Walton this item be approved. Approved unanimously.

### **13. MetroTAC Work Plan**

Roberto Yano MetroTAC was not present and the Work Plan was attached to the agenda.

### **14. Review of Items to be Brought Forward to the Regular Metro Commission/Metro Wastewater JPA Meeting August 5, 2021**

Karyn mentioned that the JPA was typically dark during August/September. MetroTAC Vice Chair Minicilli stated that other than Item 12, he did not see anything else urgent so he will speak with Roberto and the JPA Chair regarding the need to hold the August/September meetings.

### **15. Other Business of MetroTAC**

There was none.

### **15. Adjournment to the Next Regular Meeting August 18, 2021**

There being no further business; Vice MetroTAC Chair Eric Minicilli adjourned the meeting at 1:00 p.m.

# ATTACHMENT 3

Calif. Water Technologies  
LLC Contract

Ferrous Chloride

**METRO JPA/TAC  
Staff Report  
Date: 9/2/21**

**Project Title:** Execution of California Water Technologies, LLC Contract

**Requested Action:**

JPA/TAC authorization to spend an estimated \$14,840,995 of Metro funds to purchase Ferrous Chloride (FeCl<sub>2</sub>) chemical used at wastewater treatment plants for over the next five years. The impact to the Metro JPA is estimated to be 33%, approximately \$4,897,528.

**Recommendations:**

Approve the Metro expenditure request and forward to the Metro Commission.

Metro TAC:	To be submitted for consideration
IROC:	N/A
Prior Actions: (Committee/Commission, Date, Result)	The prior five year contract from ITB No. 10077844-17-V was for an amount not to exceed \$10,062,853. As the expenditures approached the \$3,000,000 expenditure threshold, a Council Action was prepared requesting the authorization to approve the remaining three (3) one (1)-year options to purchase Ferrous Chloride with California Water Technologies. On January 31, 2018, City Council approved a resolution (R-311509) authorizing \$8,025,880 for the remaining option years.

**Fiscal Impact:**

Is this projected budgeted?	X Yes ____ No ____
Cost breakdown between Metro & Muni:	It is estimated that funding will be distributed as follows: Metro \$14,840,995; Muni \$0
Fiscal impact to the Metro JPA:	33% of Metro costs = \$4,897,528

**Capital Improvement Program:**

New Project?	Yes ____	No ____	N/A ____	X ____
Existing Project?	Yes ____	No ____	Upgrade/addition ____	Change ____ N/A X

**Previous TAC/JPA Action:**

Yes

**Additional/Future Action:** Pending Environmental Committee Meeting for September 16, 2021

**City Council Action:** Pending for October 2021

**Background:** *Provide background information on the need for the project*

Ferrous Chloride (FeCl<sub>2</sub>) is a chemical used for hydrogen sulfide (H<sub>2</sub>S) control in wastewater treatment plants. H<sub>2</sub>S is a corrosive chemical which causes odor and is hazardous to human health. Control of H<sub>2</sub>S concentrations in the wastewater treatment process is an environmental, safety and regulatory requirement. Additionally, control of H<sub>2</sub>S concentration is important for preserving the wastewater system infrastructure.

**Discussion:** *Provide information on decisions made to advance the project*

This is a regulatory item for the purpose of treating wastewater at the plants.

**Bid Results:** *If bidding was done provide bidding format and results*

An Invitation to Bid (ITB), 10089748-21-V, for purchase of Ferrous Chloride (FeCl<sub>2</sub>) was issued by Purchasing & Contracting Department on May 19, 2021 and closed on June 8, 2021 in which Purchasing

& Contracting Department received three (3) responsive bids. Upon receiving sample testing results on June 23, 2021, required as part of the evaluation process, California Water Technologies, LLC was determined the lowest responsive and responsible bidder to the ITB.



# ATTACHMENT 4

Hawthorne Machinery Co.

Parts, Tech. & Repair Svs.  
Caterpillar Co-Generation  
Engines; Back up  
Generators & Assoc.  
Switchgear

**METRO JPA/TAC  
Staff Report  
Date: 8/31/21**

**Project Title:** Execution of Hawthorne Machinery Co Contract

**Requested Action:**

JPA/TAC authorization to spend an estimated \$12,012,500 of Metro funds to provide parts, technical and repairs services for Caterpillar Co-Generation (Co-Gen) engines, backup generators, and associated switchgear located at various Public Utilities facilities. The impact to the Metro JPA is estimated to be 33%, approximately \$3,964,125.

**Recommendations:**

Approve the Metro expenditure request and forward to the Metro Commission.

Metro TAC:	To be submitted for consideration
IROC:	N/A
Prior Actions: (Committee/Commission, Date, Result)	On November 3, 2015, City Council approved a resolution (R-310036) executing a five (5) year agreement with Hawthorne to provide technical services and parts for Caterpillar engine generators and electrical switchgear in an amount not to exceed \$8,417,647.

**Fiscal Impact:**

Is this projected budgeted?	X Yes ____ No ____
Cost breakdown between Metro & Muni:	It is estimated that funding will be distributed as follows: Metro \$12,012,500; Muni \$2,793,750; Water \$193,750
Fiscal impact to the Metro JPA:	33% of Metro costs = \$3,964,125

**Capital Improvement Program:**

New Project?	Yes ____	No ____	N/A ____	X ____
Existing Project?	Yes ____	No ____	Upgrade/addition ____	Change ____ N/A X

**Previous TAC/JPA Action:**

This item was reviewed by the Metro Joint Power Authority (JPA) Technical Advisory Committee on or about June 17, 2015 and by the Metro JPA Commission on or about September 3, 2015.

**Additional/Future Action:** Pending Environmental Committee Meeting for October 7, 2021

**City Council Action:** Pending for October 12, 2021

**Background:** *Provide background information on the need for the project*

Hawthorne provides as needed repair services, parts and technical expertise to help City staff ensure that the engines and generators are operational.

WWTD oversees the maintenance and repairs of five (5) continuous running engine/generators and nineteen (19) emergency backup generators that require expert repairs and technical services to ensure the equipment provides power to critical treatment and pumping system infrastructure.

**Discussion:** *Provide information on decisions made to advance the project*

The City of San Diego (City), Public Utilities Department (PUD), Wastewater Treatment and Disposal (WWTD) division manages the operations and maintenance of the Regional Wastewater treatment system for the City and the member agency of the Metro Wastewater Joint Powers Authority. The system currently operates five (5) continuous running engine/generators and nineteen (19) emergency

backup generators that require repairs and technical services to ensure the equipment provides power to critical treatment and pumping system infrastructure. This includes engines that convert methane from the wastewater treatment and Miramar landfill to process and generate renewable energy that offsets some of the department's energy costs.

WWTD will request that council authorize the execution of an agreement with Hawthorne Machinery Co. (Hawthorne) to provide parts, technical and repair services for Caterpillar engines, backup generators, and associated switchgear located at various Public Utilities facilities.

Hawthorne provides as needed repair services, parts and technical expertise to help City staff ensure that the engines and generators are operational, which resulted in an \$9,335 average daily energy use costs savings and \$934,959 of annual credits from the SDG&E's Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) in Fiscal Year 2020. The Department asks that the City Council authorize a new five (5) year agreement.

Hawthorne is the only authorized parts supplier and technical services provider for Caterpillar engine/generators, emergency generators, and switchgear. Hawthorne's Caterpillar factory-trained staff have the expertise and certification needed to professionally service and repair the Caterpillar equipment. In addition, this ensures maximum performance and minimum environmental impact. On October 1, 2020, the Purchasing and Contracting department approved the department's request for a five (5) year Sole Source Agreement (No. 4186) for an amount not to exceed \$15 million with Hawthorne Machinery Co.

This agreement will provide parts and services for the five (5) continuous running engine/generators, nineteen (19) emergency backup generators, associated electrical switchgear, as well as purchasing and servicing any new equipment. The nineteen (19) emergency backup generators have varying purposes which include providing power during a grid power outage to ensure uninterrupted operational activities, creating electricity that is used to power facilities, operating large pumps to transport wastewater for treatment, or providing adequate backup power to support large facility operations.

The two primary continuous running engine/generators at Pump Station 2 have a critical task of each operating a large pump at the main wastewater pump station on Harbor Drive. These engines operate on pipeline natural gas which provides significant electrical savings each day as well as protect the pump station during a grid power outage from wastewater surging back through the station and releasing to the environment.

Over 2.2 million regional users of wastewater treatment have a vested interest in the systems' safe and reliable treatment of wastewater in full compliance with all County, State and Federal regulations. Additionally, the engine generators provide electrical savings in operating WWTD facilities and provide revenue to offset operational costs. Insufficient parts and services to maintain this equipment operational could result in loss of revenue, increased electrical costs, and the possibility of a release of sewage to the environment during a power outage resulting in fines and penalties.

**Bid Results:** *If bidding was done provide bidding format and results*  
N/A, Sole Source agreement (No. 4186) was issued.

# ATTACHMENT 6

- a. Follow Up Performance Audit  
PUD IWCP – Part I
- b. Follow Up Performance Audit  
PUD IWCP – Part II
- c. Industrial User Fee – SD  
Outreach
- d. Memo to Chair Jones –  
Industrial Wastewater Discharge  
Permit Inventory Status

# ATTACHMENT A

## Follow Up Performance Audit

### PUD – IWCP

#### Part I

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# **FOLLOW-UP PERFORMANCE AUDIT OF THE PUBLIC UTILITIES DEPARTMENT'S INDUSTRIAL WASTEWATER CONTROL PROGRAM**

The Public Utilities Department's  
Cost Recovery Practices Remain Out  
of Compliance with City Regulations  
and Policies and Possibly State Law

Office of the  
City Auditor

City of San Diego



## Follow-Up Performance Audit of the Industrial Wastewater Control Program

*The Public Utilities Department's Cost Recovery Practices for IWCP Remain Out of Compliance with City Policies and Possibly State Law*

### Why OCA Did This Study

The Public Utilities Department's (PUD) Industrial Wastewater Control Program (IWCP) permits, monitors, and inspects a variety of industries across the City and 12 other Participating Agencies to detect and minimize the discharge of toxic substances into the sewerage system.

In 2013, we issued a [performance audit of IWCP](#). At that time, we found that outdated fees, billing lapses, and inadequate controls limited program cost recovery from IWCP permittees. Most program costs were passed on to other wastewater customers who were not IWCP permittees. In addition, we issued a confidential memorandum raising the possibility that these cost recovery practices were not in compliance with Proposition 218 (Prop 218).<sup>1</sup> The objective of the current audit was to review the status of the recommendations we made in 2013.

### What OCA Found

We found that the issues we identified in 2013 remain largely unaddressed.

**Finding 1:** While an IWCP fee update is in progress, it has not been completed, and many program fees remain unadjusted since 1984. As a result, from FY 2010 to FY 2019, program costs totaled about \$38.8 million, of which only \$5.5 million (14 percent) was recovered from fees charged to IWCP permittees. The remaining \$33.3 million (86 percent) was passed on to other customers via wastewater rates. By not regularly reviewing IWCP fees and presenting them to the City Council for approval, PUD's IWCP cost recovery practices remain out of compliance with City regulations and policies. In addition, the continuance of these practices again raises the possibility of non-compliance with Prop 218.<sup>1</sup>

**Finding 2:** PUD continues to use overly-complex billing processes for IWCP, which is inefficient and has caused billing lapses. Even though PUD implemented our 2013 recommendation to recover unbilled costs from FY 2008 to FY 2012, we found that, since FY 2017, PUD has again failed to bill many IWCP permittees outside the City.



Source: U.S. Environmental Protection Agency

### What OCA Recommends

We make a total of 9 recommendations to correct the issues we identified, which are similar to the public and confidential recommendations we made in 2013. Specifically, we recommend that PUD:

- Document procedures to track IWCP costs and revenues;
- Complete the current IWCP fee study, consult with the City Attorney's Office to develop a fee proposal that is in compliance with City regulations, policies, and state law, and present the proposal to the City Council for approval;
- Document policies and procedures for periodically reviewing and updating IWCP fees moving forward;
- Consolidate and simplify the billing process for IWCP fees; and
- Seek recovery of IWCP fees that went unbilled since FY 2017.

PUD agreed with all 9 recommendations and has taken several steps towards implementation.

For more information, contact Kyle Elser, Interim City Auditor at (619) 533-3165 or [cityauditor@sandiego.gov](mailto:cityauditor@sandiego.gov)

<sup>1</sup> We do not reach any legal conclusions in our report regarding Proposition 218, and nothing in our report should be interpreted as any type of legal conclusion.



## THE CITY OF SAN DIEGO

July 15, 2020

Honorable Mayor, City Council, and Audit Committee Members  
City of San Diego, California

Transmitted herewith is a follow-up performance audit report on the Public Utilities Department's Industrial Wastewater Control Program. This report was conducted in accordance with the City Auditor's Fiscal Year 2020 Audit Work Plan, and the report is presented in accordance with City Charter Section 39.2. The Results in Brief are presented on page 1. Audit Objectives, Scope, and Methodology are presented in Appendix B. Management's responses to our audit recommendations are presented after page 49 of this report.

We would like to thank staff from the Public Utilities Department and the City Attorney's Office. All of their valuable time and efforts spent on providing us information is greatly appreciated. The audit staff members responsible for this audit report are Shadi Matar, Luis Briseño, Danielle Knighten, and Andy Hanau.

Respectfully submitted,

Kyle Elser  
Interim City Auditor

cc: Kris Michell, Chief Operating Officer  
Jeff Sturak, Assistant Chief Operating Officer  
Johnnie Perkins, Deputy Chief Operating Officer, Public Utilities/Infrastructure  
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# Table of Contents

Results in Brief .....	1
Background .....	5
Audit Results .....	24
Finding 1: The Public Utilities Department Has Not Adjusted Many IWCP Permit Fees Since 1984, and its Cost Recovery Practices Remain Out of Compliance with City Policies and Potentially State Law .....	24
Finding 2: Billing Lapses Have Reoccurred Due to Overly Complex and Inefficient Processes and a Breakdown in Oversight .....	37
Conclusion .....	42
Recommendations.....	44
Appendix A: Definition of Audit Recommendation Priorities .....	47
Appendix B: Audit Objectives, Scope, and Methodology.....	48

## Results in Brief

The Public Utilities Department's (PUD) Industrial Wastewater Control Program (IWCP) represents a key element of the City of San Diego's (City) environmental management efforts. IWCP permits, monitors, and inspects a variety of industries across the City and 12 other Participating Agencies (PAs) to detect and minimize the discharge of toxic substances into the metropolitan sewerage system. The sewage is treated by the City's wastewater treatment plants before being discharged into the Pacific Ocean.

### **Summary of Previous Audit Findings**

In August 2013, we issued a public performance audit of IWCP that assessed the extent to which the program's permit and inspection fees and billing processes met legal requirements, achieved appropriate cost recovery, and ensured timely collection. We found that outdated fees, billing lapses, and inadequate controls limited program cost recovery.

Specifically, although City regulations and policies require fees to be regularly reviewed and updated, we found that many IWCP fees had not been updated since as far back as 1984. Moreover, PUD was not tracking program costs.<sup>1</sup> As a result, IWCP did not achieve adequate cost recovery. We estimated that between FY 2010 and FY 2012, billable costs exceeded revenues by about \$8.3 million—meaning that only 15 percent of billable costs were recovered through program fees charged to regulated businesses. The other 85 percent of costs were offset by charges to other ratepayers, including residential and commercial customers. In addition, we found that IWCP had not issued bills to many permittees for a five-year period, from FY 2008 to FY 2012, totaling \$850,000.

In addition to our public audit report, we raised additional legal concerns in a confidential memorandum to the Mayor,

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<sup>1</sup> As reported in our August 2013 audit, PUD was not able to precisely determine recoverable program costs because it did not maintain sufficient data to do so and because a formal workload study to identify program costs had not been conducted.

PUD, and the City Attorney's Office in May 2013.<sup>2</sup> Specifically, the fact that the vast majority of program costs were being passed on to non-IWCP users via wastewater rates created the possibility that PUD's cost recovery practices were out of compliance with Proposition 218 (Prop 218).<sup>3</sup> Adopted by California voters in 1996, Prop 218 generally requires that "property related fees and charges"—including charges for water and sewer service—not exceed the cost of providing the service.

We made a total of 8 recommendations in our public audit and an additional 5 recommendations in our confidential memorandum to ensure that program costs are tracked; fees are regularly reviewed and updated; billing is timely; and cost recovery practices comply with City regulations and policies as well as state law. Since 2013, we have kept the Mayor, the City Council, and the Audit Committee informed of PUD's progress in implementing these recommendations via periodic recommendation follow-up reports. During this time, PUD only provided evidence to demonstrate that 3 of the 13 recommendations were fully implemented.<sup>4</sup>

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<sup>2</sup> This memorandum was issued confidentially because cost recovery at the time was unclear (because program costs were not being tracked); additional City analysis was needed to determine whether there was a risk of Prop 218 non-compliance; and because the memorandum contains sensitive and privileged information. While that memorandum remains confidential because it contains sensitive and privileged information, given the time that has passed and the new information that has become available, we have determined that it is in the public interest to raise the pertinent issues here so that management and oversight bodies can act to quickly and appropriately resolve them as needed. Any reference to the 2013 confidential memorandum is not intended in any way to waive the confidentiality of the report itself or to otherwise make the confidential report or any portion of it subject to disclosure.

<sup>3</sup> We do not reach any legal conclusions in this report regarding Proposition 218, and nothing in this report should be interpreted as any type of legal conclusion.

<sup>4</sup> OCA reports on the status of outstanding public audit recommendations on a six-month interval and reports on the status of outstanding confidential recommendations periodically, the most recent of which we completed in June 2019. During the follow-up process, OCA reviews information provided by management to determine whether a recommendation has been implemented.

**The Issues We Identified  
in 2013 Remain Largely  
Unaddressed, and PUD's  
Cost Recovery Practices  
Remain Out of  
Compliance With City  
Regulations and Policies  
and Possibly State Law**

Given the serious issues that were identified in 2013, and the apparent lack of progress in implementing our recommendations, we conducted this follow-up audit to evaluate the current state of PUD's cost recovery efforts for IWCP. Specifically, our audit objectives were to review the implementation status of our 2013 recommendations and publicly report on the issues we had identified in 2013 through both our public audit and our confidential audit memorandum.

We found that, while some progress has been made, the issues we identified in 2013 remain largely unaddressed. PUD began tracking IWCP costs in 2014 in an effort to facilitate an update to program fees. PUD has also commissioned several consultant fee studies, although two of these studies were cancelled after we identified methodological issues during our recommendation follow-up process, and none have yet been finalized and presented to the City Council for approval. A new fee study is nearing completion, and PUD plans to present the results to the City Council by January 2021. As a result, many fees still remain unadjusted since 1984, and program cost recovery remains very low. From FY 2010 through FY 2019, IWCP costs have totaled approximately \$38.8 million. Of these costs, only \$5.5 million (14 percent) was recovered from IWCP permittees while the remaining \$33.3 million (86 percent) was passed on to other wastewater customers, such as residential and commercial customers, via wastewater rates.

These cost recovery practices remain out of compliance with City regulations and policies. More seriously, the possibility remains that, by passing on most program costs to other wastewater customers, the City may not be complying with Prop 218.<sup>5</sup> We also identified an additional concern with Prop 218 compliance that is created by complexities in PUD's wastewater accounting and its agreement with regional PAs. Specifically, due to these complexities, the \$33.3 million needed to subsidize IWCP between FY 2010 and FY 2019 came

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<sup>5</sup> As previously noted, we do not reach any legal conclusions in this report regarding Proposition 218, and nothing in this report should be interpreted as any type of legal conclusion.

exclusively from City of San Diego wastewater customers, even though IWCP serves the larger metro area, including 12 PAs.

Additionally, even though PUD implemented our 2013 recommendation to recover the approximately \$850,000 in costs that went unbilled from FY 2008 to FY 2012,<sup>6</sup> we found that, since FY 2017, PUD again failed to bill many IWCP permittees outside the City. As in 2013, we found this was largely due to overly-complex and labor-intensive billing processes and a breakdown in billing oversight.

We make a total of 9 recommendations to address the issues identified above, which are similar to the public and confidential recommendations we made in 2013. Specifically, we recommend that PUD document its procedures to track IWCP costs and revenues; complete the current fee study and work with the City Attorney's Office to develop a fee proposal in compliance with City regulations, policies, and state law, and present these fees to the City Council for approval; document policies and procedures for periodically reviewing and updating fees moving forward; and consolidate and simplify its IWCP billing process. Management agreed to implement all 9 recommendations.

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<sup>6</sup> Prior to the completion of our 2013 audit, PUD sent invoices for unbilled charges accrued during FY 2008 and FY 2009. Then, in our office's Audit Recommendation Follow-up Report for the period ending June 30, 2014, we verified that PUD invoiced for previously unbilled permits and monitoring services for FY 2010 through FY 2012, totaling about \$628,000.

# Background

The Public Utilities Department's (PUD) Industrial Wastewater Control Program (IWCP) represents a key element of the City of San Diego's (City) environmental management efforts. Implemented in 1982, IWCP is a pretreatment and pollution prevention program intended to minimize toxic discharges to the metropolitan sewerage system. To that end, IWCP operates an industrial wastewater discharge permit, monitoring, and enforcement system for the City and 12 other jurisdictions, referred to as Participating Agencies (PAs), within the County of San Diego. The sewage is treated by the City's wastewater treatment plants before being discharged into the Pacific Ocean. IWCP's budgeted staffing and expenses for recent years are summarized in **Exhibit 1**.

## Exhibit 1

### Industrial Wastewater Control Program Budgeted Staffing and Expenses, 2017 – 2020

	2017	2018	2019	2020
Positions	29	26	32	32
Expenses	\$3,814,965	\$3,356,631	\$3,971,596	\$3,971,596

Notes: Figures in the table reflect total budgeted staffing and expenses for all sections of the program (permits, enforcement, supportive services, and sampling). According to PUD, this does not include costs from the Environmental Chemistry Services section (ECS), which analyzes user samples for IWCP, because this is not a core ECS function. According to PUD, IWCP samples make up only about 6 percent of ECS's total expenses.

Figures for 2017 through 2019 reflect information from PUD's Annual Wastewater Pretreatment Program Reports, which is reported on a calendar year basis. Figures for 2020 reflect budget information from the City's enterprise resource planning system, which is recorded on a fiscal year basis.

Source: Auditor generated based on information from PUD and the City's enterprise resource planning system, SAP.

**IWCP Operational Focus** IWCP was created in July 1982 after being formally approved by the U.S. Environmental Protection Agency (EPA). IWCP applies and enforces federal pretreatment regulations set forth by the EPA pursuant to the Code of Federal Regulations<sup>7</sup> and the Clean Water Act. In addition, under state and federal regulations—and as described in the Point Loma Wastewater Treatment Plant’s NPDES<sup>8</sup> Permit—the City must implement the federal Industrial Pretreatment Program to control the discharges of all Significant Industrial Users (SIUs).<sup>9</sup> The NPDES Permit additionally requires the City to implement a non-industrial Source Control Program to regulate the discharge of toxic pollutants and pesticides into the system from non-industrial sources.

In general, IWCP’s primary focus is to minimize toxic discharges to the sewerage system. The program consists of:

1. An industrial wastewater discharge permit system to establish industrial discharge limits and requirements;
2. Periodic facility inspections and unannounced sampling;
3. Enforcement procedures to deter violations and bring noncompliant dischargers back into compliance with discharge standards and requirements; and

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<sup>7</sup> Title 40, Part 403, 1981.

<sup>8</sup> Created in 1972 by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program is authorized to state governments by EPA to perform many permitting, administrative, and enforcement aspects of the program. NPDES addresses water pollution by regulating point sources that discharge pollutants to waters of the United States.

<sup>9</sup> According to PUD, SIUs are all industrial users that are subject to categorical pretreatment standards set forth in Title 40 of the Code of Federal Regulations, Chapter I, Subchapter N, Parts 405 - 471. The term “SIU” includes industrial users that: discharge an average of 25,000 gallons per day of process wastewater (excluding sanitary and “dilute wastewater,” as defined at 40 CFR 403.6 e(1)(i) under “FD”); contributes a process waste stream that makes up 5 percent or more of average dry weather hydraulic or organic capacity of the publicly-owned treatment works; or is determined to have reasonable potential for adversely affecting the publicly-owned treatment works’ operation or for violating any pretreatment standard or requirement.

4. Industrial user guidance and permit conditions designed to encourage pollution prevention and waste minimization.

**IWCP Industrial  
Wastewater Discharge  
Permits**

IWCP regulates various types of industries,<sup>10</sup> primarily by issuing a variety of permits to businesses based on industry type and amount of wastewater discharge.<sup>11</sup> According to the program's annual report, IWCP had an inventory of almost 900 active permits as of December 31, 2019. **Exhibit 2** below provides a breakdown of the number of SIU and non-SIU permits as of December 31, 2019 and an explanation of the associated permit types.

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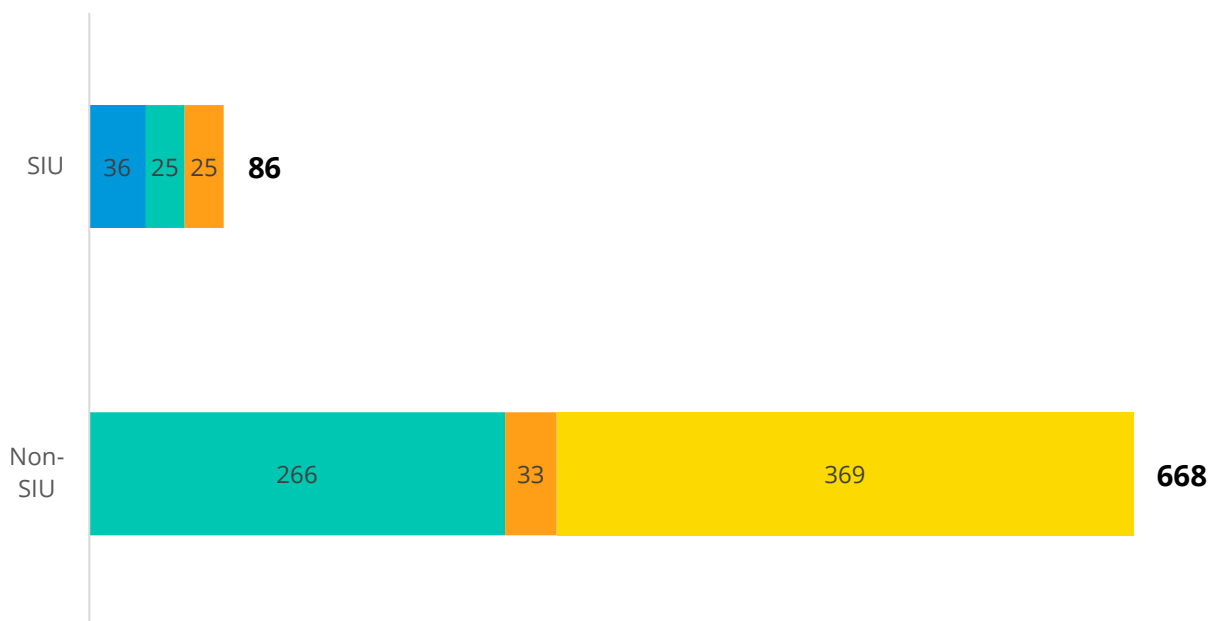
<sup>10</sup> These include aerospace manufacturing; metal forming, casting and finishing; pharmaceutical manufacturing; hospitals and medical centers; film processors; laundries and dry cleaners; and a variety of laboratories.

<sup>11</sup> [Exhibit 2 in the 2013 audit](#) summarizes IWCP's various permit types.



## Exhibit 2

## The Industrial Wastewater Control Program's SIU and Non-SIU Permit Inventory as of December 31, 2019



Legend	Permit Classification	Permit Description
	Class 1	Issued to certain industries whose composition and amounts of discharge are subject to federal standards
	Class 2	Issued to targeted industrial sectors that have some toxic discharge, but are not subject to federal standards
	Class 3	Issued to targeted industrial sectors to regulate conventional pollutants
	Best Management Practices (BMP)	These authorizations include requirements followed by a certification of compliance for management and discharge of silver-rich solutions or dry-cleaning solvents

Note: Trucked waste permits are excluded from the chart because these are not the main focus of IWCP's regulation of industrial businesses through permitting, monitoring, and enforcement activities.

Source: Auditor generated based on information from PUD's Point Loma Wastewater Treatment Plant's 2019 Pretreatment Report.

In the past, IWCP's primary focus was regulating SIUs, which are subject to stringent federal standards because of the potential risks these types of industries pose to the sewerage system and the environment. Accordingly, SIUs require

additional monitoring and routine sample testing. However, according to PUD management, IWCP has recently shifted resources to also focus on regulating non-SIU businesses through its Enhanced Source Control Program. This change is intended to assist in the City's implementation of the Pure Water program, since IWCP's activities are critical to protect source water quality for that program.<sup>12</sup>

### **IWCP Jurisdictions**

IWCP's pretreatment program encompasses the metropolitan wastewater area; this includes not only the City, but also the unincorporated areas and the incorporated municipalities within San Diego County that utilize the City's wastewater treatment system. To regulate industries outside City limits, IWCP operates under the auspices of interjurisdictional pretreatment agreements (IJAs) between the City and each of the PAs in the County and in the incorporated municipalities. IJAs are important because they:

- Require PAs to promulgate ordinances that comport with federal standards and parallel City ordinances regarding pretreatment standards for waste discharge;
- Authorize the City, through IWCP, to permit, inspect, and monitor facilities in each of the PAs; and
- Establish permit and monitoring fees with the PAs to recover applicable IWCP costs associated with these activities.

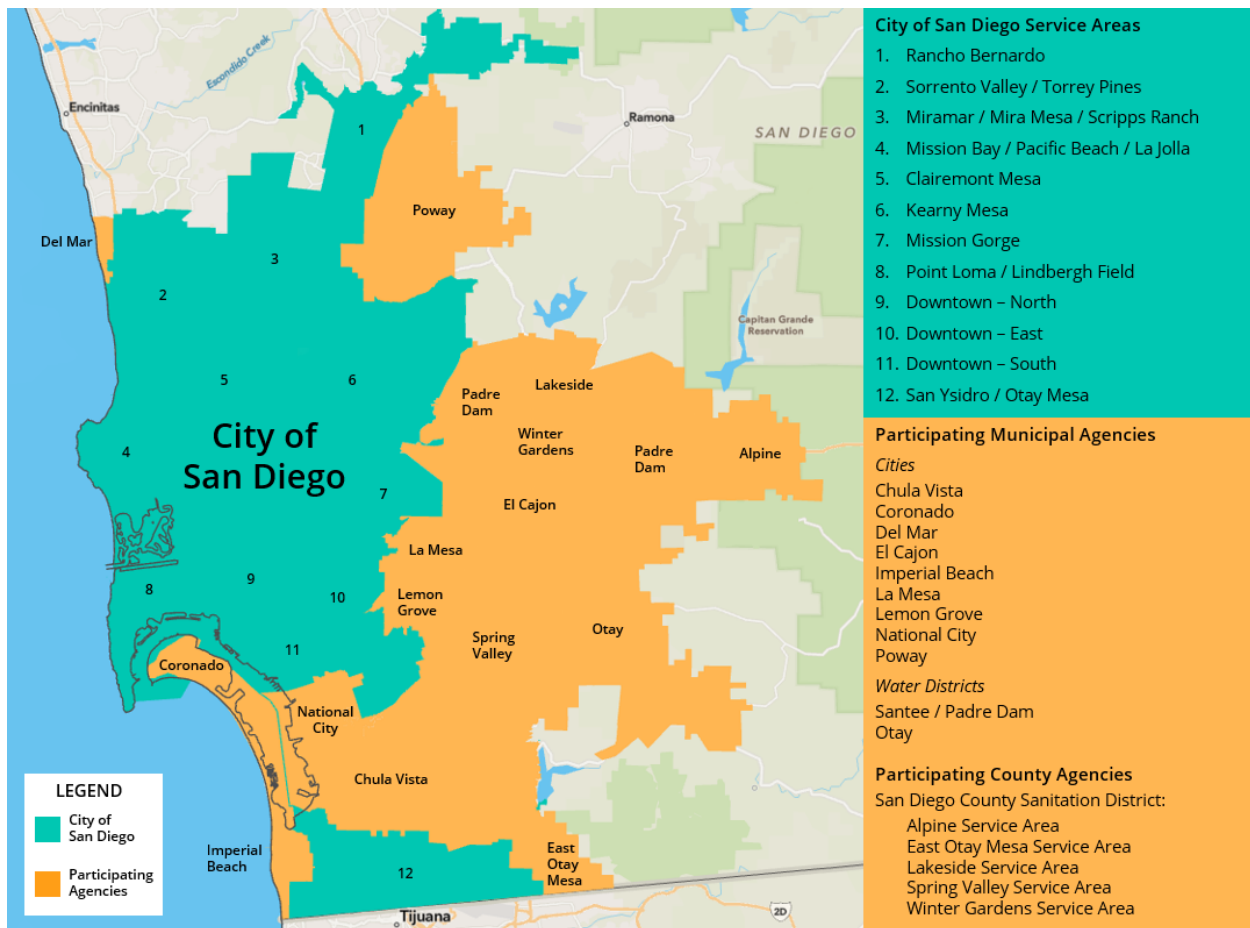
IWCP regulates industrial businesses located within the jurisdictions shown in **Exhibit 3**.

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<sup>12</sup> The City's phased, multi-year Pure Water program started in 2015 and is expected to provide one-third of San Diego's water supply when fully implemented by the end of 2035. Pure Water uses recycled water to produce a water supply and reduce wastewater discharge into the ocean.

## Exhibit 3

## The Industrial Wastewater Control Program's Service Area Extends Beyond the City of San Diego



Note: Labels are approximate.

According to PUD, the service areas listed under “Participating County Agencies” were previously separate sewer districts. In July 2011, those entities were incorporated into the newly formed San Diego County Sanitation District. Therefore, these service areas are considered part of a single Participating Agency, the San Diego County Sanitation District.

Source: Auditor generated based on SanGIS data and information from PUD.

Most businesses regulated by IWCP are located within the City, but about one-third of them are spread across the PAs, as shown in Exhibit 4.

## Follow-up Performance Audit of the Industrial Wastewater Control Program

### Exhibit 4

#### Number of Permittees per IWCP Service Area

Area	Class 1	Class 2, 2C, 2Z	Class 3, 3C, 3Z	BMP	Total Permits	Total Percentage
<b>City of San Diego</b>	<b>22</b>	<b>227</b>	<b>48</b>	<b>213</b>	<b>510</b>	<b>67.6%</b>
City of Chula Vista	1	15	2	31	49	6.5%
City of Coronado	0	1	0	7	8	1.1%
City of Del Mar	0	0	1	2	3	0.4%
City of El Cajon	3	14	0	36	53	7.0%
City of Imperial Beach	0	0	0	4	4	0.5%
City of La Mesa	0	5	0	21	26	3.4%
City of National City	0	9	1	18	28	3.7%
City of Poway	4	4	3	11	22	2.9%
Santee / Padre Dam Municipal Water District	4	6	0	12	22	2.9%
City of Lemon Grove	0	2	0	5	7	0.9%
<b>Total Within Municipal PAs</b>	<b>12</b>	<b>56</b>	<b>7</b>	<b>147</b>	<b>222</b>	<b>29.4%</b>
Alpine Service Area	0	0	0	2	2	0.3%
Lakeside Service Area	0	4	1	3	8	1.1%
Spring Valley Service Area	1	2	1	4	8	1.1%
Winter Gardens Service Area	0	1	0	0	1	0.1%
East Otay Mesa Service Area	1	1	1	0	3	0.4%
<b>Total Within County PA</b>	<b>2</b>	<b>8</b>	<b>3</b>	<b>9</b>	<b>22</b>	<b>3.0%</b>
<b>Grand Total</b>	<b>36</b>	<b>291</b>	<b>58</b>	<b>369</b>	<b>754</b>	<b>100.0%</b>

Note: Trucked waste permits are not included in this table.

Source: Auditor generated based on 2019 Point Loma Pretreatment Report.

#### **IWCP Fees, Cost Recovery, and Enforcement**

San Diego Municipal Code Section 64.0508 states that Industrial Wastewater Discharge Permit Fees should be established periodically by resolution of the City Council. Accordingly, IWCP charges annual permit fees to regulated industries within the City. The IJAs establish the permit and monitoring fees within the PAs. Permit fees range from \$25 to \$3,180 per year and are based on the permit classification, amount of wastewater discharged, and various business characteristics, as well as where the business is located (City vs. PAs). Additionally, Council Resolution No. 260133, adopted

March 1, 1984, states that the fees should recover PUD's costs for inspecting, monitoring, and sampling permitted facilities.

IWCP also has a variety of enforcement mechanisms available. When a permittee violates discharge limits, an enforcement action is initiated through a Notice of Violation and additional sampling. IWCP bills violating industries directly to recover violation, sampling, and administrative fees. IWCP is also authorized to seek administrative civil penalties.

Billing arrangements for permit and monitoring fees vary by jurisdiction, as shown below in **Exhibit 5**.

Exhibit 5

Billing Arrangements for Permit and Monitoring Fees Vary by Jurisdiction

	City of San Diego	County Participating Agencies	Municipal Participating Agencies
<b>Fee Structure</b>	Flat Rate - Established by 1984 Council Resolution establishing IWCP permit fees	Line Item (Individual Charge for Each Activity) - Established in 1999 Agreements with County Agencies	Hourly - IWCP/IWL staff should track labor hours for each project, and PUD staff add overhead rates to generate invoice amounts
<b>Permit Fee Range</b>	\$25 to \$2,000 per year, based on class and flow	\$135 to \$3,180 per year, based on class, complexity, and whether self-monitoring is required	Varies based on labor hours charged
<b>Are the businesses billed directly?</b>	Yes	Yes	No
<b>Is the participating agency billed directly?</b>	N/A	No	Yes <sup>1</sup>
<b>Are SIUs billed for additional lab monitoring fees?</b>	No, because this cost is included in annual permit fee	Yes	Yes, but PUD does not track individual user costs
<b>Are non-SIUs billed for additional lab monitoring fees?</b>	No, because this cost is included in annual permit fee	Yes	Yes, but varies based on labor hours charged

<sup>1</sup> The City of Coronado bills industries directly and is therefore an exception.

Source: Auditor generated summary based on Interjurisdictional Pretreatment Agreements and IWCP information, as of May 20, 2020.

IWCP utilizes the Pretreatment Information Management System (PIMS) to administer information related to the inventory of permitted facilities. Specifically, IWCP uses PIMS to track Industrial User permit information; inspection, monitoring, and violation data; and to charge most IWCP fees. For businesses within the City and/or County PAs, fees charged in PIMS are automatically transferred to the Citywide financial system, SAP. For businesses within the Municipal PAs, violation fees are automatically transferred to SAP while fees for permitting and monitoring are manually entered in SAP. These differences are shown in **Exhibit 11**.

### **Summary of Previous Audit Findings**

In August 2013, our office completed a performance audit of IWCP to assess the extent to which permit and inspection fees and billing processes met legal requirements, achieved appropriate cost recovery, and ensured timely collection. The audit found that outdated fees, billing lapses, and inadequate controls limited program cost recovery.

Specifically, IWCP fees were outdated—having not been updated since as far back as 1984. Moreover, program costs were not tracked.<sup>13</sup> As a result, IWCP did not achieve adequate cost recovery. We estimated that between FY 2010 and FY 2012, billable costs exceeded revenues by about \$8.3 million—meaning that only 15 percent of billable costs were recovered through program fees charged to regulated businesses. The other 85 percent of costs were offset by charges to other ratepayers, including residential and commercial customers.

IWCP's cost recovery level is ultimately a decision that should be made by the Mayor and the City Council, in accordance with San Diego Municipal Code Section 64.0508, Council Policy 100-05, and Administrative Regulation 95.25. However, because PUD never reviewed fees or prepared proposals to the City Council for updating them, these policymakers were likely not aware that IWCP was not recovering its costs through permit fees.

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<sup>13</sup> As reported in our August 2013 audit, PUD was not able to precisely determine recoverable program costs because it did not maintain sufficient data to do so and because a formal workload study to identify program costs had not been conducted.

The first audit finding included five recommendations, summarized below:

1. Track all billable costs so that fees (cost recovery rates) can be determined.
2. Review fees annually and conduct detailed fee studies not less than every three years; present fee proposals to the City Council.
3. Conduct a fee study to determine fee levels for full cost recovery; ensure fee calculation methodology meets applicable legal requirements.
4. Revise agreements with outside agencies to include fees that achieve cost recovery and mechanisms to adjust fees in response to changes in the cost of service.
5. Develop a proposal to update program fees within the City that achieve cost recovery and include mechanisms to adjust fees in response to changes in the cost of service.

In addition, the audit found that, in the five-year period between FY 2008 and FY 2012, PUD failed to invoice over \$850,000 to numerous regulated entities for IWCP services. This was primarily caused by unnecessarily complex billing processes, system programming errors, and a lack of established accountability for billing and review of financial information. Moreover, according to PUD, the failure to bill was caused by turnover in staff and initial confusion resulting from the implementation of the SAP financial system in FY 2010.

The second audit finding included three recommendations, summarized below:

6. Seek recovery of all unbilled costs related to IWCP activities.
7. Establish a centralized billing process and standardize billing policies and procedures across all IWCP activities.
8. Review all PIMS settings to ensure invoices are generated accurately and in a timely manner.



PUD originally agreed to implement all 8 recommendations by January 31, 2014.

**Our Confidential  
Memorandum Raised the  
Possibility that IWCP's  
Cost Recovery Practices  
Were Not in Compliance  
with Prop 218**

Prior to publishing our August 2013 audit, our office distributed a confidential audit memorandum to City management, the City Attorney's Office, and the Mayor in May 2013. While that memorandum remains confidential because it contains attorney-client privileged information, given the time that has passed and the new information that has become available, we have determined that it is in the public interest to raise the pertinent issues here so that management and oversight bodies can act to quickly and appropriately resolve them as needed. The confidential memorandum raised the same issues that were reported publicly in the August 2013 audit but went further by identifying the possibility that, by passing most costs on to other classes of users, IWCP was not in compliance with Proposition 218 (Prop 218).<sup>14</sup> Adopted by California voters in 1996, Prop 218 focuses on taxes, fees, or charges that are directly associated with property ownership; known as "property related fees and charges," these include charges for water and sewer service. Prop 218's rules generally require that rates not exceed the cost of providing the service and that rate proceeds be used only to provide the service. However, as reported in 2013, approximately 85 percent of IWCP costs were being passed on to other classes of users via sewer service charges—raising the possibility that IWCP's cost structure was not in compliance with Prop 218 requirements.

The 5 recommendations made in the confidential memorandum are similar to the 5 recommendations made in Finding 1 of the public audit, except they include ensuring that cost recovery practices also be reviewed for compliance with Prop 218. Following the issuance of our confidential audit memorandum in 2013, PUD worked to determine potential corrective measures related to these issues.

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<sup>14</sup> As previously noted, we do not reach any legal conclusions in this report regarding Proposition 218, and nothing in this report should be interpreted as any type of legal conclusion.

Our office issued the memorandum confidentially at the time because actual cost recovery was unclear (since program costs were not being tracked), because additional analysis would be required to determine whether any corrective action was necessary, and because the memorandum contains attorney-client privileged information. We recommended that the City further study this issue and take corrective action if necessary. Since issuing the confidential memorandum and the public audit report, our office has kept the Mayor, the City Council, and the Audit Committee apprised of PUD's progress implementing the recommendations by periodically issuing recommendation follow-up reports.

**PUD Has Made Some Efforts to Address Previous Audit Recommendations, but Past Missteps Have Slowed Progress**

Since our 2013 audit, PUD has continuously been engaged in efforts to address substantive issues identified by the audit. However, at the time we initiated this follow-up audit, the City had fully implemented only 3 of a total of 13 recommendations made by our office in 2013.<sup>15</sup>

In FY 2014, PUD created a cost center specific to IWCP to better track program revenues and expenditures. However, the cost center still includes some line items that are unrelated to IWCP permitting, monitoring, and enforcement activities. Therefore, determining precise revenues and expenditures for these activities—which is necessary to understand what program fee levels would achieve cost

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<sup>15</sup> As of December 2019, the City had implemented 1 of the 8 recommendations made in the public audit report and 2 of the 5 recommendations made in the confidential audit memorandum.

The only recommendation that was implemented from the public report was Recommendation 6, which had to do with seeking recovery—to the greatest extent possible allowed by law—of all unbilled IWCP costs related to application review, permitting, inspection, and monitoring. Our 2013 audit found that PUD had not billed numerous regulated entities for IWCP services in the five-year period between FY 2008 and FY 2012 and that unbilled amounts totaled more than \$850,000. PUD sent invoices for unbilled charges accrued during FY 2008 and FY 2009 prior to the completion of our 2013 audit. Then, in our office's Audit Recommendation Follow-up Report for the period ending June 30, 2014, we reported that PUD had submitted evidence of having invoiced for previously unbilled permits and monitoring services for FY 2010 through FY 2012, totaling about \$628,000.

The two recommendations from the confidential audit memorandum that have been implemented pertain to delaying the Wastewater Cost of Service Study until additional analysis of IWCP's cost recovery practices is completed. Our office has verified that these recommendations have been implemented.

recovery—is still not as straightforward as we recommended in the audit report. Nevertheless, PUD has recently made progress toward developing and documenting a methodology to track program costs and revenues, which will be used in the future to update fees. This is discussed further in Finding 1.

*Although PUD  
Commissioned Several Fee  
Studies Since the Audit, They  
Were Never Finalized or Sent  
to the City Council for  
Approval in Accordance with  
City Policies and to Ensure  
Compliance with Proposition  
218*

In April 2016, a consultant for PUD, Black & Veatch (B&V), completed a draft IWCP fee study, which found that IWCP fees would—in certain scenarios—need to be increased significantly to achieve full cost recovery.<sup>16</sup> These results were consistent with our 2013 audit findings that cost recovery was only about 15 percent. Even though the fee study cost approximately \$150,000, it was never finalized. Current PUD management speculates this was because the consultants' fee structure was too complicated, but this cannot be verified due to the significant change in PUD management staff since 2016. The results of this fee study were never presented to the City Council and were not provided to OCA during our biannual recommendation follow-up process.

Around the time PUD decided not to move forward with the results of that fee study, PUD provided the same consultant (B&V) with IWCP cost and revenue data and asked if the amount of costs being passed on to other customers was material. Based on the data PUD provided, B&V concluded that IWCP costs were being fully recovered and that raising permit fees would not have a material effect on wastewater revenues or wastewater rates for non-IWCP permittees. PUD provided a letter from B&V to OCA to this effect and asked that we close the remaining IWCP recommendations because the costs were not material. However, upon a closer review, OCA identified that the data PUD provided to B&V significantly overestimated revenues. Specifically, it included revenues for items such as “trucked waste,” which is revenue for treatment of waste trucked into PUD dumping locations (such as waste

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<sup>16</sup> Not all fees in this fee study were directly comparable with current fees because the study recommended creating many different classes of permittees with different rates. However, some of the proposed fees in the study were directly comparable to current fees and showed a significant increase in certain scenarios.

from portable toilets), and unrelated to IWCP inspections and monitoring.

In July 2018, PUD retained another consultant (Raftelis) to study IWCP fees again—this time at a cost of \$30,000.<sup>17</sup> Again, using data and assumptions from PUD, Raftelis concluded that only about \$500,000 of IWCP's costs were not being recovered from IWCP permittees. Further, Raftelis concluded these unrecovered costs were not significant in the sense that increasing fees to achieve cost recovery would not have a material effect on rates, and the reduction to wastewater charges (presumably for other, non-industrial customers) would be less than one cent.<sup>18</sup> Our office again questioned the assumptions used to reach this conclusion, and PUD subsequently acknowledged that unrecovered costs totaled approximately \$3.3 million per year while asserting that this amount was immaterial given the size of wastewater revenues.

PUD is awaiting the results of a new fee study, at a cost of \$21,090,<sup>19</sup> which is intended to determine what full cost recovery fees would be and how much of those costs can be justifiably passed along to non-IWCP ratepayers. As discussed in more detail below, PUD plans to recommend updated fees to the City Council by January 2021 to correct some of the remaining cost recovery issues with the program.

**Exhibit 6** summarizes key events related to our audit since 2013.

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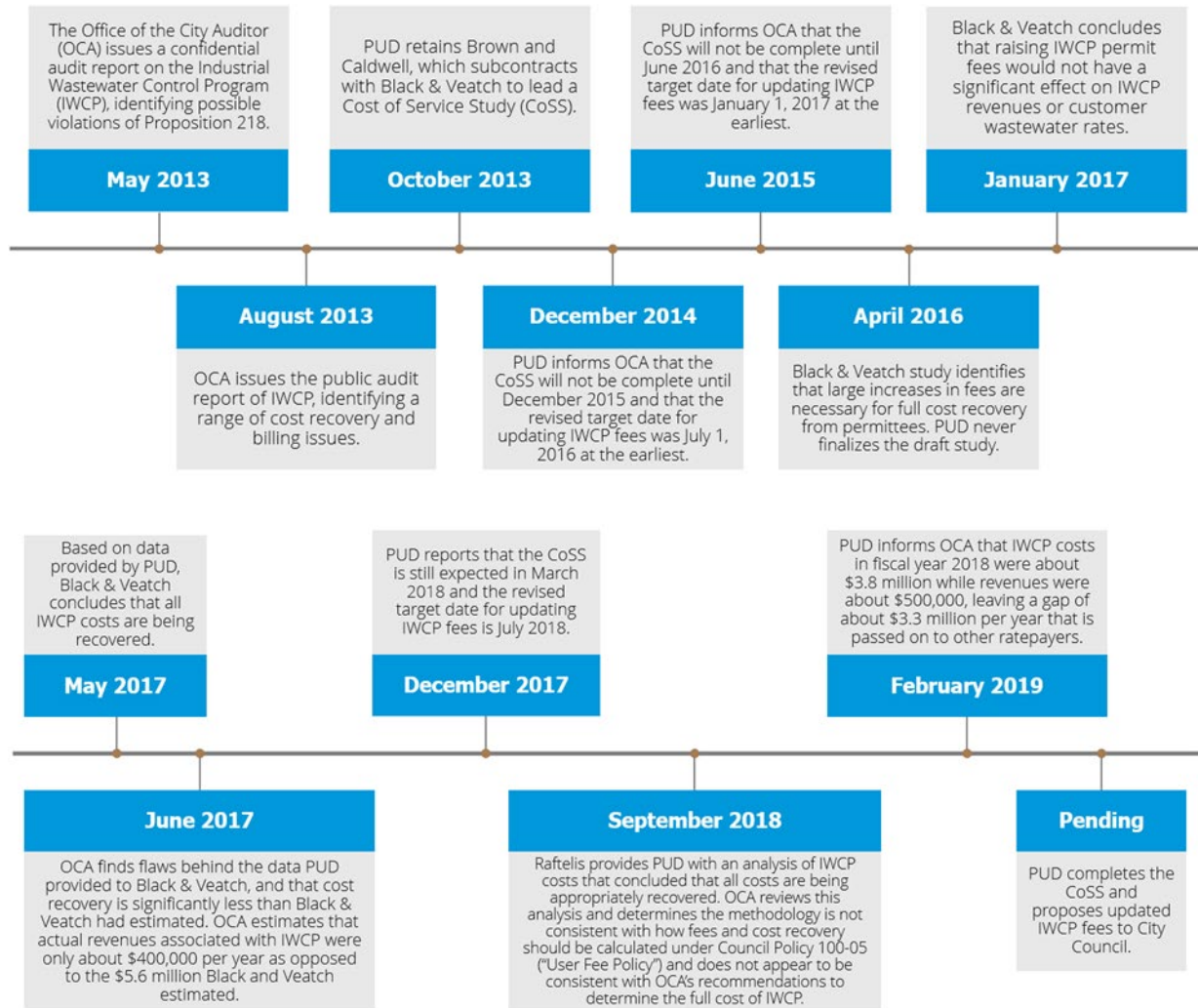
<sup>17</sup> This is a line item amount set aside for this work in a larger contract with the consultant. Actual invoice payments total \$18,910 as of July 8, 2020.

<sup>18</sup> The consultant did not specify a time or unit interval when making this estimation; therefore, it is unclear whether this one cent applies monthly, annually, per unit of water used, etc.

<sup>19</sup> The allocated amount for the current fee study is \$21,090; about \$18,400 of that has been invoiced as of July 8, 2020.

## Exhibit 6

### Timeline of IWCP Events Since 2013



Source: Auditor generated based on communications between OCA, PUD, and the City Attorney's Office.

#### New Audit Underway

In addition to this follow-up report, our office plans to complete another audit of IWCP; the tentative objectives of that audit will focus on operational issues of the program, such as permitting, monitoring, and enforcement.

#### IWCP Organizational Changes Since 2013 Audit

In June 2018, IWCP engaged a consultant team to review and assess staffing levels, organization, and workflow. The resulting consultant report made a total of 22 recommendations across 6 program areas. According to the

schedule in the report, changes to the program would be implemented between May 2019 and October 2020.<sup>20</sup> Among these changes is an organizational restructuring to facilitate the Enhanced Source Control Program's (ESCP) workflow.<sup>21</sup> Previously, inspections for both SIUs and businesses that fell within ESCP were handled by the same work group, while enforcement activities, including the issuance of Notice of Violations (NOVs), were handled by a separate work group. As shown in **Exhibit 7**, SIU inspection activities have been assigned to one group of inspectors while non-SIU businesses have been assigned to two groups: Source Control-North and Source Control-South. Enforcement activities are being incorporated into the workload of inspectors in both the SIU and Source Control work groups.<sup>22</sup>

In addition, according to PUD, the Support Services group was set up to develop, update, and maintain Standard Operating Procedures (SOPs) for IWCP. Support Services is also tasked with assisting in groundwater permitting and supporting the clerical needs of the program. PUD management informed us that program staff has been working on developing SOPs during the COVID-19 pandemic while working remotely.

Moreover, five new full-time equivalent positions were created in the FY 2020 budget. One of these was an unclassified Program Manager position to oversee the program because, according to PUD management, the increased importance of IWCP as Pure Water is implemented warrants leadership at a higher level. The position was filled in October 2019. The addition of these positions further increases IWCP's program costs.

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<sup>20</sup> It is unknown whether this timeline will change based on operational impacts from the COVID-19 pandemic.

<sup>21</sup> ESCP was created in 1998 in response to regulatory requirements associated with the waiver from secondary treatment granted to the City's Point Loma Wastewater Treatment Plant. As the City begins implementing the first phase of the Pure Water Program, ESCP will be important to regulate the discharge of toxic pollutants and pesticides into the system from non-industrial sources.

<sup>22</sup> We observed inspectors in both work groups in March 2020. Based on our observations, it appears IWCP has a large backlog of inspections for both SIU and ESCP permittees. We may explore this issue further in our forthcoming audit of IWCP's permitting and enforcement processes.

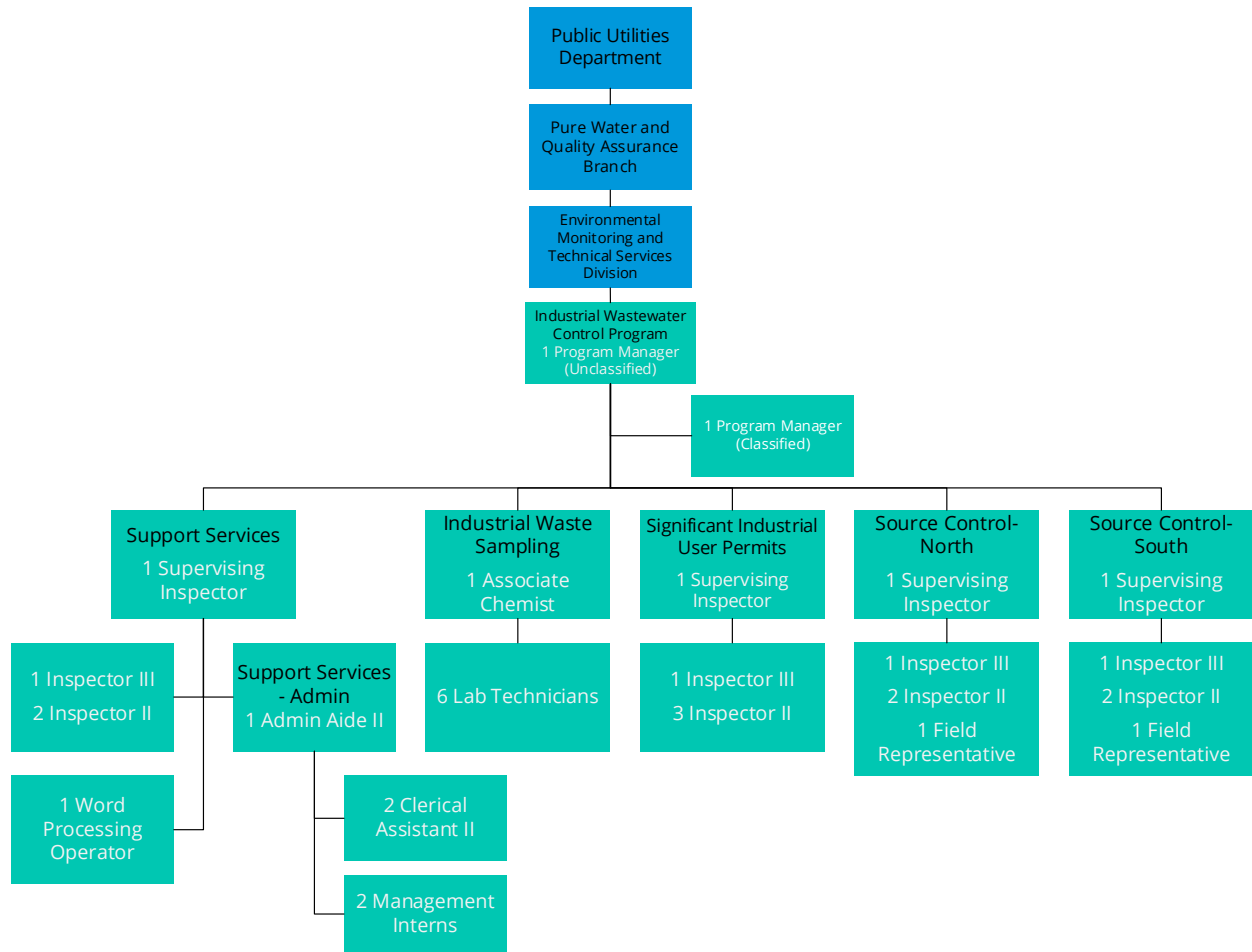
In February 2019, PUD requested a Special Salary Adjustment (SSA) of 20 percent for the Industrial Wastewater Pretreatment Inspector series (Inspector I, II, and III) to address retention issues in the Program, the differential in salary created by prior SSAs for Chemists and Lab Techs, and to increase the incentive for staff to remain with the City and IWCP. According to PUD, the SSA was approved, and new salaries were effective July 2019.

These changes are significant to the program's restructuring, but it is important to note that additional staffing will also increase the program's costs. Therefore, if program fees remain the same, there is a risk that cost recovery could become even lower.

IWCP implemented its new organizational structure in April 2020; the most current version is shown in **Exhibit 7**.

Exhibit 7

Industrial Wastewater Control Program Organizational Structure as of June 2020



Source: Auditor generated based on information provided by PUD.



# Audit Results

## **Finding 1: The Public Utilities Department Has Not Adjusted Many IWCP Permit Fees Since 1984, and its Cost Recovery Practices Remain Out of Compliance with City Policies and Possibly State Law**

**Finding Summary** While the Public Utilities Department (PUD) has made some progress, the issues we identified in our 2013 audit of the Industrial Wastewater Control Program (IWCP) remain largely unaddressed. Many fees have still not been adjusted since 1984, and program cost recovery remains very low. For example, while program costs totaled approximately \$38.8 million between FY 2010 and FY 2019, only about \$5.5 million (14 percent) was recovered through program fees charged to regulated businesses. The remaining \$33.3 million (86 percent) of program costs were passed on to other wastewater customers, including residential and commercial customers, via wastewater rates.

These cost recovery practices remain out of compliance with City regulations and policies. More seriously, the possibility remains that, by passing most program costs on to other wastewater customers, the City may not be complying with Proposition 218 (Prop 218).<sup>23</sup> We also identified an additional concern with Prop 218 compliance that is created by complexities in PUD's wastewater accounting and its agreement with Participating Agencies (PAs). Specifically, due to these complexities, the \$33.3 million needed to subsidize IWCP between FY 2010 and FY 2019 came exclusively from City of San Diego wastewater customers, even though IWCP serves the larger metro area, including 12 PAs.

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<sup>23</sup> As previously noted, we do not reach any legal conclusions in this report regarding Proposition 218, and nothing in this report should be interpreted as any type of legal conclusion.

## Follow-up Performance Audit of the Industrial Wastewater Control Program

PUD has options to ensure IWCP's cost recovery practices comply with City policies and state law and has recently made progress to this end. However, several of these efforts are still underway; therefore, our office will continue to monitor these developments as they apply to the recommendations we make in this report.

### From FY 2010 to FY 2019, 86 Percent of IWCP Costs—Totaling More Than \$30 Million—Were Passed on to Other Wastewater Customers

Our 2013 audit identified that many IWCP fees had not been updated since 1984 and others since 1999. That issue remains unaddressed since our 2013 audit, which now means that many program fees have not been adjusted for 36 years.

As a result, the vast majority of IWCP costs continue to be passed on to other wastewater customers. As **Exhibit 8** and **Exhibit 9** show, unrecovered IWCP costs averaged about \$3.3 million—or 86 percent—per year, totaling \$33.3 million in the ten-year period between FY 2010 and FY 2019. Those costs were offset by revenues from non-IWCP sources, including wastewater rates charged to residential and commercial customers.

### Exhibit 8

#### IWCP Revenues, Expenses, and Cost Recovery, Fiscal Years 2010-2019

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Violation Fees	\$21,250	\$23,483	\$20,153	\$16,877	\$14,824	\$16,306
Discharge Fees*	\$89,216	\$101,411	\$95,136	\$293,578	\$536,840	\$168,797
Lab Monitoring Fees	\$14,587	\$12,685	\$15,326	\$149,097	\$471,710	\$86,454
Trucked Waste Fees^	\$177,957	\$192,466	\$170,336	\$171,231	\$169,906	\$230,036
Misc. Revenues			\$3,003			
<b>Total Revenues†</b>	<b>\$303,010</b>	<b>\$330,045</b>	<b>\$303,954</b>	<b>\$630,783</b>	<b>\$1,193,280</b>	<b>\$501,593</b>
<b>Total Billable Expenses</b>	<b>\$3,137,974</b>	<b>\$3,190,876</b>	<b>\$3,465,149</b>	<b>\$4,250,040</b>	<b>\$5,153,584</b>	<b>\$4,946,787</b>
<b>Unrecovered Costs</b>	<b>(\$2,834,964)</b>	<b>(\$2,860,831)</b>	<b>(\$3,161,195)</b>	<b>(\$3,619,257)</b>	<b>(\$3,960,304)</b>	<b>(\$4,445,194)</b>
<b>Percent Cost Recovery</b>	<b>10%</b>	<b>10%</b>	<b>9%</b>	<b>15%</b>	<b>23%</b>	<b>10%</b>

## Follow-up Performance Audit of the Industrial Wastewater Control Program

	FY 2016	FY 2017	FY 2018	FY 2019	Total
Violation Fees	\$14,925	\$12,820	\$31,340	\$27,975	\$199,953
Discharge Fees	\$95,005	\$323,133	\$108,550	\$108,730	\$1,920,396
Lab Monitoring Fees	\$8,564	\$169,256	\$82,155	\$3,618	\$1,013,452
Trucked Waste Fees	\$281,422	\$312,813	\$295,559	\$327,630	\$2,329,356
Misc. Revenues					\$3,003
<b>Total Revenues</b>	<b>\$399,916</b>	<b>\$818,022</b>	<b>\$517,604</b>	<b>\$467,953</b>	<b>\$5,466,160</b>
<b>Total Billable Expenses</b>	<b>\$4,187,460</b>	<b>\$3,590,548</b>	<b>\$3,601,533</b>	<b>\$3,253,635</b>	<b>\$38,777,587</b>
<b>Unrecovered Costs</b>	<b>(\$3,787,544)</b>	<b>(\$2,772,525)</b>	<b>(\$3,083,928)</b>	<b>(\$2,785,683)</b>	<b>(\$33,311,426)</b>
<b>Percent Cost Recovery</b>	<b>10%</b>	<b>23%</b>	<b>14%</b>	<b>14%</b>	<b>14%</b>

Notes: **Exhibit 5** in our 2013 audit report includes a similar table for FY 2010 through FY 2012. The corresponding figures in this table originate from that exhibit, but we have adjusted them as follows:

\* In the 2013 table, "Discharge Fees" were classified as "Permitting Fees."

^ In the 2013 table, "Trucked Waste Fee" amounts were included as part of the "Permitting Fees" and "Monitoring Fees" categories. We adjusted the figures and separated out Trucked Waste revenues here for FY 2010 through FY 2012 to be consistent with other years in the table.

† In the 2013 table, "Total Revenues" included an estimated amount in each of the years (FY 2010 through FY2012) for certain permitting and monitoring revenues that had not actually been recovered at the time. After our 2013 audit, and in our office's Audit Recommendation Follow-up Report for the period ending June 30, 2014, we reported that PUD invoiced for previously unbilled permits and monitoring services for FY 2010 through FY 2012. The invoices totaled about \$628,000. Therefore, we removed the estimated revenue amounts for FY 2010 through FY 2012 from this table so as to not double count the actual revenues PUD recovered subsequent to our 2013 audit.

Source: Auditor generated based on information from PUD (FY 2010 through FY 2012) and PUD (FY 2013 through FY 2019).

**IWCP's Cost Recovery  
Practices Remain Out of  
Compliance with City  
Policies and Possibly State  
Law**

By not studying fees and presenting them to the City Council on a regular basis, PUD is not complying with multiple City regulations and policies. Specifically, San Diego Municipal Code Section 64.0508 states that Industrial Wastewater Discharge Permit Fees should be established periodically by a resolution of the City Council. In addition, the City has several policies and procedures in place requiring periodic review and updating of fees to ensure adequate cost recovery. For example, according to Administrative Regulation 95.25, the City's policy is to annually review fees to ensure that all reasonable costs incurred in providing these services are being recovered. In addition, Council Policy 100-05 also states that fees should achieve full cost recovery, except in certain cases where the intent is to provide a specific benefit to recipients (such as recreation center or library fees). The policy also requires in-depth fee studies every three years, with interim adjustments to fees taking place on an annual basis. Finally, the policy requires City Council approval for changes to fees in Enterprise Fund departments (including PUD). Because updated IWCP fees still have not been proposed to the City Council for approval, PUD is still out of compliance with these policies.

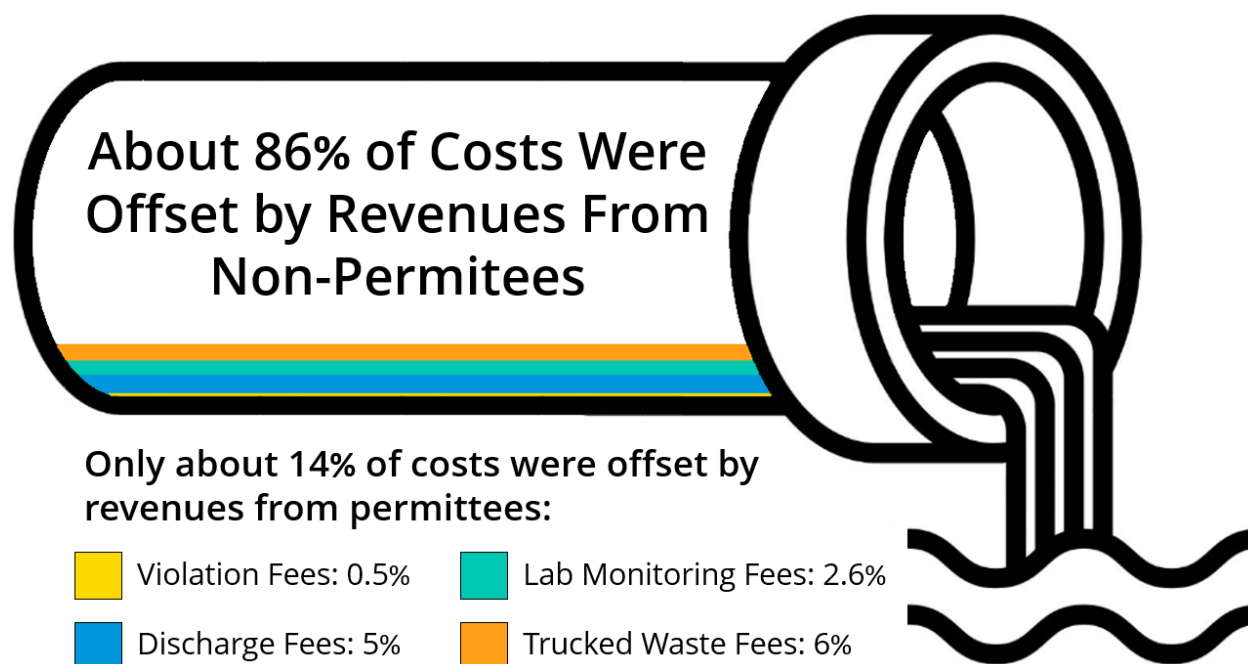
More importantly, evidence gathered since 2013 indicates an increased likelihood that the City's cost recovery practices for IWCP remain potentially out of compliance with the requirements of Prop 218, which essentially states that utility ratepayers can only be charged in accordance with the benefit they receive.<sup>24</sup> Since FY 2010, IWCP has cost over \$38 million. IWCP permittees benefit from the program by being allowed to operate businesses that may potentially discharge harmful substances into the metropolitan wastewater system. However, they have only paid about \$5.5 million via IWCP fees (about 14 percent of IWCP costs) during this time. The other 86 percent of IWCP costs, or about \$33.3 million, has been passed along to other City wastewater customers that are not IWCP permittees, such as residential customers, via higher wastewater rates.

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<sup>24</sup> As previously noted, we do not reach any legal conclusions in this report regarding Proposition 218, and nothing in this report should be interpreted as any type of legal conclusion.

Exhibit 9

Between Fiscal Years 2010 and 2019, Only About 14 Percent of IWCP's Costs Were Offset by Revenues from IWCP Permittees



Source: Auditor generated based on information from PUD.

While Prop 218 does not necessarily require full cost recovery, PUD does need to thoroughly analyze the benefits of IWCP and allocate costs equitably between IWCP permittees and other wastewater customers. There are clearly benefits to the average customer—such as avoiding secondary treatment at the Point Loma wastewater treatment facility, which PUD estimates would cost ratepayers almost \$2 billion.<sup>25</sup> However, PUD needs to analyze and quantify these benefits and then seek City Council approval for updated fees, which PUD has not historically done. According to PUD, this analysis is currently in process. Thus, the longer PUD takes to perform

<sup>25</sup> Secondary treatment is the second stage in most wastewater treatment systems in which bacteria consume the organic matter in wastewater. The Clean Water Act requires that municipal wastewater treatment plants meet a minimum of secondary treatment. However, the City has for decades operated under a waiver from secondary treatment under Sections 301(h) and 301(j)(5) of the Clean Water Act, and PUD has noted that IWCP helps ensure the City's ongoing eligibility to receive this waiver. Absent this waiver, which must be renewed every five years, the City would need to upgrade the Point Loma wastewater treatment facility to provide secondary treatment. According to PUD, the estimated cost to ratepayers for upgrading the plant to secondary treatment is almost \$2 billion.

this analysis, the longer the City is potentially out of compliance with Prop 218 and potentially subject to legal liability.

While PUD has recently acknowledged that cost recovery issues are substantial—averaging \$3.3 million per year passed on to other customers between FY 2010 and FY 2019—PUD has still maintained that this is not a material amount given total wastewater revenues. For example, revenue from sewer service charges—which is used to offset IWCP's unrecovered costs—was approximately \$267.1 million in FY 2018. Therefore, unrecovered costs of \$3.3 million would represent just over 1 percent of that revenue. PUD also estimated that recovering an additional \$3.3 million in IWCP fees in FY 2018 would have lowered the typical single-family residential customer's total sewer bill by just 1.3 percent. Using this information, we estimate that recovering an additional \$3.3 million in IWCP fees would roughly translate to approximately \$5 per year in savings for the average single-family residential customer.

While the amount of unrecovered costs may be very small compared to overall wastewater revenues, the City is not meeting certain obligations by allowing revenues from other customers to offset unrecovered IWCP costs. For example, the City has an obligation under Prop. 218 to ensure its ratepayers are not paying more than their fair share of wastewater expenses and to accurately allocate expenses within the appropriate funds. In addition, legal compliance with Prop 218 is the minimum requirement the City must meet when setting fees appropriately. Prop 218 issues aside, not adjusting fees for up to 36 years and applying revenues from residential customers to offset costs created by certain industrial users may create inequity, represents poor stewardship of customer revenues, and can damage public perception of the organization. While there are many aspects and potential effects to consider, a decision on an appropriate cost recovery level—including how much should be passed on to other customers—should ultimately be made by the Mayor and the City Council.

**Even Though the City Provides Wastewater Services—including IWCP—in the Metro Area, City Ratepayers Alone Are Subsidizing IWCP**

We uncovered an additional cost recovery issue since our 2013 audit that is caused by complexities in PUD's wastewater accounting structure and the City's agreement with the Participating Agencies (PAs). PUD uses two funds to account for wastewater activities: the Municipal Wastewater Fund (Muni Fund) and the Metropolitan Wastewater Fund (Metro Fund).<sup>26</sup> Only City customers contribute to the Muni Fund, while the Metro Fund includes revenues from both City customers and customers in the PAs. In addition, the current Regional Wastewater Disposal Agreement between the City and the PAs prohibits any IWCP costs from being passed on to PAs.<sup>27</sup> Accordingly, IWCP's revenues and expenses are budgeted exclusively within the Muni Fund, even though IWCP regulates businesses throughout the metro wastewater area—both within and outside of the City.<sup>28</sup> This means costs incurred by the program that are not recovered through fees charged to regulated businesses—which average to about 86 percent of program costs since FY 2010—are offset by revenues generated *only* from City customers. Thus, because IWCP does not recover all of its costs, and because IWCP is budgeted in the Muni Fund, the average single-family residential customer in the City pays about \$5 per year to subsidize IWCP while similar residential customers in the PAs pay nothing to subsidize IWCP—even though approximately

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<sup>26</sup> The Muni and Metro Funds have different revenue and expense sources and support different capital improvement projects. The Muni Fund receives revenues from sewer service charges; wastewater fees; and grants to cover expenses for maintaining, collecting, and transporting wastewater. The Metro Fund receives revenues from sewer service charges; wastewater fees; grants; and the sale of electricity generation. Importantly, revenue from Participating Agencies is used exclusively in the Metro Fund.

<sup>27</sup> In December 2018, the City Council and the Mayor approved an Amended and Restated Regional Wastewater Disposal Agreement; this agreement states that the City and the Participating Agencies intend to negotiate within a year of the effective date to address, among other things, the issue of IWCP costs and whether and to what extent those will be shared among the parties. We learned from the City Attorney's Office that the Amended and Restated Disposal Agreement is not in effect because two Participating Agencies have not signed it. Nevertheless, according to the City Attorney's Office, the parties are moving closer to getting the Amended and Restated Agreement fully authorized. In the meantime, the previous Disposal Agreement—which became effective in 1998—is still in effect.

<sup>28</sup> The metro wastewater area includes the City of San Diego plus 12 Participating Agencies. Refer to **Exhibit 3** for a map of IWCP's service area.

one-third of businesses regulated by IWCP are located outside the City. **Exhibit 10** illustrates that only revenue from City customers is used to offset unrecovered costs, even though IWCP serves the larger metro area.

**Exhibit 10**

**City Customers Alone Subsidize IWCP's Costs, Even Though IWCP Serves the Larger Metro Area**



\*Not all Participating Agencies appear in this graphic. Refer to **Exhibit 3** for a complete representation of Participating Agencies.

Source: Auditor generated based on information provided by PUD.



**PUD Has Options to  
Ensure Compliance with  
City Cost Recovery  
Policies and Proposition  
218**

The simplest way to ensure compliance with the City's cost recovery policies and the requirements of Proposition 218 is to thoroughly study IWCP costs, develop fees that achieve full cost recovery, and present them to the City Council for approval and implementation. Assuming PUD were to achieve full cost recovery, this approach would also eliminate the need to move IWCP's budget from the Muni Fund to the Metro Fund, since IWCP permittees would be directly offsetting all program costs.

However, a different and more comprehensive approach—one that allows for less than full cost recovery—would be for PUD to thoroughly study the costs *as well as the benefits* of the program. PUD could then develop fees that achieve a desired level of cost recovery from IWCP permittees while being able to justify passing on the unrecovered costs to other wastewater customers (based on the quantifiable benefits those other customers receive from the program). In this scenario, the costs passed on to other customers must not be more than the benefits they receive from the program; therefore, the quantifiable benefits of the program would dictate the program's minimum cost recovery level.

However, this second option is more complicated because it requires PUD to complete additional analysis before setting program fees. For example, in addition to studying costs, PUD would need to thoroughly analyze and quantify the benefits that IWCP provides to non-IWCP customers—which may be difficult to accomplish, especially if those benefits are not easily quantifiable. Moreover, this option may potentially increase the risk of non-compliance if a court were to find the City's analysis overestimated the relative benefit of the program to non-IWCP customers. Finally, the second option is more complicated because PUD would also need to move IWCP's budget from the Muni Fund to the Metro Fund to ensure that any unrecovered costs are shared between the City and the Participating Agencies.

For comparative purposes, we reviewed the cost structures of other agencies' IWCP-like programs to compare cost recovery rates and other elements relating to IWCP improvements. We compared IWCP to the Orange County (CA) Sanitation District,

the City of Portland's Industrial Pretreatment Program, the City of San Jose's Industrial Discharge Program, and King County's (WA) Industrial Waste Program.<sup>29</sup> We found that cost recovery varies for the other agencies—from 10 percent to 100 percent. In San Diego, cost recovery averaged 14 percent between FY 2010 and FY 2019. In addition, other agencies update their permit fees regularly and have methods to track billable costs clearly, accurately, and explicitly related to industrial wastewater.

**PUD Has Recently Made  
Progress in Implementing  
Some of the  
Recommendations from  
Our 2013 Audit and to  
Ensure Compliance with  
City Cost Recovery  
Policies and Proposition**

**218**

In response to Recommendation 1 from our 2013 audit report, PUD recently drafted a process narrative for calculating all billable IWCP costs and program revenues so that PUD staff can determine IWCP fee levels and appropriate cost recovery rates. The draft process narrative is supplemented by screenshots and a spreadsheet to assist staff in calculating IWCP costs and revenues. While the process narrative and supplemental materials are still in draft form as of June 2020, they appear to substantively address Recommendation 1 from our 2013 audit report. Our office will make a final determination on the status of this recommendation after PUD finalizes the process narrative and approves it for use.<sup>30</sup>

In addition, and according to PUD, the department is pursuing the second approach described above to ensure compliance with the City's cost recovery policies and the requirements of Prop 218. PUD has engaged a consultant to complete a cost of service study and assist the department in developing updated IWCP fees for approval by the City Council. According to PUD, their consultant is also working to quantify the benefits of IWCP so that PUD may better understand whether a portion of the program's costs can be justifiably passed on to other customers. In addition, the department intends to move IWCP's budget from the Muni Fund to the Metro Fund at some point in the future. Finally, PUD has developed a draft fee

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<sup>29</sup> All comparable programs were chosen based on similarities to the City of San Diego's IWCP. However, the City of San Diego is the only program that participates in the 301(h) waiver program. In addition, Portland and King County are not located in California, and thus are not subject to the provisions of Prop 218.

<sup>30</sup> After we reviewed the draft process narrative, PUD management informed us that the final version will likely be in the form of a department instruction.

model; this draft model allows staff to determine fee levels that would be necessary to fully recover IWCP's program costs. The draft fee model; the analysis by PUD's consultant; the determination on a proposed cost recovery level; and the proposal of updated program fees to the City Council for approval are all pending as of June 2020. We note that these items and actions collectively touch on several of the recommendations we made in our 2013 audit report—specifically Recommendations 2, 3, 4, and 5. Therefore, our office's final determination on the status of these recommendations is pending completion of these items.

**Recommendations** Given that the same issues we identified in 2013 are largely still taking place and that PUD has not implemented the recommendations we made at that time, we make the same recommendations in this follow-up report. The following recommendations were made in our 2013 public audit and have been modified to include the potential Prop. 218 issues we raised in our 2013 confidential memo. We note that Recommendations 4 and 6 depend on negotiating with the Participating Agencies; we encourage the City to negotiate terms that allow these recommendations to be implemented as stated.

Specifically, in order to ensure that cost recovery practices for IWCP are brought into compliance with City policies and state law as quickly as possible, we recommend:

**Recommendation 1** The Public Utilities Department should establish policies and procedures to track all billable IWCP related costs so that fee levels and appropriate cost recovery rates can be determined effectively. (Priority 1)

**Recommendation 2** The Public Utilities Department should establish policies and procedures to periodically review fee levels and present fee proposals to the City Council. These reviews and fee studies should include calculation of the rate of cost recovery achieved by current fees. Reviews should be conducted on an annual basis, and detailed fee studies should be conducted not less than every three years, in accordance with Council Policy 100-05 and Administrative Regulation 95.25, and

proposed fees and cost recovery levels should comply with Proposition 218. (Priority 1)

- Recommendation 3** The Public Utilities Department should perform a fee study to determine fee levels that achieve full cost recovery for all IWCP activities, including all labor and materials required for application review and permitting, inspections, monitoring, and sample analysis, as well as overhead and non-personnel expenses. The Public Utilities Department should ensure that methodologies used to calculate fees are adequately documented and consult with the Office of the City Attorney to meet all applicable legal requirements, including those established by Proposition 218. (Priority 1)
- Recommendation 4** Upon completion of the fee study, the Public Utilities Department should work with the Office of the City Attorney and the Participating Agencies to review and revise, as appropriate, Interjurisdictional Agreements to include fees for service that achieve appropriate cost recovery under the guidelines of Council Policy 100-05 and Administrative Regulation 95.25, as well as Proposition 218. The revised agreements should include mechanisms to adjust fees in response to changes in the cost of service. (Priority 1)
- Recommendation 5** Upon completion of the fee study, the Public Utilities Department, in consultation with the City Attorney's Office, should develop a proposal for consideration by the City Council to update fees for Industrial Users within the City of San Diego. This proposal should include fees that achieve appropriate cost recovery under the guidelines of Council Policy 100-05 and Administrative Regulation 95.25, as well as Proposition 218. The revised fee schedules should include mechanisms to adjust fees in response to changes in the cost of service. (Priority 1)

In addition to the recommendations we made in 2013, we make the following new recommendation to ensure that any IWCP programs costs that are not recovered through program fees from regulated businesses are divided equitably between City customers and customers within the Participating Agencies. As previously noted, and per the Amended and Restated Disposal Agreement, this requires the City to negotiate with the Participating Agencies.

**Recommendation 6** The Public Utilities Department should move the Industrial Wastewater Control Program's budget from the Municipal Wastewater Fund to the Metropolitan Wastewater Fund. (Priority 1

## Finding 2: Billing Lapses Have Reoccurred Due to Overly Complex and Inefficient Processes and a Breakdown in Oversight

### Finding Summary

Even though the Public Utilities Department (PUD) implemented our 2013 recommendation to recover costs that went unbilled between FY 2008 and FY 2012,<sup>31</sup> we found that, since FY 2017, PUD again failed to bill many IWCP permittees outside the City. As in 2013, we found this was largely due to overly-complex and labor-intensive billing processes and a breakdown in billing oversight.

PUD management stated that adopting a standardized billing process for all program fees, regardless of jurisdiction, is ultimately their goal. However, according to PUD management, this is something that would need to be negotiated as part of updated agreements with Participating Agencies (PAs). In addition, PUD must still propose updated program fees to the City Council for approval. Therefore, implementing a single billing procedure will likely take place further in the future.

### IWCP Still Uses Multiple Billing Processes, which is Inefficient and Increases the Risk of Billing Errors

As show in **Exhibit 11** below, our 2013 audit found that PUD used three different billing processes for different industrial businesses, depending on the jurisdiction in which they were located.

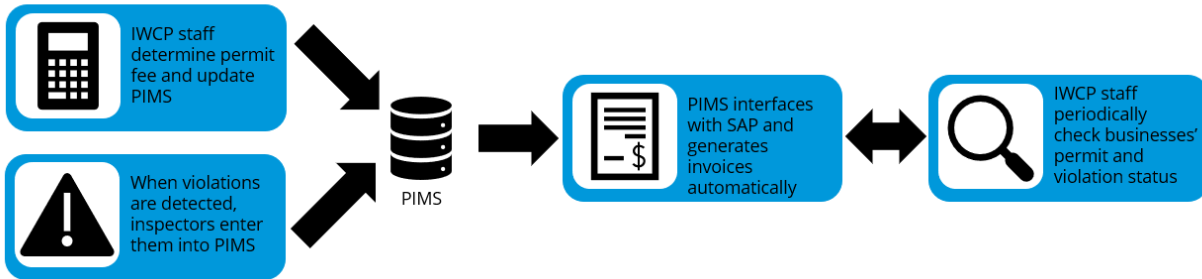
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<sup>31</sup> Prior to the completion of our 2013 audit, PUD sent invoices for unbilled charges accrued during FY 2008 and FY 2009. We later verified that PUD invoiced for previously unbilled permits and monitoring services for FY 2010 through FY 2012.

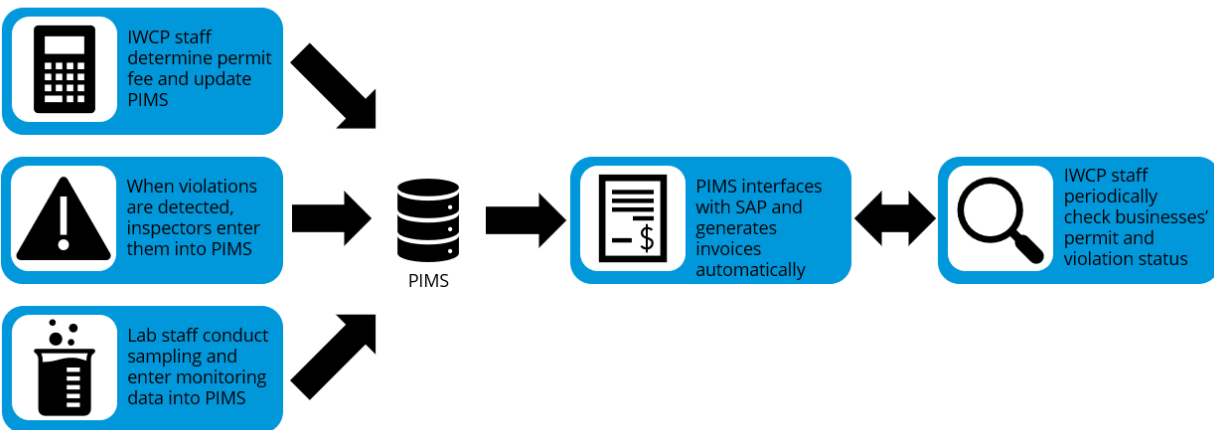
## Exhibit 11

## Summary of IWCP's Multiple Billing Processes

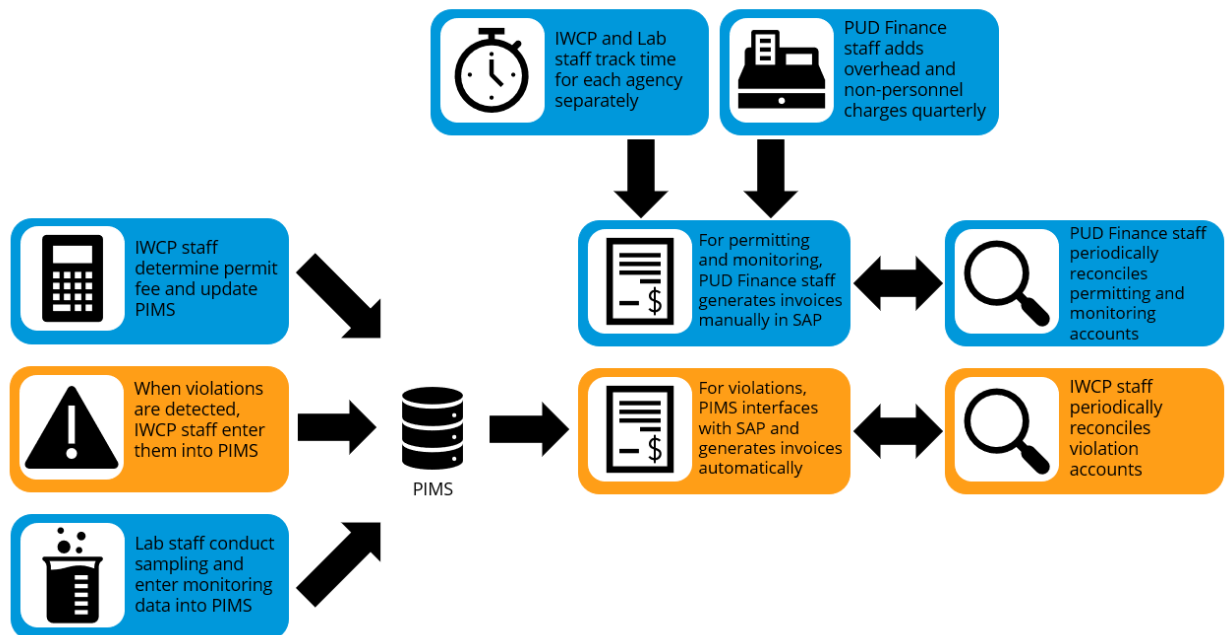
## Billing Process for Industrial Users Within the City



## Billing Process for Industrial Users Within the County Participating Agencies



## Billing Process for Industrial Users Within the Municipal Participating Agencies



Source: Auditor generated summary of PUD information.

This approach created unnecessary complexity, making it difficult for IWCP staff to ensure the timely and accurate billing and reconciliation of accounts. In fact, we found that IWCP failed to bill approximately \$850,000 to some regulated entities located outside the City during the five-year period between FY 2008 and FY 2012. This indicated both a lack of understanding of billing practices on the part of staff as well as a significant breakdown in billing oversight. We recommended that PUD develop a single, standardized billing process for all IWCP fees. That recommendation, however, has not been implemented since the 2013 audit.

Instead, we learned that IWCP still follows multiple billing processes depending on the jurisdiction in which an industrial business is located. We also learned that billing lapses have reoccurred, and IWCP has not billed all industrial businesses outside of the City since FY 2017.<sup>32</sup> According to PUD, this is a result of not having enough staff to accomplish the billing for all municipal PAs. In addition, as in 2013, we conclude that the use of multiple billing processes is a major contributing factor to these lapses, as the current billing processes are overly complex, confusing, and inefficient. When asked whether IWCP would adopt a standardized billing process for all fees regardless of jurisdiction, PUD management stated that this is ultimately the goal and is something that would need to be negotiated as part of updated agreements with PAs. However, according to PUD management, billing procedures are only one aspect of those agreements—updated fees, for example, would also need to be addressed—so implementing a single billing procedure will likely take place further in the future.

For comparison, in the City of Los Angeles, the Bureau of Sanitation's Industrial Waste Division administers the Pretreatment Program, which regulates the discharge of industrial wastewater into the city's publicly-owned treatment works system. The Pretreatment Program's service area includes 19 contributing jurisdictions and 8 contract cities. According to Financial Management staff from the City of Los Angeles's Industrial Waste Division, the largest participating

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<sup>32</sup> The total amount that has gone unbilled is yet to be determined.



agencies have signed onto a Universal Terms Agreement (UTA). Under the UTA, the city treats the wastewater and the participating agencies must follow certain procedures relating to enforcement and regulation. The UTA also provides that the City of Los Angeles will charge participating agencies the same rates it charges users in the City of Los Angeles. Thus, the City of Los Angeles uses a singular billing process for all participating jurisdictions and may avoid the billing inefficiencies created by using multiple and complex billing processes.

Because the billing process issues identified in our 2013 audit have not been corrected, and because billing lapses have reoccurred, we again make the following recommendations to standardize IWCP's billing process, ensure accurate and timely billing, and improve efficiency:

**Recommendation 7** The Public Utilities Department should work with the Office of the City Attorney to seek recovery, to the greatest extent possible allowed by law, of all unbilled costs related to Industrial Wastewater Control Program application review, permitting, inspection, and monitoring. (Priority 1)

**Recommendation 8** The Public Utilities Department should establish a centralized billing process and standardized billing policies and procedures for all IWCP fees and charges. These policies and procedures should be documented in a process narrative and should:

- a. Establish responsibilities and timelines for generating and sending invoices for all IWCP fees and charges;
- b. Establish responsibilities and timelines for performing a periodic reconciliation of all IWCP revenue accounts;
- c. Establish guidelines and procedures for recording labor time, if necessary to determine invoice amounts;
- d. Establish guidelines and procedures for calculating invoice amounts; and
- e. Ensure that appropriate Separation of Duties controls are enforced. (Priority 1)

**Recommendation 9** The Public Utilities Department should perform a comprehensive review of all PIMS settings and invoice calculating features to ensure that invoices are automatically generated by PIMS and sent in a timely manner. (Priority 1)

# Conclusion

IWCP is an important City program. It is a key component of the City's environmental management efforts; plays a critical role in the City's compliance with wastewater regulations; helps to protect wastewater infrastructure and limit replacement costs; is important for protecting source water quality for the Pure Water Program; and is critical for the City's ongoing eligibility for the waiver from secondary wastewater treatment, which helps preclude the need to make about \$2 billion worth of upgrades to the Point Loma Wastewater Treatment Plant.

We believe that conducting this follow-up audit was in the public interest, given the importance of the program, the length of time that passed since our 2013 audit, and the numerous delays in implementing both the public and confidential audit recommendations. Even though the City has made some progress toward implementing these, we found that many of the same substantive issues remain largely unaddressed:

- Program fees have still not been updated for decades;
- Program cost recovery is still very low—only about 14 percent between FY 2010 and FY 2019;
- Unrecovered program costs are still offset by charges to other ratepayers, including residential and commercial customers, which creates the possibility that PUD's cost recovery practices do not comply with Proposition 218;<sup>33</sup> and
- Billing lapses reoccurred as a result of overly-complex and labor-intensive billing processes and a breakdown in billing oversight.

In addition to the issues we raised in 2013, this report identifies an additional concern with Proposition 218

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<sup>33</sup> As previously noted, we do not reach any legal conclusions in this report regarding Proposition 218, and nothing in this report should be interpreted as any type of legal conclusion.

compliance: City wastewater customers alone are subsidizing program costs, even though the program serves customers in the larger metro area, including customers in the Participating Agencies.<sup>34</sup>

Making changes to the program per our recommendations is important to ensure that program fees are regularly reviewed and updated; cost recovery is monitored; billing is timely; and cost recovery practices are equitable and comply with City policies and state law.

We will continue to monitor the City's progress in addressing the issues identified by our audits.

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<sup>34</sup> As previously noted, we do not reach any legal conclusions in this report regarding Proposition 218, and nothing in this report should be interpreted as any type of legal conclusion.

# Recommendations

- Recommendation 1** The Public Utilities Department should establish policies and procedures to track all billable IWCP related costs so that fee levels and appropriate cost recovery rates can be determined effectively. (Priority 1)
- Recommendation 2** The Public Utilities Department should establish policies and procedures to periodically review fee levels and present fee proposals to the City Council. These reviews and fee studies should include calculation of the rate of cost recovery achieved by current fees. Reviews should be conducted on an annual basis, and detailed fee studies should be conducted not less than every three years, in accordance with Council Policy 100-05 and Administrative Regulation 95.25, and proposed fees and cost recovery levels should comply with Proposition 218. (Priority 1)
- Recommendation 3** The Public Utilities Department should perform a fee study to determine fee levels that achieve full cost recovery for all IWCP activities, including all labor and materials required for application review and permitting, inspections, monitoring, and sample analysis, as well as overhead and non-personnel expenses. The Public Utilities Department should ensure that methodologies used to calculate fees are adequately documented and consult with the Office of the City Attorney to meet all applicable legal requirements, including those established by Proposition 218. (Priority 1)
- Recommendation 4** Upon completion of the fee study, the Public Utilities Department should work with the Office of the City Attorney and the Participating Agencies to review and revise, as appropriate, Interjurisdictional Agreements to include fees for service that achieve appropriate cost recovery under the guidelines of Council Policy 100-05 and Administrative Regulation 95.25, as well as Proposition 218. The revised agreements should include mechanisms to adjust fees in response to changes in the cost of service. (Priority 1)

**Recommendation 5** Upon completion of the fee study, the Public Utilities Department, in consultation with the City Attorney's Office, should develop a proposal for consideration by the City Council to update fees for Industrial Users within the City of San Diego. This proposal should include fees that achieve appropriate cost recovery under the guidelines of Council Policy 100-05 and Administrative Regulation 95.25, as well as Proposition 218. The revised fee schedules should include mechanisms to adjust fees in response to changes in the cost of service. (Priority 1)

**Recommendation 6** The Public Utilities Department should move the Industrial Wastewater Control Program's budget from the Municipal Wastewater Fund to the Metropolitan Wastewater Fund. (Priority 1)

**Recommendation 7** The Public Utilities Department should work with the Office of the City Attorney to seek recovery, to the greatest extent possible allowed by law, of all unbilled costs related to Industrial Wastewater Control Program application review, permitting, inspection, and monitoring. (Priority 1)

**Recommendation 8** The Public Utilities Department should establish a centralized billing process and standardized billing policies and procedures for all IWCP fees and charges. These policies and procedures should be documented in a process narrative and should:

- a. Establish responsibilities and timelines for generating and sending invoices for all IWCP fees and charges;
- b. Establish responsibilities and timelines for performing a periodic reconciliation of all IWCP revenue accounts;
- c. Establish guidelines and procedures for recording labor time, if necessary to determine invoice amounts;
- d. Establish guidelines and procedures for calculating invoice amounts; and
- e. Ensure that appropriate Separation of Duties controls are enforced. (Priority 1)

**Recommendation 9** The Public Utilities Department should perform a comprehensive review of all PIMS settings and invoice calculating features to ensure that invoices are automatically generated by PIMS and sent in a timely manner. (Priority 1)

# Appendix A: Definition of Audit Recommendation Priorities

The Office of the City Auditor maintains a priority classification scheme for audit recommendations based on the importance of each recommendation to the City, as described in the table below. While the City Auditor is responsible for providing a priority classification for recommendations, it is the City Administration's responsibility to establish a target date to implement each recommendation, taking into consideration its priority. The City Auditor requests that target dates be included in the Administration's official response to the audit findings and recommendations.

Priority Class <sup>35</sup>	Description
1	<p>Fraud or serious violations are being committed.</p> <p>Significant fiscal and/or equivalent non-fiscal losses are occurring.</p> <p>Costly and/or detrimental operational inefficiencies are taking place.</p> <p>A significant internal control weakness has been identified.</p>
2	<p>The potential for incurring significant fiscal and/or equivalent non-fiscal losses exists.</p> <p>The potential for costly and/or detrimental operational inefficiencies exists.</p> <p>The potential for strengthening or improving internal controls exists.</p>
3	<p>Operation or administrative process will be improved.</p>

<sup>35</sup> The City Auditor is responsible for assigning audit recommendation priority class numbers. A recommendation that clearly fits the description for more than one priority class shall be assigned the higher priority.



## Appendix B: Audit Objectives, Scope, and Methodology

In accordance with the City Auditor's Fiscal 2020 Audit Work Plan, we conducted a follow-up audit of the Public Utilities Department's (PUD's) Industrial Wastewater Control Program (IWCP).

**Objectives and Scope** Given the serious issues identified in 2013 through both our public audit report and our confidential audit memorandum, and the apparent lack of progress in implementing our recommendations, we conducted this follow-up audit to evaluate the current state of PUD's cost recovery efforts for IWCP. Specifically, our audit objectives were to review the implementation status of our 2013 recommendations and publicly report on the issues we had identified in 2013 through both our public audit and our confidential audit memorandum.

**Methodology** To do this, and in addition to the routine efforts we have made since 2013 as part of our office's normal recommendation follow-up process, we requested and reviewed pertinent program documents from PUD. These included policies and procedures related to IWCP's operations; recent permitting data; program expenses and revenues; service contract documents related to cost of service studies; current organizational charts; several annual wastewater pretreatment reports; and a program assessment report completed in 2019.

***Data Reliability and Internal Controls*** We updated several key components from our 2013 audit report based on information provided by PUD, including the cost recovery table presented in **Exhibit 8**. For figures in the cost recovery table that PUD provided to us, we reviewed PUD's methodology for calculating them, but we did not perform detailed data reliability testing. Our testing of internal controls was limited to reviewing PUD's documentation for tracking costs and revenues.

We also reviewed correspondence between our office, PUD, and the City Attorney's Office to better articulate the sequence of notable events that took place since our 2013 public audit report and confidential audit memorandum.

In addition, we conducted several interviews with department management and program staff to discuss past developments and efforts to address our 2013 recommendations; the current state of the program, including field observations to better understand the permitting and inspection process; and management's recent progress in implementing our past recommendations, including the current cost of service study and other pending items that will impact the program and its cost recovery practices in the future.

### **Compliance Statement**

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.



THE CITY OF SAN DIEGO

**M E M O R A N D U M**

DATE: July 9, 2020

TO: Kyle Elser, Interim City Auditor, Office of the City Auditor

FROM: Shauna Lorance, Director, Public Utilities Department

SUBJECT: Management Response to Follow-Up Performance Audit of Public Utilities Department's Industrial Wastewater Control Program

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The purpose of this memorandum is to provide Management's response to the City Auditor's report entitled *Follow-Up Performance Audit of Public Utilities Department's Industrial Wastewater Control Program: PUD's Cost Recovery Practices Remain Out of Compliance with City Regulations, Policies, and Potentially State Law*.

Public Utilities Department (Department) management agrees with recommendations included in the audit and has made considerable progress toward completing several of this audit's recommendations over the past year. Under the leadership of Mayor Faulconer, a new management structure and team are now in place and we are committed to continuous improvement throughout our operations. Those improvements include the initial steps necessary to respond to this audit's recommendations, including a cost of service analysis for the Industrial Wastewater Control Program (IWCP) and development of a clear and documented process for tracking IWCP expenses and revenues to fully capture *all* of that program's financial impacts.

The Department has worked diligently with a rate consultant to prepare an IWCP cost recovery model that can be used to prepare updated fee proposals on both a near-term and long-term basis, and the model has sufficient usability and flexibility to adapt to future changes to the program's operations and budget. As noted in the audit and in our responses below, the Department's rate consultant is continuing to work to determine the appropriate portion of IWCP expenses that should be recovered directly through IWCP fees and those that should be recovered from system-wide users who indirectly benefit from the program. This work, along with the IWCP cost recovery model, will be used as the basis for a proposal the City Council can consider to adjust existing IWCP fees.

While over two decades have passed since IWCP fees were last updated, we have documented through our responses how we will periodically update fees to ensure that they remain appropriate and comply with all applicable regulations.

Page 2 of 7

Kyle Elser, Interim City Auditor, Office of the City Auditor

July 9, 2020

We appreciate the opportunity to provide comments on this audit and thank the City Auditor's team for their cooperation and professionalism throughout the audit process. Our responses to the audit recommendations are below.

**RECOMMENDATION #1:** The Public Utilities Department should establish policies and procedures to track all billable IWCP related costs so that fee levels and appropriate cost recovery rates can be determined effectively.

**Management's Response:** Agree. The IWCP is budgeted in multiple fund centers (an IWCP Fund Center and an Environmental Chemistry Services Fund Center) which requires the use of multiple data sources to accomplish this recommendation. The Department has prepared a draft Department Instruction that clearly documents processes and procedures for extracting IWCP expense and revenue data using SAP Business Objects and the Pretreatment Information Management System (PIMS). The draft Department Instruction clearly lays out the processes needed to extract budget information from SAP, and the steps needed to apply PIMS data, in order to capture specific IWCP expenses and revenues.

The information derived from this process provides total IWCP expenses and revenues that can be used in combination with the IWCP Cost Recovery Model (see Recommendations 2 and 3), to determine fee levels to achieve appropriate cost recovery.

**Target Implementation Date:** Tracking IWCP related costs, using SAP and PIMS, has been implemented. The Department Instruction will be finalized and put into effect by December 30, 2020, including training of all applicable team members. As new employees involved in this program are hired, additional training on the Department Instruction will be provided during the onboarding process.

**RECOMMENDATION #2:** The Public Utilities Department should establish policies and procedures to periodically review fee levels and present fee proposals to the City Council. These reviews and fee studies should include calculation of the rate of cost recovery achieved by current fees. Reviews should be conducted on an annual basis, and detailed fee studies should be conducted not less than every three years, in accordance with Council Policy 100-05 and Administrative Regulation 95.25, and proposed fees and cost recovery levels should comply with Proposition 218.

**Management's Response:** Agree. The response to Recommendation 1 provides the process necessary to identify total IWCP expenses and revenues that can be used in combination with the IWCP Cost Recovery Model (see Recommendation 3, to determine appropriate fee levels to achieve appropriate cost recovery, which will be executed annually). Additionally, the City contracted with Raftelis Financial Consultants, Inc. (Raftelis Consulting) to prepare a fee model that can allocate IWCP expenses to various IWCP functions and tasks, and that can be used to update IWCP permitting and violation fees. This model is substantially complete, and Raftelis Consulting is further preparing a user manual for the model that will allow the Department to update total expenses and the allocation of those expenses in order to propose updated fee levels on a periodic basis. The fee proposal consideration by the City Council is discussed in Recommendation 3.

As noted in the audit, the IWCP does provide benefits to non-industrial customers, and therefore it may be appropriate to not recover all IWCP costs from IWCP fees. Raftelis

Consulting is currently evaluating and quantifying these system-wide benefits to determine the appropriate level of direct cost-recovery through fees under Proposition 218.

**Target Implementation Date:** Most elements of this recommendation have been implemented. The Department Instruction will be finalized and operationalized by December 30, 2020, including training of all appropriate team members. An initial fee proposal will be developed in Fiscal Year 2021, and any implemented fee proposal will be reviewed to generate an updated fee proposal by Fiscal Year 2024.

**RECOMMENDATION #3:** The Public Utilities Department should perform a fee study to determine fee levels that achieve full cost recovery for all IWCP activities, including all labor and materials required for application review and permitting, inspections, monitoring, and sample analysis, as well as overhead and non-personnel expenses. The Public Utilities Department should ensure that methodologies used to calculate fees are adequately documented and consult with the Office of the City Attorney to meet all applicable legal requirements, including those established by Proposition 218.

**Management's Response:** Agree. As noted in the response to Recommendation 2, the Department has engaged Raftelis Consulting to create a fee model and user manual that will be used to develop fees for appropriate cost recovery of IWCP activities by allocating all expenses (including labor, materials, overhead, and non-personnel expenses) to specific IWCP functions and tasks. The model is substantially complete.

Raftelis Consulting is currently evaluating the appropriate level of direct cost recovery for the program. Upon completion of its evaluation, the Department will work with the City Attorney's office to ensure that any ensuing fee proposals will meet all legal requirements.

**Target Implementation Date:** Raftelis Consulting and the Department will complete work on the fee study, to prepare a proposal for revised fees for consideration by the City Council by January 30, 2021, and the Department will work with the City Attorney to ensure all legal requirements are met.

**RECOMMENDATION #4:** Upon completion of the fee study, the Public Utilities Department should work with the Office of the City Attorney and the Participating Agencies to review and revise, as appropriate, Interjurisdictional Agreements to include fees for service that achieve appropriate cost recovery under the guidelines of Council Policy 100-05 and Administrative Regulation 95.25, as well as Proposition 218. The revised agreements should include mechanisms to adjust fees in response to changes in the cost of service.

**Management's Response:** Agree. As noted in the audit, a portion of IWCP expenses and revenues are derived from permittees that are outside of City limits and that are in the jurisdiction of Participating Agencies (PAs) of the Metropolitan Wastewater Joint Powers Authority (Metro JPA). The Department intends to seek permit fees for IWCP functions and tasks that are uniform regardless of the location of the permittee.

The PAs of the Metro JPA are currently in the process of approving an amended and restated agreement that describes wastewater expenses they are responsible for paying. That amended and restated agreement explicitly notes that upon its effective date, the City and the PAs intend to negotiate in good faith on additional matters, including the proportion of

IWCP costs that PAs are ultimately responsible for (the existing agreement precludes using IWCP costs to determine overall PA payments for use of the City's wastewater treatment infrastructure). Negotiations on this are anticipated to begin immediately after the amended and restated agreement is approved by all PAs, which is currently anticipated by November 2020. Any revisions to Metro JPA agreements will be subject to negotiations, and while the Department will seek an appropriate and timely outcome regarding IWCP costs, the Department cannot guarantee a specific outcome or timeframe.

**Target Implementation Date:** The Department anticipates entering negotiations on further amendments to the Metro JPA Agreement by November 2020.

**RECOMMENDATION #5:** Upon completion of the fee study, we recommend the Public Utilities Department, in consultation with the City Attorney's Office, should develop a proposal for consideration by the City Council to update fees for Industrial Users within the City of San Diego. This proposal should include fees that achieve appropriate cost recovery under the guidelines of Council Policy 100-05 and Administrative Regulation 95.25, as well as Proposition 218. The revised fee schedules should include mechanisms to adjust fees in response to changes in the cost of service.

**Management's Response:** Agree. As noted in our response to Recommendation 3, the Department has engaged Raftelis Consulting to create a fee model that can be used to determine fees for full cost recovery of IWCP activities by allocating expenses to specific IWCP functions and tasks. This model is substantially complete.

Raftelis Consulting is currently evaluating the appropriate level of direct cost recovery for the program. Upon completion of its evaluation the Department will work with the City Attorney's office to ensure that any ensuing fee proposals will meet all legal requirements. While the Department may propose updated fees, the decision to actually implement those fees rests with the City Council.

**Target Implementation Date:** Raftelis Consulting and the Department will complete work on the fee study, and prepare a proposal for revised fees for consideration by the City Council by January 30, 2021, and the Department will work with the City Attorney to ensure all legal requirements are met.

**RECOMMENDATION #6:** The Public Utilities Department should move the Industrial Wastewater Control Program's budget from the Municipal Wastewater Fund to the Metropolitan Wastewater Fund.

**Management's Response:** Agree. As the IWCP is a treatment program, it is appropriate for it to be budgeted in the Metropolitan Wastewater Fund. Metropolitan Wastewater Fund expenses are shared by the City and the PAs. The City's current agreement with the PAs precludes the City from charging PAs for general IWCP expenses; however, as noted in the response to Recommendation 4, the Department intends to enter negotiations with the PAs of the Metro JPA to determine an appropriate share of IWCP expenses that to be borne by the PAs. Upon completion of these negotiations, it will be appropriate to move the IWCP budget from the Municipal Sewer Fund to the Metropolitan Wastewater fund.

Moving the IWCP budget requires reallocating IWCP expenses and revenues through the City's restructure process. Requests for restructures generally must be submitted by operating departments to the Department of Finance by October in order for them to be implemented in the following fiscal year's budget.

**Target Implementation Date:** The Department intends to include the IWCP's budget in the Metropolitan Sewer Fund after completing negotiations with the PAs. If this is completed by the fall of 2021, in accordance with DoF's schedule, this should then be reflected in the FY 2023 budget. If negotiations with the PAs do not conclude by the fall of 2021, the budgetary transition may not be possible until the following fiscal year (Fiscal Year 2024).

**RECOMMENDATION #7:** The Public Utilities Department should work with the Office of the City Attorney to seek recovery, to the greatest extent possible allowed by law, of all unbilled costs related to Industrial Wastewater Control Program application review, permitting, inspection, and monitoring.

**Management's Response:** Agree. While bills for IWCP permitting and sampling performed for Metro JPA PA customers have not been sent since FY 2017, the Department is able to determine the unbilled parties and amounts.

While PAs are not billed for general IWCP costs, as discussed in Recommendations 4 and 6, PAs do pay for their share of the Metro Wastewater system's treatment expenses. On an annual basis, PAs make initial payments for their anticipated use, and then after a reconciliation of their anticipated and actual use, they are issued refunds or additional bills to true-up those initial payments. The Department intends to send bills for unbilled IWCP fees to the appropriate PAs at the same time that it sends its true-up refunds/invoices.

**Target Implementation Date:** The Department is working to notify PAs of amounts due; it anticipates sending invoices for unbilled amounts by December 30, 2020.

**RECOMMENDATION #8:** The Public Utilities Department should establish a centralized billing process and standardized billing policies and procedures for all IWCP fees and charges. These policies and procedures should be documented in a process narrative and should:

- a. Establish responsibilities and timelines for generating and sending invoices for all IWCP fees and charge;
- b. Establish responsibilities and timelines for performing a periodic reconciliation of all IWCP revenue accounts;
- c. Establish guidelines and procedures for recording labor time, if necessary to determine invoice amounts;
- d. Establish guidelines and procedures for calculating invoice amounts; and

Ensure that appropriate Separation of Duties controls are enforced.

**Management's Response:** Agree. While there is an existing process for billing City of San Diego businesses, billing businesses that fall outside of the City's boundaries and in the boundaries of the various PAs is complicated. In some cases, those businesses are billed directly, and in others the PA in whose jurisdiction those businesses are located is billed. The



Page 6 of 7

Kyle Elser, Interim City Auditor, Office of the City Auditor

July 9, 2020

Department's past practices have not been clearly documented, and the Department is currently evaluating its past processes while developing instructions and guidelines for calculating the appropriate yearly costs to PAs and permittees that are located outside the City. This includes:

- Developing instructions and documenting a standard operating procedure for current sampling and permitting fees charged to PA's using PIMS data (expected to be complete in December 2020);
- The Environmental Monitoring and Technical Services (EMTS) and Finance Divisions working to ensure the methodology for PA fees are appropriate for billing (expected to be complete in January 2021); and
- EMTS completing the reorganization of the IWCP and assigning the responsibility of annually billing PAs to the Support Services Group (expected to be complete in October 2020, with bills annually to PAs or outside permittees annually in October).

Note that implementation of this process will require negotiations with PAs, as is indicated in the responses to Recommendations 4 and 6.

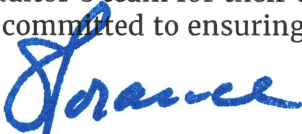
**Target Implementation Date:** The Department's Environmental Monitoring and Technical Services Division is working in conjunction with its Finance Division to complete these operating procedures by January 30, 2021.

**RECOMMENDATION #9:** The Public Utilities Department should perform a comprehensive review of all PIMS settings and invoice calculating features to ensure that invoices are automatically generated by PIMS and sent in a timely manner.

**Management's Response:** Agree. The Department currently invoices City of San Diego and County businesses automatically with approved fees pursuant to the 1984 Council Resolution or County agreement. As described in our response to Recommendation 8, PA bills require annual calculations. The process described in our response to Recommendation 8 will contain approved timelines. Additionally, the Department is developing a PIMS replacement program through the RFP process; the bidding period is expected to open in September 2020. This new PIMS will have documented billing invoice processes that sync with SAP system.

**Target Implementation Date:** The Department anticipates the new PIMS system to be implemented by June 2021. This timeline may need to be modified depending on the implementation timelines of respondents to the RFP to ensure successful implementation.

Again, we appreciate the opportunity to provide comments on this audit, and thank the City Auditor's team for their cooperation and professionalism throughout the audit process. PUD is committed to ensuring substantial progress is made on addressing these findings.



Shauna Lorange  
Director

cc: Kris Michell, Chief Operating Officer  
Aimee Faucett, Chief of Staff, Office of the Mayor



Page 7 of 7

Kyle Elser, Interim City Auditor, Office of the City Auditor

July 9, 2020

Jeff Sturak, Assistant Chief Operating Officer

Rolando Charvel, Chief Financial Officer

Johnnie Perkins, Deputy Chief Operating Officer

Jessica Lawrence, Director of Policy and Council Affairs, Office of the Mayor

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John Stufflebean, Assistant Director, Public Utilities Department

Peter Vroom, Deputy Director, Public Utilities Department

Charles Modica, Deputy Director, Public Utilities Department

Andy Hanau, Interim Assistant City Auditor, Office of the City Auditor

# ATTACHMENT B

## Follow Up Performance Audit

PUD – IWCP

Part II

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# PERFORMANCE AUDIT OF THE PUBLIC UTILITIES DEPARTMENT'S INDUSTRIAL WASTEWATER CONTROL PROGRAM – PART II

IWCP's Current Methods of Identifying Industrial Users Have Likely Left Many Businesses Unpermitted, and, While IWCP Generally Keeps Up with Inspections and Permits for Certain Businesses, IWCP Should Reassess Its Capacity for Handling Future Workloads

Office of the  
City Auditor

City of San Diego



# Performance Audit of the Public Utilities Department's Industrial Wastewater Control Program – Part II

*IWCP's Current Methods of Identifying Industrial Users Have Likely Left Many Businesses Unpermitted, and, While IWCP Generally Keeps Up with Inspections and Permits for Certain Businesses, IWCP Should Reassess Its Capacity for Handling Future Workloads*

## Why OCA Did This Study

The Industrial Wastewater Control Program (IWCP) is a key component of the City's environmental management efforts and plays a critical role in complying with wastewater regulations. We conducted this audit to determine (1) whether IWCP maintains a complete and accurate inventory of industrial users within the Metropolitan Wastewater Area; and (2) whether and to what extent IWCP has inspected and issued a permit to regulated industrial users.

## What OCA Found

**Finding 1:** Because IWCP is responsible for regulating certain industrial businesses, being aware of all those businesses is foundational to the program's success. While the program uses several methods to achieve this, we found some of them to be outdated and inefficient. In addition, IWCP management reported not having enough staff to keep up with identifying all potential industrial users. As a result, we found IWCP is unaware of hundreds of businesses that may potentially need to be regulated. This may diminish IWCP's effectiveness and creates an unfair advantage for unregulated businesses.

**Finding 2:** Our review also included timeliness aspects of IWCP's inspection and permitting activities, which are core functions of the program. We found IWCP is generally meeting established requirements for conducting inspections and issuing permits to industrial users that fall under federal regulations. We commend IWCP for this but also recommend monitoring and reporting to help ensure full compliance. In addition, we found IWCP inspects and permits other industrial users—those in the Enhanced Source Control Program (ESCP)—much less frequently, mainly because they fall under local regulations and have historically not been prioritized by the program. PUD management stated that this is changing due to the importance of ESCP for the Pure Water Program; however, IWCP has not established target inspection frequencies or determined what staffing resources will be needed to meet increased workloads.



IWCP staff inspecting a water reclamation tank. Source: OCA.

## What OCA Recommends

We make 7 recommendations to help IWCP better understand its service demands, improve oversight of critical program outputs, and plan its future capacities. Key recommendations include:

- Updating the program's policies, procedures, and methods for identifying potential industrial users within the Metropolitan Wastewater Area;
- Working with the Economic Development Department to update the City's [OpenCounter](#) portal by adding IWCP permits to the list of potential permits that a business may need to acquire from the City when starting or expanding operations;
- Developing procedures for monitoring the effectiveness of methods for identifying new businesses, conducting inspections, and issuing permits;
- Establishing target service levels for inspections and permit issuances for both federally- and locally-regulated industrial permittees; and
- Completing a staffing analysis to determine resources necessary to meet target service levels.

These changes can help the program improve effectiveness in protecting the City's environmental quality and wastewater infrastructure.

For more information, contact Andy Hanau, City Auditor at (619) 533-3165 or [cityauditor@sandiego.gov](mailto:cityauditor@sandiego.gov).



## THE CITY OF SAN DIEGO

March 11, 2021

Honorable Mayor, City Council, and Audit Committee Members  
City of San Diego, California

Transmitted herewith is Part II of a performance audit report on the Public Utilities Department's Industrial Wastewater Control Program. This report was conducted in accordance with the City Auditor's Fiscal Year 2021 Audit Work Plan, and the report is presented in accordance with City Charter Section 39.2. The Results in Brief are presented on page 1. Audit Objectives, Scope, and Methodology are presented in Appendix B. Management's responses to our audit recommendations are presented after page 47 of this report.

We would like to thank staff from the Public Utilities Department. All of their valuable time and efforts spent on providing us information is greatly appreciated. The audit staff members responsible for this audit report are Shadi Matar, Luis Briseño, Danielle Knighten, and Kyle Elser.

Respectfully submitted,

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# Table of Contents

Results in Brief .....	1
Background .....	4
Audit Results .....	11
Finding 1: IWCP Needs to Enhance and Modernize its Methods for Identifying Industrial Users in the Metropolitan Wastewater Area to Ensure it Regulates All Applicable Businesses and to Protect Environmental Quality and Wastewater Infrastructure.....	11
Finding 2: IWCP Generally Completes Inspections and Issues Permits On-time for Significant Industrial Users, but Efficiency Improvements and Additional Staff May be Necessary to Handle Likely Increases to its Future Workload.....	22
Conclusion .....	36
Recommendations.....	38
Appendix A: Definition of Audit Recommendation Priorities .....	40
Appendix B: Audit Objectives, Scope, and Methodology.....	41

## Results in Brief

The Industrial Wastewater Control Program (IWCP) regulates certain types of industrial businesses within the Metropolitan Wastewater Area to minimize toxic discharges to the sewerage system and comply with federal, state, and local wastewater and environmental regulations. IWCP is essential for securing a secondary treatment waiver from the federal government, which helps the City avoid approximately \$2 billion in upgrade costs to the Point Loma Wastewater Treatment Plant. IWCP also plays an increasingly significant role as the Pure Water Program is implemented, which will convert recycled water into drinking water.

**Finding 1: IWCP Needs to Enhance and Modernize its Methods for Identifying Industrial Users in the Metropolitan Wastewater Area to Ensure it Regulates All Applicable Businesses and to Protect Environmental Quality and Wastewater Infrastructure**

In order to effectively regulate all industrial users that are under the program's purview, IWCP must first identify all businesses that potentially require permits from the program. However, we found that IWCP's methods for identifying industrial businesses are outdated and inefficient. For example, IWCP does not utilize business locations data published by San Diego County to locate businesses that should be reviewed by the program.

As a result, IWCP is not identifying all the industrial users in the Metropolitan Wastewater Area. This has left IWCP unaware of potentially hundreds of users that may need permits from the program. Leaving many businesses unpermitted increases the risk of toxic discharges and creates an unfair playing field where some businesses incur permitting and compliance costs while other, similar businesses do not. We recommend that the program enhance and modernize its methods for identifying industrial users in the Metropolitan Wastewater Area to ensure all applicable businesses are regulated and to protect environmental quality and wastewater infrastructure.

**Finding 2: IWCP Generally Completes Inspections and Issues Permits On-time for Significant Industrial Users, but Efficiency Improvements**

Once industrial businesses are identified, IWCP's regulatory responsibilities under federal and local requirements include inspecting industrial users' facilities and issuing industrial wastewater permits. Currently, IWCP's permit inventory includes 86 federally-regulated Significant Industrial Users (SIUs), as well

**and Potentially Additional  
Staff May be Necessary to  
Handle Likely Increases to  
its Future Workload**

as 668 non-SIUs that are regulated locally via the Enhanced Source Control Program (ESCP).

We found that IWCP is generally keeping up with inspections and permits for SIU facilities, which are regulated under federal requirements. However, IWCP did not achieve 100 percent compliance with these requirements. In addition, IWCP inspects and issues permits to non-SIUs that fall under local requirements—those in ESCP—much less frequently than those regulated under federal requirements. In fact, about 6 years elapsed between inspections of these facilities, on average. While local requirements do not specify how frequently facilities of industrial users in ESCP must be inspected, according to PUD management, IWCP has recently been making efforts to inspect and renew permits for these facilities. According to PUD management, these efforts will ensure program compliance ahead of changes that will result from the implementation of the Pure Water Program. In addition, according to IWCP management, the program intends to evaluate industrial users in ESCP much more frequently in the future but has not yet established target inspection frequencies.

IWCP management attributes relatively infrequent inspections and permit renewals for industrial users in ESCP to historically prioritizing compliance with federal requirements (by focusing on SIUs and other industrial users subject to federal categorical pretreatment standards). In addition, IWCP does not directly report on inspection frequency or whether it issues permits on-time in its annual pretreatment reports. Moreover, IWCP management pointed out some staffing issues, including turnover and vacancies last year and the need to better train staff to minimize permit processing times.

We agree that the above issues need to be addressed. Additionally, we found that the program's underlying staffing capacity may not be enough to complete all program tasks. This is especially concerning given that the inventory of industrial users—and the program's associated regulatory work—will likely grow by potentially hundreds of businesses in the future if IWCP implements the audit recommendations made in Finding 1. We recommend that IWCP begin tracking and monitoring inspection frequencies and on-time permit issuance, conduct a staffing



analysis to determine the resources needed to achieve desired inspection frequencies, and request the required resources during the annual budget process.

We make seven recommendations to help the program better understand its service demands, improve oversight of critical program outputs, and plan its future capacities. Our full recommendations can be found on page 38. PUD agreed to implement all seven of these recommendations.

# Background

The Industrial Wastewater Control Program (IWCP) represents a key element of the Public Utilities Department's (PUD) environmental management efforts. IWCP is a pretreatment and pollution prevention program that was implemented by the City of San Diego (City) in 1982 and is intended to minimize toxic discharges to the metropolitan sewerage system. The program focuses on four main functions:

1. Operating an industrial wastewater discharge permit system to establish industrial discharge limits and requirements;
2. Conducting periodic facility inspections and unannounced sampling;
3. Conducting enforcement procedures to deter violations and bring noncompliant dischargers back into compliance with discharge standards and requirements; and
4. Issuing industrial user guidance and permit conditions designed to encourage pollution prevention and waste minimization.

IWCP operates an industrial wastewater discharge permit, monitoring, inspection, and enforcement system for the City and 12 other jurisdictions, referred to as Participating Agencies (PAs), within the County of San Diego.<sup>1</sup> Currently, around 68 percent of industrial users<sup>2</sup> are located within the City of San Diego while the remaining 32 percent are located within the PAs. According to PUD management, IWCP has historically met its program

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<sup>1</sup> This arrangement is governed by contractual service agreements and Interjurisdictional Pretreatment Agreements signed by the City of San Diego and each of the 12 Participating Agencies. These agreements establish IWCP's authority to implement and enforce pretreatment regulations in contributing agencies and require that they adopt equivalent ordinances, penalties, and procedures for regulation of industrial users in their service areas.

<sup>2</sup> Throughout this report, we use the term "industrial users" to refer specifically to industrial businesses that are subject to regulation by the program, while the general term "industrial businesses" refers generically to all industrial entities in the Metropolitan Wastewater Area, regardless of whether they are subject to regulation by the program.

objectives, which has resulted in minimal wastewater treatment plant upsets and few permit compliance issues.

**IWCP Operates Under a Complex Legal Framework, Including Regulations at the Federal, State, and Local Levels**

IWCP applies and enforces federal pretreatment regulations set forth by the U.S. Environmental Protection Agency (EPA) pursuant to the Code of Federal Regulations, the Clean Water Act, and local program requirements mandated in the City of San Diego's Municipal Code. Under state and federal regulations, the City must implement the federal Industrial Pretreatment Program to control the discharges of all Significant Industrial Users (SIUs). In addition, the California Regional Water Quality Control Board for the San Diego Region and the EPA jointly issue a permit to the City under the National Pollutant Discharge Elimination System (NPDES). The NPDES permit requires the City to implement a non-industrial Source Control Program to regulate the discharge of toxic pollutants and pesticides into the system from non-industrial sources. The EPA requires that pretreatment programs like IWCP be evaluated annually for compliance with federal pretreatment program requirements. Additionally, the City's Independent Rates Oversight Committee (IROC) advises the Mayor and City Council on policy issues relating to the oversight of PUD operations, which includes IWCP. Moreover, the City Council's Environment Committee's oversight responsibilities include (but are not limited to) programmatic policy matters related to wastewater and IROC. Finally, IWCP also operates under interjurisdictional pretreatment agreements between the City and each of the 12 Participating Agencies, which establish IWCP's authority to implement and enforce pretreatment regulations within the Metropolitan Wastewater Area.<sup>3</sup>

**Regulations for Significant Industrial Users are Set by the Federal Government While Those for Non-Significant**

The program administers various types of permits both inside the City of San Diego and 12 other Participating Agencies across the Metropolitan Wastewater Area. The majority of permits that require routine inspection and permitting are for Significant Industrial Users (SIUs) and non-Significant Industrial Users (non-SIUs).

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<sup>3</sup> The Metropolitan Wastewater Area refers to the geographic area encompassed by the City of San Diego and the 12 Participating Agencies within the County of San Diego, as shown in [Exhibit 3](#) of the Follow-up Performance Audit of IWCP.

**Industrial Users are Set  
by the Program**

SIUs are all industrial users that are subject to categorical pretreatment standards set forth in Title 40 of the Code of Federal Regulations, Chapter I, Subchapter N, Parts 405 – 471. The term “SIU” includes industrial users that: discharge an average of 25,000 gallons per day of process wastewater (excluding sanitary and “dilute wastewater,” as defined at 40 CFR 403.6 e(1)(i) under “FD”); contributes a process waste stream that makes up 5 percent or more of average dry weather hydraulic or organic capacity of the publicly-owned treatment works; or is determined to have reasonable potential for adversely affecting the publicly-owned treatment works' operation or for violating any pretreatment standard or requirement.

Non-SIUs are not subject to federal pretreatment standards but still need to be regulated by the program. Non-SIU standards and regulations are set by the program, and many of their requirements, such as inspections, are currently conducted on an as needed basis. Non-SIUs are regulated as part of the Enhanced Source Control Program (ECSP), a component of IWCP.

**IWCP's Industrial User  
Inventory Includes Almost  
750 Active Permits**

IWCP regulates various types of industries, primarily by issuing a variety of permits to businesses based on industry type and amount of wastewater discharge.

The program's Pretreatment Annual Report for the Point Loma Wastewater Treatment Plant stated that, as of as of December 31, 2019, IWCP had an inventory of almost 750 active permits. This inventory is comprised of industrial users of different classes. These classes each have different regulatory requirements that either fall under the Code of Federal Regulations, the parameters of the NPDES permit, or local statutes set in the City of San Diego's Municipal Code. **Appendix C** provides a summary of the inspection and permit requirements for each industrial user class.

IWCP utilizes the Pretreatment Information Management System (PIMS) to track information related to the inventory of permitted facilities. Specifically, IWCP uses PIMS to track industrial user permit information; inspection, monitoring, and violation data; and to charge most program fees.

**IWCP's Staffing and Budget**

IWCP's staff primarily consists of two Program Managers, Supervising Inspectors, Inspectors, and support staff. The second Program Manager position was recently added to assist in the implementation of the Pure Water Program requirements. The Inspectors and their Supervisors are tasked with inspections, permitting, investigation, and enforcement duties related to the industrial user inventory. The support services group, which is comprised of Inspectors, an Administrative Aide, and other administrative staff have also been tasked with assisting in Pure Water Program requirements and have also worked on updating the industrial user inventory. IWCP's budgeted staffing and expenses for recent years are summarized in **Exhibit 1**.

**Exhibit 1**

**Industrial Wastewater Control Program Budgeted Staffing and Expenses, 2017 – 2020**

	2017	2018	2019	2020
Positions	29	26	32	32
Expenses	\$3,814,965	\$3,356,631	\$3,971,596	\$3,971,596

Notes: Figures in the table reflect total budgeted staffing and expenses for all sections of the program (permits, enforcement, supportive services, and sampling). According to PUD, this does not include costs from the Environmental Chemistry Services section (ECS), which analyzes user samples for IWCP, because this is not a core ECS function. According to PUD, IWCP samples make up only about 6 percent of ECS's total expenses.

Figures for 2017 through 2019 reflect information from PUD's Annual Wastewater Pretreatment Program Reports, which is reported on a calendar year basis. Figures for 2020 reflect budget information from the City's enterprise resource planning system, which is recorded on a fiscal year basis.

Source: Auditor generated based on information from PUD and the City's enterprise resource planning system, SAP.

**IWCP Underwent Changes as a Result of a Program Assessment**

In June 2018, IWCP hired a consultant team to review and assess staffing levels, organization, and workflow. The resulting report made a total of 22 recommendations across 6 program areas. Among these recommended changes is an organizational restructuring to facilitate the Enhanced Source Control Program's (ESCP) workflow.<sup>4</sup> Previously, inspections and

<sup>4</sup> ESCP was created in 2003 in response to regulatory requirements associated with the waiver from secondary treatment granted to the City's Point Loma Wastewater Treatment Plant. As the City

permitting for both SIUs and businesses that fell within ESCP were handled by the same work group. A Field Representative position was also added to each arm of ESCP. Field Representatives assist Inspectors by identifying potential industrial users in the field, contacting business representatives, and providing them with program information, and supporting in special projects. As shown in **Exhibit 2**, SIU inspection activities have been assigned to one group of inspectors while non-SIU businesses have been assigned to two groups—Source Control-North and Source Control-South.

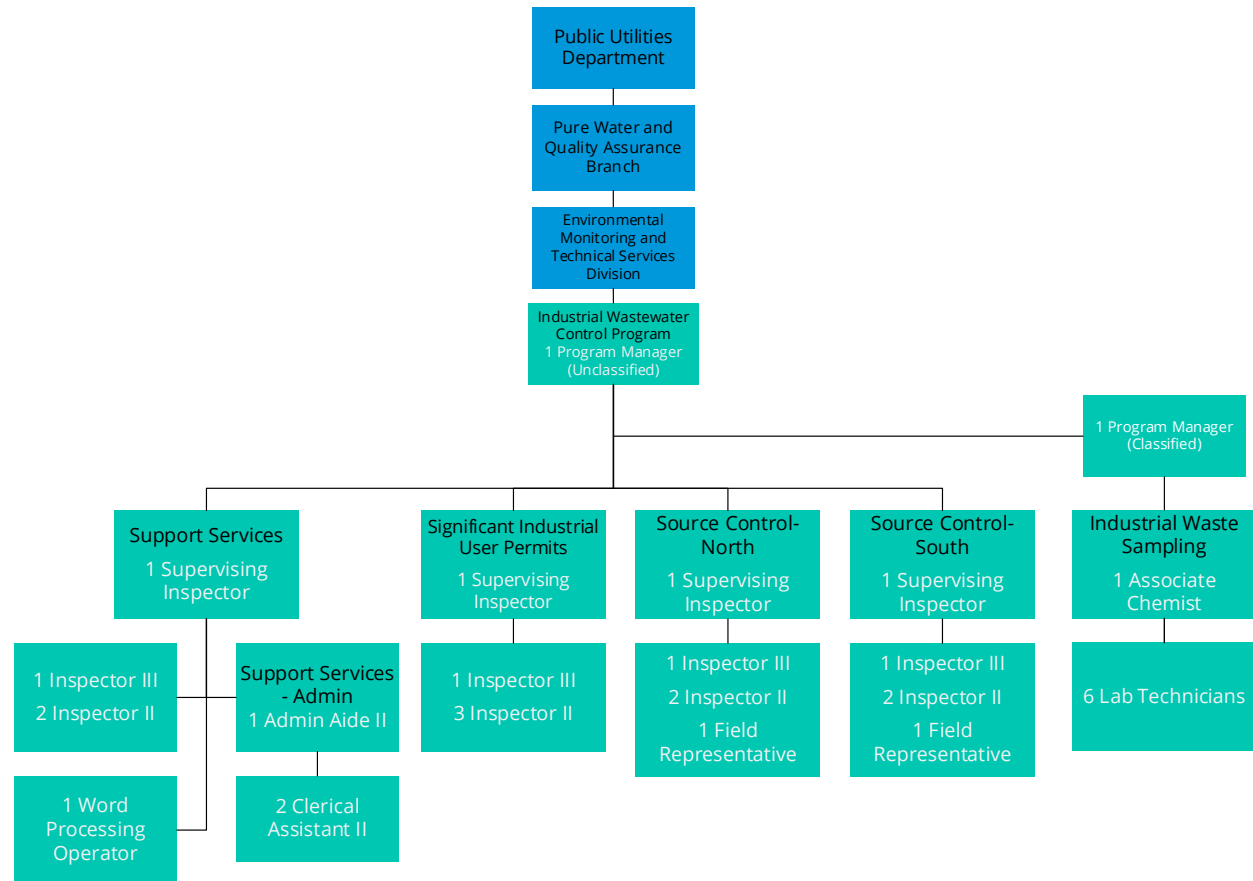
In addition, in February 2019, PUD requested a Special Salary Adjustment (SSA) of 20 percent for the Industrial Wastewater Pretreatment Inspector series (Inspector I, II, and III). The SSA was intended to address retention issues in the program, the differential in salary created by prior SSAs for Chemists and Lab Technicians, and to increase the incentive for staff to remain with the City and IWCP. According to PUD, the SSA was approved, and new salaries were effective July 2019.

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begins implementing the first phase of the Pure Water Program, ESCP will be important to regulate the discharge of toxic pollutants and pesticides into the system from non-industrial sources.

## Exhibit 2

## IWCP Created Two Groups for the Enhanced Source Control Program and Added Positions to Assist in Pure Water Implementation



Source: Auditor generated based on information provided by PUD.

### Our Previous Audits of IWCP Focused on Cost Recovery Issues

In August 2013, our office completed a performance audit of IWCP, which found that outdated program fees, billing lapses, and inadequate controls limited program cost recovery. We estimated that only 15 percent of billable costs were recovered by IWCP permittees; the other 85 percent were offset by charges to other ratepayers, including residential and commercial customers. In addition, we issued a confidential memorandum raising the possibility that IWCP's cost recovery practices were not in compliance with Proposition 218 (Prop 218). Our office made a total of 13 recommendations in 2013 to correct these issues, but the City had fully implemented only 3 of the recommendations by January 2020.

Our office therefore completed a follow-up audit July 2020, which found that the issues we identified in 2013 remained

largely unaddressed. For example, cost recovery remained very low at 14 percent. In addition, our follow-up audit reported that City customers alone are subsidizing the program's unrecovered costs, even though the program also serves customers in the 12 Participating Agencies. We made nine recommendations to address these issues, and PUD agreed to implement all of them. As of February 2021, PUD reported progress on implementing many of these recommendations.

These reports are available on the Office of the City Auditor's website at the following locations:

- Performance Audit of the Industrial Wastewater Control Program (2013):  
[https://www.sandiego.gov/sites/default/files/14-002\\_IWCP.pdf](https://www.sandiego.gov/sites/default/files/14-002_IWCP.pdf)
- Follow-up Performance Audit of the Industrial Wastewater Control Program (2020):  
[https://www.sandiego.gov/sites/default/files/21-001\\_iwcp\\_follow-up.pdf](https://www.sandiego.gov/sites/default/files/21-001_iwcp_follow-up.pdf)



# Audit Results

## **Finding 1: IWCP Needs to Enhance and Modernize its Methods for Identifying Industrial Users in the Metropolitan Wastewater Area to Ensure it Regulates All Applicable Businesses and to Protect Environmental Quality and Wastewater Infrastructure**

**Finding Summary** In order to effectively regulate all industrial users that are under the program's purview, the Industrial Wastewater Control Program (IWCP) must first identify all businesses that potentially require permits. However, we found that IWCP is not identifying all potential industrial users in the Metropolitan Wastewater Area. This has left IWCP unaware of potentially hundreds of users that may need IWCP permits. Leaving many businesses unpermitted increases the risk of toxic discharges and creates an unfair playing field where some businesses incur permitting and compliance costs while other, similar businesses do not. The program needs to enhance and modernize its methods for identifying industrial users in the Metropolitan Wastewater Area to ensure all applicable businesses are regulated and to protect environmental quality and wastewater infrastructure.

**IWCP is Required to Identify All Possible Industrial Users** IWCP is subject to guidelines set by the U.S. Environmental Protection Agency (EPA) and the National Pollutant Discharge Elimination System (NPDES) permit depending on the industrial user classification. According to the Code of Federal Regulations and EPA best practices, IWCP has a responsibility to identify and locate all possible industrial users within its wastewater system that might be subject to the program. In addition, the City provides an updated list of all Significant Industrial Users (SIUs) in its annual pretreatment report, in accordance with requirements of the NPDES permit.

**IWCP Uses Several  
Methods to Identify  
Industrial Users**

According to IWCP, the program uses the following methods to identify industrial users that may need a permit from the program:

1. Reviewing industrial user application requests.
2. Screening referrals from the following sources:
  - a. The County of San Diego's Department of Environmental Health and Quality – Hazardous Materials Division;
  - b. The City of San Diego's Development Services Department;
  - c. Public Works Departments of Participating Agencies; and
  - d. Permit Assistance Centers throughout the Metropolitan Wastewater Area.
3. Tracking business openings, closings, and relocations during Inspectors' normal course of work when in the field in their assigned geographical areas.
4. Screening the business license list on a periodic basis and sending screening surveys to potential industrial users.
5. Annually reviewing area telephone directories by business category. The new listings are compared with the previous directory and current industrial user inventory to check for new, relocated, and closed businesses.
6. Routinely asking industry contacts about their competitors in the area.
7. Requesting an Annual Water Consumption Report from all water purveyors servicing areas tributary to the metropolitan sewerage system. The report lists all non-domestic facilities consuming greater than 25,000 gallons of water per day; the report is screened to identify industrial users that may be classified as SIUs due to flow.

According to guidelines provided to inspectors, the inventory of industrial users should also be updated to include businesses that may not need a permit but that should be recorded in the Pretreatment Information Management System (PIMS) nonetheless, so that IWCP has a record that the business was reviewed.

IWCP management told us these methods are part of their normal workflows. However, our results suggest these methods are not fully effective or may not be fully employed by the program. Historically, the program has not tracked which methods have been more effective in identifying new industrial users and has instead relied on anecdotal information from Inspectors. Tracking results for each method could help the program understand which are more effective; thus the program should strategize its approach and prioritize the more successful methods in the future.<sup>5</sup> Moreover, to improve oversight and ensure the program continues using these methods in the future, the program could compile and report this information externally and on a regular basis. There are at least two possible venues for this, including reporting this information to the City Council's Environment Committee<sup>6</sup> or the Independent Rates Oversight Committee.<sup>7</sup>

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<sup>5</sup> This refers to tracking how many potential industrial users were identified as possibly needing a permit, how many were assessed by the program, and ultimately how many were determined to need a permit.

<sup>6</sup> The Environment Committee's areas of responsibility include programmatic policy matters related to water, wastewater, and storm water, and parks. These encompass the Clean Water Program; water management and policy; Pure Water Program, including Capital Improvement Projects (CIP); energy (solar, property assessed clean energy programs, green); multiple species conservation program; solid waste disposal; recycling; air quality standards; hazardous waste; regional parks; open space; public utilities; golf; utility undergrounding; franchise agreements; storm water management and policy, Climate Mitigation and Adaption Plan (CMAP), wastewater management and policy; Independent Rates Oversight Committee; indirect potable reuse/direct potable reuse; recycled water; graywater; San Diego County Water Authority; wildlife management; environmental services; and environmental policy.

<sup>7</sup> In addition to serving as an official advisory body to the Mayor and City Council on water and wastewater services, IROC also oversees and advises on planning and operations including, but not limited to resource management, cost effectiveness, planned expenditures, service delivery methods, public awareness and outreach efforts, and the City's efforts to provide high quality and affordable services.

**We Used County Data to Identify Many Additional Businesses That IWCP May Need to Assess**

IWCP's current methods of identifying industrial users are not fully effective in capturing all the businesses that should be regulated by the program. We compared select categories from the County of San Diego's business sites data<sup>8</sup> to the permit records in IWCP's Pretreatment Information Management System (PIMS) and could not locate about 58 percent of businesses from the County data in PIMS—meaning that IWCP had identified only about 42 percent of businesses within select categories that could potentially need a permit.

These results suggest that IWCP is not aware of many of the businesses that it should potentially be permitting. We selected business categories in the County data by first matching the names of businesses from the County dataset to the names of businesses in PIMS. We then selected business categories with the highest matching percentages to explore further, since these would be the most likely to contain other businesses that we would expect could or should be regulated by the program. For example, we included the Bio-tech Industry category because, according to IWCP's Inspector Manual, biotechnology research firms are a targeted business for the program. We anticipated that targeted businesses would likely require at least an assessment by the program to determine whether the business should be permitted. However, IWCP would need to be aware of the business in the first place to conduct such an assessment. The results in **Exhibit 3** suggest this is not the case for potentially hundreds of businesses.

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<sup>8</sup> This data is available on the [SanGIS Regional Data Warehouse](#) and includes the locations of business sites within San Diego County.

## Exhibit 3

## County Data Includes Hundreds of Potential Industrial Users that IWCP is Not Aware Of

Business Category	Total # Businesses Checked	# Not Located in PIMS	% Not Located in PIMS	% Located in PIMS
RENTAL LINENS	8	5	62%	38%
BIO-TECH INDUSTRY	148	75	51%	49%
BOAT MFG	13	11	85%	15%
CHEMICALS	8	3	38%	62%
BIO-MED R&D	51	24	47%	53%
HOSPITAL	90	67	74%	26%
METAL-HEAVY MFG	50	28	56%	44%
MFG HEAVY	36	25	69%	31%
AUTO WASHER / AUTO WASH-SELF SERV	92	37	40%	60%
ELECTRICITY GEN	39	22	56%	44%
ELECTRONIC ASSEMBLY	28	16	57%	43%
AEROSPACE (AIRFRAME)	45	32	71%	29%
CIRCUIT BOARD MANUFACTURING	5	3	60%	40%
WINERY	91	47	52%	48%
FOODS	54	44	81%	19%
	758	439	58%	42%

Source: Auditor generated based on data from the County of San Diego and information from IWCP's Pretreatment Information Management System.

**Our Results are Limited  
by Data Issues and Our  
Outside Perspective**

We acknowledge that these results are limited because the business categories in the County dataset may be too broad, and businesses self-report this information to the County. This means there may be some businesses in each category that are not actually the exact type of business described by the category name.<sup>9</sup> In addition, we were not able to determine, based on our limited review, whether businesses in these categories actually require a permit; IWCP would need to make this determination after assessing business operations. Finally, we cannot infer whether or to what extent the businesses not yet identified by IWCP (those not located in PIMS) include any SIUs. Again, IWCP

<sup>9</sup> For example the Foods category may include grocery stores, cafes, offices for food corporations, or similar establishments that would typically not require a permit from IWCP and that should be categorized differently. Since the County data includes separate categories for cafes and grocery stores, those categories are more appropriate for those businesses than the Foods category.

would need to make that determination based on their assessment of business processes.

**IWCP is Better Suited to Identify Potential Industrial Users Using the County Data**

Nevertheless, in seeking to assess whether IWCP maintains a complete and current inventory of industrial users, we took this approach because it is not part of the program's current methods for doing so. As experts, IWCP staff are better suited to identify industrial users of interest more efficiently by targeting specific business categories within the County data. For example, businesses within the Bio-tech Industry category may be more likely to require a permit from IWCP than businesses in the Foods category. Therefore, IWCP need not review all records in the dataset and could instead take a more targeted approach.

**IWCP's Review of Our Results Shows Many of the Businesses We Identified Likely Need an Assessment and Potentially a Permit**

While our analysis has limitations, our results indicate that there are potentially many industrial businesses within the County data that IWCP is not aware of and that it may need to assess, inspect, and/or issue a permit to. In fact, IWCP management confirmed that some of the businesses we identified would probably require permitting after an inspection. Specifically, we judgmentally selected 50 businesses that we could not locate in PIMS and asked IWCP management whether they are of interest to the program, meaning that business operations would likely need to be assessed and could potentially require a permit. From this list of 50 businesses, IWCP management reported that they would need to assess 26 (52 percent) to determine whether the business needs a permit. While this was only a review of a small, non-random sample, it indicates that, out of the 439 non-permitted businesses we identified, potentially hundreds of them require an assessment, which may result in permitting.

**IWCP Can Improve Efforts for Identifying Potential Industrial Users Outside the City**

In addition, our results suggest IWCP has not identified industrial users outside the City of San Diego as effectively as it has within the City of San Diego, even though IWCP is also responsible for regulating industrial users in those jurisdictions (the Participating Agencies). Of the total number of businesses from the County data we checked against PIMS, IWCP did not identify approximately 55 percent of the businesses located within the City of San Diego. However, that figure was higher, at 66 percent, for businesses located outside the City. This suggests IWCP can improve its efforts for identifying potential industrial users

outside the City to ensure a complete and current inventory of industrial users across the Metropolitan Wastewater Area.

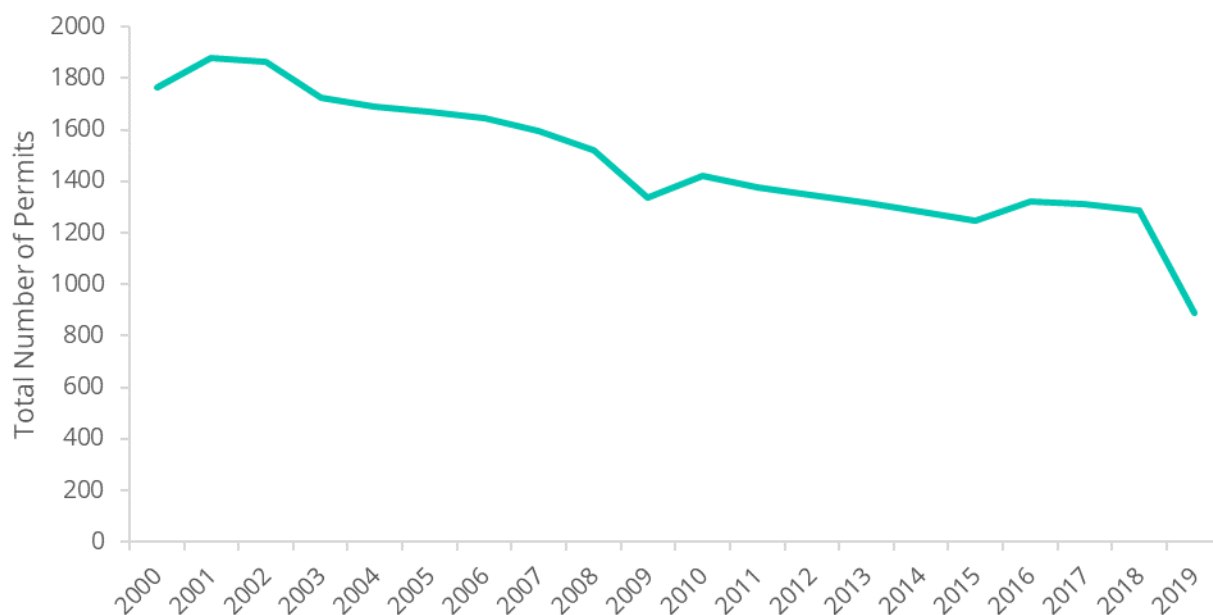
**Industrial User Inventory  
Has Declined Over Time,  
Which May Indicate IWCP  
is Not Identifying All  
Industrial Users**

According to IWCP, total industrial user inventory has been on the decline since 2002 due to business closures, relocations, and technological advances in water reclamation. Although total inventory has decreased, SIU inventory has steadily grown since 2007. This is due to changes in criteria for regulating certain industrial users that now get included in the SIU count.<sup>10</sup> **Exhibit 4** shows the change in the total number of permits between 2000 and 2019. As explained further below, we found that the decline may also be due to IWCP's use of outdated and ineffective methods to identify all users that should be permitted.

**Exhibit 4**

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**IWCP's Inventory Has Declined by Almost 1,000 Active Permits Since 2001**



Source: Auditor generated based on information from PUD's 2019 Pretreatment Annual Report for the Point Loma Wastewater Treatment Plant.

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**The Methods IWCP Uses  
to Identify Potential  
Industrial Users Are**

This decline may also be due to shortcomings in identifying all industrial users, which may stem from the use of outdated and inefficient methods. For example, some of the methods used by

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<sup>10</sup> These facilities are temporary groundwater remediation facilities and construction dewatering permits. They are short term permits but do get counted in the overall SIU total.

### Outdated, Inefficient, and Ineffective

the program, such as comparing yearly phone book releases, are outdated and are not effective in capturing all industrial users in the Metropolitan Wastewater Area. In addition, IWCP receives manual referrals from the Development Services Department whenever specific project types trigger Mechanical Reviewers to ask customers to provide an approval letter from IWCP. While this referral process represents a valuable internal control, there are opportunities to automate similar referrals from businesses seeking to establish or expand their operations. For example, the City launched its OpenCounter portal in 2016 as a virtual tool to help business applicants identify the permits they must obtain from the City to operate their business. However, OpenCounter does not currently include IWCP permits in the list of permits applicants may need to obtain. Therefore, there may be an opportunity to leverage OpenCounter as a more modern and automated way of identifying additional industrial users by adding IWCP permits to that platform. **Exhibit 5** shows excerpts from the City's OpenCounter portal.

#### Exhibit 5

#### OpenCounter Does Not Include IWCP as a Permit Option in Its Portal

**The City of SAN DIEGO**

**Business Portal**

See which permits you may need to start or expand your business.

**CHECK MY PERMITS**

STEP 1/4

**Business Type**

Enter your project type to find matching land use codes from the City's official list

Example: Yoga studio

If you don't see a relevant option, please [browse the use code list](#).

**Location**

Select your location by typing in the address or clicking on the map.

**Address \***

Example: 10 Street Name

STEP 2/4

**PERMITS** STEP 3

- Building Permit
- Business Tax Certificate
- Coastal Development Permit
- Development Impact Fees
- Electrical Permit
- Facilities Benefit Assessments
- Fictitious Business Name Permit
- Fire Permit - Alarm
- Housing Impact Fee
- Mechanical Permit
- Plumbing Permit
- Right-of-Way - Construction Plan Permit
- Right-of-Way - Traffic Control Permit
- Right-of-Way Permit
- Sign Permit
- Site Development Permit

**PERMIT FEES** STEP 4/4

Permit	Fee
Building Permit	\$11,568.77
Business Tax Certificate	\$38.00
Development Impact Fees	...
Electrical Permit	...
Fictitious Business Name Permit	\$42.00
Fire Permit - Alarm	\$423.25
Housing Impact Fee	...
Plumbing Permit	\$151.78
Site Development Permit	\$13,000.00
<b>Total Cost</b>	<b>\$25,223.80</b>

**SAN DIEGO**

Legend: Permitted (Green), Conditional (Yellow), Prohibited (Grey)

Source: Auditor generated based on various pages within the City of San Diego's OpenCounter Portal <https://business.sandiego.gov/>.



Other methods rely on current industrial users to report their competitors or on Inspectors to identify new industrial users while out in the field. However, as discussed in Finding 2, IWCP has a backlog of pending permits that makes completing inspections a priority over identifying new industrial users. If inspectors do identify new businesses, they are likely adjacent or nearby to a business with an existing permit or application. This may create clusters of permitted industrial users in certain areas while potential industrial users in other areas may not be identified by the program's traditional methods. In addition, according to IWCP management, updating the program's industrial user inventory is normally done by Field Representatives and primarily through in-person contacts based on observations while in the field. However, Field Representatives have recently been working on catching up on the backlog of permit renewals for industrial users in ESCP rather than assisting in larger efforts to identify new industrial users.

**According to IWCP Management, the Program Does Not Have Enough Staff to Keep Up with Identifying All Potential Industrial Users**

In addition, IWCP has cited staffing vacancies as a potential reason why they have not been able to identify all businesses that may need an IWCP permit. For example, IWCP is facing a backlog of inspections and permits, especially with the non-SIU facilities that affect the Pure Water project. As a result, field representatives are focused on bringing the backlog up-to-date instead of maintaining the inventory of industrial users. Therefore, while IWCP may have methods available to keep the inventory current, the methods may not always be employed because of shifting operational demands and existing resource constraints. This underscores the importance of using the most efficient methods for identifying potential industrial users, including the use of data-driven and automated solutions to leverage existing resources.

**Not Being Aware of All Industrial Users May Diminish IWCP's Effectiveness and Creates an Unfair Advantage for Unregulated Businesses**

Our results indicate that IWCP's procedures are not fully effective in identifying and locating all possible industrial users that might be subject to its regulatory program. As a result, there is a risk that IWCP is not regulating all industrial users that are subject to the program and its regulatory requirements. This diminishes the City's level of assurance that IWCP is minimizing

toxic discharges to the metropolitan sewerage system, which could negatively affect wastewater infrastructure and the environment. In addition, there is a risk that IWCP is not applying regulatory requirements uniformly across all businesses, which is unfair and creates an advantage for unpermitted businesses that should be regulated as industrial users by the program.

**IWCP Can Make Several  
Changes to Improve  
Awareness of Businesses  
That May Need to be  
Regulated**

According to PUD management, unpermitted industrial users have not yet led to significant consequences, such as environmental impacts or treatment plant damage. Nevertheless, it is important to improve IWCP's awareness to prevent these incidents from happening in the future and to increase fairness for businesses. We found several ways the City can improve its methods for identifying potential industrial users; therefore, we recommend:

**Recommendation 1**

To help maintain a complete and current inventory of industrial users, the Industrial Wastewater Control Program should update its existing policies, procedures, and methods for identifying potential industrial users within the Metropolitan Wastewater Area. Specifically, the updated policies, procedures, and methods should:

- a. Include directions for analyzing business sites data from the County of San Diego to identify businesses that may potentially be regulated by the program as industrial users;
- b. Include enhanced methods for identifying businesses outside the City of San Diego, such as increased collaboration with the permitting agencies of other local jurisdictions within the Metropolitan Wastewater Area;
- c. Specify which staff members are responsible for conducting this new analysis and specify which staff members are responsible for employing each of the existing methods; and
- d. Specify how often responsible staff should conduct this new analysis and specify how often responsible staff should employ each of the existing methods.  
(Priority 1)

- Recommendation 2** The Industrial Wastewater Control Program should train all staff responsible for regularly updating the inventory of industrial users, as noted in Recommendation 1, on procedures to identify potential industrial users in the Metropolitan Wastewater Area. (Priority 2)
- Recommendation 3** The Industrial Wastewater Control Program (IWCP) should work with the Economic Development Department to update the City's OpenCounter portal by adding IWCP permits to the list of potential permits that a business may need to acquire from the City when starting or expanding operations. (Priority 3)
- Recommendation 4** The Industrial Wastewater Control Program (IWCP) should develop procedures to track the results of using the updated methods described in Recommendation 1, including how many potential industrial users were identified, how many were assessed, and how many were determined to need a permit from the program. IWCP should report this information to the City Council's Environment Committee or to the Independent Rates Oversight Committee annually, along with the information produced by implementing Recommendation 6. (Priority 2)

## **Finding 2: IWCP Generally Completes Inspections and Issues Permits On-time for Significant Industrial Users, but Efficiency Improvements and Additional Staff May be Necessary to Handle Likely Increases to its Future Workload**

**Finding Summary** IWCP's regulatory responsibilities under federal and local requirements include inspecting industrial users' facilities and issuing industrial wastewater permits for 86 Significant Industrial Users (SIUs) and 668 non-SIUs. We found that IWCP is generally keeping up with inspections and permits for SIU facilities, which are regulated under federal requirements.

However, IWCP did not achieve 100 percent compliance with these requirements. In addition, IWCP inspects and issues permits to non-SIUs that fall under local requirements—those in the Enhanced Source Control Program (ESCP)—much less frequently than those regulated under federal requirements. In fact, about six years elapsed between inspections of these facilities, on average. While local requirements do not specify how frequently facilities of industrial users in ESCP must be inspected, according to PUD management, IWCP has recently been making efforts to inspect and renew permits for these facilities. According to PUD management, these efforts will ensure program compliance ahead of changes that will result from the implementation of the Pure Water Program. In addition, according to IWCP management, the program intends to evaluate industrial users in ESCP much more frequently in the future.

PUD management attributes relatively infrequent inspections and permit renewals for industrial users in ESCP to historically prioritizing compliance with federal requirements (by focusing on SIUs and other industrial users subject to federal categorical pretreatment standards). In addition, IWCP does not directly report on inspection frequency or whether it issues permits on-time in its annual pretreatment reports. Moreover, IWCP management pointed out some staffing issues, including

turnover and vacancies last year and the need to better train staff to minimize permit processing times.

We agree that the above issues need to be addressed.

Additionally, we found that the program's underlying staffing capacity may not be enough to complete all program tasks. This is especially concerning given that the inventory of industrial users—and the program's associated regulatory work—will grow by potentially hundreds of businesses in the future if PUD implements the audit recommendations made in Finding 1. We recommend that PUD begin tracking and monitoring inspection frequencies and on-time permit issuance, conduct a staffing analysis to determine the resources needed to achieve desired inspection frequencies, and request the required resources during the annual budget process.

**Federal Regulations  
Require IWCP to Develop  
Procedures for Identifying  
Noncompliance;  
Inspections are a Part of  
these Procedures**

Under federal regulations, IWCP is required to develop procedures to independently identify occasional and continuing noncompliance with pretreatment standards by SIUs. Such procedures include inspections to help ensure that IWCP does not rely exclusively on self-reported data when evaluating industrial user compliance.

**Inspections Include  
Interviewing Business  
Representatives and  
Touring the Facility**

A facility inspection consists of an interview with business representatives and a tour of the facility. Before the interview, inspectors review key documents in the permit file to familiarize themselves with the latest issues at the business, including a fact sheet; the latest inspection report; any enforcement activity since the last inspection or permit issuance; and updated water consumption information. During the interview, the inspector discusses the business's permit application, water consumption, waste generating processes, wastewater composition, and volume of wastewater flow with the business representatives. During the tour of the facility, the Inspector examines the business operations that contribute wastes to the sewer system, chemical storage areas, and pretreatment facilities, and identifies an industrial waste sampling point. After the interview and tour, the Inspectors coordinates with business representatives to receive any pending items and start drafting the inspection report and the permit, which are later reviewed by supervisors.

**Inspections Help  
Determine the Industrial  
User's Permit Category**

The Inspector's report of the facility inspection, together with the completed permit application, form the basis for assigning the industrial user a permit category and establishing discharge limits and conditions.

**Inspection Frequency  
Requirements Vary Across  
Permit Categories**

Under federal regulations, IWCP is required to inspect and sample Significant Industrial Users (SIUs) at least once per year. For industrial users that are not permitted or controlled SIUs, EPA guidance states that IWCP should develop procedures for routine inspections. Therefore, and according to program management, IWCP also inspects certain types of non-SIUs at least once per year, while other industrial users are inspected as needed or based on permit expiration dates. **Appendix C** summarizes inspection requirements for different industrial users based on permit class.

**IWCP is Generally Keeping  
Up with Inspections for  
Industrial Users Subject  
to Federal Requirements  
but Needs to Improve  
Monitoring to Reach 100  
Percent Compliance**

According to §403.8(f)(2)(v) of the Code of Federal Regulations (CFR), IWCP must inspect and sample the effluent from each Significant Industrial User (SIU) at least once a year. For industrial users that IWCP has classified as Non-Significant Categorical Industrial Users, IWCP must evaluate, at least once per year, whether the industrial user continues to meet the criteria in CFR §403.3(v)(2).

Within our scope period,<sup>11</sup> IWCP inspected most industrial user facilities that are subject to federal inspection requirements at least once per year.<sup>12</sup> Based on a random sample, we found IWCP had inspected 97 percent of these industrial users at least once per year.<sup>13</sup> The average amount of time between

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<sup>11</sup> Our scope included industrial users that had applied for and/or had been issued a wastewater discharge permit from IWCP between January 1, 2017 and September 28, 2020.

<sup>12</sup> Industrial user facilities operating under the following IWCP permit classes are subject to federal inspection requirements and must therefore be inspected at least once per year: 1; 2-SIU; 2C; 3-SIU; 3C; and 4C.

<sup>13</sup> Of the 237 industrial users in our random sample, 65 are subject to federal requirements, including an inspection at least once per year. Of these, 30 were industrial users that had been issued a permit for a temporary construction project—14 of which did not have more than one inspection recorded in PIMS. However, it is possible that these industrial users may not have required more than one inspection, given the temporary nature of construction projects. Of the remaining 35 permanent industrial user facilities in our sample that are subject to federal inspection

inspections for these industrial users was 12.7 months (386 days).<sup>14</sup>

While mostly positive, these results show IWCP did not inspect all industrial users subject to federal requirements at least once per year. Therefore, to achieve full compliance, it may be helpful for the program to improve oversight in this area by formally monitoring and reporting on its inspection frequencies. As mentioned in Finding 1, there are at least two possible venues for this, including reporting this information to the City Council's Environment Committee or to the Independent Rates Oversight Committee.

**IWCP Inspects Other  
Industrial Users Much  
Less Frequently**

According to the U.S. Environmental Protection Agency's (EPA's) *Industrial User Inspection and Sampling Manual for POTWs*, IWCP should also develop procedures for routine inspections of industrial users that are not permitted or controlled SIUs. In other words, even industrial users that are non-SIUs—and not necessarily subject to federal requirements—should be inspected routinely.

Non-SIU facilities are subject to local requirements—not federal requirements; IWCP is therefore not required to inspect these facilities at least once per year. However, based on a random sample, we found IWCP had inspected 81 of these industrial users at least twice, with about 5.9 years (2,167 days) elapsing between inspections, on average.<sup>15</sup> **Exhibit 6** summarizes inspection frequency requirements and actual performance for

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requirements, 34 had been inspected at least once per year, while 1—designated as a Class 1 facility—had not.

<sup>14</sup> Since the inspection requirement is once per year (but not necessarily on the same date each year), the amount of time between inspections can be more than 12 months while still complying with the requirement. To comply with the requirement, the amount of time between inspections cannot be more than 24 months. For example, an industrial user inspected in January 2020 and December 2021 would technically meet the requirement of having been inspected at least once in 2020 and at least once in 2021.

<sup>15</sup> Of the 237 industrial users in our random sample, 172 are non-SIUs and therefore are not subject to federal requirements, including an inspection at least once per year. Of these 172 industrial users, 104 were in a pending status as of November 2020, meaning that IWCP had not yet issued them a permit and, in many cases, had not yet conducted an initial inspection of the facility. IWCP had inspected only a smaller group of these industrial users at least once as of November 2020.

SIUs and non-SIUs based on our random sample of industrial user facilities.

## Exhibit 6

### IWCP Inspects SIUs Much More Frequently Than Non-SIUs Because of Different Regulatory Requirements

	Significant Industrial Users (SIUs)	Non-SIUs (Enhanced Source Control Program)
Regulatory Requirements	Federal	Local
Number of Permits*	86	668
Required Inspection Frequency	At least once per year	None
Number of industrial users inspected at least once per year (based on random sample)	34 of 35 (97 percent)	N/A
Actual Inspection Frequency (based on random sample)	12.7 months, on average	5.9 years, on average

\*As of December 31, 2019.

Source: Auditor generated based on federal and local regulatory documents; information from PUD's 2019 Pretreatment Annual Report for the Point Loma Wastewater Treatment Plant; and a random sample of industrial user facilities in IWCP's Pretreatment Information Management System.

This is a marked difference from how frequently IWCP inspects industrial users subject to federal requirements and stems from a lack of requirements—federal or local—that specify how frequently these facilities must be inspected. As a result, according to IWCP management, the program has historically prioritized inspections and permit renewals for those industrial users that are subject to federal requirements.

#### IWCP has Recently Focused on Industrial Users Not Subject to Federal Requirements as Part of Larger Pure Water Implementation Effort

However, according to IWCP management, the program in 2020 began focusing additional resources on industrial users in the Enhanced Source Control Program (those subject to local requirements)—especially those in areas tributary to the North City Water Reclamation Plant (NCWRP)—in order to ensure program compliance ahead of the expansion of NCWRP as part of the first phase of the Pure Water project. The completion of the Pure Water project will help the Point Loma Wastewater Treatment Plant achieve “secondary equivalency” by reducing



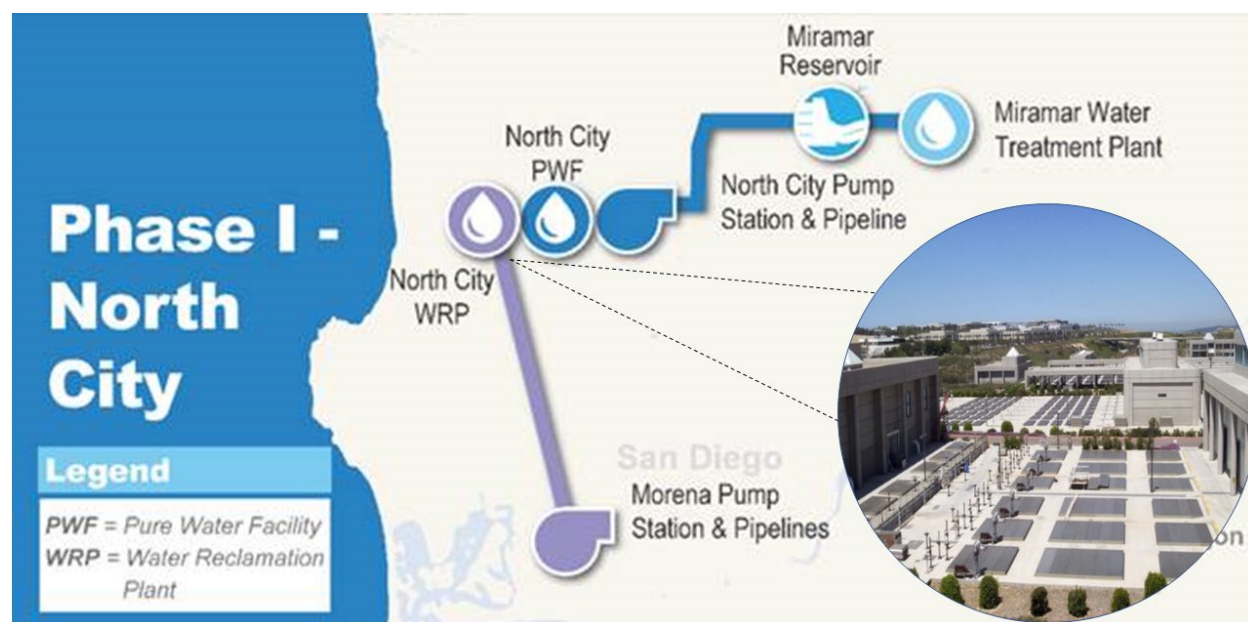
the total wastewater it processes—while avoiding the need to convert the Point Loma Wastewater Treatment Plant to secondary treatment technology and its associated costs, which are estimated at \$2 billion.<sup>16</sup> **Exhibit 7** highlights infrastructure being built in the first phase of Pure Water, which is driving IWCP’s focus on industrial users in the Enhanced Source Control Program.

#### Exhibit 7

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#### IWCP is Focusing Additional Resources on Areas Tributary to the North City Water Reclamation Plant

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Source: Pure Water Phase 1 Projects Fact Sheet and North City Water Reclamation Plant Fact Sheet.

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#### IWCP Intends to Evaluate Industrial Users in the Enhanced Source Control Program More Frequently in the Future

In addition, IWCP management stated that it would like to evaluate the Enhanced Source Control Program (ESCP) industrial user facilities in some form once per year in the future. This may include requiring a self-certification from the industrial user during the permit renewal process and/or rotating inspections based on geographical areas within the Metropolitan

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<sup>16</sup> As part of Phase 1 of the Pure Water project, the North City Water Reclamation Plant is being expanded from a capacity of 30 million gallons per day to 52 million gallons per day; construction is expected to begin in mid-2021. In addition, construction on the North City Pure Water Facility is expected to begin in early 2021. In the future, upon the completion of the Pure Water project, wastewater flows will be redirected from the Point Loma Wastewater Treatment Plant and recycled at the North City Water Reclamation Plant before being sent to the new North City Pure Water Facility.

Wastewater Area. This approach would represent a shift in how frequently the program evaluates industrial users in ESCP; because evaluating them more frequently than in the past represents additional work for the program, such efforts may require additional resources.

Our fieldwork also examined some of IWCP's permitting activities. Specifically, we sought to verify whether IWCP limits the duration of permits in accordance with federal law (for industrial users that are subject to federal requirements); whether IWCP regularly renews permits prior to their expiration; and whether IWCP processes permits in a timely manner. The following sections describe our results in these areas.

**Permits Cannot be Issued  
for a Term Longer Than  
Five Years, and IWCP  
Complies with This Limit**

Under federal regulations, permits for SIUs may not be issued for a term longer than five years. In addition, §64.0505 of the San Diego Municipal Code specifies that "Permits shall be issued for a specified time period, not to exceed five years."

None of the industrial users in our sample—with active or inactive permits, and regardless of whether the industrial user is subject to federal or local requirements—were issued a permit for a term longer than five years.<sup>17</sup> We found that IWCP generally sets permits to expire in PIMS after four years, giving the program an additional year to renew the permit before the five-year limit is reached. Therefore, we conclude that IWCP complies with permit duration limits as specified in federal and local laws.

**Permits Should Not  
Regularly be Continued  
Beyond Expiration**

According to the EPA's *Industrial User Permitting Guidance Manual*, permits should not routinely be continued beyond their expiration dates. Such a practice should be a stopgap measure used only in unusual situations—not in lieu of having enough staff or reissuing permits in a timely manner. Furthermore, the length of time a permit is continued beyond expiration should be kept as brief as possible.

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<sup>17</sup> Of the 237 industrial users in our random sample, 87 facilities had active permits; 39 facilities had inactive permits; and 111 facilities' permits were pending (had not yet been issued) as of November 2020.

**IWCP Allowed Some Industrial Users to Operate with Expired Permits as a Result of Prioritizing Industrial Users Subject to Federal Requirements**

We found that, of the industrial user facilities in our random sample requiring a permit from IWCP, 26 facilities (12 percent) operated with an expired permit prior to the issuance of a current permit.<sup>18</sup> The vast majority of these—23 of them—were Class 2 and Class 3 non-SIU facilities, where permits had been expired for about 5.6 years (2,050 days), on average.

IWCP management acknowledged that the program allowed some industrial users to operate with an expired permit, but again explained that this was the result of having historically prioritized inspections and permit renewals for those industrial users that are subject to federal requirements. IWCP management emphasized that this was a strategic decision based on wanting first and foremost to ensure the program's compliance with federal requirements while facing the reality of resource constraints, including lacking enough staff to keep up with inspections and permit renewals for industrial users in ESCP.

In addition, according to IWCP management, the program kept some expired permits active if the industrial user had previously abided by their permit guidelines and had not changed their business process—so the effect of keeping the expired permit in place was essentially the same as issuing a new one. Finally, certain permit classes that IWCP allowed to expire require semi-annual reporting, so the program was able to maintain communication with the affected industrial users even if their permits were expired. For these reasons, IWCP management believes there was essentially no functional impact to the program or the industrial user that resulted from allowing some permits to expire. Nevertheless, IWCP management acknowledged that continuing some permits beyond expiration was not a good practice and stated that they are working on developing solutions to prevent this from reoccurring in the future.

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<sup>18</sup> Of the 237 industrial users in our random sample, 14 facilities were designated as Class 4C and 4 facilities were designated as Class 4Z. Industrial users in these classes technically do not require a permit from IWCP; instead, IWCP issues them a Conditional Permit Waiver and a Class 4Z Letter, respectively. Therefore, only 219 industrial users in our random sample require permits, and 26 of these (12 percent) operated with an expired permit prior to the issuance of a current permit.

While some efficiency improvements may help IWCP achieve more frequent assessments and permit renewals for industrial users in ESCP, effectively keeping up with inspections and permits for ESCP may ultimately be a question of program capacity. In this regard, several changes to IWCP resulting from the program assessment done in 2019 may also help. For example, reorganizing the program's structure to also focus on industrial users in ESCP, adding two Field Representative positions, and increasing Inspector pay represent potential improvements to ESCP's staffing resources and may help IWCP avoid inspection and permit renewal lapses in ESCP in the future. However, as these changes take effect, and as the program reaches a steadier state, we believe it is in IWCP's best interest to reassess its service demands and then determine whether its staffing levels are appropriate to carry out all program responsibilities, including those under ESCP.

**Regularly Continuing Permits Beyond Their Expiration Creates Non-Compliance Risks and Reflects Poorly on the Program**

We agree that continuing permits beyond their expiration is not a good practice. While IWCP management identified some mitigating mechanisms to ensure that an expired permit has limited effects on the industrial user or on the program's efficacy or intended outcomes, allowing industrial users to operate with an expired permit increases the risk that the industrial user does not comply with permit terms or federal or local laws that are intended to limit negative impacts on the environment. In addition, regularly allowing permits to expire sets a bad tone for a regulatory agency such as IWCP. For example, industrial users regulated by the program may recognize this practice and view it as an opportunity to violate permit terms or circumvent pretreatment requirements. Ultimately, the practice reflects poorly on the program, the department, and the public image of the City as a whole.

**IWCP's Goal is to Process  
Permits for SIU Facilities  
Within Six Months**

In addition to conducting inspections in a timely manner, issuing permits in a timely manner is also important. According to IWCP management, as of December 2020, the program has implemented the goal of processing permit applications for all SIU facilities within six months.<sup>19</sup>

**IWCP is Generally Meeting  
This Goal, but Permits for  
Some Non-SIU Facilities  
Take at Least About a  
Year to Process**

Based on a random sample of industrial users, we found IWCP is generally processing permits for SIU facilities within its six-month goal. Permits issued by the program to SIU facilities were processed in 141 days (4.7 months), on average.<sup>20</sup>

However, permits issued by the program to non-SIU facilities took longer at 194 days (6.5 months), on average.<sup>21</sup> In addition, a substantial portion of permits in our random sample were pending as of November 2020.<sup>22</sup> The vast majority of these were for Class 2 and Class 3 non-SIU facilities, which fall under ESCP.<sup>23</sup> Pending permits had been waiting at least a year (367 days) for completion, on average, as of November 2020.<sup>24</sup> Therefore, permit processing times vary distinctly between SIUs and non-SIUs, which indicates that IWCP has prioritized SIUs over non-SIUs.

**Permit Processing Delays  
Contribute to Permit  
Backlog and Increase Risk  
of Industrial User Non-  
Compliance**

Permit processing delays for non-SIUs contribute to the existing backlog of pending inspections and permits. With an existing backlog, addressing pending permits for non-SIUs more slowly means the program can only inspect a portion of those facilities. This creates a risk of growing the backlog of inspections and

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<sup>19</sup> This timeframe was recommended by consultants as part of the program assessment done in 2019; according to the consultants, IWCP should begin the permit renewal process six months prior to permit expiration.

<sup>20</sup> One outlier value is excluded from this calculation; including it results in an average of 157 days (5.2 months).

<sup>21</sup> Eleven outlier values are excluded from this calculation; including them results in an average of 491 days (1.3 years).

<sup>22</sup> A total of 111 permits in our random sample of 237 (47 percent) were pending as of November 2020.

<sup>23</sup> Of the 111 pending permits in our random sample, 104 were for Class 2 and Class 3 non-SIU facilities.

<sup>24</sup> Sixteen outlier values are excluded from this calculation; including them results in an average of 493 days (1.4 years).

permit renewals each year. As of October 2020, 280 of the 612 (46 percent) industrial user facilities that had submitted a permit application to IWCP since 2017 were in a pending status.<sup>25</sup> IWCP management stated that the program was focused on the backlog of industrial users that are tributary to the North City Water Reclamation Plant because it affects the Pure Water project and associated permit. In addition, according to IWCP management, the program has reduced its permit backlog from four years to one year, so the current wait time is actually an improvement from past wait times. Finally, IWCP management stated that it intends to keep the backlog down to 45 days or less in the future. However, it is unclear at this time whether the program has enough resources to accomplish this.

In addition, permit processing delays increase the risk that an industrial user operates with an expired permit or without a permit altogether. This, in turn, heightens the risk of non-compliance with permit terms or federal or local laws, which are intended to limit negative impacts on the environment and on wastewater infrastructure.

**Staffing Issues Contribute  
to Permit Processing  
Delays**

According to IWCP management, staffing issues are also contributing to some permit processing delays. According to IWCP management, there have been some organizational and staffing changes to the program since 2019, which included adding new positions and changing workflows based on recommendations made by consultants in the 2019 program assessment. As mentioned in the Background, IWCP also received approval for a Special Salary Adjustment of 20 percent for the Industrial Wastewater Pretreatment Inspector series (Inspector I, II, and III), which took effect in July 2019. However, according to PUD management, despite this adjustment, other classification and salary changes may be helpful to improve Inspector retention within the program. Moreover, according to IWCP management, the ongoing Covid-19 pandemic also interrupted facility inspections for a period of about 4.5 months last year. In addition, the program experienced some staffing turnover and resulting vacancies in several Inspector positions last year, which disrupted inspection and permit processing workflows. According to IWCP management, they are working to

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<sup>25</sup> Not all pending permits are part of the backlog; the backlog is a subset of all pending permits.

fill these vacancies and train new employees as quickly as possible.

Finally, IWCP management has identified a need to better train Inspectors to minimize back-and-forth between Inspectors and supervisors during the permit review process. IWCP management stated that they are trying to implement a 30-day time frame for a permit draft after an inspection is conducted, but that delays may occur as the draft permit goes back and forth between Inspectors and supervisors (since revisions to the draft permit are necessary if it is inaccurate). According to IWCP management, the program is working on training inspectors to draft permits more accurately the first time so that only a maximum of two revisions are necessary. However, IWCP management also stated that permit reviews are taking longer because of the existing backlog of permits and a lack of staffing resources necessary to keep up with all inspection and permitting activities.

**IWCP May Need  
Additional Capacity to  
Meet Future Demands**

Therefore, while IWCP management said it is working to address these issues, there may be an underlying need to assess whether the program's staffing levels are appropriate to meet all of the program's operational demands. When asked about this possibility, IWCP management stated that this kind of assessment may be beneficial in the future, once all existing positions are filled and after having the opportunity to make process improvements that maximize existing staffing resources.

We agree that it would be prudent to first make efficiency improvements that maximize existing resources. For example, filling vacant positions and providing additional training and instruction to all staff Inspectors to help minimize permit processing times are improvements that do not require additional staff positions. However, based on our observations and discussions with IWCP management, there may still be a need to assess program workloads and staffing levels even after making incremental efficiency improvements.

An important consideration underlying these issues is the potential for identifying a significant number of new industrial users—possibly hundreds—that may result from implementing

the recommendations we make in Finding 1. This could make the backlog of inspections and permits worse if the program does not have the capacity to take on additional industrial users. In addition, IWCP intends to evaluate all non-SIU facilities once per year in the future, given the potential risks these users pose to the environment and to ensure compliance with the City's NPDES and Pure Water permits. This frequency of evaluation would be significantly higher than IWCP has achieved in the past for non-SIUs and will further strain IWCP's staffing resources.

**IWCP Should Establish  
Target Service Levels and  
Complete a Staffing  
Analysis**

Implementing recommendations from Finding 1 will help IWCP develop a more complete and current inventory of industrial users. This will help IWCP better understand service demands on the program, which is necessary to establish target service levels. IWCP can also use total available staff hours, knowledge of how much time certain tasks may take to accomplish, and estimates of non-productive staff time (such as vacation time, training, sick leave, etc.). This will help IWCP better understand its available staffing resources and whether they are enough to meet target service levels. Therefore, after the program implements recommendations from Finding 1:

**Recommendation 5**    The Industrial Wastewater Control Program should establish target service levels for inspections and permit issuance for both Significant Industrial User (SIU) and non-SIU facilities. These targets should include (but not be limited to) how frequently the program will formally inspect or otherwise evaluate industrial user facilities for compliance with pretreatment regulations and how quickly the program should process permit applications and renew permits prior to their expiration. (Priority 2)

**Recommendation 6**    The Industrial Wastewater Control Program (IWCP) should develop procedures to monitor performance in achieving the target service levels described in Recommendation 5. IWCP should report this information annually to the City Council's Environment Committee or to the Independent Rates Oversight Committee, along with the information produced by implementing Recommendation 4. (Priority 2)

**Recommendation 7**    The Industrial Wastewater Control Program (IWCP) should complete a staffing analysis to determine the staffing level



necessary to meet the target service levels established in Recommendation 5. If this staffing level requires additional positions, IWCP should make the necessary budget requests to the City Council during the annual budget process. If the City Council does not approve these requests, IWCP should adjust its target service levels to ensure they can be met, based on current staffing resources. (Priority 1)

## Conclusion

The Industrial Wastewater Control Program (IWCP) is a key component of the City's environmental management efforts and plays a critical role in complying with wastewater regulations. It is essential for securing a secondary treatment waiver from the federal government, which helps the City avoid approximately \$2 billion in upgrade costs to the Point Loma Wastewater Treatment Plant. IWCP also plays an increasingly significant role as the Pure Water Program is implemented.

Because IWCP is responsible for regulating certain industrial businesses, being aware of all those businesses is foundational to the program's success. While the program uses several methods to achieve this, we found that IWCP is unaware of potentially hundreds of businesses that may need to be regulated. Therefore, IWCP should make improvements to incorporate data-based procedures and leverage existing and more efficient and modern solutions to help ensure the program identifies all industrial users that are under its purview. However, because these changes have the potential to increase the program's workload, it will be important to assess service demands and staffing resources and ensure the program is able to meet established service levels in the future.

Our review also included timeliness aspects of IWCP's inspection and permitting activities, which are core functions of the program. We found that IWCP is generally meeting established requirements for conducting inspections and issuing permits to industrial users that fall under federal regulations. We commend IWCP for this but also recommend monitoring and reporting to help ensure full compliance. In addition, we found that IWCP inspects and permits other industrial users—those in the Enhanced Source Control Program (ESCP)—much less frequently, mainly because they fall under local regulations and have historically not been prioritized by the program. However, management stated that this is changing due to the importance of ESCP for the Pure Water Program.

While management has started shifting resources to ESCP, the existing backlog of ESCP permits combined with the likelihood of

increasing service demand (by implementing recommendations from Finding 1) means that existing resources may be insufficient to keep up with the timely regulation of all industrial users in the future. Therefore, we recommend IWCP establish target service levels, complete a staffing analysis, and request additional resources, if necessary.

Collectively, the changes we recommend are intended to help the program better understand its service demands, improve oversight of critical program outputs, and plan its future capacities. These changes can help the program improve effectiveness in protecting the City's environmental quality and wastewater infrastructure.

# Recommendations

- Recommendation 1** To help maintain a complete and current inventory of industrial users, the Industrial Wastewater Control Program should update its existing policies, procedures, and methods for identifying potential industrial users within the Metropolitan Wastewater Area. Specifically, the updated policies, procedures, and methods should:
- a. Include directions for analyzing business sites data from the County of San Diego to identify businesses that may potentially be regulated by the program as industrial users;
  - b. Include enhanced methods for identifying businesses outside the City of San Diego, such as increased collaboration with the permitting agencies of other local jurisdictions within the Metropolitan Wastewater Area;
  - c. Specify which staff members are responsible for conducting this new analysis and specify which staff members are responsible for employing each of the existing methods; and
  - d. Specify how often responsible staff should conduct this new analysis and specify how often responsible staff should employ each of the existing methods.  
(Priority 1)
- Recommendation 2** The Industrial Wastewater Control Program should train all staff responsible for regularly updating the inventory of industrial users, as noted in Recommendation 1, on procedures to identify potential industrial users in the Metropolitan Wastewater Area.  
(Priority 2)
- Recommendation 3** The Industrial Wastewater Control Program (IWCP) should work with the Economic Development Department to update the City's OpenCounter portal by adding IWCP permits to the list of potential permits that a business may need to acquire from the City when starting or expanding operations. (Priority 3)

- Recommendation 4** The Industrial Wastewater Control Program (IWCP) should develop procedures to track the results of using the updated methods described in Recommendation 1, including how many potential industrial users were identified, how many were assessed, and how many were determined to need a permit from the program. IWCP should report this information to the City Council's Environment Committee or to the Independent Rates Oversight Committee annually, along with the information produced by implementing Recommendation 6. (Priority 2)
- Recommendation 5** The Industrial Wastewater Control Program should establish target service levels for inspections and permit issuance for both Significant Industrial User (SIU) and non-SIU facilities. These targets should include (but not be limited to) how frequently the program will formally inspect or otherwise evaluate industrial user facilities for compliance with pretreatment regulations and how quickly the program should process permit applications and renew permits prior to their expiration. (Priority 2)
- Recommendation 6** The Industrial Wastewater Control Program (IWCP) should develop procedures to monitor performance in achieving the target service levels described in Recommendation 5. IWCP should report this information annually to the City Council's Environment Committee or to the Independent Rates Oversight Committee, along with the information produced by implementing Recommendation 4. (Priority 2)
- Recommendation 7** The Industrial Wastewater Control Program (IWCP) should complete a staffing analysis to determine the staffing level necessary to meet the target service levels established in Recommendation 5. If this staffing level requires additional positions, IWCP should make the necessary budget requests to the City Council during the annual budget process. If the City Council does not approve these requests, IWCP should adjust its target service levels to ensure they can be met, based on current staffing resources. (Priority 1)

## Appendix A: Definition of Audit Recommendation Priorities

The Office of the City Auditor maintains a priority classification scheme for audit recommendations based on the importance of each recommendation to the City, as described in the table below. While the City Auditor is responsible for providing a priority classification for recommendations, it is the City Administration's responsibility to establish a target date to implement each recommendation, taking into consideration its priority. The City Auditor requests that target dates be included in the Administration's official response to the audit findings and recommendations.

Priority Class <sup>26</sup>	Description
1	Fraud or serious violations are being committed. Significant fiscal and/or equivalent non-fiscal losses are occurring. Costly and/or detrimental operational inefficiencies are taking place. A significant internal control weakness has been identified.
2	The potential for incurring significant fiscal and/or equivalent non-fiscal losses exists. The potential for costly and/or detrimental operational inefficiencies exists. The potential for strengthening or improving internal controls exists.
3	Operation or administrative process will be improved.

<sup>26</sup> The City Auditor is responsible for assigning audit recommendation priority class numbers. A recommendation that clearly fits the description for more than one priority class shall be assigned the higher priority.

## Appendix B: Audit Objectives, Scope, and Methodology

**Audit Objectives** In accordance with the Office of the City Auditor’s Fiscal Year 2021 Audit Work Plan, we conducted a performance audit of the Public Utilities Department’s Industrial Wastewater Control Program (IWCP). Our audit objectives were to determine:

1. Whether IWCP maintains an accurate inventory of industrial users within the Metropolitan Wastewater Area; and
2. Whether and to what extent IWCP has inspected and issued a permit to eligible industrial users in the Metropolitan Wastewater Area.

**Scope** Our scope included IWCP’s current inventory of industrial users. Because this is constantly changing as businesses open, close, or otherwise change their operations, we focused on industrial user facilities that had applied for and/or had been issued a wastewater discharge permit from IWCP between January 1, 2017 and September 28, 2020. We updated certain permit information from PIMS when we conducted our review of inspection and permit processing times in November 2020.

**Methodology** To determine whether IWCP maintains an accurate inventory of industrial users within the Metropolitan Wastewater Area, we:

**Audit Objective 1**

- Reviewed regulatory documents and best practices to understand IWCP’s responsibilities for identifying potential industrial users within its jurisdiction.
- Reviewed program documentation about the methods IWCP uses to identify potential industrial users within its jurisdiction.
- Interviewed IWCP management and staff about how the program maintains its inventory of industrial users.
- Interviewed staff from the Development Services Department (DSD) to understand how the referral process between DSD and IWCP works.

- Reviewed local permitting websites and other sources of public business data, including business tax license data from municipalities across San Diego County and business sites data published by the County of San Diego. We decided to use the County's business sites data because it was the most extensive and uniform dataset we could find for businesses located within the Metropolitan Wastewater Area.
- We judgmentally selected 15 business categories from the County data for review, based on whether the category was among the most-frequently occurring in PIMS and whether the category name seemed likely to include businesses of interest to the program. For categories that contained hundreds or thousands of businesses, we drew a random sample of businesses based on a 95 percent confidence level and a margin of error of 5 percent. We conducted internet searches of the business names and addresses in our sample to verify whether the business was in operation; we also looked up the business name and/or address in PIMS to determine whether IWCP had issued a permit to the business and/or whether a permit for the business was pending. We documented whether the business was located in PIMS, summarized our results, and asked IWCP management to review a subset of 50 businesses we did not locate in PIMS to confirm whether they need to be assessed by the program and whether they could potentially require a permit from IWCP.

**Audit Objective 2** To determine whether and to what extent IWCP has inspected and issued a permit to eligible industrial users in the Metropolitan Wastewater Area, we:

- Reviewed regulatory documents and best practices to understand IWCP's responsibilities for conducting inspections and issuing permits on a regular basis.
- Consulted with Wastewater Enforcement Engineers from the U.S. Environmental Protection Agency (EPA) to understand the EPA's wastewater and pretreatment criteria related to inspections and permitting.



- Reviewed program documentation about how IWCP staff conduct inspections and issue permits to industrial users within its jurisdiction.
- Observed inspections taking place and discussed the permitting process with inspectors.
- Reviewed permit files, including electronic permitting data from PIMS and some physical permit files. We reviewed permitting data in PIMS for each of the industrial user permits in our random sample. During our review, we verified and/or recorded key dates, including: when IWCP received a permit application; when IWCP conducted inspections; when a permit was drafted by an inspector; when a permit draft was reviewed by a supervisor; when a final permit was issued by a program manager; and when a permit expired. We then calculated several key metrics, including inspection and permit frequency; permit duration; frequency and duration of expired permits; permit processing times; and wait times for pending permits.
- Interviewed IWCP management and staff to discuss our results and better understand some of the reasons behind permit processing delays and the practice of sometimes continuing some permits beyond expiration.

#### **Data Reliability Testing**

We tested the reliability of permit data from PIMS to ensure it was sufficiently complete and accurate for the purpose of forming conclusions about IWCP's inventory of industrial users and IWCP's inspection and permitting frequencies. We did this by selecting a random sample of industrial user permits from the dataset provided by IWCP based on a 95 percent confidence level and a margin of error of 5 percent. We then verified the accuracy of the information in the dataset by comparing values from the dataset to the information recorded in PIMS; we did this for each of the industrial user permits in our random sample and across several key fields. We also verified the accuracy of inspection and permit dates in PIMS by confirming that inspections were reviewed by a supervisor; that an inspection report was attached to the electronic permit file; and that a Program Manager signed off on the final permit.

**Internal Controls Statement** Our review of internal controls was limited to those controls relevant to the audit objectives described above. Specifically, we reviewed policies and procedures documents; interviewed department management; observed inspections taking place; and reviewed permitting data to understand how the program maintains its inventory of industrial users and how it ensures inspections and permits are completed in a timely manner.

**Compliance Statement** We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Appendix C

## Summary of Inspection and Permit Requirements for Each Industrial User Class

Permit Class	Permit Description	Significant Industrial User?	Subject to federal categorical pretreatment standards?	Permit Required?	Minimum Inspection Frequency	Maximum Permit Term
1	Process subject to federal categorical pretreatment standards; requires source control, pretreatment, or both.	Yes	Yes	Yes	Once per year	5 years
2	Discharge contains some toxic constituents but not subject to federal categorical pretreatment standards; numeric limits or Best Management Practice requirements apply; includes groundwater remediation projects.	Yes, if flows > 25,000 gallons per day	No	Yes	SIU: Once per year  Non-SIU: "As needed" (when renewing permit)	5 years
2C	Process subject to federal categorical pretreatment standards but <b>does not discharge to sewer</b> ; discharge contains some toxic constituents that are not subject to federal categorical pretreatment standards.	No	Process - Yes Discharge - No	Yes	Once per year	5 years
2F	BMP Discharge Authorization – silver-rich solutions	No	No	Discharge Authorization	Randomly	5 years; re-certification every 6 months
2Z	Process subject to federal categorical pretreatment standards but <b>does not generate process wastewater</b> ; discharge contains some toxic constituents that are not subject to federal categorical pretreatment standards.	No	Process - Yes Discharge - No	Yes	None	5 years

Permit Class	Permit Description	Significant Industrial User?	Subject to federal categorical pretreatment standards?	Permit Required?	Minimum Inspection Frequency	Maximum Permit Term
3	Conventional pollutants; numeric limits or BMP requirements apply; includes construction dewatering projects.	Yes, if flows > 25,000 gallons per day	No	Yes	SIU: Once per year Non-SIU: "As needed" (when renewing permit)	5 years
3C	Process subject to federal categorical pretreatment standards but <b>does not discharge to sewer</b> ; discharge contains conventional pollutants.	No	Process - Yes Discharge - No	Yes	Once per year	5 years
3Z	Process subject to federal categorical pretreatment standards but <b>does not generate process wastewater</b> ; discharge contains conventional pollutants.	No	Process - Yes Discharge - No	Yes	None	5 years
4	Sanitary flow only and Class 2 and Class 3 facilities with flows below permitting thresholds.	No	No	No	N/A	N/A
4C	Process subject to federal categorical pretreatment standards but <b>does not discharge to sewer</b> ; annual requirement for Conditional Permit Waiver is inspection by IWCP and the owner to submit a Certification of Zero Discharge of Federally Regulated Wastewater.	No	Process - Yes Discharge - No	Conditional Permit Waiver	Once per year	1 year
4D	BMP Discharge Authorization – dry cleaning solvents	No	No	Discharge Authorization	Randomly	5 years; re-certification every 6 months

Permit Class	Permit Description	Significant Industrial User?	Subject to federal categorical pretreatment standards?	Permit Required?	Minimum Inspection Frequency	Maximum Permit Term
4M	BMP Discharge Authorization – dental amalgams	No	No	Discharge Authorization	Randomly	5 years; re-certification every 6 months
4Z	Process subject to federal categorical pretreatment standards but <b>does not generate process wastewater</b> ; annual requirement is inspection by IWCP and the owner to submit a Certification of Zero Regulated Wastewater Generated.	No	Process - Yes Discharge - No	Class 4Z Letter	None	1 year
5	Sanitary flow only; minimal potential to ever generate industrial wastewater.	No	No	No	N/A	N/A

Note: The table does not include permit classes for trucked waste because these are not the main focus of IWCP's regulation of industrial users through permitting, monitoring, and enforcement activities.

Source: Auditor generated based on 2019 Annual Pretreatment Report for the Point Loma Wastewater Treatment Plant and information received from the Public Utilities Department.



THE CITY OF SAN DIEGO

MEMORANDUM

DATE: March 9, 2021

TO: Andy Hanau, City Auditor, Office of the City Auditor

FROM: Shauna Lorance, Director, Public Utilities Department

SUBJECT: Management Response Performance Audit of the Public Utilities Department's Industrial Wastewater Control Program – Part II

---

The purpose of this memorandum is to provide Management's response to the recommendations to the City Auditor's report entitled *Performance Audit of Public Utilities Department's Industrial Wastewater Control Program - Part II*.

The San Diego Public Utilities Department (Department) would like to provide information on changes that have started to be implemented in the Industrial Wastewater Control Program (IWCP) based on an independent consultant review that coincides with similar recommendations for the Performance Audit. Beginning in 2017, the Department hired outside consultants to complete a comprehensive review to evaluate the IWCP and ensure the Program would have the ability to meet the needs associated with the Pure Water Program. The final consultant report provided multiple recommendations, including restructuring IWCP to form two inspection groups, one for enhanced source control (ESC) and another for significant industrial users (SIU). After restructuring and reviewing the ESC, it became clear that a significant number of ESC inspections were behind schedule. Thus, IWCP has focused to fix the backlog of ESC inspections, creating efficiencies for drafting and issuing permits in a timely manner. Subsequently, IWCP has been able to reduce the backlog of 400 inspections in the Pure Water area down to 225 inspections over the last year.

We appreciate the opportunity to provide comments on this audit and thank the City Auditor's team for their cooperation and professionalism throughout the audit process. Our responses to the audit recommendations are below.

**RECOMMENDATION #1:** To help maintain a complete and current inventory of industrial users, IWCP should update its existing policies, procedures, and methods for identifying potential industrial users within the Metropolitan Wastewater Area. Specifically, the updated policies, procedures, and methods should:

- a. Include directions for analyzing business sites data from the County of San Diego to identify businesses that may potentially be regulated by the program as industrial users.

Page 2 of 5

Andy Hanau, City Auditor, Office of the City Auditor

March 9, 2021

- b. Include enhanced methods for identifying businesses outside the City of San Diego, such as increased collaboration with the permitting agencies of other local jurisdictions within the Metropolitan Wastewater Area.
- c. Specify which staff members are responsible for conducting this new analysis and specify which staff members are responsible for employing each of the existing methods.
- d. Specify how often responsible staff should conduct this new analysis and specify how often responsible staff should employ each of the existing methods. (Priority 1)

**Management's Response:** Agree. IWCP includes information in our annual regulatory report regarding our ability to locate new businesses or discover businesses that have never been evaluated by IWCP. IWCP has consistently met this regulatory requirement. Additional avenues to support our current methods are appreciated and will be incorporated into our processes for businesses within San Diego city limits.

Additionally, IWCP agrees that improving the process for evaluating potential businesses in the Participating Agencies is needed. IWCP will work in partnership with the Participating Agencies to ensure there are written procedures for business referrals to IWCP for further evaluation to determine if they require a permit.

Written policy development, including the identification of staff roles and responsibilities will be developed for incorporation in the next annual reporting period that begins in January 2022.

**Target Implementation Date:** IWCP plans to implement these changes and be able to demonstrate use of these improvements by July 2022.

**RECOMMENDATION #2:** IWCP should train all staff responsible for regularly updating the inventory of industrial users, as noted in Recommendation 1, on procedures to identify potential industrial users in the Metropolitan Wastewater Area. (Priority 2)

**Management's Response:** Agree. IWCP will train staff on revised and/or new policies and procedures.

**Target Implementation Date:** IWCP expects to train all staff responsible once new policies/procedures are developed by January 2022.

**RECOMMENDATION #3:** IWCP should work with the Economic Development Department to update the City's Open Counter portal by adding IWCP permits to the list of potential permits that a business may need to acquire from the City when starting or expanding operations. (Priority 3)

**Management's Response:** Agree. IWCP was unaware of this opportunity and thanks the Auditors for identifying this as an option. IWCP management has coordinated with the Economic Development Department (EDD) and learned that EDD is in the process of issuing

Page 3 of 5

Andy Hanau, City Auditor, Office of the City Auditor

March 9, 2021

a solicitation for Open Counter. Once the City has selected a future software provider, EDD has agreed to include IWCP permits as part of Open Counter in order to better evaluate potential businesses.

**Target Implementation Date:** EDD is advertising the request for proposal in March 2021 and expects to evaluate and award in June 2021. IWCP will work with EDD to include IWCP permits when software is implemented

**RECOMMENDATION #4** The Industrial Wastewater Control Program (IWCP) should develop procedures to track the results of using the updated methods described in Recommendation 1, including how many potential industrial users were identified, how many were assessed, and how many were determined to need a permit from the program. IWCP should report this information to the City Council's Environment Committee or to the Independent Rates Oversight Committee annually, along with the information produced by implementing Recommendation 6. (Priority 2)

**Management's Response:** Agree. IWCP currently reports the manners in which the Program evaluates potential permittees to meet regulatory requirements. IWCP will include the new mechanisms and data in this recommendation to develop the report. Since the regulations do not require IWCP to report this type of information in the annual reports, IWCP will document the steps taken as supporting documentation for the report. IWCP will plan to present the report at IROC.

**Target Implementation Date:** March 2023

**RECOMMENDATION #5** IWCP should establish target service levels for inspections and permit issuance for both SIU and non-SIU facilities. These targets should include (but not be limited to) how frequently the program will formally inspect or otherwise evaluate industrial user facilities for compliance with pretreatment regulations and how quickly the program should process permit applications and renew permits prior to their expiration. (Priority 2).

**Management's Response:** Agree. IWCP has regulatory requirements for inspections and permit issuance for SIU facilities and is currently meeting these regulatory thresholds. IWCP will continue to perform 100% of inspections annually for SIU facilities.

For non-SIU facilities, IWCP agrees to implement the new procedures described in Recommendation 1. It is estimated that the new protocols will include an evaluation of approximately 30,000 potential businesses. While utilizing the new procedures, ESC will establish goals and resource levels needed for evaluating these potential new businesses.

**Target Implementation Date:** July 2022



Page 4 of 5

Andy Hanau, City Auditor, Office of the City Auditor

March 9, 2021

**RECOMMENDATION #6** The Industrial Wastewater Control Program (IWCP) should develop procedures to monitor performance in achieving the target service levels described in Recommendation 5. IWCP should report this information annually to the City Council's Environment Committee or to the Independent Rates Oversight Committee, along with the information produced by implementing Recommendation 4. (Priority 2)

**Management's Response:** Agree. As stated in Recommendation #4 and #5, IWCP will document the mechanisms the audit recommendations are requesting as back up to the annual report to achieve the target service levels. IWCP will present the report at IROC to provide an update on progress implementing the new processes

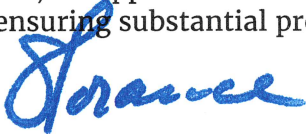
**Target Implementation Date:** July 2022

**RECOMMENDATION #7** IWCP should complete a staffing analysis to determine a staffing level necessary to meet the target service levels established in Recommendation 5. If this staffing level requires additional positions, IWCP should make the necessary budget requests to the City Council during the annual budget process. If the City Council does not approve these requests, IWCP should adjust its target service levels to ensure they can be met, based on current staffing resources. (Priority 1)

**Management's Response:** Agree. In 2019-2020, the IWCP added 6 new positions to the program based on the independent consultant recommendations. Staff turnover and the pandemic have prevented the program from being fully staffed since the creation of these new positions. Once on-going hiring processes are complete and new staff are trained during Fiscal Year 2022, IWCP will complete a staffing analysis to determine whether additional positions may be needed. If additional staff are required, a request for new positions will be requested during the Fiscal Year 2024 budget development process.

**Target Implementation Date:** Staffing analysis will be completed by July 2022. If new staff are needed, they will be requested in the Fiscal Year 2024 budget development process.

Again, we appreciate the opportunity to provide comments on this audit. PUD is committed to ensuring substantial progress is made on addressing these findings.



Shauna Lorance

Director, Public Utilities Department

cc: Honorable City Attorney, Mara Elliott  
Paola Avila, Chief of Staff, Office of the Mayor  
Jay Goldstone, Chief Operating Officer  
Andrea Tevlin, Independent Budget Analyst  
Alia Khouri, Deputy Chief Operating Officer  
Matthew Helm, Chief Compliance Officer  
Shauna Lorance, Director, Public Utilities Department  
Lisa Celaya, Assistant Director, Public Utilities Department  
John Stufflebean, Assistant Director, Public Utilities Department  
Peter Vroom, Deputy Director, Public Utilities Department

Page 5 of 5

Andy Hanau, City Auditor, Office of the City Auditor

March 9, 2021

Ally Berenter, Senior Manager, External Affairs & Water Policy, Office of the Mayor

Joy Newman, Program Manager, Public Utilities Department

Kenneth So, Deputy City Attorney, City Attorney's Office

# ATTACHMENT C

Industrial User Fee

San Diego Outreach

## Beth Gentry

---

**From:** Newman, Joy <JNewman@sandiego.gov>  
**Sent:** Wednesday, September 08, 2021 2:20 PM  
**To:** Newman, Joy  
**Subject:** FW: Industrial User fee review  
**Attachments:** San Diego - IWCP Study\_UserGuide\_Final.pdf; Permittee Letter.pdf

**Warning:  
External  
Email**

Afternoon Industrial Users, I wanted to provide an update that the proposed cost of service study for the Industrial Wastewater Control fees will be heard at council on September 21, 2021 at 2pm. The agenda will be found at the following link when it is posted, <https://www.sandiego.gov/city-clerk/officialdocs/council-agendas-minutes-results>.

I have re-attached the original letter and fee study for your review.

Please let me know if you have any questions.

Thank you,

Joy

**Joy R. Newman, R.E.H.S.**  
Industrial Wastewater Control  
Program Manager  
City of San Diego  
Public Utilities Department  
C (619)539-5438



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**From:** Steger, John <JSteger@sandiego.gov>  
**Sent:** Tuesday, July 13, 2021 11:21 AM  
**To:** Steger, John <JSteger@sandiego.gov>  
**Subject:** FW: Industrial User fee review

Good day Industrial Users,

While Joy Newman is away this week and on her behalf, I wanted to inform you that the proposed cost of service study for the City of San Diego's Industrial Wastewater Control Program is scheduled to be discussed at the Council meeting on July 20, 2021.

For your reference, I have attached the original letter to you as well as the user guide.

If you have any immediate questions, don't hesitate to contact me.  
Otherwise, Joy is back next week and can address your concerns.

Thank you,

**John Steger**  
Pretreatment Program Manager  
Public Utilities Department  
Industrial Wastewater Control Program



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**From:** Newman, Joy <[JNewman@sanidiego.gov](mailto:JNewman@sanidiego.gov)>  
**Sent:** Wednesday, June 9, 2021 9:41 AM  
**To:** Newman, Joy <[JNewman@sanidiego.gov](mailto:JNewman@sanidiego.gov)>  
**Subject:** FW: Industrial User fee review

Good Morning Industrial Users, I wanted to inform you that the proposed cost of service study for the City of San Diego's Industrial Wastewater Control Program is going to be on the agenda at the Budget Committee on June 23, 2021 at 9am. We plan to bring the discussion to a July Council meeting and again in September. Once the dates are confirmed, I will send out another email.

For your reference, I have attached the original letter to you as well as the user guide.

If you have any questions, please do not hesitate to reach out to me.

Thank you,

Joy

**Joy R. Newman, R.E.H.S.**  
Industrial Wastewater Control  
Program Manager  
City of San Diego  
Public Utilities Department  
C (619)539-5438



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**From:** Newman, Joy  
**Sent:** Wednesday, February 17, 2021 12:31 PM  
**To:** Newman, Joy <[JNewman@sandiego.gov](mailto:JNewman@sandiego.gov)>  
**Subject:** FW: Industrial User fee review

Afternoon Industrial Users, I wanted to let you know that the Proposed fee increases will not be heard at the Environment Committee on February 25, 2021. I will send an update to you when the item will be heard.

Please let me know if you have any questions.

Thank you!

Joy

**Joy R. Newman, R.E.H.S.**  
Industrial Wastewater Control  
Program Manager  
City of San Diego  
Public Utilities Department  
C (619)539-5438



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**From:** Newman, Joy  
**Sent:** Tuesday, February 9, 2021 1:07 PM  
**To:** Newman, Joy <[JNewman@sandiego.gov](mailto:JNewman@sandiego.gov)>  
**Subject:** Industrial User fee review

Good Afternoon Industrial User Permittees, please find attached a letter and report related to an upcoming item at the City of San Diego Environmental Committee on February 25, 2021.

Please let me know if you have any questions.

Thank you!

Joy

**Joy R. Newman, R.E.H.S.**  
Industrial Wastewater Control  
Program Manager  
City of San Diego  
Public Utilities Department



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# ATTACHMENT D

Memo to Chair Jones

Industrial Wastewater  
Discharge Permit  
Inventory Status





**DATE:** August 20, 2021

**TO:** Metro Wastewater JPA, Chair Jerry Jones

**FROM:** Metro TAC, Chair of Industrial Waste Discharge Committee, Beth Gentry

**SUBJECT:** Industrial Waste Discharge Permit Inventory Assessment Status

At the August 5, 2021, Metro Wastewater JPA monthly meeting, Chair Jerry Jones requested an informational memorandum on the Industrial Wastewater Discharge (IWD) Permit Inventory Assessment Status. The purpose of this memorandum is to provide such status.

March 2021, the Office of the City Auditor of the City of San Diego, published a Performance Audit of the Public Utilities Department's Industrial Wastewater Control Program – Part II (Part II Audit)<sup>1</sup>, because the City of San Diego is required to maintain an Approved Pretreatment Program. Prior audits in 2013<sup>1</sup> and 2020<sup>1</sup> focused on cost recovery issues. The purpose of the Part II Audit was to determine:

- (1) whether the Industrial Wastewater Control Program (IWCP) maintains a complete and accurate inventory of industrial users within the Metropolitan Wastewater Area; and
- (2) whether and to what extent IWCP has inspected and issued a permit to regulated industrial users.

Task 1 of the Part II Audit addresses the request of the JPA and is the focus of this memorandum. The Part II Audit reviewed the current intake process for industrial dischargers which in summary includes the review of application requests, screening referrals from outside agencies, tracking business openings and closing, review of telephone directories, questioning competitors, and reviewing water consumption records. It was noted that these intake methods may not be consistently applied. To assess the comprehensiveness and accuracy of the Industrial Wastewater Discharge Permits identified through this process, the audit team utilized a data source different than used by the City which was the County Database for comparison. More than 50% of the businesses from the County database could not be located in the City's IWD Permit database. It was acknowledged that the County database may be too broad and that a simple business category search was not enough to determine permit requirements. The Part II Audit concluded that while the analysis had limitations, the results indicate that there are likely more industrial businesses within the county data that IWCP is not aware of and require assessments, inspections, and/or permit issuance. The auditors made seven recommendations which are summarized in Table 1.

1. Performance Audit of the Public Utilities Department's Industrial Wastewater Control Program – Part II (2021)  
[https://www.sandiego.gov/sites/default/files/21-010\\_iwcp\\_part2.pdf](https://www.sandiego.gov/sites/default/files/21-010_iwcp_part2.pdf)
2. Performance Audit of the Industrial Wastewater Control Program (2013):  
[https://www.sandiego.gov/sites/default/files/14-002\\_IWCP.pdf](https://www.sandiego.gov/sites/default/files/14-002_IWCP.pdf)
3. Follow-up Performance Audit of the Industrial Wastewater Control Program (2020):  
[https://www.sandiego.gov/sites/default/files/21-001\\_iwcp\\_follow-up.pdf](https://www.sandiego.gov/sites/default/files/21-001_iwcp_follow-up.pdf)

### The Joint Powers Authority Proactively Addressing Regional Wastewater Issues

Chula Vista • Coronado • Del Mar • El Cajon • Imperial Beach • La Mesa • Lemon Grove Sanitation District  
National City • Otay Water District • Poway • Padre Dam Municipal Water District  
County of San Diego, representing East Otay, Lakeside/Alpine, Spring Valley & Winter Gardens Sanitation Districts

Table 1. SUMMARY OF PART II AUDIT RECOMMENDATIONS AND CITY RESPONSE

No.	Audit Recommendation	City's Response
1	Update policies, procedures, and methods for identifying industrial users	The City has procedures in place and will add the new procedure to use the County dataset. Implementation is targeted for <b>July 2022</b> .
2	Improve training	City staff will be trained on revised and/or new policies once new policies/procedures are developed; target is <b>January 2022</b> .
3	Include IWCP permits when businesses start or expand operations through the City's Economic Development Department (EDD)	The new procedure identified by the auditor will become effective once the City's EDD identifies and <b>implements their new software</b> .
4	Implement tracking for reviewed and permitted businesses and report findings to the City Council's Environment Committee or the Independent Rates Oversight Committee (IROC) annually, along with results of Recommendation #6.	IWCP plans to present the annual regulatory report to IROC with a target implementation date of <b>March 2023</b> .
5	Establish target service levels for inspection and permit issuance for both SIU and non-SIU facilities.	IWCP will continue to perform 100% of inspections annually for SIU facilities. For non-SIU facilities, IWCP will implement new procedures identified in Recommendation #1 (est. 30,000 potential businesses require evaluation), target implementation is <b>July 2022</b> .
6	Develop procedures to monitor performance in achieving the target service levels described in Recommendation #5 and report to the City Council's Environment Committee or to IROC.	The City plans to document the mechanisms as stated in Recommendations #4 and #5 as backup to the annual regulatory report and present at the IROC, target implementation <b>July 2022</b> .
7	Complete a staffing analysis to determine staffing levels necessary to meet the target service levels and as appropriate recommend budget changes or level of service changes.	The staffing analysis will be targeted for completion by <b>July 2022</b> and if needed, new positions requested in the Fiscal Year 2024 budget development process.

IWCP: Industrial Wastewater Control Program

# ATTACHMENT 9

## CIP Program & Funding Sources



**THE CITY OF SAN DIEGO**

**M E M O R A N D U M**

**DATE:** August 16, 2021

**TO:** Metro Technical Advisory Committee (Metro TAC)

**FROM:** Surraya Rashid, Deputy Director, Public Utilities Department

**SUBJECT:** FY2021 Capital Improvements Projects (CIP) Report – 4th Quarter

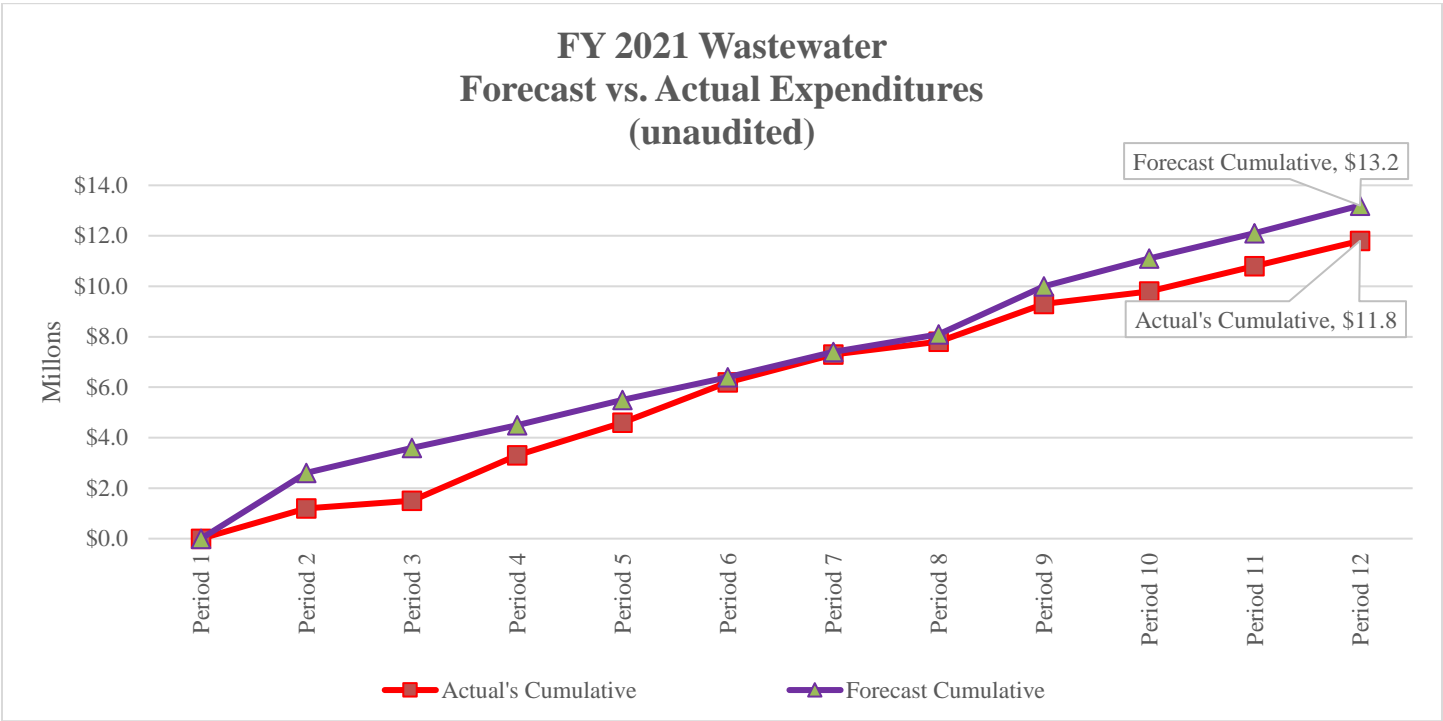
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The Public Utilities Department hereby submits the FY2021 CIP updates for the period of April 1, 2021 through June 30, 2021.

The report includes the following:

- Forecast versus actual expenditures report
- Projects expenditure updates

**FORECAST VERSUS ACTUAL EXPENDITURES UPDATES**





# ATTACHMENT 13

## MetroTAC Work Plan

**Metro TAC & JPA Work Plan**  
**Active & Pending Items**  
**January 2021**  
*Updated Items in Red Italics*

Active Items	Description	Member(s)
SB 332 Working Group	SB 332 (Hertzberg/Weiner) relates to wastewater treatment for recycled water and agencies with ocean outfalls. It requires the entity that owns the wastewater treatment facility that discharges through an ocean outfall and affiliated water suppliers (it defines water not wastewater suppliers) to reduce the facilities annual flow as compared to the average annual dry weather wastewater discharge baseline volume as prescribed by at least 50% on or before January 1, 2030 and by at least 95% on or before January 1, 2040. The working group was formed to track the process of this legislation.	<i>Yazmin Arellano Beth Gentry Hamed Hashemian</i>
Muni Transportation Rate Study Working Group	6/19: Working Group has presented an alternative plan which the City is reviewing.	Roberto Yano Yazmin Arellano Dan Brogadir Carmen Kasner Mark Niemiec Dexter Wilson SD staff
Point Loma Permit Ad Hoc	Metro Commission/JPA Ad Hoc established 9/17. 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 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. <i>1/21 This group continues to meet as needed.</i>	Jerry Jones Jim Peasley Ed Spriggs Bill Baber Jill Galvez Metro TAC staff & JPA consultants
Phase II Pure Water Facilities Working Group	Created to work with SD staff & consultants on determining Phase II facilities and costs. <i>1/21: Alternatives have been narrowed to two.</i>	Roberto Yano Scott Tulloch Dexter Wilson SD staff & consultants
Phase I Financial Implementation Working Group	This working group was formed to continue to work on Section 2.9.1 and other financial implementations issues in Exhibit F associated with the Amended Restated Agreement. <i>1/21: Group will start meeting once the ARA is fully signed (January 2021) on a regular basis with a goal to complete all tasks by 1/22.</i>	Roberto Yano Karyn Keese Dexter Wilson SD staff & consultants
Phase II Disposal Agreement Working Group	This group was created to negotiate the 2 <sup>nd</sup> Amended Restated Agreement ARA2) which will incorporate the completed financial and other items from the first ARA. <i>1/21: Working Group is meeting with SD staff to set up framework for ARA2 process.</i>	Roberto Yano Eric Minicilli Karyn Keese Scott Tulloch Dexter Wilson SD staff & consultants
Industrial Wastewater Control Committee	Formed to work with San Diego on new standards for industrial waste discharge and cost allocation of same. <i>1/21: SD is trying to formalize a pretreatment rate case and has hired a consultant. Monthly updates are presented at TAC.</i>	<b>Beth Gentry</b> Interested JPA members Dexter Wilson SD Staff & Consultants

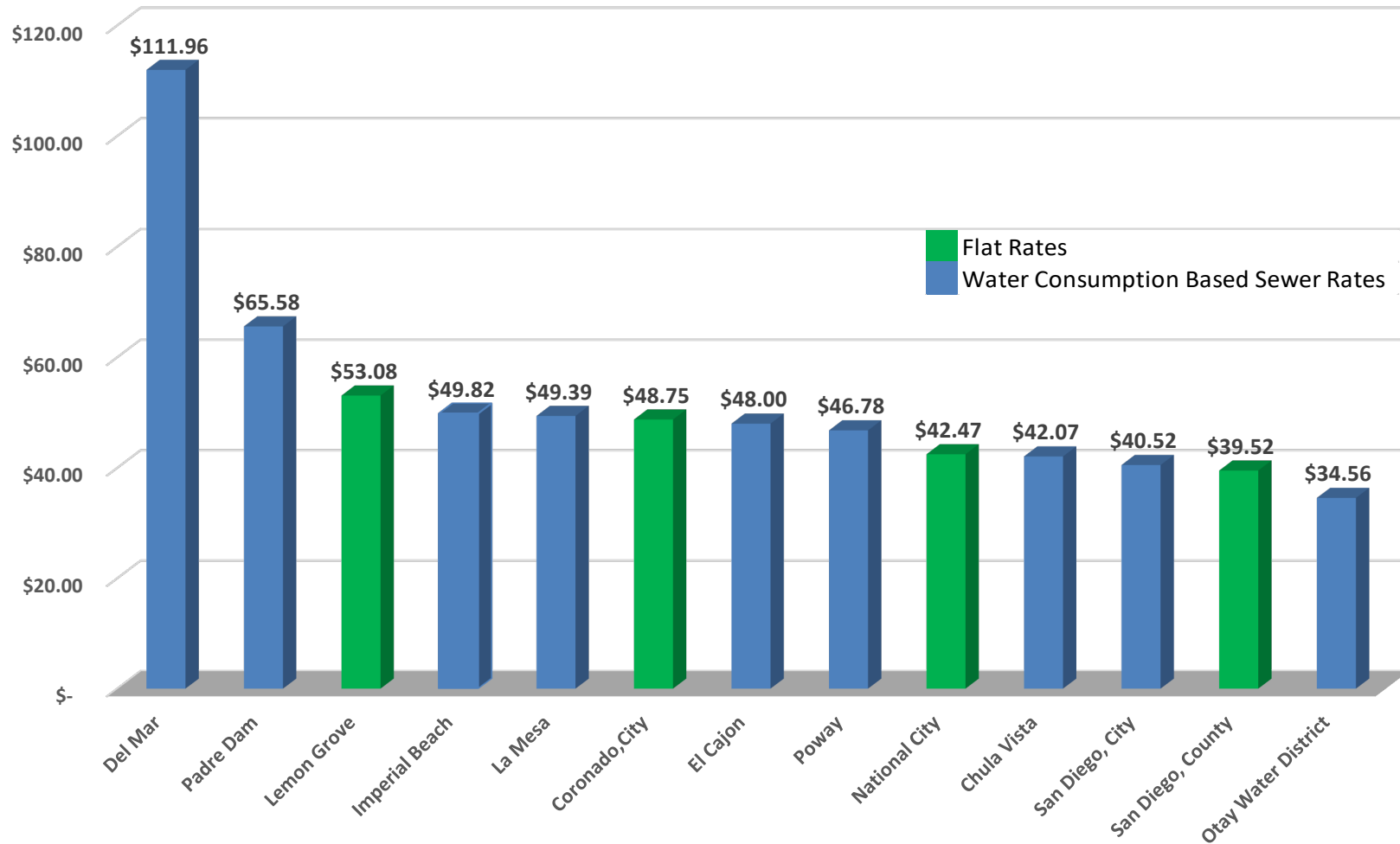




**Metro TAC & JPA Work Plan**  
**Active & Pending Items**  
**January 2021**  
***Updated Items in Red Italics***

Active Items	Description	Member(s)
JPA Website Update Working Group	The JPA Website, especially the New Director Manual, has not been updated for several years. <i>1/21: Working group has started revisions and is looking for technical members to assist.</i>	Roberto Yano Karyn Keese Lori Peoples
Exhibit E Audit	<i>1/21: FY2019 Exhibit E audit is in fieldwork stage. JPA team reviewing SD responses to sample questions.</i>	Karen Jassoy Karyn Keese Dexter Wilson
IRWMP	JPA Members should monitor funding opportunities at: <a href="http://www.sdirwmp.org">http://www.sdirwmp.org</a> <i>1/21: Beth Gentry continues to give monthly TAC updates. Details can be found in minutes of each meeting.</i>	Yazmin Arellano Beth Gentry
Changes in wastewater/water legislation	BBK, 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	BBK JPA members as appropriate

**Sewer Rate Comparison for Metro Participating Agencies**  
**Single Family Monthly Rates Based on 7 HCF of Water Usage**  
**Effective January 1, 2021 for FY 2021**



# Metro TAC Participating Agencies Selection Panel Rotation

Agency	Representative	Selection Panel	Date Assigned
County of San Diego	Dan Brogadir	As-Needed Condition Assessment Contract	3/24/2015
Chula Vista	Roberto Yano	Out on Leave	6/10/15
La Mesa	Greg Humora	North City to San Vicente Advanced Water Purification Conveyance System	6/10/15
Poway	Mike Obermiller	Real Property Appraisal, Acquisition, and Relocation Assistance for the Public Utilities Department	11/30/15
El Cajon	Dennis Davies	PURE WATER RFP for Engineering Design Services	12/22/15
Lemon Grove	Mike James	PURE WATER RFP Engineering services to design the North City Water reclamation Plant and Influence conveyance project	03/16/15
National City	Kuna Muthusamy	Passes	04/04/2016
Coronado	Ed Walton	As-Needed Environmental Services - 2 Contracts	04/04/2016
Otay Water District	Bob Kennedy	As Needed Engineering Services Contract 1 & 2	04/11/2016
Del Mar	Eric Minicilli	Pure Water North City Public Art Project	08/05/2016
Padre Dam	Al Lau	Biosolids/Cogeneration Facility solicitation for Pure Water	08/24/2016
County of San Diego	Dan Brogadir	Pure Water North City Public Art Project	08/10/2016
Chula Vista	Roberto Yano	Design Metropolitan Biosolids Center (MBC) Improvements Pure Water Program	9/10/2016
La Mesa	Greg Humora	Design of Metropolitan Biosolids Center (MBC) Improvements	9/22/16
Poway	Mike Obermiller	Electrodialysis Reversal (EDR) System Maintenance	12/7/16
El Cajon	Dennis Davies	As-Needed Construction Management Services for Pure Water	3/13/17
Lemon Grove	Mike James	Morena Pipeline, Morena Pump Station, Pure Water Pipeline and Dechlorination Facility, and the Subaqueous Pipeline	8/7/17
National City	Vacant	North City and Miramar Energy Project Landfill Gas and Generation- Pass	1/31/2018
Coronado	Ed Walton	North City and Miramar Energy Project Landfill Gas and Generation	1/31/2018
Otay Water District	Bob Kennedy	As Needed Engineering Services - Contracts 3 and 4 (H187008 & H187009)	2/16/2018
Del Mar	Joe Bride	Request for Proposal Owner Controlled Insurance Program (OCIP) Pure Water – 1 <sup>st</sup> email sent on 5/23/18 & 2 <sup>nd</sup> email sent on 5/29/18	5/23/18
Padre Dam	Al Lau	Request for Proposal Owner Controlled Insurance Program (OCIP) Pure	5/31/18

		Water (Mark Niemiec will participate)	
County of San Diego	Dan Brogadir	Request for Owner Controlled Insurance Program Interview (Pure Water)	2/25/19
Chula Vista	Frank Rivera Beth Gentry	Request for Owner Controlled Insurance Program Interview (Pure Water)	2/26/19
Imperial Beach	Eric Minicilli	RSP Metro Metering	4/22/2020
La Mesa	Hamed Hashemian		
Poway	Eric Heidemann Troy DePriest		
El Cajon	Dennis Davies Yazmin Arellano		
Lemon Grove	Mike James		
National City	Roberto Yano		
Coronado	Ed Walton		
Otay Water District	Bob Kennedy		
Del Mar	Joe Bride		
Padre Dam	Mark Niemiec Sen Seval		
County of San Diego	Dan Brogadir		
Chula Vista	Frank Rivera		
Imperial Beach	Eric Minicilli		
La Mesa	Hamed Hashemian		
Poway	Eric Heidemann Troy DePriest		
El Cajon	Dennis Davies Yazmin Arellano		
Lemon Grove	Mike James		
National City	Roberto Yano		
Coronado	Ed Walton		
Otay Water District	Bob Kennedy		
Del Mar	Joe Bride		
Padre Dam	Mark Niemiec Sen Seval		
County of San Diego	Dan Brogadir		
Chula Vista	Frank Rivera		
Imperial Beach	Eric Minicilli		
La Mesa	Hamed Hashemian		