



Sewer System Management Plan



6075 Kimball Avenue
Chino, California 91708

WDID #8SSO10580

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“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

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Date Approved: April 17, 2019



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Abbreviations/Acronyms

AGM – Assistant General Manager
BIS – Business Information Services
BMP – Best Management Practices
BSS – Brine Sewer System
Cal OES – California Office of Emergency Services
CAP – Contracts and Procurements
CBMWD – Chino Basin Municipal Water District
CCTV – Closed-Circuit Television
CCWRF – Carbon Canyon Water Recycling Facility
CDA – Chino I Desalter
CDPH – California Department of Public Health
CEU – Continued Education Units
CFR – Code of Federal Regulations
CIP – Capital Improvement Program
CIWQS – California Integrated Water Quality System Project
CM – Corrective Maintenance
CMMS – Computerized Maintenance Management System
CSDLAC – County Sanitation Districts of Los Angeles County
CVWD – Cucamonga Valley Water District
CWEA – California Water Environment Association
DAMP – Drainage Area Management Plan
DS – CIWQS Data Submitter
DVD – Digital Versatile Disk
DWG – from Drawing
EA – External Affairs
EM – Emergency Maintenance
ENV – Environmental
EWL – Etiwanda Water Line
FOG – Fats, Oils, and Grease
GIS – Geographic Information System
GPS – Global Positioning System
HAZWOPER – Hazardous Waste Operations & Emergency Response
HVAC – Heating, Ventilation, and Air Conditioning
I/I – Inflow and Infiltration
IEBL – Inland Empire Brine Line
IEUA – Inland Empire Utilities Agency
JCSD – Jurupa Community Services District
KPI – Key Performance Indicators
LACSD – Los Angeles County Sanitation District
LRO – Legally Responsible Official
MA – Mutual Aid
MGD – Million Gallons Per Day
MMPM – Monitoring, Measurement, and Program Modifications



MRP – Monitoring and Reporting Program for WDR
MS4 – Municipal Separate Storm Sewer System
MWH – Montgomery Watson Harza Inc.
NASSCO – National Association of Sewer Service Companies
NIMS – National Incident Management System
NPDES – National Pollutant Discharge Elimination System
NRWS – Non-Reclaimable Wastewater System
O&M – Operations and Maintenance
OCSD – Orange County Sanitation District
OERP – Overflow Emergency Response Plan
PDF – Portable Document Format
PLSD – Private Lateral Sewage Discharge
PM – Preventive Maintenance
PSERP – Pump Station Emergency Response Plan
R&R – Repair and Replace
RCA – Regional Contracting Agencies
RP – Regional Water Recycling Plant
RSS – Regional Sewer System
RWRP – Regional Water Recycling Plant
RWQCB – Regional Water Quality Control Board
SAP – Systems, Applications, and Products software
SARI – Santa Ana Regional Interceptor
SARBS – Santa Ana River Basin Section
SARWQCB – Santa Ana Regional Water Quality Control Board
SAWPA – Santa Ana Watershed Project Authority
SECAP – System Evaluation and Capacity Assurance Plan
SIU – Significant Industrial Users
SOP – Standard Operating Procedure
SSMP – Sewer System Management Plan
SSO – Sanitary Sewer Overflow
SWRCB – State Water Resources Control Board
TIFF – Tagged Image File Format
TYCIP – Ten Year Capital Improvement Plan
URGP – Unified Response Guidance Plan
VC – Verified Clean
WDID – Waste Discharge Identification Number
WDR – Wastewater Discharge Requirements
WFMP – Wastewater Facilities Master Plan
WQMP – Water Quality Monitoring Plan

* * *



0.0 Introduction

0.1 Regulatory Background

On May 2, 2006, the State Water Regional Control Board (SWRCB) adopted [Order No. 2006-0003 \(Order\)](#), Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer Systems. This Order requires that owners of wastewater collection systems with more than a mile of pipeline have in place a Sewer System Management Program (SSMP) to comply with the terms of this Order, which is to reduce the number and severity of Sanitary Sewer Overflows (SSOs), to audit the program every two years, and revise the SSMP every five years. On February 20, 2008, the State Water Board Executive Director adopted [Order No. 2008-0002-EXEC](#), a revised Monitoring and Reporting Program (MRP) for the WDR to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state. On September 9, 2013, the State Water Board Executive Director adopted [Order No. 2013-0058-EXEC](#) which amends the MRP of [Order No. 2006-0003](#) by adding a third sanitary spill category - Category 3 SSO, sampling requirements within 48 hours and technical report within 45 days (for Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters), and new recordkeeping requirements. Therefore, the definitions for the three spill categories are now as follows:

- CATEGORY 1 Discharges of untreated or partially treated wastewater of **any volume** resulting from an Enrollee's sanitary sewer system failure or flow condition that:
- Reach surface water and/or reach a drainage channel tributary to a surface water; or
 - Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated stormwater or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
- CATEGORY 2 Discharges of untreated or partially treated wastewater of **1,000 gallons or greater** resulting from an Enrollee's sanitary sewer system failure or flow condition that **do not** reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
- CATEGORY 3 All other discharges of untreated or partially treated wastewater resulting from an Enrollee's sanitary sewer system failure or flow condition.

The definition of Private Lateral Sewage Discharge (PLSD) and its reporting requirement has not been changed, i.e., PLSD discharges may be voluntarily reported.



A principal element of the Order is the requirement that the collection agencies adopt and maintain a management plan for the system, referred to as a SSMP.

On April 15, 2009, Inland Empire Utilities Agency's (Agency) Board of Directors adopted the SSMP to comply with the Order.

The Order establishes the following goals:

- The SSMP must document the organization's legal authority to achieve the goals of the SSMP as demonstrated through the Agency's ordinances, agreements, and other legally binding instruments.
- The SSMP must identify the Agency's organization and staff responsible for implementing and maintaining the SSMP.
- The SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the Agency's wastewater conveyance system.

Additionally, the Order requires the Agency's staff to perform periodic internal audits of the SSMP, focusing on evaluating the effectiveness of the SSMP and staffs' compliance with its requirements, as shown in Section D.13(x) of the Order. The internal audits must be performed at least every two years with the audit report kept on file at the Agency.

The SSMP must be re-adopted after approval by the Agency's Board of Directors every five years or after any significant changes. To complete the re-adoption process, Agency staff must place the SSMP on its website or send to the SWRCB along with all references stated in the SSMP. The next quinquennial review is due on April 17, 2024.

0.2 Agency Description

The Chino Basin Municipal Water District (CBMWD) was created in 1950 by popular vote with the mission to supply supplemental water to the Chino Basin. On July 1, 1998, the CBMWD was named Inland Empire Utilities Agency (IEUA) to better reflect the service area it serves and its activities. Since then, the Agency has expanded its areas of responsibility from a supplemental water supplier to a regional wastewater treatment agency, including domestic and industrial wastewater disposal systems and energy recovery and production facilities. The Agency's vision is to promote water conservation, water recycling, groundwater management, organic composting, renewable energy, and overall environmental stewardship in partnership with the communities served. The Agency's five-member Board of Directors is elected to represent approximately 850,000¹ residents within the Agency's service area. Each Board member is elected by Division to serve a four-year term.

¹ Population estimate as of 2018 (California Department of Finance – <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/>)



0.3 Asset Information

The Agency serves seven cities with its five water recycling facilities (refer to Figure 1 below). Those facilities include the following:

Representing the North Region:

Regional Water Recycling Plant No. 1 (RP-1)

Regional Water Recycling Plant No. 4 (RP-4)

Representing the South Region:

Regional Water Recycling Plant No. 2 (RP-2)

Regional Water Recycling Plant No. 5 (RP-5)

Carbon Canyon Water Recycling Facility (CCWRF)

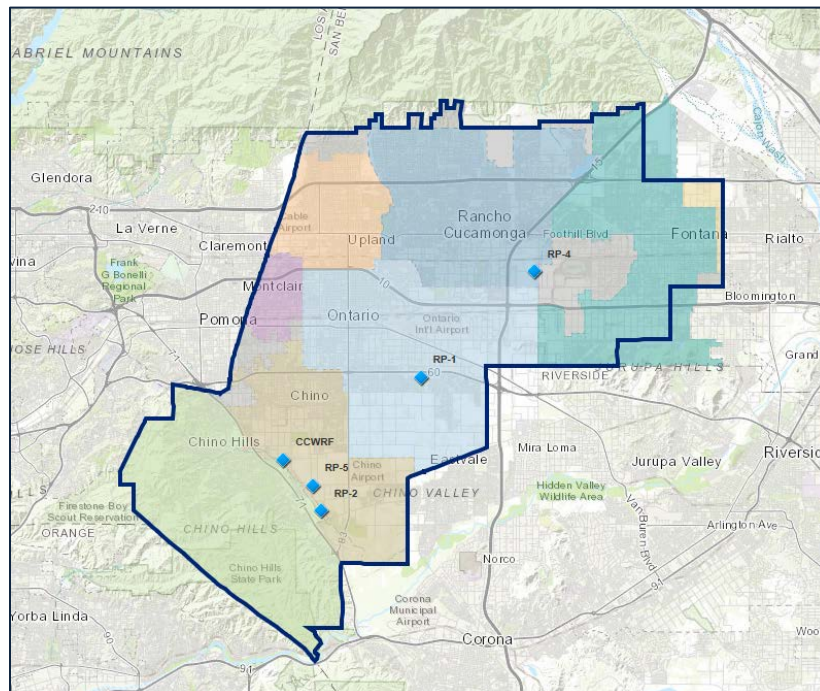


Figure 1: Agency Service Area, Regional Contracting Agencies, and Facilities

The Agency operates two independent sewer collection systems – The Regional Sewer System (RSS) and the Brine Sewer System (BSS). The RSS serves to convey primarily domestic wastewater to the Agency’s Regional Water Recycling facilities. The BSS collects and conveys wastewater containing high levels of dissolved salts outside the Agency’s service area due to the restrictive salinity requirements imposed upon the Agency’s Regional Water Recycling facilities.

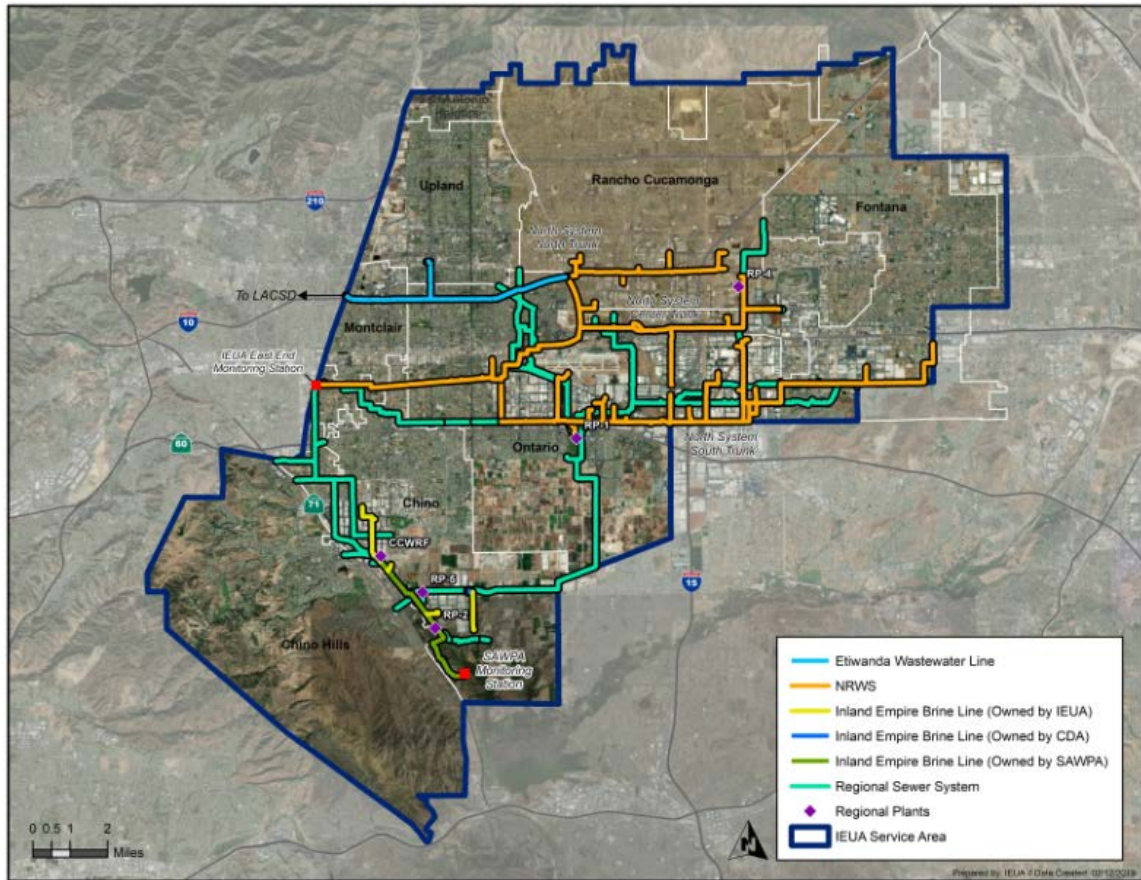


Figure 2: Agency Regional and Brine Sewer Systems

The RSS system is shown in light blue in Figure 2. The BSS system is comprised of three main components: the Etiwanda Wastewater Line (EWL), the Non-Reclaimable Wastewater System (NRWS), and the Inland Empire Brine Line (IEBL). The IEBL is further broken down by ownership – the Agency, Chino I Desalter (CDA), or Santa Ana Watershed Project Authority (SAWPA). The EWL and the NRWS lines discharge to Los Angeles County Sanitation District (LACSD) and the IEBL line discharges to Orange County Sanitation District (OCSD).



Table 1 shows each pipe length and manhole (MH) count.

Gravity Main Only	Total			MH Count*
	Pipe (ft.)	Pipe (mi.)	Pipe (%)	
BSS - NRW	276,040	52.3		777
BSS - EWL	43,007	8.1		59
BSS - IEBL (Owned by IEUA)	20,042	3.8		72
BSS - IEBL (Owned by CDA)	1,340	0.3		10
BSS - IEBL (Owned by SAWPA)	25,924	4.9		68
BSS Total	366,353	69.4	44%	986
RSS Total	459,835	87.1	56%	1,474
Grand Total	826,188	156.5	100%	2,460

Table 1: Sewage Pipe Lengths and Number of Manholes

Total sewer pipe length is 156.5 miles (56% RSS and 44% BSS), which includes 14.0 miles of force main (shown in Table 2).

Force Main Only	Total	
	Pipe (ft.)	Pipe (mi.)
BSS Total	33,817	6.4
RSS Total	39,917	7.6
Grand Total	73,734	14.0

Table 2: BSS and RSS Force Main Pipe Lengths



Figure 3 below contains a summary of each system’s pipe diameters (in inches), material makeup, and ages.

RSS Pipeline By Diameter		
Diameter	Miles	Percentage
18	7.3	8%
21	6.7	7%
24	7.8	9%
27	7.1	8%
30	18.3	20%
33	5.6	6%
36	7.1	8%
42	6.6	7%
Other	23.4	26%
Grand Total	90.1	100%

RSS Pipeline By Material		
Materials	Miles	Percentage
⊕ Vitrified Clay	48.8	54%
⊕ Reinforced Concrete Pipe	16.6	18%
⊕ Ductile Iron	11.9	13%
⊕ Other	12.8	14%
Grand Total	90.1	100%

RSS Pipeline By Age		
Age	Miles	Percentage
1970-1980	13.3	15%
1980-1990	21.6	24%
1990-2000	23.1	26%
2000-2010	19.3	21%
2010-Present	0.6	1%
*Other	12.2	14%
Total	90.1	100%

*1970 or older

BSS Pipeline By Diameter		
Diameter	Miles	Percentage
8	12.9	17%
10	3.6	5%
12	7.6	10%
15	6.9	9%
18	5.3	7%
21	9.3	12%
24	6.8	9%
27	11.4	15%
30	3.8	5%
Other	8.1	11%
Grand Total	75.8	100%

BSS Pipeline By Material		
Materials	Miles	Percentage
⊕ Vitrified Clay	43.7	58%
⊕ Reinforced Concrete Pipe	14.9	20%
⊕ Abestos Concrete	9.7	13%
⊕ Polymerized Vinyl Chloride	4.3	6%
⊕ Other	3.2	4%
Grand Total	75.8	100%

BSS Pipeline By Age		
Age	Miles	Percentage
1970-1980	11.9	16%
1980-1990	9.7	13%
1990-2000	5.5	7%
2000-2010	5.2	7%
2010-Present	0.4	1%
*Other	43.1	57%
Total	75.8	100%

*1970 or older

Figure 3: RSS and BSS Pipe Diameter, Material, and Age

0.4 Regional Contracting Agencies/Satellites

The Agency provides its Regional Contracting Agencies (RCA) with wastewater treatment, recycled water, and biosolids treatment. The RCAs include the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Upland, and the Cucamonga Valley Water District (CVWD). The Agency, these RCAs, and Jurupa Community Services District (JCSD) entail the Agency’s nine Mutual Aid (MA) partnerships.

* * *



1.0 Element 1: Goals

1.1 WDR Requirements Summary

The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

1.2 Agency SSMP Goals

Refer to Element 4 in the Agency's Operation and Maintenance Program for its plan to properly manage, operate, and maintain its sewer systems.

Using the previous audit and in conjunction with the WDR, the Agency developed its SSMP goals listed below. The first two are to directly measure the State's overall goals of reducing the number SSOs and volume spilled. The remaining six goals directly contribute to the first two and they mitigate the impact of SSOs should they occur.

Overall Goals:

1. Spill Frequency:
 - a. Maintain the Agency's SSO low spill average of one or less per year.
 - b. Be lower than the State or Region Municipal spill rate indices.
2. Spill Volume:
 - a. Recover more than 80% of gallons spilled.
 - b. Be lower than State or Region Municipal net volume spills indices.

Mitigators:

3. Preserve and improve the condition and performance of the wastewater collection system.
4. Maintain a highly trained staff.
5. Finish capturing closed-circuit television (CCTV) inspection data using the National Association of Sewer Service Companies (NASSCO) coding standards and placing in a geographic information system (GIS) of entire RSS and BSS systems.
6. Track budget versus actual expenditures.
7. Conduct a condition assessment of both RSS and BSS systems.
8. Communicate the causes and effects of SSOs with member agencies.



Table 3 below lists key performance indicators (KPIs) that will assist in measuring our performance in attaining our goals.

KPI	Description	Goal	Related Goal #
Spill Frequency	<ol style="list-style-type: none"> Maintain low spill numbers Spill Rate Indices (# spills/100 mi/yr.) 	<ol style="list-style-type: none"> Maintain less than 1 spill per year average Be lower than the state and region 	1
Spill Volume	<ol style="list-style-type: none"> Spill recovery Net Volume Spills Indices (gallons/1000 Capita/yr.) 	<ol style="list-style-type: none"> Recover more than 80% of gallons spilled Be lower than the state and region 	2
Preventive Maintenance (PM) Completion	Average % of PM Completed	<ol style="list-style-type: none"> 90% or greater 	3
Inspection & Cleaning Production	Inspection & Cleaning Footage	<ol style="list-style-type: none"> Maintain an average inspection rate and cleaning rate of 3 years (~ 5,000 ft./week each) Reinspection of the entire system every 5 years 	3 & 5
Training	Safety & professional training	<ol style="list-style-type: none"> Complete 100% the Agency's safety training Complete 100% continued education units Complete 80% or better in-house professional training Maintain NASSCO coding certifications 	4
Capital Spending	Budget vs. Actual expenditures	Spend 95% +/-5%	3 & 6

Table 3: Goals and Associated KPIs

Goal 7 and Goal 8 do not have an associated KPI; however, they will be assessed whether they are completed or not.

Goals attainment will be assessed and briefed to Management annually and presented to the Board of Directors after each audit.



2.0 Element 2: Organization

2.1 WDR Requirements Summary

The SSMP must identify:

- a) The name of the responsible or authorized representative as described in Section J of this Order.
- b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
- c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services).

2.2 Agency Organization

This section discusses the following sections:

- 2.21 Agency Organization and Contact Information
- 2.22 Agency Position Narratives as Pertaining to the SSMP
- 2.23 Agency California Integrated Water Quality System Project (CIWQS) Legally Responsible Official and Data Submitters (DS)
- 2.24 Agency Sewer Collections Staff
- 2.25 SSMP Revision Responsible Staff
- 2.26 SSO Flow Chart
- 2.27 MA Contacts and Resources
- 2.28 Emergency Contractors

2.21 Agency Organization & Contact Information

Figure 4 below displays the Agency's overall organizational chart. The Agency is governed by a five-member Board of Directors, led by a General Manager and four Executives/Assistant General Managers (AGMs): Operations, Engineering, Finance & Administration, and External Affairs & Policy, and run by their corresponding Managers.

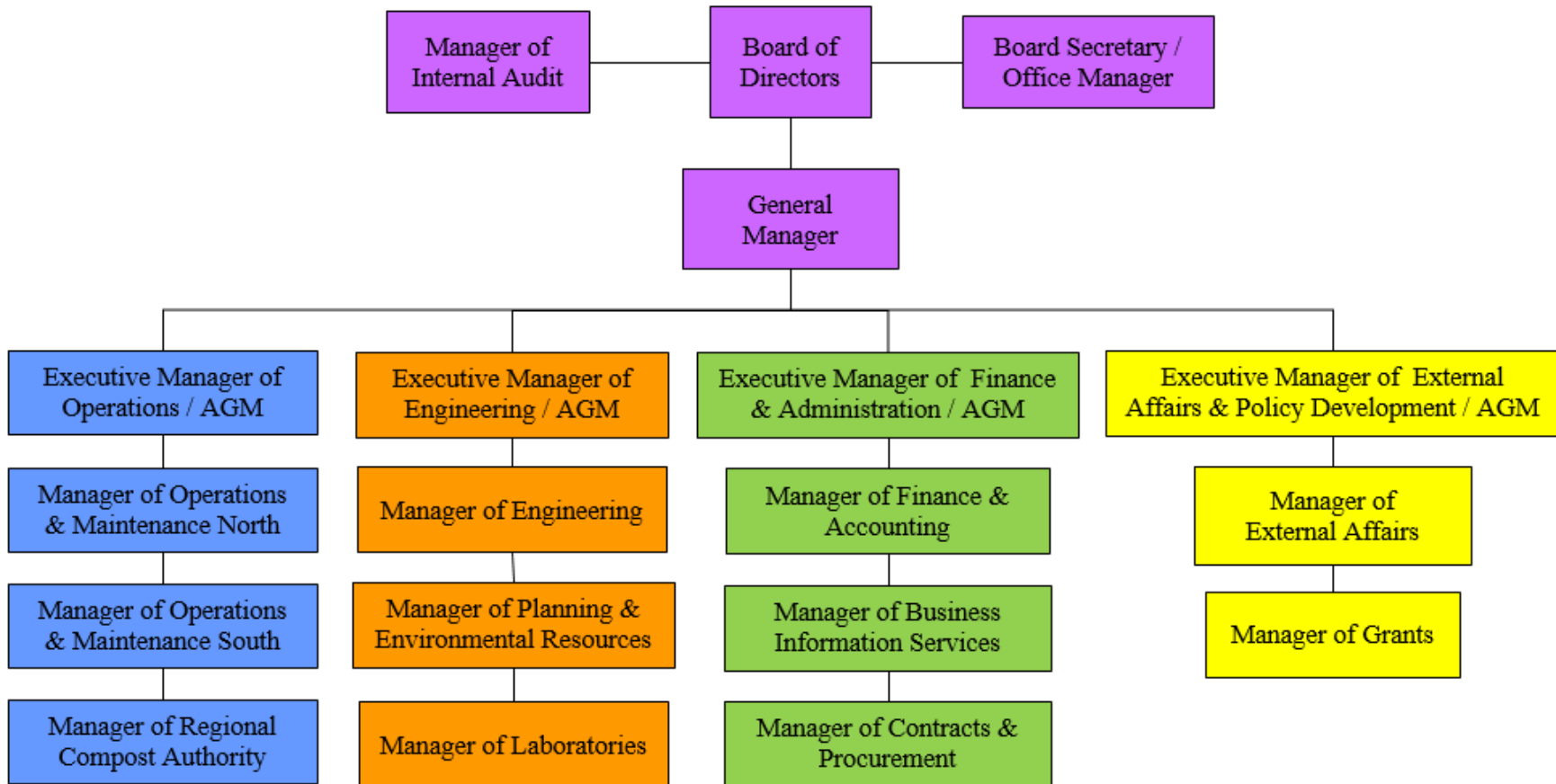


Figure 4: Agency Organizational Chart



Name	Position	Phone Number	Email
Shivaji Deshmukh	General Manager	909-993-1612	sdeshmukh@ieua.org
Randy Lee	Executive Manager of Operations /AGM	909-993-1810	rlee@ieua.org
Chris Berch	Executive Manager of Engineering/AGM	909-993-1762	cberch@ieua.org
Christina Valencia	Executive Manager of Finance and Administration/AGM	909-993-1673	cvalencia@ieua.org
Kathy Besser	Executive Manager of External Affairs & Policy Development/AGM	909-993-1638	kbesser@ieua.org
Chander Letulle	Operations & Maintenance Manager--South	909-993-1452	cletulle@ieua.org
Vacant	Operations & Maintenance Manager--North		
Shaun Stone	Manager of Engineering	909-993-1695	sstone@ieua.org
Sylvie Lee	Manager of Planning & Environmental Resources	909-993-1646	slee@ieua.org
Javier Chagoyen-Lazaro	Manager of Finance and Accounting	909-993-1675	kjchagoyen@ieua.org
Kanes Pantayatiwong	Manager of Business Information Services	909-993-1666	kpantaya@ieua.org
Warren Green	Manager of Contracts and Procurement	909-993-1709	wgreen@ieua.org
Andrea Carruthers	Manager of External Affairs	909-993-1935	acarruthers@ieua.org
Ken Monfore	Deputy Manager of Maintenance (Collections/Facilities/Fleet)	909-993-1938	kmonfore@ieua.org
Dan Dyer	Collection System Supervisor	909-993-1720	ddyer@ieua.org
Collections Field Staff	On-Call Number	951-675-1131	N/A

Table 4: Contact Information for Management, Administrative, and Maintenance Positions

Table 4 above lists contact information for management, administrative, and maintenance positions.



2.22 Agency Position Narratives as Pertaining to the SSMP

The following is a list of positions and corresponding roles and responsibility narratives as relating to the SSMP.

General Manager - Establishes policy, plans strategy, leads staff, allocates resources, delegates responsibility, authorizes outside contractors to perform services, and may serve as a public information officer.

Executive Managers (Operations, Engineering, Finance & Administration, External Affairs & Policy Development) – The Agency’s four Executive Managers are responsible for their respective divisions and are also AGMs.

Manager of Operations and Maintenance - North – Oversees Agency’s Northern Region O&M, and responsible for north pump station emergency response plans.

Manager of Operations and Maintenance - South – Oversees Agency’s Southern Region O&M, and responsible for overflow emergency response plan and south pump station emergency response plans.

Manager of Engineering – Leads the Engineering team to ensure reliable engineering and construction management, design and performance provisions, system evaluation and capacity assessment, and master planning.

Manager of Planning and Environmental Services – Works, as needed, on applicable planning, permits, laws, and regulations; SSO reporting and outside agency notifications.

Manager of Finance & Accounting – Responsible for sewer fees and liabilities.

Manager of Business Information Services – Asset management and GIS mapping.

Manager of Contracts, Procurement, & Risk – Oversees contracts, quality assurance risk management, and the MA Agreement.

Manager of External Affairs – Responsible for public affairs and community outreach.

Deputy Manager of Maintenance (Collection/Facilities/Fleet) - Manages maintenance activities, provides relevant information to management, prepares and implements contingency plans, leads emergency response, investigates and reports SSOs, and trains field crews.

Collection System Supervisor – Plans and schedules preventive, corrective, and emergency maintenance and supervises Collection’s crew.

Collection System Operators - Undertakes preventive maintenance (cleaning and inspecting) activities, mobilizes and responds to notification of stoppages, and SSOs.



2.23 CIWQS Legally Responsible Officers & Data Submitters

The Agency's CIWQS currently has three LROs and six DSs (reference Table 5).

Name	LRO/DS	Position
Randy Lee	LRO	Executive Manager of Operations/AGM
Chris Berch	LRO	Executive Manager of Engineering/AGM
Sylvie Lee	LRO	Manager of Planning and Environmental Resources
Pietro Cambiaso	DS	Deputy Manager of Planning & Environmental Resources
Bonita Fan	DS	Senior Environmental Resources Planner – Regulatory Compliance
Julio Im	DS	Senior Associate Engineer - Environmental Compliance
Ken Tam	DS	Senior Associate Engineer - Environmental Compliance
Ken Monfore	DS	Deputy Manager of Maintenance - Collection/Facilities/Fleet
Dan Dyer	DS	Collection System Supervisor

Table 5: Agency's Legal Responsible Officers and Data Submitters for CIWQS

2.24 Agency Sewer Collection's Staff

The Collection's staff is made up of a team of 10 personnel; consisting of three leadership roles – Manager, Deputy Manager, and Supervisor; two field lead positions and five field staff Operators.

Figure 5 below lists the Collection teams' names, contact information, and associated Collection System Maintenance (CSM) grades for leads and field staff. The leads and field staff can be contacted through the On-Call phone number (951-675-1131). Additionally, all personnel can be contacted through the Agency's operator phone number (909-993-1600).

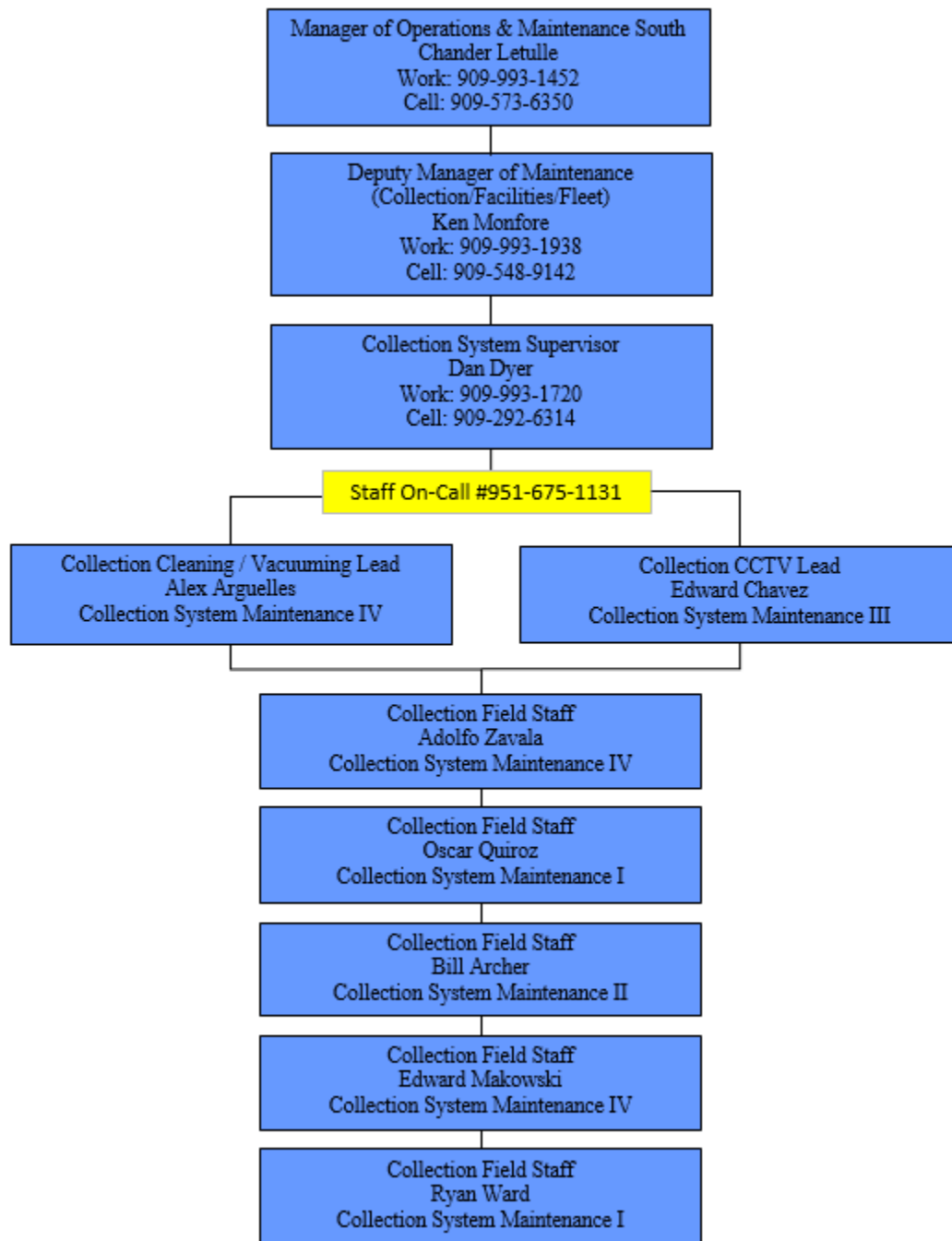


Figure 5: Agency Collections Crew Chain of Command (updated 3/1/2019)



2.25 SSMP Revision Responsible Staff

SSMP Section	Name	Phone	Email
Introduction	Ken Monfore	909-993-1938	konfore@ieua.org
Element 1: Goals	Ken Monfore	909-993-1938	kmonfore@ieua.org
Element 2: Organization	Ken Monfore	909-993-1938	kmonfore@ieua.org
Element 3: Legal Authority	Pietro Cambiaso	909-993-1639	pcambias@ieua.org
Element 4: O&M	Dan Dyer	909-993-1720	ddyer@ieua.org
Element 5: Design & Perf Prov	Jerry Burke	909-993-1548	jburke@ieua.org
Element 6: OERP	Dan Dyer	909-993-1720	ddyer@ieua.org
Element 7: FOG Control Program	Dan Dyer	909-993-1720	ddyer@ieua.org
Element 8: SECAP	Jerry Burke	909-993-1548	jburke@ieua.org
Element 9: MMPM	Ken Monfore	909-993-1938	kmonfore@ieua.org
Element 10: SSMP Program Audits	Ken Monfore	909-993-1938	kmonfore@ieua.org
Element 11: Communication	Andrea Carruthers	909-993-1935	acarruthers@ieua.org
Appendix A: Adoption & Re-cert	Ken Monfore	909-993-1938	kmonfore@ieua.org
Appendix B: Audit History	Ken Monfore	909-993-1938	kmonfore@ieua.org
Appendix C: Change Log	Ken Monfore	909-993-1938	kmonfore@ieua.org
Appendix D: Deficiency Action Log	Ken Monfore	909-993-1938	kmonfore@ieua.org
Appendix E: OERP	Dan Dyer	909-993-1720	ddyer@ieua.org
Appendix F: WQMP	Dan Dyer	909-993-1720	ddyer@ieua.org

Table 6: List of Responsible Agency Staff for SSMP (updated 3/1/2019)

Table 6 above lists those responsible for each section of the SSMP and their respective contact information.



2.26 SSO Flow Chart

Figure 6 below depicts the SSO actions from the Agency’s initial notification, to further staff notifications, to requests for additional support, to additional actions, to post-spill actions. The details of the SSO actions are in the Agency’s Overflow Emergency Response Plan (OERP) (Appendix E).

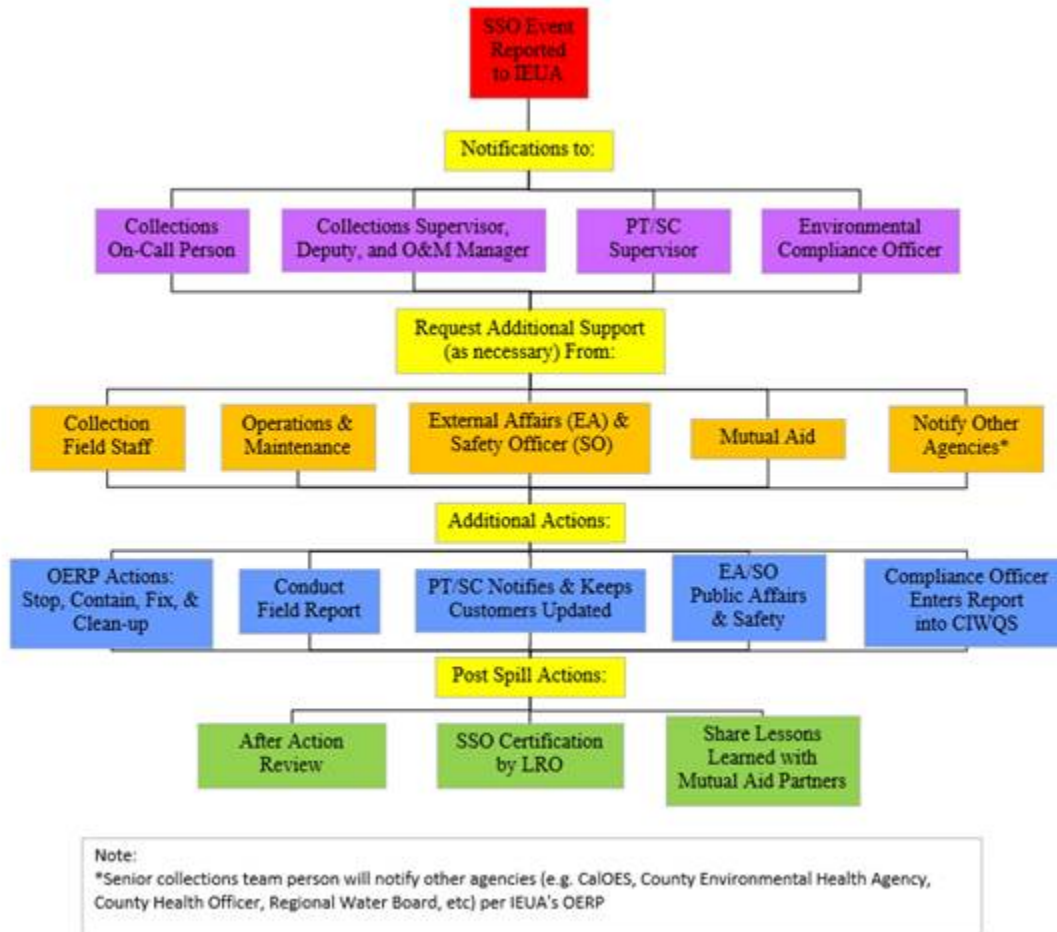


Figure 6: SSO Observation/Action Flow Chart

2.27 Mutual Aid Contacts & Resources

The eight regional contracting authorities and JCSD make up the Agency’s MA partners. These groups have agreed to support one another in the event of an SSO.



Mutual Aid Contact and Resources List						
IEUA						
Position	Name	Work #	Cell #	Email	Equipment available	On Call #
Deputy Manager of Maintenance	Ken Monfore	(909)993-1938	(909)548-9142	kmonfore@ieua.org	2 GAP Vac Trucks, Camera Van, Water Truck,	(951)675-1131
Collection Supervisor	Daniel Dyer	(909)993-1720	(909)292-6314	ddyer@ieua.org	4" Trash Pump	
Cucamonga Valley Water District						
Position	Name	Work #	Cell #	Email	Equipment available	On Call #
Construction & Maintenance Superintendent	Robert Koczko	(909)987-2591	(909)912-9718	robertk@cvwdwater.com	SSO Bypass Reel/Hose/Pump, SRECO Sewer	(909)987-2591
Waste Water Collection's	Shawn Spromberg	(909)483-7413	(909)912-4099	shawns@cvwdwater.com	Easement Machine, 6" Pump, SRECO	
Water Utility	James Bryan	(909)207-1450	(909)990-5558	jamesb@cvwdwater.com	Continuous Sewer Rodder	
City of Chino						
Position	Name	Work #	Cell #	Email	Equipment available	On Call #
Environmental Manager	Reuben Valdez	(909)334-3423	(909)721-0741	rvaldez@cityofchino.org	Sewer Vactor Jet Truck, Water Truck, 10 Yd ³	(909)628-1234
Street Department Supervisor	Joe Lopez	(909)334-3505	(909)917-2248	jlopez@cityofchino.org	Dump Truck, Backhoe, 4" Water Pump	Police
City of Chino Hills						
Position	Name	Work #	Cell #	Email	Equipment available	On Call #
Operations Supervisor	Olson Childress	(909)364-2829	(909)573-4359	ochildress@chinhills.org	Vactor Truck, Camera Van, 6" Trash Pump,	(909)364-2860
Water and Sewer Manager	Mark Wiley	(909)364-2854	(909)364-2860	mwiley@chinhills.org	Backhoe, Jetter truck, 10 Ton Dump Truck, Skip Loader.	
City of Fontana						
Position	Name	Work #	Cell #	Email	Equipment available	On Call #
Utilities Supervisor	Todd Heagstedt	(909)350-6764	(909)821-8244	theagstedt@fontana.org	Vactor Truck, Camera Van, Sewer Rodder,	(909)350-7700
Public Works Manager	Keith Kramer	(909)350-6644	(909)697-7861	kkramer@fontana.org	Multi Trash Pump, Large Dump Truck, Backhoe & Bobcat & Loader Tractor	Police
City of Montclair						
Position	Name	Work #	Cell #	Email	Equipment available	On Call #
Field Supervisor	Xavier Mendez	(909)625-9467	(909)721-1755	mendez@cityofmontclair.org	Sewer Jetter Truck, Camera Van, Water Truck,	(909)621-4711 Police
Pretreatment Coordinator	Nicole deMoet	(909)625-9446	(909)721-1776	jemoet@cityofmontclair.org	Backhoe, 5 Yd ³ Dump Truck, 4" Trash Pump, Confined Space Trailer	
City of Ontario						
Position	Name	Work #	Cell #	Email	Equipment available	On Call #
Utilities Supervisor	Andy Marquez	(909)395-2691	(909)721-8931	amarquez@ontarioca.gov	Vactor/Water Truck, Camera Van, Water Truck,	(909)721-7246
Utilities Operations Manager	Don Meyer	(909)395-2692	(909)721-8937	dmeyer@ontarioca.gov	5 Yd ³ Dump Truck, Backhoe, (2,4,6,8) inch Trash Pump	
City of Upland						
Position	Name	Work #	Cell #	Email	Equipment available	On Call #
Environmental Quality Manager	Harrison Nguyen	(909)291-2970		hnguyen@ciupland.ca.us	810 Vactor Truck, SRECO Flush Truck, Trash	(909)946-7624
Utilities Field Supervisor	Jeremy Gendreau	(909)291-2984	(909)376-1197	jgendreau@ciupland.ca.us	Pump	Police
Jurupa Community Services District						
Position	Name	Work #	Cell #	Email	Equipment available	On Call #
Sewer Operations Manager	Dan Ducasse	(951)727-8001	(951)660-6973	dducasse@jcsd.us	(2) Vactor Combo Trucks, (1) Straight Jetter,	(951)685-7434
Sewer Systems Supervisor	Jim Payfer	(951)685-7434	(951)675-8692	jpayfer@jcsd.us	(1) CCTV Van, SSO Bypass Trailer Hose Reel w/ 4" & 6" Hose lengths with 6" HH trash Pump	

Table 7: Mutual Aid Quick Reference Sheet (updated 3/1/2019)



Table 7 above lists each agency's points of contact information as well as available equipment.

2.28 Emergency Contractors

The Agency maintains an emergency contractor list (refer to Figure 7 below) for emergency repairs. These are categorized by general, electrical, mechanical, sewer, and miscellaneous (HVAC, Hazardous, Welding, etc.) engineering and construction support.

General, Electrical: <ul style="list-style-type: none">- Big Sky- Davis Electric- Doty Brothers Equipment- Ferreira Construction- KDC Inc. DBA Dynalectric	General, Mechanical: <ul style="list-style-type: none">- Genesis Construction- J.R. Filanc Construction Co., Inc.- Kana Subsurface Engineering- Vance Corporation- W.M. Lyles Co.- Weka, Inc.
Sewer System: <ul style="list-style-type: none">- KVAC (Tanker Support)- Mike Bubalo Construction- W.A. Rasic Contracting	Misc: <ul style="list-style-type: none">- AToM Engineering (HVAC)- Humphrey Constructors (Landscaping, Hazardous)- Murphy Industrial Coatings, Inc. (Painting)- SCW Contracting Corp (Structural, Welding)- Trinity Construction (Hazardous)- Doty Brothers Equipment Co (Fire)- Ferreira Construction (Fencing)

Figure 7: Emergency Contracts

2.3 Agency Organizational Documents

- Appendix E – Overflow Emergency Response Plan
- Mutual Aid Agreement (www.ieua.org)

* * *



3.0 Element 3: Legal Authority

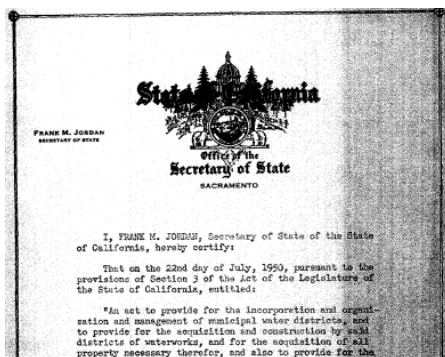
3.1 WDR Requirements Summary

- a) Prevent illicit discharges into its sanitary sewer system (examples may include inflow and infiltration (I/I), stormwater, chemical dumping, unauthorized debris and cut roots, etc.);
- b) Require that sewers and connections be properly designed and constructed;
- c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
- d) Limit the discharge of fats, oils, and grease (FOG) and other debris that may cause blockages, and
- e) Enforce any violation of its sewer ordinances.

3.2 Agency Compliance Summary

The Agency's legal authority is granted pursuant to the authorization of the Municipal Water District Law of 1911, California Water Code Section 71000 et seq., California Government Code Section 54739 et seq., the Clean Water Act (33 U.S.C. 1251 et seq.) and the General Pre-Treatment regulations (40 C.F.R. 403).

3.21 History



On April 17, 1950, a petition was filed with the Board of Supervisors of the County of San Bernardino, State of California, regarding the organization of Chino Basin Municipal Water District (CBMWD) pursuant to the provisions of the Municipal Water District Act of 1911. A special election was ordered within the proposed district and elections were held on June 6, 1950. 11,921 votes out of 13,787 supported the organization of CBMWD. On July 3, 1950, in the regular meeting of the Board of

Supervisors of the County of San Bernardino, State of California, adopted the proposition of the formation of CBMWD, and recorded under Book 2609, Page 231. Subsequently, on July 22, 1950, the State of California incorporated CBMWD under the laws of the Municipal Water District. On July 1, 1998, the CBMWD was renamed Inland Empire Utilities Agency (Agency) to better reflect the service area it serves and its activities. Currently, the Agency covers an area of 242 square miles with a current population of approximately 850,000.



3.22 Objectives

The Agency's legal authority objectives are as follows – prevent illegal discharges by requiring discharge permits, proper design and construction of sewer systems, access or right of entry to any property connected to the sewer system, and dischargers to meet discharge limits, charges, and fees for services. The Agency's achieves these objectives by means of Ordinances, Permits, Resolutions, and industry accepted standard practices.

3.23 Ordinances

The Agency's Regional and NRWS collection systems are governed by three ordinances – Regional Wastewater System Ordinance No. 97, the NRWS and EWL Ordinance No. 99, and IEBL Ordinance No. 106. The Regional Wastewater System is a collection and conveyance system providing service for primarily residential neighborhoods with some commercial and industrial dischargers that meet the Agency's pretreatment discharge local limits. The NRWS is a collection and conveyance system dedicated to industrial wastewater discharges containing high levels of dissolved salts. This system is composed of three independent sub-systems – 1) the IEBL formerly known as the Santa Ana Regional Interceptor (SARI) which is owned by the Santa Ana Watershed Project Authority (SAWPA) that discharges to the Orange County Sanitation Districts (OCSD), and 2) the NRWS and 3) the EWL systems that discharges to County Sanitation Districts of Los Angeles County (CSDLAC).



Requirement	Legal Authority Reference
Prevent illicit discharges into the wastewater collection system	Ordinance No. 97 (Section 2 - General Sewer Use Requirement) Ordinance No. 99 (Section 2 - General Sewer Use Requirement) Ordinance No. 106 (Article 2 - Prohibited Waste Discharges)
Limit the discharge of fats, oils, grease and other debris that may cause blockages	Ordinance No. 97 (Section 2 - General Sewer Use Requirement) Ordinance No. 99 (Section 2 - General Limitations on Non-Reclaimed Wastewater) Ordinance No. 106 (Article 2 - Prohibited Waste Discharges)
Sewers and connections be properly designed and constructed	Ordinance No. 97 (Section 3 - Pre-Treatment Facilities) Ordinance No. 99 (Section 6 - Pipeline Construction) Ordinance No. 106 (Article 4 - Wastewater Discharge Permits)
Proper installation, testing, and inspection of new and rehabilitated sewers	Ordinance No. 97 (Section 3 - Pre-Treatment Facilities) Ordinance No. 99 (Section 6 - Pipeline Construction) Ordinance No. 106 (Article 4 - Wastewater Discharge Permits)
Clearly define city responsibilities and policies	Regional Pre-Treatment Agreements Regional Sewage Service Contract
Ensure access for maintenance, inspection or repairs for portions of the service lateral owned or maintained by the city	Ordinance No. 97 (Section 7 - Right of Entry) Ordinance No. 99 (Section 7 - Inspection & Entry) Ordinance No. 106 (Article 4 - Wastewater Discharge Permits) Regional Pre-Treatment Agreements
Control infiltration (I/I) from private service laterals	Ordinance No. 97 (Section 4 - Independent Wastewater Discharge Permit Contents) Ordinance No. 99 (Section 6 - Wastewater Discharge Permits) Ordinance No. 106 (Article 4 - Wastewater Discharge Permits)
Install grease removal devices (such as traps or interceptors), design standards for grease removal devices, maintenance requirements, BMP requirements, record keeping, and reporting requirements	Ordinance No. 97 (Section 5 - Independent Wastewater Discharge Permit Contents) Ordinance No. 99 (Section 7 - User Permit Conditions) Ordinance No. 106 (Article 5 - Interceptor Requirements) Regional Pre-Treatment Agreements
Authority to inspect grease producing facilities	Ordinance No. 97 (Section 7 - Right of Entry) Ordinance No. 99 (Section 7 - Inspection and Entry) Ordinance No. 106 (Article 5 - Inspection) Regional Pre-Treatment Agreements Regional Sewage Service Contract
Enforce any violation of its sewer ordinance	Ordinance No. 97 (Section 10 - Administrative Enforcement Remedies) Ordinance No. 99 (Section 8 - Enforcement) Ordinance No. 106 (Article 6 - Enforcement) Regional Pre-Treatment Agreements

Table 8: Agency’s Legal Authority Reference

Table 8 above summarizes the WDR requirement and the Agency’s legal authority reference.



Regional Wastewater System Ordinance No. 97

A copy of this Ordinance is available on the Agency's website: www.ieua.org.

Ordinance No. 97 objectives are to provide a maximum beneficial use of the RSS, groundwater resources and effluent receiving waterways by preventing the introduction of pollutants which may harm or interfere with the collection system and the operation of the wastewater recycling facilities. This Ordinance covers wastewater discharge requirements such as permitting, discharge prohibitions, compliance monitoring, and enforcement.

The Agency operates its pretreatment program pursuant to the legal authority contained in Ordinance No. 97, enforceable in Federal, State, or local courts, which authorizes or enables the Agency to apply and enforce the requirements of Sections 307 (b) and (c), and 402 (b)(8) of the Clean Water Act and any regulations implementing those sections. The Agency approved pretreatment program designates the Agency's as the primary control authority for Significant Industrial Users within the Agency's service area that includes the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Upland, and the Cucamonga Valley Water District, collectively known as the RCAs. The Agency and the RCAs use a standardized format for enforcement response plans and control mechanisms. The Agency and the RCAs have contractual agreements in place to acknowledge the Agency as the control authority having oversight of the regional pretreatment program. As required by the Regional Water Quality Control Board (RWQCB), the Agency and the RCAs have developed region-wide pretreatment mechanisms that are consistent and uniform throughout the Agency's service area.

Non-Reclaimable Wastewater System (NRWS and EWL) Ordinance No. 99

Non-Reclaimable Wastewater System (IEBL) Ordinance No. 106

A copy of Ordinance No. 99 and No. 106 available on the Agency's website: www.ieua.org.

Ordinance No. 99 and No. 106 objectives are to provide a maximum beneficial use of the NRWS by preventing the introduction of pollutants which may harm or interfere with the collection system and the operation of the OCS and CSDLAC wastewater treatment plants. These ordinances cover the general discharge requirements such as permitting, discharge limitations, compliance monitoring, and enforcement.

3.24 Permits

Any entity who wants to discharge into the Agency's sewer system must first obtain and maintain a valid permit. Any discharge without a valid permit is considered an illegal discharge and is subject to enforcement action under the terms and conditions of the Agency's Ordinance. A permit applicant must submit documents with relevant information regarding the source, strength, and volume of the wastewater generated; the proposed alignment of the sewer conveyance system to the Agency's trunk lines, proper design, and construction of the system, etc. The information is then evaluated by the office engineer and permit engineer. When the Agency's requirements are met is a permit with discharge limits issued to the applicant.



3.25 NRWS Rate Resolutions

Rate resolutions are approved and/or amended by the Agency's Board of Directors, around June for the next fiscal year. The rate resolutions are good for one year and cover both the North and South NRWS systems. Rate resolutions cover the capacity, volumetric, strength, CIP, O&M, and administrative fees.

3.26 Amendments

Ordinances and rate resolutions are subject to amendments to accommodate the dynamics of the sewer industry.

3.3 Agency Legal Authority Documents

The following documents meet the Order requirements for this element:

- a) San Bernardino County Board Approval of Chino Basin Municipal Water District (B2609_P234) 02653.
- b) Acts of Incorporation with the San Bernardino County, CA.
- c) Ordinance No. 97 governs the Regional Wastewater System; adopted on October 15, 2014.
- d) Ordinance No. 99 governs the North NRWS; adopted on June 18, 2014.
- e) Ordinance No. 106 governs the South NRWS; adopted on September 19, 2017.
- f) Chino Basin Regional Sewage Service Contract with Exhibits; amended on October 19, 1994.
- g) The Regional Rate Resolutions are revised annually.
- h) The NRWS system Rate Resolutions are revised annually.

Documents c) through h) above can be found on the Agency's website: www.ieua.org.

* * *



4.0 Element 4: Operations & Maintenance (O&M) Program

4.1 WDR Requirements Summary

The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

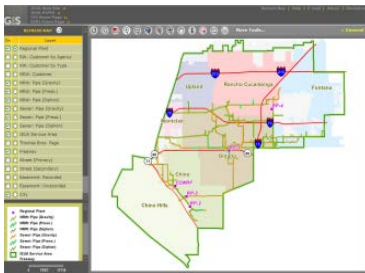
- a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
- b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
- c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and televised inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a CIP that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the CIP;
- d) Provide training on a regular basis for staff in sanitary sewer system O&M, and require contractors to be appropriately trained; and
- e) Provide equipment and replacement part inventories, including identification of critical replacement parts.



4.2 Agency O&M Plan

4.21 Collection System & Storm Drain System Map

The Agency understands the importance of good mapping of its sewer collection system. Hence, the Agency maintains both hard copies and electronic versions of its sewer collection system. Engineering and Construction Management maintain a library in its main headquarters in Chino, California, with all design and As-Built drawings. In addition, all the drawings are also archived in electronic DWG, TIFF, and/or PDF formats for easy access and compatibility.



The Agency also maintains a GIS of the entire BSS and RSS systems (refer to tables and figures in Introduction Section 0.3 Asset Information). This is the best way to fully visualize the entire collection system and is supported by the Agency's Business Information Services (BIS) department. This information is updated in real time via iPad during manhole inspections and preventive cleaning maintenance in the field, while CCTV inspections are updated monthly via data download from the CCTV system to the GIS database. In addition to the Agency's shapefiles, which include the RSS system, the BSS system, the recycled water system, and customers; member agencies' sewer collections system shapefiles, parcel layers, and aerial layers are also incorporated and updated periodically with new information. All this information is readily accessible from any computer within the Agency's intranet and via iPad in the field.

The Agency does not own or operate any stormwater conveyance systems but is working with member agencies to import stormwater system data to the Agency's GIS mapping.

4.22 Preventive Operations & Maintenance

To keep the Agency's collection systems in top working condition, the Agency conducts PM, corrective maintenance (CM), and emergency maintenance (EM) on both its sewer systems (RSS and BSS). These processes are depicted in Figure 8 below; however, a discussion of the Agency's inspection and cleaning, overall referred to as production, procedures precede the PM, CM, and EM sections.

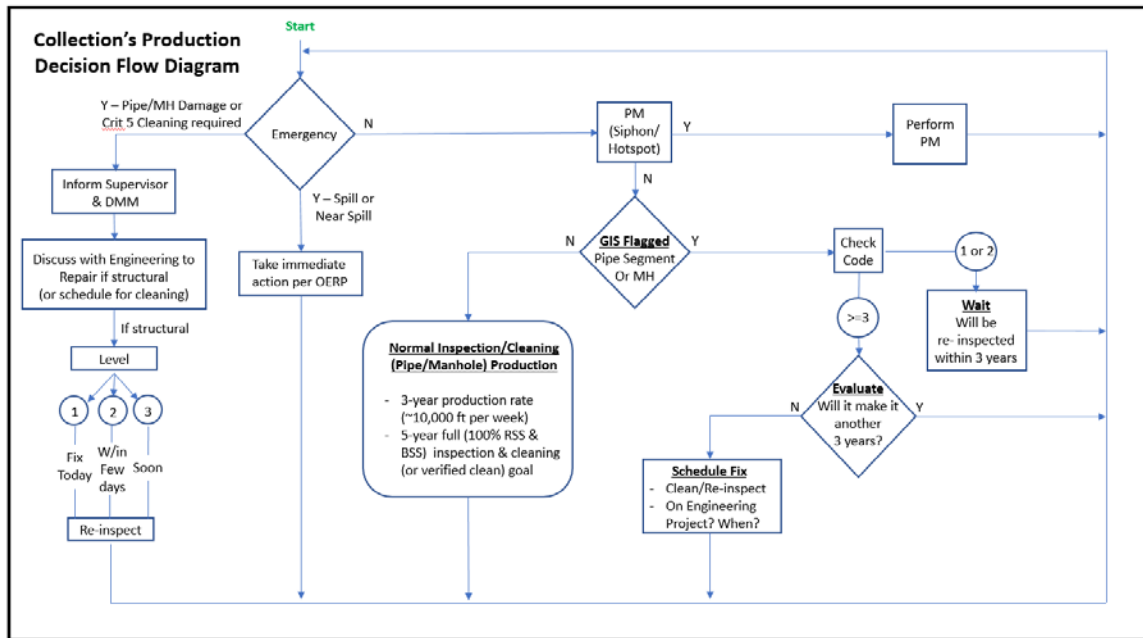


Figure 8: Collection's Production Decision Flow Diagram

PM is explained in the Preventive Maintenance section 4.22; CM is discussed as non-urgent repairs in the Rehabilitation & Replacement (R&R) section 4.23; and EM is also discussed as urgent repairs, in the R&R section 4.23.

The Agency's staff uses a Computerized Maintenance Management System (CMMS) and Enterprise Asset Management software from SAP® (implemented in 2007) for tracking its maintenance program activities.

Production (Inspection/Cleaning)

In general, the Agency inspects and cleans (or verifies clean (VC)) its sewer pipes and manholes at a 3-year production rate, which is roughly 10,000 ft. either cleaned, inspected, or a combination thereof, weekly.

Inspection



The Agency's sewer collection system inspections are conducted using the latest color CCTV cameras using software for video capture, fault observations and annotations, and pipe plots (using NASSCO standards). Collection's staff will perform a preliminary field assessment while performing the pipe/manhole inspections (refer to section 4.23 for urgent and non-urgent repair actions).



GPS units are also used to collect information about manholes and pipelines. A specially designed truck accommodates all the equipment and appurtenances for CCTV. The locally stored CCTV data is transferred into the Agency's main server and burned into digital media, such as USB flash drive or DVD.

Cleaning

A pipe can either be cleaned or VC. If deemed necessary, actual pipe cleaning will be performed using one of its combination (vacuum/jetting) trucks. However, a pipe can be VC, which means that there were no indications of debris or other obstructions (e.g. roots, grease, etc.) that would require cleaning, for example:

- No visual debris/obstructions: Pipe and sewage water clarity must support this visual determination.
- Camera crawler indication when using CCTV: Crawler does not appear to be driving over or impeded by unseen objects.
- Surface water indication: No water disturbance such as ripple or turbulence potentially due to underlying objects.
- Heavy debris indication: Hydro-Jetter cleans line section multiple times until debris is no longer being pulled by vacuum.

Additionally, a pipe segment may be VC using CCTV (preferably) or a pole camera (high resolution/magnification camera capability). However, if using the pole camera, the field operator must be extra cautious there are no obstructions requiring actual cleaning. This added precaution is due to the different capabilities of the two systems. Specifically, the CCTV crawler can approach objects and view them up close; yet, the pole camera uses high magnification to view distant objects from its manhole entry point.

Production Rate/Cycle

Although three years is the production rate target, the full (100% RSS and BSS) inspection and cleaning goals are every five years. The time difference is due to the more frequent inspection and cleaning requirements of siphons and hotspots, which are discussed in the Preventive Maintenance section below.

Preventive Maintenance

Siphons and hotspots are placed on an accelerated inspection/cleaning schedule of monthly, quarterly, semi-annual, and annual (refer to Table 9 below) to help minimize the potential of an SSO event.

Sewer System Management Plan
Element 4 – Operations & Maintenance Program

Rev. April 17, 2019

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BSS (15 Siphons & 1 HotSpot)									
Line	Segment	System	Description	City	Frequency	Traffic	Length ft	Barrels	Total ft
NSNT	033-034	BSS	8th st	Rancho	Monthly	N	159	2	318
NSNT	055-056	BSS	Inland Empire	Ontario	Monthly	N	184	2	368
NSCT	059-060	BSS	Holt & 10 fwy	Ontario	Monthly	N	273	2	546
VNTL	010-011	BSS	Jurupa	Ontario	Semi-annual	N	147	3	441
EISL	019-019A	BSS	Jurupa & Etiwanda	Ontario	Semi-annual	Y	194	3	582
IEBL	006A-006B	BSS	Pacific Elbow Co.	Chino	Semi-annual	N	51	5	255
IEBL	010A-010B	BSS	Central & Prado	Chino	Semi-annual	N	197	2	394
NSST	077-088	BSS	Marlay	Fontana	Semi-annual	Y	330	2	660
NSST	137-138	BSS	Turner	Ontario	Semi-annual	Y	128	2	256
NSST	148-149	BSS	RP-1	Ontario	Semi-annual	Y	199	2	398
SBAN	007-008	BSS	CSI	Fontana	Semi-annual	Y	303	2	606
PTXC	001-002	BSS	Paradise Textile	Chino	Semi-annual	Y	124	1	124
NSST	091-162	BSS	Philidelphia Line	Fontana	Semi-annual	Y	31,633	1	31633
NSNT	005-006	BSS	Day Creek Wash	Rancho	Annual	N	254	1	254
NSNT	013-014	BSS	Under Milliken	Rancho	Annual	N	187	1	187
NSNT	019B-019C	BSS	Under Haven	Rancho	Annual	N	194	1	194
RSS (26 Siphons)									
Line	Segment	System	Description	City	Frequency	Traffic	Length ft	Barrels	Total ft
WI	049-050	Regional	Fabtech	Chino	Monthly	N	155	2	310
WI	057-058	Regional	Ramona	Chino	Monthly	Y	100	2	200
RDT	015-016	Regional	Riverside Dr	Chino	Monthly	Y	130	2	260
GMT	006-007	Regional	CCWRF back gate	Chino	Monthly	N	165	2	330
FT	018-019	Regional	Wash	Ontario	Monthly	N	180	2	360
WIR	027-028	Regional	East End under 60 fwy	Chino	Quarterly	Y	100	1	100
WIR	072-073	Regional	Ramona & Railroad	Chino	Quarterly	Y	140	2	280
CHT	014-015	Regional	Carbon	Chino	Quarterly	N	540	2	1080
CHT	008-009	Regional	Lucilles	Chino	Quarterly	Y	40	1	40
CI	009-010	Regional	Central Ave in park lot	Chino	Quarterly	N	85	2	170
LST	003-004	Regional	High School	Chino	Quarterly	N	115	2	230
LST	008-010	Regional	Prado Rd	Chino	Quarterly	N	675	2	1350
CAT	005-006	Regional	Chino Ave & 71 FWY	Chino	Quarterly	Y	220	2	440
FI	011-012	Regional	Live Oak	Fontana	Quarterly	Y	165	2	330
FI	042-043	Regional	Marlay	Fontana	Quarterly	Y	240	2	480
WIR	091-092	Regional	Outside CCWRF	Chino	Semi-annual	Y	75	1	75
ET	014-015	Regional	Ilex	Fontana	Semi-annual	Y	115	2	230
CUI	031A-031B	Regional	Whispering Lakes	Ontario	Semi-annual	N	90	2	180
GAO	065-066	Regional	Eli Basin & Philidelphia	Ontario	Annual	N	130	2	260
CUIR	061-062	Regional	Oropak	Ontario	Annual	N	195	2	390
CUIR	065-066	Regional	RP-1 Access Rd	Ontario	Annual	N	360	2	720
CUIR	067-068	Regional	RP-1 Access Rd	Ontario	Annual	N	285	2	570
FIR	039-040	Regional	Jurupa	Fontana	Annual	Y	260	2	520
FIR	064-065	Regional	15 FWY Basin	Ontario	Annual	N	200	2	400
UIR3	021-022	Regional	Grove & Mission	Ontario	Annual	Y	255	1	255
UIR3	030-031	Regional	Mission Under Wash	Ontario	Annual	Y	185	1	185

Table 9: Siphons & Hotspots



These activities are added, deleted, or altered based on analysis findings during the maintenance process. Activities will be altered by modifying the work content, adjusting the intervals and/or adjusting times to compensate for adverse conditions found. Work order closeout procedures are in place to ensure all work history is documented and condition assessment is maintained for proper record keeping. As part of the PM process analysis, observations related to grease build-up within the sewer collection system are reported to Source Control, which is responsible for further investigation to determine the cause of the identified grease build-up.

4.23 Rehabilitation & Replacement Program

Urgent Repairs

Upon discovery of an emergency during routine preventive O&M (i.e. NASSCO coded critical 5 pipe/manhole damage or cleaning required), field staff will contact the Collection System Supervisor to act. If the critical 5 is due to an O&M issue (e.g. root, grease, debris, etc.), the Supervisor will schedule a cleaning/re-inspection as appropriate. However, if it is a structural issue (e.g. pipe offset, break, or other excessive damage), the Supervisor will report to the Deputy Manager who will contact Engineering. Engineering will evaluate the emergency as a Level 1, 2, or 3, which establishes the following repair precedence:

- Level 1: Immediately repair (i.e. that day)
- Level 2: Repair within the next few days
- Level 3: Repair within the next week or two

Engineering will then contact their emergency contractors (refer to Figure 7, section 2.28) to initiate the repair. Once the restoration is completed, the Collection's staff will re-inspect to ensure the problem was properly corrected.

Non-Urgent Repairs

The GIS database will be reviewed by the Collection and Engineering supervisors to assess and prioritize non-urgent repairs based on critical ranking and conditions assessment. These will be placed and tracked on a CIP spreadsheet (see Table 10 below). These repairs will be briefed with the respective Deputy Managers.



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Pipeline Segments	Pipeline Name (Collections)	System	Pipe		Structural or O&M	Next Inspection		Evaluation	On Existing Project?	Comments	Plan???	Status	Date	Reinspection
			Size (in)	Rating		Date	Date							
CUI-032_CUI-033	Cucamonga Interceptor	BSS	42"	5	S	2/28/2017	As Needed	Med	No	Hole void visible/ defect is on top of pipe has low impact on pipe	Put on project	Project in the works for 2020		
VTRF-001 to VTRF-002	Ventura Foods Lateral	BSS	8"	5	S	3/12/2017	As Needed	Med	No	Hole with potential void visible.	Put on project	Project in the works for 2020		
VINY-010 to VINY-011	Vinyard Ave Trunk	BSS	8"	5	S	7/31/2017	As Needed	Med	No	Structural hole in pipe void is visible. No current flow in pipe, has been confirmed by Source control	Put on project	Project in the works for 2020		
YAT-007 to YAT-008	Yorba Ave Trunk	BSS	15"	5	S	8/2/2018	As Needed	Low	No	HSV, but on an abandoned line. Confirmed with PT/SC	Put on project	Project in the works for 2020		
CIM-003 to CIM-004	Chino Men's Prison Line	BSS	8"	4	S	8/27/2018	As Needed	Med	No	Fracture multiple cracks starting at 7:00 to 5:00 just above water line	Put on project	Project in the works for 2020		
CT-001 to CT-018	Cucamonga Trunk	BSS	18"	5	S	11/26/2018	As Needed	High	No	The pipes structural integrity is failing and the lining is falling off the walls of the pipe. This is exposing high pipe deterioration.	Has been put on a project	Engineering has project in the works for 2019		

Table 10: Pipe and Manhole Non-Urgent Repair List

Customer Complaints

CM and EM necessitated by customer complaints (i.e. foul odor, missing manholes, spills) will be handled accordingly and tracked through a work order via CMMS.

Long-Term CIP

In addition to the continual system condition assessment and repair process discussed above, the Agency is in the process of conducting a third-party condition assessment of its entire collection system. The last of this type of valuation was performed in 2006. Among the deliverables will be an updated long-term CIP, which will also be utilized to update the TYCIP. For additional information, refer to section 8.23 concerning short and long-term CIPs.



4.24 Training



The Agency understands that training is essential for safety and proper maintenance activities. The Agency regularly provides training for Collection's staff and contractors.

Collection's Staff Training

This training is divided into two general parts: Safety Training and Technical Training.

Safety Training

In-house safety training is performed continually throughout the year. Table 11 below list those training topics.



IEUA Safety Training Topics	
Training Topics	Frequency
Ethics	Annual
Heat Illness	Annual
Hearing Conservation and Safety	Annual
Respiratory Protection	Annual
Bloodborne Pathogens	Annual
Handling Cal OSHA	Annual
Hazard & Incident Reporting	Annual
Asbestos Awareness	Annual
Using Fire Extinguishers Training	Annual
Workplace Violence	Annual
Confined Space	Annual
CPR/First aid	Every 2 years
HAZWOPER	Annual
Lockout Tagout	Annual
Hazard Communication	Annual
RCRA Hazard Waste	Annual
Workplace Emergencies	Annual
Defensive Driving	Annual
Active Shooter	Annual
Fall Protection	Annual
Office Ergonomics	Annual
Hydrogen Sulfide	Annual
Forklift Safety Pedestrian	Annual
Ladder Safety	Annual
Workplace Violence	Annual
Harassment Prohibition	Annual
Drug/Alcohol Free Workplace	Annual
Security at Agency	Annual
Vehicle Use Procedures	Annual
Hazardous Materials	Annual
On-the-Job IIRP	Annual
IIPP Safety Manual	Annual
PPE	Annual
EEO	Annual

Table 11: Collection’s Safety Training

In addition to in-house safety training, hazardous waste operations and emergency response (HAZWOPER) training (or refresher training as required) is provided annually.

All safety training is tracked for completion by the supervisor and safety officer.



Technical Training

Technical training, both in-house and outside the Agency, is scheduled and tracked by the supervisor.

Refer to Table 12 below for the in-house training topics and periodicity.

IEUA Sewer Collection's Technical Training Topics	
Training Topics	Frequency
Agency OERP	Annual
Agency SSMP	Annual
Sanitary Sewer Regulations (WDR & MRP)	Annual
SSO Volume Estimation Techniques	Annual
Researching and Doc SSO Start Times	Annual
Impacted Surface Water Response Procedures	Annual
SWRCB Employee Knowledge Expectations	Semi-Annual
Water Quality Sampling Plan	Annual
Employee Core Competency Evaluations of SSO	Annual
CIWQS	Annual
SSO Table Top	Annual
SSO Drill	Annual
NASSCO	Every 3 Years
Collections SOP Training	Annual
PSERP	Annual
CWEA SARBS Collections Seminars	Annual
Mutual Aid Meetings and Training Events	Semi-Annual

Table 12: Collection’s Technical Training

Outside the Agency, the Collection’s staff participates in the California Water Environment Association (CWEA) program for collection system maintenance (CSM Grades I through IV) - refer to Figure 5, section 2.24 for current certification levels); and maintain their required continuing education units (CEU). NASSCO training is also provided every three years to ensure the Collection’s operators maintain their coding certifications for a pipeline, lateral, and manhole assessment.

The Agency’s Collection’s staff also participates in semi-annual training with other MA partners consisting of lectures and overviews of current issues as they relate to the effective maintenance and operation of all the Agencies’ collection systems. This training has proven to be invaluable and serves as an excellent tool for networking and teambuilding.



The Agency encourages all its staff to additionally stay in touch with today's technology and the latest innovations as they relate to the collection system industry through conferences, seminars, and workshops provided by reputable organizations and manufacturers. Staff is also encouraged to obtain membership in professional organizations.

Contractor Training

Contractors will be vetted during the contract award process to ensure all their staff are properly trained. SSO training will also be addressed during the pre-construction meetings. Figure 9 below, from the OERP, will be reviewed during these meetings.

Inland Empire Utilities Agency: Overflow Emergency Response Plan
CONTRACTOR ORIENTATION

The following procedures are to be followed in the event that you cause or witness a Sanitary Sewer Overflow.

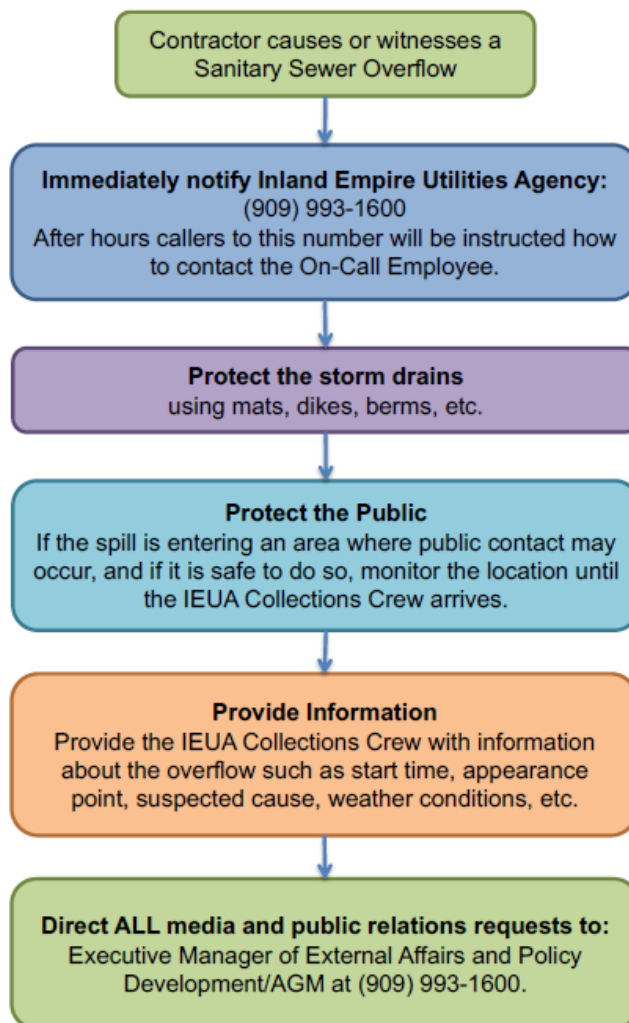


Figure 9: Contractor SSO Orientation Training



4.25 Contingency Equipment & Replacement Inventories



The Agency has critical equipment/parts in stock at its warehouse at RP-1 and RP-4. Table 13 below lists on-hand pipe and manhole cleaning/inspection equipment, safety gear (e.g. confined space equipment), and traffic control equipment.

IEUA Collection's Equipment Inventory	
What We Have	Needs
2 GapVax Combo Trucks	8" Trash Pump
1 Ques CCTV Camera Van	3-8" to 36" Inflatable Plugs
Safety Trailer with Confined Space Equipment	Pole Camera for Manhole Inspection
2 Ford F250 Traffic Control Trucks	SSO level sensors for various locations
5 Yd Dump Truck	Replacement GapVax Combo Truck
Water Truck	Electro Pipe SCAN Equipment
Traffic Control Signs and Delineation	Easement Machine
3 iPads for GIS Fieldwork	SSO response Van
Trimble GPS Unit locator	Portable Lighting
2 Self-contained Breathing Apparatus units	
Various Nozzles for Hydro Cleaning	
4" Trash Pump	
6" Trash Pump	
6 Leader Hoses	
36" to 60" inflatable Plug	
Generator/Portable and Trailer Mounted	
9 Gas Techs	
3 Hand Held Spot Lights	
Tyvek Suits and Gloves	
AED and First Aid Kits	
Fire Extinguishers	
2 10'x10' EZ Ups	
5 Ton Chain Come-Along	
2 Hydro Excavation Tubes	
12 Tiger Tails	
Sand Bags and PIGs	
30" to 38" Manhole Covers and Rings	

Table 13: Collection's Current Equipment & Needs



As shown in Table 13, additional needs and other new technologies are being evaluated. Those include SSO advanced warning devices (e.g. level and flow sensors), zoom pole cameras, and hydro nozzle camera quick clean inspections.

In addition, the Agency retains contractors that are available for any emergency repairs (refer to section 2.28, Figure 7). The Agency also has a MA agreement in place with all the RCAs and JCSD which provides the sharing of resources, equipment, and personnel in the event of an emergency (refer to section 2.27, Table 7).

4.3 Agency O&M Documents

- GIS maps
- PMs (siphons/hotspots)
- Sewer Pipe & Manhole CIP
- Safety Training
- Agency's Collection's In-house Training
- Collection's Emergency & Critical Equipment List

* * *



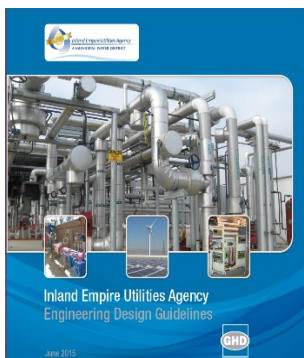
5.0 Element 5: Design & Performance Provisions

5.1 WDR Requirements Summary

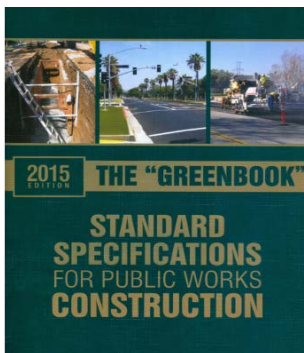
- a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations, and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

5.2 Agency Design & Performance Provisions Plan

5.21 Standards for Installation, Rehabilitation, and Repair



Pump stations and force mains for future projects are sized based on the standards in the industry as defined by the American Society of Civil Engineers and the American Water Works Association. The Agency has Engineering Design Guidelines which also guides internal staff as well as consultants through the design of all sewer infrastructure. The Agency oversees the design and performance of its Regional and Non-Reclaimable sewer systems' construction following these guidelines as well as the Agency's own standards for manholes and connections. For all other standards, the Agency adheres to the *Standard Specifications for Public Works Construction*, commonly known as the "*GREENBOOK*" standards.



The Agency has an Engineering department with resources to design a system so that it will perform as intended. The staff is composed of various engineering disciplines to tackle even the most difficult of designs. AutoCAD® is the standard drawing format. In addition, all bid proposals must also adhere to the "*GREENBOOK*" standards.



5.22 Standards for Inspection and Testing of New, Rehabilitated, and Repaired Facilities

The Agency has an Engineering and Construction Management department with resources to make sure every project is built to code as designed and follows the testing and inspection standards in the “*GREENBOOK*” standards. The staff consists of various disciplines to ensure a project is built as designed. For pipeline rehabilitation and repairs, this is accomplished by requiring CCTV inspection and assessment before accepting and commissioning a project.

5.3 Agency Design & Performance Documents

The following documents meet the Order requirement for this element and are available in the Agency’s Engineering department.

- Agency’s Standard for Manholes
- Agency’s Standard for Connections
- Agency’s Standard for Bedding and Backfill
- Agency’s Engineering Design Guidelines
- Copies of *Standard Specifications for Public Works Construction “GREENBOOK”*

* * *



6.0 Element 6: Overflow Emergency Response Program (OERP)

6.1 WDR Requirements Summary

- a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- b) A program to ensure an appropriate response to all overflows;
- c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or National Pollutant Discharge Elimination System (NPDES) permit requirements. The SSMP should identify the officials who will receive an immediate notification;
- d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

6.2 Agency OERP Plan

The Agency created and approved, as of July 2018, a new OERP to replace its outdated 2007 SSOURGP. This section states the purpose of the program, outlines the OERP plan, and discusses the plan for updating the document; however, full details are included in the actual plan, which is located in Appendix E.



6.21 Purpose

Overflow Emergency Response Plan



One of the Agency's goals are to have minimal SSOs to protect public health and the environment and to comply with regulatory agencies. However, should an overflow occur, the Agency follows the guidelines established under its OERP. The OERP is a comprehensive plan designed to provide the Agency with emergency response procedures and to ensure any reported spill is responded to immediately and address impact mitigation.

The Agency also has a MA Agreement (posted on the Agency's website www.ieua.org) with its member agencies to elicit or render aid should that agency need assistance.

6.22 Outline of Sewer Overflow Emergency Response Plan

The OERP includes the following sections:

- SSO Detection and Notification
- SSO Response Procedures
- Recovery and Cleanup
- Water Quality Monitoring and Sampling
- Reporting, Monitoring, and Recordkeeping
- Post SSO Event Debriefing
- Failure Analysis Investigation
- SSO Response Training

Note: The Agency is in the process of developing a Water Quality Monitoring Program to enhance the OERP section on Water Quality.

6.23 Plan Update

Like the SSMP, the OERP is dynamic in nature and thus will be revised and updated periodically so that it contains the latest emergency response procedures, contact information, and associated equipment. Any SSO plan deficiencies and updates will be addressed and tracked for completion. These changes will be captured in the Change Log (Appendix C) and the Deficiency Action Log (Appendix D).



6.3 Agency Compliance Documents

- Overflow Emergency Response Plan (Appendix E)
- Mutual Aid Agreement (www.ieua.org)

* * *



7.0 Element 7: Fats, Oil, and Grease (FOG) Control Program

7.1 WDR Requirements Summary

- a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, record keeping, and reporting requirements;
- e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
- f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

7.2 Agency FOG Control Program Plan

The Agency owns and operates both the RSS and BSS. These collection and conveyance systems are large diameter pipelines that form the drainage system for the member agencies' sewer systems. As each member agency has developed a FOG program that is tailored specifically to address their cities' needs, including permitting and inspection of commercial and industrial dischargers as well as enforcement and public education and outreach programs, the Agency has determined that a formalized FOG Control Program is not needed. Additionally, historical data, with only one FOG related SSO that was over 10 years ago (12/7/2007), supports the same conclusion. However, the Agency has an Ordinance in place prohibiting excessive FOG discharges and has a cleaning and maintenance schedule for areas prone to FOG build-ups such as siphons and pipeline sections with minimal slope.



The Agency is also actively participating with member agencies to promote FOG control programs. One outreach is public education, which is accomplished through distribution of FOG literature including information on proper disposal of FOG. The literature addresses both commercial sources such as restaurants and residential sources as well.

7.3 Agency Ordinance Documents

- Ordinance No. 97 governs the Regional Wastewater System; approved on October 15, 2014.
- Ordinance No. 99 governs the North NRWS; adopted on June 18, 2014.
- Ordinance No. 106 governs the South NRWS; adopted on February 19, 2014.
- Copies available on the Agency's website: www.ieua.org

* * *



8.0 Element 8: System Evaluation and Capacity Assurance Plan (SECAP)

8.1 WDR Requirements Summary

- a) **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity), and the major sources that contribute to the peak flows associated with overflow events;
- b) **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
- c) **Capacity Enhancement Measures:** The steps needed to establish a short and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- d) **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the CIP developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

8.2 Agency SECAP Plan

8.21 Evaluation

RSS

The 2015 Wastewater Facilities Master Plan (WFMP) updated the hydraulic model of the collection system and evaluated the existing conveyance system to determine the ability to convey current and future flows. The hydraulic model indicated the Montclair Pipeline may be at capacity. As a result, a supplemental investigation was conducted. New flow monitoring data was collected then entered into the model and the updated model indicated the existing capacity is sufficient. Another result of the WFMP was that four flow diversion alternatives were developed to optimize recharge groundwater opportunities in the north and it was determined that Whispering Lakes and Haven Pump Station could be



used to divert flows from RP-5 to RP-1. These two alternatives are under investigation but will require collaboration with the pump station owners.

Influent wastewater flows were projected to increase at each of the four Regional Water Recycling facilities, primarily because of population growth. However, CIP projects were developed based on each expansion needs until 2035. Refer to the Capacity Enhancement Measure section below.

BSS

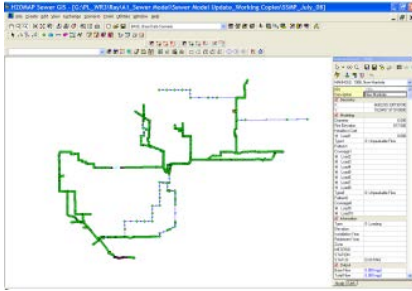
The Agency's BSS conveys high strength wastewater to LACSD and OCSD for treatment. In 2004, the Agency hired PBS&J to conduct a condition assessment of the BSS. Because of that assessment, the Agency has a BSS improvement program to repair BSS manholes on an annual basis as part of the annual CIP.

For the BSS, a further increase in use is tightly controlled. Any industry desiring to discharge into this system must first purchase capacity in the system and enter into a Capacity Right Agreement with the Agency. Once approved, and after the issuance of an industrial wastewater discharge permit, flow monitoring is conducted and reported by the industry in monthly flow monitoring reports. The Collections group conducts CCTV inspections of the system which are summarized in GIS. Engineering and Collections collaborate on a monthly basis to discuss results of the latest inspections and plan and improvement work for the future as part of the Agency's annual BSS improvement project.

Regarding capacity, the BSS regained 0.4 MGD capacity in 2018 when the Preserve Lift Station came online. The station is owned by the City of Chino and serves the Preserve residential development in Chino. Previously, residential sewerage flows were directed to the BSS under a lease agreement. When the Preserve Lift Station came online, the 0.4 MGD flow was diverted from BSS to the RSS thereby restoring the capacity of the BSS. Also, the Agency is currently in discussions with the Chino State Penitentiary facility to direct their flows from the BSS to the RSS via the same Preserve Lift Station. When this occurs, there will be an estimated additional 0.4 MGD of capacity regained in the BSS.

Additional Measures

The Pretreatment Agreement between the Agency and its member agencies requires them to conduct flow monitoring and sampling at strategic locations. These sites were selected to cover approximately 90-95% of the member agencies flow into the Agency's sewerage system. The results of this flow monitoring indicate that the Agency's Regional Trunk lines have enough transport capacity.



The Agency has MWH's H2OMap Sewer[®] software application which allows the sewer system capacity evaluation at any point. The software allows the use of “what-if” scenarios and identifies pipeline segments that could be deficient.

8.22 Design Criteria

The Agency's sewer infrastructure design is managed by the Engineering department. Engineering follows the best practices in the industry as well as uses the “*GREENBOOK*”, American Water Works Association standards, and the Agency's Engineering Design Guidelines. The Agency uses reputable consulting engineering firms that provide design services for CIP projects and ensures all designs follow the applicable design criteria.

8.23 Capacity Enhancement Measures & Schedule

BSS

There is a project in the preliminary design phase to replace the existing BSS force mains from the Philadelphia Lift Station to the point of connection to the gravity system that flows to LACSD for treatment. The design of this force main includes a 20% capacity increase for future growth

RSS

Table 14 below came from the 2015 WFMP and lists the major capital projects to ensure the Agency continues to meet capacity for the next 20 years (2035).



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Project	Purpose
Montclair Pipeline Upgrades Project	Upsize four pipeline segments from 21-inch and 30-inch diameter to 36-inch diameter to mitigate deficiencies in the conveyance system, reliably accommodate future growth, and convey peak buildout flows
Whispering Lakes Pump Station Expansion Project	Increased pumping capacity to meet projected future flows Ability to send more flows to RP-1 for treatment
RP-1 Solids Treatment Expansion Project	Increased solids treatment capacity to meet existing and projected future flows
RP-1 Liquid Treatment Expansion and Primary Effluent Equalization Elimination Project	Increased liquid treatment capacity to meet projected future flows Eliminating primary flow equalization and converting ponds for other uses
RP-4 Liquid Treatment Expansion Project	Increased liquid treatment capacity to meet projected future flows
RP-5 Solids Handling Facilities Project (RP-2 Relocation)	Relocation of RP-2 solids handling operations to RP-5 Increased solids treatment capacity to meet existing and projected future flows Relocation of RP-2 Lift Station to above the flood elevation Demolition of RP-2 facilities
RP-5 Liquid Treatment Expansion Project	Increased liquid treatment capacity to meet projected future flows

Table 14: Major Capital Projects to Meet Projected Capacity Until 2035

Other CIP projects to enhance system conveyance capacity/maintainability completed in the last five years or planned for the future are listed in Table 15 below.

Repairs

Table 15 below lists the system projects and costs.



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Project	Title	Construction Start Date	Project End Date	Cost to Date	Original Budget	No. of Manholes	Description
EN15045.00	Collection System Manhole Upgrades FY15-16	Sep 2016	June 2016	\$598,497	\$620,000	44	Located in cities on Ontario, Chino, Chino Hills, Fontana. Replace with cast Iron/ GMI
EN15046.00	Collection System Manhole Upgrades FY15-16	Sep 2015	Jun 2016	\$363,762	\$436,086	22	Includes rehab of the interior of 1 MH in City of Ontario
EN17014.00	NRW Manhole Upgrades FY16-17	Nov. 2016	Aug 2017	\$198,130	\$350,000	11	Various
EN17015.00	Collection System FY 16-17	Apr. 2017	Jan 2018	\$323,192	\$500,000	38	Various
EN18014.01	NRWS Manholes Upgrades 17-18 Phase II	Sep 2018	Feb 2019	\$353,162.49	\$17,939.98	9	Remove, dispose and replace 9 manhole covers within the SBC Flood Control
EN18015.00	Collection System Upgrades FY 18/19	Sep 2018	Jan 2019	\$121,430	\$500,000	79	Located in Chino and Ontario
EN18057.00	NRW Manhole Cover Removal	Nov 2018	In Progress	\$8,353	\$170,000	42	Remove interior manhole covers
EN19014.00	NRWS Manholes Upgrades	Aug 2019	In Progress	\$582	\$200,000	39	Design-bid
EN19015.00	Collection System Upgrades	Feb. 2019	In Progress	\$58,409	\$500,000	79	Manholes pre-purchased. Located in Chino and Ontario
EN19021	San Bernardino Lift Station	TBD	Future	TBD	\$600,000	TBD	Various
EN19024	Collection System Asset Management	TBD	Future	TBD	\$1,250,000	TBD	Various



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EN19027	NRW Pipeline Relining	TBD	Future	TBD	\$2,300,000	TBD	Various
EN20014	NRWS Manhole Upgrades	TBD	Future	TBD	\$200,000	TBD	Various
EN22002	NRW East End Flowmeter	TBD	Future	TBD	\$1,986,985	TBD	Various
EN22014	NRWs Manhole Upgrades	TBD	Future	TBD	\$200,000	TBD	Various
EN23002	Philadelphia Lift Station Force Main	TBD	Future	TBD	\$6,000,000	TBD	Various
EN23014	NRWS Manhole Upgrades	TBD	Future	TBD	\$200,000	TBD	Various
EN24014	NRWS Manhole Upgrades	TBD	Future	TBD	\$200,000	TBD	Various
EN25014	NRWS Manhole Upgrades	TBD	Future	TBD	\$200,000	TBD	Various
EN26020	Lift Station AMP Projects	TBD	Future	TBD	\$500,000	TBD	Various
EN16011	Whispering Lakes Pump Station	TBD	Future	TBD	\$500,000	TBD	Various
EN17050	Septic Conversion PDR	TBD	Future	TBD	\$1,000,000	TBD	Various
EN19005	Haven LS Improvements	TBD	Future	TBD	\$3,000,000	TBD	Various
EN19025	Montclair and San Bernardino	TBD	Future	TBD	\$1,250,000	TBD	Various
EN20015	Collection System Upgrades	TBD	Future	TBD	\$500,000	TBD	Various
EN21015	Collection System Upgrades	TBD	Future	TBD	\$500,000	TBD	Various
EN22015	Collection System Upgrades	TBD	Future	TBD	\$500,000	TBD	Various
EN23015	Collection System Upgrades	TBD	Future	TBD	\$500,000	TBD	Various
EN24015	Collection System Upgrades	TBD	Future	TBD	\$500,000	TBD	Various
EN25015	Collection System Upgrades	TBD	Future	TBD	\$500,000	TBD	Various

Table 15: System Repairs



8.3 Agency System Evaluation and Capacity Assurance Plan Documents

- 2006 PBS&J Report
- 2015 Wastewater Facilities Master Plan (WFMP)
- Agency's Engineering Design Guidelines
- *Standard Specifications for Public Works Construction "GREENBOOK"*

* * *



9.0 Element 9: Monitoring, Measurement, and Program Modifications (MMPM)

9.1 WDR Requirements Summary

- a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- c) Assess the success of the PM program;
- d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
- e) Identify and illustrate SSO trends, including frequency, location, and volume.

9.2 Agency MMPM Plan

The Agency will maintain relevant information to meet the MMPM requirements above.

Examples of information to be tracked and maintained include the following:

- Historical SSOs (depicting date, location, number, volume/recovered volume, category, etc.)
- Graphical location of SSOs
- SSO trends, frequency, volume, and cause
- PM completion rate
- Inspection and cleaning production
- Training/Certifications
- Repairs (CM and EM)
- CIP expenditures

Refer to Table 3 in Element 1- Goals for the KPIs to be monitored and measured. These will be continually tracked and briefed to management annually and presented to the Board of Directors after each audit.

Program elements will be modified, as appropriate, based on monitored and measured performance evaluations.

9.3 Agency MMPM Documents

- CIWQS SSO tracking database: <http://www.waterboards.ca.gov/ciwqs/>



10.0 Element 10: SSMP Program Audits

10.1 WDR Requirements Summary

As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

10.2 Agency SSMP Program Audit Plan

The Agency will conduct periodic audits of the SSMP. These will be conducted at a minimum of every two years, and more frequently depending on the system size and number of SSOs. Each audit will evaluate the SSMP's effectiveness, Agency compliance, deficiencies, and corrective actions. Audits will also be kept on file for at least five years.

The original Board adoption date was April 15, 2009; but the initial plan was set in place on May 2, 2009, which is used as the anniversary date for the biannual audits. However, the SSMP recertification date has been kept as mid-April to match the Board convening dates. Refer to SSMP Appendix B – Audit History for the history of the Agency's IEUA SSMP audits. SSMP Appendix C –Change Log contains the history of changes made to the SSMP, which will represent the effective implementation of the "living" SSMP. SSMP Appendix D –Deficiency Action Log tracks the identified deficiencies, corrective actions, the person responsible, and schedule for completing actions.

10.3 Agency Audit Documents

- Appendix B – Audit History
- Appendix C – Change Log
- Appendix D – Deficiency Action Log
- www.ieua.org

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11.0 Element 11: Agency Communication Program

11.1 WDR Requirements Summary

The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public with the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

11.2 Agency Communication Program Plan

The Agency communicates on a regular basis with its RCAs/MA Partners, the public, and to its Board of Directors.

11.21 RCA/Mutual Aid Partners



The Agency coordinates semi-annual Collection's staff meetings, inviting all nine MA partners (Chino, Chino Hills, Fontana, the Agency, Jurupa, Montclair, Ontario, Rancho Cucamonga, and Upland). Each agency takes turns hosting these meetings - presenting spill lessons learned, current issues, new technology, etc. These events have been invaluable for networking and training. Additionally, semi-annual meetings, between the staff MA meetings, are held between Supervisors and Managers to share problems and solutions as they relate to better sewer collections O&M, as well as foster personal relationships. Each of these venues have led to improved interagency SSO support.

RCA committee meetings are also periodically held to update members on recent spills, SSMP changes, and other relevant sewer collections information.



11.22 Public

The Agency is involved in multiple community events such as the Agency’s Earth Day, Touch-a-Truck, etc. These events help provide the public with information on how their



sewer conveyance systems work, how they are operated and maintained, what is safe and unsafe to put in sewer pipes and manholes, the FOG program, emergency response procedures, and contact data for information and feedback.

The public can also access the Agency’s SSO information from the SWRCB website (refer to Figure 10 below) using the following link and entering the Agency’s WDID number: 8SSO10580.

https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_main

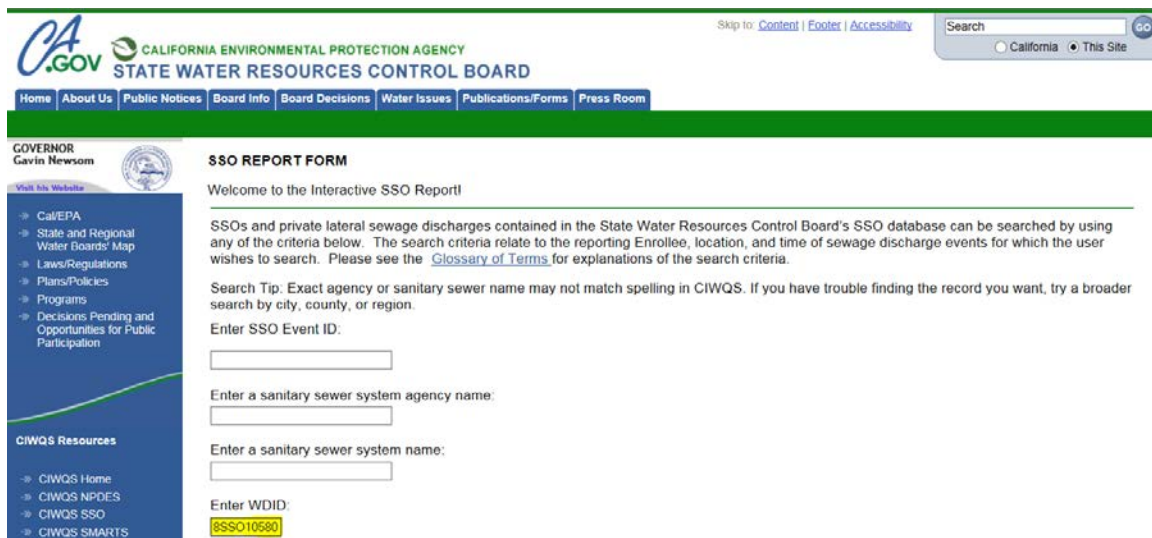


Figure 10: SWRCB Website for Agency SSO Information

11.23 Agency Managers/Board of Directors

SSMP periodic updates are presented to the Managers, Executives, and Board of Directors. At a minimum, Managers and Executives will be briefed annually, following the internal yearly review. The Board will be briefed after each audit and SSMP revision. All groups will also be updated upon any SSMP significant change. The SSMP will also be re-adopted by the Board every five years or upon any significant change to the SSMP.



11.24 Other Outreach Channels

The image is a screenshot of the Inland Empire Utilities Agency (IEUA) website. The header features the agency's logo, the tagline "WATER SMART - THINKING IN TERMS OF TOMORROW", a "CONTACT US" button, and social media icons for Facebook, Twitter, LinkedIn, YouTube, and Instagram. A search bar is located in the top right. The navigation menu includes "Home", "About Us", "Governance", "Facilities", "Water Sources", "Fees & Rates", "Use Water Wisely", "News", and "Education". The "About Us" menu is expanded to show "Sewer System Operations". On the left side, there is a vertical menu with categories: Groundwater, Imported Water, Pretreatment & Source Control, Recycled Water, and Stormwater. Below this is a "IEUA Newsletter" sign-up section with a "SUBSCRIBE NOW!" button. At the bottom left is a Facebook widget for the "Inland Empire Utilities Agency" page, showing 538 likes. The main content area is titled "SEWER SYSTEM OPERATIONS" and features a photograph of a blue sewer collection truck. Below the photo, there is a paragraph of text explaining the 2006-0003 State Water Resources Control Board (SWRCB) order and the agency's compliance. Three bullet points provide links to: 1) the Contact List in Case of EMERGENCY SSO (February 1, 2018), 2) the IEUA Sewer System Management Plan (April 27, 2015), and 3) the 2017 IEUA SSMP Biennial Audit Report (May 2, 2017). The text "IEUA Sewer Collections Crew" is centered at the bottom of the main content area.

Figure 11: Agency SSMP on the Web

The Agency's website is currently undergoing a redesign (due to launch Fall 2019), which will feature the sewer system functions as a call-out button/element/tab on the Agency's home page; however, sewer system topics are currently communicated on the sewer system landing page – About Us/Sewer System Operations, which features the SSMP/SSMP Audit Report, Collection Systems video, Emergency SSO information and will continue to be fluid to incorporate any communication/outreach needed for future initiatives, resources, etc.

As well as utilizing the Agency website, the Agency uses social media such as Facebook, Twitter, YouTube, and Instagram to inform the public on the sewer system operations and outreach initiatives.

The Agency additionally publishes a quarterly newsletter with an opportunity to update subscribers on sewer system programs and functions: E-Basin Update. The newsletter can be viewed on the Agency's website as well.



An annual sewer report will be developed that can be viewed on the Agency’s website and will be distributed to RCAs and stakeholders. In addition, it will be posted on the Agency’s social media channels.

11.25 SSMP Updates

The SSMP is a dynamic document that will be periodically revised and re-published on the Agency’s website. This will take place upon any significant plan changes or every five years, at a minimum, from the original SSMP adoption date (May 2, 2009). Appendix C – Change Log, will list all modifications to the document including revision, implemented by, implementation date, approved by, approval date, and the reason for the change.

11.3 Agency Communication Documents

- Social media: Facebook, Twitter, YouTube, & Instagram.
- Newsletter: E-Basin Update
- www.ieua.org

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