

ARROWBEAR PARK COUNTY WATER DISTRICT

SEWER SYSTEM MANAGEMENT PLAN

**Arrowbear Park County Water District
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Adopted

April 19, 2012

1st Update Adopted

April 20, 2017

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ABBREVIATIONS / ACRONYMS

AB	Assembly Bill
AHJ	Authority Having Jurisdiction
APCWD	Arrowbear Park County Water District
APWA	American Public Works Association
ASCE	American Society of Civil Engineers
BAT	Best Available Technology
BMP	Best Management Practice
Cal OES	California Office of Emergency Services
CASA	California Association of Sanitation Agencies
CCTV	Closed-Circuit Television
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
CIWQS	California Integrated Water Quality System
CM	Corrective Maintenance
CMOM	Capacity, Management, Operations, and Maintenance
CMMS	Computerized Maintenance Management System
COUNTY	County of San Bernardino
CPC	California Plumbing Code
CWEA	California Water Environment Association
DISTRICT	Arrowbear Park County Water District
EMA	Enhanced Maintenance Area
ERP	Emergency Response Plan
FOG	Fats, Oils, and Grease
FSE	Food Service Establishments
GPS	Global Positioning System
GIS	Geographic Information System
GRD	Grease Removal Device
GWDR	General Waste Discharge Requirements also referred to as the Waste Discharge Requirements (WDR)
I/I	Inflow / Infiltration
IERP	Integrated Emergency Response Plan
JPIA	Joint Powers Insurance Authority
LRO	Legally Responsible Official
MOP	Manual of Practice
MRP	Monitoring and Reporting Program
MS4	Municipal Separate Storm Sewer System
NACWA	National Association of Clean Water Agencies
NASSCO	National Association of Sewer Service Companies
NGO	Non-governmental Organization
NOI	Notice of Intent
NOV	Notice of Violation
O&M	Operation and Maintenance
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services, State of California
Order	State Water Resources Control Board Order No. 2006-0003-DWQ adopted May 2, 2006

PD	Predictive Maintenance
PLSD	Private Sewer Lateral Discharge
PM	Preventative Maintenance
PMP	Preventative Maintenance Program
QA/QC	Quality Assurance/Quality Control
R&R	Rehabilitation and Replacement
RWQCB	Regional Water Quality Control Board
SBCDEH	San Bernardino County Department of Environmental Health
SDRMA	Special Districts Risk Management Authority
SOP	Standard Operating Procedure <u>or</u> Standard Maintenance Procedure
SSO	Sanitary Sewer Overflow and any sewer spill or overflow of sewage
SSMP	Sewer System Management Plan
SWRCB	State Water Resources Control Board
UPC	Uniform Plumbing Code
WDID	Waste Discharge Identification Number
WDR	Waste Discharge Requirements
WWTP	Wastewater Treatment Plant

DEFINITIONS

1. **Collection System** – Generic term for any system of pipes or sewer lines used to convey wastewater to a treatment facility.
2. **Drainage Channel** - For the purposes of complying with the Statewide Sanitary Sewer Order, (1) a man-made canal used to transport storm water as part of a municipal separate storm sewer system, or (2) an intermittent or perennial stream bed.
3. **Enrollee** - A federal or state agency, municipality, county, district, and other public entity that owns or operates a sanitary sewer system, as defined in the General WDR, that has submitted a complete and approved application for coverage under this Order.
4. **Event ID** – A unique identifier assigned by the SSO database to each reported SSO or private lateral sewage discharge.
5. **FOG** – Fats, Oils, and Grease (See also Industrial Waste).
6. **Industrial Waste** – Means any and all waste substances, liquid or solid, except domestic sewage, and includes among other things radioactive wastes and explosive, noxious or toxic gas when present in the sewage system (See also FOG).
7. **Lateral** – Segment of pipe that connects a home or building to a sewer main, which is usually located beneath a street or easement. The responsibility for maintaining a lateral belongs to the private property owner.
8. **Nuisance** - California Water Code Section 13050, subdivision (m), defines a nuisance as anything that meets all of the following requirements:
 - a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
 - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - c. Occurs during, or as a result of, the treatment or disposal of wastes.
9. **Percent Reached Surface Water** – Volume of sewage discharged from a sanitary sewer system or private lateral or collection system estimated to have reached surface water divided by the total volume of sewage discharged.
10. **Percent Recovered** – Volume of sewage discharged that was disposed of properly, divided by the total volume of sewage discharged.
11. **Private Lateral** – Privately owned sewer service lateral.
12. **Private Lateral Sewage Discharge (PLSD)** – Sewage discharges caused by blockages or other problems within privately owned laterals, collection systems or other private sewer assets that are tributary to the reporting Enrollee's sanitary sewer system. Reports of these events may be submitted by Enrollees on a voluntary basis except in San Diego Region 9, but are not the Enrollee's responsibility unless caused by issues in the main line or because of other Enrollee activity. Normally, this type of sewage discharge is the responsibility of the private lateral, private asset, or collection system owner.

13. **(SSO)** - Sanitary Sewer Overflows. Any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:
 - i. Overflows or releases of untreated or partially treated wastewater that reaches waters of the United States;
 - ii. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
 - iii. Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.
14. **Sanitary Sewer System** - Any system of pipes, pump stations, sewer lines, or other conveyances upstream of a wastewater treatment plant headwork's used to collect and convey wastewater to a publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system and discharges into these temporary storage facilities are not considered to be SSOs. For the purposes of the SWRCB Order sanitary sewer systems include only those systems owned by public agencies that are comprised of more than one mile of pipes or sewer lines.
15. **SSO Category 1** – All discharges of sewage resulting from a failure in an Enrollee's sanitary sewer system that resulted in a discharge to a drainage channel and/or surface water.
16. **SSO Category 2** – All discharges of sewage resulting from a failure in an Enrollee's sanitary sewer system of a volume equal to or greater than 1,000 gallons that did not reach surface water.
17. **SSO Category 3** – All discharges of sewage resulting from a failure in an Enrollee's sanitary sewer system of a volume less than 1,000 gallons that did not reach surface water.
18. **SSO Database** – Online reporting system developed, hosted, and maintained by the SWRCB for compliance with the Monitoring and Reporting Program contained in SSS WDR.
19. **SSO Reporting System** – The on-line spill reporting system that is hosted, controlled, and maintained by the SWRCB. The web address for this is <http://ciwqs.waterboards.ca.gov>. This on-line database is maintained on a secure site and is controlled by unique usernames and passwords.
20. **Satellite Collection System** - The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary system is tributary.
21. **Storm Drain** – For the purposes of complying with the SSS WDR, any pipe that is part of a Municipal Separate Storm Sewer System (MS4) used for collecting or conveying storm water.
22. **Total # of SSOs per 100 miles of Sewer per Year** – Broad metric used to compare the relative performance of Enrollees and their sanitary sewer systems. This metric expresses the number of SSOs for which the reporting Enrollee is responsible, for every 100 miles of pipe or sewer lines in an Enrollee's sanitary

- sewer system. Due to the large variation in facility specific characteristics, this metric should only be viewed as a rough comparison of the operation and maintenance performance of Enrollees and their sanitary sewer systems. For systems smaller than 100 miles, this metric tends to skew the result as the miles of pipe get smaller. This metric is calculated as described: $\text{Total \# of SSOs per year} = (\text{Total \# of SSOs} \times 100) / ((\text{Years}) \times (\text{Miles of Pressure Sewer} + \text{Miles of Gravity Sewer} + \text{Miles of Public Laterals}))$
23. **Total Volume of SSOs Reached Surface Water per 100 miles of Sewer** – Broad metric used to compare the relative performance of Enrollees and their sanitary sewer systems. This metric expresses the volume of SSOs, for which the reporting Enrollee is responsible, that reached surface water for every 100 miles of pipe or sewer lines in an Enrollee's sanitary sewer system. Because sewage discharges that reach surface water pose a greater threat to public health and the environment, this metric reflects some accounting of the threat posed by SSOs. Due to the large variation in facility specific characteristics, this metric should only be viewed as a rough comparison of the operation and maintenance performance of Enrollees and their sanitary sewer systems. For systems smaller than 100 miles, this metric tends to skew the result as the miles of pipe get smaller. This metric is calculated as described: $\text{Total Annual Volume of SSOs Reaching Surface Waters} = (\text{Total volume of SSOs reaching Surface Waters} \times 100) / ((\text{Years}) \times (\text{Miles of Pressure Sewer} + \text{Miles of Gravity Sewer} + \text{Miles of Public Laterals}))$
24. **Total Volume Reached Surface Water** – Amount of sewage discharged from a sanitary sewer system, private lateral, or collection system estimated to have reached surface water.
25. **Total Volume Recovered** – Amount of sewage discharged that was captured and disposed of properly.
26. **Untreated or partially treated wastewater** - Any volume of waste discharged from the sanitary sewer system upstream from wastewater treatment plant headworks.
27. **WDID** – Waste Discharge Identification number assigned as a unique identifier by the SWRCB to each Enrollee for regulatory recordkeeping and data management purposes.

INTRODUCTION

The California State Water Resources Control Board (“SWRCB”) promulgated a waste discharge requirement (“WDR”) permit on May 2, 2006 to regulate sanitary sewer systems. This permit is known as SWRCB Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. A copy of the Order is included as **Appendix A**.

On February 20, 2008, the 2006 Order was amended to reduce the time allowed for Monitoring and Reporting of an overflow and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state in order to “adequately protect the public health and safety or the beneficial uses of the waters of the state when there is a sewage collection system spill.” This was SWRCB Order No. 2008-0002-EXEC.

On July 30, 2013, Attachment A to the Order was promulgated and became effective on September 9, 2013 and is known as Attachment A, SWRCB Order No. WQO 2013-0058-EXEC, amending the Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. This was “Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program objectives, assess compliance, and enforce the requirements of the SSS WDRs” (together these documents constitute the “SSS WDR”). A copy of these Orders are included as **Appendix B**.

These Orders, among other things, requires local public sewer collection system agencies, referred to as “Enrollees,” to develop a Sewer System Management Plan (“SSMP”). As specified in Section D.14 of the SSS WDR, SSMPs must be self-audited at least every two (2) years and updated every five (5) years from the original adoption date by the Enrollee’s governing board. The original SSMP must have been approved by the governing board of the Enrollee at a public meeting and adopted.

The five-year SSMP update must also be approved and certified as do all significant updates to the SSMP. The SSMP, all references in the document, and the adoption documents by the governing board must be available on the agency website or submitted to the SWRCB upon adoption or recertification. Enrollees do not send their SSMP to the State or Regional Water Boards for review or approval, but must make it publicly available, and upload an electronic copy to the SSO database or provide a link to the Enrollees’ website where the SSMP is posted.

EXECUTIVE SUMMARY

Section D.13 of the SSS WDR, requires all Enrollees to development an SSMP and make it available to the public and to the SWRCB and RWQCB. The SSS WDR further specifies eleven (11) mandatory Elements that must be addressed in the SSMP. The SSMP is required to include the elements listed below. However, if the District determines and provides justification that any element is not appropriate or applicable, the SSMP does not need to address that element.

1. Goals
2. Organization
3. Legal Authority
4. Operations and Maintenance Program
5. Design and Performance Provisions
6. Overflow Emergency Response Plan (“OERP”)
7. Fats, Oils, and Grease (FOG) Control Program
8. System Evaluation and Capacity Assurance Plan (“SECAP”)
9. Monitoring, Measurement and Program Modifications
10. SSMP Program Audits
11. Communications Program

The following Chapters will address the above elements of the Plan and represent the Arrowbear Park County Water District SSMP.

The original SSMP was adopted by the Arrowbear Park County Water District Board of Directors at a public meeting on April 19, 2012.

The first update to the SSMP was adopted by the Arrowbear Park County Water District Board of Directors at a public meeting on April 20, 2017.

The second update to the SSMP was adopted by the Arrowbear Park County Water District Board of Directors at a public meeting on June 16, 2022.

As required by the Order, the District makes the SSMP available to the State and/or Regional Water Board upon request. A copy of the SSMP is also publicly available for review at the office of the District General Manager at the District Offices at 2365 Fir Dr., Arrowbear Lake, CA 92382 and on the District’s website at arrowbearwater.org.

CHAPTER 1 – GOALS

This chapter describes the Arrowbear Park County Water District's SSMP goals.

1.1 Purpose

The purpose of the Order is to prevent sanitary sewer overflows (SSOs). To support this purpose and facilitate proper funding and management of the sanitary sewer system the Arrowbear Park County Water District is required to develop, implement, and maintain the SSMP. The District is also required to provide certification to the State Water Board by technically qualified and experienced persons to ensure that the SSMP is developed and implemented appropriately.

1.2 Goals

The goal of this Sewer System Management Plan (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 Sanitary Sewer Overflows (SSOs) that may occur.

The Arrowbear Park County Water District recognizes the importance of protecting water quality by preventing sewer spills and is supplementing its existing sewer system management program with the requirements of the new State regulations.

The District seeks to provide high quality and cost-effective wastewater collection for its constituents by implementing the following:

- Be available and responsive to the needs of the public and work cooperatively with local, state and federal agencies to reduce, mitigate impacts of and properly report SSOs.
- Properly manage and operate the District's facilities to minimize SSOs
- Identify, prioritize, and continuously renew and replace sewer system facilities to maintain reliability.
- Implement regular, proactive maintenance of the system to remove roots, debris, and fats, oils, and grease in areas prone to blockages that may cause sewer backups or SSOs
- Uphold the District's standards and specifications on newly constructed public and private sewers.
- Cost effectively minimize infiltration/ inflow ("I/I")
- Maintain and improve the condition and performance of the District's wastewater collection system.
- Understand the condition of and maintain infrastructure to maximize the life of the collection system.
- Properly operate and maintain the collection system to minimize financial impacts on customers.
- Adhere to the components of the SSMP.

An additional element of the Order is a Monitoring and Reporting Program. The Monitoring and Reporting Program requirements are included as **Appendix B** of this SSMP. The elements of this program, included in the original Order, were revised in 2008 by Order No. WQ 2008-0002-EXEC and in 2013 by SWRCB Order No. WQO 2013-0058-EXEC.

1.3 About This Document

The Arrowbear Park County Water District has prepared this SSMP to ensure compliance with the SWRCB Orders. Support materials such as large format drawings, relational databases, and voluminous documents may not be physically included in the SSMP. In these cases a reference will be provided within the SSMP that indicates the type, owner, and location of these support materials.

CHAPTER 2 – ORGANIZATION

This chapter describes The Arrowbear Park County Water District's organization and chain of communication.

2.1 Organization Compliance Requirements

The Order requires that the SSMP include the names and phone numbers of administrative and maintenance positions responsible for implementing measures in the SSMP program, including lines of authority by organization chart and a narrative explanation. In addition, a chain of communication for reporting SSO's from receipt of complaint is required. The intent of the Organization element is to identify persons, by name, responsible for implementing the SSMP, responding to SSO events, and meeting the SSO reporting requirements, including drafting and certifying reports and providing other information required by the CIWQS Online Database.

Legally Responsible Official (LRO), the MRP states that:

- All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
- Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
- Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
- The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.
- A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

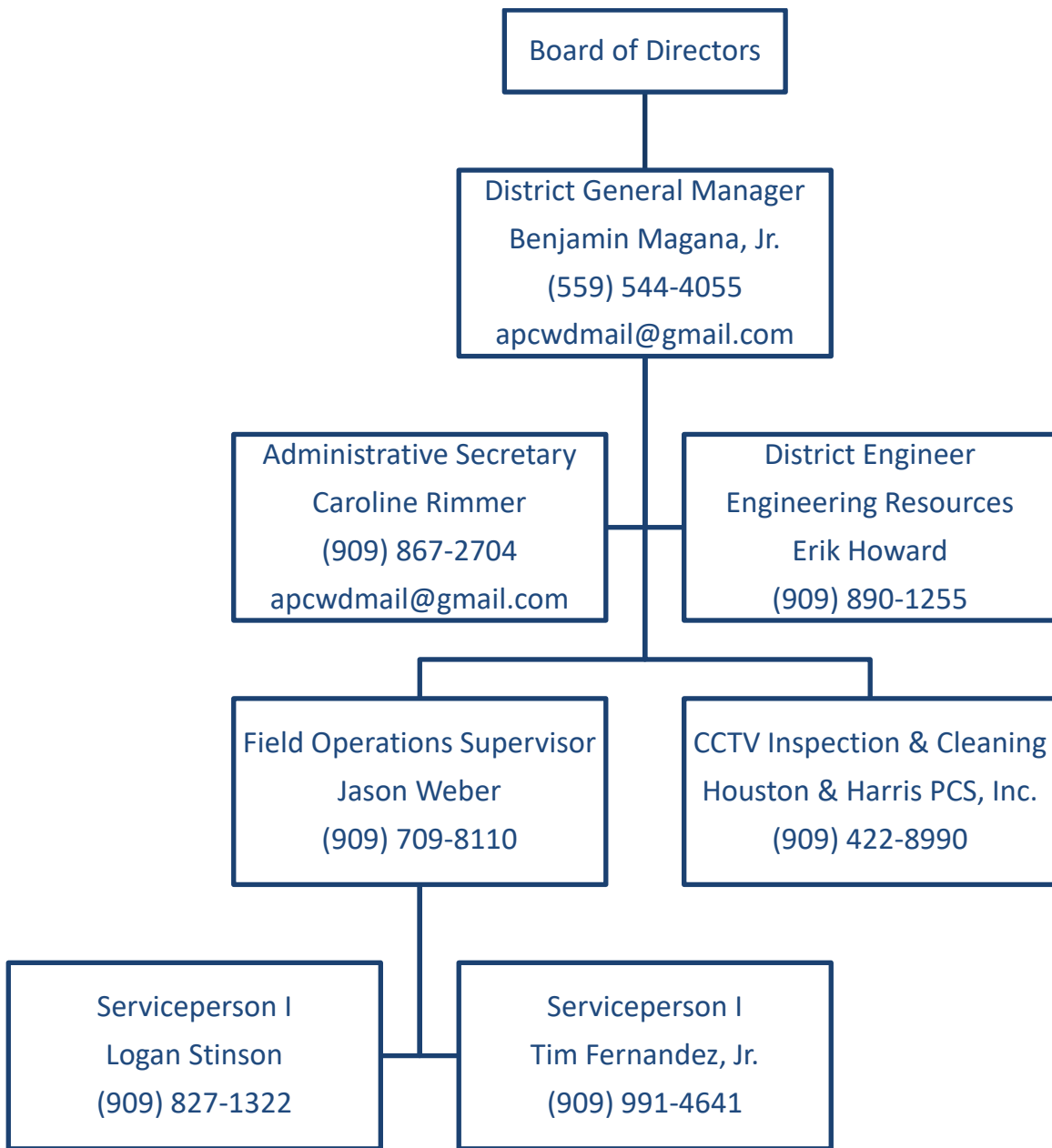
The District General Manager shall be the LRO for the District

2.2 Compliance Summary

The positions described provide current and sufficient staffing to operate the sewer system on a sustainable basis and to comply with all requirements of the Order.

2.3 Compliance Documents

The following organization chart presents the filled positions, names, and contact information for the individuals within the Arrowbear Park County Water District's organizational structure.



2.4 Roles and Responsibilities

The roles and responsibilities of each position in the organization chart are listed below:

Board of Directors

- Establishes Policy.
- Adopt SSMP.

District General Manager

- SSMP Management.
- Prepare public information documents.
- Receives SSO complaints or information.
- Allocates resources.
- Training of Personnel.
- Administers and enforces Sewer Rules and Regulations.
- Prepares wastewater collection system planning documents.
- Manages capital improvement program.
- Documents new and rehabilitated assets.
- Coordinates development and implementation of SSMP.
- Recommends policy.
- Authorizes outside contractors/consultants to perform services.

District Engineer

- Assists General Manager in preparing wastewater collection system planning documents.
- Assists General Manager managing capital improvement delivery system.
- Assists General Manager in documenting new and rehabilitated assets.
- Assists General Manager coordinating development and implementation of SSMP.

CCTV Contractor

- Performs annual cleaning and CCTV inspections of designated gravity sewers at the District's direction.
- Provides emergency services as needed at the District's direction.

Field Operations Supervisor/Sewer Department Chief Operator

- Routine Operation & Maintenance.
- Conduct inspections of sewer lateral construction.
- Conduct inspections of grease interceptors and reports.
- Recommend and review SSMP revisions.
- Provide input into Audit procedure.
- Supervises Servicepersons.

Servicepersons/24-Hour On-call Maintenance Technician (909-255-4324)

- Routine Operation & Maintenance.

Administrative Assistant

- Receives SSO inquiries, complaints and information.
- Provide Education Program information.
- Provide input into Audit procedure.

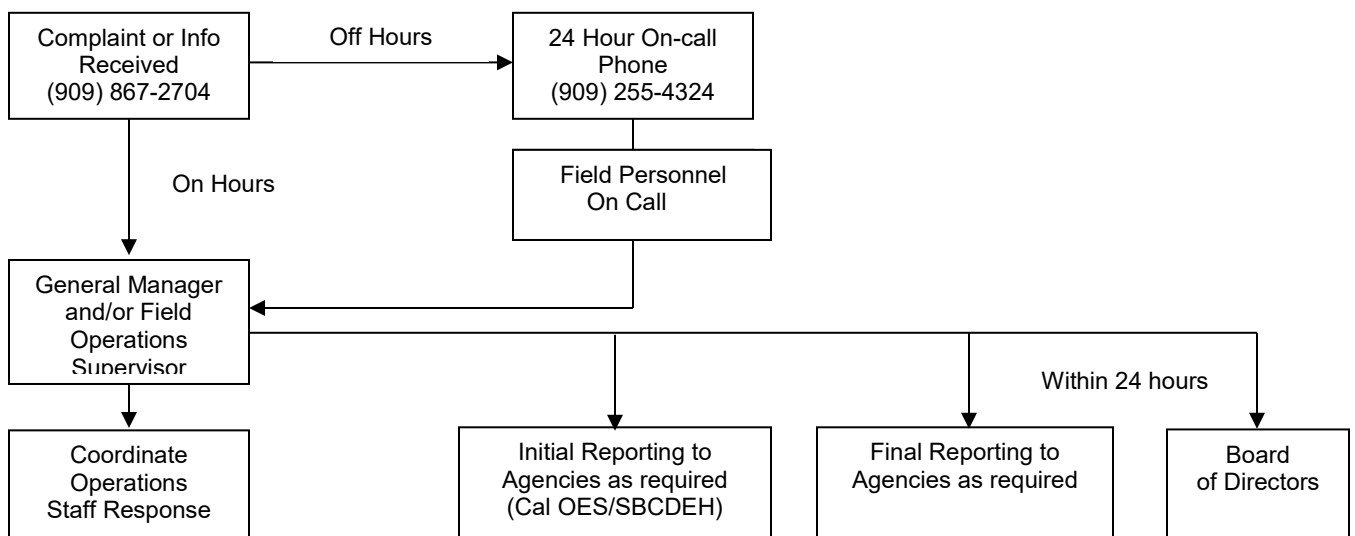
Emergency contact information is also on the District’s web-site arrowbearwater.org.

2.5 Chain of Communication Compliance Requirements

The Order requires a specified chain of communications for SSO reporting from receipt of complaint or other information through reporting to the State and Regional Water Boards and other regulatory agencies, as applicable.

2.6 Compliance Summary.

The following flow chart shows the chain of communication for reporting SSOs. It starts with the receipt of a complaint or other information and includes the title of the person responsible for reporting SSOs to the State and Regional Water Boards, San Bernardino County Department of Environmental Health (SBCDEH), and the California Emergency Management Agency (Cal OES). Reporting to the Cal OES is required only if the discharge is 1,000 gallons or larger, may imminently and substantially endanger human health or discharge to surface water. This flowchart is part of the SSO Reporting Guidelines process developed to manage the reporting process and is described in **Appendix F**.



2.7 Contact Information

The following provides the current names, titles, and phone numbers for SSO contacts provided in the chain of communication flow chart. All positions and information for those positions is also listed in section 2.3 above.

Board President

Sheila Wymer
909-867-2689

General Manager

Benjamin Magaña
909-867-2704

Field Operations Supervisor/Sewer Department Chief Operator

Jason Weber
909-709-8110

Administrative Assistant

Caroline Rimmer
909-867-2704

CHAPTER 3 – LEGAL AUTHORITY

3.0 Compliance Requirements

The SSMP must include the legal authority, through sewer use ordinances, service agreements, or other legally binding procedures to

- (a) prevent illicit discharges to its sanitary sewer system (including Inflow/infiltration from satellite wastewater collection systems and laterals, storm water, chemical dumping, unauthorized debris, 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 District;
- (d) limit the discharge of fats and greases and other debris that may cause blockages; and,
- (e) enforce any violation of its sewer ordinances.

3.1 Compliance Summary

The legal authority requirements of this Order are described in the Arrowbear Park County Water District Rules and Regulations Handbook, revised and approved by the Board of Directors at a regular Board of Directors Public Meeting on July 17, 2014. The pertinent sections of the District Rules and Regulations Handbook (Sections 1000, 2000, 2100, 2200, and 2300 are included in **Appendix C**. Compliance with the specific requirements of the Order is described below:

For part (a) - Compliance with the requirements of the Order is described in the Arrowbear Park County Water District Rules and Regulations Handbook for Sewer Service, Section 2020 – Prohibited Wastes.

For part (b) - Compliance with the requirements of the Order is described in the Arrowbear Park County Water District Rules and Regulations Handbook for Sewer Service, Section 2100 – Sewer System Design Criteria, Section 2200 – Sewer System Technical Specifications, and Section 2300 – Sewer System Standard Drawings.

For part (c) – Sewer laterals are not owned or maintained by the District. Private sewer laterals within the District will be installed per applicable codes as determined by the Authority Having Jurisdiction (AHJ), The County of San Bernardino.

For part (d) - Compliance with the requirements of the Order is described in the Arrowbear Park County Water District Rules and Regulations Handbook for Sewer Service, Sections 2000 – 2080, Sewer Service Policy.

For part (e) - Compliance with the requirements of the Order is described in the Arrowbear Park County Water District Rules and Regulations Handbook for Sewer Service, Section 1070 – Violations, Enforcement, and Policing.

3.2 Compliance Documents

The legal authority for enacting the SSMP programs and policies are included in the following documents:

- Arrowbear Park County Water District Rules and Regulations, current update.

The above referenced document is available at District Headquarters, in the office of the General Manager.

3.3 Roles and Responsibilities

The roles and responsibilities for enforcement of the legal authority to enact the SSMP programs and policies are derived from acts of the Board of Directors. Interpretation of the enabling State legislation giving authority to the District is provided by legal counsel.

The roles and responsibilities of the various District positions associated with the Rules and Regulations for Sewer Service are described below:

General Manager

- Administer sewer use policies.
- Apply design and construction regulations.
- Administer sewer maintenance policies.
- Enforce related Sewer Rules and Regulations provisions, which includes, but is not limited to, prosecuting violators and issuing notices and fines.

District Engineer

- Assists General Manager in preparing design and construction standards and regulations.

CHAPTER 4 – OPERATIONS AND MAINTENANCE PROGRAM

4.0 Compliance Requirements

A summary of the Operations and Maintenance Program requirements is as follows:

- a) Describe routine preventative 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 Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
- b) 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 storm water conveyance facilities;
- c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation action to address each deficiency. The program should include regular visual and TV 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 capital improvement plan 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 capital improvement plan;
- d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance and require contractors to be appropriately trained; and
- e) Provide equipment and replacement parts inventories, including identification of critical replacement parts.

4.1 Compliance Summary

Item (a) - The Arrowbear Park County Water District has an on-going Operations and Maintenance Program that includes a Preventative Maintenance Program. The District's Preventative Maintenance Program is outlined in the Operations and Maintenance Program, included as **Appendix D**.

Item (b) – The District maintains an up-to-date map of the system. Storm water conveyance is largely by overland flow. A reduced copy of the system map is included as **Appendix E**. Detailed maps are maintained at the District offices.

Items (c), (d) and (e) – Refer to the District Operation & Maintenance Program (**Appendix D**) for compliance with these items.

4.2 Compliance Documents

The documents supporting compliance with the requirements for Operations and Maintenance are as follows:

- Preventative maintenance program.
- CCTV and visual inspection program.
- Integrated Emergency Response Program (ERP).
- Wastewater collection system maps (**Appendix E**).

The above referenced documents are available at District Headquarters, in the office of the General Manager.

4.3 Roles and Responsibilities

The roles and responsibilities of staff supporting compliance with the Measures and Activities are as follows:

General Manager

- Sewer mapping.
- Sewer evaluation and rehabilitation activities.
- Training of Personnel.
- Development and budgeting of Capital Improvements.

District Engineer

- Assists General Manager with sewer mapping.
- Assists General Manager with sewer evaluation and rehabilitation activities.

Field Operations Supervisor/Sewer Department Chief Operator

- Sewer evaluation and rehabilitation activities.
- Routine operation, maintenance, and inspection.
- Training of personnel.

Servicepersons

- Routine operation, maintenance, and inspection.

CHAPTER 5 – DESIGN AND PERFORMANCE PROVISIONS

5.0 Compliance Requirements

- a) The design and construction standards & specifications for new sewer systems and other appurtenances and the rehabilitation and repair of existing sewer systems; and
- b) Procedures and standards for inspecting and testing the installation of new sewers and other appurtenances and for rehabilitation and repair projects.

5.1 Compliance Summary

The Arrowbear Park County Water District Rules and Regulations Handbook, revised and approved by the Board of Directors at a regular Board of Directors Public Meeting on July 17, 2014 contains the pertinent sections of the District Rules and Regulations Handbook (Sections 2100 – 2300) that stipulate design and construction requirements for new sewer systems and for the rehabilitation of existing systems (see **Appendix C** for pertinent sections). These requirements include standards and specifications for the design, construction, inspection and testing for sanitary sewer construction, repair and rehabilitation. These standards, specifications, inspection and testing requirements are reviewed and updated on an on-going basis.

5.2 Compliance Documents

The documents used for design and construction performance evaluations include the following:

- Arrowbear Park County Water District Rules and Regulations Handbook, most current version.
- Arrowbear Park County Water District Standard Plans.
- American Public Works Association (APWA) Standard Plans.
- Standard Specifications for Public Works Construction.
- San Bernardino County standard pipe sizing design criteria (as modified by the District) with regard to hydraulic capacity, slope, and velocity.

The above referenced documents are available at District Headquarters, in the office of the General Manager.

5.3 Roles and Responsibilities

The positions, roles, and responsibilities of the Design and Performance staff are as follows:

District General Manager

- Overall management of sewer design and construction.

- Development of design and construction standards.
- Review of plans submitted by developers.
- Issue construction permits.

District Engineer

- Assists General Manager with sewer design and construction.
- Assists General Manager with sewer development design and construction standards.
- Assists General Manager with sewer construction plan review.

Field Operations Supervisor/Sewer Department Chief Operator

- Field inspection of sewer lateral connection construction.

CHAPTER 6 – OVERFLOW EMERGENCY RESPONSE PLAN

6.0 Compliance Requirements

Under the Order, each discharger shall develop and implement an overflow Emergency Response Plan (ERP) that identifies measures to protect public health and the environment. At a minimum this plan shall include the following:

- a) Proper notification procedures so that primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- b) A program to ensure appropriate response to all overflows;
- c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected agencies (e.g. health agencies, regional water boards, water suppliers, surrounding cities, etc.) of all SSOs that potentially affect public health or reach 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 NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
- d) Procedures to ensure that appropriate staff and contract personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- e) Procedures to ensure emergency operations such as traffic/crowd control and other necessary emergency response.
- 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.

6.1 Compliance Summary

The Arrowbear Park County Water District has developed an SSO Emergency Response Plan (ERP), see **Appendix F**.

The ERP includes notification procedures. Emergency response will be a collaborative effort involving at a minimum local Agencies, Districts, and Wastewater Regulators. All measures are in place now and are part of our existing plan.

6.2 Compliance Documents

The compliance documents are as follows:

- SSO Emergency Response Plan (**Appendix F**)
- Wastewater Collection System Map (**Appendix E**)

A larger version and detailed section maps of the Collection System Map are available at District headquarters, office of the General Manager.

6.3 Roles and Responsibilities

The roles and responsibilities for the SSO emergency response are shown in Section 2.4.

CHAPTER 7 – FOG CONTROL PROGRAM

7.0 Compliance Requirements

The Order requires the District to evaluate its service area to determine if a Fats, Oils and Grease (FOG) control program is needed. If FOG is determined to be a problem the District must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sewer collection system. The program shall include the following elements as appropriate:

- 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, BMP requirements, and record keeping and reporting requirements;
- e) Authority to inspect grease producing facilities, enforcement authority, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
- f) 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.

7.1 Compliance Summary

The District has evaluated the effects of FOG on its sewer system and has determined it does not have a significant FOG problem. This determination is based on the fact that there is not a history of FOG related SSO occurrences. In addition, the District requires an interceptor for all non-domestic uses and all existing food service facilities within the District's service area have grease interceptors installed. Also, the District has an active program of monitoring and inspection of private grease interceptors.

FOG that does enter the system is controlled by the District's preventative maintenance program. As part of the District's FOG control program those segments of the system known to be a potential problem due to location, flat grades, or other conditions are cleaned on a more frequent basis than the remaining system.

The legal authority and other compliance requirements of this Order are described in the Arrowbear Park County Water District Rules and Regulations Handbook, revised and approved by the Board of Directors at a regular Board of Directors Public Meeting on July 17, 2014. The pertinent sections of the District Rules and Regulations Handbook (Sections 1000, 2000, 2100, 2200, and 2300) and are included in **Appendix C**.

7.2 Compliance Documents

Compliance with FOG control provisions of the Order is achieved through implementation of the following:

- Arrowbear Park County Water District Rules and Regulations for Sewer Service, most recent update.
- Grease interceptors.
- Increased cleaning of potential problem areas.

7.3 Roles and Responsibilities

The positions, roles, and responsibilities of the staff in the FOG control program are as follows:

General Manager

- Administer sewer use policies.
- Administer sewer maintenance policies.
- Enforce design and construction regulations.
- Permit sewer related improvements.
- Enforce Rules and Regulations provisions, which includes, but is not limited to, prosecuting violators and issuing notices and fines.

Field Operations Supervisor/Sewer Department Chief Operator

- Conduct inspections related to sewer related improvements.
- Schedules and conducts inspections of grease interceptors.
- Schedules increased maintenance intervals for potential problem areas.

CHAPTER 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

8.0 Compliance Requirements

As prescribed by the SWRCB Order, the District is required to prepare and implement a Capital Improvement Plan (CIP) that will provide adequate hydraulic capacity of key sewer elements. This plan must include the following:

- a) Evaluation: Actions needed to evaluate those portions of the sanitary sewer collection system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including 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;
- c) Capacity Enhancement Measures: The steps needed to establish 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, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding; and
- d) Schedule: 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 of Order 2006-0003-DWQ.

8.1 Compliance Summary

The District sewer system has not experienced any capacity related problems or SSOs. The existing subdivided area is largely sewer with the exception of the southeast corner and the 1987 annexation area (six large undeveloped lots). The District is approximately 60% built out. A system wide Sewer Master Plan was prepared in 1999. The Executive Summary to this report is included as **Appendix G**. The entire report is available in the Office of the General Manager. Very little growth has been experienced since the report was complete. A capacity evaluation of all collection sewers, the two inverted siphons and the lift station/force main was conducted. All were found to have adequate capacity for projected flows with the exception of a flat segment of sewer on Highway 18 (between Deep Creek and Dove Lane).

The District will continue to monitor system capacity with special attention to the Route 18 problem area as additional areas are developed and flows are added.

The District continues to make operational improvements to the system but no capacity related improvements are needed or anticipated for the foreseeable future.

Annually (typically in April), the Board of Directors and the General Manager meet to discuss Master Plan (including Sewer) and CIP needs for the next fiscal year as well as future needs. Funds for Master Plan and CIP are allocated during an Annual Budget Meeting (typically in May), and approved at the regular Board Meeting in June. The most current Annual Master Plan and Approved Budget is available at the District Office.

8.2 Compliance Documents

The documents used for system evaluation and capacity assurance are as follows:

- Annual Master Plan and Budget (including Sewer).
- Sewer Master Plan dated January 1999.
- Wastewater Collection System Map (**Appendix E**).

8.3 Roles and Responsibilities

The monitoring of system capacity and the development and implementation of a Master Plan and Capital Improvement Program to address capacity deficiencies is the responsibility of the District General Manager and Board of Directors.

General Manager

- Prepare Annual Master Plans and Budgets.
- Ongoing monitoring and evaluation of system capacity.

Field Operations Supervisor/Sewer Department Chief Operator

- Evaluate system capacity through regular monitoring of flow volume, pump run times, and system performance.

CHAPTER 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

9.0 Compliance Requirements

Under the Order there are five key monitoring, measurement, and program modification requirements. They are:

- 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 preventative maintenance 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.

9.1 Compliance Summary

The above requirements will be satisfied through the following actions:

Item (a) - Relevant information used to develop the SSMP activities will be maintained by the District Manager. This information will be in both hard and computer files. A filing system based on each element of the SSMP will be established and additional pertinent information added to the files for use in evaluation and update activities.

Item (b) - Monitoring of the implementation and effectiveness of each appropriate element of the SSMP will be tracked by the internal audit procedure established by the SSMP Program Audit Element (see Chapter 10).

Item (c) - The Arrowbear Park County Water District SSO history is excellent. This is partially due to the past and current preventative maintenance program. The effectiveness of the program is continually tracked by reviewing regular maintenance work as well as emergency and corrective measure work orders. The cause of the problem is determined and the existing preventive maintenance for the area is reviewed and modified if warranted.

Item (d) - SSMP elements will be evaluated every two years at a minimum as a result of the audit procedure. Deficiencies in existing program elements will be identified and revisions made where warranted. Personnel or procedural revisions will be made as they occur.

Item (e) - The District has experienced few SSO's and expects few in the future. However, should they occur they are reported through the California Integrated

Water Quality System (CIWQS). In addition, District maintenance staff will log the appropriate data so any trends can be identified.

9.2 Compliance Documents

The compliance documents are as follows:

- Sanitary Sewer Management Plan (SSMP) and preparation data.
- Annual audit documents.
- Preventative maintenance records.
- SSO data.

The above referenced documents are available at District Headquarters, in the office of the General Manager.

9.3 Roles and Responsibilities

The positions, roles, and responsibilities are as follows:

Board of Directors

- Provide input to SSMP.
- Adopt SSMP Updates.

District General Manager

- Monitor implementation of plan.
- Initiate review and update of plan.
- Obtain input from staff and make appropriate updates to plan.
- Input monthly SSO information on the CIWQS web-site.
- Input annual required information on the CIWQS web-site.
- Assess the success of the preventative maintenance program.
- Identify and illustrate SSO trends, including frequency, location, and volume.

Field Operations Supervisor/Sewer Department Chief Operator

- Recommend plan revisions.
- Provide comments on plan updates.

CHAPTER 10 – SSMP PROGRAM AUDITS

10.0 Compliance Requirements

As a part of the SSMP the Arrowbear Park County Water District 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. The audit shall focus on evaluating the effectiveness of the SSMP and the Arrowbear Park County Water District's compliance with the SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them.

10.1 Compliance Summary

The Arrowbear Park County Water District will conduct an internal audit of the SSMP at two year intervals. Audits will be initiated and managed by the District General Manager using the Audit Report Form included as **Appendix H**. In addition to identifying deficiencies the audit will review the effectiveness of the SSMP elements. Deficiencies identified will be addressed and mitigation measures identified and scheduled for action. Strategies to correct deficiencies will be developed by the District General Manager and the Sewer Department Supervisor.

The audit procedure shall begin in January of 2014 and every odd numbered year following. The audit report shall be completed by March 1 and presented to the District Board of Directors at its meeting in March. This schedule will allow the audit to be complete in time for preparation Master Plan and the following fiscal year budget so that appropriate funds can be budgeted for deficiency mitigations.

The audit shall also review the Audit Report Form and procedure and recommend needed revisions.

10.2 Compliance Documents

The documents used for audit evaluations include the following:

- SSO reports.
- Sewer maintenance records.
- SSMP Program Audit Element.
- SSMP Audit Report Form.

The above referenced documents are available at District Headquarters, in the office of the District General Manager.

10.3 Roles and Responsibilities

The positions, roles, and responsibilities of the audit staff are as follows:

Board of Directors

- Provide guidance and policy direction as needed to correct deficiencies or increase efficiencies.
- Approve SSMP Audit.

District General Manager

- Conduct internal audit and prepare reports.
- Collect data on applicable program elements and recommend revisions.

Field Operations Supervisor/Sewer Department Chief Operator

- Provide data on applicable program elements.
- Provide SSO records.
- Review maintenance elements of SSMP to identify deficiencies and recommend revisions.

CHAPTER 11 – COMMUNICATIONS

11.0 Compliance Requirements

The Arrowbear Park County Water District shall communicate on a regular basis with the public on the development, implementation, performance, and updates of this SSMP. The communication program shall provide the public the opportunity to provide input as the program is developed and implemented.

11.1 Compliance Summary

The Arrowbear Park County Water District communications program will consist of the following short and long-term measures:

- Prepare and distribute newsletter releases regarding development and implementation of the SSMP.
- Place SSMP on District web-site.
- Present SSMP to District Board of Directors for approval at a public meeting.
- Internal audit reports and meetings.
- Prepare Annual/Audit report to District Board of Directors on SSMP status and present at public meeting.

Further information regarding the SSMP communication procedures and activities are described further in **Appendix I**.

11.2 Compliance Documents

- Written reports
- Newsletter releases
- Information on the District web-site
- Mail inserts
- Audit reports

The above referenced documents are available at District Headquarters, in the office of the District General Manager.

11.3 Roles and Responsibilities

The positions, roles, and responsibilities of the communications staff are as follows:

District Manager

- Development and publishing of public information.
- Develop District Board of Director reports.
- Prepare annual/audit reports.