

**Muni Wastewater Project List (20-Year)  
(Prioritization Results- FY 13)**

<b>Rank</b>	<b>Title</b>	<b>Description</b>	<b>Facility Type</b>
1	East Mission Gorge Force Main (EMGFM)	<p><b>Background:</b> The East Mission Gorge Force Main (EMGFM) terminates at the North Mission Valley Interceptor Sewer near the intersection of Fairmount Avenue and Twain Avenue. The force main is a 48-inch diameter concrete cylinder pipe approximately 8-miles in length and constructed in 1993, at the same time as East Mission Gorge Pump Station. The force main's concrete lining is deteriorating from sulfuric acid build up. The force main was assessed and recommended for rehabilitation.</p> <p><b>Scope:</b> Rehabilitation of the East Mission Gorge force main</p>	Pipeline
2	Alvarado Trunk Sewer Phase 4	<p><b>Background:</b> Alvarado Trunk Sewer (TS #7) was originally built between 1952 and 1968. A few segments were installed in 1986, and only a small portion close to Adobe Falls Park was replaced and realigned in 2000 (Phase 2). Alvarado Trunk Sewer is approximately 4.26 miles long. It is located in Council District 7 along I-8 east of I-15 and conveys flow from La Mesa, Lake Murray Trunk Sewer and surrounding areas. The size of the pipe varies from 15 to 33 inches in diameter. The pipe material is mostly Vitrified Clay (VC). The trunk sewer has odor issues in surrounding condominium complex. The trunk sewer's capacity was evaluated and the hydraulic model predicted that it's reaching near capacity.</p> <p><b>Scope:</b> 1. Upsize approximately 3.2 miles with some re-alignment and slope improvements. 2. Construct: 2,678-ft of 30-inch pipe, 5,392-ft of 33-inch pipe, 2,230-ft of 36-inch pipe, 4,555-ft of 39-inch pipe, 1,777-ft of 48-inch pipe</p>	Pipeline
4	Sewer Main Replacements	<p><b>Background:</b> This project provides for the replacement of sewer mains that are in a deteriorated condition or are undersized. This project will help to reduce sewer spills while reducing maintenance costs and extending the service life of sewer pipelines.</p> <p><b>Scope:</b> Replace approximately 20 miles of deteriorated and undersized sewer mains ranging from 8-inch to 12-inch for the replacement at various locations within the City limits. The assumption is based on facilities near/reach its useful life.</p>	Pipeline
3	Pipeline Rehabilitation	<p><b>Background:</b> This project provides for the extension of the useful life of sewers and manholes, improvements in the level of service to the residents of San Diego, and compliance with regulatory agencies' standards. This project will help to reduce sewer spills while reducing maintenance costs and extending the service life of sewer pipelines.</p> <p><b>Scope:</b> Rehabilitate approximately 25 miles of deteriorated sewers ranging from 8-inch to 12-inch and manholes rehabilitation, and repair at various locations within the City limits. The assumption is based on facilities near/reach its useful life.</p>	Pipeline
5	Tecolote Canyon TS	<p><b>Background:</b> Tecolote Canyon Trunk Sewer (TS #8) was originally built in the 1950's and is approximately 6.5 miles long. It is located in the Clairemont Mesa, Bay Park, and Linda Vista communities, District 6. The size of the pipe varies from 12 to 27 inches in diameter. The pipe material is mostly Vitrified Clay (VC). The trunk sewer's capacity was evaluated and the hydraulic model predicted that it will reach the capacity between 2017-2020. The trunk sewer's condition was assessed in early 2012 and recommended for improvement as described in the scope.</p> <p><b>Scope:</b> 1. Proposed to replace (upsized) 17,400 feet of pipes. 2. Proposed to rehabilitate 1,300 feet of pipes.</p>	Pipeline
6	Pacific Beach Drive TS	<p><b>Background:</b> Pacific Beach Drive Trunk Sewer (TS #64) was originally built in the 1970's and is approximately 1.3 miles long. It is located in Pacific Beach community, District 2. The size of the pipe varies from 12 to 18 inches in diameter. The pipe material is Vitrified Clay (VC). The following scope of work is based on previous condition assessment of the pipe. CCTV assessment is needed to confirm the quantity that was specified in previous condition assessment scope.</p> <p><b>Scope:</b> Proposed to replace 6,200 feet of pipes.</p>	Pipeline
7	South Mission Valley Trunk Sewer Phase 2	<p><b>Background:</b> South Mission Valley Trunk Sewer (TS#6) was built mostly between 1947 and 1958. It is approximately 6.5 miles long, located in Mission Valley, District 6. South Mission Valley Trunk Sewer consists of 18 to 36-inch Vitrified Clay pipes. The trunk sewer's capacity was evaluated and the hydraulic model predicted that approximately 2.5 miles it will reach the capacity by 2025. The remaining segments have adequate capacity, CCTV assessment will be needed to confirm if replacement, rehabilitation or repair is needed. The scope of work may be altered by this condition assessment.</p> <p><b>Scope:</b> 1. Proposed to upsize and realign 3,073-ft of 27-inch pipe to 36-inch 2. Proposed to upsize 4,828-ft of 27-inch pipe to 30-inch, and upsize 4,899-ft of 24-inch pipe to 27-inch</p>	Pipeline
8	Carroll Canyon Trunk Sewer	<p><b>Background:</b> Carroll Canyon Trunk Sewer (TS #49) was originally built in 1970 and is approximately 9.1 miles long. It is located in the Mira Mesa and Sorrento Valley communities, District 5. The size of the pipe varies from 15 to 42 inches in diameter. The pipe material is Vitrified Clay (VC) and Polyvinyl Chloride (PVC). The trunk sewer's capacity was evaluated and the hydraulic model predicted that it will reach the capacity by 2030. The remaining segments have adequate capacity, CCTV assessment is needed to confirm if replacement, rehabilitation or repair is needed. The scope of work may be altered by this condition assessment.</p> <p><b>Scope:</b> Proposed to replace approximately 30,000 feet of pipes as follows: Upsize: 4,135-ft of 18-inch to 21-inch, 5,627-ft of 21-inch to 24-inch, 2,403-ft of 24-inch to 30-inch, 10,375-ft of 27-inch to 30-inch, 6,055-ft of 30-inch to 36-inch, 726-ft of 33-inch to 36-inch</p>	Pipeline
9	Bayshore TS (plus d/s portion of PS4)	<p><b>Background:</b> Bayshore Trunk Sewer (TS#39) was built in 1952 and is approximately 6,200 feet long. It is located in Roseville community, District 2. The trunk sewer consists of 18-inch and 21-inch Vitrified Clay pipes. The trunk sewer's capacity was evaluated and the hydraulic model predicted that it will reach the capacity between 2017-2020. In order to resolve the capacity issue, the following scope of work is required. For trunk sewer condition, CCTV assessment is needed to confirm if replacement, rehabilitation or repair is needed..</p> <p><b>Scope:</b> Extend the PS 4 force main by 2,200 ft connecting to the bigger pipe at the further downstream of trunk sewer.</p>	Pipeline

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10	Second La Jolla-Pacific Beach TS	<p><b>Background:</b> Second La Jolla – Pacific Beach Trunk Sewer (TS #61) was originally built in the 1960’s and is approximately 6.8 miles long. It is located in the La Jolla and Pacific Beach communities, Districts 1 &amp; 2. The size of the pipe varies from 18 to 48 inches in diameter. The pipe material is Vitrified Clay (VC) and Reinforced Concrete Pipe (RCP). The following scope of work is based on previous condition assessment of the pipe. The remaining segments have adequate capacity, CCTV assessment will be needed to confirm if replacement, rehabilitation or repair is needed. The scope of work may be altered by this condition assessment.</p> <p><b>Scope:</b> 1. Proposed to replace 3,500 feet of pipes. 2. Proposed to rehabilitate 5,600 feet of pipes.</p>	Pipeline
11	Jamacha Road TS	<p><b>Background:</b> Jamacha Road Trunk Sewer (TS #27) was originally built in the late 1970’s and is approximately 4.8 miles long. It is located in the Jamacha Lomita, Skyline, Encanto, and Valencia Park communities, District 4. The size of the pipe varies from 10 to 30 inches in diameter. The pipe material is Vitrified Clay (VC). The following scope of work is based on previous condition assessment of the pipe. CCTV assesment is needed to confirm the quantity that was specified in previous condition assessment scope.</p> <p><b>Scope:</b> 1. Proposed to replace 6,300 feet of pipes. 2. Proposed to rehabilitate 1,900 feet of pipes.</p>	Pipeline
12	SPS 23T - 1190 Cactus Road	<p><b>Background:</b> (FY 2009 Condition Assessment) Station constructed in 1987 as temporary station. Mechanical/Electrical upgrades in 2004. The station capacity is 2,000 gpm. The original plan was to abandon the station when the Otay Mesa Trunk Sewer was installed. The trunk sewer is no longer considered viable. The existing station does not comply with SDG criteria and has high maintenance costs caused by self-priming pumps and difficult access to wetwell. Station electrical gear is located underground and is potentially subject to flooding and catastrophic failure. Pump reliability is currently an issue. The station requires a second force main, and additional storage capacity. BCE will be conducted to determine most appropriate way to address issues.</p> <p><b>Scope:</b> Based on Phase 1 &amp; 2 upgrades proposed in 2009 PBS&amp;J Otay Mesa Master Plan Update report, project construction cost includes new pump, second force main, and additional emergency storage volume, estimated adequate up to year 2025. The project will need to consider permanent standby generator, and current maintainance of existing station configuration of self priming pumps and below grade electrical.</p> <p>Note: Background, scope and cost estimate are based on existing 2009 report by PBS&amp;J. The report and data presented herein need to be updated to reflect the revised project development schedule and patterns projected for the area.</p>	Pump Station
13	Mira Mesa TS	<p><b>Background:</b> Mira Mesa Trunk Sewer (TS#42) was built in the early 1960’s and is approximately 7.4 miles long. It is located in the Mira Mesa community, District 5. The size of pipe varies from 12 to 30 inches in diameter. The pipe material is made of Vitrified Clay (VC). The following scope of work is based on previous condition assessment of the pipe. CCTV assesment is needed to confirm the quantity that was specified in previous condition assessment scope.</p> <p><b>Scope:</b> Proposed to replace approximately 9,900 feet of pipes.</p>	Pipeline
14	SPS 72 - 11928 Paseo Lucido	<p><b>Background:</b> Per FY 2010 Muni PS Condition Assessment, pump station constructed in 1983 and upgraded to add building to house pumps and electrical equipment. Station utilizes self priming pumps and does not conform to SDG requirement. Most important non-compliant issues is safety in that the wetwell access in from within the building. Additional SDG non-compliant requirements are: 2nd force main, additional emergency storage, and emergency generator. Station pump performance is below the design value and results in non-self cleaning velocities. Force main pressure reading indicate potential blockage. Building requires repairs to roof. BCE will be conducted to address all issues and refine the proposed scope to bring station into compliance with SDG requirements.</p> <p><b>Scope:</b> Add 2nd force main 6 in dia. pvc approx 1100 ft long; construct new wetwell with submersible pumps including providing sufficient emergency storage and valve chamber; provide standby generator; repair building roof.</p>	Pump Station
15	PS 77 A/B Upgrade	<p><b>Background:</b> SPS 77A and 77B along with their forcemain, comprise a system used to transfer of wastewater from the Rancho Bernardo area under Lake Hodges to the Escondido Hale Wastewater Treatment Plant. Several mechanical upgrades are desired to improve the operation and reliability of the system.</p> <p><b>Scope</b> 1. Replacement of the existing 14-in. swing check valves on the remaining two of the four pump sets at 77A with Val-Matic® SurgeBuster® Check Valves. SurgeBuster check valves were installed on two pump sets and have provided much improved performance with regard to reduction in back flow and water hammer reduction on pump shutdown. SurgeBuster check valves are also less likely to become rag bound. 2. Replace two existing 20-in. swing check valves located on the forcemain in vaults at 77B with Val-Matic Surge Buster Valves for improved performance as above and reduced potential for becoming rag bound. 3. Retrofit the first stage pump in each of the four sets of pump with Cornell's cutter style impeller and suction plate. This retrofit will reduce the ragging of the pumps and improve reliability. The cutter impeller retrofit will be tested in SPS 5 in the near future. 4. Rehabilitate two influent screens at 77A to restore reliability.</p>	Pump Station
16	Mission Village TS	<p><b>Background:</b> Mission Village Trunk Sewer (TS #35) was originally built in the late 1950’s and is approximately 3.7 miles long. It is located in the Mission Valley East and Serra Mesa communities, District 6. The size of the pipe varies from 10 to 24 inches in diameter. The pipe material is Vitrified Clay (VC) and Polyvinyl Chloride (PVC). The following scope of work is based on previous condition assessment of the pipe. CCTV assesment is needed to confirm the quantity that was specified in previous condition assessment scope.</p> <p><b>Scope:</b> 1. Proposed to replace 8,100 feet of pipes. 2. Proposed to rehabilitate 500 feet of pipes.</p>	Pipeline

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17	Kearny Mesa TS	<p><b>Background:</b> Kearny Mesa Trunk Sewer (TS #17) was originally built in the early 1960's with 40% upgraded pipelines in the late 1970's and is approximately 11.5 miles long. It is located in the Kearny Mesa, Serra Mesa, Birdland, and Mission Valley East communities, District 6. The size of the pipe varies from 12 to 36 inches in diameter. The pipe material is Vitrified Clay (VC) and Polyvinyl Chloride (PVC). The following scope of work is based on previous condition assessment of the pipe. CCTV assesment is needed to confirm the quantity that was specified in previous condition assessment scope.</p> <p><b>Scope:</b> 1. Proposed to replace 11,300 feet of pipes. 2. Proposed to rehabilitate 11,700 feet of pipes.</p>	Pipeline
18	SPS 5 -1795 Harbor Drive	<p><b>Background:</b> Per FY 2010 MUNI PS Condition Assessment, station constructed in 1997 and upgraded in 2004. Station tributary area includes Convention Center. Station is plagued with chronic pump problems with typically only 3 of 4 pumps operable. Peak wet weather flow approaches capacity of 2 pumps. Problems appear associated with both the configuration of the wetwell inlet (which deposits solids over one pump inlet) and with high level of rags and debris in wastewater flow. Several valves not functional, making pump repair difficult. Flow meter not functioning. Convention Center expansion will increase flows. Current odor control system consisting of activated carbon canisters is difficult to service due to difficulty of disposing of spent carbon. BCE will be conducted to refine the proposed scope which will determine the best way to address issues and plan for potential increase in flow from Convention Center expansion.</p> <p><b>Scope:</b> Const Cost Estimate based on Pump retrofit for rag handling, repair/replacement of non-functioning pump isolation valves and 2 check valves. Upgraded odor control system.</p>	Pump Station
19	SPS 86 - 5890 Copley Dr.	<p><b>Background:</b> Per FY 2010 Muni PS Condition Assessment, station constructed in 1994 and does not comply with SDG on several issues, most importantly on providing sufficient access area for equipment maintenance. Station design prohibits installation of substitute (other manufactures') unit. Valve chamber floods and pump station flow meter does not function. Based on projected WWF, the design capacity is not adequate. Flow received from MBC has excessive grit and rocks entered the wet well. BCE will be conducted to refine the proposed scope which will determine most appropriate approach to address issues.</p> <p><b>Scope:</b> Upgrade pump station to provide adequate capacity includes: provide sufficient access for equipment maintenance, install units compatible with other manufacture parts, new flow meter, sump pump for valve chamber, and consider in configuring the influent before entered the wet well to prevent grit and rocks .</p>	Pump Station
20	SPS 85- 11513 Alborado Dr. (2nd FM)	<p><b>Background:</b> (FY2010 Muni PS Condition Assessment) Station constructed in 1993 and utilizes self-priming pumps. Station has single 4-in force main. Measured pump capacity of 35 to 50 gpm is 25 to 35% of pump design. Force main exhibits headloss much higher than expected (32 ft vs. 4 ft.) Indicating partial plugging. Noticeable grease in wetwell, possible source of plugging. The addition of a redundant force main is needed as a backup in case of a breakdown of the existing force main and for maintainance purposes.</p> <p><b>Scope:</b> Install a 2nd force main</p>	Pump Station
21	SPS 76 - 18695 Pomerado Rd	<p><b>Background:</b> The existing portable generator is old and unreliable. Spare parts are not available.</p> <p><b>Scope:</b> Install a new 100kW generator and auto transfer switch</p>	Pump Station
22	SPS 16 - 3599 BAYSIDE WALK (2nd FM)	<p><b>Background:</b> This pump station currently has a single PVC force main. In order to avoid the potential of sewage spills, the addition of a redundant force main is needed as a backup in case of a breakdown of the existing force main and for maintainance purposes.</p> <p><b>Scope:</b> Install a 2nd force main (8 in dia, 40 ft long) and valve chamber</p>	Pump Station
23	SPS 14 - 3214 BAYSIDE WALK (2nd FM)	<p><b>Background:</b> This pump station currently has a single PVC force main. In order to avoid the potential of sewage spills, the addition of a redundant force main is needed as a backup in case of a breakdown of the force main and for maintainance purposes.</p> <p><b>Scope:</b> Provide 2nd force main (10 in dia, 662 ft long) and valve chamber</p>	Pump Station
24	SPS 13- Tolumaine Beach PS (2nd FM)	<p><b>Background:</b> Per FY 2009 Condition assessment, pump station constructed in 1962 and upgraded in 1982. Pump station structural and mechanical upgrades are currently in design. Additional storage volume for a 2 hour holding capacity and 2nd force main are not covered in the current upgrade and it's required by SDG. Existing force main is located in environmentally sensitive area.</p> <p><b>Scope:</b> Provide new dual 4-in. PVC forcemains and abandon old forcemains in environmentally sensitive area. Provide a 6,000 gallon capacity storage tank to provide 2 hrs of holding capacity.</p>	Pump Station
25	SPS 25A - 6309 Via Cabrer (2nd FM)	<p><b>Background:</b> Currently SPS 25A has a single force main and emergency storage capacity equivalent to approximately 1.0 hour at modeled maximum wet weather flow of 49 gpm. Average dry weather daily flow is approximately 3 to 4 gpm. Station is equip for portable engine/generator connection.</p> <p><b>Scope:</b> Install a 2nd force main (4 in dia, 600 ft long) and valve chamber, and increase storage capacity to approximately 2 hrs. (req'd volume approx 3000 gal.)</p>	Pump Station
26	SPS 77 A/B 2nd Forcemain	<p><b>Background:</b> SPS 77A /77B along with their forcemain, comprise a system used to transfer of wastewater from the Rancho Bernardo area through a forcemain under Lake Hodges to the Escondido Hale Wastewater Treatment Plant (HWTP). There are dual forcemains aligned under the lake, however, the land portions between the pump station to inlet connection of the dual forcemains and the outlet connection of the dual forcemains to HWTP are configure of a single forcemains.</p> <p><b>Scope</b> Install a second 20" forcemain though the land portion, which is an environmentally sensitive area.</p>	Pump Station