

**Municipal Wastewater Project List
(Prioritization Results- As of January 2012)**

Rank	Title	Description	Facility Type
1	Pipeline Replacement (AA)	<p>Background: This project is for the replacement of sewer mains that are in a deteriorated condition or are undersized. This project will help meet EPA requirements to reduce sewer spills while reducing maintenance costs and extending the service life of sewer pipelines. This project is consistent with the applicable community plans and is in conformance with the City's General Plan.</p> <p>Scope: Replace approximately 20 miles of deteriorated and undersized sewer mains at various locations within the City limits. The assumption is based on facilities near/reaching the end of its useful life.</p>	Pipeline
2	Pipeline Rehabilitation (AA)	<p>Background: This project is for the rehabilitation of sewer mains and manholes to extend their useful life, improve the level of service to the residents of San Diego, and comply with regulatory agencies' standards. This project will help meet EPA requirements to reduce sewer spills while reducing maintenance costs and extending the service life of sewer pipelines. This project is consistent with applicable community plans and is in conformance with the City's General Plan.</p> <p>Scope: Rehabilitate and repair approximately 20 miles of deteriorated sewers and manholes at various locations within the City limits. The assumption is based on facilities near/reaching the end of its useful life.</p>	Pipeline
3	Bayshore TS (plus d/s portion of PS4)	<p>Background: 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. The condition was also assessed and recommended for improvement as described in the scope.</p> <p>Scope: 1. Proposed to replace 1,900 feet of pipes (new parallel alignment) 2. Proposed to rehabilitate 2,000 feet of pipes (existing alignment)</p>	Pipeline
4	SPS 23T - 1190 Cactus Road	<p>Background: (FY 2009 Condition Assessment) This station has a 2000gpm capacity and was constructed in 1987 as temporary station. The station received Mechanical/Electrical upgrades in 2004. The original plan was to abandon station when Otay Mesa Trunk Sewer was installed. The trunk sewer no longer considered viable. The existing station does not comply with SDG&E criteria and has high maintenance costs caused by self-priming pumps and difficult access to the wetwell. Station electrical gear is located underground and is potentially subject to flooding and catastrophic failure. Pump reliability is currently an issue. Station requires second force main, and additional storage capacity</p> <p>Scope: Submit station to BCE process to determine most appropriate way to address issues. (Project construction cost amount based on Phase 1 & 2 upgrades in 2009 PBS&J Otay Mesa Master Plan Update report, which includes a new pump, second force main, and additional emergency storage volume, estimated adequate up to year 2025. Should also consider permanent standby generator. Maintains existing station configuration of self priming pumps and below grade electrical.)</p>	Pump Station
5	Kearny Mesa TS	<p>Background: 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 and Polyvinyl Chloride. The trunk sewer's condition was assessed and recommended for improvement as described in the scope.</p> <p>Scope: 1. Proposed to replace 11,300 feet of pipes. 2. Proposed to rehabilitate 11,700 feet of pipes.</p>	Pipeline
6	Second La Jolla-Pacific Beach TS	<p>Background: 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 & 2. The size of the pipe varies from 18 to 48 inches in diameter. The pipe material is Vitrified Clay and Reinforced Concrete Pipe. The trunk sewer's condition was assessed and recommended for improvement as described in the scope.</p> <p>Scope: 1. Proposed to replace 3,500 feet of pipes. 2. Proposed to rehabilitate 5,600 feet of pipes.</p>	Pipeline
7	Jamacha Road TS	<p>Background: 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. The trunk sewer's condition was assessed and recommended for improvement as described in the scope.</p> <p>Scope: 1. Proposed to replace 6,300 feet of pipes. 2. Proposed to rehabilitate 1,900 feet of pipes.</p>	Pipeline
8	SPS 86 - 5890 Copley Dr.	<p>Background: (FY2010 Muni PS Condition Assessment) This station was constructed in 1994 and does not comply with SDG&E criteria on several issues, most importantly providing sufficient access area for equipment maintenance. The pump station projected wetweather flow is higher than the design rating. The station receives domestic flow from MBC. Pump reliability is a constant issue (low bearing and seal life and volute wear due to grit and rocks reported in wetwell). Spare parts for PACO pumps difficult to procure. Station design prohibits installation of substitute (other manufactures') unit. Valve chamber floods and pump station flow meter does not function.</p> <p>Scope: Submit station to BCE process to determine most appropriate approach to address the capacity issue (increase capacity or divert MBC flows) and address the other issues.</p>	Pump Station
9	SPS 5 -1795 Harbor Drive	<p>Background: (FY2010 MUNI PS Condition Assessment) This station was constructed in 1997 and upgraded in 2004. Station tributary area includes the 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 are not functional and make pump repair difficult. Flow meter is 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 spent carbon.</p> <p>Scope: Submit station to BCE to determine the best way to address present problems and plan for potential increase in flow from Convention Center expansion. Construction cost estimate based on pump retrofit for rag handling, upgrade in pump motor HP, upgrade to E/G, repair/replacement of 4 pump isolation valves, upgraded odor control system (biofilter assumed \$250,000 in place of carbon)</p>	Pump Station
10	Pacific Beach Drive TS	<p>Background: 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. The trunk sewer's condition was assessed and recommended for improvement as described in the scope.</p> <p>Scope: Proposed to replace 6,200 feet of pipes.</p>	Pipeline
11	Tecolote Canyon TS	<p>Background: Tecolote Canyon Trunk Sewer (TS #8) was originally built in the 1950's and is approximately 6.5 miles long. It is located in 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. 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 and recommended for improvement as described in the scope.</p> <p>Scope: 1. Proposed to replace 13,700 feet of pipes (670 feet due to condition). 2. Proposed to rehabilitate 1,300 feet of pipes.</p>	Pipeline

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12	Mission Village TS	Background: 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 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 and Polyvinyl Chloride. The trunk sewer's condition was assessed and recommended for improvement as described in the scope. Scope: 1. Proposed to replace 8,100 feet of pipes. 2. Proposed to rehabilitate 500 feet of pipes.	Pipeline
13	SPS 72 - 11928 Paseo Lucido	Background: (FY2010 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 are: 2nd force main required, additional emergency storage required, and emergency generator required. 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. Scope: Submit station to BCE process to address all issues and determine the most appropriate approach to bring station into compliance with SDG requirements and repairs: 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.	Pump Station
14	SPS 45 - 9888 La Jolla Farms Road	Background: (FY2010 Muni PS Condition Assessment) This pump station was constructed in 2005 with a capacity of 2,000 gpm @ 260 ft. with 200 hp pumps. Pumps measured capacity in 2,700 to 2,800 resulting in potential cavitation and minor motor overload. One variable speed unit is out of service and a check valve is leaking causing noticeable backflow. Scope: Submit station to BCE to determine most cost effective approach to address operational problems. One approach would be to trim impellers and modify pump inlet piping to address cavitation and motor overloading. Bypass or replace existing VFD and continue to operate station as constant speed.	Pump Station
15	PS 77 A/B Upgrade	Background: 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. Scope 1. Replace the existing 14-in. swing check valves on the remaining two of the four pump sets at 77A with Val-Matic® Surge Buster® Check Valves. Surge Buster 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. Surge Buster check valves are also less likely to become ragbound. 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.	Pump Station
16	Mira Mesa TS	Background: Mira Mesa Trunk Sewer (TS#42) was built in the early 1960's and is approximately 7.4 miles long. It is located in 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. The trunk sewer's condition was assessed and recommended for improvement as described in the scope. Scope: Proposed to replace approximately 9,900 feet of pipes	Pipeline
17	SPS 85- 11513 Alborado Dr.	Background: (FY2010 Muni PS Condition Assessment) This station was constructed in 1993 and utilizes self-priming pumps. The 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. Scope: Check force main to confirm plugging, clean as necessary. Provide 2nd force main. Address other items such as lack of gas detection in pump room.	Pump Station
18	SPS 13- Tolumaine Beach PS	Background: (FY209 Condition assessment) Pump station constructed in 1962 and upgraded in 1982. Pump station structural and mechanical upgrade is currently in design. Additional storage volume for a 2 hour holding capacity and 2nd force main are not covered in the current upgrade but required by SDG. Scope: Add 2nd force main - 4-in PVC at approx 210 ft. and add Approximately 60,000 gal emergency storage tank volume (based on estimated peak flow of approx 60 gpm per Municipal Pump Station Flow Data Report)	Pump Station
19	SPS 25A - 6309 Via Cabrer New	Background: 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 has hookup for portable engine/generator. Scope: Provide 2nd force main (4 in dia, 600 ft long) and valve chamber, and increase storage capacity to approximately 2 hrs. (required volume approx 3000 gal.)	Pump Station
20	East Mission Gorge Force Main (EMGFM)	Background: 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, same time as East Mission Gorge Pump Station. The force main was assessed and recommended for improvement as described in the scope. Scope: The rehabilitation method is based on downsizing of the entire 8-miles pipeline to 30 inch inside diameter using HDPE slip lining to provide the desired minimum velocity of 5 fps.	Pipeline
21	SPS 22	Background: The ventilation system is corroded due to extensive salt water. Scope: Corrective measures need to be made to resolve the problem.	Pump Station
22	SPS 16 - 3599 BAYSIDE WALK	Background: 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. Scope: Provide 2nd force main (8 in dia, 40 ft long) and valve chamber	Pump Station
23	SPS 14 - 3214 BAYSIDE WALK	Background: 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. Scope: Provide 2nd force main (10 in dia, 662 ft long) and valve chamber	Pump Station
24	SPS 76 - 18695 Pomerado Rd	Background: The existing portable generator is old and spare parts are not available Scope: Provide a new 100kW generator and auto transfer switch	Pump Station