

Comment and Response Log from the DDW Public Hearings on the North City Pure Water Project Title 22 Engineering Report

Important Notes:

1) The comments and responses related to Public Health Protection have not been included in this Comment and Response Log document. They remain under review by State Water Resources Control Board, Division of Drinking Water. The City of San Diego anticipates that the Public Health Protection comments and responses will be posted the first week of November.

2) The comments and responses other than Public Health Protection are included in this document and have been organized within their respective topics to include Program Cost, Engineering and Design, Pipeline Alignment, and General comments.



Program Cost

	Comment or Question	Response
1	The cost is not appropriate compared to what other countries are paying. Israel recycles salt water for \$1.50/100 cubic feet. The City could separate greywater in the system and recycle it at a far lesser cost. Also, the City could reduce street runoff using water that pollutes the waterways and reuse it.	It is unclear whether the \$1.50/100 cubic feet for sea water desalination in Israel is related or operating cost, or the total amortized capital cost plus operating costs. In addition, Israel has regulations regarding the allowance of brine discharge to saline waters. There are significan California regarding ocean intakes and reverse osmosis brine discharge, which were ultimate Carlsbad Desalination Project through the use of the existing inlet and discharge from the En Notably, the unit cost of Pure Water is less than the cost of water from the Carlsbad Desalin Separating greywater in the City's system will not result in lower costs, as many studies have more appropriate for individual dwellings and complexes, as opposed to regional systems.
2	Why is the City spending the money for numerous stages of processing sewage when the last stage is reverse osmosis? Processing sea water is only one stage (reverse osmosis), so it is less than a third of the cost.	Processing sea water (sea water desalination), is not 1/3 the cost of Pure Water. The Carlsb Project uses three treatment steps, not one. There are pre-treatment filters that use chemi flocculation and filtration to remove constituents in the sea water that can foul downstream followed by micronic filters, and then reverse osmosis (RO membranes). Second, the unit co produced by the Carlsbad Desalination Project is higher than the cost of Pure Water, becaus (energy) required to remove the salt from the sea water. Sea water has more than 10 times solids than tertiary treated wastewater.
3	How does the cost of reclaimed water compare to imported water?	Currently, the cost of Pure Water is about 40 to 50 percent higher than imported water; how water costs have tripled since 2000. In addition, the reliability of imported water is subject influences, interagency agreements, and conveyance risks (aqueducts cross major fault lines factors support the importance of diversifying the water supply portfolio.
4	Why not invest the over \$4 billion cost of this water project, which will eventually overrun to a much higher amount, on desalination plants that have been proven for over 60 years to safely make purified drinking water?	The cost of Pure Water Phase 1, including all engineering design, management, environmen planning/mitigation and construction costs, is approximately \$1.4B. The second phase has restimated. The avoided cost of upgrading the Point Loma Wastewater Treatment Plant is \$2 can be a successful approach to diversify the region's water portfolio. In late 2015, the Carls Project came on-line and delivers approximately 50 mgd of drinking water throughout San D Unfortunately, the regulations for constructing desalination intakes and outfalls, and manage concentration brine waste, are quite complex in California. One of the reasons that the Carl feasible was because it could use the intake and outlet system already constructed for the E In addition, the cost of desalinated water from the Carlsbad project is higher than for Pure V production basis (\$/acre-foot produced), and would have been higher if the intake and outlet newly constructed. The region continues to look at all methods to diversify the water portfolis one.
5	How much will the Project cost?	The cost of Pure Water is about \$1700 to \$1900/Acre-Foot produced (about 326,000 gallons \$2,100/AF for the Carlsbad Desalination Project and about \$1,300/AF for current imported s important to note that imported water costs have tripled since 2000. In addition, the reliab water is subject to climatic influences, interagency agreements, and conveyance risks (aque fault lines). These collective factors support the importance of diversifying the water supply
6	Will the project be fully funded to completion?	The project will be fully funded through an authorization from City Council to receive low-in state revolving loan funds.



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	Comment or Question	Response
1	What side of Town Center Drive will the pipeline be on?	The alignment on Town Center Drive is located on the west side in the southbound lanes.
2	Is any tree removal required?	Tree removal is not required.
3	Where will the vents on the pipeline be located?	There are 14 vent locations along the alignment for addresses, see page 9 of https://www.sandiego.gov/sites/default/files/pwsd_morena_pump_station_and_pipelines_
4	With climate change can the charcoal filters handle the odor?	Climate change will not have an impact on the carbon filter performance.
5	What is plan B for odor if the filters aren't enough?	High purity oxygen will be injected into the wastewater force main prior to transport to prev condition from developing within the pipeline. Odorous conditions are attributable to septic addition to the High purity oxygen injection, there will be carbon filters installed at all air vac the pipeline alignment. The high purity oxygen and carbon filters are effective measures to noxious odors.
6	Please make sure to implement real-time water (minimum frequency of once/minute update rate) quality monitoring at the treatment plant output, midway along the Miramar pipeline, and at the output of the pipeline / input to the Lake Miramar treatment facility / reservoir. In addition to real-time water quality monitoring, automated shut-down controls must be implemented to stop the flow of treated water if any of the monitoring stations indicates below-standard quality water in the pipeline system. System restart should be done manually (not automatically) after diagnosis and correction of the reason for the shut down. The North City Water Reclamation Plant should have the ability to reverse the flow of water in the pipeline to the Miramar Plant/Reservoir to "suck back" any below- standard quality water into the Miramar Plant/Reservoir.	The Monitoring and Reporting Program for the project is provided in Section 15 of the Title Report. Process performance parameters that are continuously monitored (updated every included in Slide 38 of the Hearing presentation. Slides 60 through 62 illustrate the ability to disconnect Miramar Reservoir from the Miramar Water Treatment Plant as a resilience (fail measure. The report and the Hearing slides can be found at www.purewatersd.org/reports



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	Comment or Question	Response
7	Why can't more reservoirs be built?	Building additional reservoir capacity does not increase the amount of water supply unless t water to store in the reservoir. San Diego already has an extensive reservoir system that cap impounds nearly all of the available local runoff. The region also has substantial reservoir ca storing imported water. Much of the reservoir capacity in the San Diego region is filled with There are many risks, largely depending on imported sources, including availability (affected inter-agency agreements) and long-term interruption if the aqueducts are damaged from na earthquakes. The Pure Water Project will replace some of the imported water with a reliable source of water.
		Siting and constructing new reservoirs is expensive and difficult. In the San Diego region, the reservoir sites remaining. Environmental regulations severely limit the ability to construct n it is a very sensitive topic for natural resource agencies and property owners. Building new restremely expensive. In spite of all this, the San Diego County Water Authority was able to r Dam in 2014, increasing the reservoir capacity by almost three-fold. The San Diego region n acre feet of reservoir storage capacity, with about 1/3 in San Vicente Reservoir. The region I reservoir capacity.
8	What are the plans for dealing with the waste produced?	The wastes produced from the Pure Water Project will be conveyed to the Point Loma Wast Plant for processing and subsequent ocean discharge.
9	Will a baseline of tests be performed on the reservoir, and will periodic testing be performed at the reservoir?	The Surface Water Augmentation regulations require a baseline of 2 years of water quality n releasing Pure Water to the reservoir. The Monitoring and Reporting Program is summarize the Title 22 Engineering Report.
10	What securities are in place to avoid tampering with the water supply? Is the Project earthquake safe?	The City's water system and wastewater system have security features in place to protect ag malicious acts. The security systems include physical barriers [e.g. fences], lighting, electron security patrols. Sections 5.7 and 6.7 of the North City Project Environmental Impact Report and earthquake risks, and how the project has been designed to withstand seismic events. T be found at www.purewatesd.org/reports.
11	What level of purity is the water that will pass through our neighborhoods?	The purified water that will be released into Miramar Reservoir is very high quality and will the Miramar Water Treatment Plant prior to distribution to the customers in the service are meet all Federal and State Drinking Water requirements, as well as Notification Levels estab Division of Drinking Water. The purified water quality is discussed in detail in Section 9 of th Engineering Report.
12	In Clairemont, there are three intersections with active or inactive gas stations, one of which is near a high school and middle school. Are hazmat procedures in place during excavation to install new underground pipes to address handling contaminated soil caused by underground seepage from leaky storage tanks?	Procedures to deal with any hazardous materials encountered during construction is well do City's Standard Specifications for Public Works Construction. These requirements are refere specifications for all construction contracts, and the City's inspectors will adhere to these sp construction.
13	During the Title 22 Public Hearing, slide 49 called "Resevoir Provides at Least 60 Days Retention" along with the transcript notation shows input at the top of the reservoir and output at the bottom. However, another slide shows the Pure Water input at the bottom of the reservoir, and I'm told that the outflow is from the top of the reservoir. Which slide is correct?	Slide 49 is a general schematic to demonstrate how the reservoir retains water. The Pure W released into the reservoir through 94 outlets in a "crows foot" pipeline arrangement along reservoir in the eastern segment (furthest from the outlet tower). Water can be withdrawn from four ports at varying depths along an outlet tower in the western segment of the reservithdrawn from ports closer to the surface. Withdrawal is determined by the water layer th quality to treat (for example, limiting algae).



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	Comment or Question	Response
14	Why is the City not reclaiming water for reuse applications in place of using it for freshwater supplies? Reuse water can be reclaimed for 1/3 the processing cost, and pumping cost would be the same since the City pumps the water to the height of Miramar Reservoir and the water will flow downhill to Lake Hodges (a purple pipe reservoir).	The City of San Diego is reclaiming water for non-potable reuse applications, such as irrigation and industrial uses. Currently, an annual average of 6 to 7 mgd is used for non-potable uses. When the first phase of Pure Water becomes operational, the City has reserved up to 12 mgd through inter-agency agreements for non-potable uses. Unfortunately, these uses vary with seasonal climate patterns, cannot fully use the available water resource on a year-round basis, and expanding the non-potable network to reach further throughout the country is very costly both in terms of pipeline construction and pumping. Agencies in Los Angeles and Orange County treat their recycled water to a high level, where it is injected into the ground. It can be used as a barrier to salt water intrusion and becomes part of the groundwater supply. The groundwater supply is used for many purposes in Los Angeles and Orange County, including drinking. Several agencies in the Los Angeles Basin and at the Orange County Water District produce water that is put into a drinking water supply. Hodges Reservoir is a primary drinking source water. It impounds local runoff and stores imported water, and sends the water to a drinking water treatment plant. Hodges Reservoir is not used to store purple pipe water. Hodges Reservoir functions the same as Miramar Reservoir, and the two are not connected.
15	Why pump the sewage for 20 miles? It is not economical. It is a 3-phase flow (solids, liquid and gas) and is very explosive.	Wastewater from the Morena Pumping Station will not be pumped 20 miles. It will be pumped 10.5 miles from a site near I-5 and Friars Road to the North City Water Reclamation Plant. A second, parallel pipeline is a gravity return pipeline (flowing the opposite direction) containing only brine from the reverse osmosis process and centrate from the Metro Biosolids Center. Wastewater is not explosive. In a force main system, gases are treated and vented at high points in the pipeline, as required. There are several wastewater force mains throughout the City and none has had an
16	Did the City consider building the treatment plant at the Morena facility, therefore, there would be no need for a 48" pipeline?	explosion. There is an existing North City Water Reclamation Plant with an existing capacity of 30 mgd that provides 6 to 7 mgd of reuse water for non-potable purposes (e.g., irrigation, industrial uses). There is not sufficient land to build a treatment plant at the site of the Morena Pumping Station and if there were, the costs to construct a new facility rather than expand an existing facility would be significantly more. It is much more efficient to pump the needed wastewater to the existing Reclamation Plant that can be expanded to meet the overall treatment needs for non-potable reuse and Pure Water.
17	If any odor is detected, will it immediately be addressed?	The pipeline vents on the wastewater force main are used on other force mains in San Diego and the air is treated with carbon filters to eliminate odors. The force mains are not venting continuously and the carbon is only required for intermittent releases. Members of the community working group have visited existing vents to verify performance of the carbon filters to eliminate odors.
18	The Title 22 Engineering Report should address the potential for odor control as much as possible given the pipeline will be constructed through residential areas of Clairemont.	The Title 22 Engineering Report addresses the health effect aspects of the water supply. The potential for odor and its impact was addressed in the Environmental Impact Report, which was certified by the City Council on April 10, 2018 and can be found at www.purewatersd.org/reports.
19	Has this been done by other utilities and what was the result?	Purified water has been successfully supplementing drinking water sources for many decades. The most recent examples are in Big Spring, Texas and at the Orange County Water District (OCWD). OCWD's Groundwater Replenishment System has produced over 250 billion gallons of purified water; more on the facility can be found at https://www.ocwd.com/gwrs.



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	20	Why does the Pure Water project need to apply for a National Pollutant Discharge Elimination System permit when the discharge from the Project to Miramar is drinkable water quality?	The Pure Water project needs to apply for an NPDES permit because of its original source. A monitored to demonstrate compliance and is released into Miramar Reservoir, it is sanction supply for the Miramar Water Treatment Plant under the City's Water Supply permit granted Drinking Water. Secondly, while the water that is released to the reservoir is very highly treat considered drinking water until it is treated at the Miramar Water Treatment Plant. The recadopted by the State Water Resources Control Board are for surface water augmentation, n reuse.
	21	How is Miramar Reservoir considered a Water of the United States for the purpose of applying for an NPDES permit?	The City of San Diego submitted a request to the Army Corps of Engineers for an Approved J Determination (AJD). The formal results of the AJD request have not been received, but ver Corps staff have indicated that although Miramar Reservoir is an isolated wetland, it is consi an impoundment to a historical Water of the United States and form the potential to suppor commerce. Waters of The United States include all waters which are currently used, or were or may be susceptible to use in interstate or foreign commerce and all impoundments of wa defined as Waters of the United States.
	22	How did the water restrictions from the drought of 2015-2016 impact sewage levels? If we have restrictions in the future, how will they impact Pure Water delivery?	Water conservation reduces the volume of wastewater returned to the collection system. T an evaluation of available wastewater under a variety of conservation conditions and conclu sufficient wastewater to support Phase 1 and 2 of the Pure Water Program.
	23	When will the Pure Water Project apply for a 404 and 408 permit from the Army Corps of Engineers?	The North City Project requires permits from the Army Corps of Engineers, and permit applic already been submitted.
	24	Is there a plan to monitor the fish in Miramar Reservoir for affect of adding Pure Water?	The Regional Water Quality Control Board, through its issuance of an NPDES permit, will spe program to demonstrate beneficial uses of the reservoir are sustained. This will include mor populations in the reservoir. The monitoring program will be implemented by the City.
	25	Is storm water runoff permitted at Miramar Reservoir from the surrounding area? If not, why not?	As shown on Slide 45 from the Public Hearing, the catchment area for Miramar Reservoir is a the reservoir itself is about 170 acres. Runoff from the portions of the catchment that have commercial development is diverted away from the reservoir. This is done to protect the res accidental pollution. Only runoff from the smaller undeveloped portion of the catchment flo reservoir.
	26	Israel has the world's highest level of using recycled water at 85%. But they use that water for agriculture and industry. They have been using desalination plants for over 60 years to produce much of their drinking water needs.	Israel is a model for recycled water for non-potable uses. One of the major factors that allow more than 75% of its wastewater is that reasonably large population centers that produce we located very close to large non-potable uses, such as agriculture. Therefore, recycled water be pumped and piped long distances to reach the end use. San Diego does not have that sate major agricultural uses in California (Central Valley), for example, are very long distances from The City currently recycles 6 to 7 mgd for non-potable reuse from the North City Water Recl a plan for up to 11 mgd. These demands, however, are seasonal depending upon rainfall. Expotable uses is difficult because of location, and consequent pumping and piping requirement very high level of treatment, Pure Water is a much more economical way to ensure that all or resource is used effectively.



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	Comment or Question	Response
27	Why is some of this fresh drinking water being used for irrigation and agriculture (mismanagement of money and resources, let's get some new people on the Water Boards.)	The Carlsbad Desalination Project is supplementing the existing potable water supply provid County Water Authority (SDCWA). It is provided to wholesale customers and agencies throu water aqueducts owned and operated by the SDCWA. To that extent, it supplements all water the delivery systems those agencies use.
28	Why is the City not considering desalination?	Desalination can be a successful approach to diversify the region's water portfolio. In late 2 Desalination Project came on-line and delivers approximately 50 mgd of drinking water thro County. Unfortunately, the regulations for constructing desalination intakes and outfalls, ar high-concentration brine waste, are quite complex in California. One of the reasons that the was feasible was because it could use the intake and outlet system already constructed for t Plant. In addition, the cost of desalinated water from the Carlsbad project is higher than for unit production basis (\$/acre-foot produced), and would have been higher if the intake and to be newly constructed. The region continues to look at all methods to diversify the water Water is one.
29	Why is the City not using the project cost to construct a desalination plant?	Desalination can be a successful approach to diversify the region's water portfolio. In late 2 Desalination Project came on-line and delivers approximately 50 mgd of drinking water thro County. Unfortunately, the regulations for constructing desalination intakes and outfalls, ar high-concentration brine waste, are quite complex in California. One of the reasons that the was feasible was because it could use the intake and outlet system already constructed for t Plant. In addition, the cost of desalinated water from the Carlsbad project is higher than for unit production basis (\$/acre-foot produced), and would have been higher if the intake and to be newly constructed. The region continues to look at all methods to diversify the water Water is one.
30	Why did the City choose Miramar Reservoir rather than San Vicente Reservoir which is larger?	San Vicente is a larger reservoir than Miramar Reservoir. It is true that conveying and pump much higher elevation would have cost the City and the water customers significantly more discussed in the presentation at the Hearing, Miramar meets the detention time and dilution forth in the Division of Drinking Water's Surface Water Augmentation regulations. There are requirements depending upon the size of the reservoir. Because Miramar Reservoir has a sr less dilution than a release to San Vicente, additional treatment is required at the Pure Wate additional treatment, including additional removal well beyond what is required, is provided facilities.
31	What is the method to turn off Pure Water immediately? It appears that it would be days to weeks to turn off the system.	There are many ways to divert water in the event that it does not meet the Division of Drink requirements for release to Miramar Reservoir. Water can be diverted to the sewer 1) after Water Reclamation Plant before entering the Purified Water Facility, 2) after several of the t at the Purified Water facility, 3) at the Purified Water Facility prior to being pumped to Mira 4) after the Pure Water Pumping Station. In addition, Miramar Reservoir can be "de-coupler Miramar Water Treatment Plant and the Water Treatement Plant can receive source water imported raw water sources, as it currently does, until the water in the Reservoir can be tess meets all requirements. All of these diversions and de-coupling can be performed in minute takes to open and close values or to shut down the raw water pumps from Miramar Reservoir the Pure Program is highly resilient.



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Pipeline Alignment

	Comment or Question	Response
1	Why is the pipeline not being constructed on I-805?	Multiple pipeline alignments were evaluated during the design of the pipelines. Locating the the I-805 was found to be infeasible as this would require longitudinal encroachments in Cali of Transportation (Caltrans) right of-way for construction of the pipelines within I-805. As st Caltrans Encroachment Manual, Chapter 5, Section 606.1, "Caltrans' policy prohibits the place longitudinal encroachments within controlled access rights-of- wayrequests for placement encroachments are permitted only when approved through Caltrans' design exception proceed by the DOD [Division of Design], Chief, when no other reasonable alternative is available, and determined that there is available space" (Caltrans 2018a). Proposed longitudinal encroachments are also prohibited per the Caltrans Project Development Procedures Ma (Caltrans 2018b). Additionally, the alternative pipeline alignment would result in the same not impacts as the proposed alignment. Noise and traffic impacts occurring within the University merely be transferred east to other communities and would also result in significant and una
2	Has the design team considered redundancy and robustness for public health protection as it relates to the raw sewage force main and the other waste pipeline running through University City?	There are many raw sewage gravity and force mains running beneath city streets in San Dieg key feature of the pipeline design. The design of both of these pipelines is conservative and applicable codes including earthquake and other extreme events. A safety factor of 2 has be piping materials and thicknesses for the force main. The other pipeline contains brine reject osmosis membranes and centrate from the Metro Biosolids Center. It is a gravity line, not a
3	If there is no alternative route for the Morena raw sewage pipeline to avoid residential neighborhoods, how will it be monitored?	The Morena force main will have pressure monitoring to ensure pipeline integrity. In the unbreak, the pump station will immediately shut down and no additional sewage will flow thro compromised pipe. It is important to note that there are many raw sewage force mains in Sabreaks have been recorded.
4	I attended the August 15 presentation of the Title 22 Pure Water Engineering Report. The presentations were devoted entirely to water purity and took as a given the selection of the Mission Valley to Miramar route through densely populated urban San Diego. The selection of the route should not be taken as a given, however. No information was provided on construction, utilities, environmental and human impact, public safety especially with respect to fire, ambulance, and police access during the construction, and short- and longer-term impact on traffic. The choice of the urban route is questionable on a number of grounds. Until these concerns are addressed, please be assured that I will join neighbors and other concerned citizens in engaging all administrative, political, and litigation efforts to stop this ill-considered approach to San Diego's water supply.	The purpose of this Public Hearing was to receive public comment on the Title 22 Engineerin associated health protection, not on the facility design. There have been many meetings and project design, culminating in the City Council's certification of the Environmental Impact Re 2018. These issues were addressed in the Environmental Impact Report, which can be found www.purewatersd.org/reports.
5	Is the City aware of the Morena Corridor project? There are two major projects in the area, so how will the Morena Pump Station fit with the other projects?	The City maintains a central database with all construction projects throughout the City, for to understanding construction overlaps and contractor coordination needs. Contractors are red other projects in the area and the specifications for the Morena Pipeline provide requirement Contractor for coordination with other projects. These issues were discussed in a series of m June through August 2018 with a University City Community Workgroup.



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Pipeline Alignment

6	Are the two Morena pipelines earthquake proof?	The two Morena pipelines, one to deliver wastewater to the NCWRP and the other to return brine and centrate to the Point Loma Wastewater Treatment Plant, are designed to withstar according to the most updated earthquake code requirements.
7	Why did the City not seriously consider other alignments in the EIR rather choosing the route through the residential neighborhood of Clairemont?	Multiple pipeline alignments were evaluated duing the environmental review and design pha Multiple variables were considered in determining pipeline alignements including soils, geolo air quality, biological and historical resources. The route chosen is feasible and results in the impact to the environment (including communities).
8	Is the pipeline path chosen the most geologically safe path possible regardless of neighborhood income levels and property values?	Please see response to Question 7, above.
9	How is the City addressing the disruption to residents of Clairemont as the pipeline is constructed?	The Clairemont Working Group, along with other working groups, are meeting collaborativel program team to mitigate community impacts.
10	How does the City intend to address pipe leaks on Genessee which would greatly impact the area?	All of the sewer force main is constructed of steel, which is considered a flexible pipeline ma all of the pipeline joints are fully welded, forming a continuous pipeline with no joints posing separation. The steel pipe has a one-inch thick mortar lining to prevent corrosion on the insi- wrapped, protected against corrosion with an impressed current and has a one-inch thick mo outside. In addition, there are pressure sensors and meters to identify any discrepancy in flo When a flow or pressure discrepancy is identified, the pump station will automatically shut c will identify and repair any leak.
11	Pumping raw sewage has never been done before. We're going to put these outlets for the gas to escape, methane gas, greenhouse gas, which will stink. What will be the impact to Clairemont property values?	There are many raw sewage force mains in San Diego and in nearly all metropolitan areas ar Providing vents along a pressurized pipe for any collected gases that vent intermittently is a and is also currently done in San Diego. The gas is treated with granular activated carbon to Members of the community working group have visited existing vents to verify performance filters.
12	How will Genessee Avenue be restored?	The latest street Overall Condition Index (OCI) will be used to update the design drawings for advertisement. If an OCI is lower than 70 out of 100, an asphalt grind and overlay will be ide identified higher than a 70 out of 100, a slurry seal will be applied. After installation of the p segment, but prior to pavement restoration, the City's Resident Engineer will evaluate the co pavement and provide a new rating to account for any damage caused during the installation Pavements will be restored from curb-to-curb within a right-of-way that does not contain a r raised median is present, the pavement will be restored on any side of the street that the pa affected. The City's Public Utilities Department is working with the Transportation and Storm to identify funding for segments of the alignment where one side of the street to provide pa to the unaffected side streets with raised medians.
13	Is there a traffic plan for those traveling on Miramar Road going into Scripps Ranch?	There is a traffic control plan for every stage of construction. Work on Miramar Road will be in each direction will remain open during construction hours, and the road will be open to funon-construction work.



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	Comment or Question	Response
1	Why are the Water Boards not concerned with the reputation of San Diego and the USA (we live in a first world country and we do not need to turn sewer water into drinking water, even third world countries cannot afford to do that).	The San Diego City Charter enumerates certain responsibilities to the Mayor and City Council the development of water supply sources, the operations of those facilities and the oversigh department are the responsibility of the Mayor and City Council. The City Council approves p projects put forth by various City Departments, including the Public Utilities Department and Department. The City Council certified the CEQA document for Phase 1 of the Pure Water Pr receiving public comment at a hearing on April 10, 2018. If you would like to participate in future discussions about the Program, we encourage you t at purewatersd.org and sign up for our email distribution list. Additionally, you may wish to your City Councilmember or the Mayor to express your concerns.
2	Why does San Diego continue to ignore one of the biggest sanitation risks in our City? That of the continued flow of polluted wastewater from Tijuana River into San Diego County. This problem has existed for many years and if you believe that Mexico will pay for the wall, then you probably believe that Mexico will clean up the Tijuana River.	This comment is related to cross-border polluted storm water runoff and not associated with Program. The City continues to work with the appropriate federal border agencies to develo solution to the Tijuana River discharge into San Diego County. For more information about th Water Pollution Prevention Program, including the Tijuana River Valley, please visit https://www.sandiego.gov/stormwater.
3	What do you think will happen to our convention center and downtown hotels when the tourists find out that they are drinking reprocessed sewage water?	There are several water agencies throughout California and elsewhere that augment their w purified recycled water. The multi-barrier water purification process has been proven to pro The Orange County Groundwater Replenishment System has successfully used a similar wate process to San Diego since 2008 and currently produces 100 million gallons per day of purifie County is home to many tourist attractions and large amusement parks. We are not aware o effects to Orange County's tourism attractions after implementation of the Orange County G Replenishment System. Other places in various stages of implementing potable reuse projec Singapore, Australia, Virginia, Texas and numerous other California cities.
4	Why does it take the City two hours to shut off a broken water main?	Water mains transport water under pressure to our customers. In order to ensure proper pr reliability, they are often "looped" systems meaning the water is pressurizing the main from and directions. In the case of a main break, emergency crews will need to find the nearest va of the break and conduct a shutdown. In many cases, the water main is a large diameter whi specialized work of the City's hydraulics crews to ensure proper shutdown in a measured ma eliminate the creation of a water hammer which may cause more damage to other compone system. In recent years, City crews have reduced the response time to the report of a water under 30 minutes. This accounts for travel time from the time of the report to arriving on sit break. Crews then determine the severity of the situation and determine the next steps to sl may include the need to call in the specialized crews depending on the variables associated v Water is a precious commodity to us and we do our best to conserve it. However, every wat nation experiences water loss. According to the American Water Works Association, the ave experiences an annual water loss of 8-12% of its total demand. The City of San Diego experie water loss of 3-6% of our total demand, but we always strive to improve.



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ressure and system in multiple sources valves on either side nich requires the nanner to reduce or nents of the delivery r main break to ite at the reported shutdown, which with the break. ter system in the erage water agency iences an annual

5	Will there be a local hire agreement in order to ensure quality workmanship on a project of this size?	The City Council has been working with the Mayor's Office, the Public Utilities Department a Works Department to apply appropriate skilled and local workforce language into the constructions
6	Why not have the Public Hearings ahead of design completion to hear the objections and questions from the public?	This specific Public Hearing is for the Title 22 Engineering Report and the public health aspec The project must be completing design to finalize the Title 22 Engineering Report and to see Division of Drinking Water.
7	Australian research shows that reuse of sewage for potable water would never be considered.	Australia has played an important role in the development of potable reuse internationally. Australia was the first country to develop national water quality guidelines specifically for pothas recently been followed-up with the development of detailed protocols for the validation performance for a number of key advanced water treatment processes. An important groun replenishment project is now operational in Perth, Western Australia. A smaller scheme in S Wales, produces highly treated reclaimed water for river-flow augmentation upstream of a c intake.
8	Why don't we get to vote on this project?	The City Council approves public works projects put forth by various City Departments, inclu Utilities Department and the Public Works Department. The City Council certified the CEQA Phase 1 of the Pure Water Program after receiving public comment at a hearing on April 10,
9	Giving the public their 3 Hearings in the span of only 32 hours during a week when kids are going back, getting ready to go back to school, or on vacation does not provide a good sample of the population most likely to be affected. Most people I talked to were unaware of the letter sent to them with the information and couldn't make it to the Hearings. Also, I wish I had been given more time to think after the presentation in order to formulate educated questions.	As required in the Division of Drinking Water's Surface Water Augmentation regulations, not Hearings was mailed 60 days prior to the public hearing and the Title 22 Engineering Report as a hard copy and on-line for review during that period. Many regulations only require one three were provided primarily to allow for a variability in time and location for convenience Two were held at the Public Utilities Department auditorium in the morning and evening to flexibility, and a third was scheduled late afternoon/early evening at a different location (the Reclamation Plant conference room) for location flexibility.
10	Why did the Public Hearings happen after the first phase is already in the plans?	The City prepared a Program Level CEQA document (Pure Water Program Environmental Im 2014111068) that provided an analysis of the entire Pure Water Program. During that CEQA two public scoping meetings (December 2014) and published a draft Environmental Impact I public review and comment. The Final EIR went to City Council and was certified at hearing 2016. At that hearing the Council passed a resolution of approval for the Program as a whol The project level CEQA document for Phase 1 of the Pure Water Program began in 2016. Th project level CEQA/NEPA document (Pure Water Program North City Project Environmental 2016081016) that provided an analysis of the North City Project. During that CEQA process scoping meetings (August 2016), a public workshop (October 11, 2016), and published a draft review. The Final EIR went to City Council and was certified at a public hearing on April 10, 2 was specifically related to the Title 22 Engineering Report, which is required by the Division of according to the Surface Water Augmentation regulations. The report is based upon the No designs.
11	Are the people in support of this project going to be the primary users of this water?	Since 2004, public perception in San Diego about supplementing water supply with recycled positively. The purified water distribution area will include the portion of the City of San Dieg potable water from the Miramar Water Treatment Plant in addition to the City of Del Mar. A purified water distribution area can be viewed online at https://www.sandiego.gov/sites/default/files/pw_distribution_area_phase_1.pdf.



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Most significantly, otable reuse. This n of treatment ndwater Sydney, New South

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pact Report SCH-A process, we had Report (EIR) for on October 25, le.

he City prepared a I Impact Report SCHwe had two public aft EIR for public 2018. This hearing of Drinking Water orth City project

l water has evolved go that receives A map of the

12	After reading all of the information sent out to homeowners and as a citizen of north county, I would like to express my absolute objection to recycled sewer water getting into our reservior and into our drinking water system. I cannot imagine the panic that will ensue when we will enevitably be issued a boil water order. I do not have to imagine what will be in that water, Hepatitis A, B, C. Blood products, Ecoli just to name a few. While I do unerstand we have water needs in Southern California, I cannot believe that this is even being considered. Please work with the Water Authority and come up with a plan to import clean water or look into another desalination plant. Please reconsider this objectionable plan.	The City conducted a demonstration project (2009-2013) that confirmed the purified water in and state drinking water standards. This included the construction and operation of a one-met day Pure Water Demonstration Facility to test the safety and reliability of full-scale water pure technology to purify recycled wastewater to meet all state and federal drinking water standard year testing period, more than 9,000 laboratory tests were conducted on 342 chemical and it constituents and water quality parameters. All tests confirmed the water meets or exceeds a drinking water standards. A summary of the purified water quality and testing results can be of the Title 22 Engineering Report online at: https://www.sandiego.gov/sites/default/files/ncpw_project_draft_title_22_engineering_report of the City has performed more than 30,000 laboratory tests on the purified water. Sim demonstration project, the effectiveness of the water purification process has been improved two additional treatment barriers: ozonation and biological activated carbon filters, which end through treatment redundancy and robustness. The multi-barrier water purification process is similar water purification process since 2008 and currently produces 100 million gallons per water. The purified water will supplement and blend with the City's imported water supplies from t and Northern California Bay Delta. There are 399 water agencies and cities that discharge tree into the Colorado River and Northern California Bay Delta. There are gene water, desalination and gro
13	San Diegan's have consistently opposed any plan of the Water Board to use reclaimed water in our drinking water supply, and I want to loudly echo this sentiment. No matter the argument, I do not trust the Public Utilities Department to effectively remove all contaminants from a reclaimed source.	The City conducted a demonstration project (2009-2013) that confirmed the purified water is and state drinking water standards. This included the construction and operation of a one-m day Pure Water Demonstration Facility to test the safety and reliability of full-scale water put technology to purify recycled wastewater to meet all state and federal drinking water standard year testing period, more than 9,000 laboratory tests were conducted on 342 chemical and is constituents and water quality parameters. All tests confirmed the water meets or exceeds a drinking water standards. A complete summary of all water quality monitoring results can be https://www.sandiego.gov/sites/default/files/legacy/water/purewater/pdf/projectreports/a To date, the City has performed more than 30,000 laboratory tests on the purified water. Sin demonstration project, the effectiveness of the water purification process has been improve two additional treatment barriers: ozonation and biological activated carbon filters, which en- through treatment redundancy and robustness. The multi-barrier water purification process to protect public health. The Orange County Groundwater Replenishment System has succes similar water purification process since 2008 and currently produces 100 million gallons per water.



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meets all federal nillion-gallon-perurification ards. During a onemicrobial all federal and state e found online here: 'awpfappendixb.pdf.

ince the red even further with enhance reliability as has been proven essfully used a r day of purified

4	I attended the Public Hearing in San Diego on 15 August 2018. I did not have a print	The City conducted a demonstration project (2009-2013) that confirmed the purified water r
	out of my comments, so I am sending this email.	and state drinking water standards. This included the construction and operation of a one-mi
		day Pure Water Demonstration Facility to test the safety and reliability of full-scale water pu
	Thank you again for hosting the public hearings. I'm confident that each of the	technology to purify recycled wastewater to meet all state and federal drinking water standa
	presenters do their best at their job, but I don't trust the presenters, the scientists	year testing period, more than 9,000 laboratory tests were conducted on 342 chemical and r
	mentioned in the slide show, or anyone else, to execute a project like this safely.	constituents and water quality parameters. All tests confirmed the water meets or exceeds a
		drinking water standards. A complete report of the Demonstration Project and all water qual
	I'm disappointed in myself that I didn't put more effort into opposing this project in the	results can be found online here:
	past.The only way I'm comfortable with water that was once in my toilet ending up in	https://www.sandiego.gov/sites/default/files/legacy/water/purewater/pdf/projectreports/v
	my tap is if it	port.pdf
	Flushes down my toilet	To date, the City has performed more than 30,000 laboratory tests on the purified water. Sin
	 Is processed in the sewer system 	demonstration project, the effectiveness of the water purification process has been improve
	Pumped miles out to sea	two additional treatment barriers: ozonation and biological activated carbon filters, which er
	Mixes with lots of ocean water	through treatment redundancy and robustness. The multi-barrier water purification process
	Evaporates	to protect public health. The Orange County Groundwater Replenishment System has succes
	Falls as rain	similar water purification process since 2008 and currently produces 100 million gallons per o
	Trickles into the ground water	water. Information on Orange County's project can be found at https://www.ocwd.com/gwr
	 Is pumped into the municipal water system 	various stages of implementing projects include Singapore, Australia, Virginia, Texas and num
	 and sent back to my house. 	California cities. A map with information on similar projects around the world can be viewed
		https://watereuse.org/water-reuse-101/global-connections/.
	I've read that the total of agricultural uses in California consume 4 times more water	
	than all Urban uses. I respect water rights. I think the public utilities should pay	
	market prices for some of those water rights and use that water for urban consumers.	
	Please send me links to any information where this option has been studied. I also trust	
	desalination more than the toilet-to-tap reclamation described in the public hearing.	



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15	I attended one of the public hearings on this which should have taken place early in	The City of San Diego was not permitted to move forward with holding the Public Hearings u
	the planning stages, rather than at this late date when it appears to be a fait accompli. I	approval to do so from the State Water Resources Control Board, Division of Drinking Water
	listened carefully to the presentations, and to some serious and disturbing concerns	received on June 8, 2018. The City was required to notify the public at least 60 days in advar
	raised by several people in attendance. The net effect is that it strikes me as a	Hearing.
	spectacularly dubious project, which smacks of overconfidence to the point of being	
	scientific hubris that perfect safety can be engineered into something for which the cost of oversight or a failure would be dire indeed. I find it hard to believe that there is a lack of viable alternatives. The general public may be snoozing as regards this development, but I have to think a great many will be shocked once the full details of it sink in. Hopefully, the anticipated legal challenges will exert some positive effect. Failing that, I would like to see an exact map of the projected service area, so that I can consider moving outside of its boundaries	Additional opportunities for public involvement were made available during the developmen Water Program Environmental Impact Report, which included two public scoping meetings i Additionally, two public scoping meetings were held in August 2016 and one public worksho October 2016 for the Pure Water Program North City Project Environmental Impact Report (went to City Council and was certified at a public hearing on April 10, 2018. Two free public open house events were held at the North City Water Reclamation Plant in O October 2017, which were attended by more than 1,000 community members and provided opportunity to learn more about the project and meet with project staff. The purified water distribution area will include the portion of the City of San Diego that reco from the Miramar Water Treatment Plant in addition to the City of Del Mar. A map of the pu distribution area can be viewed online at https://www.sandiego.gov/sites/default/files/pw_distribution_area_phase_1.pdf.
16	Before the Pure Water project goes forward, there must be full implementation and enforcement of the Pretretment program by the Pure Water project, the regional and state water boards and the Division of Drinking Water.	The City of San Diego currently has an operating Industrial Waste Control Program. The City enforces the control program for the entire wastewater system to protect the system and w treatment plants from unwanted discharges. This program was enhanced beyond federal ar requirements to meet specific needs of the ocean discharge permit for the Point Loma Wast plant. The control program includes an extensive monitoring program, an assessment of the chemicals in the collection system and through treatment, an inventory of constituents that into the collection system, and an outreach and enforcement program to minimize chemical



until it received r. Such approval was nce of the Public

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