LINDA VISTA-ANNANDALE ASSOCIATION (LVAA)

PASADENA NON-POTABLE WATER PROJECT

FREQUENTLY ASKED QUESTIONS (FAQs) (February, 2016)

WHAT IS THE NON-POTABLE WATER PROJECT?

Per the Environmental Impact Report (EIR), the *Pasadena Non-Potable Water Project* involves the construction and operation of a new non-potable water distribution system to deliver water from three local water sources to customers within the service areas of Pasadena Water and Power (PWP), Foothill Municipal Water District and their member agencies (including Lincoln Avenue Water Company, Valley Water Company, Las Flores Water Company, and Rubio Canyon Land and Water Association), and California American Water Company, for landscape irrigation, cooling, and other non-potable uses. The three local water sources are: (1) recycled water produced by the Los Angeles/Glendale (LAG) Water Reclamation Plant; (2) tunnel water from Devils Gate and Richardson Springs; and (3) surface water from the Arroyo Seco stream.

The main and most reliable source of non-potable water is up to 5.4 million gallons per day (MGD) of tertiary recycled water[1] from LAG. The City of Pasadena has an agreement in place with the City of Glendale to provide up to 6,000 acre-feet of non-potable water annually to Pasadena from the LAG plant. This water is tertiary treated through a three-step process imitating nature's own cleaning processes. The LAG plant processes 20 million gallons of non-potable water each day.

The LAG plant is located approximately 6 miles west of Pasadena in the City of Los Angeles and is operated by the City of Los Angeles Bureau of Sanitation. The proposed Project would connect to Glendale Water and Power's (Glendale) existing recycled water system at Scholl Canyon. Existing Glendale and LAG pump stations would pump recycled water from LAG to the top of Scholl Canyon. The existing pump stations would require upgrades throughout the various phases of the project as described below. At Scholl Canyon, the recycled water would be stored in the proposed Scholl Canyon Recycled Water Reservoir. From that reservoir, the recycled water would be distributed to users through new dedicated pipelines.

HOW, WHERE AND WHEN WILL THE NON-POTABLE WATER BE DISTRIBUTED?

Per the EIR, the proposed Project includes phased construction of new non-potable water infrastructure, including pipelines, conduits, storage reservoirs,

pressure reducing stations, and pump stations, and, consists of six phases which will involve major construction on public streets throughout Pasadena. Construction is expected to begin in 2016 and continue through 2028 or later. The Phases are:

- Phase I Project: delivery to Art Center College of Design, Brookside Golf Course, the Rose Bowl Stadium area, and Brookside Park (2016-2018).

- Phase II - Southern Extension I: delivery to Huntington Memorial Hospital, Glenarm Power Plant, and several smaller customers (operational in 2023).

- Phase III - Southern Extension II: delivery to California Institute of Technology (Caltech), Pasadena City College, Huntington Library and Gardens, and some smaller customers (operational in 2024).

- Phase IV - Annandale Extension: delivery to Annandale Golf Club (operational in 2025).

- Phase V - Northwestern Extension: delivery to multiple Caltrans sites, Muir High School, Jet Propulsion Laboratory (JPL), Flintridge Riding Club, Oak Grove/Hahamongna Park, La Cañada High School, and St. Francis High School (operational in 2027).

- Phase VI - Northeastern Extension: delivery to Mountain View Cemetery, LA County Public Works Yard, Charles White County Park, Scripps Home, Eliot Middle School, Altadena Golf Course and other smaller customers (operational in 2028).

The EIR asserts that water supplied by the proposed Project would be purchased by the identified non-potable water customers; however, the proposed Project would benefit all PWP customers by helping to protect water supply reliability. Note: delivery and sale of the new non-potable water to large institutions, whether in the PWP service area or not, has generated community controversy, particularly the delivery and sale of water to the Huntington Library and Gardens in San Marino.

WHAT ARE THE COSTS OF THE PROJECT?

Per the EIR, the engineering estimate for the total capital cost is approximately $50 million for all six phases. Of this total, Phase I (Note: of greatest interest to Linda Vista) is anticipated to cost $15 to $18 million. **The EIR asserts that PWP is pursuing multiple funding opportunities to reduce the costs that would ultimately need to be borne by ratepayers (emphasis added by LVAA).** The EIR states that PWP has submitted applications for state and federal funding, numerous Grant opportunities, and, other funding opportunities. Also, PWP will also submit an application for

reimbursement from the Metropolitan Water District's Local Resources Program. **The EIR indicates that PWP's water rates are being evaluated for restructuring to provide sources of financial support for the proposed Project (emphasis added by LVAA)**. Note per LVAA: The Project is not intended to deliver non-potable water to Pasadena residential rate payers.

As stated in LVAA's Draft EIR Comment Letter re this Project which is posted on the LVAA website (lvaa.net), there has been little or no public discussion as to why, once again, neighborhoods such as Linda Vista must bear all the impacts in order to benefit large institutions such as the Rose Bowl, the Huntington Library and Gardens in San Marino, or Mountain View Cemetery. When will potential Pasadena residential rate stabilization or reductions, in light of the Project and its impacts, be publicly discussed? And, if grant and similar funding is insufficient, what will the various large institutions benefitting from the Project be required to contribute over time to the enormous cost of the Project paid for up front, apparently, by Pasadena? As one Northwest Pasadena resident called out at a recent public meeting: "where is the Business Plan"?

WHAT ARE THE ASSERTED BENEFITS OF THE PROJECT IN LIGHT OF THE COSTS?

As to Project benefits, the EIR states that the reliability of PWP's water supply is uncertain due to persistent droughts, more stringent environmental and water quality regulations, climate changes, decreasing groundwater levels, and groundwater contamination in Raymond Basin. Approximately 60 percent of PWP water supplies are imported from Metropolitan Water District of Southern California (MWD) and 40 percent are from local groundwater. The City asserts that the proposed Project would help alleviate PWP's long-term water supply challenges caused by these uncertainties, provide opportunities to maximize the available local water sources, diversify PWP's water supply, and increase overall water supply reliability. Also, offsetting potable water demands helps to reduce reliance on imported water, and makes existing potable water supplies more available to meet potable demands throughout PWP's system.

HOW WILL PHASE I, AS PROPOSED, IMPACT LINDA VISTA?

As previously indicated, Phase I of the proposed Project would deliver non-potable water to Art Center College of Design, Brookside Golf Course, the Rose Bowl Stadium area, and Brookside Park. There is some thought in the community that due to all of the challenges involved with the entire Project, including costs, logistics, timing and so on, Phase I may be the only part of the Project that is ever completed,

particularly since Phase I is being strongly backed and advocated for by the Rose Bowl Operating Company (RBOC).

In addition to Pipelines and other related installations discussed below, Phase I includes:

- Up to four new non-potable water storage facilities at Scholl Canyon in both Glendale and Pasadena which would be screened and, in any event, are not visible, per the EIR, from Pasadena.
- Pressure reducing station at the intersection of Washington Boulevard and West Drive. The station will be subject to Pasadena entitlement and design review.
- Hydroelectric generation turbine facility and the necessary accessories for operation and connection to PWP's electric system and batteries to store electricity at the intersection of Washington Boulevard and West Drive (adjacent to the pressure reducing station). This facility will be subject to Pasadena entitlement and design review.

Per the EIR, Phase I pipelines would consist of the following segments: (1) Scholl Canyon landfill; (2) the undeveloped ridge adjacent to the Art Center College of Design; (3) Art Center College of Design (Art Center)/LA County Flood Control District access road; (4) then "down" off the hill to Linda Vista streets (see below) and (5) then to the Brookside Golf Course/Rose Bowl/Brookside Park. Pipeline construction will involve, per the EIR, typical pipeline installation procedures including digging, trenching, excavating, shoring, and, staging of supplies.

Power and Fiber Optic Conduits: Per the EIR, and, in addition to Pipes, concrete encased conduits for power transmission cables (three stacked rows of three 6-inch PVC conduits) and concrete encased conduits for fiber optic cables (two 4-inch PVC conduits side by side) would be installed in a separate, parallel trench along the Phase I pipeline alignment from Scholl Canyon. The trench would be approximately 2.5 feet wide and approximately 6 feet deep and would be installed within the construction corridor of the pipeline trench. PWP will install the power cables for emergency interconnection between the PWP power grid and Glendale, Burbank, or Edison power grids located at Scholl Canyon.

Also per the EIR, the Pasadena streets segment (pipeline and conduits) would be installed within roadway rights-of-way (ROWs) owned by the City of Pasadena. The (the Linda Vista) roads include Afton Street, Wellington Avenue, Linda Vista Avenue, Laurel Street, Parkview Avenue, including down to Washington Boulevard. The construction corridor is expected to be less than 40 feet wide within the pavement,

sidewalk/parkway, and shoulder areas. **At least one lane would be remain open for traffic during construction within most streets, but a limited number of smaller, local residential streets (e.g., Afton Street, Wellington Avenue, and Laurel Street) would be entirely closed for short durations of time (one to two weeks) during construction (emphasis added by LVAA.)** Prior to construction, the City of Pasadena Department of Public Works will approve a Construction Staging and Traffic Management Plan for the project including circulation during construction, lane or street closures. It will also obtain an Encroachment Permit.

Per the EIR, here is a more detailed summary of the Linda Vista proposed pipeline/conduit alignments:

Phase I Project Pipeline/conduit Alignments in Linda Vista:

Afton Street: Between the end of Afton Street at the Afton Debris Basin and Linda Vista Avenue; then

Wellington Avenue: Between two segments of Afton Street; then

Linda Vista Ave.: Between Afton Street and Laurel Street; then

Laurel Street: Between Linda Vista Avenue and Parkview Avenue; then

Parkview Avenue: Between Laurel Street and Washington Boulevard.

Per the EIR, and, as to construction equipment, personnel and trips during peak excavation and earthwork, the proposed Project phases would each generate trips with construction and deliveries. Assuming an average crew of 20 people for each phase, including inspectors, construction could generate up to 20 round-trip trips per day per phase. In addition, during peak construction, the proposed Project would require an average of 7 to 8 round-trip concrete delivery and/or soil export truck trips per day (assuming up to 76 cubic yards per day). During construction other materials would be delivered: process, mechanical, and electrical equipment; filter media; rebar for concrete; structural steel, CMU block, and wood trusses for buildings; and electrical conduit. Estimated average materials delivery round trips are 1 to 2 per day. Also, per the EIR, work would include the use of heavy construction equipment (e.g., excavators, dump trucks, compactors), but construction activity would be temporary and not uncommon in urban and suburban areas.

WHAT CHANGES TO THE PIPELINE/CONDUIT ALIGNMENT HAS LVAA ADVOCATED SHOULD BE MADE TO THE PROPOSED PHASE I PROJECT?

For many months, and so far unsuccessfully, LVAA has advocated that a substitute route should take the Pipeline/conduit Alignment away from Laurel and Parkview (and the surrounding and adjacent neighborhood area) where Pipeline/conduit construction through these narrow, quiet, tree-lined residential streets will cause enormous and significant environmental impacts to approximately 50 homes, plus all surrounding and adjacent areas of Linda Vista, and, instead, the Alignment should be changed to go from Linda Vista Ave. to Salvia Canyon; down Salvia Canyon by the shortest, feasible route; and, then, "up" West Drive to Washington Boulevard. As an engineering matter, there is more than sufficient pressure to take the water up West Drive. Also, the RBOC does not object to this alternate route as pipeline/conduit construction will stop on large event days.

Why this Alignment Alternative was left out of the EIR has not clear. The reduction of impacts on Linda Vista residents is obvious, and, under CEQA, cost savings are not a valid consideration in designing a Project – mitigation of impacts should be the primary factor.

The Final EIR answers LVAA's advocacy as follows:

Salvia Canyon Route – Phase I Alternative

The proposed Salvia Canyon Route was considered but rejected during the early stages of design because of potential soil liquefaction hazards and a substantial cost increase due to the addition of approximately 2,150 lineal feet of additional pipeline (total length of 5,150 lineal feet as compared to 3,000 lineal feet under the Phase I Project). The potential cost increase is estimated to be between $500,000 and $1,000,000 in additional construction costs. In the Pasadena area, the low-lying areas along West Drive, Washington Boulevard, and Rosemont Avenue are located within a zone classified as potentially liquefiable by the California Geological Survey (CGS) seismic hazard zonation report (CGS, 1998 and CGS, 1999). The American Lifelines Alliance Seismic Guidelines for Water Pipelines recommends, when feasible, to avoid potential liquefaction hazards by choosing feasible alignments outside of these zones. The alignment along Salvia Canyon and West Drive would have added approximately an additional 5,150 lineal feet of high pressure, large diameter pipeline within a potentially liquefiable zone as compared to the proposed Phase I alignment, which has limited portions located in the liquefiable zone

LVAA observes that the additional cost of going down Salvia Canyon and up West Drive may be minor in the big financial picture. Plus, it is not that clear that "potential" liquefaction along West Drive is such an important matter – additional cost seems to be the major issue.

Note: As to the Alignment above Linda Vista Ave. off of the Art Center, LVAA did agree with PWP that coming down Lida St. was not feasible considering the small size of Lida, the number of streets off of Lida with numerous homes, and the large amount of "through" traffic including Art Center traffic.

For more information, including accessing both the Project Draft EIR and Final EIR, go to the PWP Project website:

http://cityofpasadena.net/waterandpower/recycledwater/

Also, more information is provided on LVAA's website, lvaa.net.