

Section 5

Cumulative Impacts

5.1 CEQA REQUIREMENTS FOR CUMULATIVE IMPACT ANALYSIS

CEQA requires an evaluation of the cumulative impacts of related projects in an EIR (CEQA Guidelines Section 15130). Section 15130(b) identifies two approaches for evaluating cumulative impacts: the “list approach” and the “planning scenario approach.” The list approach uses “a list of past, present, and reasonably anticipated probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency.” The planning scenario approach utilizes “a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.” This Program EIR uses the “list approach.”

The cumulative impact analysis must also include probable future activities of a project or associated with the project. These activities might be implemented subsequent to the proposed project. An EIR must include an analysis of the environmental effects of these future activities if:

1. they are a reasonably foreseeable consequence of the initial project; and
2. the future action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.

[Note, **Section 4** of this Program EIR presents the environmental effects of the future activities associated with implementation of the Watershed Management Plan. Components are anticipated to be implemented over approximately 10 years.]

Based on State CEQA Guidelines Appendix G, the proposed project would have significant impacts if it had impacts that were individually limited but “cumulatively considerable.” Cumulatively considerable means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects.

The discussion of each related project consists of a description of the project and its potential environmental impacts that relate to the proposed project. The cumulative effects of all related projects with the proposed project are then discussed at the end of this section.

5.2 RELATED PROJECTS

LACDPW, with Stakeholder input, has identified the following regionally significant projects to be related to the proposed Watershed Management Plan:

Section 5 - Cumulative Impacts

- Sun Valley Park Multiuse Pilot Demonstration Project
- Valley Steam Plant Combined-Cycle Generating Facility Installation
- San Fernando Valley Superfund Site Remediation and Monitoring
- Tujunga Spreading Grounds Methane Gas Migration Pilot Study
- Bradley Landfill and Recycling Center Transition Master Plan
- Future construction projects within the project area

5.2.1 Sun Valley Park Multiuse Pilot Demonstration Project

Sun Valley Park and Recreation Center is an existing City of Los Angeles park located on Vineland Avenue between Cantara Street and Lorne Street. The Sun Valley Park Multiuse Pilot Demonstration Project (Sun Valley Park Project) is proposed by LACDPW as a pilot project to demonstrate the effectiveness of non-traditional stormwater management techniques used throughout the Sun Valley Watershed Management Plan. The Sun Valley Park Project will use a portion of the park to capture, treat, and infiltrate stormwater collected from approximately 20 acres of the park area and 25 acres of residential and commercial land near the park. Stormwater runoff will be directed into the park using a system of storm drains and catch basins in the surrounding streets. The water will then be carried to underground treatment units to remove sediments, oil and grease, and heavy metals. The treated stormwater will then be conveyed to two underground infiltration basins.

Since the entire system is underground, the existing baseball diamond, basketball courts, and swimming pool will be preserved. Construction of the project is expected to begin in early 2004, prior to implementation of any of the Watershed Management Plan components detailed in this Program EIR. The project will provide an opportunity for simultaneous improvements to the park, which may include a soccer/football field, restored walkway, refurbished baseball field, and native plantings. A water quality monitoring system will be installed to monitor the pollutant removal efficiency of stormwater treatment methods and effects on groundwater water quality associated with stormwater infiltration. Specifically, vadose zone monitoring of soil water (via porous suction cup samplers) at six locations and groundwater monitoring wells at three locations (one upgradient, two downgradient) are proposed. Sampling for total petroleum hydrocarbons (TPH) diesel, TPH gasoline, and metals is currently proposed.

LACDPW determined that implementation of the Sun Valley Park project would have less than significant impacts on the environment. For many topics, project-related impacts will be beneficial. A CEQA Notice of Exemption was prepared and filed for the project in 2003. The cumulative environmental effects of Sun Valley Park along with the rest of the Watershed Management Plan components are essentially the same as the impacts described for the proposed project (see **Section 4**).

5.2.2 Valley Steam Plant Combined-Cycle Generating Facility Installation

LADWP is currently constructing a new combined cycle generating facility (CCGF) at the Valley Steam Plant. The CCGF project will help LADWP comply with RECLAIM, a regulatory

program designed and adopted by SCAQMD to reduce NO_x and sulfur dioxide emissions in the South Coast Air Basin. The CCGF will replace four existing utility boilers with two combustion turbine generators, a new steam turbine generator, two heat recovery steam generators and associated selective catalytic reduction systems, cooling towers, and ancillary equipment. Two new 20,000-gallon aboveground storage tanks (ASTs) will be constructed to increase the ammonia storage capacity at the facility. In addition, an existing fuel oil AST will be converted to diesel service (SCAQMD, 2002a). As of August 2003, construction is approximately 80 percent complete (M. Acevedo, pers. comm., 2003). Construction is expected to continue through April, 2004 and be completed prior to construction of any of the Watershed Management Plan components detailed in this Program EIR.

The Final EIR prepared for the Valley Steam Plant project (January 2002) by the SCAQMD indicates that the project is expected to have significant adverse impacts (after mitigation) related to construction air emissions; operations emissions of CO and PM₁₀; hazards from catastrophic failure of storage tanks, tank cars, and increased use of hazardous materials; and increased traffic during construction. Cumulatively significant impacts were identified for construction air emissions, operations air emissions, and traffic during construction. The proposed Watershed Management Plan was not listed as a related project in the Valley Steam Plant Final EIR (SCAQMD, 2002a).

5.2.3 San Fernando Valley Superfund Site Remediation and Monitoring

The southern portion of the project area in the eastern San Fernando Basin (SFB) overlaps with existing volatile organic compound (VOC) groundwater contaminant plumes, which were first discovered in the early 1980s. Concentrations of chlorinated VOCs, trichloroethylene (TCE) and perchloroethylene (PCE), were found to be above federal and state drinking water quality standards (Maximum Contaminant Levels or MCLs) in many city production wells located in the eastern part of the SFB (EPA, 2000).

In 1986, the San Fernando Valley was listed on the National Priorities List (NPL) under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund. NPL is a list of sites with known releases or threatened releases of contaminants that have been determined to warrant further investigation by EPA. Since the late 1980s, EPA, in cooperation with state and local agencies, has been conducting clean-up by pumping groundwater from a series of wells and treating the water to remove the VOCs. The project area is located within the North Hollywood and Burbank Operable Units (OUs). An OU is a focused study area established to facilitate the clean-up efforts. Under EPA oversight, public supply wells located within the North Hollywood and Burbank OUs are operated by LADWP and the City of Burbank Water and Power, respectively. Water from these wells is treated (via aeration and granular activated carbon (GAC) filters) and/or blended with higher quality water before entering public water supply distribution systems (EPA, 2000).

Since 1992, EPA has conducted a Basinwide Monitoring Program, which consists of quarterly sampling of groundwater wells located throughout the eastern portion of the SFB (EPA, 2002a). During the monitoring program for 2001, TCE and PCE were detected in over 85 percent of the 63 wells sampled, with 23 (TCE) and 17 (PCE) of the wells exceeding the state MCL (EPA,

Section 5 - Cumulative Impacts

2003d). Since 1999, EPA has also included the following constituents in the sampling program to determine if they are of concern in the SFB and whether clean-up action is required: hexavalent chromium, methyl tertiary butyl ether (MTBE), semi-volatile organic compounds (SVOCs), and perchlorate (EPA, 2003d).

Operations-related impacts from the groundwater clean-up efforts include air emissions of VOCs for the aeration towers – these are controlled by a vapor phase GAC system. Additionally, the carbon used in the various GAC systems requires periodic replacement and then disposal or regeneration. Emissions of VOCs from the Watershed Management Plan relate only to limited vehicle tailpipe emissions (primarily during construction with some minor vehicle use during operation).

5.2.4 Tujunga Spreading Grounds Methane Gas Migration Pilot Study

In recent years, the use of the Tujunga Spreading Grounds has been limited due to methane gas migration from the adjacent historical landfill (Sheldon/Arleta Landfill) (ULARA Watermaster, 2002). When large amounts of water are infiltrated at the Tujunga Spreading Grounds, this results in the release of methane on the eastern side of the landfill. Currently, the spreading grounds are operated at up to 50 cubic feet per second (cfs), which is approximately 20 percent of their maximum capacity. LADWP has been conducting a pilot study to continue limited spreading while operating a gas collection system. Recent results of the pilot study showed that no gas migration occurred when the spreading grounds are operated at up to 100 cfs. It is anticipated that the operation will increase gradually over the next several years until the full capacity of the spreading grounds is reached, as long as the methane migration can be contained (M. Mackwoski, pers. comm., 2003).

As part of detailed design for the Strathern Pit component, LACDPW will coordinate with City of Los Angeles Bureau of Sanitation, LADWP, and the ULARA Watermaster's office to evaluate the feasibility of using the Tujunga Spreading Grounds for stormwater infiltration. The evaluation will determine the amount of stormwater that can be infiltrated by the proposed project without adverse effects on landfill methane migration. Since the proposed project will be coordinated with the gas migration study, and since other releases of methane in the area that could relate to operation of the Watershed Management Plan are not known, there are no cumulative impacts with this related project.

5.2.5 Bradley Landfill and Recycling Center Transition Master Plan

Bradley Landfill and Recycling Center (Bradley Landfill) is a Class III municipal solid waste disposal and recycling facility located within the project area. The 209-acre site is located at 9227 Tujunga Avenue, Sun Valley, and is bounded approximately by Glenoaks Boulevard, Sheldon Street, San Fernando Road, and Tujunga Avenue. Project components located in the vicinity include Sheldon Pit and Cal Mat Pit to the north and northeast, Valley Steam Plant to the northwest, and Vulcan Gravel Processing Plant and Tuxford Green to the south. Bradley Landfill does not accept hazardous, radioactive, or untreated medical waste.

The Bradley Landfill and Recycling Center Transition Master Plan is a long-range plan that is divided into two phases. In the first phase of the plan, the maximum permitted height of the

landfill will be expanded by 43 feet (from 1,010 to 1,053 feet above mean sea level) to provide additional disposal capacity of 4.7 million cubic yards within the boundaries of the existing landfill. This expansion will allow the landfill to operate until the established closure date of April 14, 2007. The second phase will consist of constructing and operating a 6,000 ton-per-day transfer station and 1,000 ton-per-day Materials Recovery Facility that will be located adjacent to the existing landfill. The purpose of this plan is to provide for an orderly transition of Bradley Landfill from an active landfill to a transfer station/Materials Recovery Facility.

A Notice of Preparation for an Environmental Impact Report for the Bradley Landfill and Recycling Center Transition Master Plan was published in April 2003 (SCH No. 2002121027). The lead agency for the Master Plan is the City of Los Angeles Planning Department. As indicated in the NOP, project issues to be addressed in the EIR are air quality, forest land/fire hazard, water quality, land use, noise, and traffic/circulation.

5.2.6 Future Construction Projects Within the Project Area

Construction projects of various types, not currently identifiable, will continue in the project area over the next 10 years (the projected implementation schedule of the Watershed Management Plan). Depending on the timing and description of these projects, cumulative impacts with the proposed project related to construction (air quality, noise, and traffic) are possible. Development projects within the watershed that increased impervious area might also alter stormwater drainage patterns.

5.3 CUMULATIVE IMPACT ANALYSIS

Upon review of the proposed project and identified related projects, the following are the topics with potential cumulative impacts.

5.3.1 Air Quality

Operations-related emissions from the Sun Valley Park project (which are negligible), Valley Steam Plant (significant for CO and PM10), Superfund Remediation (VOCs, but mitigated), Sheldon/Arleta Landfill (methane), and Bradley Landfill (PM10 from earthwork and equipment tailpipe emissions) would occur at the same time as construction and operation of Watershed Management Plan project components. Since operation of at least one of these related projects (Valley Steam Plant) would result in significant air emissions, and since project-related emissions during construction for several components (see **Table 4.1-5**) are projected to exceed SCAQMD NO_x thresholds, the air quality impacts of construction of the proposed project components with operation of the related projects would be cumulatively significant. Air quality emissions could be further increased by other, currently unidentified, construction projects that could be concurrent with construction of Watershed Management Plan components.

Mitigation has been identified in **Section 4.1** to reduce project-related air emissions to the extent feasible. Mitigation for air quality impacts is also being implemented or planned for other related projects.

Section 5 - Cumulative Impacts

5.3.2 Geology and Soils

Operation of the related projects (and possibly construction at Bradley landfill) could potentially increase soil erosion by wind or water. For the Watershed Management Plan, mitigation has been identified in **Sections 4.1 and 4.7** to reduce construction-related soil erosion and dust generation to the extent feasible. Related projects (especially large-scale operations such as Bradley Landfill) would also implement mitigation to minimize soil erosion. At any one time, the area subject to soil erosion from these projects is expected to be small compared to the total study area, which is urban and primarily paved or sodded. Therefore, the cumulative effect on geology and soils is not considered to be significant.

5.3.3 Hydrology – Water Quality

Related projects with the potential to adversely affect groundwater quality include Sun Valley Park and Bradley Landfill Master Plan. The San Fernando Valley Superfund Remediation project is an on-going effort to clean-up existing groundwater contamination.

Sun Valley Park pilot project will collect water from approximately 45 acres of park and residential/commercial land and infiltrate the runoff into the groundwater basin. The impact of the proposed Watershed Management Plan (including infiltration included in the Sun Valley Park project) on groundwater quality is predicted to be less than significant. However, the vadose zone and groundwater monitoring program conducted for Sun Valley Park will reveal whether any water quality issues arise from infiltration of Sun Valley stormwater into the groundwater basin, and whether any additional measures would be required to prevent adverse effects.

Design of the Bradley Landfill transfer station and materials recovery facility is anticipated to include measures necessary to protect groundwater from leachate or on-site stormwater runoff. No cumulative adverse impacts to groundwater with the Watershed Management Plan components are anticipated. Inundation of the existing landfilled materials by raising of the groundwater table related to infiltration proposed by the Watershed Management Plan is not predicted (see **Section 4.7.6.3.3**).

Cumulative impacts on groundwater quality could potentially occur from recharging stormwater into a groundwater basin with an ongoing VOC remediation (San Fernando Valley Superfund Site). The importance of the project's potential cumulative impacts with the Superfund cleanup efforts was recognized early in the project analysis, and was evaluated based on a groundwater modeling conducted by LADWP (see **Section 4.7.6.3.3**). The model predicted that no significant effects would occur on the existing VOC plume.

5.3.4 Noise

Substantial noise generation associated with the proposed Watershed Management Plan is related to construction equipment and vehicles. Noise from construction of project components could be cumulative with noise from operation of the Valley Steam Plant and construction or operation of Bradley Landfill. The other known related projects, such as operation of Sun Valley Park, Superfund remediation efforts and the methane gas pilot study, have negligible noise generation.

Noise generation related to project construction at Valley Steam Plant is predicted to be less than significant (see **Section 4.8.4**). Since this project site is located in a primarily industrial and commercial area (adjacent to Hansen Spreading Grounds, Bradley Landfill, and Sheldon Pit) cumulative noise impacts of project construction and plant operation are also anticipated to be less than significant.

Watershed Management Plan components to be constructed near Bradley Landfill include Valley Steam Plant, Cal Mat Pit, and storm drains. Noise generation related to project construction at Valley Steam Plant is predicted to be less than significant (see **Section 4.8.4**). However, construction of storm drains in roads and construction of stormwater facilities at Cal Mat Pit may be significant even with implementation of feasible mitigation measures. Additional noise from construction (if concurrent) or operation of Bradley Landfill would further elevate area noise levels. The cumulative impact is potentially significant.

Operation of the Watershed Management Plan components will have minimal noise generation related to pump operation (pumps will be enclosed at Strathern Pit and Sheldon Pit), maintenance vehicles and equipment, and visitors to the proposed parks. Cumulative noise impacts of operation of the proposed project with operation of the related projects are considered to be less than significant.

5.3.5 Recreation

The proposed Watershed Management Plan components detailed in this Program EIR and the Sun Valley Park project would have a cumulatively beneficial impact on recreation in the project area. The acreage of recreational facilities in Sun Valley will be expanded and existing facilities will be enhanced. Adverse impacts from the related projects and the Watershed Management Plan relate only to localized and temporary access restrictions, possible if construction periods are concurrent. The cumulative effect would be less than significant.

5.3.6 Traffic and Transportation

With incorporation of mitigation measures, the proposed project is expected to have less than significant impacts on traffic during the construction period (**Section 4.11**). The only known related project that may have concurrent construction impacts is conversion of Bradley Landfill to a transfer station and Materials Recovery Facility. Landfill activities may occur concurrently with installation of storm drains in streets near the landfill. Storm drains are linear construction zones, which are expected to progress at an average rate of 200 to 500 feet per day. Under typical conditions, any particular location would be directly impacted by the construction activities for a duration of one to five days. The traffic management plans to be prepared for each project component will consider on-going construction and operational activities in the immediate area (such as construction at Bradley Landfill). The cumulative impact on traffic and transportation is anticipated to be less than significant.