

5.11 UTILITIES – WATER SUPPLY

5.11.1 INTRODUCTION

The purpose of the Water Supply section is to assess the proposed project's potential impact on available water supply and infrastructure. The analysis in this section is based primarily on the most recent groundwater conditions study prepared by Kenneth D. Schmidt and Associates for the City of Porterville (hereinafter "2009 Groundwater Conditions Report"), as well as on the analysis of water supply and facilities in the City of Porterville 2030 General Plan EIR, the Porterville Urban Water Management Plan 2007 Update and various other historical hydrological data. Water to be used by the proposed project is currently available from the City and would be transported using the City's existing water supply infrastructure. Pursuant to the findings in the 2009 Groundwater Conditions Report, the City can sustainably continue to rely on groundwater supplies for all potential service needs through build out of all development envisioned in its General Plan given the significant existing natural groundwater recharge and planned augmentation thereof with additional surface water. Accordingly, project impacts would be less than significant.

5.11.2 ENVIRONMENTAL SETTING

City Water Supply

The project site is within the service area of the City of Porterville's domestic water supply system, managed by the City's Public Works Department's Field Services Division. The City's water distribution system consists of a numerous groundwater wells, a network of approximately 200 miles of water pipes ranging in size from 2 to 16 inches in diameter, booster pump stations, storage tanks, and pressure reducing valves. The City's municipal wells are generally scattered west of Plano Avenue and south of Westfield Avenue. The area east of Plano Avenue is considered water deficient and water is pumped from the wells located in western and central Porterville. The City currently operates and maintains three hillside reservoirs: two with a capacity of 3,000,000 gallons and one with a capacity of 300,000 gallons. The City plans to add two additional reservoirs, one with a capacity of 3,000,000 gallons and another with a capacity of 550,000 gallons with funds from a recently acquired California Infrastructure and Economic Development Bank (CIEDB) loan. The City's distribution system is divided into three major pressure zones. The City has approximately 14,000-metered connections, of which 13,000 are residential meters.

In 2009, the City of Porterville completed a comprehensive study: *Groundwater Conditions within the City of Porterville's Urban Area Boundary* (2009 Groundwater Conditions Report).¹ That study is summarized below and available in **Appendix 5.11**. The purpose of the 2009 Groundwater Conditions Report was to

¹ Kenneth D. Schmidt and Associates, *Groundwater Conditions within the City of Porterville Urban Area Boundary* (October 2009), as noted above and referred to hereinafter as "2009 Groundwater Conditions Report."

provide an evaluation of groundwater conditions in the proposed urban area, the extent of groundwater overdraft, and the sustainable groundwater supply for the lands within the proposed Urban Development Boundary (UDB) as of 2030, and to determine accurate hydrologic characteristics of the local groundwater basin to provide for the preparation of a groundwater management plan as outlined in the City's UWMP 2007 Update.

The City relies on groundwater supplies pumped from 34 active wells (and a number of standby wells). Groundwater levels in the Tule Subbasin (of the San Joaquin Valley Groundwater Basin) beneath Porterville fluctuate depending mainly on annual rainfall. While some decreases in specific capacities and pumping rates for a number of City wells were observed, the 2009 Groundwater Conditions Report concluded that they are not indicative of an overall long-term overdraft, or that the City may "run out of water" within a few years. Rather, they are indicative of short-term decreases in saturated thickness during droughts, and of well plugging.² That report also determined that the annual average net withdrawals from the groundwater basin exceed the average net inflows (or recharge) resulting in annual average overdraft of approximately 1,800 acre-feet per year (afy) within the 36,300-acre proposed Urban Area Boundary (UAB) and 1,200 afy within the Urban Development Boundary (UDB) within base period between 1986 and 2006. Accordingly, while the aquifer is in an overdraft condition, the degree of overdraft is considered to be slight and is tempered by an average of 28,000 afy of natural groundwater recharge, which seeps down through the bed and banks of the Tule River, Porter Slough and unlined canals and ditches, which divert water from those water bodies. The 2009 Groundwater Conditions Report concluded that the City's reliance on groundwater supplies is sustainable and that it could achieve a balanced water budget, even if all of the growth envisioned in the City's General Plan were to occur, by augmenting the significant natural groundwater recharge in the area with moderate amounts of surface water.

Specifically, the 2009 Groundwater Conditions study found that the City may sustainably continue to rely on groundwater supply if the amount of surface water that is used or recharged in the urban area plus incidental recharge is equal to or greater than the consumptive use.³ As of 2008, this urban consumptive use was 6,600 afy, and by 2030, the urban consumptive use in the proposed UDB is projected to be about 11,000 afy. Ultimately, the report concluded that by 2030, about 6,000 to 8,000 afy of surface water should be recharged by the City, in order to obtain a water balance for full development of lands within the proposed UDB. The 6,000–8,000 afy proposed by the 2009 Groundwater Conditions Report is a conservative recommendation in that it only credits 3,000–5,000 afy of the average 28,000 af of natural recharge (seepage from Tule River and Porter Slough) to the City, and assumes that the City will develop

² 2009 Groundwater Conditions Report, p. 41.

³ 2009 Groundwater Conditions Report, pp. 65–66.

fully as anticipated in the General Plan despite the fact that such development has been significantly slowed to date by the downturn in the economy.

Groundwater Recharge

To address potential groundwater overdraft conditions, the City (i) decided to implement a groundwater recharge program in 2007 through which the City committed to purchasing surface water for groundwater recharge purposes in increasing amounts commensurate with future development to ensure a balanced water budget;⁴ and (ii) commissioned the 2009 Groundwater Conditions Report to accurately assess existing conditions and design its recharge program to ensure that the goal of a balanced water budget can be and is achieved.

In furtherance of its groundwater recharge program, the City of Porterville implemented and maintains agreements with local water agencies and companies to obtain surface water for use in recharging local groundwater.⁵ The City Council recently (December 1, 2009), authorized the Public Works Director to meet with those water agencies and local irrigation companies to discuss the 2009 Groundwater Conditions Report, share that report's comprehensive analysis and continue to negotiate additional agreements to obtain surface water on a long-term basis to recharge the groundwater.

In 2007, when the City implemented its groundwater recharge program, the goal was to purchase 700 af of surface water beginning in 2010 and gradually increase purchases to 5,400 af by 2030.⁶ The 2009 Groundwater Conditions Report confirmed that such a plan would indeed result in a balanced water budget and ensure sustainable groundwater supply through 2030.

The City, however, began purchasing surface water immediately in 2007, and has continued to increase its purchases and the amount of surface water used to recharge the groundwater ever since. The City budgeted \$85,000, \$86,000 and \$87,000 for assessments and surface water purchases and used those funds to purchase and recharge 922 af, 522 af and 1271 af in 2007, 2008 and 2009 respectively. The City budgeted \$133,000 for assessments and surface water to purchase and recharge an estimated 2,002 af in 2010. In the first 6 weeks of 2010 alone, the City recharged 650 af pursuant to flood release waters acquired by the City from the Pioneer Water Company.

⁴ City of Porterville, *Urban Water Management Plan 2007 Update* (March 2008), 10.

⁵ City of Porterville, *Urban Water Management Plan 2007 Update*, (March 2008), 13.

⁶ City of Porterville, *Urban Water Management Plan 2007 Update*, (March 2008), 16.

Funding Sources

The City finances all of its water supply needs, including groundwater recharge costs, through its Water Enterprise Fund, which is comprised of two distinct funds – the Water Operating Fund and the Water Replacement Fund.

The Water Operating Fund accounts for all income and expenditures related to the City’s water pumping, storage and distribution system. This fund is self-supporting with income from water sales being the principal source of revenue. In 2009/2010, revenue is anticipated to be approximately \$5 million, with operating expenses of \$4.7 million. Approximately 98 percent of connections to the City water system are metered and charged a fix rate (fee) for each meter. The rate is dependent on the size of the meter. A typical residential water meter fee is \$5 per month. Each customer is also charged \$0.72 for every 748 gallons (one unit) of water used. The City’s groundwater recharge program is currently funded by the Water Operating Fund, and this fund will continue to finance the recharge program until such time that the City adopts a new Water System Master Plan. Use of the Water Operating Fund to fund the recharge program will be supplanted by additional funds to be received from a separate development-related groundwater recharge fee the City intends to institute as part of its planned Water System Master Plan update process.

The Water Replacement Fund was established to provide the City funds for the extension and replacement of water supply lines, groundwater wells and other capital improvements in the City’s water system. Revenue into the Water Replacement Fund is generated primarily by developer acreage fees (i.e., connection fees), and also by depreciation payments from the Water Operating Fund. The Water Replacement Fund also collects funds from the Water Operating Fund for replacement of equipment. At the beginning of fiscal year 2009/2010, the City-estimated a \$3.6 million balance in the Water Replacement Fund, with a capital-spending plan of \$1.157 million. Additional water capital improvements (including two new storage reservoirs and related infrastructure and one new groundwater well, among others) are planned in 2010 and will be funded by an additional \$8.1 million California Infrastructure and Economic Development Bank (CIEDB) loan.

5.11.3 REGULATORY PLANS AND POLICIES

State

Urban Water Management Planning Act

The Urban Water Management Planning Act⁷ requires urban water suppliers that provide water for municipal purposes to more than 3,000 customers, or more than 3,000 af of water on an annual basis, to prepare an urban water management plan (UWMP). The intent of the UWMP is to assist water supply agencies in water resource planning given their existing and anticipated future demands. The UWMP must include a water supply and demand assessment comparing total water supply available to the water supplier with the total projected water use over a 20-year period. The management plans must be updated every five years.

Senate Bill 221 and Senate Bill 610

Senate Bill 610 (SB 610)⁸ and Senate Bill 221 (SB 221)⁹ amended state law to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 are companion measures, which seek to promote more collaborative planning between local water suppliers and cities and counties. Both statutes require that detailed information regarding water availability be provided to city and county decision-makers prior to approval of specific large development projects. Both statutes also require that this detailed information be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Both measures recognize local control and decision-making regarding the availability of water for projects and the approval of projects.

SB 221 establishes the relationship between the water supply assessment (WSA) prepared for a project and the project approval under the Subdivision Map Act. Pursuant to California Government Code, the public water system must provide a written verification of sufficient water supply prior to the approval of a new subdivision.¹⁰ SB 221 prohibits a local planning agency from approving a tentative map, parcel map, or development agreement for residential subdivisions of more than 500 units unless the water supplier issues a written verification that a sufficient water supply is available for the project, or the local agency finds that alternate water supplies are, or will be, available prior to the completion of the project.

⁷ California Water Code Sections 10610–10656.

⁸ California Public Resources Code, Section 21151.9.

⁹ California Business and Professions Code, Section 11010 and California Government Code, Section 66473.4.

¹⁰ California Government Code, Section 66473.7

SB 610 modifies the requirements for the water supply assessments already required to be provided by the water suppliers to local planning agencies for certain types of projects. This bill also expands the requirements for certain types of information in an UWMP, including an identification of any existing water supply entitlement, water rights, or water service contracts held relevant to the water supply assessment for a proposed project, and a description of water deliveries received in prior years.

The California State Water Code requires a lead agency to identify the public water system supplying water for a development project that is subject to the California Environmental Quality Act (CEQA) and to request a WSA.¹¹ Generally, a WSA is required if the water system has more than 5,000 connections and the project falls within one of the following categories:

- Residential development with more than 500 units or one which uses as much water as a 500-unit residential project
- Commercial center or business with more than 500,000 square feet of space or 1,000 employees
- Commercial office building with more than 250,000 square feet of space or 1,000 employees
- Hotel or motel with more than 500 rooms
- Industrial, manufacturing, or processing plant with more than 1,000 employees, 40 acres of land, or 650,000 square feet of floor space
- Mixed-use project meeting any of the above criteria

The WSA from the public water system must indicate whether water demand associated with the project was included in the last UWMP and assess whether its total projected supplies available during normal, single-dry, and multiple-dry water years will meet projected demand in the service area with the proposed project. If it does not, the WSA must describe the means to be used to obtain the necessary supplies along with the identification of any needed improvements.

The proposed project is not of sufficient size to require a water supply assessment in that it is a commercial center of less than 500,000 square feet and with less than 1000 employees. Therefore, no WSA is required for this project, because it falls below the law's threshold size/employee criteria and because this project was a component of the overall Riverwalk Marketplace project for which a WSA was prepared in 2005. That WSA concluded that water supply was adequate for both Phase I (previously approved and constructed) and Phase II (the currently proposed Walmart store project).

¹¹ California Water Code Sections 10910–10915.

2009 Comprehensive Delta/Water Legislation

In November 2009, the California legislature passed the comprehensive 2009 Delta/Water Legislation. The package consists of five bills, whose content reflects the inextricable linkages between the health of the California Delta and California's statewide water supply management practices and policies. The bills descend directly from the goals set out in the blue-ribbon Delta Vision Strategic Plan, a December 2008 document with findings and recommendations for managing the Delta as a crucial component of California's water supply system. The 2009 Delta/Water Legislation—in codifying policies such as a 20 percent per capita urban use reduction target, mandatory monitoring of groundwater levels, new measuring requirements for agriculture, enhanced penalties for improper diversion, alongside establishing a new governance structure for the Delta—directly implements some of the Delta Vision Strategic Plan's most important recommendations. Pertinent components of this legislation include:

A. Groundwater Monitoring (SBX7 6)

For the first time in California, local water agencies will be required to monitor groundwater elevations throughout the state, and to publish the data with the DWR. As California comes to terms with yearly water scarcities, this bill addresses the need for consistent, reliable data—currently not measured at all, or measured with wide inconsistencies—on groundwater levels.

B. Water Conservation for Urban and Agricultural Users (SBX7 7)

Between now and 2020, California must achieve a 20 percent drop in urban per capita water use across the state. This codifies the goal set by Governor Schwarzenegger, and set out in the Delta Vision Strategic Plan.

Urban-serving water agencies have a wide menu of choices in how to comply, which in part credits agencies that made substantial capital investments in conservation measures after the drought of the early 1990s.

C. Water Diversion and Use Reporting (SBX7 8)

The final piece of the legislative package sets out new requirements for the water diversion statements that must be filed with DWR. It eliminates an exemption that previously applied to diverters within the Delta—the estimated 1,800 municipal, agricultural, and industrial diversions believed to divert 5 percent of the Delta's freshwater flows. The bill also appropriates funds for permanent water-right enforcement positions, providing a new level of protection for the state's water rights system.

California Water Code

Division 7 of the California Water Code (Porter-Cologne Act) establishes a program to protect water quality and beneficial uses of state water resources and includes both groundwater and surface water. The State Water Resources Control Board and the Regional Water Quality Control Boards (RWQCBs) are the principal state agencies responsible for control of water quality.

Regional

The Central Valley RWQCB regulates all municipal wastewater discharges to protect the quality and beneficial uses of ground water and surface water resources, to maximize reclamation and reuse, and to eliminate waste associated health hazards.

In the currently unincorporated areas of the Planning Area, the Tulare County Flood Control and Water Conservation District is responsible for storm drain maintenance.

Porterville has adopted Tulare County's well standards. The County Environmental Health Department issues permits, collects fees and enforces standards within the City limits.

Local

City of Porterville Urban Water Management Plan 2007 Update

The Porterville UWMP 2007 Update describes the City's programs for meeting current and future water demand (i.e., 23-year planning horizon from 2007–2030), and includes a variety of mandatory and voluntary conservation measures designed to reduce water demand.¹² The UWMP evaluates and describes the City's water resource supplies and projected needs and generally finds that the City's supplies are adequate to meet those future needs. The UWMP also addresses a number of related subjects including water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought years.

City of Porterville Wholesale Water Policy

The City has also established a wholesale water policy, which states that the City will only provide water to requesting private water purveyors outside the City limits and to administer those requests for City water once the City has met its water producing responsibilities as established in the Water System Master Plan. More specifically, this policy establishes the following requirements:

- The City can only sell water if water system production goals are met or if a source of supply is established which meets 120 percent of the requesting system's requirements.
- The requesting system must pay design and construction costs for all piping, water reservoirs, and related infrastructure needed to connect the new well to the system grid and to connect the system grid to a "point of connection" within City right of way at a location determined by the City.

¹² City of Porterville, *Urban Water Management Plan*, 2007 Update, (March 2008).

- The requesting system must adhere to the City water conservation policies, including any reduction in supply as warranted during summer months and/or during emergencies, and cannot sell water to anyone other than to their “normal” customers.
- Prior to receiving City water, the requesting system must apply for and receive LAFCO approval to enter into and receive City water.

City of Porterville Water Conservation Plan

The City also has an existing Water Conservation Plan that outlines policies and procedures to reduce water demand during droughts. The Plan includes three phases of implementation. Conservation measures gradually increase in scope and severity with each phase. The public is given opportunities to voluntarily reduce consumption in Phase I. If Phase I efforts are not sufficient to reduce demand, Phase II is implemented, which includes some additional voluntary measures as well as mandatory measures. If Phase II is insufficient to reduce demand accordingly, Phase III is implemented, adding yet additional mandatory measures directed at both the public and the City. The City’s three-tiered Water Conservation Plan is designed to achieve up to 50 percent reduction in water demand to address any unexpected water supply shortage.

City of Porterville 2030 General Plan

The Porterville 2030 General Plan EIR determined that by securing surface water supplies for groundwater recharge and implementing conservation practices, the City will be able to meet normal, single dry year and multiple dry year demands over the 20-year planning horizon. Based in part on the General Plan’s implementation of the following water supply policies, the EIR concluded that potential impacts related to the anticipated growth and commensurate increased demand for water are less than significant.

- PU-I-5 Require that necessary water supply infrastructure and storage facilities are in place coincident with new development, and approve development plans only when a dependable and adequate water supply to serve the development is assured.

- PU-I-6 Cooperate with surrounding water management and irrigation districts in comprehensive water management and recharge program with the long-term goal of stabilizing the groundwater basin.

- PU-I-7 Continue to require water meters in all new development.

- PU-I-8 Require that agricultural water rights be assigned to the City when agricultural land is annexed to the City for urban development, consistent with this General Plan.
- PU-I-9 Work cooperatively toward a program of conjunctive surface water use with local water purveyors and irrigation districts to retain surface water rights and supply following annexation and urban development so as to protect against aquifer overdrafts and water quality degradation.
- PU-I-10 Encourage private sector use of alternative water sources to achieve a water balance, including reclaimed water for irrigation and landscaping purposes.
- PU-I-11 Promote the continued use of surface water for agriculture to reduce groundwater table reductions.
- PU-I-12 Establish a comprehensive program for water conservation.
- PU-I-13 Undertake a program to retrofit public buildings with water conservation features.
- OSC-I-56 Update the emergency water conservation plan to include appropriate conservation policies that can be implemented during times of water shortages caused by drought, loss of one or more major sources of supply, contamination of one or more sources of supply, or other natural or manmade events.

5.11.4 THRESHOLD OF SIGNIFICANCE

According to Appendix G of the *State CEQA Guidelines*, a significant impact would occur if the project

- has insufficient water supplies available to serve the project from existing entitlement and resources, and new or expanded entitlement are needed; or
- requires or results in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effect; or
- would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted.

[Note: The CEQA Checklist items related to wastewater are addressed in **Section 5.12, Utilities – Sanitary Sewer**; and the checklist items related to stormwater are addressed in **Section 5.5, Hydrology and Water Quality**.]

5.11.6 PROJECT IMPACTS

The analysis of potential impacts to public utilities associated with construction and operation of the proposed project, including the significance criteria applicable to assessing such impacts, is presented below.

Impact 5.11-1 The proposed project would result in a slight increase in demand for City water service; however, existing water resources and supply infrastructure are adequate to serve the commercial and fire flow needs of the project in the near term. This is a less than significant impact

Water for domestic supply and fire flows for the proposed project will be provided by existing water supply and infrastructure (12-inch water lines which currently exist around the project site's perimeter in Springville Street and Vandalia Avenue.), which the City determined is of sufficient capacity to serve the project without the need for any immediate improvements.

The proposed project was originally considered as part of the larger Porterville Riverwalk Marketplace Commercial Center Project EIR completed in 2006. At that time, the comprehensive Riverwalk Marketplace project was divided into three phases:

- Phase I –A 203,000-square-foot Walmart store, plus buildout of an adjacent satellite commercial center including restaurants and other retailers. The 203,000-square-foot major retail space includes 113,000 square feet of general sales area; 51,000 square feet of grocery area; 1,600 square feet of pharmacy space; a 1,900 square foot optical center; a 940-square-foot hair salon; a 47,000-square-foot auto service center; and a 2,200-square-foot snack bar. A garden center encompasses 20,000 square feet of space, and other uses such as storage fill the remaining space. The total area of Phase I will be approximately 246,000 square feet.
- Phase II – Expansion of the commercial center to include nine additional restaurants and retailers; the total area of Phase II will be approximately 193,000 square feet.
- Phase III – Completion of the commercial center to total 16–18 retailers and 5–7 restaurants (for a total of approximately 24 commercial establishments). The total area of Phase III will be approximately 180,000 square feet.

A Water Supply Assessment (WSA) was required for that project (pursuant to California Water Code Section 10910 et. seq.) as it proposed in excess of 500,000 square feet of commercial space. The 2005 WSA prepared for the entire Riverwalk Marketplace site projected total water demand to be 108.1 afy or 96,480 gpd at that time.¹³ The 2005 WSA determined that there was sufficient water supply to meet the entire project's needs. The smaller component project proposed and considered here does not trigger the

¹³ Quad Knopf, *Water Supply Assessment for the Riverwalk Marketplace Commercial Center Project*, (November 2005).

need for another Water Supply Assessment because (i) it falls below the employee and square-footage thresholds of Water Code section 10912(a)(2); and (2) the proposed project can continue to rely on the 2005 WSA pursuant to Water Code section 10910(h).

The proposed Walmart store will require approximately 5,093 gallons per day (gpd) for domestic use and about 8,693 gpd for irrigation, for a total water demand of 13,786 gpd.¹⁴ This irrigation rate reflects higher applications of water needed in the first five years for the establishment of landscaping, after which irrigation requirements would decline by 15 to 20 percent. Using conservative estimates attributable to the highest potential water demand uses (i.e., restaurant), the outlots are expected to require approximately 4,000 gpd (for both domestic use and irrigation). Thus, the Walmart store and outlots are expected to require a total of 17,786 gpd. This water demand is equivalent to 19.94 afy, which represents approximately 0.14 percent of the City's current total annual water demand (based on projected 2010 demand of 14,600 afy).

According to information provided by the project engineer and included in the Project Description, the Walmart store will include high-efficiency restroom sinks and urinals, which will provide for substantial water conservation. Specifically, all restroom sinks will include sensor-activated low-flow faucets (which reduce water usage by approximately 75 percent compared to 1992 EPA standards). Moreover, sinks themselves generate the electricity needed to operate the motion sensors through turbines built into the faucets. Further, all restrooms in the Walmart store will have high-efficiency urinals that use only 0.125 gallon (one pint) of water per flush (this fixture yields 87 percent water savings per flush versus conventional 1-gallon-per-flush urinals) and all toilets will similarly be highly efficient (reducing water use by 20 percent over EPA mandated standard of 1.6-gallon-per-flush toilets and generating enough electricity to power automatic flush mechanism).

In addition to implementing and funding its own groundwater recharge program, the City is involved in cooperative efforts with other local governments, water purveyors and irrigations districts to effectively manage the City's groundwater resources to provide for adequate water supplies for future planned growth while achieving and maintaining groundwater balance. The minor amount of groundwater pumpage required to meet the water demands of the project would not have a substantial effect on groundwater resources or the City's existing plan to achieve and maintain groundwater balance.

The proposed project is located within the Central Pressure Zone of the City of Porterville's Municipal Water System. The project is required to construct a looped water system that provides sufficient fire flow

¹⁴ Project water demands were calculated for the previous iteration of the project with included a larger Walmart store totaling 181,463 square feet. Therefore, water demand would be correspondingly smaller based on the size of reduction (25,623 square feet).

to meet California Fire Code standards along the full frontage of parcels created by the development, except where they exist and are in good condition in the opinion of the City Engineer. The applicant proposes to connect with the existing utility infrastructure found in the Springville Avenue right-of-way. A looped water system would be constructed consisting of 10-inch diameter pipe with laterals ranging in size from 3 to 8 inches in size extending from this loop to provide domestic water supplies and fire flow service.

With respect to water supply infrastructure, representatives of the City's Public Works Department indicated that the City's existing wells, pipe network, pump stations, storage tanks and pressure reducing valves have sufficient capacity to serve the water demand and fire flow requirements of the project. This is consistent with the Water Supply Assessment prepared for the original Porterville Riverwalk Marketplace Commercial Center Project (which at that time included the Walmart store and outlots proposed and analyzed alone here) which concluded that the City had sufficient water supply to meet that project's total water demand, which was determined to be 96,480 gpd or about 5.5 times more water than the current project. Water supply for the Walmart Store and the outlots will be provided from the City's 12-inch water lines which currently exist around the project site's perimeter in Springville Street and Vandalia Avenue such that no new water supply infrastructure (other than a connection to the existing lines adjacent to the project site) will be needed prior to the construction and operation of the project. Further, given the fact that the City relies on groundwater of excellent quality, the City does not operate a water treatment facility as part of its public water service and the addition of this project to the City's water demand will not change this. The City does operate a wastewater treatment facility, which has existing capacity to accept project related wastewater without any changes or improvements. Wastewater information and impact analysis is addressed in **Section 5.12, Utilities – Sanitary Sewer**.

The project will also be required to pay a water connection fee, which will add to the current surplus in the City's Water Replacement Fund, one of two component funds in its overall Water Enterprise Fund, and be used to fund various water supply capital improvements needed to facilitate future growth and commensurate increase in water demand and infrastructure, including the purchase of surface water for groundwater recharge purposes.

Based on the above discussion, existing water resources and facilities are adequate to serve the domestic water and fire flow needs of the project. In addition, the proposed project would not adversely affect the municipal water supply facilities or groundwater resources. Therefore, the impact of the project upon water supplies and facilities would be *less than significant*.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact 5.11-2 **Project-Related Groundwater Impacts: The project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. *This would be a less than significant impact.***

Implementation of the proposed project would result in the development of an undeveloped lot, which would result in an increase in impervious surfaces over existing conditions. Additional impervious surfaces would reduce the amount of groundwater recharge by limiting the percolation of rainwater on site. However, the main source of groundwater recharge for the Porterville area is the Tule River, Porter Slough and associated irrigation canals and ditches that provide an average of 28,000 af per year of water that seeps down and recharges the groundwater aquifer tapped by the City's groundwater wells. The project will not physically interfere with these natural recharge areas nor with the City's program to augment groundwater recharge with additional surface water and will actually facilitate the City's groundwater recharge program by providing connection fees to be added to the City's Water Enterprise Fund. Additionally, the City has available numerous surface water storage facilities to allow for future recharge areas should they be required. Therefore, development of the proposed project would not significantly impact groundwater recharge, and impacts would be less than significant.

Implementation of the proposed project would add commercial uses thereby increasing water usage on the project site over existing conditions. However, no wells would need to be added as part of the proposed project. As described above, the City of Porterville currently relies exclusively on groundwater to meet the demands of the City and currently has the capacity to serve the project without developing new wells or infrastructure for distribution to the project site. The 2005 WSA similarly determined that the City has adequate water supply to provide to this project (incorporated herein by reference) and the City of Porterville's 2007 UWMP determined that groundwater reserves are sufficient to meet the City's water needs for the foreseeable future. The 2009 Groundwater Conditions Report confirmed that finding based on much more comprehensive data and analysis. The City is in the process of securing additional surface water resources to augment the significant natural seepage from the Tule River and Porter Slough and recharge the groundwater aquifers to secure a balanced water budget even as the City increases

pumping to meet the needs of anticipated development in the future. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

5.11.7 CUMULATIVE IMPACTS

Impact 5.11-3 Cumulative Water Supply Impacts: The increased demands for water supply resulting from the cumulative projects in Porterville (assuming full buildout under the 2030 General Plan occurs) could require the improvements to and expansions of water supply utilities and service systems. Extensions of water mains would be constructed as needed in accordance with the City’s master utility plans. Municipal wells and storage facilities would be constructed as needed to meet cumulative water supply demands. Any physical expansion of these facilities will be subject to environmental review and any resulting impacts will be required to be mitigated. *This would be a less than significant impact.*

At full buildout of the City’s 2030 General Plan, the Citywide population is estimated to be 107,300 persons housed within 34,250 dwelling units. The maximum non-residential development permitted at buildout of the general plan is estimated to be 30.5 million square feet of floor area with capacity to accommodate approximately 54,460 jobs. The City’s UWMP summarizes City projections for demand growth and supply availability through 2030 and anticipates water supply and demand to rise at a ratio of 1:1, meaning sufficient water supplies will be available to meet demands during normal, single-dry, and multiple-dry years. Water supply would therefore be adequate to serve cumulative projects.

The 2009 Groundwater Conditions report confirmed the UWMP’s finding, citing recent City well pump test data showing ample capacity to serve current and future water demand. While there is an adequate supply of groundwater to supply anticipated future growth, as that demand increases commensurate with development water supply capital improvements may be necessary to pump and deliver water to match future demand. Specifically, additional wells, water lines, pump stations, storage tanks and

reservoirs, and pressure valves may be required. The City's existing Water System Master Plan includes many of these future planned improvements and ensures their costs are covered by City water connection fees, such that funding will be available to construct the future improvements when they are needed. The City will update its Water System Master Plan in the near future and will then determine additional water supply improvements that may be needed but were not included in the existing Water System Master Plan. In addition to adjusting the water connection fee to ensure funding is available to construct any additional water supply improvements identified in the Water System Master Plan update process, the City will include a separate development-related groundwater recharge fee to bolster its existing funding to purchase surface water used to recharge the groundwater and ensure that recharge needs will be met in the future.¹⁵

The 2009 Groundwater Conditions Report confirmed the adequacy of the groundwater supply to serve cumulative projects and that the City can sustainably continue to rely on groundwater supplies for all potential service needs through buildout of all development envisioned in its General Plan given the significant existing natural groundwater recharge and planned augmentation thereof with additional surface water. Specifically, the 2009 Groundwater Conditions Report found that the City can achieve a balanced water budget and ensure that its reliance on groundwater is sustainable through 2030 by augmenting the significant natural seepage from the Tule River and Porter Slough by purchasing between 6,000 and 8,000 afy of surface water for groundwater recharge purposes. That recommendation, however, is conservative in that it only credits the City with between 3,000 to 5,000 afy of the average 28,000 afy of natural seepage recharging the groundwater aquifer and given the recent economic downturn, questionably assumes that all development envisioned in the General Plan will actually occur by 2030. In sum, the 2009 Groundwater Conditions Report validated the City's existing groundwater recharge program and concluded that the City can balance its groundwater budget and help ensure sustainable groundwater supply even as the City grows.

The City's Water Enterprise Fund has provided ample funding for the City's groundwater recharge program to date. Moreover, the Water Enterprise Fund will be augmented in the near future with a separate groundwater recharge fee to ensure future development pays its share of needed water supply improvements, including the purchase of surface water for groundwater recharge purposes.

Finally, in addition to the City's groundwater recharge program, compliance with increased conservation requirements (e.g., reducing demand by 20 percent by 2020 as required by SBX 7 and implementation of additional measures in the City's water conservation plan such as landscaping irrigation ordinances in

¹⁵ Rodriguez, Baldomero and Reed, Mike, City of Porterville (Director of Public Works Department and Director of Engineering Division thereof, respectively), *Telephone Conversations*, January-February, 2010.

2010) would help offset increased supply requirements attributable to future growth. The City also continues to explore ways to increase the use of recycled water.

Given the City’s plan to continue its reliance on groundwater to meet its water supply demand, it is unlikely that the City will need to construct a water treatment facility in the future, as its groundwater is of such good quality that no such facility has ever been needed to date.¹⁶ Should such a facility be deemed necessary in the future as a result of unexpected decrease in groundwater quality or the need to use surface water to meet public water service demands, the City will plan for and incorporate such a facility into its UWMP and Water System Master Plan updates, taking care to also ensure that any such facility is adequately funded by water connection fees.¹⁷

Collectively, these measures will enable the City to ensure an adequate supply of water and avoid significant water supply impacts associated with cumulative development planned in its General Plan.

[The discussion and analysis of potential cumulative wastewater-related impacts is addressed in **Section 5.12, Utilities – Sanitary Sewer.**]

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

¹⁶ Rodriguez, Baldomero and Reed, Mike, City of Porterville (Director of Public Works Department and Director of Engineering Division thereof, respectively), *Telephone Conversations*, January-February, 2010.

¹⁷ Ibid.