

4.8 HYDROLOGY AND DRAINAGE

This section describes the existing conditions related to hydrology and drainage within the City of Cerritos. Identification of hydrologic and drainage impacts that could result from implementation of the proposed General Plan Update and appropriate mitigation measures are provided.

4.8.1 ENVIRONMENTAL SETTING

WATER SOURCES

SURFACE WATER

No naturally occurring permanent surface water features exist within the City of Cerritos. Man-made lakes are located at Cerritos Regional Park, Heritage Park and Iron-Wood Nine Golf Course. In addition, existing storm drain facilities carry water during wet weather.

GROUNDWATER

Currently, local groundwater for the City of Cerritos originates from three wells within the City. The C-1 well is located in the area of Bloomfield Avenue and Artesia Boulevard. The C-2 well is located at the City's Corporate Yard at 166th Street and Marquardt Avenue and the C-4 well is located in the area of Reservoir Hill Park at Studebaker Road and 166th Street. These groundwater sources supplied approximately 3.4 billion gallons, or 85.7 percent of the City's total water supply in 2001.¹ A fourth water well is currently under construction. Upon its completion it will have an operational capacity of 2,500 to 3,500 gallons per minute.

The City's water system uses a combination of electrical and natural gas power to ensure uninterrupted water service. The location of the City's water wells are shown on [Exhibit 4.8-1, *Water Sources*](#) and their operational capacities are shown in [Table 4.8-1, *Existing Groundwater Resources*](#).

In addition to local groundwater sources within the City, Cerritos receives a portion of its water from the Central Basin Metropolitan Water District (CBMWD), which is a member agency of The Metropolitan Water District of Southern California (MWD). MWD water is transported from the Colorado River and State Water Project in northern California. The connection with CBMWD is located near the intersection of Woodruff Avenue and South Street (Source Connection CEN. B-46). Water is distributed to consumers within the City of Cerritos through City-owned pipes. Approximately 179

¹ Correspondence from Ron Babel, Water Superintendent, City of Cerritos, October 3, 2002.

miles of pipe supply water to approximately 16,000 homes, businesses and industrial sites. The water system also utilizes one 12-million gallon tank at the Reservoir Hill site and two six-million gallon tanks at the C-2 Corporate Yard Site. In 2001, the City of Cerritos received approximately 566 million gallons, or 14.3 percent of its total water supply from the Central Basin MWD.

**Table 4.8-1
Existing Groundwater Resources**

Well	Operational Capacity (gpm)
C-1	2,000 gpm
C-2	3,500 gpm
C-4	3,500 gpm
C-5	3,000 gpm
Source: City of Cerritos.	

RECYCLED WATER

The current recycled water distribution system saves approximately 815 million gallons of potable water each year in the City of Cerritos. The City irrigates more than 200 acres of City-owned property, including Iron-Wood Golf Course, parks, parkways and medians with recycled water. In addition, recycled water is used for landscape irrigation at public schools, Cerritos Community College, for freeway landscaping and at the Cerritos Towne Center. Prior to being used for irrigation, wastewater from industries, businesses and homes is treated by a tertiary (three-stage) process by the Sanitation District of Los Angeles County.

The City of Cerritos has constructed a 15,000-gallon per minute pump station on the County Sanitation District's property along with a recycled water distribution system that distributes recycled water through 25 miles of water lines throughout the City. Recycled water is purchased from the Los Coyotes Water Reclamation Plant, located west of the I-605 freeway and north of the SR-91 freeway, adjacent to the Iron-Wood Nine Golf Course.

STORMWATER MANAGEMENT

Stormwater runoff is a significant contributor to local and regional pollution. Urban stormwater runoff is the largest source of unregulated pollution to the waterway and coastal areas of the United States. Federal, State and regional regulations require the City of Cerritos to control the discharge of pollutants to the storm drain system, including the discharge of pollutants from construction sites and areas of new development or significant development.

C E R R I T O S G E N E R A L P L A N E I R

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Water Sources
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FEDERAL REQUIREMENTS

Clean Water Act

Passed in 1972, the Clean Water Act (CWA) established the National Pollutant Discharge Elimination System (NPDES) permit program. The CWA prohibits the discharge of pollutants from point sources to United States (U.S.) waters unless an NPDES permit authorizes the discharge. It requires that municipal NPDES Permits include a requirement to prohibit non-storm water discharges into the storm sewer and controls to reduce the discharge of pollutants in storm water discharges to the maximum extent practicable, including management practices, control techniques, system design and engineering methods and such other provisions that the U.S. EPA or the California State Water Resources Control Board deem appropriate for the control of such pollutants.

Reduction of conventional forms of pollution, such as sewage treatment plants and industrial facilities has been considerable since implementation of the NPDES program. However, it was shown that pollution from land runoff contributed a larger portion of pollutants than the regulated conventional sources. The 1987 CWA amendments established a framework for regulating urban storm water runoff. Urban runoff includes dry and wet weather flows from urbanized areas through a storm water conveyance system. Pollutants can be intercepted and deposited into U.S. waters as water flows over streets, parking lots, construction sites and industrial, commercial, residential and municipal areas. If not properly controlled, urban runoff could be a significant source of pollutants in waters of the U.S.

National Pollution Discharge Elimination System (NPDES) Stormwater Program

The NPDES Stormwater Program is a comprehensive two-phased national program for addressing the non-agricultural sources of stormwater discharges adversely affecting the quality of the nation's waters.

The purpose of the NPDES program is to establish a comprehensive stormwater quality program to manage urban stormwater that minimizes pollution of the environment to the maximum extent practicable (MEP). The NPDES program consists of: 1) characterizing receiving water quality, 2) identifying harmful constituents, 3) targeting potential sources of pollution, and 4) implementing a Comprehensive Stormwater Management Program (CSWMP). The reduction of pollutants in urban stormwater discharge to the MEP through the use of structural and nonstructural Best Management Practices (BMPs) is one of the primary objectives of the water quality regulations.

The Program uses the NPDES permitting mechanism to require control and monitoring measures designed to prevent harmful pollutants from being washed into local bodies by stormwater runoff. The NPDES program requires the owner or operator of any facility, or any person responsible for any activity that discharges waste into the surface

waters of the U.S. to obtain a NPDES permit from the Regional Water Quality Control Board, as mandated by the Clean Water Act.

NPDES Phase I (General Construction Activity Stormwater Permit)

Phase I of the NPDES program addresses stormwater runoff from: 1) medium and large MS4s generally serving populations of 100,000 or greater; 2) construction activities disturbing five acres of land or greater; and 3) ten categories of industrial activities. With respect to the disturbance of five acres of land or greater, the State Water Resources Control Board (SWRCB) issued one statewide General Construction Activity Stormwater Permit on August 20, 1992 to apply to all construction activities. The permit requires discharges associated with construction activities to:

- ❑ Eliminate or reduce non-stormwater discharges to stormwater systems and other waters of the U.S.;
- ❑ Develop and implement a Stormwater Pollution Prevention Plan (SWPPP); and
- ❑ Perform inspections of stormwater control structures and pollution prevention measures.

A SWPPP prepared in compliance with the permit describes the site, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. Dischargers are also required to inspect construction sites before and after storms to identify stormwater discharge from construction activity, and to identify and implement controls where necessary. Developers would be required to submit a Notice of Intent (NOI) to the SWRCB for coverage under the permit and would be required to comply with all the requirements.

NPDES Phase II

New NPDES Phase II stormwater regulations were finalized and issued by the EPA in January 2000 in an effort to continue to preserve, protect and improve the Nation's water resources from polluted stormwater runoff. These new regulations are designed to implement programs to control urban stormwater runoff from additional MS4s in urbanized areas and operations of small construction sites that were not already covered by the Phase I NPDES permits. The main objectives of the Phase II regulations are to: 1) reduce, to the maximum extent possible, the amount of pollutants being discharged, and 2) protect the quality of the receiving waters.

To meet this goal, the permittee must implement a stormwater management program that addresses six minimum control measures including: 1) public education and outreach, 2) public participation/involvement, 3) illicit discharge detection and elimination, 4) construction site stormwater runoff control for sites greater than one acre, 5) post-construction stormwater management in new development and

redevelopment, and 6) pollution prevention/good housekeeping for municipal operations. These controls will typically be addressed by developing BMPs.

State and Regional Programs

The Clean Water Act allows individual States to operate their own NPDES programs provided such programs meet minimum federal requirements. The Los Angeles Regional Water Quality Control Board issues the municipal stormwater National Pollutant Discharge Elimination System permit, MS4. The City of Cerritos is in the jurisdiction of the Los Angeles Regional Water Quality Control Board, currently operating under Permit No. CAS004001, Order No. 01-182. The Permit was adopted on December 31, 2001 and expires on December 31, 2006.

The objective of Order No. 01-182 is to protect the beneficial uses of receiving waters in Los Angeles County. To meet this objective, the Order requires that the Los Angeles Countywide Storm Water Quality Management Plan (SQMP) specify Best Management Practices (BMPs) that would be implemented to reduce the discharge of pollutants in stormwater to the maximum extent practicable. Further, Permittees are to assure that stormwater discharges from the MS4 shall neither cause nor contribute to the exceedance of water quality, standards and objectives nor create conditions of nuisance in the receiving waters, and that the discharge of non-storm water to the MS4 has been effectively prohibited.

Permit No. CAS004001 requires implementation of a Storm Water Quality Management Program (SQMP), which provides specific guidelines to control, reduce and monitor discharges of waste to storm drain systems. The emphasis of the SQMP is pollution prevention through education, public outreach, planning and implementation as source control BMPs first and structural and treatment control BMPs second.

Standard Urban Storm Water Mitigation Plan (SUSMP)

The Standard Urban Stormwater Mitigation Plan (SUSMP) was developed as part of the Los Angeles Regional Water Quality Control Board's Municipal Stormwater Program. The SUSMP addresses stormwater pollution from certain types of new development and redevelopment. The SUSMP specifies the minimum required Best Management Practices (BMPs) that must be used for a designated project. Additional BMPs may be required on certain targeted categories of projects based on these regulations at the discretion of the City of Cerritos. Applicable project applicants are required to incorporate appropriate SUSMP requirements into their development plans.

Urban Stormwater Runoff

The reduction of pollutants in urban stormwater discharge to the MEP through the use of BMPs is one of the primary objectives of the water quality regulations. BMPs typically used to manage runoff water quality can include the following: controlling roadway and parking lot contaminants by installing oil and grease separators at storm

drain inlets; cleaning parking lots on a regular basis; and incorporating peak-flow reduction and infiltration features, such as grass swales, infiltration trenches, and grass filter strips into landscaping.

Since the NPDES permit will target a diverse array of nonpoint source controls, the program will include the implementation of BMPs. Construction-related BMPs could comprise one set of specific guidelines for reducing pollutants in stormwater discharges and runoff during construction and post-construction. This would likely include erosion and sediment control practices, as well as general site and materials management for construction sites. Post-construction BMPs could include design elements to reduce the volume of runoff and pollutant loading in runoff. Types of pollution prevention practices are described in the California Storm Water Best Management Practices Handbook.

Water Quality Control Plan

The Water Quality Control Plan for the Los Angeles Region 4 addresses water quality objectives for both surface and groundwater. The surface water sources in and around the City are minor and are not identified in the Basin Plan for specific water quality objectives or for beneficial uses. Water quality discharge requirements meeting area wide surface water use objectives are established as permit requirements by the RWQCB and the SUSMP during permitting for construction and operations of individual development projects.

CITY OF CERRITOS PROGRAMS

Implementation of Federal, State and regional stormwater regulations is done locally through ordinances, policies and programs established by the City of Cerritos.

Stormwater and Urban Runoff Pollution Prevention Controls Ordinance

The Stormwater and Urban Runoff Pollution Prevention Controls Ordinance (Ord. 777) provide specific local regulations for stormwater pollution prevention. The Ordinance regulates non-stormwater discharge to the storm drain system; providing for the control of spillage, dumping or disposal of materials into the storm drains system; and reduction of pollutants in stormwater and urban runoff to the maximum extent practicable.

Stormwater Pollution Prevention Plan (SWPPP)

The City of Cerritos requires completion of a Stormwater Pollution Prevention Plan (SWPPP) prior to any construction activity on projects that would disturb more than two acres of soil. SWPPPs develop, implement and monitor BMPs. The SWPPP must identify the source control and/or treatment control practices (BMPs) that would

significantly reduce, avoid or mitigate runoff pollutants to the maximum extent practicable.

Public Education and Outreach

To improve the effectiveness of local and regional stormwater programs, the County of Los Angeles and the City of Cerritos have developed public information and outreach programs. These programs assist residents and businesses in understanding stormwater issues and what strategies can be implemented to reduce stormwater pollution.

The City of Cerritos contributes financially to a five-year countywide stormwater public education program implemented by the County of Los Angeles. The program focuses on residents, school children, businesses and public employees. Various outreach methods and tools are utilized to educate and train these audiences about stormwater pollution management and prevention.

Locally, the City of Cerritos has implemented its own public education and outreach effort. This effort promotes public awareness of stormwater pollution through distribution of literature and other materials to inform residents of ways to prevent stormwater pollution through safe housekeeping practices.

NATURAL HAZARDS

FLOODING

The City of Cerritos contains no natural, permanent water features. Man-made lakes are located at Cerritos Regional Park, Heritage Park and Iron-Wood Nine Golf Course. The San Gabriel River Channel and Coyote Creek Wash traverse the City. Both channels are concrete-lined and are designated as floodways to serve the region.

The City of Cerritos is not in a flood zone according to the Federal Emergency Management Agency (FEMA). However, Cerritos is located within the dam inundation areas of two dams: Whittier Narrows and Prado (refer to [Exhibit 4.8-2, *Dam Inundation Areas*](#)). The Whittier Narrows Dam is located in Los Angeles County on the San Gabriel and Rio Hondo Rivers in the City of Pico Rivera, approximately eleven miles north of Cerritos. It is owned by the Los Angeles District Corps of Engineers. The dam is normally empty, except during or immediately after periods of significant runoff. In the event of dam failure, the water would flow south, affecting all of Cerritos, excluding the area north of the SR-91 freeway and east of Bloomfield Avenue. The affected area is comprised of commercial, industrial, educational and residential uses. The flood wave would reach Cerritos in approximately 15 hours and would be about four feet deep.

The Prado Dam is located in Riverside County, south of the City of Corona on the Santa Ana River adjacent to State Route 91 (Riverside Freeway), approximately 27 miles northeast of Cerritos. It is owned by the Los Angeles District Corps of Engineers. The

dam is normally empty, except during or immediately after periods of significant runoff. In the event of dam failure, the water would inundate most of Orange County and a small portion of Los Angeles County. In Cerritos, the water would first affect the northeastern area and then travel southwest through the City (refer to Exhibit 4.8-2, Dam Inundation Areas). The affected area is comprised of commercial, industrial, educational and residential uses. The flood wave would reach the City in approximately 8½ hours and would be about seven feet deep.

4.8.2 STANDARDS OF SIGNIFICANCE

SIGNIFICANCE CRITERIA

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria, or standards, used to determine the significance of impacts may vary depending on the nature of the project. Hydrology and Water Quality impacts resulting from the implementation of the proposed General Plan Update could be considered significant if they cause any of the following results:

- Violate any water quality standards or waste discharge requirements;
- 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);
- Substantially alter the existing drainage pattern on the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

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Dam Inundation Areas
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- ❑ Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- ❑ Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; and/or
- ❑ Inundation by seiche, tsunami, or mudflow (refer to Section 7.0, *Effects Found Not To Be Significant*).

Based on these standards, the effects of the proposed project have been characterized as either a “less than significant impact” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact level through the application of mitigation, it is categorized as a significant and unavoidable impact.

4.8.3 IMPACTS AND MITIGATION MEASURES

WATER QUALITY STANDARDS AND WASTE DISCHARGE REQUIREMENTS

- IMPLEMENTATION OF THE PROPOSED GENERAL PLAN UPDATE FOR THE CITY OF CERRITOS MAY VIOLATE WATER QUALITY STANDARDS AND WASTE DISCHARGE REQUIREMENTS.

Level of Significance Before Policies/Mitigation: Potentially Significant Impact.

Impact Analysis: Future development projects resulting from implementation of the proposed General Plan Update may contribute to water quality degradation in the City of Cerritos. Runoff from disturbed areas would likely contain silt and debris, resulting in a short-term increase in the sediment load of the stormdrain system serving the City. There is also the possibility for chemical releases at future construction sites. Substances such as oils, fuels, paints and solvents may be transported to nearby drainages, watersheds and groundwater in storm runoff, wash water and dust control water. The significance of these water quality impacts would vary depending upon the level of construction activity, weather conditions, soil conditions and increased sedimentation of drainage systems within the area.

The Conservation Element of the proposed General Plan Update sets forth policies to “provide direction regarding the conservation, development and utilization of natural resources” within Cerritos. The City has identified a specific goal regarding stormwater pollution. The goal includes ensuring the adequate conveyance of stormwater, and the introduction of techniques and methods that reduce the presence of pollutants consistent with regional, State and Federal standards (CON-6). The policies proposed in the General Plan Update include ensuring appropriate mitigation techniques for all

construction and grading activities (CON-6.2) and compliance with all Federal, State and City regulations related to stormwater (CON-6.4). Implementation of the proposed General Plan Update would result in a less than significant impact.

In addition, mitigation measures are proposed to further reduce any impacts to less than significant levels. Therefore, implementation of the proposed General Plan Update would result in less than significant impacts in regards to water quality and waste discharge.

Policies in the Proposed General Plan Update:

- CON-5.1 Ensure existing drainage facilities are properly maintained and absent of debris or other material that may impact stormwater flow and water quality.
- CON-5.2 Ensure the appropriate stormwater mitigation techniques are employed for all construction and grading activities.
- CON-5.3 Ensure all project-related stormwater mitigation techniques are sufficiently monitored.
- CON-5.4 Ensure all new development complies with Federal, State and City regulations and ordinances related to stormwater.

Mitigation Measures: In addition to the policies listed above, the following mitigation measures are recommended to further reduce any impacts.

- MM-HYD-1 Individual development projects would be required to prepare a drainage/grading plan for approval by the City of Cerritos Department of Public Works prior to issuance of grading permits.
- MM-HYD-2 Individual development projects would be required to construct any parkway drains or similar devices required by the draining/grading plan prior to issuance of a building permit.
- MM-HYD-3 To ensure that construction activities associated with individual development or redevelopment projects would not degrade water quality, future development projects shall be required to develop and implement a water quality control plan as deemed necessary by the City and/or the California Regional Water Quality Control Board. In addition, the proposed water quality control plan shall also be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit process.

As part of the review/permitting process, individual development projects shall be required to mitigate potential adverse water quality impacts that are associated with both construction and operational

phases of the development. Measures to comply with this requirement could include, but shall not be limited to the following:

- Individual project applicants shall file a Notice of Intent where required by applicable law and obtain a construction permit from the California Regional Water Quality Control Board. Evidence of said permit shall be provided to the City prior to the issuance of building permits (required for projects greater than five acres).
- Individual development projects shall comply with Best Management Practices for stormwater management. Such practices shall address both long-term operational aspects of the project, as well as the construction stage.
- Individual project applicants shall prepare a Stormwater Pollution Prevention Plan (SWPPP) to address the prevention of both point and non-point pollution sources. The SWPPP will include structural facilities, ongoing maintenance and monitoring provisions to verify compliance with the Plan and permit process.

MM-HYD-4 For individual development projects that fall into one of the Standard Urban Stormwater Mitigation Plans (SUSMP) project types, characteristics or activities, the project design shall comply with the applicable provisions of the SUSMP, and if required by the SUSMP, shall include structural and other measures to collect the first ¾-inch of stormwater runoff from the site, and control peak flow discharge.

Level of Significance After Policies/Mitigation: Less Than Significant Impact.

GROUNDWATER DEPLETION

- IMPLEMENTATION OF THE PROPOSED GENERAL PLAN UPDATE FOR THE CITY OF CERRITOS MAY DEplete GROUNDWATER RESOURCES.

Level of Significance Before Policies/Mitigation: Potentially Significant Impact.

Impact Analysis: The City of Cerritos obtains approximately 85.7 percent of its water from local groundwater resources originating in one of three wells within the City. A fourth well is under construction and upon completion will provide an additional source of groundwater.

Implementation of the proposed General Plan Update would increase the population and businesses within the City of Cerritos, and ultimately increase the demand for water supplies. Implementation of the proposed General Plan Update would result in a 1.1 percent increase in the amount of residential units. Non-residential development

would increase approximately 12 percent as a result of implementation of the proposed General Plan Update. Projected development would further constrain the water supply.

Water conservation in Southern California became increasingly important in the 1980s and early 1990s, when the entire region suffered a severe drought. Drought conditions in Southern California directly affect groundwater recharge and groundwater supplies. The City has identified the protection and conservation of its existing and future water resources as one of its goals (CON-1). Specific policies include reducing non-local water resources through the utilization of local groundwater resources (CON-1.3). In addition, Cerritos has recognized the importance of water conservation. Water conservation programs established by the City in addition to policies CON-1.1, CON-1.2 and CON-1.4 included in the proposed General Plan Update would result in further protection of groundwater resources. Therefore, implementation of the proposed General Plan Update would result in less than significant groundwater impacts.

Policies in the Proposed General Plan Update:

- CON-1.1 Continue to expand the utilization of recycled water for irrigation purposes and other appropriate uses.

- CON-1.2 Enhance outreach activities to educate residents on the importance of water conservation (e.g., promote use of drought tolerant plant material in both residential and commercial applications).

- CON-1.3 Reduce the demand for non-local water resources through the utilization of local groundwater resources.

- CON-1.4 Establish and implement water conservation methods for all city-maintained facilities in order to provide a demonstrable example of conservation techniques.

Mitigation Measures: No mitigation measures beyond the policies identified in the proposed General Plan Update are required.

Level of Significance After Policies/Mitigation: Less Than Significant Impact.

DRAINAGE AND RUNOFF

- IMPLEMENTATION OF THE PROPOSED GENERAL PLAN UPDATE MAY RESULT IN IMPACTS TO DRAINAGE PATTERNS IN THE CITY OF CERRITOS AND CONTRIBUTE RUNOFF WATER TO THE STORMWATER DRAINAGE SYSTEMS IN THE CITY.

Level of Significance Before Policies/Mitigation: Potentially Significant Impact.

Impact Analysis: There are no naturally occurring permanent surface water features within the City of Cerritos. Man-made lakes are located at Cerritos Regional Park, Heritage Park and Iron-Wood Nine Golf Course. The San Gabriel River Channel and Coyote Creek Wash carry water through the City. Implementation of the proposed General Plan Update would result in the development of vacant and underutilized parcels. Development would increase erosion, siltation and surface water runoff to the existing storm drain system. No new drainage systems or alterations to the existing drainage systems are planned for the City.

The City has recognized the need to monitor and improve as necessary, the storm drain system to ensure its adequacy in accommodating future development. Policies to ensure that project-related stormwater mitigation techniques are employed and monitored (CON-5.2 and CON-5.3) are proposed in the General Plan Update. Future development within Cerritos would be subject to the policies included in the proposed General Plan Update, resulting in a less than significant impact.

Policies in the Proposed General Plan Update:

- CON-5.2 Ensure the appropriate stormwater mitigation techniques are employed for all construction and grading activities.
- CON-5.3 Ensure all project-related stormwater mitigation techniques are sufficiently monitored.
- CON-5.4 Ensure all new development complies with Federal, State and City regulations and ordinances related to stormwater.

Mitigation Measures: In addition to the policies listed above, the following mitigation measure is recommended to further reduce any impacts.

- MM-HYD-5 To ensure that runoff does not exceed storm drainage capacity, individual development projects shall be evaluated by the City's Public Works Department to assess specific requirements for both on-site and localized drainage facilities. Local drainage facilities shall be consistent with the City's Master Plan of Drainage. In addition, an engineered site drainage plan shall be prepared for individual development projects in accordance with City requirements.

Level of Significance After Policies/Mitigation: Less Than Significant Impact.

FLOODING

- FUTURE DEVELOPMENT RESULTING FROM IMPLEMENTATION OF THE PROPOSED GENERAL PLAN UPDATE MAY RESULT IN POTENTIAL FLOODING IMPACTS WITHIN THE CITY OF CERRITOS.

Level of Significance Before Policies/Mitigation: Potentially Significant Impact.

Impact Analysis: The City of Cerritos is not located within a flood zone. The City is predominately builtout with approximately 27 acres of vacant land and approximately 46 acres of underutilized land. The proposed General Plan Update would result in the addition of approximately 179 dwelling units. These units would most likely be accommodated through the use of the vacant and underutilized lands. The City identifies the protection of Cerritos residents from potential flood hazards as one of its goals (SAF-1). The policies proposed in the General Plan Update, including the management of development activity to avoid flood damage (SAF-1.1), would reduce any flood impacts to less than significant.

Policies in the Proposed General Plan Update:

- SAF-1.1 Manage development activity so that flooding damage will be avoided.
- SAF-1.2 Minimize potential flood damage through the identification of necessary storm drain improvements.
- SAF-1.3 Provide an annual review of the Standardized Emergency Management System Multi-Hazard Functional Plan to ensure evacuation routes are sufficient in the event of flooding.
- SAF-1.4 Continue the maintenance of flood control facilities within Cerritos to ensure their efficient operation.

Mitigation Measures: In addition to the policies listed above, the following mitigation measure is recommended to further reduce any impacts.

- MM-HYD-6 Individual development projects located within the 100-year floodplain shall evaluate the extent of the flooding hazard and ensure that all finished floor elevations are located above the base flood elevation. These projects shall be reviewed by the City's Public Works Department to ensure consistency with City requirements.

Level of Significance After Policies/Mitigation: Less Than Significant Impact.

DAM INUNDATION

- FUTURE DEVELOPMENT RESULTING FROM IMPLEMENTATION OF THE PROPOSED GENERAL PLAN UPDATE MAY RESULT IN URBAN USES BEING LOCATED IN DAM INUNDATION AREAS OF THE CITY.

Level of Significance Before Policies/Mitigation: Potentially Significant Impact.

Impact Analysis: The City of Cerritos is located within the dam inundation areas of both the Whittier Narrows Dam and the Prado Dam. The Whittier Narrows Dam is located approximately 11 miles north of Cerritos and the Prado Dam is located approximately 27 miles northeast of Cerritos. The areas affected by the failure of either dam would include commercial, industrial, educational and residential uses within Cerritos.

Development resulting from implementation of the proposed General Plan Update would not increase the hazards of dam inundation. However, urban uses would be located in dam inundation areas. The Safety Element of the proposed General Plan Update identifies the protection of the City from flood hazards resulting from dam failure and inundation as one of its goals (SAF-1). The following policies, SAF-1.1, 1.3 and 1.4 have been included to decrease these hazards to less than significant.

Policies in the Proposed General Plan Update:

- SAF-1.1 Manage development activity so that flooding damage will be avoided.

- SAF-1.3 Provide an annual review of the Standardized Emergency Management System Multi-Hazard Functional Plan to ensure evacuation routes are sufficient in the event of flooding.

- SAF-1.4 Continue the maintenance of flood control facilities within Cerritos to ensure their efficient operation.

Mitigation Measures: No mitigation measures beyond the policies identified in the proposed General Plan Update are required.

Level of Significance After Policies/Mitigation: Less Than Significant Impact.

4.8.4 UNAVOIDABLE SIGNIFICANT IMPACTS

All hydrology and drainage impacts associated with implementation of the proposed General Plan Update would be less than significant by adherence to and/or compliance with policies in the proposed General Plan Update and with the imposition of mitigation measures. No unavoidable significant hydrology and drainage impacts would occur as a result of buildout of the proposed General Plan Update.

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