

File 400.32

June 27, 2023

Chris Motta, Principal Planner County of Fresno Department of Public Works and Planning 2220 Tulare Street, Sixth Floor Fresno, CA 93721

Dear Mr. Motta,

FMFCD Comments to the Notice of Availability Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update (SCH#201803106)

The Fresno Metropolitan Flood Control District (FMFCD) has reviewed the information provided from the proposed Notice of Availability of a Draft Program Environmental Impact Report for the Fresno County General Plan.

FMFCD offers the following comments specific to the review of the DPEIR to address typographical errors or to enhance clarity. It is requested that the following comments be considered and incorporated therein (the individual pages are included, and the section or sentence has been highlighted for your reference):

Page 1-20: Add Fresno Metropolitan Flood Control District as any other public agencies.

Page 2-9, Figure 2-5: Recommend showing FMFCD designated basins on the diagram. Please feel free to contact FMFCD for basin shapefiles. Location of the northerly/southerly streets labeled incorrectly.

Page 2-10, Figure 2-6: Recommend showing FMFCD designated basins on the diagram. Please feel free to contact FMFCD for basin shapefiles.

Page 2-10, Figure 2-6: Limited Industrial designation located on existing FMFCD basin location. Correct designation north of existing FMFCD basin.

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County of Fresno Notice of Availability Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update (SCH#201803106) June 27, 2023 Page 2 of 10

Geology and Soils

Page 4.7-14: Consider defining the significance threshold of "substantial soil erosion" based RUSLE2 Equation and upon the Construction General Permit medium risk threshold of 15 tons/acre.

Page 4.7-16: Update the name of the Construction General Permit to Order WQ 2022-0057-DWQ.

Hydrology and Water Quality

Page 4.10-8: Consider expanding the discussion of the Phase I NPDES Program to include regulation of municipal and industrial sources of pollution. The NPDES regulations apply to development projects greater than one acre, however, NPDES Phase I/II regulations also apply to cities that meet certain population sizes and industrial sites that are covered by certain Standard Industrial Codes (SIC).

Page 4.10-11: The Construction General Permit was revised September 8, 2022, it is now titled Order WQ 2022-0057-DWQ/NPDES NO CAS000002.

Page 4.10-13: Consider revising "The majority" to "A portion". FMFCD services are limited to the Fresno and Clovis metropolitan areas.

Page 4.10-16: Adherence to the Construction General Permit will not reduce cumulative impacts of increased impervious surface below significance thresholds. The Construction General Permit reduces impacts of land disturbance activities during construction and may not cover post-construction requirements.

Impact Analysis

Page 4.14-16: Correct referenced Section 4.8 to 4.10, Hydrology and Water Quality.

County of Fresno Notice of Availability Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update (SCH#201803106) June 27, 2023 Page 3 of 10

Utilities and Service Systems

Page 4.17-4: Consider revising "Most" to "A portion". FMFCD services are limited to the Fresno and Clovis metropolitan areas.

Page 4.17-11: The description of Phase I NPDES regulations is incomplete, it also covers municipal discharges as allowed under the municipal stormwater discharge permit.

Page 4.17-12: Update the name of the Construction General Permit to Order WQ 2022-0057-DWQ.

Page 4.17-18: Correct language to specify limits of FMFCD Boundary within the County of Fresno as follows: Revise first sentence to include "(Fresno and Clovis metropolitan areas) are managed...".

Pages 6-11, 6-12, and 6-20: Include stormwater drainage.

Page C-95, Appendix C: Add wording to specify limits of FMFCD program to include "... the Fresno/Clovis Metropolitan area within..."

Page C-95, Appendix C: Capitalize word "District" and Revise wording "... storm flows." to read "...flooding and safely convey storm flows."

FMFCD General Comments:

Hydrology & Water Quality

The Fresno Metropolitan Flood Control District (FMFCD) is responsible for managing urban stormwater runoff within the greater Fresno/Clovis area. Its local urban system for stormwater drainage consists of storm drains, detention and retention basins, and pump stations. The system is designed to retain and infiltrate as much stormwater and urban runoff as possible. FMFCD's Storm Drainage and Flood Control Master Plan (Master Plan) includes 165 drainage areas, each providing service to approximately one to two square miles. All but five of the developed drainage areas are served by a retention or detention facility.

County of Fresno Notice of Availability Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update (SCH#201803106) June 27, 2023 Page 4 of 10

Urban storm water discharges are regulated by Section 402(p) of the federal Clean Water Act. The City of Fresno, FMFCD, the County of Fresno, the City of Clovis, and the California State University, Fresno are currently covered as Co-Permittees for Municipal Separate Storm Sewer System (MS4) discharges through National Pollutant Discharge Elimination System (NPDES) General Order No. R5-2016-0040 and NPDES Permit No. CAS0085324 (Storm Water Permit) effective May 17, 2018. To implement the Storm Water Permit the Co-Permittees adopted a Storm Water Quality Management Plan (SWQMP) that describes permit implementation and Co-Permittee responsibilities. The current SWQMP was approved by the Central Valley Regional Water Quality Control Board on April 17, 2015 and is effective until adoption of a new SWQMP, which is anticipated within the next five years.

The Significance Thresholds, as discussed on Page 4.10-6, must consider the entire scope of the County's Phase I Storm Water Permit. First, the Storm Water Permit includes water quality and watershed protection measures for <u>all discharges</u> to the storm drainage system, not only development projects. Development projects are subject to specific measures included in the Storm Water Permit and implemented as described in the SWQMP. The SWQMP should be incorporated by reference in the PEIR and implemented via updated County Policies. In areas outside the District Boundary, the County is solely responsible for implementation of the SWQMP. In order to reduce impacts to less than significant, the County should consider mitigation measures that support the expansion of the District boundary to mitigate the negative effects of runoff.

Second, the County of Fresno is responsible for implementing storm water quality measures within its jurisdiction. An updated FMFCD and County of Fresno's Memorandum of Understanding (MOU) is required to implement provisions of the SWQMP. The MOU is necessary to identify the certain measures best suited for the County to perform related to the planning, inspection, and enforcement of NPDES Permit requirements. In addition, the County shall provide the District a Statement of Legal Authority to implement the Phase I NPDES Permit Requirements within its jurisdiction. Since the 2000 General Plan was adopted, the following regulatory programs have been adopted by the State Water Resources Control Board that the County must coordinate with FMFCD to effectively implement:

- Amendment to the Water Quality Control Plan for Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California; and
- Amendment to the Water Quality Control Plan for the Sacramento and San Joaquin River Basins for the Control of Pyrethroid Pesticide Discharges.

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County of Fresno Notice of Availability Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update (SCH#201803106) June 27, 2023 Page 5 of 10

Lastly, FMFCD requires, as a responsible agency and as a requirement of the Storm Water Permit:

1) All development projects within the Phase I NPDES boundary shall be consistent with the District's Storm Drainage and Flood Control Master Plan (Master Plan);

2) Subsequent CEQA documents implementing the General Plan incorporate a Stormwater Checklist for CEQA Review.

Consistency with the FMFCD Master Plan

a. FMFCD Drainage Fee Ordinance

The community has developed and adopted a Master Plan. Each property contributes its pro-rata share to the cost of the public drainage system. In order to ensure consistency with the Master Plan, the project shall pay drainage fees pursuant to the Drainage Fee Ordinance prior to approval of any final maps and/or issuance of building permits at the rates in effect at the time of such approval.

Stormwater Checklist for CEQA Review

a. Potential impact of project construction on stormwater runoff.

Stormwater runoff from construction activities can have a significant impact on water quality. To build on sites with over one acre of disturbed land, property owners must obtain coverage under the California Construction General Permit for Discharges of Stormwater (CGP). The CGP is issued by the State Water Resources Control Board (SWRCB). The CGP requires sites that do not qualify for an erosivity waiver to create a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP is a site-specific plan that is designed to control the discharge of pollutants from the construction site to local storm drains and waterways.

b. Potential impact of project post-construction activity on stormwater runoff.

FMFCD operates the Regional Stormwater Mitigation System, which consists of facilities to handle stormwater runoff and non-stormwater discharges in the FMFCD service area. However, river discharging drainage areas and drainage areas without basin service are subject to FMFCD Policy: Post-Development and Industrial Storm Water Pollution Control Requirements (Policy).

County of Fresno Notice of Availability Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update (SCH#201803106) June 27, 2023 Page 6 of 10

Development and redevelopment projects can result in discharge of pollutants to receiving waters. Pollutants of concern for a project site depend on the following factors:

- Project location;
- Land use and activities that have occurred on the project site in the past;
- Land use and activities that are likely to occur in the future; and
- Receiving water impairments.

As land use activities and site design practices evolve, particularly with increased incorporation of stormwater quality BMPs, characteristic stormwater runoff concentrations and pollutants of concern from various land use types are also likely to change.

Pollutant	Potential Sources
Sediment (total suspended solids	Streets, landscaped areas, driveways, roads, construction
and turbidity), trash and debris	activities, atmospheric deposition, soil erosion (channels
(gross solids and floatables)	and slopes)
Pesticides and herbicides	Residential lawns and gardens, roadsides, utility right-of-
	ways, commercial and industrial landscaped areas, soil wash-off
Organic materials/oxygen	Residential laws and gardens, commercial landscaping,
demanding substances	animal waste
Metals	Automobiles, bridges, atmospheric deposition, industrial
	areas, soil erosion, metal surfaces, combustion processes
Oil and grease, organics	Roads, driveways, parking lots, vehicle maintenance areas,
associated with petroleum	gas stations, illicit dumping to storm drains, automobile
	emissions, and fats, oils, and grease from restaurants
Bacteria and viruses	Lawns, roads, leaking sanitary sewer lines, sanitary sewer
	cross-connections, animal waste (domestic and wild), septic
	systems, homeless encampments, sediments/biofilms in
	storm drain system
Nutrients	Landscape fertilizers, atmospheric deposition, automobile
	exhaust, soil erosion, animal waste, detergents

Typical Pollutants of Concern and Sources for Post-Development Areas

Source: Adapted from USEPA, 1999 (Preliminary Data Summary of Urban Storm Water BMPs)

County of Fresno Notice of Availability Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update (SCH#201803106) June 27, 2023 Page 7 of 10

FMFCD's Post-Development Standards Technical Manual provides guidance for implementing stormwater quality Best Management Practices (BMPs) for drainage areas subject to the Policy, with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. The Post-Development Standards Technical Manual addresses the following objectives and goals:

- Minimize impervious surfaces and directly connect impervious surfaces in areas of new development and redevelopment, and where feasible, to maximize on-site infiltration of stormwater runoff;
- Implement pollution prevention methods supplemented by pollutant source controls and treatment, and where practical, use strategies that control the sources of pollutants or constituents (i.e., where water initially meets the ground) to minimize the transport of runoff and pollutants offsite and into MS4s;
- Preserve, and where possible create or restore, areas that provide important water quality benefits, such as riparian corridors, wetlands, or buffer zones
- Limit disturbances of natural water bodies and natural drainage systems by development, including roads, highways, and bridges;
- Identify and avoid development in areas that are particularly susceptible to erosion and sediment loss or establish guidance that protects areas from erosion and sediment loss;
- Implement source and structural controls as necessary and appropriate to protect downstream receiving water quality from increased pollutant loadings and flows (hydromodification concepts) from new development and significant redevelopment;
- Control the post-development peak stormwater runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect downstream habitat; and
- Consider integration of Low Impact Development (LID) principles into project design.

County of Fresno Notice of Availability Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update (SCH#201803106) June 27, 2023 Page 8 of 10

The Post-Development Standards Technical Manual describes the stormwater management requirements for Priority Projects, which are identified as meeting one or more of the following and discharge to the San Joaquin River or do not have basin service:

- Home subdivisions of 10 housing units or more;
- Commercial developments greater than 100,000 square feet;
- Automotive repair shops;
- Restaurants;
- Parking lots 5,000 square feet or greater with 25 or more parking spaces and potentially exposed to urban runoff;
- Streets and roads;
- Retail gasoline outlets (RGOs); and
- Significant redevelopment projects, which are developments that result in creation or addition of at least 5,000 square feet of impervious surface on an already developed site. Significant redevelopment includes, but is not limited to, expansion of a building footprint or addition or replacement of a structure, structural developing including an increase in gross floor area and/or exterior construction or remodeling, replacement of impervious surface that is not part of a routine maintenance activity, and land disturbing activities related with structural or impervious surfaces. Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development and the existing development was not subject to Post-Construction Standards, only the proposed alteration must meet the requirements of the Post-Development Standards Technical Manual.

All Priority Projects must mitigate the Stormwater Quality Design Volume (SWQDV) or Stormwater Quality Design Flow (SWQDF) through LID- or treatment-based stormwater quality BMPs or a combination thereof.

For new development or significant redevelopment projects for restaurants with less than 5,000 square feet, the project applicant must meet all the requirements of the Post-Development Standards Technical Manual except for mitigating the SWQDV or SWQDF and implementing stormwater quality BMPs.

The Post-Development Standards Technical Manual can be found on FMFCD's website here: <u>http://www.fresnofloodcontrol.org/wp-content/uploads/2014/11/Post-Development-Standards-Technical-Manual.pdf</u>

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County of Fresno Notice of Availability Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update (SCH#201803106) June 27, 2023 Page 9 of 10

c. Potential for discharge of stormwater from areas from material storage, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas.

Development projects may create potential impacts to stormwater from non-stormwater discharge from areas with material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work area.

Some materials, such as those containing heavy metals or toxic compounds, are of more concern than other materials. Toxic and hazardous materials must be prevented from coming in contact with stormwater runoff. Non-toxic or non-hazardous materials, such as debris and sediment, can also have significant impacts on receiving waters. Contact between non-toxic or non-hazardous materials and stormwater runoff should be limited, and such materials prevented from being discharged with stormwater runoff. To help mitigate these potential impacts, BMPs should be included to prevent discharges from leaving the property.

Refer to FMFCD Post-Development Standards Technical Manual for more information or go to http://water.epa.gov/polwaste/nps/urban.cfm.

d. Potential for discharge of stormwater to impact the beneficial uses of the receiving waters or areas that provide water quality benefits.

Identify receiving waters and describe activities that may impact the beneficial uses of the receiving waters or that project water quality benefits. Project that can impact beneficial uses or receiving waters may be mitigated by implementation of the FMFCD Post-Development Standards Technical Manual.

e. Potential for the discharge of stormwater to cause significant harm on the biological integrity of the water ways and water bodies.

Conservation of natural areas, soils, and vegetation helps to retain numerous functions of predevelopment hydrology, including rainfall interception, infiltration, and evapotranspiration. Each project site possesses unique topographic, hydrologic, and vegetative features, some of which are more suitable for development than others. Sensitive areas, such as streams and their buffers, floodplains, wetlands, steep slopes, and highly-permeable soils, should be protected and/or restored. Slopes can be a major source of sediment and should be properly protected and stabilized. County of Fresno Notice of Availability Draft Program Environmental Impact Report for the Fresno County General Plan Review and Zoning Ordinance Update (SCH#201803106) June 27, 2023 Page 10 of 10

Locating development in less sensitive areas of a project site and conserving naturally vegetated areas can minimize environmental impacts from stormwater runoff.

The evaluation of a project's effect on sensitive natural communities should encompass aquatic and wetland habitats. Consider "aquatic and wetland habitat" as examples of sensitive habitat.

f. Potential for significant changes in the flow velocity or volume of stormwater runoff that can cause environmental harm.

The evaluation of a project's effect on drainage patterns should refer to the FMFCD's Storm Drainage and Flood Control Master Plan and have their project reviewed by FMFCD to assess the significance of altering existing drainage patterns and to develop any mitigation measures in addition to our stormwater mitigation system. The evaluation should also consider any potential for streambed or bank erosion downstream from the project.

g. Potential for significant increases in erosion of the project site or surrounding areas.

The evaluation of a project's effect on drainage patterns should refer to the FMFCD's Storm Drainage and Flood Control Master Plan and have their project reviewed by FMFCD to assess the significance of altering existing drainage patterns and to develop any mitigation measures in addition to our stormwater mitigation system. The evaluation should also consider any potential for streambed or bank erosion downstream from the project.

Thank you for your consideration of these comments and for allowing us to be a part of the General Plan Update process. We continue to look forward to working with you and the County of Fresno on the update process.

Sincerely,

Denise Wade Master Plan and Special Projects Manager

DW/lrl

Attachments

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- The California Department of Transportation (Caltrans) has responsibility for approving future improvements to the State highway system, including Highway 99 and Interstate 5.
- The California Department of Fish and Wildlife (CDFW) has responsibility for issuing take permits and streambed alteration agreements for any projects with the potential to affect plant or animal species listed by the State of California as rare, threatened, or endangered or that would disturb waters of the State.
- Any other public agencies, such as: Fresno County Fire Protection District, Fresno Irrigation District, Fresno Unified School District, Fresno Local Agency Formation Commission, Airport Land Use Commission of Fresno County, Central Valley Regional Water Quality Control Board, San Joaquin Valley Air Quality Management District, Army Corps of Engineers, Department of Water Resources, and California Department of Housing and Community Development.

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Trustee agencies have jurisdiction over certain res
but do not have a legal authority over approving c
agencies for the General Plan may include CDFW,
State Lands Commission.
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1.5 Intended Uses of the EIR

This EIR is an informational document for use in the County's review and consideration of the proposed General Plan Review and Zoning Ordinance Update. It is to be used to facilitate creation of a General Plan that incorporates environmental considerations and planning principals into a cohesive policy document. The GPR/ZOU will guide subsequent actions taken by the County in its review of new development projects. This EIR discloses the possible environmental consequences associated with the proposed project. The information in this EIR will be used by the Fresno County Board of Supervisors, the Fresno County Planning Commission, the general public, and potentially the trustee and responsible agencies.

The focus of this EIR is to:

- Provide information about the GPR/ZOU for consideration by the Fresno County Board of Supervisors and Fresno County Planning Commission in their selection of the proposed project, an alternative to the proposed project, or a combination of various chapters from the proposed project and its alternatives, for approval
- Review and evaluate the potentially significant environmental impacts that could occur as a result of the implementation of the GPR/ZOU compared to existing conditions
- Identify feasible mitigation measures that may be incorporated into the proposed project in order to reduce or eliminate potentially significant effects
- Disclose any potential growth-inducing and/or cumulative impacts associated with the proposed project
- Examine a reasonable range of alternatives that could feasibly attain the basic objectives of the proposed project, while eliminating and/or reducing some or all of its potentially significant adverse environmental effects

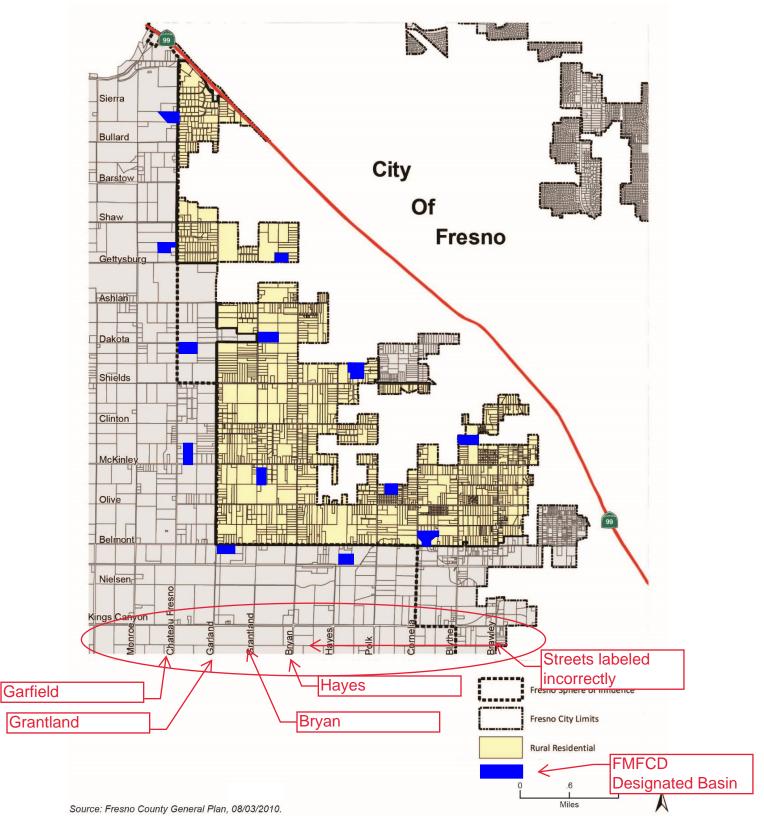
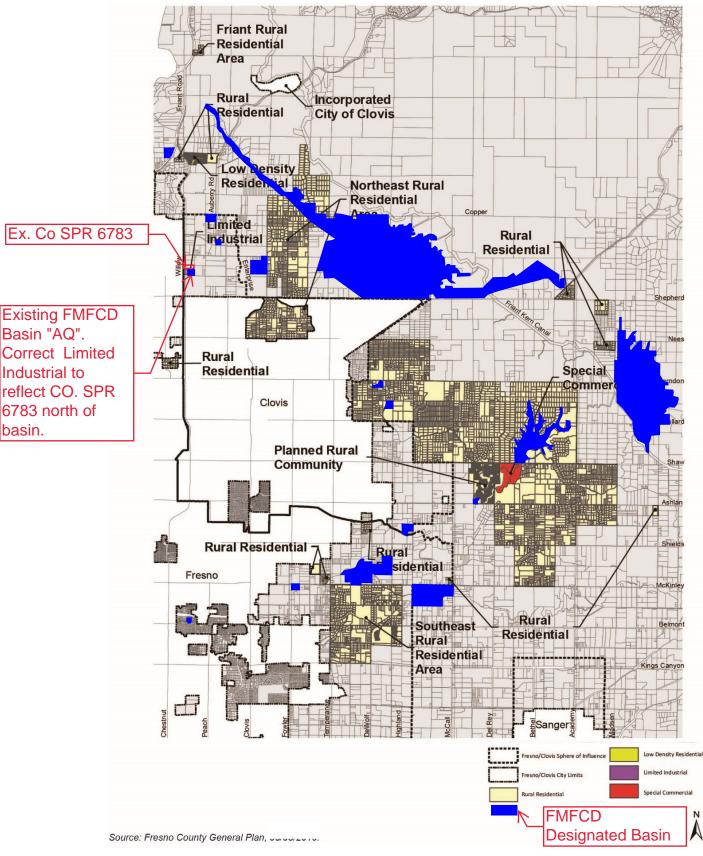


Figure 2-5 Rural Residential Land Use Diagram





County of Fresno General Plan Review and Zoning Ordinance Update

- Landslides
- 2. Result in substantial soil erosion or the loss of topsoil
- 3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse
- 4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property
- 5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater
- 6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

Threshold 1:	: Would the project directly or indirectly cause potential substantial adverse effect	
	including the risk of loss, injury, or death involving rupture of a known earthquake	
	fault, strong seismic ground shaking, seismic-related ground failure, including	
	liquefaction, or landslides; or,	

Threshold 3: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

IMPACT GEO-1 New development envisioned in the General Plan Review and Zoning Ordinance Update (GPR/ZOU) could result in exposure of people or structures to a risk of loss, injury, or death from seismic events. Additionally, development under the general plan has the potential to be located on an unstable geologic unit or unstable soil, or soil that could become unstable as a result of the project. However, adherence to the requirements of the California Building Code and implementation of the policies in the 2042 General Plan would minimize the potential for loss, injury, or death following a seismic event, as well as the potential for on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse due to unstable soils or unstable geologic units. IMPACTs would be less than significant level.

As discussed above in Subsection 4.6.1, *Setting*, due to the presence of multiple faults within the County, there is the potential for strong ground shaking during a large earthquake along the Nunez or Ortigalita faults in the western part of the Planning Area. The western part of the Planning Area is also at moderate risk for landslides.

Implementation of the proposed GPR/ZOU would facilitate residential and nonresidential development within the Planning Area. The residents and employees of these developments would be potentially exposed to the effects of fault rupture, seismic groundshaking, liquefaction, and landslides from local and regional earthquakes; particularly in the western part of the county, which is more prone to seismic hazards As described in Chapter 2, *Project Description*, the proposed GPR/ZOU includes only minimal changes to the County's land use designations and will direct growth to existing communities. Increased zoning densities would be introduced in some areas of the western portion of the County and residents may be potentially exposed to seismic hazards. Structures that would be built on unstable soils or unstable geology on steep slopes could be exposed to an existing risk of landslide or if improperly constructed could exacerbate existing landslide conditions or soil instabilities. New structures built under the proposed project could also experience substantial damage during seismic groundshaking events.

would require preparation of drainage plans for development or infrastructure projects in hillside areas to ensure runoff is directed away from unstable slopes.

Implementation of the policies and programs listed above, in addition to compliance with applicable laws and regulations, would minimize the potential for loss, injury, or death following a seismic event or unstable soils and geologic units and would reduce this potential impact to a less than significant level.

Mitigation Measures

No mitigation is required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 2: Would the project result in substantial soil erosion or the loss of topsoil?

IMPACT GEO-2 CONSTRUCTION OF NEW DEVELOPMENT ENVISIONED IN THE GPR/ZOU WOULD REQUIRE GROUND DISTURBANCE SUCH AS EXCAVATION AND GRADING THAT WOULD RESULT IN LOOSE OR EXPOSED SOIL. THIS DISTURBED SOIL COULD BE ERODED BY WIND OR DURING A STORM EVENT, WHICH WOULD RESULT IN THE LOSS OF TOPSOIL. COMPLIANCE WITH APPLICABLE REGULATIONS, INCLUDING THE CLEAN WATER ACT, AND IMPLEMENTATION OF THE POLICIES IN THE **2042** GENERAL PLAN WOULD MINIMIZE THE POTENTIAL FOR EROSION AND THE LOSS OF TOPSOIL AND WOULD REDUCE THIS POTENTIAL IMPACT TO A LESS-THAN-SIGNIFICANT LEVEL.

As discussed above under Subsection 4.6.1, *Setting*, soils in the eastern part of the County have been identified as having moderate to high erosion potential. Many of these soils are located in the Sierra National Forest, Sequoia National Park, or Kings Canyon National Park. In the western part of the county, soils located in the Coastal Range foothills have also been identified as being associated with moderate to severe sheet and gully erosion. Additionally, soils in the western part of the county are particularly susceptible to erosion due to human activity. Development under the GPR/ZOU would involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities. Loose and disturbed soils are more prone to erosion and loss of topsoil by wind and water.

Update

Construction activities that disturb one or more acres of land surface are subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board (SWRCB). Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require development of a storm water pollution prevention plan (SWPPP), which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-storm water management controls. Inspection of construction sites before and after storms is also required to identify storm water discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the Construction General Permit is reinforced through the Fresno County Municipal Code (Chapter 14.24), which requires the development of an erosion and sediment control plan that is equivalent to the required SWPPP.

County of Fresno General Plan Review and Zoning Ordinance Update

peak flows or total runoff volume, and to mimic the pre-development site hydrology. These controls may include limits on impervious areas or provisions for detention and retention of runoff on site.

Construction activities, including excavation and trenching, may encounter shallow groundwater. The 2042 General Plan Policy Update includes Policy OS-A.24 to prevent groundwater degradation, stating that the County shall only approve land uses with low risk of degrading groundwater. In the event that shallow groundwater is encountered, dewatering of the excavation or trenching site may be required. If improperly managed, these dewatering activities could result in discharge of contaminated groundwater. In accordance with the Central Valley RWQCB Groundwater General Permit (Order No. 5-00-175; NPDES No. CAG995001), contaminated groundwater would be treated prior to discharge or disposed of at an appropriate disposal facility or wastewater treatment plant, if there is doubt about the ability for continuous compliance with requirements (Central Valley CRWQCB 2000).

USEPA regulations on stormwater discharges, known as Phase I of the NPDES program, prohibit discharges of stormwater to waters of the United States from construction projects that encompass one or more acres of soil disturbance, unless in compliance with an NPDES permit. Phase II of the NPDES program expands the requirements to operators of small municipal separate storm sewer systems (MS4s) in urban areas and small construction sites, requiring NPDES permit coverage and pollution control measures. Discharges to the County's storm water conveyance system that would not be covered by the Phase II General Permit would be required to obtain coverage under an individual NPDES permit or comply with individual Waste Discharge Requirements, as approved by the Central Valley RWQCB.

The General Plan envisions a mix of development types and land uses in the County, such as residential development, commercial development, industrial development, and development of public uses, such as roadways and trails. Generally, during operation, residential land uses do not involve activities with the potential for substantial degradation of water quality or violation of water quality standards. Residential land uses typically involve the use of non-toxic chemicals that are used within the interior of residential buildings and have no potential for discharge to water. Residential development could involve the use of household cleaning products, paint, and gasoline for small motors, such as lawnmowers and leaf blowers. Similarly, depending on the specific business, operation of commercial or retail development could involve the storage and use of petroleum products or other chemicals that could degrade water quality. However, the use and storage of these products would be in conformance with all regulations and legal requirements and would generally be of small quantities. Industrial development and industrial processes could generate pollutants with potential to affect water quality. Likewise, the General Plan envisions the continuation of agriculture in the County, which could also potentially affect water quality from discharges or runoff of chemicals such as fertilizers and pesticides. These chemicals must also be stored, handled, and used in compliance with mandatory CWA, state, and local requirements, reducing the potential for discharge and substantial water quality degradation.

In addition to compliance with mandatory CWA, state, and local requirements, including the Fresno County Code of Ordinances Chapter 14.24, implementation of the proposed General Plan goals and policies would further reduce the potential for water quality degradation (Fresno County 2021). The following goals contain specific policies involved with water quality protection: Goal LU-C describes protections for river environments, surface water, and groundwater; Goal OS-A is "to protect and enhance the water quality and quantity in Fresno County's streams, creeks, and groundwater basins;" Goal PF-C is "to ensure the availability of an adequate and safe water supply for domestic and agricultural consumption;" Goal PF-D is "to ensure adequate wastewater collection and

impacts to groundwater supply would be less than significant, because changes to recharge rates or patterns associated with land use conversions would be effectively managed under the aforementioned policies and practices.

The General Plan would not substantially decrease groundwater supplies, interfere substantially with groundwater recharge, or obstruct implementation of a sustainable groundwater management plan. Potential impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 3a: Would the GPR/ZOU substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

IMPACT HWQ-3 DEVELOPMENT FACILITATED BY THE GPR/ZOU COULD ALTER THE EXISTING DRAINAGE PATTERNS ON FUTURE DEVELOPMENT SITES AND POTENTIALLY RESULT IN EROSION AND SILTATION. COMPLIANCE WITH APPLICABLE REGULATIONS, INCLUDING THE CLEAN WATER ACT, AND IMPLEMENTATION OF THE GOALS AND POLICIES OF THE 2042 GENERAL PLAN WOULD MINIMIZE THE POTENTIAL FOR EROSION AND SILTATION AND WOULD REDUCE THIS POTENTIAL IMPACT TO A LESS THAN SIGNIFICANT LEVEL.

Development under the GPR/ZOU would involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities. Development would also result in alterations to drainage patterns through structural changes to ground surface permeability and changes in topography from grading and excavation. As described under Impact HWQ-1, construction of future projects could result in soil erosion due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. If not managed properly, disturbed soils would be susceptible to high rates of erosion from wind and rain, resulting in sediment transport and siltation of local streams via storm water runoff from the construction sites.

Update

Construction activities that disturb one or more acres of land surface are subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board (SWRCB). Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require development of a storm water pollution prevention plan (SWPPP), which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-storm water management controls. Inspection of construction sites before and after storms is also required to identify storm water discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the Construction General Permit is reinforced through the Fresno County Municipal Code (Chapter 14.24), which requires the development of an erosion and sediment control plan that is equivalent to the required SWPPP.

Threshold 3b:	Would the GPR/ZOU substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?
Threshold 3c:	Would the GPR/ZOU substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would 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?
Threshold 3d:	Would the GPR/ZOU substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would impede or redirect flood flows?

IMPACT HWQ-4 DEVELOPMENT FACILITATED BY THE GPR/ZOU COULD ALTER THE EXISTING DRAINAGE PATTERNS AND INCREASE THE AMOUNT OF RUNOFF IN SPHERES OF INFLUENCE OF INCORPORATED CITIES AND IN EXISTING UNINCORPORATED COMMUNITIES, WHICH COULD RESULT IN FLOODING ON- OR OFF-SITE, EXCEEDING THE CAPACITY OF EXISTING OR PLANNED STORMWATER DRAINAGE SYSTEMS, OR CREATE SUBSTANTIAL ADDITIONAL SOURCES OF POLLUTED RUNOFF. COMPLIANCE WITH APPLICABLE REGULATIONS AND IMPLEMENTATION OF THE GOALS AND POLICIES OF THE 2042 GENERAL PLAN WOULD MINIMIZE THE POTENTIAL FOR INCREASED RUNOFF AND FLOODING. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Development facilitated by the GPR/ZOU could incrementally increase the total impervious area, and thus stormwater runoff, in spheres of influence of incorporated cities and in existing unincorporated communities within the County (refer to Section 2, *Project Description*). However, as described above, implementation of the 2042 General Plan's goals and policies and adherence to the requirements of the Clean Water Act would minimize the off-site runoff and pollutant from project site A Portion ncourage infill development and development in areas without prohibitive environmental or resource management concerns, further reducing impacts to drainage.

The Majority of the storm drainage systems within unincorporated Fresno County are managed by the Fresno Metropolitan Flood Control District. District facilities include drainage facilities, flood control water courses, and retention basins. A small number of individual communities are served by special districts, which facilitate stormwater through management of retention basins and ditches. Development facilitated by the General Plan could increase stormwater runoff and may require the construction or expansion of stormwater drainage facilities. Should these facilities be required, they would be subject to CEQA review and appropriate environmental mitigation.

As the drainage basin for thousands of watershed acres of Sierra Nevada and Coast Range foothills and mountains, flooding is a natural occurrence in Fresno County. During winter and spring months, heavy rainfall and snowmelt swell the County's river systems. Stormwater is collected and controlled in the gutters, inlets, underground storm drains, retention basins, pumping stations, and open channels managed by the Fresno Metropolitan Flood Control District and the special districts that serve small individual communities. Development will add to the County's impervious surface areas and increase the flow that enters drainage facilities. To reduce the impacts of anticipated

4.10.3 Cumulative Impacts

The geographic scope for the cumulative analysis of hydrology and water quality includes the Kings, Madera, Delta-Mendota, Westside, and Pleasant Valley Groundwater Basins, which are all subbasins of the San Joaquin Valley Groundwater Basin, in the San Joaquin River and Tulare Lake Hydrologic Regions. Cumulative development in Fresno County allowable under the Fresno County General Plan would also increase impermeable surfaces, which could increase runoff, exacerbate flooding conditions, and reduce groundwater recharge. The impacts of increased impervious surface (e.g., increased runoff, altered drainage patterns, decreased water quality) would be reduced through adherence to the NPDES General Construction Permit administered by the State Water Resources Control Board (SWRCB). Every construction project that disturbs one or more acres of land surface or that is part of a common plan of development or sale that disturbs more than one acre of land surface would require coverage under the Construction General Permit. For projects less than one acre in size, Fresno County requires the implementation of Countywide BMPs to protect water quality. Compliance with these regulations would reduce impacts to a less than significant level.

The proposed GPR/ZOU would not result in a substantial increase of pollutant discharges to local water sources, alteration of drainage patterns in the project corridor, or otherwise result in a substantial contribution to cumulative impacts, and thus would not be cumulatively considerable.

4.14.5 Impact Analysis

a. Methodology and Significance Thresholds

According to Appendix G of the adopted *CEQA Guidelines*, impacts related to public services and recreation from implementation of General Plan 2035 would be significant if it would:

- 1. Result in substantial adverse physical impacts associated with the need for or provision of new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for:
 - a. Fire protection
 - b. Police protection
 - c. Schools
 - d. Parks
 - e. Other public facilities
- 2. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- 3. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Should be 4.10

In terms of Threshold 1(e) regarding impacts on "other public facilities," such facilities include libraries. Impacts related to libraries are discussed in this section. Impacts related to public stormwater facilities are addressed in Section 4.8, *Hydrology and Water Quality*, and Section 4.17, *Utilities and Service Systems*. Impacts related to public wastewater, water, and solid waste facilities are discussed in Section 4.17, *Utilities and Service Systems*.

b. Impacts and Mitigation Measures

Threshold 1a: Would the GPR/ZOU result in substantial adverse physical impacts associated with the provision of new or physically altered fire facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives?

IMPACT PS-1 IMPLEMENTATION OF THE GPR/ZOU WOULD ADD NEW POPULATION, GENERATING ADDITIONAL NEED FOR FIRE PROTECTION SERVICES. THE PROPOSED 2042 GENERAL PLAN POLICIES WOULD REDUCE IMPACTS ASSOCIATED WITH THE PROVISION OF FIRE PROTECTION SERVICES, AND NEW FACILITIES WOULD BE LOCATED IN DEVELOPED AREAS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Under the GPR/ZOU buildout, an estimated 24,607 new residents would be added to the Planning area. When added to the 2021 population, the GPR/ZOU would increase unincorporated Fresno County's total population to an estimated 234,591 residents, an increase of 16.7 percent. Because the population of Fresno County is expected to increase by approximately 16.7 percent, demand for public services such as fire protection would also increase.

Fresno County FPD's most recent Strategic Plan (2022) identifies the goal of prioritizing, promoting, and providing for the mental and physical health and safety of CAL FIRE/ Fresno County FPD employees and the people served. The Strategic Plan identifies Objective E to evaluate facilities and

statutory deadline." Specifically, the sustainability goal establishes that the Westside Subbasin will be operated within its sustainable yield by 2040 and maintain sustainability through the entire planning and implementation horizon through 2070. The GSP sets forth active management strategies that may be pursued by the GSA and stakeholders as authorized, as well as enforceable commitments to ensure its efficacy. These strategies include firming up access to more reliable surface water deliveries, conjunctive use, demand management through the adoption of an allocation system, improved efficiencies by transfer/trading, and surface water substitution within subsidence prone areas.

In accordance with description above, and as demonstrated by each of the four subbasins within Fresno County being actively managed under a basin-specific GSP by a DWR-approved GSA (or joint powers authority comprised of multiple GSA groups operating in coordination), groundwater resources throughout Fresno County are actively managed towards the key goal of attaining and maintaining sustainable groundwater conditions.

b. Wastewater

Most of the wastewater collection systems within unincorporated Fresno County serve small communities. Wastewater service within the county is generally provided by special districts, including waterworks districts, community services districts, county service areas, a county sanitation district, and County water districts.

Incorporated areas within Fresno County are served by municipal wastewater collection and treatment systems, with the exception of Fowler, Kingsburg, and Selma, which are served by a joint

Selma-Kingsb served by small "Most" to "A community se portion"

tion District. Unincorporated areas within the county are Igh many rural areas of the county rely on individual or

c. Stormwater Drainage

Most of the storm drainage systems within the unincorporated areas of Fresno County are managed by the Fresno Metropolitan Flood Control District. District facilities include drainage facilities, flood control water courses, and retention basins. The Fresno Metropolitan Flood Control District services the Fresno and Clovis areas including unincorporated areas stretching east into the Foothills. A small number of individual communities have storm drainage systems serviced by special districts. Drainage services in these areas center on the creation and maintenance of retention basins to collect stormwater.

d. Electric Power, Natural Gas, and Telecommunications

Electric Power

Pacific Gas & Electric (PG&E) provides electrical service to the majority of Fresno County, including all incorporated areas. The Southern California Edison Company serves the northeast area of Fresno County in the communities of Shaver Lake and Big Creek where the company has generating facilities. PG&E's power system is one of the nation's largest electric and gas utilities and maintains 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines (PG&E 2022).

CORTESE-KNOX-HERTZBERG GOVERNMENTAL REORGANIZATION ACT OF 2000

The Cortese-Knox-Hertzberg Governmental Reorganization Act of 2000 requires California Local Agency Formation Commission's (LAFCO) to conduct municipal service reviews for specified public agencies under their jurisdiction.

One aspect of municipal service review is to evaluate an agency's ability to provide public services within its ultimate service area. A municipal service review is required before an agency can update its sphere of influence.

SMALL COMMUNITY WASTEWATER GRANT PROGRAM

The small community wastewater grant program (SCWG), funded by Propositions 40 and 50, provides grant assistance for the construction of publicly owned wastewater treatment and collection facilities. Grants are available for small communities with financial hardships. Communities must comply with population restrictions (maximum population of 20,000 people) and annual median household income provisions (maximum income of \$37,994) to qualify for funding under the SCWG Program.

TITLE 22 OF CALIFORNIA CODE OF REGULATIONS

Title 22 regulates the use of reclaimed wastewater. In most cases, only disinfected tertiary water may be used on food crops where the recycled water would come into contact with the edible portion of the crop. Disinfected secondary treatment may be used for food crops where the edible portion is produced above ground and will not come into contact with the secondary effluent. Lesser levels of treatment are required for other types of crops, such as orchards, vineyards, and fiber crops. Standards are also prescribed for the use of treated wastewater for irrigation of parks, playgrounds, landscaping and other non-agricultural irrigation. Regulation of reclaimed water is governed by the nine RWQCBs and CDPH.

c. Stormwater Drainage

Federal Laws and Regulations

CLEAN WATER ACT

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial stormwater discharges, including discharges associated with construction activities, under the NPDES program.

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

In 1990 EPA published final regulations that establish stormwater permit application requirements. The regulations, also known as Phase I of the NPDES program, provide that discharges of stormwater to waters of the United States from construction projects that encompass one or more acres of soil disturbance are effectively prohibited unless the discharge complies with an NPDES permit. Phase II of the NPDES program expands the requirements by requiring operators of small MS4s in urbanized areas and small construction sites to be covered under an NPDES permit, and to implement programs and practices to control polluted stormwater runoff

State Laws and Regulations

State Water Resources Control Board (SWRCB). In California, the NPDES stormwater permitting program is administered by the SWRCB. The SWRCB has established a construction General Permit that can be applied to most construction activities in the State. Construction permittees may choose to obtain individual NPDES permits instead of obtaining coverage under the General Permit, but this can be an expensive and complicated process, and its use is generally limited to very large construction projects that discharge to critical receiving waters. In California, owners of construction projects may obtain NPDES permit coverage by filing a Notice of Intent (NOI) to be covered under the SWRCB Order No. 99-08- DWQ, NPDES General Permit No. CAS00002, WDRs for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit) and subsequent adopted modification.

__Update

d. Electric Power, Natural Gas, and Telecommunications

Federal Laws and Regulations

FEDERAL ENERGY REGULATORY COMMISSION (FERC)

FERC is an independent agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines, as well as licensing hydropower projects. Licensing of hydroelectric facilities under the authority of FERC includes input from State and Federal energy, environmental protection, fish and wildlife, and water quality agencies. The California Energy Commission's Systems Assessment and Facilities Siting Division provides coordination with FERC to ensure that needed energy facilities are authorized in an expeditious, safe, and environmentally acceptable manner.

State Laws and Regulations

CALIFORNIA ENERGY COMMISSION (CEC)

The CEC is California's primary energy policy and planning agency. Created by the California Legislature in 1974, the CEC has five major responsibilities: 1) forecasting future energy needs and keeping historical energy data; 2) licensing thermal power plants 50 MW or larger; 3) promoting energy efficiency through appliance and building standards; 4) developing energy technologies and supporting renewable energy; and 5) planning for and directing State response to energy emergencies. Under the requirements of the California Public Resources Code, the CEC in conjunction with the California Department of Conservation (DOC) Division of Oil, Gas, and Geothermal Resources is required to assess electricity and natural gas resources on an annual basis or as necessary.

CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC)

The CPUC is a State agency created by a constitutional amendment to regulate privately-owned utilities providing telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation services, and in-State moving companies. The CPUC is responsible for assuring that California utility customers have safe, reliable utility services at reasonable rates, while protecting utility customers from fraud. The CPUC regulates the planning and approval for the

Goal or Policy	Effects Related to Wastewater Treatment Facilities
Policy PF-D.2: Wastewater Treatment Facility Operation. The County shall require that any new community sewer and wastewater treatment facilities serving residential subdivisions be owned and maintained by a County Service Area or other public entity or entity governed by the California Public Utilities Commission and approved by the County.	Ensures that new wastewater treatment facilities serving residential subdivisions are owned and maintained by an entity governed by the California Public Utilities Commission and approved by the County.
Policy PF-D.4: Available Wastewater Treatment Capacity. The County shall limit the expansion of unincorporated, urban density communities to areas where community wastewater treatment facilities can be provided.	Limits the expansion of unincorporated, urban density communities where existing or planned wastewater treatment infrastructure and facilities are not available or feasible.
 Policy PF-D.5: Reduced Wastewater System Demand. The County shall promote efficient water use and reduced wastewater system demand by: a. Requiring water conserving design and equipment in new construction; b. Encouraging retrofitting with water conserving devices; and c. Designing wastewater systems to minimize inflow and infiltration, to the extent economically feasible. 	Supports efficient water use and reduced wastewater system demand by encouraging retrofitting and effective design.
Policy PF-D.6: On-site Sewage Disposal Systems. The County shall permit individual on-site sewage disposal systems on parcels that have the area, soils, and other characteristics that permit installation of such disposal facilities without threatening surface or groundwater quality or posing any other health hazards and where community sewer service is not available and cannot be provided.	Allows for on-site sewage disposal systems where such facilities would not threaten surface or groundwater quality or pose health hazards, and where community sewer service is not available and cannot be provided.
Policy PF-D.7: Sewer Master Plans. The County shall require preparation of sewer master plans for wastewater treatment facilities for areas experiencing urban growth.	Requires preparation of sewer master plans for wastewater treatment facilities specifically in areas experiencing growth.

The policy analysis in Table 4.17-2 demonstrates that with the goals and policies of the 2042 General Plan, wastewater infrastructure associated with future development under the GPR/ZOU would be appropriately planned for and accommodated. However, as discussed above this table, wastewater treatment needs associated with currently projected population growth were not accounted for in the size and capacity of existing facilities, particularly the community-based systems throughout unincorporated Fresno County. Therefore, depending upon the location of future population growth, substantial new or expanded wastewater treatment facilities may be required, and potential environmental impacts would be significant and unavoidable.

STORMWATER DRAINAGE FACILITIES

Stormwater drainage facilities within the unincorporated areas of Fresno County are managed by the Fresno Metropolitan Flood Control District, and generally consist of channels and control features to guide the flow of stormwater runoff, stormwater detention basins to slow flow velocity and control discharge, and related facilities to guide surface flows through and around development areas, to avoid or minimize potentially adverse impacts. Some small communities in unincorporated Fresno County have stormwater drainage systems serviced by special districts. These systems are typically designed and developed on an as-needed basis, and are tied to specific land uses and land use cover types. As such, stormwater drainage facilities associated with future growth would be

(Fresno and Clovis metropolitan areas)

Finally, the increase in population facilitated by Alternative 2 2 would result in an increased demand for parks and recreation facilities and would potentially create the need for new parks and recreation facilities. Construction of these facilities would be guided by policies of the 2042 General Plan that protect the environment. Similar to the proposed GPR/ZOU, impacts to parks and recreational facilities would be less than significant under this alternative. Overall, impacts to fire and police protection services would be reduced, and impacts to schools, libraries, and parks and recreational facilities would be similar compared to the proposed GPR/ZOU.

o. Transportation

Alternative 2 would involve increasing density within the SOI of the City of Fresno. Denser growth near existing urban centers would increase Alternative 2's consistency with the California Transportation Plan, the FCOG 2018-2042 RTP/SCS, the Fresno County 2018 Active Transportation Plan, and the Fresno County 2021 Regional Trails Plan as transit service and connectivity would be improved under a denser land use pattern. Therefore, Alternative 2 would be consistent with applicable, programs, plans, ordinances, and policies addressing the circulation system, and impacts would be reduced compared to the proposed GPR/ZOU.

Because Alternative 2 would facilitate denser residential growth, VMT per capita is expected to decrease as residents would be located closer to existing transit and services. Under the proposed GPR/ZOU, estimated 2042 VMT per capita would be approximately 14.4, just above the significance threshold of 14.0. Alternative 2 would increase the allowable density within the City of Fresno SOI, which would locate residents closer to existing services, reducing overall trip lengths compared to more rural areas of the county, and thus would reduce VMT per capita; accordingly, VMT per capita would likely be reduced below the significance threshold, and impacts would not be significant and unavoidable under this alternative. Impacts would be less than significant and reduced under Alternative 2.

Similar to the proposed GPR/ZOU, Alternative 2 would include goals and policies that would aim to make roadways safer and to increase emergency access and efficient emergency evacuation. Impacts related to these factors would remain less than significant. Overall, transportation impacts would be reduced under Alternative 2 compared to the proposed GPR/ZOU.

p. Tribal Cultural Resources

Because Alternative 2 would result in denser development near an existing incorporated city, development facilitated by this alternative would likely occur in previously disturbed areas. Therefore, Alternative 2 has less potential to disturb previously undisturbed tribal cultural resources, and impacts would be reduced. However, there is always potential for disturbance to occur; compliance with existing regulations and implementation of 2042 General Plan policies would reduce impacts to unanticipated discovery of human remains but impacts would remain significant and unavoidable.

Add stormwate drainage

q. Utilities and Service Systems

Similar to the proposed GPR/ZOU, Alternative 2 would facilitate population growth in Fresno County, which would result in increased demand for water, wastewater collection and treatment, electric power and natural gas, and telecommunications facilities. Depending on the timing of development facilitated by this alternative, it may become necessary to construct new or expanded utility facilities, which could result in significant impacts to the environment. However, development facilitated by Alternative 2 would comply with applicable 2042 General Plan policies to ensure that adequate infrastructure is available to serve future development, similar to the proposed GPR/ZOU. Because Alternative 2 would facilitate increased development in a city SOI area, future development would be served by existing water, wastewater, electric power and natural gas, and telecommunications facilities; therefore, the need for new or expanded facilities would be reduced and impacts would be reduced compared to the proposed GPR/ZOU. However, similar to the proposed GPR/ZOU, Alternative 2 would result in a significant increase in water demand that may not be adequately served by Fresno County's projected and reasonably available water supplies. While development facilitated by this alternative would likely be served by existing water infrastructure, water demand would still increase, and impacts would remain significant and unavoidable.

Finally, similar to the GPR/ZOU, development facilitated by this alternative would result in an increased amount of wastewater and solid waste compared to existing and projected baseline conditions. This alternative would facilitate the same growth anticipated under the proposed GPR/ZOU and would further direct development toward existing an urban unincorporated community. Similar to the proposed project, existing wastewater treatment facilities are sufficient to accommodate planned development, and landfills serving Fresno County have adequate capacity to accept additional waste. Compliance with 2042 General Plan policies and solid waste reduction legislations would reduce the amount of additional waste generated. Therefore, impacts related to solid waste would remain less than significant. Overall, impacts related to existing utility facilities would be reduced, and impacts related to water demand and solid waste would be similar compared to the proposed GPR/ZOU.

r. Wildfire

The proposed GPR/ZOU would direct growth toward urban areas where wildfire risk is low and does not envision substantial development in Very High Fire Hazard Severity Zones located in State Responsibility Areas, as designated by CAL FIRE. Alternative 2 would further facilitate development near an existing urban community by allowing increased density in the City of Fresno SOI. In addition to implementation of 2042 General Plan policies, Alternative 2 would result in reduced impacts related to emergency response plans. Most development facilitated by the proposed GPR/ZOU and this alternative would be located outside of Moderate to Very High Fire Hazard Severity Zones, and with mitigation to address the potential to exacerbate wildfire risks, impacts would be less than significant. Alternative 2 would further facilitate growth in areas already served by existing infrastructure, roads, and fire protection facilities. As a result, impacts related to the installation or maintenance of associated infrastructure would be reduced compared to the proposed GPR/ZOU, and impacts would remain less than significant. Finally, Alternative 2 would involve denser development in generally flat, developed areas within the City of Fresno, where risk of flooding or landslides is lower than undeveloped areas. As a result, impacts would be reduced compared to the proposed GPR/ZOU and impacts related to post-fire slope instability would remain less than significant. Overall, impacts would be reduced compared to the proposed GPR/ZOU, but impacts would remain significant and unavoidable.

Similar to the proposed GPR/ZOU, Alternative 3 would include goals and policies that would aim to make roadways safer and to increase emergency access and efficient emergency evacuation. Impacts related to these factors would remain less than significant. Overall, transportation impacts would be reduced under Alternative 3 compared to the proposed GPR/ZOU and would be less than significant.

p. Tribal Cultural Resources

Because Alternative 3 would result in substantially denser rural residential development near existing incorporated cities of Fresno and Clovis and in the Community Plan Areas, development facilitated by this alternative would likely occur in previously disturbed areas. Therefore, Alternative 3 has less potential to disturb previously undisturbed tribal cultural resources, and impacts would be reduced. However, there is always potential for disturbance to a stormwater regulations and implementation of 2042 General Plan policies we drainage unanticipated discovery of human remains, but impacts would remain significant and unavoidable.

q. Utilities and Service Systems

Similar to the proposed GPR/ZOU, Alternative 3 would facilitate population growth in Fresno County, which would result in increased demand for water, wastewater collection and treatment, electric power and natural gas, and telecommunications facilities. Depending on the timing of development facilitated by this alternative, it may become necessary to construct new or expanded utility facilities, which could result in significant impacts to the environment. However, development facilitated by Alternative 3 would comply with applicable 2042 General Plan policies to ensure that adequate infrastructurestormwater ure development, similar to the proposed GPR/ZOU. Because Alternative 3 vdrainage development in r areas within the SOIs of Fresno and Clovis and in the Community Plan Areas, future development in these areas would be served by existing water, kastewater, electric power and natural gas, and telecommunications facilities; therefore, the need for new or expanded facilities would be reduced and impacts would be reduced compared to the proposed GPR/ZOU. However, similar to the proposed GPR/ZOU, Alternative 3 would result in a significant increase in water demand that may not be adequately served by Fresno County's projected and reasonably available water supplies. While development facilitated by this alternative would likely be served by existing water infrastructure, water demand would still increase and impacts would remain significant and unavoidable.

Finally, similar to the GPR/ZOU, development facilitated by this alternative would increase the amount of solid waste sent to area landfills and the amount of wastewater directed toward existing wastewater treatment facilities. Landfills serving Fresno County have adequate capacity to accept additional waste, and compliance with 2042 General Plan policies and solid waste reduction legislations would reduce the amount of additional waste generated. Wastewater treatment facilities have sufficient capacity to accommodate planned development. Therefore, impacts related to solid waste would remain less than significant. Overall, impacts related to existing utility facilities would be reduced and impacts related to water demand and solid waste would be similar compared to the proposed GPR/ZOU.

r. Wildfire

The proposed GPR/ZOU would direct growth toward urban areas where wildfire risk is low, and does not envision substantial development in Very High Fire Hazard Severity Zones located in State Responsibility Areas, as designated by CAL FIRE. Alternative 3 would further facilitate development



Existing and Planned Programs, Plans, and Policies	Objectives
County of Fresno, Affordable Housing Programs Drought Water Shortage and Drought Assistance (Fresno County 2022)	The County's Affordable Housing Program provide financial assistance to residents of unincorporated areas of the county who are experiencing water shortages.
Fresno Metropolitan Flood Control District Flood Control Program (Fresno County Flood Control District 2022)	The Fresno Metropolitan Flood C Clovis Metropolitan area n manages storm flows in Fresno C within dams, reservoirs, channels, and streams in order to minimize severe flooding. Climate change is not specifically acknowledged on the program pamphlet.
Fresh Capitalize D Fresh District Rural Streams Program (Fresho County Flood Control District 2022)	The Fresno Metropolitan Flood Control District's Rural Streams Program preserves, restores, and maintains channels in the eastern portion of the District's management areas to minimize severe storm flows . Climate change is not specifically acknowledged on the program webpage.
Groundwater Sustainability Plans (Kings, Delta-Mendota, and Westside subbasins) (Fresno County 2022)	The California Department of Water Resources (DWR) defined and Satisfies, Delta-Mendota, and Westside subbasins as high-i Convey Storm file areas, therefore requiring a Groundwater Sustainability Agency (GSA) to be identified for each subbasin and that each subbasin implement a Groundwater Sustainability Plan. The Groundwater Sustainability Plans for each subbasin (GSP) detail strategies to increase groundwater recharge capacity and drought resilience. The GSPs acknowledge future changing climate conditions as they outline strategies for ensuring groundwater supplies be sustainable by 2040.

Wildfires, Landslides, and Air Quality

Table 8 lists programs, plans, and policies that help increase the community's resilience to wildfires, landslides, and air quality.

Existing and Planned Programs, Plans, and Policies	Objectives
Fresno County SRA Fire Safe Regulations (Fresno County Fire Protection District 2022)	Fresno County requires new construction located within State Responsibility Areas (SRA) to meet minimum uniform standards for emergency access, perimeter wildfire protection measures, private water supply reserves for emergency fire use, signing and building numbering, and vegetation modifications.
Fresno County Sheriff's Office Evacuation Guidelines for Residents (Fresno County 2022)	The Fresno County Sheriff's Office hosts a website which provides wildfire safety recommendations and evacuation guidelines for the residents of Fresno County.
Highway 168 Fire Safe Council (Highway 168 Fire Safe Council 2022)	The Highway 168 Fire Safe Council is a non-profit group serving the eastern rural Fresno County unincorporated communities of Friant, Prather, Tollhouse, Auberry, Big Sandy, Meadow Lakes, Pine Ridge, Shaver Lake, Big Creek, and Huntington Lake. The group runs several programs aimed at mitigating wildfire risk, including the Shaver West Fuel Break Project, Beal Fuel Break Project, Sugarloaf Fuel Break Project and community education and outreach efforts. The Highway 168 Fire Council provides older adults and disabled residents with assistance to maintain their defensible space and reduce wildfire risk on their properties.

Table 8 Programs, Plans, and Policies to Manage Wildfire Impacts