

1 Appendix 3.0-1
2 **Regional Plans and Local General Plans**

3 This appendix summarizes relevant regional and local general plan goals, objectives, and policies
4 applicable to the Merced Intermodal Track Connection (MITC) Project (Project). The Project is
5 located almost entirely within the Merced city limits and entirely within Merced County. Table 3.0-
6 1.1 lists the regional plans and local general plans considered during the preparation of the
7 environmental impact report (EIR) for the Project.

8 **Table 3.0-1.1. List of Regional and Local General Plans**

Regional Plans
Central Valley Flood Protection Plan Update 2022 (DWR 2022)
California Central Valley Flood Protection Board Strategic Plan 2013-2017 (Central Valley Flood Protection Board 2013)
Upper San Joaquin River Regional Flood Management Plan (San Joaquin River Flood Control Project Agency 2015)
State of California Emergency Plan (State of California Governor’s Office of Emergency Services 2017)
Local General Plans
Merced County
2030 Merced County General Plan (County of Merced 2013)
Merced County Municipal Code
Regional Transportation Plan/Sustainable Communities Strategy for Merced County (Merced County Association of Governments 2022)
Merced County Regional Bicycle Transportation Plan (Merced County Association of Governments 2008)
Storm Water Management Program (Merced Storm Water Group 2007)
2017 County of Merced Emergency Operations Plan (County of Merced 2017)
2021-2026 Merced County Multi-Jurisdictional Hazard Mitigation Plan (County of Merced 2021)
City of Merced
Merced Vision 2030 General Plan (City of Merced 2012)
City of Merced Municipal Code
Merced 2013 Bicycle Transportation Plan (City of Merced 2013)

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10 Sections 3.0-1.1, *Aesthetics*, through 3.0-1.15, *Transportation*, lists the goals, objectives, and policies
11 from relevant plans applicable to the Project, organized by environmental resource topic.

12 **3.0-1.1 Aesthetics**

13 The following goals, objectives, and policies are relevant to aesthetics.

14 **3.0-1.1.1 Regional Plans and Policies**

15 No regional plans and/or policies are relevant to aesthetics.

1 **3.0-1.1.2 Local Plans and Policies**

2 **3.0-1.1.2.1 Merced County**

3 **2030 Merced County General Plan (County of Merced 2013)**

- 4 • **Public Facilities and Services Policy PFS-3.6.** Retention/Detention Facility (Regulation and
5 Development Review/Infrastructure and Service Master Plans, Strategies, and Programs
6 [RDR/MPSP]). Encourage stormwater detention/retention project designs that minimize
7 drainage concentrations and impervious coverage, avoid floodplain areas, are visually
8 unobtrusive and, where feasible, provide a natural watercourse appearance and a secondary
9 use, such as recreation.
- 10 • **Land Use Goal LU-5.B.** Preserve and enhance the design, heritage, historic character, and
11 quality of life of Urban Communities in Merced County.
- 12 • **Land Use Policy LU-5.B.4.** Integrate Natural Features (RDR). Emphasize each community'
13 natural features as the visual framework for new development and redevelopment.
- 14 • **Land Use Policy LU-5.B.5.** Streetscape Continuity (RDR). Ensure that streetscape elements (e.g.,
15 street signs, trees, furniture) maintain a visual continuity and follow a common image for each
16 Urban Community.
- 17 • **Land Use Policy LU-5.B.7.** Screening Industrial Uses (RDR). Require new industrial uses to be
18 screened, either by landscaping or site design, from existing residential uses and public facilities
19 (e.g., schools, parks) in order to minimize visual impacts within Urban Communities.
- 20 • **Land Use Goal LU-5.D.** Maintain economic vitality and promote the development of commercial
21 uses within Urban Communities that are compatible with surrounding land uses and meet the
22 present and future needs of County residents, workers, and visitors.
- 23 • **Land Use Policy LU-5.D.1.** Commercial Development (RDR). Require new commercial
24 development be designed to minimize the visual impact of parking areas on public roadways
25 and maintain compatibility with surrounding land uses.
- 26 • **Natural Resources Policy NR-3.2.** Soil Erosion and Contamination (RDR). Require minimal
27 disturbance of vegetation during construction to improve soil stability, reduce erosion, and
28 improve stormwater quality.
- 29 • **Natural Resources Goal NR-4.** Protect scenic resources and vistas.
- 30 • **Natural Resources Policy NR-4.1.** Scenic Resource Preservation (RDR). Promote the
31 preservation of agricultural land, ranch land, and other open space areas as a means of
32 protecting the County's scenic resources.
- 33 • **Natural Resources Policy NR-4.3.** Building Design (RDR). Require that siting and design of
34 buildings protect, improve, and enhance the scenic quality of the built and natural environments
35 and take full advantage of scenic resources through site orientation, building setbacks,
36 preservation of viewsheds, height limits, and the use of appropriate construction materials and
37 exterior modulation.

- 1 • **Natural Resources Policy NR-4.4.** New Roads (RDR). Consider the surrounding landscape,
2 topography, and existing scenic values when determining the location and construction of new
3 roads.
- 4 • **Natural Resources Policy NR-4.5.** Light Pollution Reduction (RDR). The County shall develop
5 and implement a lighting ordinance to require good lighting practices, such as the use of specific
6 light fixtures that reduce light pollution, minimize light impacts, and preserve views of the night
7 sky. The ordinance shall contain standards to avoid light trespass, particularly from developed
8 uses, to sensitive wildlife corridors and refuges.
- 9 • **Recreation and Cultural Resources Policy RCR-1.11.** Scenic Resource and Public Land
10 Protection (RDR). Encourage the use of regional parks and open space areas as a mechanism to
11 preserve the County’s natural scenic beauty and protect land for public purposes.
- 12 • **Recreation and Cultural Resources Policy RCR-2.7.** Historic Preservation (RDR). Support the
13 efforts of local preservation groups and community property owners to preserve or improve
14 building facades and exteriors consistent with the historic and visual character of the specific
15 building or area.

16 Merced County Municipal Code

17 Chapter 9.53 Regulation of Stormwater

- 18 • **Chapter 9.53.030 A.3.a.i.** Stream Setbacks and Buffers. A vegetated area including trees,
19 shrubs, and herbaceous vegetation shall be retained (if existing) or established to protect a
20 stream system or lake reservoir.
- 21 • **Chapter 9.53.030 A.3.a.iii.** Tree Planting and Preservation. Plant and/or preserve healthy
22 established trees including both evergreen and deciduous varieties, as applicable.

23 Chapter 18.40 Performance Standards

- 24 • **Chapter 18.40.070.** Outdoor Lighting.
 - 25 ○ **A. Exterior Lighting.** Exterior lighting shall be designed and maintained in a manner so that
26 glare and reflections are contained within the boundaries of the subject parcel and shall be
27 hooded and directed downward and away from adjoining properties and public rights-of-
28 way.
 - 29 ○ **B. Illumination.** The use of blinking, flashing, or unusually high-intensity or bright lights is
30 prohibited.
 - 31 ○ **C. Lighting Compatibility.** All lighting fixtures shall be appropriate to the use they are
32 serving, in scale, intensity, and height. (Ord. 1976 § 2, 2019)

33 Regional Transportation Plan/Sustainable Communities Strategy for Merced 34 County (Merced County Association of Governments 2022)

- 35 • 7.4. Preserve productive farmland and land that provides habitat for rare, endangered or
36 threatened species.
- 37 • 7.4.1. Consider impacts on prime farmland and areas that support protected wildlife.

1 **3.0-1.1.2.2 City of Merced**

2 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 3 • **Policy L-2.5.** Maintain attractive industrial and business park areas.
 - 4 ○ **Implementing Action L-2.5e.** Require high quality architectural, site (signs, lights, walls,
5 etc.), and landscape designs for industrial developments that abut Highway 99.
- 6 • **Policy L-3.4.** Build identity, character, and enhanced community design in the South Merced
- 7 Community Plan area.
- 8 ○ **Implementing Action L-3.4b.** Beautify and enhance the design of Gateway roads in the
9 South Merced Community Plan area.
- 10 • **Policy T-1.6.** Minimize adverse impacts on the environment from existing and proposed road
- 11 systems.
- 12 ○ **Implementing Action T-1.6a:** Continue working to minimize environmental impacts
13 associated with heavily travelled transportation corridors, such as high noise levels and stop14 and go traffic situations (which contribute heavily to air pollution problems).
- 15 • **Policy OS-1.3.** Promote the protection and enhancement of designated scenic routes.
 - 16 ○ **Implementing Action OS-1.3b.** Preserve the designated scenic corridors. The Scenic
17 Corridors are as follows.
 - 18 • a) North and South Bear Creek Drive within the City limits
19 • b) N Street from 16th Street to the Merced County Courthouse
- 20 • c) 21st Street from the Merced County Courthouse to Glen Avenue21 • d) M Street from Black Rascal Creek to Bellevue Road.22 • e) West 28th Street from M Street to G Street.23 • f) Lake Road from Yosemite Avenue to Lake Yosemite.24 • g) R Street (extended) from Black Rascal Creek to Bellevue Road.25 • h) Olive Avenue East of McKee Road.26 • i) M Street from 18th Street to Bear Creek27 • j) Campus Parkway.28 • k) Bellevue Road from Lake Road to "G" Street.
- 29 ○ **Implementing Action 1.3.c.** Utilize established guidelines for the review of projects
- 30 proposed within a designated Scenic Corridor. The following guidelines apply to the review31 of applications for development in vicinity of a designated Scenic Corridor:
- 32 • a) Utility lines should be placed underground whenever feasible.
33 • b) Signing should be carefully controlled to ensure that it does not detract from the34 scenic beauty of the corridor. Specific guidelines for signing along these corridors35 should be established.

- 1 • c) Limit the intrusion of future land uses which may detract from the scenic quality of
- 2 the corridor.
- 3 • d) Unsightly mechanical and utility structures shall be screened from view by use of
- 4 planting, grading, and fencing.
- 5 • e) Heights and setbacks of buildings should be regulated to avoid obstructing important
- 6 scenic views.
- 7 • f) Every effort should be made to preserve and properly maintain existing stands of
- 8 trees and other plant materials of outstanding value.
- 9 • g) Structures on private and public properties visible from the corridor should be
- 10 maintained in good condition (free of trash, weeds, etc.).
- 11 • h) Architectural and landscape design should result in an attractive appearance and a
- 12 harmonious relationship with the surrounding environment.
- 13 • **Policy OS-4.1.** Preserve open spaces areas which are necessary to maintaining public health and
- 14 safety.
- 15 ○ **Implementing Action OS-4.1b.** Utilize areas along railroad rights-of-way and under high-
- 16 voltage power transmission lines as open space; These areas could be used as greenways
- 17 and open space areas which would provide scenic buffers from potential health hazards in
- 18 addition to providing visual (and noise in the case of railroads) buffers to surrounding areas.
- 19 These areas could also be developed with storm water retention basins, groundwater
- 20 recharge basins, or used as part of the municipal water or other utility systems where the
- 21 risk of public exposure to health hazards could be minimized.
- 22 • **Policy OS-5.2.** Protect soil resources from the erosive forces of wind and water.
- 23 ○ **Implementing Action 5.2c.** Maintain adequate vegetation along the banks of urban streams
- 24 and storm water drainage channels.

25 **City of Merced Municipal Code**

26 **Chapter 14.12 Trees, Shrubs, and Plants**

- 27 • **Section 14.12040.** Cutting, trimming, or planting—Permit required. No person shall cut, trim,
- 28 prune, plant, spray, remove, injure or interfere with any tree, shrub or plant upon any street,
- 29 park, pleasure ground, boulevard, alley or public place of the city, without the prior permission
- 30 and approval therefor from the director. The director is authorized to grant such permission in
- 31 his discretion and, where necessary, subject to the condition that the removed tree will be
- 32 replaced by an official tree in conformity with the master plan. No such permission shall be valid
- 33 for a longer period than thirty days after its date of issuance.

34 **3.0-1.2 Air Quality and Greenhouse Gas**

35 The following goals, objectives, and policies are relevant to air quality and greenhouse gas.

36 **3.0-1.2.1 Regional Plans and Policies**

37 No regional plans and/or policies are relevant to air quality and greenhouse gas.

1 **3.0-1.2.2 Local Plans and Policies**

2 **3.0-1.2.2.1 Merced County**

3 **2030 Merced County General Plan (County of Merced 2013)**

- 4 • **Air Quality Goal AQ-1.** Reduce air pollutants and greenhouse gas emissions and anticipate
5 adaptation due to future consequences of global and local climate change.
 - 6 ○ **Air Quality Policy AQ-1.1.** Energy Consumption Reduction (RDR). Encourage new
7 residential, commercial, and industrial development to reduce air quality impacts from
8 energy consumption.
- 9 • **Air Quality Goal AQ-2.** Mitigate significant local and regional air quality impacts of projects
10 through the CEQA process.
 - 11 ○ **Air Quality Policy AQ-2.1.** Air Quality Plan Compliance (RDR). Require all development
12 projects to comply with applicable regional air quality plans and policies.
 - 13 ○ **Air Quality Policy AQ-2.3.** Cumulative Impacts (RDR). Encourage the reduction of
14 cumulative air quality impacts produced by projects that are not significant by themselves,
15 but result in cumulatively significant impacts in combination with other development.
 - 16 ○ **Air Quality Policy AQ-2.4.** Mitigation (RDR). Require that local and regional air quality
17 impacts identified during CEQA review for projects reviewed and approved by the County
18 are consistently and fairly mitigated.
 - 19 ○ **Air Quality Policy AQ-2.5.** Innovative Mitigation Measures (RDR, Inter-Governmental
20 Coordination [IGC], Joint Partnerships with the Private Sector [JP]). Encourage innovative
21 mitigation measures and project redesign to reduce air quality impacts by coordinating with
22 the San Joaquin Valley Air Pollution Control District, project applicants, and other interested
23 parties.
 - 24 ○ **Air Quality Policy AQ-2.7.** Air District Best Performance Standards (RDR). Require the
25 County to use the Best Performance Standards adopted by SJVAPCD during the development
26 review and decision-making process to ensure new projects meet the targets set by the
27 district.
- 28 • **Air Quality Goal AQ-4.** Reduce traffic congestion and vehicle trips through more efficient
29 infrastructure and support for trip reduction programs.
 - 30 ○ **Air Quality Policy AQ-4.3.** Public Transport Use Incentives (RDR, Planning Studies and
31 Reports [PSR]). Prepare incentives and programs to encourage use of public transit and
32 decrease vehicle miles traveled.
 - 33 ○ **Air Quality Policy AQ-4.6.** Non-Motorized Transportation (RDR). Encourage nonmotorized
34 transportation corridors within and between communities.
- 35 • **Air Quality Goal AQ-5.** County residents are protected from toxic air pollutants and noxious
36 odors from industrial, manufacturing, and processing facilities, and agricultural operations.

1 **Regional Transportation Plan/Sustainable Communities Strategy for Merced** 2 **County (Merced County Association of Governments 2022)**

- 3 • **Goal 2.** Air Quality: Achieve air quality standards set by the Environmental Protection Agency
4 (EPA), and the State Air Resources Board.

5 **3.0-1.2.2.2 City of Merced**

6 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 7 • **Goal Area SD-1.** Clean air with minimal toxic substances and odor. Clean air with minimal
8 particulate content.
 - 9 ○ **Policy SD-1.1.** Accurately determine and fairly mitigate the local and regional air quality
10 impacts of projects proposed in the City of Merced.
 - 11 • **Implementing Action 1.1a.** Implement uniform standard, analysis methods, and
12 significance thresholds recommended by the Air District for mitigation air quality
13 impacts resulting from development.
 - 14 • **Implementing Action 1.1b.** Ensure that significant air quality impacts identified during
15 CEQA review are consistently and fairly mitigated.
 - 16 • **Implementing Action 1.1c.** All air quality mitigation measures should be feasible,
17 implementable, and cost effective.
 - 18 ○ **Policy SD-1.6.** Reduce emissions of PM10 and other particulates with local control
19 potential.
 - 20 • **Implementing Action 1.6c.** Require all access roads, driveways, and parking areas in
21 new commercial and industrial development to be paved or constructed of other
22 materials that minimize particulate emissions.
- 23 • **Goal Area SD-1.** Reduction in the generation of Greenhouse Gases (GHG) from new
24 development.

25 **3.0-1.3 Biological Resources**

26 The following goals, objectives, and policies are relevant to biological resources.

27 **3.0-1.3.1 Regional Plans and Policies**

28 No regional plans and/or policies are relevant to biological resources.

1 **3.0-1.3.2 Local Plans and Policies**

2 **3.0-1.3.2.1 Merced County**

3 **2030 Merced County General Plan (County of Merced 2013)**

- 4 • **Natural Resource Goal NR-1.** Preserve and protect, through coordination with the public and
5 private sectors, the biological resources of the County.
 - 6 ○ **Natural Resource Policy NR-1.1.** Habitat Protection: Identify areas that have significant
7 long-term habitat and wetland values, including riparian corridors, wetlands, grasslands,
8 rivers and waterways, oak woodlands, vernal pools, and wildlife movement and migration
9 corridors, and provide information to landowners.
 - 10 ○ **Natural Resource Policy NR-1.2.** Protected Natural Lands: Identify and support methods
11 to increase the acreage of protected natural lands and special habitats, including but not
12 limited to, wetlands, grasslands, vernal pools, and wildlife movement and migration
13 corridors, potentially through the use of conservation easements.
 - 14 ○ **Natural Resource Policy NR-1.4.** Important Vegetative Resource Protection: Minimize the
15 removal of vegetative resources which stabilize slopes, reduce surface water runoff, erosion,
16 and sedimentation.
 - 17 ○ **Natural Resource Policy NR-1.5.** Wetland and Riparian Habitat Buffer: Identify wetlands
18 and riparian habitat areas and designate a buffer zone around each area sufficient to protect
19 them from degradation, encroachment, or loss.
 - 20 ○ **Natural Resource Policy NR-1.6.** Terrestrial Wildlife Mobility: Encourage property owners
21 within or adjacent or designated habitat connectivity corridors that have been mapped or
22 otherwise identified by the California Department of Fish and Wildlife or U.S. Fish and
23 Wildlife Service to manage their lands in accordance with such mapping programs.
 - 24 ○ **Natural Resource Policy NR-1.8.** Use of Native Plant Species for Landscaping: Encourage
25 the use of native plant species in landscaping, and, where the County has discretion, require
26 the use of native plant species for landscaping.
 - 27 ○ **Natural Resource Policy NR-1.10.** Aquatic and Waterfowl Habitat Protection: Cooperate
28 with local, State, and Federal water agencies in their efforts to protect significant aquatic
29 and waterfowl habitats against excessive water withdrawals or other activities that would
30 endanger or interrupt normal migratory patterns or aquatic habitats.
 - 31 ○ **Natural Resource Policy NR-1.11.** On-Going Habitat Protection and Monitoring: Cooperate
32 with local, State, and Federal agencies to ensure that adequate on-going protection and
33 monitoring occurs adjacent to rare and endangered species habitats or within identified
34 significant wetlands.
 - 35 ○ **Natural Resource Policy NR-1.12.** Wetland Avoidance: Avoid or minimize loss of existing
36 wetland resources by careful placement and construction of any necessary new public
37 utilities and facilities, including roads, railroads, high speed rail, sewage disposal ponds, gas
38 lines, electrical lines, and water/wastewater systems.

- 1 ○ **Natural Resource Policy NR-1.13.** Wetland Setbacks: Require an appropriate setback, to
2 be determined during the development process, for developed and agricultural uses from
3 the delineated edges of wetlands.
- 4 ○ **Natural Resource Policy NR-1.17.** Agency Coordination: Consult with private, local, State,
5 and Federal agencies to assist in the protection of biological resources and prevention of
6 degradation, encroachment, or loss of resources managed by these agencies.
- 7 ○ **Natural Resource Policy NR-1.20.** Conservation Easements: Encourage property owners
8 to work with land trusts and State and Federal agencies to pursue voluntary conservation
9 easements.
- 10 ○ **Natural Resource Policy NR-1.21.** Special Status Species Surveys and Mitigation:
11 Incorporate the survey standards and mitigation requirements of state and federal resource
12 management agencies for use in the County's review processes for both private and public
13 projects.

14 **3.0-1.3.2.2 City of Merced**

15 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 16 • **Goal Area OS-1.** Open Space for the Preservation of Natural Resources.
- 17 ○ **Policy OS-1.1.** Identifying and mitigation impacts to wildlife habitats which support rare,
18 endangered, or threatened species
- 19 ○ **Policy OS-1.2.** Preserve and enhance creeks in their natural state throughout the planning
20 area
- 21 ○ **Policy OS-1.3.** Promote the protection and enhancement of designated scenic routes
- 22 ○ **Policy OS 1.4.** Improve and expand the City's urban forest,
- 23 ○ **Policy OS 1.5.** Preserve and enhance water quality.

24 **3.0-1.4 Cultural Resources**

25 The following goals, objectives, and policies are relevant to cultural resources.

26 **3.0-1.4.1 Regional Plans and Policies**

27 No regional plans and/or policies are relevant to cultural resources.

28 **3.0-1.4.2 Local Plans and Policies**

29 **3.0-1.4.2.1 Merced County**

30 **2030 Merced County General Plan (County of Merced 2013)**

- 31 • **Recreation and Cultural Resources Goal RCR-2.** Protect and preserve the cultural,
32 archeological, and historic resources of the County in order to maintain its unique character.

- 1 ○ **Recreation and Cultural Resources Policy RCR-2.1.** Archeological Site and Artifact
2 Protection (RDR). Require development projects that affect archeological sites and artifacts
3 to avoid disturbance or damage to these sites.
- 4 ○ **Recreation and Cultural Resources Policy RCR-2.2.** Historical Area Preservation (RDR).
5 Support the preservation of historical structures and areas, particularly those listed on the
6 National Registrar of Historic Places and California Registrar of Historic Places.
- 7 ○ **Recreation and Cultural Resources Policy RCR-2.3.** Architectural Character Preservation
8 (RDR/IGC). Require that the original architectural character of significant State- and
9 Federally-listed historic structures be maintained in compliance with preservation
10 standards and regulations.
- 11 ○ **Recreation and Cultural Resources Policy RCR-2.4.** Park and Open Space Historic
12 Resource Preservation (RDR). Require the preservation of historic resources located in
13 parks and publicly-owned open space areas.
- 14 ○ **Recreation and Cultural Resources Policy RCR-2.5.** Human Remains Discovery (RDR).
15 Require that, in the event of the discovery of human remains on any project construction
16 site, all work in the vicinity of the find will cease and the County Coroner and Native
17 American Heritage Commission will be notified.
- 18 ○ **Recreation and Cultural Resources Policy RCR-2.6.** Historic Buildings and Areas (RDR).
19 Identify buildings and areas with special and recognized historic, architectural, or aesthetic
20 value to be preserved and rehabilitated during the Community Plan update process. New
21 development should respect architecturally and historically significant buildings and areas,
22 and conform to the current Secretary of the Interior’s Standards for the Treatment of
23 Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and
24 Reconstructing Historic Buildings, and incorporate adaptive reuse practices, where feasible,
25 to preserve the County’s historical heritage and rural character.
- 26 ○ **Recreation and Cultural Resources Policy RCR-2.7.** Historic Preservation (RDR). Support
27 the efforts of local preservation groups and community property owners to preserve or
28 improve building facades and exteriors consistent with the historic and visual character of
29 the specific building or area.
- 30 ○ **Recreation and Cultural Resources Policy RCR-2.8.** Historical Preservation Area/Site
31 Designations (RDR.) Allow sites of historical and archeological significance to be designated
32 as historical preservation areas or sites during the Community Planning process or on
33 individual sites in rural areas.
- 34 ○ **Recreation and Cultural Resources Policy RCR-2.9.** Historical and Cultural Resources
35 Investigation, Assessment, and Mitigation Guidelines (RDR/MPSP). Establish and adopt
36 mandatory guidelines for use during the environmental review processes for private and
37 public projects to identify and protect historical, cultural, archaeological, and
38 paleontological resources, and unique geological features.
- 39 ○ **Recreation and Cultural Resources Policy RCR-2.10.** Tribal Consultation
40 (RDR/MPSP/IGC). Consult with Native American tribes regarding proposed development
41 projects and land use policy changes consistent with Planning and Zoning Law at
42 Government Code Section 65351, and the OPR Tribal Consultation Guidelines (2005).

1 **3.0-1.4.2.2 City of Merced**

2 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 3 • **Goal Area SD-2.** A diverse and rich historic and cultural resource environment.
- 4 ○ **Policy SD-2.1.** Identify and preserve the City’s archeological resources.
- 5 ○ **Policy SD-2.2.** Identify and preserve the City’s historic and cultural resources.

6 **3.0-1.5 Tribal Cultural Resources**

7 The following goals, objectives, and policies are relevant to tribal cultural resources.

8 **3.0-1.5.1 Regional Plans and Policies**

9 No regional plans and/or policies are relevant to tribal cultural resources.

10 **3.0-1.5.2 Local Plans and Policies**

11 **3.0-1.5.2.1 Merced County**

12 **2030 Merced County General Plan (County of Merced 2013)**

- 13 • **Recreation and Cultural Resources Goal RCR-2.** Protect and preserve the cultural,
14 archeological, and historic resources of the County in order to maintain its unique character.
- 15 ○ **Recreation and Cultural Resources Policy RCR-2.1.** Archeological Site and Artifact
16 Protection (RDR). Require development projects that affect archeological sites and artifacts
17 to avoid disturbance or damage to these sites.
- 18 ○ **Recreation and Cultural Resources Policy RCR-2.2.** Historical Area Preservation
19 (RDR). Support the preservation of historical structures and areas, particularly those
20 listed on the National Registrar of Historic Places and California Registrar of Historic
21 Places.
- 22 ○ **Recreation and Cultural Resources Policy RCR-2.5.** Human Remains Discovery
23 (RDR). Require that, in the event of the discovery of human remains on any project
24 construction site, all work in the vicinity of the find will cease and the County Coroner
25 and Native American Heritage Commission will be notified.
- 26 ○ **Recreation and Cultural Resources Policy RCR-2.8.** Historical Preservation Area/Site
27 Designations (RDR.) Allow sites of historical and archeological significance to be
28 designated as historical preservation areas or sites during the Community Planning
29 process or on individual sites in rural areas.
- 30 ○ **Recreation and Cultural Resources Policy RCR-2.9.** Historical and Cultural Resources
31 Investigation, Assessment, and Mitigation Guidelines (RDR/MPSP). Establish and adopt
32 mandatory guidelines for use during the environmental review processes for private
33 and public projects to identify and protect historical, cultural, archaeological, and
34 paleontological resources, and unique geological features.

- 1 ○ **Recreation and Cultural Resources Policy RCR-2.10.** Tribal Consultation
2 (RDR/MPSP/IGC). Consult with Native American tribes regarding proposed
3 development projects and land use policy changes consistent with Planning and Zoning
4 Law at Government Code Section 65351, and the OPR Tribal Consultation Guidelines
5 (2005).

6 **3.0-1.5.2.2 City of Merced**

7 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 8 • **Goal Area SD-2.** A diverse and rich historic and cultural resource environment.
9 ○ **Policy SD-2.1.** Identify and preserve the City’s archeological resources.
10 ○ **Policy SD-2.2.** Identify and preserve the City’s historic and cultural resources.

11 **3.0-1.6 Energy**

12 The following goals, objectives, and policies are relevant to energy.

13 **3.0-1.6.1 Regional Plans and Policies**

14 No regional plans and/or policies are relevant to energy.

15 **3.0-1.6.2 Local Plans and Policies**

16 **3.0-1.6.2.1 Merced County**

17 **2030 Merced County General Plan (County of Merced 2013)**

- 18 • **Land Use Goal LU-9.** Support and promote energy efficiency through innovative building design
19 and land use patterns.
20 ○ **Land Use Policy LU-9.2.** Sustainable Building Practices (RDR). Promote sustainable
21 building practices, including the requirements of Title 24 of the California Administrative
22 Code.
23 ○ **Land Use Policy LU-9.5.** Energy Conservation Standards for New Construction. Cooperate
24 with the local building industry, utilities, and air district to promote enhanced energy
25 conservation standards for new construction.

26 **Regional Transportation Plan/Sustainable Communities Strategy for Merced** 27 **County (Merced County Association of Governments 2022)**

- 28 • **Goal 4.** Energy: Reduce usage of nonrenewable energy resources for transportation purposes.

1 **3.0-1.6.2.2 City of Merced**

2 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 3 • **Goal Area SD-3.** Sustainable Energy Resource Use in the City of Merced
 - 4 ○ **Policy SD-3.1.** Promote the use of solar energy technology and other alternative energy
 - 5 resources.
 - 6 ○ **Policy SD-3.2.** Encourage the use of energy conservation features, low-emission equipment,
 - 7 and alternative energy sources for all new residential and commercial development.

8 **3.0-1.7 Geology, Soils, Seismology, and Paleontology**

9 The following goals, objectives, and policies are relevant to geology, soils, seismology, and
10 paleontology.

11 **3.0-1.7.1 Regional Plans and Policies**

12 No regional plans and/or policies are relevant to geology, soils, seismology, and paleontology.

13 **3.0-1.7.2 Local Plans and Policies**

14 **3.0-1.7.2.1 Merced County**

15 **2030 Merced County General Plan (County of Merced 2013)**

- 16 • **Natural Resource Goal NR-3.** Facilitate orderly development and extraction of mineral
17 resources while preserving open space, natural resources, and soil resources and avoiding or
18 mitigating significant adverse impacts.
 - 19 ○ **Natural Resource Policy NR-3.1.** Soil Protection (RDR/County Services and Operations
20 [SO]). Protect soil resources from erosion, contamination, and other effects that
21 substantially reduce their value or lead to the creation of hazards.
 - 22 ○ **Natural Resource Policy NR-3.2.** Soil Erosion and Contamination (RDR). Require minimal
23 disturbance of vegetation during construction to improve soil stability, reduce erosion, and
24 improve stormwater quality.
 - 25 ○ **Natural Resource Policy NR-3.4.** New Development Compatibility (RDR). Ensure that new
26 development is compatible with existing and potential surface mining areas and operations
27 as identified on the Mineral Resource Zone Maps prepared by the State Division of Mines
28 and Geology and other mineral resource areas identified by the County. The County shall:
 - 29 a) Require development applicants near identified mineral resources to prepare a
30 statement that specifies why the County should permit the proposed land use and
31 describe how the benefits of the proposed use would clearly outweigh the impacts
32 that may limit the potential to extract mineral resources in that area.
 - 33 b) Require new incompatible land uses adjacent to existing mining operations to
34 provide a buffer between the development and adjacent mining operations

1 adequate to mitigate significant impacts to mineral land uses. The buffer distance
2 shall be based on an evaluation of noise, aesthetics, drainage, operating conditions,
3 biological resources, topography, lighting, traffic, operating hours, and air quality.

4 c) Require written notification to be sent to mining operators and subject landowners
5 of land use entitlement applications for potentially incompatible land uses in areas
6 where mining operations are currently taking place.

7 ○ **Natural Resource Policy NR-3.5.** Mineral Resource Protection (RDR). Require areas
8 identified with mineral deposits on either the State Mine Land Classification Maps provided
9 by the State Mining and Geology Board's Classification Report, or site-specific information,
10 remain protected for possible future mineral extraction. Impose conditions upon new
11 incompatible land uses in areas surrounding identified mineral deposits for the purpose of
12 mitigating significant land use conflicts prior to approving a use that would otherwise be
13 incompatible with mineral extraction. The identified mineral deposit may be determined by
14 the classification maps, Classification Report, separate County maps, or on a site-specific
15 basis.

16 ● **Health and Safety Goal HS-1.** Minimize the loss of life, injury, and property damage of County
17 residents due to seismic and geologic hazards.

18 ○ **Health and Safety Policy HS-1.3.** Dam Inundation Areas (RDR). Require all new structures
19 located within dam inundation areas to conform to standards of dam safety as required by
20 the State Division of Safety of Dams.

21 ○ **Health and Safety Policy HS-1.7.** Hillside Development (RDR). Discourage construction
22 and grading on slopes in excess of 30 percent.

23 ○ **Health and Safety Policy HS-1.8.** Grading Standards (RDR). Require that the provisions of
24 the International Building Code be used to regulate projects subject to hazards from slope
25 instability.

26 ○ **Health and Safety Policy HS-1.9.** Unstable Soils (RDR). Require and enforce all standards
27 contained in the International Building Code related to construction on unstable soils.

28 ● **Health and Safety Goal HS-2.** Minimize the possibility of loss of life, injury, or damage to
29 property as a result of flood hazards.

30 **3.0-1.7.2.2 City of Merced**

31 **Merced Vision 2030 General Plan (City of Merced 2012)**

32 ● **Policy S-2.2.** Encourage the improvement of all public facilities and infrastructure, such as
33 natural gas, fuel, sewer, water, electricity, and railroad lines and equipment with up-to-date
34 seismic safety features.

35 ● **Policy OS-5.2.** Protect soil resources from the erosive forces of wind and water.

36 ○ **Implementing Action 5.2c.** Maintain adequate vegetation along the banks of urban streams
37 and storm water drainage channels.

3.0-1.8 Hazards and Hazardous Materials

The following goals, objectives, and policies are relevant to hazards and hazardous materials.

3.0-1.8.1 Regional Plans and Policies

No regional plans and/or policies are relevant to hazards and hazardous materials.

3.0-1.8.2 Local Plans and Policies

3.0-1.8.2.1 Merced County

2030 Merced County General Plan (County of Merced 2013)

- **Public Facilities and Services Goal PFS-4.** Ensure the safe and efficient disposal and recycling of solid and hazardous waste generated in the County.
 - **Public Facilities and Services Policy PFS-4.3.** Spill Site Development. Prohibit development on sites identified by Federal, State, or local agencies as spill sites or hazardous waste areas unless approved cleanup occurs prior to development.
- **Health and Safety Goal HS-5.** Protect Merced County residents, visitors, and property through providing for the safe use, storage, transport, and disposal of hazardous materials and wastes.
 - **Health and Safety Policy HS-5.1.** Compliance with Safety Standards. Require that hazardous materials are used, stored, transported, and disposed of in a safe manner, in compliance with local, State, and Federal safety standards.
 - **Health and Safety Policy HS-5.2.** Hazardous Material and Waste Transport. Coordinate with the California Highway Patrol to establish procedures for the movement of hazardous wastes and explosives within the County.
 - **Health and Safety Policy HS-5.3.** Incompatible Land Uses. Prohibit incompatible land uses near properties that produce or store hazardous waste.
 - **Health and Safety Policy HS-5.4.** Contamination Prevention. Require new development and redevelopment proposals that have suspected or historic contamination to address hazards concerns and protect soils, surface water, and groundwater from hazardous materials contamination by conducting Phase I Environmental Site Assessments (ESA) according to the American Society for Testing and Materials (ASTM) standards and applicable Department of Toxic Substances Control (DTSC) remediation guidelines. Also, complete additional Phase II Environmental Site Assessments and soil investigations, and any identified or needed remediation when preliminary studies determine such studies are recommended.
- **Air Quality Goal AQ-5.** County residents are protected from toxic air pollutants and noxious odors from industrial, manufacturing, and processing facilities, and agricultural operations.
 - **Air Quality Policy AQ-5.1.** Residential Buffers. Require effective buffers between residential and other sensitive land uses, and nonresidential land uses that generate hazardous air emissions such as highways (e.g., I-5 and SR-99), trucking centers, gasoline

1 dispensing facilities, and dry cleaners. Effective buffers shall be determined by requiring
2 consultation with the SJVAPCD for any project that may have a health risk impact, including
3 those projects that would otherwise appear to be exempt from CEQA requirements.

4 **3.0-1.8.2.2 City of Merced**

5 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 6 • **Policy S-7.1.** Prevent injuries and environmental contamination due to the uncontrolled release
7 of hazardous materials.
 - 8 ○ **Implementing Action 7.1.c.** Continue to make sure underground storage tanks containing
9 hazardous materials are properly installed, used, and removed.
 - 10 ○ **Implementing Action 7.1.e.** To the extent feasible, encourage new residential
11 developments and other projects to locate an adequate distance from potential existing
12 sources of toxic emissions, such as freeways, heavy industrial sites, and other hazardous
13 material locations.
- 14 • **Policy S-7.2.** Ensure that hazardous materials are cleaned up before a property is developed or
15 redeveloped.
 - 16 ○ **Implementing Action 7.2.a.** Continue to work with the State Department of Health Services
17 and Merced County in developing cleanup programs for known hazardous waste sites
18 within the Merced planning area. Prior to the development or redevelopment of a piece of
19 property, the City routinely works with the appropriate State and local agencies to ensure
20 that any hazardous materials contamination is eliminated.

21 **3.0-1.9 Hydrology and Water Quality**

22 The following goals, objectives, and policies are relevant to hydrology and water quality.

23 **3.0-1.9.1 Regional Plans and Policies**

24 **2022 Central Valley Flood Protection Plan Update (California Department of** 25 **Water Resources 2022)**

- 26 • **CVFPP Primary Goal.** Improve flood risk management. Reduce the chance of flooding, and
27 damages once flooding occurs, and improve public safety, preparedness, and emergency
28 response through the following supporting goals:
 - 29 ○ Improve operations and maintenance
 - 30 ○ Promote ecosystem functions
 - 31 ○ Promote multi-benefit projects
 - 32 ○ Improve institutional support

California Central Valley Flood Protection Board Strategic Plan (Central Valley Flood Protection Board 2013)

- **Goal 1.** Preserve the Integrity and Function of Flood Protection Systems in the Central Valley
- **Objective 1.1.** Assure judicious and timely permitting.
- **Objective 1.2.** Expand enforcement capacity and authority.
- **Strategy 1.2.2.** Quantify, delineate, categorize, and prioritize encroachments and the need for enforcement actions.
- **Strategy 1.2.3.** Resolve encroachments that are in conflict with assurances provided to USACE and that compromise system performance.

Upper San Joaquin River Regional Flood Management Plan (San Joaquin River Flood Control Project Agency 2015)

- **Goal.** Provide 200-year flood protection for urban areas.
- **Goal.** Provide 100-year flood protection for small communities.
- **Goal.** Expedite system improvement permitting and construction.
- **Goal.** Promote development of multi-benefit system improvements.

3.0-1.9.2 Local Plans and Policies

3.0-1.9.2.1 Merced County

2030 Merced County General Plan (County of Merced 2013)

- **Public Facilities and Services Goal PFS-3.** Ensure the management of stormwater in a safe and environmentally sensitive manner through the provision of adequate storm drainage facilities that protect people, property, and the environment.
 - **Public Facilities and Services Policy PFS-3.1.** Stormwater Management Plans (MPSP). Require stormwater management plans for all Urban Communities to reduce flood risk, protect soils from erosion, control stormwater runoff, and minimize impacts on existing drainage facilities.
 - **Public Facilities and Services Policy PFS-3.2.** Stormwater facilities in new development. Require that new development in unincorporated communities includes adequate stormwater drainage systems. This includes adequate capture, transport, and detention/retention of stormwater.
 - **Public Facilities and Services Policy PFS-3.5.** Pre-development storm flows. Require on-site detention/retention facilities and velocity reducers when necessary to maintain predevelopment storm flows and velocities in natural drainage systems.
- **Health and Safety Goal HS-2.** Minimize the possibility of loss of life, injury, or damage to property as a result of flood hazards.

- 1 ○ **Health and Safety Policy HS-2.6.** Flood risk consideration. Prohibit new development in
2 existing undeveloped areas protected by a State flood control project without appropriately
3 considering significant known flooding risks and taking reasonable and feasible action to
4 mitigate the potential property damage to the new development resulting from a flood.
- 5 ○ **Health and Safety Policy HS-2.7.** Finding of Flood Protection for New Development. The
6 County shall not enter into a development agreement, approve any building permit or
7 entitlement, or approve a tentative or parcel map unless it finds one of the following:
- 8 a) The flood control facilities provides 200-year level of protection in urban and
9 nonurban areas consistent with the current Central Valley Flood Protection Plan;
- 10 b) Conditions imposed on the development will protect the property at a 200-year
11 level of protection in urban and non-urban areas consistent with the current Central
12 Valley Flood Protection Plan; or
- 13 c) The local flood management agency has made “adequate progress” on the
14 construction of a flood protection system which will result in protection equal or
15 greater than the 200-year flood event in urban and non-urban areas consistent with
16 the current Central Valley Flood Protection Plan.
- 17 ○ **Health and Safety Policy HS-2.9.** Minimize Public Facility Impacts. Encourage all agencies
18 that operate public facilities, such as roads, structures, wastewater treatment plants, gas,
19 electrical, and water systems within areas subject to 100- and 200-year frequency floods to
20 locate and construct facilities to minimize or eliminate potential flood damage.
- 21 ● **Water Goal W-1.** Ensure a reliable water supply sufficient to meet the existing and future needs
22 of the County.
- 23 ● **Water Goal W-2.** Protect the quality of surface and groundwater resources to meet the needs of
24 all users.
- 25 ○ **Water Policy W-2.1.** Water Resource Protection. Ensure that land uses and development on
26 or near water resources will not impair the quality or productive capacity of these water
27 resources.
- 28 ○ **Water Policy W-2.2.** Development regulations to protect water quality. Prepare undated
29 development regulations, such as best management practices, that prevent adverse effects
30 on water resources from construction and development activities.
- 31 ○ **Water Policy W-2.7.** NPDES Enforcement. Monitor and enforce provisions of the USEPA
32 NPDES program to control non-point source water pollution.
- 33 ● **Water Goal W-4.** Enhance and protect County watersheds through responsible water and land
34 use management practices that address water bodies, open spaces, soils, recreation, habitat,
35 vegetation, groundwater recharge, and development.
- 36 ○ **Water Policy W-4.1.** Water resource protection and replenishment. Protect watersheds,
37 aquifer recharge areas, and areas susceptible to ground and surface water contamination by
38 identifying such areas, and implementing requirements for their protection such as:
- 39 a) Implement zoning and development regulations to protect water resources,
40 including aquifer recharge areas and areas susceptible to ground and surface water
41 contamination;

- 1 b) For new development, and when adopting new Community Plans, require
2 community drainage systems that incorporate on-site infiltration and contaminant
3 control measures that are compatible with the County SWMP and NPDES
4 regulations for post-construction runoff conditions; and
- 5 c) Cooperate with other agencies and entities with responsibilities for water quality
6 and watershed protection.

7 **Merced County Municipal Code**

8 **Chapter 9.53 Regulation of Stormwater**

- 9 • **Section 9.53.010.** Title, purpose and general provisions.

10 B. Purpose and Intent. The purpose and intent of this chapter is to ensure the health, safety, and
11 general welfare of citizens, and protect and enhance the water quality of watercourses and
12 water bodies in a manner pursuant to and consistent with the Federal Clean Water Act (33 U.S.C.
13 Section 1251 et seq.) by reducing pollutants in storm water discharges to the maximum extent
14 practicable and by prohibiting non-stormwater discharges to the storm drain system.

15 In addition, this chapter has been written to enact requirements stipulated in the “National
16 Pollutant Discharge Elimination System (NPDES) General Permit for Waste Discharge
17 Requirements (WDRs) for Storm Water Discharges from Small Municipal Separate Storm Sewer
18 Systems (MS4s)” adopted by the State Water Resources Control Board.

19 This chapter creates regulations that govern management of construction projects, the layout
20 and design of new projects, and inspection and monitoring of existing facilities which may cause
21 or contribute pollution or illicit discharges to storm drainage systems under the jurisdiction of
22 the county of Merced.

23 D. Applicability. This chapter shall apply to all dischargers or potential dischargers located
24 within the unincorporated areas of the county of Merced.

- 25 • **Section 9.53.020.** Discharge Prohibitions

26 A. Prohibition of Illicit Discharges. No person shall discharge or cause to be discharged into the
27 storm drain system any materials, including, but not limited to, pollutants or waters containing
28 any pollutants that cause or contribute to a violation of applicable water quality standards, other
29 than storm water.

30 The commencement, conduct or continuance of any illicit discharge into the storm drain system
31 is prohibited except as described as follows:

- 32 1) Discharges from the following activities will not be considered a source of pollutants to
33 the storm drain system when properly managed to ensure that no potential pollutants
34 are present, and therefore they shall not be considered illicit discharges unless
35 determined to cause a violation of the provisions of the Porter-Cologne Act, Clean Water
36 Act, or this chapter:
- 37 a) Water line flushing;
- 38 b) Individual residential car washing;
- 39 c) Diverted stream flows;

- 1 d) Rising groundwaters;
 - 2 e) Uncontaminated groundwater infiltration to the storm drain system;
 - 3 f) Uncontaminated pumped groundwater;
 - 4 g) Discharges from potable water sources;
 - 5 h) Foundation drains;
 - 6 i) Air conditioning condensation;
 - 7 j) Springs;
 - 8 k) Water from crawl space pumps;
 - 9 l) Footing drains;
 - 10 m) Flows from riparian habitats and wetlands;
 - 11 n) Dechlorinated swimming pool discharges;
 - 12 o) Incidental runoff from landscaped areas;
 - 13 p) Discharges or flows from fire fighting.
- 14 2) With prior written concurrence of the Regional Board, the county of Merced may
15 exempt in writing other non-stormwater discharges which are not a source of pollutants
16 to the storm drain system.

17 B. Prohibition of Illicit Connections.

- 18 1) The construction, use, maintenance or continued existence of illicit connections to the
19 storm drain system is prohibited.
- 20 2) This prohibition expressly includes, without limitation, illicit connections made in the
21 past, regardless of whether the connection was permissible under law or practices
22 applicable or prevailing at the time of connection.

23 C. Waste Disposal Prohibitions. No person shall throw, deposit, leave, maintain, keep, or permit
24 to be thrown, deposited, left, or maintained, in or upon any public or private property, driveway,
25 parking area, street, alley, sidewalk, or any component of the storm drain system, any refuse,
26 rubbish, garbage, litter, or other discarded or abandoned objects, articles, and accumulations, so
27 that the same may cause or contribute to pollution. Wastes deposited in streets in proper waste
28 receptacles for the purposes of collection are exempted from this prohibition.

29 D. Discharges in Violation of Industrial or Construction Activity NPDES Storm Water Discharge
30 Permit. Any person subject to an industrial or construction activity NPDES storm water
31 discharge permit shall comply with all provisions of such permit. Proof of compliance with said
32 permit may be required in a form acceptable to the director of public works prior to or as a
33 condition of a subdivision map, site plan, building permit, or development or improvement plan;
34 upon inspection of the facility; during any enforcement proceeding or action; or for any other
35 reasonable cause.

36 E. Excess Irrigation Runoff Prohibition. Non-stormwater runoff discharge that is not incidental is
37 prohibited. No person shall allow irrigation runoff in excess of incidental runoff to occur. Any
38 person responsible for controlling runoff in excess of incidental runoff shall:

- 1) Detect leaks (for example, from broken sprinkler heads) and correct leaks within seventy-two (72) hours of learning of the leak;
 - 2) Properly design and aim sprinkler heads;
 - 3) Not irrigate during precipitation events; and
 - 4) Manage pond containing recycled water such that no discharge occurs unless the discharge is a result of a twenty-five (25) year, twenty-four (24) hour storm event or greater, and the appropriate Regional Water Board is notified by email no later than twenty-four (24) hours after the discharge. The notification is to include identifying information, including the permittee's name and permit identification number. (Ord.1923 § 1, 2014; Ord. 1897 § 1, 2012).
- **Section 9.53.030. Regulations and requirements.**
- A. Requirements to Reduce Runoff and Pollutants Associated with Runoff. In order to reduce the volume of stormwater runoff and minimize typical pollutants associated with stormwater runoff, the county requires the various measures described in the section be implemented:
- 1) Best management practices (BMPs), when required to be installed, shall conform to the California Storm Water Quality Association (CASQA) Best Management Practice Handbooks or equivalent.
 - 2) Construction Site Storm Water Runoff Control. Prior to disturbing any soil, operators of a construction activity project shall prepare and submit a Sediment Control Plan (SCP) to the department of public works for review and approval. The SCP shall be incorporated as separate sheets of the civil portion of the plans prepared for the project and shall indicate BMPs to be used during project construction and post construction. The SCP shall be prepared by a certified Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD).

The operator of a construction activity project shall submit evidence that all applicable permits (i.e., State Water Board's Construction General Permit, State Water Board 401 Water Quality Certification, U.S. Army Corps 404 permit, and the California Department of Fish and Wildlife 1600 Agreement) directly associated with the soil disturbing activities have been obtained.

If a SWPPP is required to be developed for the construction activity project pursuant to the State Water Board's Construction General Permit, the SWPPP may substitute for the required SCP. In this case, the operator of the construction activity project shall submit a copy of the SWPPP to the county for review and approval.
 - 3) Post Construction Storm Water Management.
 - a) Small Development Projects. Small development projects that create and/or replace (including projects with no net increase in impervious surface) between two thousand five hundred (2,500) square feet and five thousand (5,000) square feet of impervious surface, including detached single family homes that create and/or replace two thousand five hundred (2,500) square feet or more of impervious surface and are not part of a larger plan of development shall implement one or more of the following site design measures to reduce project site runoff:

- 1 i. Stream Setbacks and Buffers. A vegetated area including trees, shrubs, and
2 herbaceous vegetation shall be retained (if existing) or established to protect a
3 stream system or lake reservoir.
- 4 ii. Soil Quality Improvement and Maintenance. Improve and/or maintain the soil
5 through the incorporation of soil amendments and creation of a microbial
6 community.
- 7 iii. Tree Planting and Preservation. Plant and/or preserve healthy established trees
8 including both evergreen and deciduous varieties, as applicable.
- 9 iv. Rooftop and Impervious Area Disconnection. Reroute rooftop drainage pipes to
10 drain rainwater to rain barrels, cisterns, or on-site permeable areas instead of
11 the storm drain system.
- 12 v. Porous Pavement/Concrete. Incorporate use of porous pavement, porous
13 concrete and/or other permeable materials for on-site flat work (driveways,
14 walkways, patios, parking areas, etc.) instead of traditional pavement or
15 concrete.
- 16 vi. Green Roofs. Incorporate use of a vegetative layer grown on a roof (rooftop
17 garden).
- 18 vii. Vegetated Swales. Construct an on-site vegetated, open-channel swale designed
19 specifically to treat and attenuate storm water runoff.
- 20 b) Project proponents shall quantify the runoff reduction resulting from
21 implementation of one or more of the above site design measures using the State
22 Water Board SMARTS Post-Construction Calculator or another methodology
23 determined to be acceptable by the county.
- 24 i. Regulated Projects.
- 25 ii. Regulated projects shall be designed and constructed to implement the source
26 control measures and low-impact development (LID) design standards
27 described in this chapter in order to effectively reduce runoff and pollutants
28 associated with runoff.
- 29 iii. Redevelopment projects, road projects, and linear underground/overhead
30 projects (LUPs) are a special class of regulated project; these projects shall
31 implement the following special requirements:
- 32 (A) Where a redevelopment project results in an increase of more than fifty (50)
33 percent of the impervious surface of a previously existing development,
34 runoff from the entire project (including the existing, new, and replaced
35 impervious surfaces) is regulated; in this case, the entire redevelopment
36 project is considered to be part of the regulated project.
- 37 (B) Where a redevelopment project results in an increase of less than fifty (50)
38 percent of the impervious surface of a previously existing development, only
39 runoff from the new and/or replaced impervious surface of the project
40 considered to be part of the regulated project.
- 41 (C) New Road Projects and LUPs. Any of the following types of new road
42 projects and LUPs that create five thousand (5,000) square feet or more of

1 newly constructed contiguous impervious surface (either a newly
2 constructed public road project or new private development projects that
3 fall under the authority of Merced County) shall be considered a regulated
4 project; however, treatment of runoff of the 85th percentile that cannot
5 feasibly be infiltrated onsite shall follow U.S. EPA guidance regarding green
6 infrastructure to the extent possible. Types of projects include:

7 (1) Construction of new streets or roads, including sidewalks and
8 bicycle lanes built as part of the new streets or roads.

9 (2) Widening of existing streets or roads with additional traffic
10 lanes.

11 a. Where the addition of traffic lanes results in an
12 alteration of more than fifty (50) percent of the
13 impervious surface of an existing street or road, runoff
14 from the entire project (including the existing, new
15 and/or replaced impervious surfaces) is considered to
16 be part of the regulated project.

17 b. Where the addition of traffic lanes results in an
18 alteration of less than fifty (50) percent of the
19 impervious surface of an existing street or road, only
20 runoff from the new and/or replaced impervious
21 surface of the project is considered to be part of the
22 regulated project.

23 (D) Construction of linear underground/overhead projects (LUPs).

24 (E) Specific exclusions are:

25 (1) Sidewalks built as part of new streets or roads and built to
26 direct storm water runoff to adjacent vegetated areas.

27 (2) Bicycle lanes that are built as part of new streets or roads that
28 direct storm water runoff to adjacent vegetated areas.

29 (3) Impervious trails built to direct storm water runoff to adjacent
30 vegetated areas, or other non-erodible permeable areas,
31 preferably away from creeks or towards the outboard side of
32 levees.

33 (4) Sidewalks, bicycle lanes, or trails constructed with permeable
34 surfaces.

35 (5) Trenching, excavation and resurfacing associated with LUPs;
36 pavement grinding and resurfacing of existing roadways and
37 parking lots, construction of new sidewalks, pedestrian ramps,
38 or bike lanes on existing roadways; or routine replacement of
39 damaged pavement such as pothole repair or replacement of
40 short, non-contiguous sections of roadway.

41 4) Source Control Measures. Operators of regulated projects with pollutant generating
42 activities and sources shall implement permanent and/or operation source control

- 1 measures, as applicable. Measures, including appropriate BMPs, shall be implemented
2 for the following pollutant generating activities and sources:
- 3 ○ Accidental spills or leaks.
 - 4 ○ Interior floor drains.
 - 5 ○ Parking/storage areas and maintenance.
 - 6 ○ Indoor and structural pest control.
 - 7 ○ Landscape/outdoor pesticide use.
 - 8 ○ Pools, spas, ponds, decorative fountains, and other water features.
 - 9 ○ Restaurants, grocery stores, and other food service operations.
 - 10 ○ Refuse areas.
 - 11 ○ Industrial processes.
 - 12 ○ Outdoor storage of equipment and materials.
 - 13 ○ Vehicle and equipment cleaning.
 - 14 ○ Fuel dispensing areas.
 - 15 ○ Loading docks.
 - 16 ○ Fire sprinkler test water.
 - 17 ○ Drain or wash water from boiler drain lines, condensate drain lines, rooftop
18 equipment, drainage sumps, and other sources.
 - 19 ○ Unauthorized non-storm water discharges.
 - 20 ○ Building and grounds maintenance.
- 21 5) Low Impact Development (LID) Design Standards. All regulated projects shall
22 implement low impact development (LID) standards designed to reduce runoff, treat
23 storm water, and provide baseline hydromodification management conforming to the
24 following criteria:
- 25 a) Site Assessment. Developers of regulated projects shall assess and evaluate how site
26 conditions (i.e. soils, vegetation, and flow paths) will influence the placement of
27 buildings and paved surfaces; this evaluation shall be used to satisfy the goals of
28 capturing and treating runoff and assuring the goals of LID are incorporated into the
29 project design. The following methods shall be used to optimize the site layout:
 - 30 i. Define the development envelope and protected areas; identify areas most
31 suitable for development and areas to be left undisturbed.
 - 32 ii. Concentrate development on portions of the site with less permeable soils and
33 preserve areas that can promote infiltration.
 - 34 iii. Limit overall impervious coverage of the site with paving and roads.
 - 35 iv. Set back development from creeks, wetlands, and riparian habitats.
 - 36 v. Preserve significant trees.

- 1 vi. Conform the site layout along natural landforms.
- 2 vii. Avoid excessive grading and disturbance of vegetation and soils.
- 3 viii. Replicate the site's natural drainage patterns.
- 4 ix. Detain and retain runoff throughout the site.
- 5 b) Drainage Management Areas. As part of the design, the project site shall be divided
6 into discrete drainage management areas (DMAs). Each DMA shall manage runoff
7 using site design measures, source controls, and/or storm water treatment and
8 baseline hydromodification measures.
- 9 c) Numeric Sizing Criteria for Storm Water Retention and Treatment. Regulated
10 projects shall be designed to evapotranspire, infiltrate, harvest/use, and/or biotreat
11 storm water to satisfy at least one of the following hydraulic sizing design criteria:
- 12 i. Volumetric Criteria.
- 13 (A) The storm water runoff volume determined using the formula and volume
14 capture coefficients in Urban Runoff Quality Management, WEF Manual of
15 Practice No. 23/ASCE Manual of Practice No. 87 (1988); or
- 16 (B) The volume of annual runoff required to achieve eighty (80) percent or
17 more capture determined in accordance with the methodology in Section 5
18 of CASQA's Stormwater Best Management Practice Handbook, New
19 Development and Redevelopment, using local rainfall data; or
- 20 (C) The storm water runoff volume resulting from an 85th percentile twenty-
21 four (24) hour storm event calculated pursuant to procedures developed by
22 the county using precipitation frequency data published by the National
23 Oceanic and Atmospheric Administration (NOAA).
- 24 ii. Flow-Based Criteria.
- 25 (A) The flow of runoff produced from a rain event equal to at least 0.2 inches
26 per hour intensity; or
- 27 (B) The flow of runoff produced from a rain event equal to at least two times the
28 85th percentile hourly rainfall intensity as determined from local rainfall
29 records.
- 30 d) Site Design Measures. Site design measures shall be used to reduce the amount of
31 runoff, to the extent technically feasible, to achieve the infiltration,
32 evapotranspiration, and/or harvesting/reuse of the 85th percentile twenty-four
33 (24) hour storm runoff event; any remaining runoff from impervious DMAs may
34 then be directed to one or more bioretention facilities.
- 35 e) Source Controls. Permanent and/or operation source control measures as described
36 in subsection (A)(4) shall be incorporated into the project design.
- 37 f) Storm Water Treatment Measures and Baseline Hydromodification Management
38 Measures. After implementation of site design measures, remaining runoff from
39 impervious DMAs shall be directed to one or more facilities designed to infiltrate,
40 evapotranspire, and/or bioretain the amount of runoff determined through the

- 1 procedures in subsection (A)(5)(c). The facilities must be demonstrated to be at
2 least as effective as a bioretention system with the following design parameters:
- 3 i. Maximum surface loading rate of five inches per hour, based on the flow rates
4 calculated. A sizing factor of four percent of tributary impervious area may be
5 used.
 - 6 ii. Minimum surface reservoir volume equal to surface area times a depth of six
7 inches.
 - 8 iii. Minimum planting medium depth of eighteen (18) inches. The planting medium
9 must sustain a minimum infiltration rate of five inches per hour throughout the
10 life of the project and must maximize runoff retention and pollutant removal. A
11 mixture of sand (sixty (60) percent to seventy (70) percent) meeting the
12 specifications of American Society for Testing and Materials (ASTM) C33 and
13 compost (thirty (30) percent to forty (40) percent) may be used.
 - 14 iv. Subsurface drainage/storage (gravel) layer with an area equal to the surface
15 area and having a minimum depth of twelve (12) inches.
 - 16 v. Underdrain with discharge elevation at top of gravel layer.
 - 17 vi. No compaction of soils beneath the facility, or ripping/loosening of soils if
18 compacted.
 - 19 vii. No liners or other barriers interfering with infiltration.
 - 20 viii. Appropriate plant palette for the specified soil mix and maximum available
21 water use.
- 22 g) Alternative Designs. Facilities, or a combination of facilities, of a different design
23 than described in subsection (A)(5)(f) may be permitted if all of the following
24 measures of equivalent effectiveness are demonstrated.
- 25 i. Equal or greater amount of runoff infiltrated or evapotranspired;
 - 26 ii. Equal or lower pollutant concentrations in runoff that is discharged after
27 biotreatment;
 - 28 iii. Equal or greater protection against shock loadings and spills;
 - 29 iv. Equal or greater accessibility and ease of inspection and maintenance.
- 30 h) Allowed Variations for Special Site Conditions. The bioretention system design
31 parameters in subsection (A)(5)(f) may be adjusted for the following special site
32 conditions:
- 33 i. Facilities located within ten (10) feet of structures or other potential
34 geotechnical hazards established by the geotechnical expert for the project may
35 incorporate an impervious cutoff wall between the bioretention facility and the
36 structure or other geotechnical hazard.
 - 37 ii. Facilities with documented high concentrations of pollutants in underlying soil
38 or groundwater, facilities located where infiltration could contribute to a
39 geotechnical hazard, and facilities located on elevated plazas or other structures
40 may incorporate an impervious liner and may locate the underdrain discharge

- 1 at the bottom of the subsurface drainage/storage layer (this configuration is
2 commonly known as a “flow-through planter”).
- 3 iii. Facilities located in areas of high groundwater, highly infiltrative soils or where
4 connection of underdrain to a surface drain or to a subsurface storm drain are
5 infeasible, may omit the underdrain.
- 6 iv. Facilities serving high-risk areas such as fueling stations, truck stops, auto
7 repairs, and heavy industrial sites may be required to provide additional
8 treatment to address pollutants of concern unless these high-risk areas are
9 isolated from storm water runoff or bioretention areas with little chance of spill
10 migration.
- 11 i) Exceptions to Requirements for Bioretention Facilities. If the use of bioretention or a
12 facility of equivalent effectiveness is infeasible (due to construction constraints, not
13 financial constraints), other types of bioretention or media filters (such as tree-
14 boxtype biofilters or in-vault media filters) may be used for the following category
15 of regulated projects:
- 16 i. Projects creating or replacing an acre or less of impervious area, and located in a
17 designated pedestrian-oriented commercial district (i.e., smart growth
18 projects), and having at least eighty-five (85) percent of the entire project site
19 covered by permanent structures;
- 20 ii. Facilities receiving runoff solely from existing (pre-project) impervious areas;
21 and
- 22 iii. Historic sites, structures or landscapes that cannot alter their original
23 configuration in order to maintain their historic integrity.
- 24 6) Hydromodification Management. Projects that create and/or replace one acre or more
25 of impervious surface are considered to be hydromodification management projects. A
26 project that does not increase impervious surface area over the pre-project condition is
27 not a hydromodification management project.
- 28 The post-project runoff from a hydromodification management project shall not exceed
29 the estimated pre-project flow rate for the two-year, twenty-four (24) hour storm.
- 30 7) Operation and Maintenance of Post-Construction Storm Water Management Measures.
- 31 a) Maintenance Responsibility. Owners of property on which a regulated project has
32 been developed shall agree to accept responsibility for the operation and
33 maintenance of the on-site installed source control measures, treatment systems,
34 and hydromodification controls. This agreement shall be in the form of a signed and
35 notarized operation and maintenance agreement to be recorded in the Merced
36 County recorder’s office; responsibility shall transfer to any successors in interest of
37 the property.
- 38 Multi-parcel or multi-owner projects (gated communities, condominiums, etc.) shall
39 operate and maintain any commonly owned source control measures, treatment
40 systems, and hydromodification controls either through a homeowners association,
41 through a condominium agreement, or other legally enforceable agreement or
42 mechanism.

- 1 b) Inspection Authorization. The recorded operation and maintenance agreement shall
2 include a provision authorizing the county to access the project site for the sole
3 purpose of performing inspections of the installed treatment systems and
4 hydromodification controls.
- 5 B. Requirement to Eliminate Illicit Discharge. The director of public works is authorized to
6 require dischargers of illicit discharges to promptly cease and desist discharging and/or
7 clean-up and abate the illicit discharge. This may include any of the following requirements:
- 8 1) The discharger may be required to abate and clean up their discharge, spill, or pollutant
9 release within seventy-two (72) hours of notification; high risk spills may be required to
10 be cleaned-up as soon as possible.
- 11 2) The discharger may be required to abate the discharge within thirty (30) days of
12 notification, for uncontrolled sources of pollutants that could pose an environmental
13 threat.
- 14 3) The department of public works may perform the clean-up and abatement work and bill
15 the responsible party, if necessary.
- 16 4) If a situation persists where pollutant-causing sources or activities are not abated, all
17 activities on the site may be ordered to cease until the problems associated with the
18 illicit discharge are adequately addressed.
- 19 5) If the director of public works determines that clean-up activities cannot be completed
20 within the original timeframe, a new timeframe will be established and the county will
21 notify the Regional Water Board in writing within five business days of the revised
22 timeframe.
- 23 C. Requirement to Eliminate or Secure Approval for Illicit Connections.
- 24 1) The director of public works may require by written notice that any person responsible
25 for an illicit connection to the storm drain system comply with the requirements of this
26 chapter to eliminate or secure approval for the connection by a specified date,
27 regardless of whether or not the connection or discharges to it had been established or
28 approved prior to the effective date of the ordinance codified in this chapter.
- 29 2) If, subsequent to eliminating a connection found to be in violation of this chapter, the
30 responsible person can demonstrate that an illicit discharge will no longer occur, said
31 person may request county approval to reconnect. The reconnection or reinstallation of
32 the connection shall be at the responsible person's expense.
- 33 D. Requirement to Monitor and Analyze. The director of public works may require by written
34 notice that any person engaged in any activity and/or owning or operating any facility which
35 may cause or contribute to storm water pollution, illicit discharges, and/or non-storm water
36 discharges to the storm drain system, to undertake at said person's expense such monitoring
37 and analyses and furnish such reports to the county of Merced as deemed necessary to
38 determine compliance with this chapter.
- 39 E. Notification of Spills. Notwithstanding other requirements of law, as soon as any person
40 responsible for a facility or operation, or responsible for emergency response for a facility or
41 operation has information of any known or suspected release of materials which are resulting or
42 may result in illicit discharges or pollutants discharging into storm water or the storm drain

1 system from said facility, said person shall take all necessary steps to ensure the discovery,
 2 containment, and cleanup of such release. In the event of such a release of a hazardous material
 3 said person shall immediately notify emergency response officials of the occurrence via
 4 emergency dispatch services (911) as well as the department of public works. In the event of a
 5 release of non-hazardous materials, said person shall notify the department of public works in
 6 person or by phone or facsimile no later than five p.m. of the next business day. Notifications in
 7 person or by phone shall be confirmed by written notice addressed and mailed to the
 8 department of public works within three business days. If the discharge of prohibited materials
 9 emanates from a commercial or industrial establishment, the owner or operator of such
 10 establishment shall also retain an on-site written record of the discharge and the actions taken
 11 to prevent its recurrence. Such records shall be retained for at least three years.

12 **Merced Storm Water Group, Storm Water Management Program (Merced** 13 **Storm Water Group 2007)**

- 14 • **Purpose.** The Storm Water Management Program (SWMP) will be implemented to limit to the
 15 MEP, the discharge of pollutants from the Merced Storm Water Group (MSWG) storm sewer
 16 system. The MSWG is a coalition of municipalities acting as co-permittees consisting of the Cities
 17 of Atwater and Merced, Merced County and the Merced Irrigation District. The development and
 18 implementation of the SWMP is to fulfill requirements of storm water discharges from Small
 19 MS4 operators in accordance with Section 402(p) of the CWA. The SWMP was developed to also
 20 comply with General Permit Number CAS000004, Water Quality Order No. 2003-0005-DWQ.

21 **3.0-1.9.2.2 City of Merced**

22 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 23 • **Goal Area P-5.** An adequate Storm Drainage Collection and Disposal System in Merced
 - 24 ○ **Policy P-5.1.** Provide Effective Storm Drainage Facilities for Future Development.
 - 25 • **Implementing Action 5.1.c.** Continue to require all development to comply with the
 26 Storm Water Master Plan and any subsequent updates.
 - 27 • **Implementing Action 5.1.d.** Installation or design of facilities necessary to provide
 28 services to development projects will be based on the full build-out scenario.
 - 29 ○ **Policy P-5.2.** Integrate Drainage Facilities with Bike Paths, Sidewalks, Recreation Facilities,
 30 Agricultural Activities, Groundwater Recharge, and Landscaping.
 - 31 • **Implementing Action 5.2.b.** Storm water facilities shall be designed and constructed in
 32 accordance with the standards in the Parks and Open Space Master Plan and the Storm
 33 Water Master Plan.
- 34 • **Goal Area OS-1.** Improvement and Enhancement of Water Quality.
 - 35 ○ **Policy OS-1.5.** Preserve and enhance water quality.
 - 36 • **Implementing Action 1.5.a.** Utilize storm water retention basins and other “Best
 37 Management Practices” to improve the quality of storm water discharged into the
 38 region’s natural surface water system.
- 39 • **Goal Area S-3.** Flooding: Protect People and Property.

- 1 ○ **Policy S-3.2.** Implement appropriate land use planning practices to improve flood risk
2 management and reduce the consequence of flooding.
- 3 • **Implementing Action 3.2.a.** Require evaluation of potential flood hazards prior to
4 approval of development projects to determine whether the proposed development is
5 reasonably safe from flooding and consistent with the State of California Department of
6 Water Resources' (DWR) Urban Level of Flood Protection Criteria for an urban level of
7 flood protection standard (200-year) in urban and urbanizing areas. The City will not
8 approve new development or a subdivision or enter into a development agreement for
9 any property within a flood hazard zone unless the adequacy of flood protection specific
10 to the area has been demonstrated.
- 11 • **Implementing Action 3.2.b.** Require that new development and substantial
12 improvements or upgrades in identified FEMA flood hazard zones (i.e., 100- and 500-
13 year floodplains) be constructed in accordance with applicable city, State, and federal
14 regulations, including compliance with the minimum standards of the Federal
15 Emergency Management Agency and the National Flood Improvement Program to avoid
16 or minimize the risk of flood damage.

17 **City of Merced Municipal Code**

18 **Chapter 15.50 Storm Water Management and Discharge Control**

- 19 • **Section 15.50.050.** Discharge of non-storm water prohibited.
- 20 A. Except as provided in Section 15.50.060, it is unlawful, and a misdemeanor subject to
21 punishment in accordance with Chapter 1.12 of this Code, for any person to make or cause
22 to be made any non-storm water discharge.
- 23 B. Notwithstanding the exemptions provided by Section 15.50.060, if the regional water
24 quality control board or the enforcement official determines that any otherwise exempt
25 discharge causes or significantly contributes to violations of any storm water permit, or
26 conveys significant quantities of pollutants to a surface water or storm water conveyance, or
27 is a danger to public health or safety, such discharge shall be prohibited from entering the
28 storm water conveyance system.
- 29 • **Section 15.50.060.** Exceptions to discharge prohibition. As allowed by the city's Phase II MS4
30 NPDES permit, the following discharges to the storm water conveyance system are exempt from
31 the prohibition set forth in Section 15.50.050:
- 32 A. Any discharge or connections regulated under a NPDES permit issued to the discharger and
33 administered by the State pursuant to Division 7, Chapter 5.5 of the California Water Code,
34 provided that the discharger is in compliance with all requirements of the permit and all other
35 applicable laws and regulations;
- 36 B. Discharges from the following activities, which do not cause or contribute to the violation of
37 any NPDES permit:
- 38 1) Water line flushing and other discharges from potable water sources,
39 2) Incidental runoff from landscaped areas defined as unintended amounts (volume) of
40 runoff, such as unintended, minimal over-spray from sprinklers that escapes the area of
41 intended use,
42 3) Rising ground waters or springs,

- 1 4) Passive foundation and footing drains,
- 2 5) Water from crawl space pumps and basement pumps,
- 3 6) Air conditioning condensation,
- 4 7) Natural flows from riparian habitats and wetlands,
- 5 8) Dechlorinated swimming pool discharges,
- 6 9) Flows from fire suppression activities, including fire hydrant flows,
- 7 10) Waters not otherwise containing wastes as defined in California Water Code Section
- 8 13050(d) and California Health and Safety Code Section 25117,
- 9 11) Diverted stream flows,
- 10 12) Uncontaminated ground water infiltration or pumped to separate storm sewers,
- 11 13) Any discharge that the enforcement official, the local health officer, or the Regional
- 12 Water Quality Control Board determines, in writing, is necessary for the protection of
- 13 the public health and safety,
- 14 14) Any discharge caused by flooding or other natural disaster, which could not have been
- 15 reasonably foreseen or mitigated for in advance by the discharger, as determined by the
- 16 enforcement official,
- 17 15) Individual residential car washing on private property in which no commercial
- 18 enterprise or non-profit fundraising is being conducted in the washing of those vehicles.

19 **Chapter 17.48 Flood Damage Prevention**

20 • **Section 17.48.140. Standards of construction.**

21 A. Anchoring.

- 22 1) All new construction and substantial improvements shall be adequately anchored to
- 23 prevent flotation, collapse or lateral movement of the structure resulting from
- 24 hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- 25 2) All manufactured homes shall meet the anchoring standards of Section 17.48.170.

26 B. Construction materials and methods.

- 27 1) All new construction and substantial improvement shall be constructed with materials
- 28 and utility equipment resistant to flood damage.
- 29 2) All new construction and substantial improvement shall be constructed using methods
- 30 and practices that minimize flood damage.
- 31 3) All new construction and substantial improvement shall be constructed with electrical,
- 32 heating, ventilation, plumbing and air conditioning equipment and other service
- 33 facilities that are designed and/or located so as to prevent water from entering or
- 34 accumulating within the components during conditions of flooding.
- 35 4) Require within zones AH or AO that adequate drainage paths around structures on
- 36 slopes to guide floodwaters around and away from proposed structures.

37 C. Elevation and floodproofing.

- 1 5) New construction and substantial improvement in zones AE and AH shall have the
2 lowest floor, including basement, elevated to or above the base flood elevation.
3 Nonresidential structures may meet the standards in subsection C.3. hereof. Upon the
4 completion of the structure the elevation of the lowest floor including basement shall be
5 certified by a registered professional engineer or surveyor, or verified by the
6 community building inspector to be properly elevated. Such certification or verification
7 shall be provided to the city engineer.
- 8 6) New construction and substantial improvement in Zone AO shall have the lowest floor,
9 including basement, elevated above the highest adjacent grade at least as high as the
10 depth number specified in feet on the FIRM, or at least two (2) feet if no depth number is
11 specified. Nonresidential structures may meet the standards in subsection C.3. hereof.
12 Upon the completion of the structure, the elevation of the lowest floor including
13 basement shall be certified by a registered professional engineer or surveyor, or verified
14 by the community building inspector to be properly elevated. Such certification or
15 verification shall be provided to the city engineer.
- 16 7) Nonresidential construction shall either be elevated to conform with subsections C.1. or
17 2. hereof or together with attendant utility and sanitary facilities:
- 18 a) Be floodproofed so that below the base flood level the structure is watertight with
19 walls substantially impermeable to the passage of water;
- 20 b) Have structural components capable of resisting hydrostatic and hydrodynamic
21 loads and effects of buoyancy; and
- 22 c) Be certified by a registered professional engineer or architect that the standards of
23 this subsection are satisfied. Such certifications shall be provided to the city
24 engineer.
- 25 5) Garages and low cost accessory structures.
- 26 b) Detached garages and accessory structures.
- 27 (1) "Accessory structures" used solely for parking (two-car detached garages or
28 smaller) or limited storage (small, low-cost sheds), as defined in Section
29 17.48.040, may be constructed such that its floor is below the base flood
30 elevation (BFE), provided the structure is designed and constructed in
31 accordance with the following requirements:
- 32 i. Use of the accessory structure must be limited to parking or limited storage;
- 33 ii. The portions of the accessory structure located below the BFE must be built
34 using flood-resistant materials;
- 35 iii. The accessory structure must be adequately anchored to prevent flotation,
36 collapse and lateral movement;
- 37 iv. Any mechanical and utility equipment in the accessory structure must be
38 elevated or floodproofed to or above the BFE;
- 39 v. The accessory structure must comply with floodplain encroachment
40 provisions in Section 17.48.190; and

1 vi. The accessory structure must be designed to allow for the automatic entry
2 of floodwaters in accordance with Section 17.48.140.C.3.

3 (2) Detached garages and accessory structures not meeting the above standards
4 must be constructed in accordance with all applicable standards in Section
5 17.48.140.

- 6 • **Section 17.48.190. Floodways.** Located within areas of special flood hazard established in
7 Section 17.48.060 are areas designated as floodways. Since the floodway is an extremely
8 hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and
9 erosion potential, the following provisions apply:

10 A. Prohibit encroachments, including fill, new construction, substantial improvement, and other
11 new development unless certification by a registered professional engineer or architect is
12 provided demonstrating that encroachments shall not result in any increase in flood levels
13 during the occurrence of the base flood discharge.

14 B. All new construction, substantial improvement and other proposed new development shall
15 comply with all other applicable flood hazard reduction provisions of Sections 17.48.140
16 through 17.48.190.

17 **3.0-1.10 Land Use**

18 The following goals, objectives, and policies are relevant to land use.

19 **3.0-1.10.1 Regional Plans and Policies**

20 No regional plans and/or policies are relevant to land use.

21 **3.0-1.10.2 Local Plans and Policies**

22 **3.0-1.10.2.1 Merced County**

23 **2030 Merced County General Plan (County of Merced 2013)**

- 24 • **Goal LU-1:** Create a countywide land use pattern that enhances the integrity of both urban and
25 rural areas by focusing urban growth towards existing or suitably located new communities;
 - 26 ○ **Policy LU-1.1:** Direct urban development to areas within adopted urban boundaries of
27 cities, Urban Communities, and Highway Interchange Centers in order to preserve
28 productive agriculture, limit urban sprawl, and protect natural resources;
 - 29 ○ **Policy LU-1.4.** Urban Communities (RDR) Continue to support compact Urban Communities
30 through the efficient use of land to reduce conflicts with agricultural and open space areas,
31 and minimize public service costs.
 - 32 ○ **Policy LU-1.5:** Consider the establishment of new Urban Communities in areas off of
33 productive agricultural land in order to accommodate projected future growth;
 - 34 ○ **Policy LU-1.7:** Promote compact development in urban communities that supports
35 pedestrian activity and transit ridership;

- 1 ○ **Policy LU-1.10:** Require the orderly, well planned, and balanced growth of the
- 2 unincorporated communities consistent with the limits imposed by local infrastructure,
- 3 services, public facilities, and their ability to assimilate growth;
- 4 • **Land Use Policy LU-2.3.** Land Use Activity Limitations. Limit allowed land use within
- 5 Agricultural and Foothill Pasture areas to agricultural crop production, farm support operations,
- 6 and grazing and open space uses.
- 7 • **Goal LU-4:** Provide for the continuation of areas designated for rural and agricultural support
- 8 uses in a manner that minimizes agricultural and environmental impacts while benefiting the
- 9 surrounding agricultural community.
- 10 ○ **Policy LU-4.3:** Consider locating commercial and industrial uses in Rural Centers in limited
- 11 cases if they support agricultural operations, serve the daily convenience commercial needs
- 12 of the surrounding rural area, or provide health and safety benefits to the County in sparsely
- 13 populated areas;
- 14 • **Goal LU-5.A:** Preserve and enhance the character of Merced County by focusing future
- 15 unincorporated development towards Urban Communities;
- 16 ○ **Policy LU-5.A.5:** Promote the principles of smart growth in Community Plans for each
- 17 Urban Community, including creating safe, walkable neighborhoods; providing a mix of
- 18 residential densities; creating a strong sense of place; mixing land uses; directing growth
- 19 toward existing communities; building compactly; discouraging sprawl; encouraging infill;
- 20 preserving open space; and creating a range of housing opportunities and choices.

21 **Regional Transportation Plan/Sustainable Communities Strategy for Merced**

22 **County (Merced County Association of Governments 2022)**

- 23 • **Policy 7.4.** Agriculture: Preserve productive farmland and land that provides habitat for rare,
- 24 endangered or threatened species.
- 25 • **Goal 9.** Passenger Rail: Provide a rail system that provides safe and reliable service for
- 26 passengers.
- 27 • **Goal 15.** Sustainable Communities: Reduce per capita greenhouse gas emissions through
- 28 compact growth and alternative transportation strategies. Protect and enhance the natural
- 29 environment. Support vehicle electrification and the provision of electrification infrastructure in
- 30 public and private parking facilities and 2022 Regional Transportation Plan/Sustainable
- 31 Communities Strategy 91 structures. Support a vibrant and sustainable regional economy.
- 32 Maximize the use of Regional Early Action Planning 2.0 funds to implement and advance efforts
- 33 to reduce per capita greenhouse gas emissions.
- 34 • **Goal 17.** Transit: Provide an efficient, effective, coordinated regional transit system that
- 35 increases mobility for urban and rural populations, including transportation for disadvantaged
- 36 persons.

37 **Merced County Unified Development Ordinance, Title 18, Article 2: Zones,**

38 **Allowable Uses, and Development Standards**

39 The Merced County Unified Development Ordinance provides a set of detailed requirements that

40 implement General Plan policies at the individual parcel level. Title 18, Article 2 of the Merced

1 County Unified Development Ordinance establishes locational and developmental standards that
2 regulate what may or may not be done on a particular parcel of unincorporated land. Such standards
3 include lot size, building setback, and a list of allowable uses.

4 **3.0-1.10.2.2 City of Merced**

5 **Merced Vision 2030 General Plan (City of Merced 2012)**

6 The *Merced Vision 2030 General Plan*, adopted in 2012, serves as the blueprint for growth and
7 development in the City of Merced. The *Merced Vision 2030 General Plan* includes 10 topics: urban
8 expansion (amended 2015), land use (amended 2015), transportation and circulation (amended
9 2015), public services (amended 2017), urban design, open space (amended 2016), sustainable
10 development, housing (amended 2016), noise, and safety (amended 2016).

11 The land use element of the *Merced Vision 2030 General Plan* establishes land use goals and policies
12 for future development as well as structures strategies for the preservation of existing uses and
13 resources. Relevant land use goals and policies include:

- 14 • **Goal Area L-1: Residential & Neighborhood Development**
 - 15 ○ **Goal:** Mixed-used, transit and pedestrian-friendly residential environments
 - 16 • **Policy L-1.5:** Protect existing neighborhoods from incompatible developments.
17 Merced’s existing neighborhoods should be protected from incompatible commercial
18 and industrial uses which may cause adverse impacts on the residences.
 - 19 • **Policy L-1.7:** Encourage the location of multi-family developments on sites with good
20 access to transportation, shopping, employment centers, and services.
 - 21 • **Policy L-1.9:** Ensure connectivity between existing and planned urban areas. In order to
22 foster a sense of community among all citizens of Merced, and avoid separate “enclaves”
23 within the City, all development should be required to extend access and access to
24 services to surrounding existing community areas or vacant land
 - 25 • **Policy L-2.8.** Encourage a Mixture of Uses and Activities that will Maintain the Vitality of
26 the Downtown Area: In 2007, the Downtown Strategy Task Force (a 20-member group
27 representing a broad range of community interests) was formed to develop a consensus
28 on the proper direction for Downtown. They developed the following strategies for
29 achieving the goal of maintaining Downtown as the City’s center of cultural and civic
30 activity, finance, and government.
- 31 • **Goal Area L-3: Urban Growth and Design**
 - 32 ○ **Goal:** Living environments which encourage people to use a variety of transportation
33 alternatives
 - 34 • **Policy L-3.2.** Encourage Infill Development and a Compact Urban Form: Sprawling, low-
35 density and discontinuous development discourages the use of alternative
36 transportation modes and increases travel distances. Infrastructure costs and most
37 environmental impacts are less when development is more compact.
 - 38 • **Policy L-3.3:** Promote site designs that encourage walking, cycling, and transit use.

- 1 • **Policy L-3.5:** Develop a Transit-Oriented Development Overlay Zone adjacent to the
2 planned High Speed Rail Station in Downtown Merced.

3 The Sustainable Development element of the *Merced Vision 2030 General Plan* addresses the
4 environmental, natural, and cultural resources of the City of Merced and proposes policies to
5 minimize adverse effects resulting from growth and development. The Sustainable Development
6 chapter encapsulates sustainable growth in the City of Merced and includes accommodating
7 growth and development without unnecessarily consuming valuable and limited agricultural
8 soils, destroying or diminishing the value of important wildlife habitat, and destroying cultural
9 and historic resources. Relevant sustainable development goals and policies include:

- 10 • **Goal Area SD-1:** Air Quality and Climate Change
 - 11 ○ **Goal:** Effective and efficient transportation infrastructure
 - 12 • **Policy SD-1.3:** Integrate land use planning, transportation planning, and air quality
13 planning for the most efficient use of public resources and for a healthier environment.
 - 14 • **Policy SD-1.4:** Educate the public on the impact of individual transportation, lifestyle,
15 and land use decisions on air quality.

16 **San Joaquin Regional Rail Commission**

17 In 1995, the seven cities and the County of San Joaquin approved a joint powers agreement that
18 created the San Joaquin Regional Rail Commission (SJRRC). The SJRRC was established to improve
19 existing rail service and implement a rail system in San Joaquin County (San Joaquin Regional Rail
20 Commission, 2022). The SJRRC does not own the tracks on which the Altamont Corridor Express
21 (ACE) operates, but instead has entered into passenger rights agreements with both Peninsula
22 Corridor Joint Powers Board and Union Pacific Railroad (UPRR) to operate on portions of their
23 respective tracks for its current operation and would enter into new agreements for the Project. In
24 its capacity as a state joint powers agency, improvements proposed by SJRRC are not subject to local
25 or regional plans or regulations. In addition, the Interstate Commerce Commission Termination Act
26 of 1995 (ICCTA) affords railroads engaged in interstate commerce considerable flexibility in making
27 necessary improvements and modifications to rail infrastructure, subject to the requirements of the
28 Surface Transportation Board, and broadly preempts state and local regulation of railroads. This
29 preemption extends to the construction and operation of rail lines.² As such, activities within the
30 UPRR right-of-way (ROW) are exempt from local zoning codes and other land use ordinances.
31 Improvements outside of the UPRR ROW, however, would be subject to regional and local plans and
32 regulations. Consequently, the focus of analysis in this section is at locations where improvements
33 would occur outside the existing UPRR ROW.

34 **3.0-1.11 Noise**

35 The following goals, objectives, and policies are relevant to noise.

36 **3.0-1.11.1 Regional Plans and Policies**

37 No regional plans and/or policies are relevant to noise.

3.0-1.11.2 Local Plans and Policies

3.0-1.11.2.1 Merced County

2030 Merced County General Plan (County of Merced 2013)

- **Health and Safety Goal HS-7.** Protect residents, employees, and visitors from the harmful and annoying effects of exposure to excessive noise.
 - **Health and Safety Policy HS-7.2.** Acoustical and Groundborne Vibration Analysis Requirements (RDR). Require development project applicants to prepare an acoustical analysis as part of the environmental review process when noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels shown in Tables HS-1 and HS-2. Require an analysis of groundborne vibration for proposed residential and other sensitive projects (including but not limited to hospitals and schools) located within 1,000 feet of a rail line with at least 30 operations per day or an existing industrial groundborne vibration source. The acoustical and groundborne vibration analyses shall:
 - a) Be the responsibility of the applicant;
 - b) Be prepared by qualified persons experienced in the fields of environmental noise and groundborne vibration assessment and architectural acoustics;
 - c) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions;
 - d) Estimate projected future (20 year) noise levels relative to the standards shown in Tables HS-1 and HS-2 at the property line of the proposed use, and, as applicable, estimate project future groundborne vibration levels using a maximum vibration standard of 70 VdB;
 - e) Recommend appropriate mitigation to achieve compliance with the adopted policies and standards in this element, including setbacks from groundborne vibration sources causing adverse levels of vibration; and
 - f) Estimate interior and exterior noise, and groundborne vibration exposure after the prescribed mitigation measures have been implemented at the property line.
 - **Health and Safety Policy HS-7.5.** Noise Generating Activities (RDR). Limit noise generating activities, such as construction, to hours of normal business operation.
 - **Health and Safety Policy HS-7.9.** Transportation Project Construction/Improvements (RDR) Require transportation project proponents to prepare all acoustical analysis for all roadway and railway construction projects in accordance with Policy HS-7.2; additionally, rail projects shall require the preparation of a groundborne vibration analysis in accordance with Policy HS-7.2. Consider noise mitigation measures to reduce traffic and/or rail noise levels to comply with Table HS-1 standards if pre-project noise levels already exceed the noise standards of Table HS-1 and the increase is significant. The County defines a significant increase as follows:

Pre-Project Noise Environment (Ldn) Significant Increase

1	Less than 60 dB	5+ dB
2	60 – 65 dB	3+ dB
3	Greater than 65 dB	1.5+ dB

- 4 ○ **Health and Safety Policy HS-7.11.** Train Whistle Noise (IGC). Support improvements to at-grade crossings in urban areas to eliminate the need for train horn sounding near
- 5 communities.
- 6
- 7 ○ **Health and Safety Policy HS-7.12.** Requires new project to include appropriate noise
- 8 mitigation measures to comply with the Table HS-2 standards within sensitive areas.

9 **Regional Transportation Plan/Sustainable Communities Strategy for Merced**

10 **County (Merced County Association of Governments 2022)**

- 11 • **Policy 3.2.** Work with local agencies to ensure compatible land uses around existing airports to
- 12 reduce noise conflicts.

13 **3.0-1.11.2.2 City of Merced**

14 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 15 • **Goal Area N-1.** To protect City residents from the harmful and annoying effects of exposure to
- 16 excessive noise.
 - 17 ○ **Policy N-1.3.** Reduce equipment noise levels.
 - 18 • **Implementing Action 1.3a.** Limit operation hours for noisy construction equipment in
 - 19 the City of Merced.
 - 20 ○ **Policy N-1.4.** Reduce noise levels at the receiver where noise reduction at the source is not
 - 21 possible.
 - 22 • **Implementing Action 1.4c.** Use the “normally acceptable” noise levels as established in
 - 23 the “Noise and Land Use Compatibility Guidelines” for the review of non-residential land
 - 24 uses.
 - 25 • **Policy N-1.5.** Coordinate planning efforts so that noise-sensitive land uses are not located near
 - 26 major noise sources.
 - 27 • **Policy N-1.6.** Mitigate all significant noise impacts as a condition of project approval for
 - 28 sensitive land uses.

29 **3.0-1.12 Public Services and Utilities**

30 The following goals, objectives, and policies are relevant to public services and utilities.

31 **3.0-1.12.1 Regional Plans and Policies**

32 No regional plans and/or policies are relevant to public services and utilities.

3.0-1.12.2 Local Plans and Policies

3.0-1.12.2.1 Merced County

- 2030 Merced County General Plan (County of Merced 2013)**Public Facilities and Service Goal PFS-1:** Ensure adequate funding for new, expanded, and upgraded public facilities and services.
- **Public Facilities and Service Policy PFS-1.7: Infrastructure Investment Prioritization.** Require infrastructure investments to be prioritized based on the following characteristics:
 - Communities with the greatest need based on future growth or deficiencies in existing services; and/or
 - Communities with the greatest economic potential.
 - **Public Facilities and Service Policy PFS-1.9: Public Safety Services.** Coordinate with cities and special districts to ensure adequate public safety services are provided countywide and develop mechanisms to ensure financial resources are allocated for fire protection and sheriff patrol.
 - **Public Facilities and Services Goal PFS-2.** Ensure the adequate wastewater collection, treatment, and disposal within the County.
 - **Public Facilities and Services Policy PFS-2.4.** Intensive Processing Activities (RDR). Discourage the development of intensive processing activities that have heavy wastewater discharge characteristics in areas identified as having high groundwater or drainage problems unless effective mitigation measures are available.
 - **Public Facilities and Services Policy PFS-2.5.** Ground or Surface Water Contamination (RDR). Prohibit wastewater disposal facilities, including private residential facilities, that are determined to have the potential to contaminate the groundwater or surface water, on either a site-specific or cumulative basis.
 - **Goal PFS-3:** Ensure the management of stormwater in a safe and environmentally sensitive manner through the provision of adequate storm drainage facilities that protect people, property, and the environment.
 - **Policy PFS-3.2 Stormwater Facilities in New Development:** Require that new development in unincorporated communities includes adequate stormwater drainage systems. This includes adequate capture, transport, and detention/retention of stormwater.
 - **Policy PFS-3.5 Pre-Development Storm Flows:** Require on-site detention/retention facilities and velocity reducers when necessary to maintain pre-development storm flows and velocities in natural drainage systems.
 - **Policy PFS-3.6 Retention/Detention Facility:** Encourage stormwater detention/retention project designs that minimize drainage concentrations and impervious coverage, avoid floodplain areas, are visually unobtrusive and, where feasible, provide a natural watercourse appearance and a secondary use, such as recreation.
 - **Public Facilities and Services Goal PFS-4.** Ensure the safe and efficient disposal and recycling of solid and hazardous waste generated in the County.

- 1 ○ **Policy PFS-4.5 Solid Waste Service Availability:** Require all new development to
2 adequately provide solid waste storage, handling, and collection through the development
3 review and permitting process.
- 4 ● **Public Facilities and Services Goal PFS-5.** Ensure the provision of adequate utilities to the
5 residents of Merced County.
- 6 ○ **Policy PFS-5.1 Adequate Utility Facilities and Services:** Encourage the provision of
7 adequate gas and electric, communications, and telecommunications service and facilities to
8 serve the needs of existing and future residents and businesses.
- 9 ○ **Public Facilities and Services Policy PFS-5.6.** Underground Power Transmission (RDR).
10 Require power transmission and distribution facilities to be located underground within
11 urban communities and residential centers.
- 12 ○ **Public Facilities and Service Goal PFS-6:** Ensure the provision of timely and adequate law
13 enforcement through proper management and staffing of the Sheriff Department in Merced
14 County.
- 15 ○ **Public Facilities and Service Policy PFS-6.1: Staffing Levels.** Encourage optimum staffing
16 levels for both sworn Sheriff Deputies and civilian support staff in order to provide quality
17 law enforcement services in Merced County.
- 18 ○ **Public Facilities and Services Policy PFS-6.2.** Sheriff Department Response Time
19 Standards. Strive to achieve and maintain appropriate Sheriff Department response times
20 for all call priority levels to provide adequate law enforcement services for all County
21 residents.
- 22 ● **Public Facilities and Services Goal PFS-7.** Provide adequate fire and emergency medical
23 facilities and services to protect County residents from injury and loss of life, and to protect
24 property from fire.
- 25 ○ **Public Facilities and Services Policy PFS-7.1.** Fire Staffing and Response Time Standards.
26 Strive to maintain fire department staffing levels and response times consistent with
27 National Fire Protection Association standards.
- 28 ○ **Public Facilities and Services Policy PFS-7.2.** Fire Protection Service Expansion. Strive to
29 expand fire protection service in areas that are currently underserved or areas that
30 experience growth in order to maintain adequate levels of service.
- 31 ○ **Public Facilities and Services Policy PFS-7.3:** Water Service Standards. Require all
32 development within unincorporated communities to be served by water supplies, storage,
33 and conveyance facilities supplying adequate volume, pressure, and capacity for fire
34 protection.
- 35 ○ **Public Facilities and Services Policy PFS-7.6.** Emergency Medical Service Staffing and
36 Response Time Standards. Strive to achieve and maintain optimum staffing levels and
37 appropriate response times to provide adequate emergency medical services for all County
38 residents.
- 39 ○ **Public Facilities and Services Policy PFS-7.9.** Fire Safety Standard Compliance. Ensure
40 that all proposed developments are reviewed for compliance with fire safety standards by
41 responsible local fire agencies per the Uniform Fire Code and other State and local
42 ordinances.

- 1 • **Public Facilities and Services Goal PFS-8:** Coordinate with school districts, colleges, and
2 universities to provide for the educational and literary needs of Merced County residents.
- 3 ○ **Public Facilities and Services Policy PFS-8.8.** Library Facilities and Services (SO).
4 Encourage expansion of library facilities and services as necessary to meet the needs of
5 future growth.

6 **Merced County Multi-Jurisdictional Hazard Mitigation Plan (County of** 7 **Merced 2021)**

- 8 • **Goal 3:** Build resiliency and redundancy to maintain essential services, lifelines, facilities, and
9 infrastructure.

10 **3.0-1.12.2.2 City of Merced**

11 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 12 • **Goal Area P-1: Public Facilities and Services:** Maintenance and Improvement of Merced's
13 Existing Infrastructure.
- 14 ○ **Policy P-1.2:** Utilize existing infrastructure and public service capacities to the maximum
15 extent possible and provide for the logical, timely and economically efficient extension of
16 infrastructure and services, where necessary.
- 17 ○ **Policy P-1.3.** Require new development to provide or pay for its fair share of public facility
18 and infrastructure improvements.
- 19 ○ **Policy P-2.1.** Maintain and enhance public protection facilities, equipment, and personnel to
20 the maximum extent feasible within the resource constraints of the City to serve the City's
21 needs.
- 22 • **Goal Area P-3: Water:** An Adequate Water Source, Distribution and Treatment Infrastructure
23 System in Merced.
- 24 ○ **Policy P-3.1.** Ensure that adequate water supply can be provided with the City's service
25 area, concurrent with service expansion and population growth.
- 26 ○ **Policy P-3.2:** In cooperation with the County and the Merced Irrigation District, work to
27 stabilize the region's aquifer.
- 28 • **Goal Area P-4: Wastewater:** An Adequate Wastewater Collection, Treatment and Disposal
29 System in Merced.
- 30 ○ **Policy P-4.1.** Provide adequate wastewater collection, treatment and disposal capacity for
31 existing and projected future needs.
- 32 ○ **Implementing Action P-4.1.a.** Maintain and enhance the existing wastewater system to
33 increase the lifetime of the system.
- 34 ○ **Policy P-4.2:** Consider the use of reclaimed water to reduce non-potable water demands
35 whenever practical.
- 36 • **Goal Area P-5: Storm Drainage and Flood Control:** An Adequate Storm Drainage Collection
37 and Disposal System in Merced

- 1 ○ **Policy P-5.1.** Provide effective storm drainage facilities for future development.
- 2 ○ **Policy P-5.2:** Integrate drainage facilities with bike paths, sidewalks, recreation facilities,
- 3 agricultural activities, groundwater recharge, and landscaping.
- 4 ○ **Implementing Action P-5.1.c.** Continue to require all development to comply with the
- 5 Storm Water Master Plan and any subsequent updates.
- 6 ● **Goal Area P-6: Solid Waste:** Solid Waste Management Services That Accommodate the Local
- 7 Population Without Causing Significant Damage to Environmental Resources.
- 8 ○ **Policy P-6.1:** Establish programs to recover recyclable materials and energy from solid
- 9 wastes generated within the City.
- 10 ○ **Policy P-6.2.** Minimize the potential impacts of waste collection, transportation and
- 11 disposal facilities upon the residents of Merced.
- 12 ○ **Implementing Action P-6.2.c.** Continue implementation of programs in cooperation with
- 13 the Merced County Regional Waste Management Authority to meet solid waste diversion
- 14 goals.
- 15 ○ **Policy P-7.1:** Cooperate with Merced area school districts to provide elementary,
- 16 intermediate and high school sites that are centrally located to the populations they serve
- 17 and adequate to serve community growth.
- 18 ○ **Policy P-8.3:** Work with others to study innovative ways of delivering library services at the
- 19 neighborhood level to promote community education and provide a focus for community
- 20 activity and cultural development.
- 21 ● **Goal Area P-9: Telecommunications:** Development of Infrastructure and Service to Allow All
- 22 Merced Residents to Utilize New Technologies to Communicate with the Region, the Nation, and
- 23 the World.
- 24 ○ **Policy P-9.3:** Make use of telecommunications services to increase public safety.
- 25 ○ **Policy S-4.2.** Maintain a reasonable level of accessibility and infrastructure support for fire
- 26 suppression, disaster, and other emergency services.

27 **City of Merced Municipal Code**

28 **Chapter 17.60 Water Efficient Landscaping and Irrigation**

- 29 ● **Section 17.60.020. Applicability.** Whenever landscaping or landscaping and irrigation plans
- 30 are required by a condition of approval of a development project, the following landscape and
- 31 irrigation system design and specifications shall apply.

32 **3.0-1.13 Recreation**

33 The following goals, objectives, and policies are relevant to recreation.

34 **3.0-1.13.1 Regional Plans and Policies**

35 No regional plans and/or policies are relevant to recreation.

1 **3.0-1.13.2 Local Plans and Policies**

2 **3.0-1.13.2.1 Merced County**

3 **2030 Merced County General Plan (County of Merced 2013)**

4 The *2030 Merced County General Plan* (Merced County 2013) serves as the County's blueprint for
5 future land use, development, preservation, and resource conservation decisions until 2030. The
6 *2030 Merced County General Plan* provides a framework for Merced County to achieve its vision for
7 both rural and urban land use. It provides descriptions of the goals, policies, and standards for
8 future land use, development, and conservation for unincorporated Merced County. Relevant goals
9 and policies include:

- 10 • **Policy LU-1:4: Urban Communities.** Continue to support compact Urban Communities through
11 the efficient use of land to reduce conflicts with agricultural and open space areas and minimize
12 public service costs.

13 The Recreation and Cultural Resources Element of the *2030 Merced County General Plan* provides a
14 policy context for Merced County to achieve its recreation goals and cultural resource protection
15 vision. The following are relevant goals and policies that address park and recreation opportunities
16 in Merced County.

- 17 • **Goal RCR-1:** Preserve, enhance, expand, and manage Merced County's diverse system of
18 regional parks, trails, recreation areas, and natural resources for the enjoyment of present and
19 future residents and park visitors.
 - 20 ○ **Policy RCR-1.1: Public Recreation Land Use.** Encourage the continuation and expansion of
21 existing public recreation land uses, including, but not limited to, public beaches, parks,
22 recreation areas, wild areas, and trails.
 - 23 ○ **Policy RCR-1.4: Regional Recreation Facilities Master Plan.** Prepare and regularly
24 update a Regional Park and Recreation Facilities Master Plan that:
 - 25 • Identifies opportunities for a wide variety of recreation activities, including public trails.
 - 26 • Ensures that adequate local and regional park facilities are available to serve existing
27 and future population.
 - 28 • Prioritizes improvements to recreation sites based on their ability to accommodate
29 multiple activities that best address the identified recreation needs of the community
30 and take advantage of significant natural features that enhance the recreation
31 experience.
 - 32 • Requires recreation sites to be designed and developed in a manner that enhances
33 natural features and recreational use, and minimizes environmental impacts to the site
34 and adjacent lands;
 - 35 • Considers the special needs of the elderly and the physically impaired in the design and
36 development of recreation facilities;
 - 37 • Ensures adequate parking and non-vehicular access to recreation facilities.

- 1 • Encourages the development of transit services between recreation facilities and
- 2 population centers.
- 3 • Expands existing park revenue, seeks new funding sources, and explores innovative
- 4 funding arrangements for developing and maintaining County recreation facilities.
- 5 • Supports facilities and activities that meet the needs of a culturally diverse population.
- 6 ○ **Policy RCR-1.6: Non-Recreational Land Use Buffers.** Require buffering between non-
- 7 recreational land uses and sensitive public recreation lands through site design and other
- 8 techniques when the non-recreational land use may significantly impact recreational lands.
- 9 ○ **Policy RCR-1.7: Agricultural Land Use Compatibility.** Consider agriculture as a
- 10 compatible land use and appropriate buffer for public and private recreation areas.
- 11 ○ **Policy RCR-1.12: Recreation Services.** Support recreation services to promote the full use
- 12 of recreation facilities within their design capacity and improve connections and access to a
- 13 wide range of recreation opportunities in order to improve the quality of life for residents
- 14 and visitors.
- 15 ○ **Public Facilities and Services Policy PFS-3.6.** Retention/Detention Facility (RDR/MPSP).
- 16 Encourage stormwater detention/retention project designs that minimize drainage
- 17 concentrations and impervious coverage, avoid floodplain areas, are visually unobtrusive
- 18 and, where feasible, provide a natural watercourse appearance and a secondary use, such as
- 19 recreation.

20 **3.0-1.13.2.2 City of Merced**

21 **Merced Vision 2030 General Plan (City of Merced 2012)**

22 The *Merced Vision 2030 General Plan* includes an Open Space, Conservation, and Recreation element.

23 This topic's purpose is to ensure the continued availability of open land for the public's enjoyment as

24 well as for the preservation of natural resources through policies that guide development within the

25 City's natural, environmental, and cultural resources. The Open Space, Conservation, and Recreation

26 element also seeks to balance the preservation of agricultural pursuits and the pastoral lifestyle,

27 protection and conservation of natural resource lands, and increasing development pressures

28 throughout the Merced urban areas (City of Merced 2017).

29 The relevant policies of the General Plan include:

- 30 • **Policy OS-2.1:** Protect agricultural areas outside the City's Specific Urban Development
- 31 Plan/Sphere of Influence from urban impacts.
- 32 • **Policy OS-3.1.** Provide high-quality park and open space facilities to serve the needs of a
- 33 growing population.
- 34 • **Policy OS-3.3.** Maintain the City's existing high-quality open space facilities.
- 35 • **Policy OS-4.1:** Preserve open space areas which are necessary to maintaining public health and
- 36 safety.

1 **Parks and Recreation Master Plan**

2 The *Park and Open Space Master Plan* is a long-range guide for park and recreation services in the
3 City of Merced. The *Park and Open Space Master Plan* provides direction and guidelines for acquiring
4 and developing parks, open space, trails, and other recreational facilities. In addition, the plan
5 addresses community needs and charts a new direction for the City of Merced to take in the future.
6 The plan inventories existing recreation resources, provides a summary of community input on
7 needs, wants, and vision for parks and recreation in the City of Merced, and provides
8 recommendations for the management, maintenance, and programs (City of Merced 2004).

9 **3.0-1.14 Safety and Security**

10 The following goals, objectives, and policies are relevant to safety and security.

11 **3.0-1.14.1 Regional Plans and Policies**

12 **State of California Emergency Plan (State of California Governor’s Office of 13 Emergency Services 2017)**

14 The State Emergency Plan addresses California’s response to emergency situations associated with
15 natural disasters or human-caused emergencies. In accordance with the California Emergency
16 Services Act, this plan describes the methods for conducting emergency operations, the process for
17 rendering mutual aid, the emergency services of governmental agencies, how resources are
18 mobilized, how the public will be informed, and the process to ensure continuity of government
19 during an emergency or disaster. The concepts presented in this plan include mitigation programs
20 to reduce the vulnerabilities to disasters and preparedness activities to ensure the capabilities and
21 resources are available for an effective response. To assist communities and governments to recover
22 from a disaster, the plan outlines programs that promote a return to normalcy.

23 **3.0-1.14.2 Local Plans and Policies**

24 **3.0-1.14.2.1 Merced County**

25 **2030 Merced County General Plan (County of Merced 2013)**

- 26 • **Recreation and Cultural Resources Goal RCR-1.** Preserve, enhance, expand, and manage
27 Merced County’s diverse system of regional parks, trails, recreation areas, and natural resources
28 for the enjoyment of present and future residents and park visitors.
 - 29 ○ **Recreation and Cultural Resources Policy RCR-1.6.** Non-Recreational Land Use Buffers
30 (RDR). Require buffering between non-recreational land uses and sensitive public
31 recreation lands through site design and other techniques when the non-recreational land
32 use may significantly impact recreational lands.
- 33 • **Circulation Goal CIR-6.** Ensure that air transportation systems provide safe, efficient, and
34 reliable movement of passengers and freight.
 - 35 ○ **Circulation Policy CIR-6.1.** Airport Protection and Support (SO). Support and protect the
36 operations of all publicly-owned and publicly-used airports.

- 1 ○ **Circulation Policy CIR-6.2.** Air Passenger Service Coordination (JP). Encourage
2 coordination of air passenger services with other public transportation.
- 3 ○ **Circulation Policy CIR-6.3.** Air Freight Service (SO/JP). Encourage industrial and
4 commercial activities that involve freight movement to locate near airports that have air
5 freight service.
- 6 ○ **Circulation Policy CIR-6.4.** Multi-modal Development (RDR). Support the development of
7 multimodal terminal facilities at County airports.
- 8 ○ **Circulation Policy CIR-6.5.** Airport Land Use Compatibility Plan (RDR). Review building
9 permits and discretionary applications in areas subject to potential safety or noise impacts
10 from public airports to assure compatibility with the Merced County Airport Land Use
11 Compatibility Plan or other adopted ALUC plans.
- 12 ○ **Circulation Policy CIR-6.6.** Private Air Strip Locations (RDR). Prohibit private airstrips that
13 conflict with municipal airports and discourage airstrips which do not support agricultural
14 commercial operations such as crop dusting activities.
- 15 ○ **Circulation Policy CIR-6.7.** New Structures (RDR/IGC). Require projects that could impact
16 air travel to be compatible with Merced County Airport Land Use Commission plans,
17 policies, and standards.
- 18 ○ **Circulation Policy CIR-6.8.** Transmission Tower and Lines (RDR/IGC). Review all proposed
19 radio, television, power, or related transmission towers and lines for appropriate location
20 and possible air travel conflicts during the discretionary application process. All projects
21 located in Airport Areas of Influence or in approach/departure areas will be referred to the
22 Merced County Airport Land Use Commission for comment.
- 23 ● **Health and Safety Goal HS-1.** Minimize the loss of life, injury, and property damage of County
24 residents due to seismic and geologic hazards.
- 25 ● **Health and Safety Goal HS-2.** Minimize the possibility of loss of life, injury, or damage to
26 property as a result of flood hazards.
- 27 ● **Health and Safety Goal HS-3.** Minimize the exposure of County residents and public and
28 private property to the effects of urban and wildland fires.
- 29 ● **Health and Safety Goal HS-4.** Promote the safe operation of airports and the safety of Merced
30 County residents by requiring that any new development within the airport area of influence be
31 consistent with the requirements of the Merced County Airport Land Use Commission's
32 compatibility plan and compliant with Federal Aviation Administration regulations.
- 33 ○ **Health and Safety Policy HS-4.1.** Airport Land Use Compatibility Plan (RDR). Require that
34 development around public use airports be consistent with the safety policies and land use
35 compatibility guidelines contained in the Merced County Airport Land Use Commission's
36 adopted Airport Land Use Compatibility Plan, and ensure that development near private
37 airstrips addresses land use compatibility issues and complies with Federal Aviation
38 Administration regulations.
- 39 ○ **Health and Safety Policy HS-4.2.** Compliance with FAA Regulations (RDR). Require that
40 development within the airport approach and departure zones is in compliance with Part 77
41 of the Federal Aviation Administration Regulations (FAA regulations that address objects
42 affecting navigable airspace).

1 **2017 County of Merced Emergency Operations Plan (County of Merced 2017)**

2 This plan is designed to assist the Department of Public Health and other medical and health
3 personnel throughout the County of Merced to plan for, respond to and recover from a natural
4 disaster or human-caused event. The plan does not address normal day to day emergencies or the
5 well-established and routine procedures used in coping with such emergencies. Instead, the
6 operational concepts reflected in this plan focus on potential largescale disasters which can generate
7 unique situations requiring unusual emergency response.

8 The goal of the Plan is consistent with the philosophy of the Merced County Department of Public
9 Health (DPH) and strives to promote community health, prevent disease, injury, and disability, and
10 minimize the morbidity and mortality that occur as a result of a disaster. This Plan addresses
11 management of large scale events which overwhelm the normal day-to-day response capabilities. It
12 specifically includes all divisions of the DPH and integrates activities with those of other Merced
13 County departments and health care providers in the community. Where privately owned or
14 noncounty agencies are involved, those agencies are part of the on-going planning process.

15 **Merced County Multi-Jurisdictional Hazard Mitigation Plan (County of 16 Merced 2021)**

- 17 • **Goal 1:** Reduce the potential for loss of life and injury from hazards.
- 18 • **Goal 7:** Increase public awareness of hazards.

19 **3.0-1.14.2.2 City of Merced**

20 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 21 • **Policy S-1.1.** Develop and maintain emergency preparedness procedures for the City.
- 22 • **Policy S-5.2.** Prevent the encroachment of potential hazards to flight within the Airport's
23 airspace.
- 24 • **Policy EU-1.1c.** Incompatible urban development should not be approved which would
25 endanger the continued operations of the Merced Regional Airport.

26 **3.0-1.15 Transportation**

27 The following goals, objectives, and policies are relevant to transportation.

28 **3.0-1.15.1 Regional Plans and Policies**

29 No regional plans and/or policies are relevant to transportation.

1 **3.0-1.15.2 Local Plans and Policies**

2 **3.0-1.15.2.1 Merced County**

3 **2030 Merced County General Plan (County of Merced 2013)**

- 4 • **Transportation and Circulation Goal CIR-1.** Maintain an efficient roadway system for the
5 movement of people and goods that enhances the physical, economic, and social environment
6 while being safe, efficient, and cost-effective.
- 7 • **Transportation and Circulation Goal CIR-5.** Maintain and expand a rail transportation system
8 that provides safe, efficient, and reliable movement of freight and passengers within and
9 through Merced County.

10 **Regional Transportation Plan/Sustainable Communities Strategy for Merced** 11 **County (Merced County Association of Governments 2022)**

- 12 • **Policy 4.1:** Increase public transit and carpooling/vanpooling and bicycling/walking to support
13 population growth.
- 14 • **Goal 9.** Passenger Rail: Provide a rail system that offers safe and reliable service for passengers.
- 15 • **Goal 6.** Highways, Streets, and Roads: Provide a safe and efficient regional road system that
16 accommodates the demand for movement of people and goods.
- 17 • **Goal 17.** Transit: Provide an efficient, effective, coordinated regional transit system that
18 increases mobility for urban and rural populations, including transportation for disadvantaged
19 persons.

20 **Merced County Regional Bicycle Transportation Plan (Merced County** 21 **Association of Governments 2008)**

- 22 • **Goal One. Bicycle Safety.**
 - 23 ○ Provide a safe bikeway system as an alternative to vehicular travel.
 - 24 ○ Establish and maintain routes that are designed to ensure safety.
 - 25 ○ Establish a system that is secure for riders.
- 26 • **Goal Three. Bicycle Connectivity and Accessibility.**
 - 27 ○ Accommodate bicycling as part of Merced County's multi-modal transportation system.
 - 28 ○ Establish and maintain an integrated network of bicycle facilities to support bicycle
29 commuting.
 - 30 ○ Establish and maintain an integrated network of bicycle facilities to support recreational
31 bicycling.
 - 32 ○ Establish and maintain an integrated bikeway network that connects to other counties.

1 **3.0-1.15.2.2 City of Merced**

2 **Merced Vision 2030 General Plan (City of Merced 2012)**

- 3 • **Goal Area T-1.** Streets and Roads.
 - 4 ○ **Policy T-1.4.** Promote traffic safety for all modes of transportation.
 - 5 ○ **Policy T-1.5.** Minimize unnecessary travel demand on major streets and promote energy
 - 6 conservation.
- 7 • **Goal Area T-2.** Bicycles, Pedestrians, and Public Transit.
 - 8 ○ **Policy T-2.2.** Support and enhance the use of public transit.
 - 9 ○ **Policy T-2.3.** Support a safe and effective public transit system.
- 10 • **Goal Area T-3.** Air and Rail Services.
 - 11 ○ **Policy T-3.4.** Reduce rail system impacts on circulation within the urban area.
 - 12 ○ **Policy T-3.5.** Support enhanced railroad passenger service and high speed rail service for
 - 13 Merced.
 - 14 ○ **Policy T-3.6.** Retain and expand as needed rail facilities serving industrial development.
- 15 • **Goal Area OS-3.** Comprehensive urban trail and bike path system.
 - 16 ○ **Policy OS-3.2.** Maintain and expand the City’s bikeway and trail system.

17 **Merced 2013 Bicycle Transportation Plan (City of Merced 2013)**

18 The purpose of the *2013 Bicycle Transportation Plan* is to provide City Staff and the community with
 19 a comprehensive, long-range view for the development of bicycle facilities and programs within the
 20 City of Merced (City of Merced 2013).

- 21 • **Enforcement Goal.** Reduce the incidents of bicycle-related collisions with enforcement that
 22 emphasized education, compliance, and proactive measures.
 - 23 ○ **Policy.** Continue to design bikeways that minimize conflicts between bicyclists, vehicles,
 24 and pedestrians to the extent practical.
 - 25 ○ **Policy.** Design bikeways that conform to the Caltrans Design Manual standards for bikeway
 26 classifications.
 - 27 ○ **Policy.** Consider a system whereby bicyclists can easily report bikeway maintenance issues
 28 (i.e. sweeping, overgrown vegetation, lack of support facilities, vandalism, etc.).
 - 29 ○ **Policy.** Consider the provision of police patrol on bike paths. Consider pros and cons of well-
 30 lit bicycle facilities when updating the City’s Design Standards.
 - 31 ○ **Policy.** Through site plan review and consideration of use on bike lockers, seek to minimize
 32 the occurrence of bicycle thefts in the community.
 - 33 ○ **Policy.** Promote increased traffic safety with special attention to intersection operations
 34 and associated design, and hazards which could cause personal injury (GP, T-1.4c).

1 **3.0-1.16 References**

2 **3.0-1.16.1.1 Regional Plans**

3 Central Valley Flood Protection Board. June 2013. *California Central Valley Flood Protection Board*
4 *Strategic Plan 2013-2017*.

5 DWR. 2022. *Central Valley Flood Protection Plan Update 2022*. November 2022.

6 San Joaquin River Flood Control Project Agency. 2015. *Upper San Joaquin River Regional Flood*
7 *Management Plan*. February 2015.

8 State of California Governor's Office of Emergency Services. 2017. *State of California Emergency Plan*.
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