

## PART 3 – GOALS AND POLICIES

### 3.2 PUBLIC FACILITIES AND SERVICES ELEMENT

# Infrastructure and Services

#### Introduction

This section provides the framework for decisions in San Joaquin County concerning public and private infrastructure, utilities, and services. Existing and planned development in the County is dependent on a complicated network of public facilities and services. The provision of infrastructure and services to residents and businesses in San Joaquin County are covered by a range of public and private institutions, organizations, and activities. Many services provided in the unincorporated County are provided by independent special districts, or in some cases, by private companies. Each type of facility and service has a unique set of challenges and must adapt to growth and change differently.

While the focus of this section is to ensure facilities and services meet the needs of all residents and businesses, the County's rural character and limited resources reduce the levels of community services that can be provided, compared to urban service levels. Aging water, wastewater, and drainage systems and increasing demand for flood control infrastructure require significant improvements. Stretched law enforcement, over-extended fire protection, and underfunded school facilities are also a major challenge. However, improvements in high capacity information communications infrastructure and low impact development techniques provide the County with the opportunity to stimulate economic growth and save money through cost-effective drainage systems.

The goals and policies in this section support the provision and maintenance of sufficient infrastructure and services in appropriate areas of the County and provide for their timely expansion. The goals and policies indicate where those facilities and services will be most beneficial to meet the needs of the County's communities, residents, and businesses. The element also includes policies, in coordination with the Public Health and Safety Element, for the provision of facilities and services to ensure the safety and welfare of residents and visitors and the protection of property.

### **Relationship to Other General Plan Elements**

The goals and policies in the Infrastructure and Services section of the Community Development Element are interrelated with several of the goals and policies in the Natural and Cultural Resources Element, particularly as they relate to the County's management of water quality and Delta resources. Many of the policies in the Infrastructure and Services section of the Public Facilities and Services Element are supplemented by policies in the Transportation and Mobility section of the Public Facilities and Services Element in an effort to provide comprehensive solutions to multifaceted planning issues.

## General Public Facilities and Services

San Joaquin County is responsible for providing many public services and facilities. There are several overarching strategies that are inherent to the provision of all types of public facilities and services, such as funding new services and maintaining existing infrastructure. Providing the necessary public facilities and services to meet the needs of existing and future residents and businesses is vital for a safe and prosperous County. The County must be responsive to meeting existing service needs, while also ensuring that new facilities are strategically located to maximize use and efficiency.

The focus of this goal section is to guide the overall provision of public facilities and services in the unincorporated areas of the County, ensuring that there is land available for new facilities, enough capacity to meet demand, and funding in place to construct and maintain facilities and services.

### GOAL IS-1

**To provide residents and businesses quality, cost-effective, and sustainable public facilities and services.**

#### IS-1.1 Essential Facilities and Services

The County shall strive to ensure that adequate public facilities and services essential for public health and safety are provided to all County residents and businesses and maintained at acceptable service levels. Where public facilities and services are provided by other agencies, the County shall encourage similar service level goals. (RDR/PSP/IGC)

#### IS-1.2 Infrastructure Standards

The County shall require new developments that include improvements to existing infrastructure or new infrastructure to meet the requirements and standards of the County or other agencies providing services. (RDR/IGC)

#### IS-1.3 Facilities and Services Deficiencies

The County shall coordinate with other public facilities districts and agencies (e.g., special districts, community service districts) to identify and find solutions to key infrastructure deficiencies in the County. (IGC)

#### IS-1.4 Infrastructure Maintenance

The County shall work with agencies to maintain, improve, and replace public facilities as necessary to maintain adequate levels of service for existing and future development and reduce the need for new facilities. Where public facilities and services are provided by other agencies, the County shall encourage similar service level goals. (PSP/IGC)

#### IS-1.5 Infrastructure and Service Expansions

The County shall base the expansion of public facilities and services on current needs and planned or projected development patterns. (PSP)

#### IS-1.6 Efficient Infrastructure and Facilities

When performing maintenance, upgrading, or expanding infrastructure and facilities, the County shall use technologies that improve energy efficiency and conserve water, when feasible. (RDR/PSP)

**IS-1.7 Infrastructure Improvement Limitations**

The County shall limit infrastructure improvements in areas that are not planned for future development. (RDR/PSP)

**IS-1.8 Infrastructure Financing, Design, and Construction**

The County shall require new development to fund the initial financing, design, and construction of required infrastructure facilities. All financing (including operation and maintenance) and improvement plans shall be subject to County review and approval. (RDR)

**IS-1.9 Maximize Use of Existing Facilities**

The County shall require new development to be designed and sited to use existing facilities and services to the extent practical and to the extent that such a design and site choice would be consistent with good design principles. (RDR)

**IS-1.10 Public Facility Security**

The County shall site public facilities to minimize the potential vulnerability of the facilities to natural and human-made hazards and threats. (PSP)

**IS-1.11 Adaptive Facilities and Services** 

The County shall monitor expected impacts of climate change on public facilities and services and make appropriate adaptive modifications and upgrades as needed. Where public facilities and services are provided by other agencies, the County shall assist with identifying impacts and solutions. (PSP)

**IS-1.12 Easement and Rights-of-Way Protection**

The County shall, in coordination with other agencies, ensure that new development does not encroach on existing public facility easements or on areas planned or needed for future rights-of-way (e.g., roadways, interchanges) and infrastructure. The County

shall require, as necessary, offers of dedication for future easements. (RDR/IGC)

**IS-1.13 Infrastructure Financing**

The County shall approve new development only when financial mechanisms are in place to ensure that adopted County service standards are met and that long-term infrastructure and facility maintenance can be provided. (RDR)

**IS-1.14 Equitable Infrastructure Financing**

The County shall ensure that infrastructure and facility financing mechanisms for urban services are imposed equitably, and shall require the reimbursement from subsequent developments which benefit from the improved system. (RDR/PSP)

**IS-1.15 Planning for Ultimate Improvement Needs**

When necessary to ensure adequate infrastructure for an area planned for development, the County shall require system improvements beyond those necessary for a proposed new development. (RDR/PSP)

**IS-1.16 Master Planned Facilities**

The County shall require new development including single-parcel development, to provide necessary on-site and off-site infrastructure improvements. Proposed new developments that cannot be served by an existing service provider shall be required to fund preparation of a master plan or specific plan for the parcel and adjacent areas that includes:

- a large enough area and mix of uses to support self-sustaining infrastructure service systems;
- detailed infrastructure and service plan, financing, and maintenance plan; and
- approval by the Director of Public Works. (RDR)

**IS-1.17 Maximize Resources**

The County shall make maximum use of Federal, State, regional, local, and private resources to address local infrastructure and facility needs. (PSP/FB)

**Utility Agency Coordination**

Utility service providers are important to support the expansion of the County's economic base, serve new development, and maintain and increase infrastructure capacity. Utility infrastructure typically includes facilities that provide energy (e.g., electricity and natural gas lines) to residential, commercial, and institutional users.

The focus of this goal section is to ensure that public utility agencies can provide and maintain the infrastructure required for long-term service.

**GOAL IS-2**

**To ensure appropriate public utility agencies are in place for the long-term maintenance of infrastructure and provision of services.**

**IS-2.1 Service Areas**

The County shall seek to improve the provision of services to unincorporated areas by minimizing non-contiguous growth around cities and unincorporated communities and discouraging city annexations which leave irregular borders or "islands." The County shall support city and San Joaquin LAFCo efforts to eliminate irregular border areas and annex islands. (IGC)

**IS-2.2 Limit Formation of Special Districts**

The County shall support San Joaquin LAFCo policy to approve new special districts only when the formation of a new district will ensure efficient, long-term service to existing or new development. (IGC)

**IS-2.3 Special District Consolidation**

Where Special Districts can be consolidated or eliminated, the County shall support San Joaquin LAFCo decisions to provide more efficient, cost-effective services. (IGC)

**IS-2.4 New County Service Areas**

The County shall not create any new County Service Areas (CSA), except when approved by the Public Works Director, and shall, wherever feasible, eliminate or consolidate existing CSAs or convert them to another non-County public utility agency (e.g., Independent Special District, Community Service District, Mello-Roos Community Facilities District). (RDR/PSP)

**IS-2.5 Existing County Service Areas**

The County shall continue to work with residents and property owners in existing County Service Areas (CSA) to address existing deficiencies and improve long-term viability by encouraging residents, property owners, or new developments within a CSA to:

- Create a benefit assessment or a Mello-Roos Community Facilities District to fund on-going infrastructure maintenance and services;
- Expand or consolidate with other districts to provide a larger user base to fund infrastructure maintenance costs and upgrades;
- Merge into an adjacent existing Community Services District (CSD); or
- Reform into a Community Services District (CSD) responsible for financing, developing, and maintaining infrastructure and services. (PSP)

**IS-2.6 New Development Requirements**

The County shall require new development to provide water, sewer, storm water, and/or street lighting service(s), using one of the following methods, subject to County review and approval:

- Obtain a will-serve letter from an existing Special District, Community Service District, Mello-Roos Community Facilities District or other non-city public utility agency and obtain LAFCo approval for annexation or out-of-agency service;
- Obtain a will-serve letter from a city and obtain LAFCo approval for out-of-agency service;
- Fund the formation of a new Community Service District, Mello-Roos Community Facilities District or other non-County public utility agency that would perform ongoing maintenance.; or
- When approved by the Director of Public Works, fund the formation of a new County Service Area (CSA) that would provide ongoing maintenance services. (RDR)

**IS-2.7 Service Agency Notification**

The County shall notify the appropriate agencies (e.g., cities, special districts, school districts, emergency agencies) of new development applications within their service areas early in the review process to allow sufficient time to assess impacts on facilities and services. (RDR/IGC)

**IS-2.8 Joint Use Facilities**

The County shall encourage the joint use of public facilities (e.g., park and recreation uses in retention basins and schools) in order to improve efficiency and reduce public costs, as well as to encourage positive and healthy activity for residents of all ages in neighborhoods that may not have safe well-equipped nearby parks. The County shall

encourage agreements for sharing costs and operational responsibilities among agencies. (PSP/IGC)

**County Operations**

California's counties provide a vast array of services and serve as a delivery channel for many State services, such as foster care, public health care, jails, and elections. Recently there has been greater emphasis on local governments, including counties, to use sustainability as an organizing principle to plan, carryout, and evaluate their operations, services, and activities. Driving this initiative are State mandates (e.g., AB 32) to reduce greenhouse gas emissions and plan for climate change impacts (Executive Order S-3-08). Efforts to promote sustainability in county operations include using Environmentally Preferable Purchasing (EPP) in procurement, reducing waste and increasing recycling, increasing energy efficiency, generating renewable energy, conserving water, and using more fuel efficient vehicles. There are additional benefits for the County when using more sustainable practices, including lower operating costs and improved employee health and productivity.

The County Administrative Officer is the appointed general administrator of San Joaquin County operations, facilities, and services. The County has several other officials that oversee agricultural programs, property assessments, elections, and tax collection. The focus of this goal section is to identify ways to incorporate sustainability, energy efficiency, and water conservation practices into County facilities, operations, and activities.

**GOAL IS-3**

**To increase efficiency of County facilities, services, and operations to conserve resources and reduce greenhouse gas emissions.**

**IS-3.1 Efficient Operations** 🌍

The County shall maintain County facility and operation standards in a manner that meets community needs, conserves resources, and reduces the County's contribution to greenhouse gas emissions. (SO)

**IS-3.2 Sustainable Plans and Operations** 🌍

The County shall integrate sustainability concepts, greenhouse gas reduction strategies, and climate change resiliency planning into County facility and service plans and operations. (PSP/SO)

**IS-3.3 Energy Efficiency Retrofits** 🌍

The County shall increase energy efficiency in older County buildings through energy efficiency and retrofits, renewable energy generation, and water conservation retrofits. (SO)

**IS-3.4 New Energy Efficient Buildings** 🌍

When building new facilities, the County shall achieve a high standard (e.g., equivalent to LEED® certification) of energy efficiency and water conservation, and employ renewable energy technologies. (SO)

**IS-3.5 New Fleet and Equipment Purchases** 🌍

The County shall purchase lower-emission and/or electric vehicles and energy efficient equipment when purchasing new fleet vehicles and maintenance/construction equipment. (SO)

**IS-3.6 Clean Energy and Fuel Sources** 🌍

The County shall use available clean energy and fuel sources where feasible to operate its buildings, vehicles, and maintenance/construction equipment. (SO)

**IS-3.7 County Employee Actions** 🌍

The County shall encourage its employees to reduce vehicle idling, reduce trips, establish efficient routing, and use public transportation, carpooling, and alternate modes of transportation when available to reduce energy consumption and costs. (SO)

**IS-3.8 Purchasing Preferences** 🌍

The County shall use Environmentally Preferable Purchasing (EPP), where feasible, when carrying out operations and activities, including giving preference to products that reduce or eliminate indirect greenhouse gas emissions and promote recycling. (SO)

**IS-3.9 Contractor Preference** 🌍

The County shall encourage contractors to use reduced emission equipment for County construction projects and contracts for services, as well as businesses which practice sustainable operations. (SO)

**IS-3.10 County Recycling** 🌍

The County shall expand opportunities for recycling at all County facilities, increase recycling and waste diversion by County employees, and use recycled materials and products where economically feasible. (SO)

**Water Supply and Conservation**

Water is a critical resource for residents, businesses, farms, and municipal institutions. The current and future supply of water is critical to the future health and well-being of San Joaquin County's economy and residents. While all cities

and most unincorporated areas of the County are served by water districts or municipal water systems, some County communities are not located within water districts or do not have water systems that provide water service. These communities must rely on private wells and groundwater. However, most water supply districts in San Joaquin County have been transitioning away from groundwater sources to surface water to reduce overdraft of groundwater. The following unincorporated communities are not served by a water district and rely on groundwater pumping: Banta, Stoneridge, Glenwood, Noble Acres, Collierville, Coopers Corner, and Peters.

Water is a valuable resource in the County and its sources must be appropriately planned and managed. Water supply throughout the County must be assessed, per State law, for proposed developments of a certain size to ensure that adequate water supplies are available to serve the proposed use. This assessment must be considered when determining whether or not to approve a new development. The focus of this goal section is to address water resource issues and water supply and reliability.

### GOAL IS-4

**To ensure reliable supplies of water for unincorporated areas to meet the needs of existing and future residents and businesses, while promoting water conservation and the use of sustainable water supply sources.**

#### IS-4.1 Water Agency Support

The County shall support efforts of local water agencies, special district, and water conservation districts to ensure that adequate high-quality water supplies are available to support existing and future residents and businesses. (IGC)

#### IS-4.2 Interagency Cooperation

The County shall work with local water agencies to address existing and future water needs for the County. (IGC)

#### IS-4.3 Water Supply Availability

The County shall consider the availability of a long-term, reliable potable water supply as a primary factor in the planning of areas for new growth and development. (RDR/PSP)

#### IS-4.4 Water Rights Protection

The County shall support local water agencies in their efforts to protect their water rights and water supply contracts, including working with Federal and State water projects to protect local water rights. (IGC)

#### IS-4.5 Drought Response

The County shall encourage all local water agencies to develop and maintain drought contingency and emergency services plans, emergency inter-ties, mutual aid agreements, and related measures to ensure adequate water service during drought or other emergency water shortages. (PSP/IGC)

#### IS-4.6 Coordinate Efforts for Adequate Water Supply

The County shall support coordinated efforts to obtain adequate water supplies and develop water storage facilities to meet expected water demand. (PSP/IGC)

#### IS-4.7 Conjunctive Use

The County shall support conjunctive use of groundwater and surface water by local water agencies to improve water supply reliability. (PSP/IGC)

#### IS-4.8 Water Conservation Measures

The County shall require existing and new development to incorporate all feasible water conservation measures to reduce the need for water system improvements. (RDR)



**IS-4.9 Groundwater Management**

The County shall continue to support cooperative, regional groundwater management planning by local water agencies, water users, and other affected parties to ensure a sustainable, adequate, safe, and economically viable groundwater supply for existing and future uses within the County. (IGC)

**IS-4.10 Groundwater Monitoring Program**

The County shall continue to evaluate the quantity and quality of groundwater. (PSR/IGC)

**IS-4.11 Integrated Regional Water Management**

The County shall support and participate in the development, implementation, and update of an integrated regional water management plan. (PSP/IGC)

**IS-4.12 Water Supply Planning**

The County shall encourage local water agencies to develop plans for responding to droughts and the effects of global climate change, including contingency plans, water resource sharing to improve overall water supply reliability, and the allocation of water supply to priority users. (PSP/IGC)

**IS-4.13 Water Quality Standards**

The County shall require that water supplies serving new development meet State water quality standards. If necessary, the County shall require that water be treated to meet State standards and that a water quality monitoring program be in place prior to issuance of building permits. (RDR)

**IS-4.14 Sufficient Water Supply Assessments**

The County shall require new developments over 500 dwelling units in size to prepare a detailed water source sufficiency study and water supply analysis for use in preparing a Water Supply Assessment, consistent with any Integrated Regional Water Management Plan or similar water management plan. This shall include analyzing the effect of new development on the water supply of existing users. (RDR)

**IS-4.15 Test Wells**

Prior to issuing building permits for new development that will rely on groundwater, the County shall require confirmation for existing wells or test wells for new wells to ensure that water quality and quantity are adequate to meet the needs of existing, proposed, and planned future development. (RDR/PSR)

**IS-4.16 Permit for Groundwater Export**

The County shall continue to require a permit for the extraction of groundwater that is intended to be exported outside County boundaries. (RDR)

**IS-4.17 Advocate Against Water Exports**

The County shall advocate that water should not be exported to other areas of the state unless no other areas in San Joaquin County are impacted and the current and future needs of San Joaquin County can still be met. (PSP)

**IS-4.18  Graywater and Rainwater Systems**

The County shall encourage homeowners, businesses, and developers to install graywater systems and rainwater harvest systems, consistent with local and State guidelines, regulations, and standards, in order to reduce consumption of potable water. (RDR/PSP)

**IS-4.19 Water Efficient Landscaping** 🌱

The County shall encourage water efficient landscaping and use of native, drought-tolerant plants consistent with the Model Landscape Ordinance. (RDR)

**IS-4.20 Water Efficient Agricultural Practices** 🌱

The County shall encourage farmers to implement irrigation practices, where feasible and practical, to conserve water. (PSP)

**Water Treatment and Delivery**

Water and the methods used to treat and transport it are a basic necessity of residents, businesses, farms, and public institutions. Water treatment and delivery includes the infrastructure and processes of making water acceptable for drinking and other uses (e.g., industrial/medical processes) and then transferring it to the end-user. Water infrastructure typically includes canals, dams, wells, pipelines, and treatment plants.

Water delivery in San Joaquin County is provided by several agencies and projects including Federal, State, regional, and local water projects; special districts (e.g., irrigation, water, and water conservation); and private water systems. Irrigation and domestic water systems within San Joaquin County are operated and maintained by irrigation districts, water districts, and water conservation districts. The focus of this goal section is to address the treatment and delivery of water to residents, businesses, and other water users.

**GOAL IS-5**

**To maintain an adequate level of service in the water systems serving unincorporated areas to meet the needs of existing and future residents and businesses, while improving water system efficiency.**

**IS-5.1 Adequate Water Treatment and Distribution Facilities**

The County shall ensure, through the development review process, that adequate water, treatment and distribution facilities are sufficient to serve new development, and are scalable to meet capacity demands when needed. Such needs shall include capacities necessary to comply with water quality and public safety requirements. (RDR)

**IS-5.2 Water System Standards**

The County shall require the minimum standards for water system improvements provided in Table IS-1 for the approval of tentative maps and zone reclassifications. (RDR)

**TABLE IS-1  
 WATER SYSTEM**

<b>General Plan Area</b>	<b>Minimum Requirements</b>
Urban Communities	Public water system. For areas designated Rural Residential, private individual wells may be permitted if parcels are two acres or greater, no public water system exists, and there are no groundwater quality issues.
Rural Communities	Public water system. If parcels are two acres or greater and no public water system exists, private individual wells may be permitted if there are no groundwater quality issues.
Freeway Service Areas Outside of Communities	Public water system serving at least each side of the freeway.
Industrial Areas Outside of Communities	Public water system serving the entire planned areas. Individual wells may be permitted in the Truck Terminals designation.
Commercial Recreational Areas	Public water system serving the entire planned area.
Agricultural Areas	Individual water wells if there are no groundwater quality issues.

**IS-5.3 Water Service in Antiquated Subdivisions**

The County shall require water service through a public water system prior to issuance of building permits for new residences on parcels less than two acres in antiquated subdivisions. Individual wells may be allowed if public water is not available and all well and sewage requirements can be met. (RDR)

**IS-5.4 Water Infrastructure Fees**

As a condition of approval for new developments, the County shall require verification of payment of fees imposed for water infrastructure capacity per the fee payment schedule from the appropriate local agency prior to the approval of any final subdivision map. (RDR)

**IS-5.5 Water System Rehabilitation**

The County shall encourage the rehabilitation of irrigation systems and other water delivery systems to reduce water losses and increase the efficient use and availability of water. (PSP)

**IS-5.6 Consistent Fire Protection Standards for New Development**

The County, in coordination with local water agencies and fire protection agencies, shall ensure consistent and adequate standards for fire flows and fire protection for new development. (RDR/IGC)

## Wastewater Treatment and Disposal

Most of the sanitary sewer systems within the unincorporated areas of San Joaquin County serve individual small communities. Sanitary sewer service within the County is generally provided by special districts including community service districts, public utility districts, sanitary districts, and sewer maintenance districts. Many special districts that provide wastewater service cover small areas within the County. Some special district sewer systems are connected to cities, but are independently operated and serve smaller portions of the County. Some of the districts were created to serve planned development that never occurred and now only exist on paper.

Some agencies provide sewer collection service only, and contract with surrounding agencies for wastewater treatment and disposal. The major sewer district areas in San Joaquin County have their own sewer treatment facilities and they provide sewer services to large populated areas. Some of the unincorporated communities of San Joaquin County lack sanitary sewer infrastructure, and are serviced by individual or community septic systems.

The focus of this goal section is to address wastewater treatment and disposal requirements, treated water quality, and alternative treatment methods to ensure

wastewater is treated to an acceptable level and disposed of safely.

### GOAL IS-6

**To ensure wastewater treatment facilities and septic systems are available and adequate to collect, treat, store, and safely dispose of wastewater.**

#### IS-6.1 Wastewater System Maintenance and Expansion

The County shall encourage public wastewater system operators to maintain and expand their systems to meet the development needs of the County. (PSP/IGC)

#### IS-6.2 Reclaimed Water

The County shall encourage public wastewater system operations to upgrade existing wastewater treatment systems to produce reclaimed water suitable for reuse. (PSP/IGC)

#### IS-6.3 Adequate Wastewater Facilities

The County shall ensure through the development review process that wastewater collection, treatment, and disposal facilities are sufficient to serve existing and new development, and are scalable to meet capacity demands when needed. (RDR)

#### IS-6.4 Wastewater System Standards

The County shall require the minimum standards for wastewater system improvements provided in Table IS-2 for the approval of tentative maps and zone reclassifications. (RDR)

**TABLE IS-2  
WASTEWATER TREATMENT**

<b>General Plan Area</b>	<b>Minimum Standards</b>
Urban Communities	Public sewer system. Onsite wastewater treatment system may be permitted in Rural Residential areas, Commercial areas adjacent to Rural Residential areas, and in Warehouse Industrial zones, if General Plan policies and Development Title regulations are met.
Rural Communities	Onsite wastewater treatment system.
Freeway Service Areas Outside of Communities	Public sewer system for at least each side of the freeway.
Industrial Areas Outside of Communities	Public sewer system serving entire planned area. Individual commercial systems may be permitted in the Truck Terminals designation and in the Warehouse Industrial zones, if General Plan policies and Development Title regulations are met.
Commercial Recreational Areas Outside of Communities	Public sewer system serving entire planned Commercial Recreation area.
Agricultural Areas	Individual or commercial onsite wastewater treatment system

**IS-6.5 Wastewater System Requirements**

For land uses required to be served by public wastewater treatment systems, new development shall be served by an existing public wastewater treatment agency or by a new public utility service agency if no public agency is empowered to provide wastewater treatment services. For land uses not requiring public wastewater treatment systems, the County may allow private wastewater systems or septic systems if the County Environmental Health Director determines that the systems meet the State Water Resources Control Board Onsite Wastewater Treatment Systems Policy and the approved Local Agency Management Plan. (RDR)

**IS-6.6 Wastewater Treatment System Standards**

The County shall require that the development, operation and maintenance of wastewater treatment systems meet the requirements and standards of the wastewater treatment agency and the County, including the requirements and standards of the County Environmental Health Department. (RDR)

**IS-6.7 Wastewater Treatment Facilities within the Delta**

The County shall not allow wastewater treatment and disposal facilities, including storage ponds and effluent/sludge disposal areas, serving uses outside of the Delta Primary Zone (as defined by Public Resources Code Section 29728) to be located within the Delta Primary Zone. (RDR)

**IS-6.8 Urban Community Expansion**

The County shall limit the expansion of urban communities to those where existing community wastewater treatment systems have or will be upgraded to have sufficient capacity or where new systems will be constructed to meet existing and future demand. (RDR)

**IS-6.9 Wastewater Facility Infrastructure Fees**

As a condition of approval for new developments, the County shall have verification of payment of fees imposed for wastewater infrastructure capacity per the fee payment schedule from the local wastewater agency. (RDR)

**IS-6.10 Alternative Rural Wastewater Systems**

For single, stand-alone residences, the County shall support the use of alternative onsite rural wastewater treatment systems that meet the State Water Resources Control Board Onsite Wastewater Treatment Systems Policy and the approved Local Agency Management Plan. (RDR/MPSP/PSR)

**Stormwater Drainage**

Stormwater drainage facilities prevent rain water from pooling or otherwise inundating areas with localized flooding. These drainage systems typically include a combination of constructed facilities (e.g., gutters, pipes, ditches, canals) and natural features (e.g., swales) that capture runoff from impervious surfaces (e.g., paved streets, parking lots, sidewalks, and roofs) and then redirect it to a stream, river, or holding basin.

Runoff water often comes from areas with pollutants, such as roads, parking lots, and driveways that have residue from gasoline, motor oil, trash, and gardens and lawns that have high concentrations of fertilizers. These pollutants can become concentrated as they move through a drainage system and impact water resources and natural habitat areas. As a result, water quality controls are a major concern for stormwater drainage. A preferred method to decrease stormwater runoff volumes and improve water quality is the use of Low Impact Development (LID) techniques. The purpose of LID is to reduce impervious surfaces and provide more opportunities for runoff to soak into the ground onsite or to unlined ditches and swales or to be used for irrigation and other uses. LID techniques rely on soils and hardy plants to cleanse pollutants from runoff water and restore groundwater levels.

**GOAL IS-7**

**To manage stormwater from existing and future development using methods that reduce potential flooding, maintain natural water quality, enhance percolation for groundwater recharge, and provide opportunities for reuse.**

**IS-7.2 Stormwater Drainage System Standards**

The County shall require the minimum standards for stormwater drainage system improvements provided in Table IS-3 for the approval of tentative maps and zone reclassifications. (RDR)

**IS-7.1 Adequate Stormwater Facilities**

The County shall require that stormwater drainage facilities are properly designed, sited, constructed, and maintained to efficiently capture and dispose of runoff and minimize impacts to water quality. (RDR)

**TABLE IS-3  
 STORMWATER DRAINAGE SUPPLY**

<b>General Plan Area</b>	<b>Minimum Standards</b>
Urban Communities	Public drainage system, with terminal drainage unless a Master Drainage/Special Purpose Plan permits retention ponds. On-site drainage may be permitted in Rural Residential designations if parcels are two acres or more.
Rural Communities	Public drainage system. On-site drainage may be permitted if parcels are two acres or more.
Freeway Service Areas Outside of Communities	Public drainage system serving at least each side of the freeway.
Industrial Areas Outside of Communities	Public drainage system serving the entire planned area. On-site drainage may be permitted in the Truck Terminals designation.
Commercial Recreation Areas Outside of Communities	Public drainage system serving the entire planned Commercial Recreation area.
Agricultural Areas	On-site drainage.

**3.2**

SAN JOAQUIN COUNTY **GENERAL PLAN**  
**PUBLIC FACILITIES AND SERVICES ELEMENT**

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