



## Introduction

The development and quality of life for Lake County is dependent on the availability of affordable, sustainable, and safe man-made infrastructure and services. Each type of public facility or service has a unique set of challenges and must adapt to growth and change differently. This element contains goals, policies, and implementation programs that establish the framework for the provision of public facilities and services to meet the needs of the County's future development. The topic areas covered in this element are as follows.

- General (Section 5.1),
- Water Supply (Section 5.2),
- Wastewater (Section 5.3),
- Stormwater Drainage (Section 5.4),
- Solid Waste (Section 5.5),
- Public Utilities (Section 5.6),
- Communications Systems (Section 5.7),
- Fire Protection and Law Enforcement (Section 5.8),

- Community Facilities (Section 5.9), and
- Implementation Measures (Section 5.10).

## Key Terms

**Aquifer.** An aquifer is an underground layer of permeable rock, sand, or gravel that contains water. An aquifer is the area underground that stores groundwater resources.

**Detention.** A detention is a facility designed for the temporary storage of storm runoff. Detention facilities act to attenuate peak runoff and to provide water quality treatment benefits by allowing particulates to settle in the basin.

**Drainage Facilities.** In general, drainage facilities control and direct stormwater, urban runoff, groundwater seepage, and other forms of water through the use of surface or subsurface features or drains.

**Floodplain.** The area adjacent to a stream, slough, river, lake or other water course that is inundated during a 100-year storm event as mapped by the Federal Emergency Management Agency (FEMA),

**Groundwater Basin.** A groundwater basin is the aboveground area from which water flows or seeps into a particular aquifer or series of linked aquifers.

**Groundwater Transfer.** Groundwater is sometimes pumped and exported for use in a location within another groundwater basin.

**Internet.** The internet is a global network of linked networks that enables computers of all kinds to directly communicate and share services throughout the world.

**Sanitary Sewer.** A sanitary sewer system is comprised of pipes, pump stations, manholes, and other facilities that convey untreated wastewater from the various sources around the County to treatment facilities.

**Stormwater Management.** As the name implies, this is the management of stormwater. In other words, it is the public policies and activities undertaken to regulate the rate, volume, and quality of runoff.

**Wastewater.** Wastewater is sewage (either treated or untreated) from residential, commercial, industrial, and institutional sources.

**Wastewater Collection System.** The totality of the pipes, pump stations, manholes, and other facilities that convey untreated wastewater from the various sources within the County.

**Water Quality.** The chemical purity of water measured in terms of a variety of constituents or parameters (e.g., turbidity, metals concentration, organics concentration, and salinity).

## 5.1 General

<b>Goal PFS-1</b>	To establish and maintain sustainable and safe levels of service, minimize costs, and provide criteria for determining the location, capacity and timing of future public facilities and services.
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***Policy PFS-1.1 General Public Service Facilities***

The County shall situate general public service facilities and buildings such as government facilities, libraries, and community halls, near the center of general community activities.

***Policy PFS- 1.2 Locational Criteria for Public Facilities***

The County shall locate public facilities designed for direct public use (libraries, schools, etc.) along major thoroughfares.

***Policy PFS-1.3 Maintain Existing Levels of Services***

The County shall ensure that proposed developments do not create significant adverse impacts on existing natural or man made infrastructure of the County and that the necessary man made infrastructure to support the project will be in place, bonded for, or other guarantee acceptable to the Approval Authority prior to the filing of final maps or granting of other entitlements.

***Policy PFS-1.4 Security***

The County shall seek to minimize vulnerability of its public service facilities to natural and man-made hazards and threats.

***Policy PFS-1.5 Long Range Facilities Plan***

The County, in cooperation with other service providing agencies, shall develop long-range facility master plans for public services including water supply, wastewater treatment and disposal, solid waste, storm drainage, schools, fire protection, law enforcement, and other related public services.

***Policy PFS-1.6 Coordination with LAFCo***

The County shall coordinate with Lake LAFCo in the preliminary stages of entitlement application reviews of development proposals outside of current service district boundaries in order to determine whether LAFCo will have a role in the approval process.

## 5.2 Water Supply

<b>Goal PFS-2</b>	To ensure the provision of an affordable, sustainable, reliable, safe, and adequate water supply with distribution and storage facilities to meet the existing and future needs in the County.
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**Policy PFS-2.1 Additional Water Distribution Systems**

The County shall discourage the formation of new water distribution systems unless long-term fiscal and technical feasibility can be demonstrated prior to approval. Additionally, new systems should not be allowed in areas that can feasibly be served by existing water service providers, if approved through LAFCo.

**Policy PFS-2.2 Consolidation of Water Distribution Systems**

The County will encourage a program for the consolidation of small water distribution systems if in the public interest for better service and financial stability.

**Policy PSF-2.3 Proposals for Increased Density**

The County shall, through the area plan process, designate the locations and densities of urban and suburban land-uses in a manner that maximizes the use of existing water infrastructure before relying on system expansions.

**Policy PSF-2.4 Criteria for Annexations within Community Growth Boundaries**

Vacant or underutilized parcels within existing Community Growth Boundaries with a density of LDR or higher, that do not presently have public water and/or sewer service, should not be annexed into the water and/or sewer district or subdivided or developed at higher densities until such time that at least 85 percent of other available sites already within district boundaries are developed. Exceptions may be granted when it can be demonstrated that the applicable service district has enough capacity and committed funding to serve the proposal in addition to serving the anticipated needs of the existing and future development within the current district boundary.

**Policy PSF-2.5 Mitigation for Increased Water Demand**

Development proposals that include general plan amendments and rezoning proposals that would result in increased water and wastewater demands above that projected by existing land use and zoning maps will be required to implement mitigation strategies to offset impacts to existing water and wastewater systems. Implementation of these strategies will become conditions of tentative maps and other entitlements.

**Policy PSF-2.6 Development Proposals**

The County shall not approve new use permits or subdivisions unless an adequate supply of quality water and wastewater treatment capacity is available or will be developed prior to breaking ground for construction.

**Policy PSF-2.7 Water Conservation as Priority**

The County shall give priority to water conservation measures over development of additional water sources where mutually exclusive.

**Policy PSF-2.8 Water Supply Study for Substantial New Development**

Proposed new development exceeding twenty (20) dwelling units using surface water or ten (10) dwelling units using groundwater (or residential equivalent dwelling units) shall be required to prepare a water supply adequacy study that identifies where the source water is to come from as well as to the sustainability of the source water. The study shall be required prior to considering the application complete for processing in order to be considered during the CEQA review process.



See also the policies in the Water Resources Element (Section 11)

**5.3 Wastewater**

<b>Goal PFS-3</b>	To ensure the provision of adequate wastewater collection and treatment within the County.
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**Policy PFS-3.1 Adequate On-site Disposal Standards**

The County shall develop, periodically review, and enforce adequate standards for septic tanks to protect water quality and public health. Use of individual septic systems shall be discouraged for larger residential and commercial developments and also for smaller developments where a public wastewater treatment facility is reasonably available. Larger developments should only occur where public wastewater treatment facilities with adequate capacity are available to serve the development.

**Policy PFS-3.2 Maintenance of Septic Systems**

The County should promote and support programs to educate homeowners on the care and maintenance of septic systems.

**Policy PFS-3.3 Alternative Rural Wastewater Systems**

The County should investigate alternative rural wastewater systems before investing in a costly conventional sewage system. For individual homes, such systems include elevated leach fields, sand filtration systems, evapotranspiration beds, osmosis units and holding tanks. In addition, composting toilets should be considered by the County for some situations, if determined to be appropriate and found not to pose a health risk. For clusters of homes, alternative systems include communal septic tank/leach field systems, package treatment plants, lagoon systems, and land treatment.

**Policy PFS-3.4 Developer Requirements**

The County shall require that developers meet all County wastewater requirements for adequate collection, treatment, and disposal prior to breaking ground for construction.

**Policy PFS-3.5 Water Conservation**

The County shall minimize wastewater flows through water conservation efforts. Consideration should be given to allow use of gray water for landscape irrigation.

**Policy PFS-3.6 Sanitary Sewer Connections**

The County will promote the development of sewer systems and connection of land uses to sanitary sewer systems where (a) failing septic tanks, leachfield, and package systems constitute a threat to water quality and public health that cannot be remedied otherwise; or (b) future development will exceed acceptable standard for septic tanks (such as density or flow of effluent into the groundwater).

**Policy PFS-3.7 Reduce Density/Intensity near Sewer Plants**

The County shall reduce the potential for future land use conflicts near sewer treatment facilities by minimizing development potential on surrounding parcels through zoning and land use designations that limit residential density and/or commercial intensity. Proposals for land division adjacent to sewer treatment facilities should not be approved unless large parcels can be provided with adequate, on-site buffers.

**5.4 Stormwater Drainage**

<b>Goal PFS-4</b>	To ensure the management of stormwater in a safe and environmentally sensitive manner through the provision of adequate storm drainage facilities to protect people and property and maintain the quality of receiving waters.
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**Policy PFS-4.1 Adequate Storm Drainage Facilities**

The County shall ensure storm water collection and drainage facilities are properly designed and sited and incorporate public safety as well as efficient use of water criteria.

**Policy PFS-4.2 Development Requirements**

The County shall encourage project designs that minimize drainage concentrations and impervious coverage, compliment groundwater recharge, avoid floodplain areas, and where feasible, be designed to provide a natural watercourse appearance and that maintain natural watershed functions.

**Policy PFS-4.3 Stormwater Detention Basins**

The County shall require stormwater detention basins that are designed to ensure public safety, be visually unobtrusive, provide temporary or permanent wildlife habitat values, and where feasible provide recreational uses.

**Policy PFS-4.4 Drainage Management Program**

The County shall initiate a countywide drainage and flood management program to manage flood risk, protect soils from erosion, control stormwater, minimize impacts on existing drainage facilities, and maintain natural watershed functions where feasible.

**5.5 Solid Waste**

<b>Goal PFS-5</b>	To ensure the safe and efficient disposal or recycling of solid and hazardous waste generated in the County.
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**Policy PFS-5.1 Solid Waste Reduction**

The County shall promote the maximum feasible use of solid waste reduction, recycling, and composting of wastes, strive to reduce commercial and industrial waste on an annual basis, and pursue a financing mechanism for solid waste reduction programs in order to meet the requirements of Public Resources Code 41780 and 41780.1.

**Policy PFS-5.2 Ensure Capacity**

Concurrent with the approval of new development, the County shall require evidence that capacity exists within the solid waste system for the processing, recycling, transmission, and disposal of solid waste.

**Policy PFS-5.3 Provisions for Solid Waste Storage, Handling, and Collection**

The County shall ensure that all new facilities have the necessary provisions for solid waste storage, handling, and collection prior to issuing building permits.

**Policy PFS-5.4 Hazardous Waste Disposal Capabilities**

The County shall require the proper disposal and recycling of hazardous materials and should investigate hazardous waste disposal needs for anticipated geothermal and agricultural toxic wastes.

**Policy PFS-5.5 County Usage of Recycled Materials and Products**

The County shall use recycled materials and products where economically feasible.

**Policy PFS-5.6 Land Use Compatibility with Solid Waste Facilities**

Solid waste facility sites shall be protected from the encroachment of sensitive and/or incompatible land uses. Abandoned solid waste facilities should be converted to open space use.

## 5.6 Public Utilities

<b>Goal PFS-6</b>	To ensure that adequate and efficient public utilities are provided to meet the needs of residents and businesses in the County.
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**Policy PFS-6.1 *Electric Service***

The County shall coordinate with electricity providers in planning for the timely expansion of electrical facilities to meet future demand, and for projects affecting public health, schools, or for significant air emissions reductions.

**Policy PFS-6.2 *Appropriate Siting of Electric Facilities***

The County shall coordinate with electricity providers to locate transmission systems that minimize environmental and other impacts.

**Policy PFS-6.3 *Undergrounding of Utility Lines***

The County shall require utility lines in new subdivisions to be placed underground, except where it is not feasible due to operational constraints.

**Policy PFS-6.4 *Energy Conservation***

The County shall support the use of energy conservation devices and renewable energy sources in residential, commercial, and industrial developments, and shall continue to develop renewable energy sources for County facilities when practical.

**Policy PFS-6.5 *Reservation of Right-of-Ways***

The County shall coordinate with public utility providers to reserve adequate rights-of-way to facilitate expansion of services in a timely manner.

**Policy PFS-6.6 *Watershed Protection During New Public Facilities Expansion***

Extension of public facilities shall be designed to minimize or avoid potential adverse impacts to the watersheds within the County.

## 5.7 Communications Systems

<b>Goal PFS-7</b>	To expand the use of information technology in order to increase the County’s economic competitiveness, develop a more informed citizenry, and improve personal convenience for residents and businesses in the County.
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**Policy PFS-7.1 *Telecommunications Services***

The County shall work with telecommunication providers to ensure that all residents and businesses will have access to telecommunications services, including broadband internet service. To maximize access to inexpensive telecommunications services, the County shall encourage marketplace competition from multiple service providers.



**Policy PFS-7.2 *Communication Technologies to Improve Citizen Participation***

The County shall strive to expand opportunities for all citizens to participate in County governance through use of communication technologies, including the County website and cable television.

**Policy PFS-7.3 *Siting of Telecommunications Infrastructure***

To minimize the visual impact of wireless communications facilities, the County shall encourage the siting of telecommunications infrastructure to meet the following conditions:

- Located away from residential and open space areas;
- When possible, are located on existing buildings, existing poles, or other existing support structures; and,
- Painted, camouflaged, textured, or otherwise designed to better integrate into existing conditions adjacent to the installation site.

**5.8 Fire Protection and Law Enforcement**

<b>Goal PFS-8</b>	To provide adequate fire and police protection facilities and services to ensure the safety of County residents and the protection of County property.
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**Policy PFS-8.1 *Fire Protection***

The County shall promote expansion of fire protection service to continue to meet County needs.

**Policy PFS-8.2 *Fire Protection and Medical Service Standards***

The County shall require that all development in Community Growth Boundaries be adequately served by water supplies, storage, and conveyance facilities for fire protection, and adequate medical services are or will be provided concurrent with development. All services must be designed and constructed to meet the Fire Protection Standards of Lake County or the responsible agency.

**Policy PFS-8.3 *Emergency Fire Access***

The County shall require that all road networks (public and private) are designed to provide for safe and ready access for emergency fire equipment and provide an alternate route for evacuations.

**Policy PFS-8.4 *Visible Signage for Locating Roads and Buildings***

The County shall ensure that all roads and buildings are properly identified by name or number with signs which are non-combustible and are clearly visible from main roadways.

**Policy PFS-8.5 *Fire Mitigation Fee***

The County shall continue to support the fire mitigation fee ordinance.

**Policy PFS-8.6 Interagency Cooperation**

The County should continue to promote cooperative fire protection agreements with the California Division of Forestry to provide added fire protection on a year round basis.

**Policy PFS-8.7 Public Safety Programs**

The County shall promote public safety programs, including neighborhood watch programs, child identification and fingerprinting, public awareness and prevention of fire hazards, and other public education efforts.

**Policy PFS 8.8 Locations for Fire and Police Stations**

The County shall encourage the locations of fire and police stations to enable the minimum acceptable response time to service calls.

**5.9 Community Facilities**

<b>Goal PFS-9</b>	To ensure that adequate community facilities are provided and are conveniently located in order to meet the needs of residents of the County.
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**Policy PFS-9.1 Work with Local School Districts**

The County should work closely with local school districts to develop solutions to the burden of overcrowded schools and to the financial constraints on constructing new facilities.

**Policy PFS-9.2 Joint Facilities and Programs**

The County should encourage the development of joint school facilities, recreational facilities, and educational and service programs between school districts and other public agencies.

**Policy PFS-9.3 Location of School Sites**

School sites, to the extent possible, should not be located within mapped serpentine areas, or near airports, industrial complexes, agricultural operations, or high-capacity electrical transmission lines to minimize exposure to potentially hazardous conditions.

**Policy PFS-9.4 Location of Elementary Schools**

The County should coordinate with public school districts and private schools to ensure new elementary schools are centrally located within the community.

**Policy PFS-9.5 Location of Junior High and High Schools**

The County should coordinate with the school districts for the siting of new junior high and high schools along major and minor collectors with good pedestrian, bicycle and transit access. Average time-distance standards for junior high schools should be 10 miles or 30 minutes and for senior high schools 30 to 45 minutes.

**Policy PFS-9.6 Water and Sewer Services for Schools Sites**

Public water and sewer services to school sites are desirable. If these services are not available, the feasibility of on-site systems must be established.

**Policy PFS-9.7 Library Facilities and Services**

The County shall continue to assess existing and future needs of the County’s residents and expand library facilities and services as necessary to meet those needs (e.g., internet access, meeting rooms, etc). Consideration should be given to working with school districts for development of shared library facilities.

**5.10 Implementation Measures**

Table 5-1, Public Facilities and Services Implementation Measures, identifies the implementation measures the County should take to implement the goals and policies of this element. The table lists each specific implementation measure, a reference to which General Plan policy it is implementing, who is responsible to implement the program, and the timeframe for implementation.

**Table 5-1. Public Facilities and Services Implementation Measures**

	Implementation Measure	Policy	Who is Responsible	Timeframe				
				2008-2012	2013-2017	2018-2022	2023-2028	On-going
1.0	Establish a mechanism, either through formal agreement or contract, to coordinate a long-term planning process with private utility providers regarding the location and types of delivery facilities, including the following: <ul style="list-style-type: none"> <li>▪ Undergrounding of utilities;</li> <li>▪ Reservation of right-of-way;</li> <li>▪ Use of transmission line corridors for open space/greenbelt and recreational purposes; and,</li> <li>▪ Siting for compatibility with existing and proposed land uses.</li> </ul>	PFS-1.5 PFS-6.1 PFS-7.1 PFS-9.1	Public Works Department, Board of Supervisors					■
2.0	Special consideration shall be given to location of existing water and sewer service boundaries when developing or updating Community Area Plans, to assure that development is directed to sites within service boundaries first, before developing outside of district service areas and resulting in premature expansion of service district boundaries.	PFS-2.3 PFS-2.4	Community Development Department, Special Districts, Local Water Providers, LAFCO, BOS & Planning Commission					■

Implementation Measure	Policy	Who is Responsible	Timeframe				
			2008-2012	2013-2017	2018-2022	2023-2028	On-going
3.0 New developments that would result in the need for improvements to existing water system treatment, storage and/or conveyance will be subject to funding the cost of these improvements. Improvements needed to serve such developments will need to be installed and operating before permits can be issued for site grading, road building and construction of buildings. Expansion of water districts should not be done at the possible expense of providing adequate service to future development already located with district boundaries.	PFS-2.4 PFS-2.5 PFS-2.6	Community Development Department, Special Districts, Local Water Providers, BOS & Planning Commission					■
4.0 Use of water conserving measures for future developments shall be considered in project design. Consideration shall be given for use of native landscape materials, gray water for irrigation, lowest flow water fixtures available, and other available technologies. These considerations shall be encouraged by the County through the Pre-application Development review process, and shall be considered during the CEQA review process.	PFS-2.7 PFS-3.5						■
5.0 The County shall prepare a study to evaluate alternatives for rural wastewater systems. Alternatives that could be evaluated include elevated leach fields, sand filtration systems, evapotranspiration beds, osmosis units and holding tanks. For clusters of homes, alternative systems include communal septic tank/leach field systems, package treatment plants, lagoon systems, and land treatment.	PFS-3.3	Planning Commission, Board of Supervisors, Special Districts, Environmental Health Division Public Services Department		■			
6.0 The County shall prepare an update to the County's Integrated Waste Management Plan and Siting Element to determine existing and projected waste disposal needs, methods of disposable land characteristics suited for disposable sites, and anticipated locations.	PFS-3.4	Environmental Health Department, Public Services Department			■		
7.0 The County shall identify damaged and/or deficient storm drainage facilities and acquire funding to restore or upgrade these facilities.	PFS-4.1	Public Works Department, Community Development Department					■

	Implementation Measure	Policy	Who is Responsible	Timeframe				
				2008-2012	2013-2017	2018-2022	2023-2028	On-going
8.0	The County shall work with the Corps of Engineers and other appropriate agencies to develop stormwater retention/detention and recharge facilities to enhance flood protection and improve groundwater recharge.	PFS-4.1	Public Works Department, Community Development Department					■
9.0	The County shall require on-site detention facilities and velocity reducers when necessary to maintain existing storm flows and velocities in natural drainage systems.	PFS-4.1	Public Works Department, Community Development Department					■
10.0	The County shall develop and implement a countywide drainage management program, consistent with state and federal regulations. The program should address the following: <ul style="list-style-type: none"> <li>▪ Development standards and preferred best management practices for the maintenance of drainage facilities; and,</li> <li>▪ Funding for the maintenance and operation of regional drainage facilities.</li> </ul>	PFS-4.1 PFS-4.2	Public Works Department		■			
11.0	The County shall conduct periodic updates of the Countywide Integrated Waste Management Plan and Siting Element, and evaluate its progress in achieving source reduction goals.	PFS-5.1 PFS-5.2 PFS-5.3	Public Services Department, Planning Commission, Environmental Health, Board of Supervisors					■
12.0	The County shall prepare a countywide fire prevention plan. The plan would identify existing resources, existing and future needs for preventing fires, and recommendations for maintaining and improving fire prevention and protection services in the County.	PFS-8.1	Board of Supervisors		■			
13.0	The County shall maintain and enforce regulations requiring proper street, road and building identification.	PFS-8.4	Public Works Department, Fire Districts					■
14.0	The County shall work with school districts and other appropriate agencies to develop siting and design criteria for new schools that incorporate bicycle and pedestrian access.	PFS-9.3 PFS-9.4 PFS-9.5	Community Development Department					■

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