

8. Street Lights

This section addresses street lighting services within the County. Included in the section are a description of existing service providers, a discussion of system standards, an assessment of both level of service and unserved areas, and recommendations for future service delivery.

8.1. Description

Street lights are a rarely noticed municipal service intended to improve public safety and nighttime travel. There is evidence that in urban and suburban areas, where there are intersections and concentrations of pedestrians, fixed-source lighting (street lights) tends to reduce crashes (AASHTO, 2004). In addition to its traffic safety benefits, lighting may serve as a crime deterrent, may aid law enforcement agencies, and contribute to user comfort and community pride. The need for street lighting in areas with frequent inclement weather should also be considered. However, such needs must be balanced with the need to minimize sky glow and light trespass (commonly referred to as light pollution), especially in more rural areas. Sky glow is defined as the added sky brightness caused by the scattering of light into the atmosphere. The term light trespass describes light that strays from its intended target and illuminates adjacent properties.

8.1.1. Street Light System Description

Street lights can be provided by counties, cities, or by special districts. Lighting services can be funded through a portion of the one-percent property tax revenue; through a special assessment, or special tax levied by districts, cities, or a county; as service charges through utility billing; or through other general fund revenue. Local agencies often use special assessment districts, such as Landscaping and Lighting Districts (Streets and Highways Code Sections 22000 to 22679) to fund street lighting services. Homeowners associations can also provide privately owned street lighting through association fees.

Public agencies that utilize special assessments and service charges to fund street lighting services sometimes differentiate between street light types. Lights located at intersections that provide broad traffic safety benefit to travelers in all directions could be defined as "safety lights"; "street lights" could be those that are located along streets providing direct benefit only to adjacent property owners. This distinction may be important when apportioning the benefit and cost of operating and maintaining the street lights through the special assessment. When property tax or other general funds are used to support the operation and maintenance of street lighting, discretely apportioning benefit is not as critical.

8.1.2. Humboldt County Street Lighting Providers

In Humboldt County, street lighting is provided by each of the seven incorporated cities; the Humboldt, McKinleyville, and Willow Creek community services districts; and eight street lighting districts formed by Humboldt County and governed by the Board of Supervisors. The following is a description of each of the local agencies or maintenance/assessment districts providing street lighting services in Humboldt County (other than cities).

Garberville Lighting District

The Garberville Lighting District is approximately 180 acres in area and covers the downtown Garberville portion of the Garberville Urban Study Area (USA). The district is governed by the

Board of Supervisors and receives funding through a portion of the one percent property tax and a special assessment. District revenue is used to pay Pacific Gas and Electric Company (PG&E) to own, operate, and maintain streetlights within the district.

Humboldt Community Services District

The Humboldt Community Services District is authorized to provide street lighting services within the boundaries of its district. The Freshwater, Myrtle town, South Eureka, and Humboldt Hill USAs are contained within the district boundary thus making street lighting available throughout these study areas. The Humboldt Community Services District funds street lighting through direct charges collected through the monthly utility bill or through the district general fund.

Hydesville Lighting District

Most of the Hydesville/Carlotta USA does not receive tax or assessment funded street lighting services. Only a portion of the Hydesville community is within the Hydesville Street Lighting District. The district comprises about 90 acres of the downtown Hydesville area, containing parcels along Rohnerville Road and State Route 36 from A Street to Johnson Road. The remaining parcels within Hydesville are not included within the district. The Hydesville Lighting District was formed pursuant to the Street Lighting Act of 1919 to collect a portion of the one percent property tax and assessments to pay for street lighting services within its boundaries. There is no street lighting in Carlotta.

Loleta Lighting District

The Loleta Lighting District is approximately 60 acres in area and covers most of the developed area of the community of Loleta. The district is governed by the Board of Supervisors and receives funding through a portion of the one percent property tax and a special assessment. District revenue is used to pay PG&E to own, operate, and maintain streetlights within the district. The Shadowbrook subdivision, one of the newer Loleta subdivisions, and the portions of the Loleta USA east and south of Shadowbrook Street are not located within the Loleta Lighting District.

McKinleyville Community Services District

The McKinleyville Community Services District provides street lighting services within its district that includes the McKinleyville Water Study Area (WSA) and USA. The McKinleyville Community Services District is authorized to provide street lighting throughout the district, which indicates that where street lighting is currently not present, but warranted, it could be provided. The McKinleyville Community Services District funds street lighting through direct charges collected through the monthly utility bill or through the district general fund.

Myers Flat Lighting District

The Myers Flat WSA is located entirely within the Myers Flat Lighting District. The Myers Flat Lighting District extends beyond the WSA to include some larger parcels surrounding Myers Flat. Like the previously described lighting districts, the Myers Flat Lighting District is governed by the Board of Supervisors and funded through a portion of the one percent property tax.

Pacific Manor Street Lighting District

The Pacific Manor Street Lighting District is on the northwest edge of the City of Arcata and was formed pursuant to the Street Lighting Act of 1919 to collect a portion of the one percent property tax and assessments to pay for street lighting services within its boundaries. The district is approximately 10 acres in area and is comprised of about one-third of the parcels within the

Pacific Manor subdivision (Pacific Manor Subdivision No. 4). The parcels within the district are located along the entire frontage of Brian Court and portions of the Ernest Way and Janes Road frontages. The remaining parcels within the Pacific Manor are not included in the district. The Pacific Manor subdivision is within the Arcata USA. None of the other portions of the Arcata USA receive public street lighting services.

Redcrest Lighting District

The Redcrest Lighting District is approximately 25 acres in area and located entirely within the Redcrest WSA. The Redcrest Lighting District contains the core area of Redcrest, including most of the businesses and homes. The remaining 90 percent of the Redcrest WSA is outside the boundaries of an agency providing lighting services. The Redcrest Lighting District is governed by the Board of Supervisors and funded through a portion of the one percent property tax. Unlike many of the other similar districts governed by the Board of Supervisors, the Redcrest Lighting District does not receive revenue from a special assessment.

Rohnerville Lighting District

The Rohnerville Lighting District comprises approximately 110 acres of the Fortuna USA and is located north of the Rohnerville Airport and along the west side of Rohnerville Road. The Rohnerville Lighting District contains large lot residential development. The remainder of the Fortuna USA is outside the boundaries of a local agency providing lighting services. The Rohnerville Lighting District is governed by the Board of Supervisors and funded through a portion of the one percent property tax. However, the Rohnerville Lighting District does not receive revenue from a special assessment.

Weott Lighting Maintenance District

The Weott Lighting Maintenance District is approximately 550 acres in area and includes the community of Weott. The district is governed by the Board of Supervisors and receives funding through a portion of the one percent property tax and a special assessment. District revenue is used to pay PG&E to own, operate, and maintain streetlights within the district. The entire Weott USA is located within the Weott Lighting Maintenance District. The district extends beyond the Weott USA to include properties on either side of State Route 254 to a distance of approximately one mile beyond the Weott CSD boundary and approximately 0.5 miles south of Newton Road.

Willow Creek Community Services District

The Willow Creek Community Services District provides street lighting services within its district, which includes the Willow Creek WSA and USA. Currently, street lights are installed in the downtown Willow Creek business area. However, the Willow Creek Community Services District is authorized to provide street lighting throughout the district, which indicates that where street lighting is currently not present, but warranted, it could be provided. The Willow Creek Community Services District funds street lighting through direct charges collected through the monthly utility bill or through the district general fund.

8.2. Regulatory Framework

8.2.1. Street Light Standards

Most public agencies in Humboldt County that provide street lighting services do not operate or maintain the street lights and in most instances do not own street lights. Most streetlights in

Humboldt County are owned and maintained by PG&E. Street lighting operation and maintenance costs are charged by PG&E to the appropriate local agency pursuant to Tariff Rate Schedule LS-1 (PG&E-Owned Street and Highway Lighting) or LS-2 (Customer-Owned Street and Highway Lighting).

Street lighting system standards are established by the local agency responsible for the service and PG&E, the public utility that provides electric service to most of Humboldt County. Humboldt County does not have specific street lighting standards in the design document used for roadway construction, the "Humboldt Department of Public Works Roadway Design Standards Manual." As a result, the Public Works Land Use Section relies on standards contained in the American Association of State Highway and Transportation Officials (AASHTO) "A Policy on Geometric Design of Highways and Streets, 2004" for policy guidance on street lighting, as well as the Roadway Lighting Design Guide (AASHTO GL-6) that contains additional design detail.

Some of the factors that trigger the need for lighting of streets and highways are traffic volumes (both vehicles and pedestrians), at-grade intersections, turning movements, and signalization. Lighting standards often specify whether streetlights are required based on intersection type, functional classification (functional classification is a hierarchical ranking based on the degree of mobility and access that a street provides) or other characteristics of the street; the type of light; wattage of lights; and the spacing of lights. Lighting standards often differ between urban and rural settings. Specific lighting standards are also developed for pedestrian and bicycle facilities. The following is a brief description of the street lighting standards and the roadway conditions that might warrant street lights:

Intersection/Street Type

Whether or not a streetlight is warranted depends upon the type of intersection or road segment, traffic volumes, and turning movements. Table 8-1 below, City of Flagstaff Street Light Standards, shows how street functional classification is utilized to determine if streetlights are warranted and the type of light to be installed.

Type of Light

There is considerable variation in street lighting in terms of type of lamp, wattage, luminance (light-output rating of a lamp), shielding, and mounting. The most common lamp types are mercury vapor; high and low pressure sodium; and metal halide. The type of lamp is chosen by the local agency or utility based on the lamp efficiency, cost, and lamp life. The efficiency of the lamp type (mercury vapor, etc.) varies according to the wattages and luminance.

To reduce sky glow and light trespass, local agency often require lights be shielded. Shielding, or cutoff, refers to light designs that limit the pattern of light from the fixture. The following is a description of cutoff lights from the Illuminating Engineering Society of American (IESNA):

Semi-Cutoff. Designation for luminaire light distribution when the candlepower per 1000 lamp lumens does not numerically exceed 50 (5 percent) at an angle of 90 degrees above the horizontal, and 200 (20 percent) at a vertical angle of 80 degrees above the horizontal. This applies to any lateral angle around the luminaire.

Full-Cutoff. Designation for luminaire light distribution when zero candlepower occurs at or above an angle of 90 degrees above the horizontal, and a maximum of 10 percent at a vertical angle of 80 degrees above the horizontal.

In some instances, local agencies choose to install “decorative lights” rather than what is often referred to as “cobra” style or “shoe box” style lights. Decorative lights may be selected to conform to historic districts or to match the theme of a design district. Decorative lights are usually installed on local agency owned poles or posts and not on PG&E distribution facilities.

Light Spacing

Light spacing is the distance between light poles. The distance between street lights in areas that experience greater traffic volumes or where pedestrians are present would be less than in areas with few intersections and less traffic.

Street Light Standards Example

The following excerpt from the City of Flagstaff Engineering Standards is provided as an example of street lighting standards:

Streetlights at Non-Signalized Intersections

A streetlight shall be installed at each non-signalized public street intersection with the following exceptions:

- 1. Street Width.** At intersections where the width of one or more of the approaches is greater than or equal to fifty feet (50') as measured to the back of curb (on urban street sections) or edge of pavement (on rural street sections), two streetlights shall be installed on diagonally opposite corners.
- 2. Urban Local Streets.** At the intersection of two Urban Local Streets, a street light may be omitted if its installation would violate the spacing and uniformity criteria along either street.
- 3. Rural local and rural collector streets.** Streetlights are not required at intersections involving only rural local or rural collector streets. Should a designer choose to install streetlights on streets with these classifications, then the respective urban local or urban minor collector street criteria for intersections and spacing along the streets shall apply. Streetlights are required at all intersections on rural arterial streets.

Table 8-1. City of Flagstaff Street Light Standards

FUNCTIONAL CLASSIFICATION		THROUGH LANES	PED. CONFLICT	LPS WATTAGE	LUMENS	SPACING (FT)
URBAN	MAJOR ARTERIAL	4/2	HIGH	180/135	33000/ 22500	225/225
			LOW	135/90	22500/ 13500	300/275
	MINOR ARTERIAL	4/2	HIGH	180/135	33000/ 22500	225/225
			LOW	135/90	22500/ 13500	300/275
	MAJOR COLLECTOR	4/2	HIGH	135/90	22500/ 13500	250/225
			LOW	90/55	22500/ 8000	300/275
	MINOR COLLECTOR	2	LOW	55	8000	350
	COMM. LOCAL	2	HIGH	55	8000	350
LOCAL	2	LOW	55	8000	350	
URBAN Comm. Center	MAJOR ARTERIAL	4/2	HIGH	180/135	33000/ 22500	200/175
	MINOR ARTERIAL	4/2	HIGH	180/135	33000/ 22500	200/175
	MAJOR COLLECTOR	4/2	HIGH	135/90	22500/ 13500	225/175
	MINOR COLLECTOR	2	HIGH	90	22500	175
	COMM. LOCAL	2	HIGH	55	8000	150
RURAL	ARTERIAL	2	LOW			
	COLLECTOR	2	LOW			
	LOCAL	2	LOW			

Source: City of Flagstaff Engineering Standards, Title 12 Street Lighting

8.3. Street Light System & Capacity

The following table summarizes the distribution of street lighting within USAs and WSAs and provides an indication as to whether or not street lighting would be available if requested by existing residents or required as a condition of project approval. The column with the heading "Authorized Agency for Remainder" refers primarily to those instances where street lights are available to only a portion of the USA, and indicates whether or not there is a local agency authorized to provide street lights to the remainder of the USA. Where the table indicates that there is no authorized agency for the remainder of the USA, the existing lighting maintenance district would need to be expanded or another agency would need to be created or authorized to provide this service. Where the table indicates either "Only Upon Annexation" or "With LAFCo Approval," the unserved portion of the USA would need to annex to an adjacent city or district or the existing district providing water or wastewater service (if it is a CSD with latent power to provide street lighting services) would need to petition LAFCo for authorization to provide street lighting.

Table 8-2. Summary of Street Lighting by Urban Study Area

USA/WSA	Street Lights ¹	Authorized Agency for Remainder
Alderpoint WSA	○	None
Arcata USA	⊙	Only Upon Annexation (City of Arcata)
Big Lagoon WSA	○	W/LAFCo Approval (Big Lagoon CSD)
Blue Lake USA/ WSA	○	Only Upon Annexation (City of Blue Lake)
Benbow WSA	○	None
Briceland WSA	○	W/LAFCo Approval (Briceland CSD)
Fieldbrook WSA	○	W/LAFCo Approval (Fieldbrook CSD)
Fortuna USA	⊙	Only Upon Annexation (City of Fortuna)
Freshwater WSA	⊙	Yes (Humboldt CSD)
Garberville USA/WSA	⊙	W/Board of Supervisors Approval (Garberville Lighting)
Glendale USA/WSA	○	W/LAFCo Approval (Fieldbrook CSD)
Humboldt Hill USA	⊙	Yes (Humboldt CSD)
South Eureka USA/WSA	⊙	Yes (Humboldt CSD)
Hydesville USA/WSA	⊙	None
Indianola WSA	⊙	None
Jacoby Creek WSA	○	None
Loleta USA	⊙	W/Board of Supervisors Approval (Loleta Lighting)
Manila USA	○	W/LAFCo Approval (Manila CSD)
McKinleyville USA/WSA	●	Yes (McKinleyville CSD)
Miranda USA	○	W/LAFCo Approval (Miranda CSD)
Myrtle town USA/WSA	●	Yes (Humboldt CSD)
Myers Flat WSA	●	Yes (Myers Flat Lighting)
Orick USA/WSA	○	W/LAFCo Approval (Orick CSD)
Orleans WSA	○	W/LAFCo Approval (Orleans CSD)
Phillipsville WSA	○	W/LAFCo Approval (Phillipsville CSD)
Redcrest WSA	⊙	W/Board of Supervisors Approval (Redcrest Lighting)
Rio Dell USA/WSA	○	Only Upon Annexation (City of Rio Dell)
Redway USA	○	W/LAFCo Approval (Redway CSD)
Riverside WSA	○	W/LAFCo Approval (Riverside CSD)
Scotia USA	●	See note
Shelter Cove USA/WSA	○	W/LAFCo Approval (Resort Improvement Dist. #1)
Samoa USA	●	See note
Willow Creek USA/WSA	●	Yes (Willow Creek CSD)
Weott USA	●	Yes (Weott Lighting)
Westhaven WSA	○	W/LAFCo Approval (Westhaven CSD)
¹ ○ = Not available ⊙ = Available to portion of USA ● = Available throughout USA		

Source: LAFCo Sphere of Influence Reports; Humboldt County Community Development Services, 2007.

Note: Scotia and Samoa are privately owned towns that are treated as a "campus" by utility companies; where utility service is delivered to a minimum point of entry and distributed using a landowner operated system. The landowner (Palco or the Samoa Pacific Group) may install, operate, and maintain street lights at their own cost and discretion. If a special district is created to manage the infrastructure and utility systems in either Samoa or Scotia, street lighting should be enumerated as an authorized district power and a revenue source (such as a direct charge on customer's utility bill or special assessment or tax) established.

8.4. System Expansion

8.4.1. Overview

As new urban development is planned within Humboldt County, policies should be considered that guide the installation and maintenance of new street lights. The AASHTO Roadway Lighting Design Guide and street light standards from other jurisdictions, such as those excerpted from the City of Flagstaff, should be used to develop Humboldt County street lighting standards. Policies encouraging special districts serving urban areas to provide street lighting services, where appropriate, should also be considered.

8.4.2. Policy Considerations

As new development occurs and the need for additional street lighting is identified, services can be provided in several ways. The following is a discussion of how street lights could be provided to new development.

1. An existing special district that is authorized to provide street lighting services can provide the service and require that a special assessment or other funding mechanism be imposed to support the service.

In the case where new development is proposed in an area where an existing local agency provides street lighting services, the review, approval, and installation of new street lights would be carried out in the same manner as other infrastructure systems.

2. New development can annex to an existing street lighting district, if appropriate.

The Street Lighting Act of 1919, and most other street lighting laws, allows for the annexation of new territory to existing districts, whether or not the new territory is contiguous with the current district boundaries. Annexation proceedings are not subject to LAFCo authority and would be conducted by the Board of Supervisors. As described above, funding for ongoing street lighting services would be subject to Proposition 218 provisions relating to extending an existing or establishing a new direct charge or special assessment. At least 50 percent of property owners submitting ballots must vote in favor of a special assessment.

3. A new district can be formed, or an existing district expanded (or street lighting authorized as a new service) and a new assessment imposed.

Forming a new district, expanding an existing street lighting district, or authorizing an existing district to provide street lighting services would require Board of Supervisors or LAFCo approval. Most local agencies that are authorized to provide street lighting currently provide such services. Annexation of new territory to an existing street lighting district is carried out by the Board of Supervisors in the same manner as establishing a new district.

Street lighting is a power that is enumerated in Community Services District Law (California Government Code Section 61000 to 61126); however, community services districts can only provide this service if authorized to do so by LAFCo. As indicated in the table above, there are many community services districts that could provide street lighting services if authorized to do so by LAFCo. In order to provide this service, a district must submit a resolution of application and a plan for providing new services to LAFCo that contains the following:

1. The total estimated cost to provide the new or different function or class of services within the special district's jurisdictional boundaries.
2. The estimated cost of the new or different function or class of services to customers within the special district's jurisdictional boundaries. The estimated costs may be identified by customer class. An identification of existing providers, if any, of the new or different function or class of services proposed to be provided and the potential fiscal impact to the customers of those existing providers.
3. A plan for financing the establishment of the new or different function or class of services within the special district's jurisdictional boundaries.
4. Alternatives for the establishment of the new or different functions or class of services within the special district's jurisdictional boundaries.

Ongoing funding for street lighting services would be subject to Proposition 13 requirements and Proposition 218 proceedings. Proposition 218 is the "Right to Vote on Taxes Act" that was approved as part of the November 1996 statewide ballot. Proposition 218 added Article XIID to the California Constitution requiring that a parcel's assessment or a property related fee or charge may not exceed the reasonable cost for the proportional special benefit conferred on that property. Article XIID provides that only special benefits are assessable, and the City or District must separate the general benefits from the special benefits. It also requires that publicly owned properties, which benefit from the improvements, also be assessed.

9. Parks and Recreation

This section addresses neighborhood and community parks and recreation infrastructure and services within the County. Included in this section are a description of existing service providers, a discussion of system standards, an assessment of level of service and unserved areas, and recommendations for future service delivery.

9.1. Description

Parks and open space areas are important elements of the urban environment. As a rural county, Humboldt County has a wealth of outdoor recreational opportunities. More than twenty percent of the county's 2.3 million acres are protected open space, forests, and recreation areas. Within the county boundaries, there are four federal parks and beaches, ten state parks (three of which are encompassed by Redwood National Park), 16 county parks and beaches, recreational areas and reserves, and National Parkland and National Forest land. These areas contribute to the quality of life in Humboldt County and provide needed recreation opportunities for residents of neighboring counties and visitors from all over the world. However, most parks in Humboldt County are regional in scope. Outside the seven Humboldt County incorporated cities, there are few local community or neighborhood parks.

Regional parks are addressed in the Conservation and Open Space Element, Humboldt County Trails Plan and other regional park planning documents. To date, there has not been comprehensive planning for community and neighborhood park facilities. This report will focus on the expansion and development of community and neighborhood park facilities.

9.1.1. Humboldt County Parks and Recreation

Humboldt County Parks is a Division of the Public Works Department and operates sixteen regional park facilities around the County comprising approximately 850 acres. All of the county parks are regional parks, providing natural areas and access to rivers and the ocean. The County does not operate community or neighborhood parks.

Table 9-1. Humboldt County Park Facilities

Park Name	Size in Acres
Arthur W. Way County Memorial Park (Honeydew)	20
Big Lagoon County Park (Big Lagoon)	52
Centerville Beach County Park (Ferndale)	2
Clam Beach County Park (McKinleyville)	370
Crab County Park (Loleta)	10.5
Fields Landing County Park (Fields Landing)	1.5
Freshwater County Park (Freshwater)	7
Hammond Trail (McKinleyville)	5
Luffenholtz Beach County Park (Westhaven)	7.5
Mad River County Park (Arcata)	95.5
Margarite Lockwood Park (Miranda)	20

Park Name	Size in Acres
Moonstone Beach County Park (Westhaven)	8
Pedrazzini County Park (Loleta)	1
Samoa County Park (Samoa)	8
Table Bluff County Park (Loleta)	34
Van Duzen County Park (Carlotta)	200
TOTAL	842

9.1.2. Parks Provided by Other Agencies

The Humboldt County Public Works Department is not the only agency that provides parks and recreation in Humboldt County. Each of the seven incorporated cities provides parks and recreation services to a certain degree. Cities, since they serve an urban area often provide neighborhood and community parks and emphasize active recreation including recreational programming (recreation classes). County residents may use city parks typically at no fee. In addition, County residents can often use city recreation programs (recreation classes and league play) for a small, additional fee. Within the unincorporated areas of the County, some Community Services Districts (CSDs) provide parks and recreation services. For example, the McKinleyville, Willow Creek, and Manila CSDs provide parks and recreation services in their respective areas.

Parks are also provided by state and federal agencies. These parks tend to be passive in nature, and thus do not provide facilities such as soccer fields or tennis courts, but they do provide important areas for coastal access and nature appreciation. State agencies such as the California Department of Parks and Recreation (State Parks) provide large, typically passive parks. These parks include items such as trails, camping, access to historic facilities, and/or nature appreciation throughout California as well as Humboldt County. Examples of State Parks facilities within Humboldt County include Fort Humboldt State Historical Monument, Humboldt Redwoods State Park, and Grizzly Creek State Park.

The federal government also provides access to passive parkland. Agencies such as the National Park Service, United States Forest Services, Bureau of Land Management, and the U.S. Fish and Wildlife Service, often provide trail corridors, camping, nature appreciation and in some cases preservation of historic facilities. Examples of federal parks in this area include the Redwood National and State Parks, the Six Rivers National Forest, Humboldt Bay National Wildlife Refuge, and the King Range National Conservation Area.

Parks and recreation are not only provided by public agencies, but also by private individuals and groups that provide these services. For example, most communities have a health club that offers items such as weight lifting and fitness classes, and the Pacific Lumber Company provides various parks and recreation facilities in Scotia, such as Carpenter's Field. In addition, there are parks provided by private non-profit groups such as the Redwood Fields in Cutten and Tooby Park in Garberville.

The following is a description of the park and recreation services offered by incorporated cities and local agencies within Humboldt County:

City of Arcata

The City of Arcata operates and maintains a broad range of park and recreation facilities and programs. The following is a list of park and recreation facilities operated by the City of Arcata:

Table 9-2. City of Arcata Recreation & Park Facilities

Park Names	Size in Acres
Arcata Ball Park, 888 F Street	4.95
Arcata Community Park, 321 Community Park Way	33
Arcata Plaza, 801 G Street	1.4
Arcata Skate Park, 900 Sunset Boulevard	0.65
Bayside Park, Samoa Boulevard	3
Bloomfield, 1835 - 1845 Zehnder Avenue	0.2
Cahill Park, 1300 Stromberg Avenue	0.3
California Park, California Street	1
Chevret-Vaissade Park, 1760 Felix Avenue	1.5
D Street Linear Park, 1301 D Street (9th-14th)	1
Ennes Park, 1851 Stewart Avenue	0.2
Ennes Park Expansion, Wyatt Lane	4
Greenview, 1116 Lewis Court	0.3
Larson Park, 901 Grant Avenue	2.3
Mountain View Park, 2117 Sandra Court	3
Pacific Union Park , Spear Avenue	4
Redwood Park, 490 - 199 E. Park Road	25.8
Rotary Park, 101 F Street	0.2
Shay Park, 1385 Foster Avenue	5
Stewart Park, 1090 15 th Street	1.25
Sunny Brae Park, Virginia Way. and Marilyn Street	2.7
Valley West Park, 1340 Hallen Drive	3.4
Vinum Park, 1450 F Street	0.1
Westwood Manor Park, 2175 Wisteria Way	0.7
Windsong Park, Maria Court	1.75
Woodland Heights, Diamond Drive	0.6
TOTAL	102.3

Source: Arcata Economic Development Strategic Plan, Appendix E, October 2004.

City of Eureka

The City of Eureka operates and maintains a broad range of park and recreation facilities and programs. The following is a list of park and recreation facilities operated by the City of Eureka:

Table 9-3. City of Eureka Recreation & Park Facilities

Park Name	Size in Acres
Carson Park and Playground, Carson/Buhne/"H"/"I" Streets	3.2
Clara Mae Berry Park and Playground, 3 rd & "O" Streets	0.5

Park Name	Size in Acres
Cooper Gulch Park and Playground, 8 th & Myrtle Streets	33.0
Del Norte Street Public Pier, Del Norte Street/Humboldt Bay	1.0
Hammond Park & Playground, 14 th & "E" Streets	1.4
Halvorsen Park, 1201 Waterfront Drive	3.0
Hartman/Kennedy Ball Fields, 3555 "W" Street	5.1
Highland Park and Playground, Highland & Glen Streets	2.6
Jacob-Haney Ball Field, 2605 Union Street	1.5
Lundbar Hills Park, 4708 Frederick street	1.3
Ross Park and Playground, 12 th and "M" Streets	1.3
Sequoia Park, Garden, Playground, Zoo, 3400 "W" Street	67.0
20/30 Park and Playground, 2605 Pine Street	3.2
TOTAL	124.1

Source: City of Eureka Parks and Playgrounds Brochure.

City of Eureka parkland also includes the Eureka Public Marina, Myrtle Grove Cemetery, PALCO Marsh, Sacco Amphitheater, the Adorni Center, and the Warfinger Building. The City operates a variety of recreation programs for youth and adults at the Adorni Center and other park facilities.

City of Fortuna

The City of Fortuna operates and maintains the following park and recreation facilities:

Table 9-4. City of Fortuna Recreation & Park Facilities

Park Name	Size in Acres
Rohner Park, Park Street	55
Newburg Park, Rohnverville Road @ Newburg Road	20
River Lodge Meeting & Conference Center, 1800 Riverwalk Drive	--
Monday Club Building, 610 Main Street	--
TOTAL	75

Source: City of Fortuna General Plan Update Background Report, 2007.

City of Rio Dell

The City of Rio Dell does not own parkland and does not operate recreation facilities and programs. Within the City of Rio Dell, the Rio Dell School and Rio Dell Fire Protection District have facilities that are used as parks by the community. The Rio Dell School District grounds contain tennis courts and a baseball field that was constructed using grant funds secured by the City of Rio Dell. There is a playground, picnic area, and bocce court within property owned by the Rio Del Fire Protection District. The following is a list of park facilities within the City of Rio Dell:

Table 9-5. City of Rio Dell Recreation & Park Facilities

Park Name	Size in Acres
Fireman's Park, 50 West Center Street	3
Rio Dell School District, Davis Street @ 4 th Avenue	3
TOTAL	6

Source: Humboldt County Community Development Services, 2007.

City of Ferndale

The City of Ferndale operates and maintains several park facilities. The following is a list of park and recreation facilities operated by the City of Ferndale:

Table 9-6. City of Ferndale Recreation & Park Facilities

Park Name	Size in Acres
Fireman's Park, Berding Street	4.2
Russ Park, Bluff Street	97
TOTAL	101.2

Source: Humboldt County Community Development Services, 2007.

City of Ferndale parkland also includes Firemen's Pavilion located at Firemen's Park.

City of Blue Lake

The City of Blue Lake operates and maintains the following park and recreation facilities:

Table 9-7. City of Blue Lake Recreation & Park Facilities

Park Name	Size in Acres
Gymkhana Field, 210 Chartin Road	2.8
Perigot Park, 312 South Railroad Ave	5.6
Tot Lot, 4th and I Streets	0.25
TOTAL	8.65

Source: City of Blue Lake web page, <http://bluelake.ca.gov>, 2007.

City of Blue Lake parkland also includes the Victor Prasch Community Center located at Perigot Park.

City of Trinidad

The City of Trinidad operates and maintains a tennis court adjacent to City Hall as well as trails connecting the downtown area with the beach. The Trinidad School is also used by residents of the City as a park.

Table 9-8. City of Trinidad Recreation & Park Facilities

Park Name	Size in Acres
Tennis Courts, 409 Trinity Street	N/A
TOTAL	N/A

Source: City of Trinidad web page, www.trinidad.ca.gov, 2007.

Manila Community Services District

The Manila Community Services District provides park and recreation services and operates Manila Park, the Manila Dunes Community Center as well as the Manila Dunes Recreation Area comprised of beach and dune lands within the district that are used for hiking and beachcombing. The Manila Community Services District also operates recreation programs within the Manila Dunes Community Center.

Table 9-9. Manila CSD Recreation & Park Facilities

Park Name	Size in Acres
Manila Dunes Rec. Area & Community Center, 1901 Park Street	154.0
Manila Park, Lupin Avenue and Peninsula Drive	12
TOTAL	166.0

Source: Humboldt County Community Development Services, 2007.

McKinleyville Community Services District

The McKinleyville Community Services District operates and maintains several park facilities including Hiller Park, which contains ball fields, trails, and playground facilities, Pierson Park, the McKinleyville Activity Center, Azalea Hall, Larissa Park and playground area, and the Hiller and School Road trails. The McKinleyville Community Services District also operates a recreation program.

Table 9-10. McKinleyville CSD Recreation & Park Facilities

Park Name	Size in Acres
Hiller Sports, 795 Hiller Road	58.0
Pierson Park, 1608 Pickett Road	5.0
Larissa Park, Larissa Circle	0.3
TOTAL	63.3

Source: McKinleyville CSD web page, <http://mckinleyvillecsd.com/mcsdparks.htm>, 2007.

Resort Improvement District No. 1

The Resort Improvement District No. 1 operates and maintains a golf course facility and playground adjacent to the District office. The District owns a parcel of undeveloped land near the airport that may be developed with additional recreational uses in the future.

Table 9-11. Resort Improvement District No.1 Recreation & Park Facilities

Park Name	Size in Acres
Shelter Cove Golf Course, 1555 Upper Pacific Drive	35.0
Playground, 9126 Shelter Cove Road	0.25
TOTAL	35.25

Source: Resort Improvement District No. 1, 2007.

Willow Creek Community Services District

The Willow Creek Community Services District operates and maintains several park facilities including the Veterans Park which has a ball field, playgrounds, and picnic areas; Camp Kimtu campground and Kimtu Beach along the Trinity River; Creekside Park with disc golf, playgrounds, and a loop trail; Community Commons with a museum and farmer's market area, and the river trail network.

Table 9-12. Willow Creek CSD Recreation & Park Facilities

Park Name	Size in Acres
Kimtu Beach & Camp Kimtu, Kimtu Road	17.0
Veteran's Park, Kimtu Road	16.0
Creek Side Park, Willow Road	3.6
Community Commons, 38919 Hwy 299	1.2
TOTAL	37.8

Source: Willow Creek CSD, 2007.

North Humboldt Recreation and Park District

The North Humboldt Recreation and Park District (NHR&PD) was formed in 1968 to oversee planning, acquisition, and construction of a community swimming pool. The NHR&PD boundaries include the City of Arcata and extend east along West End Road to the Mad River Fish Hatchery, south to Jacoby Creek and Indianola, and west to Manila. The district operates the Arcata Community Pool facility, located on 16th Street adjacent to Arcata High School, which offers a variety of swimming related programs in cooperation with Humboldt State University - Center Activities. HSU has managed the pool facility since 1994. Prior to that time, the City of Arcata managed the pool.

The NHR&PD collects a portion of the one percent property tax as well as user fees to support its facilities and programs. The NHR&PD had an operating budget of approximately \$600,000 in 2005 (State Controller, 2005 Special Districts Annual Report).

Recreation and Park Districts are formed and operate pursuant to Section 5780 of the Public Resources Code and can provide community recreation services and acquire, construct and operate recreation, parks and open space facilities, both inside and beyond the district's boundaries. The NHR&PD has elected to limit the scope of its activities to acquiring and operating a community swimming pool (1973 SOI Report). Recreation and Park Districts are subject to the authority of the Humboldt LAFCo.

Rohner Community Recreation and Park District

The Rohner Recreation and Park District (RCR&PD) was formed in 1968 to oversee planning, acquisition, and construction of a community swimming pool. The district is governed by a five member Board of Directors, with two members appointed by the Fortuna City Council and three members appointed by the County Board of Supervisors. The district contains approximately 15 square miles, covering most of the Fortuna and Rohnerville Union School District boundaries. The RCR&PD received \$9,362 in property tax revenue and made \$12,651 in expenditures in 2004 (California Controller's Special Districts Annual Report, 2005). The district made several attempts to obtain grant funding in the 1970s to construct a community pool. Currently, the RCR&PD provides limited recreation services through the City of Fortuna Parks and Recreation Department.

9.2. Regulatory Framework

9.2.1. Park Classification and Land Requirements

The National Recreation and Park Association (NRPA) established standards and classifications for recreational facilities that are utilized by local agencies across the nation. NRPA classifications separate parks according to intended use and service area. The NRPA park classifications are often modified by the local agency to reflect local characteristics or community preferences. The following is a summary of NRPA park classifications:

Table 9-13. 1983 National Recreation and Park Association Standards

Classification	Acres/1,000 People	Size Range	Population Served	Service Area
Neighborhood Parks	1-2	15+ acres	A Neighborhood Approx. 5,000	1/4 – 1/2 mile
Community Parks	5-8	25+ acres	Several Neighborhoods	1 – 2 miles
Regional Metropolitan Parks	5-10	200+ acres	Several Communities	1 hour driving time
Special Areas	No Applicable Standard	Includes linear parks, trails, beaches, golf courses, historical sites, flood plains, coastal access ways, etc. No standard is applicable.		
Conservancy (Natural Areas)	No Applicable Standard	Protection and management of the natural/cultural environment with recreational use as a secondary objective.		

9.2.2. Quimby Act

The Quimby Act (Government Code Section 66477) was enacted by the California Legislature in 1965 to preserve open space and parkland in rapidly urbanizing areas of the state. The Quimby Act allows cities and counties to establish requirements for new development to dedicate land for parks, pay an in-lieu fee, or a combination of the two. The Quimby Act requires a city or county to adopt standards for recreational facilities in its general plan recreation element if it is to adopt a parkland dedication/fee ordinance.

It should be noted that the Quimby Act applies only to the acquisition of new parkland; it does not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act preserves open space needed to develop park and recreation facilities, but it does not ensure the development of the land or the provision of park

and recreation services to county residents. In addition, the Quimby Act applies only to residential subdivisions.

Humboldt County Quimby Act park dedication requirements are contained in the Humboldt County Zoning Code Section 314-110.1 (Parkland Dedication). The Parkland Dedication requirements use the following standards "public parkland and/or recreation facilities shall be provided at the rate of three (3) acres for each 1,000 persons, equal to a standard of 130 square feet per person." The Quimby Act establishes the standard of three acres of park area per 1,000 persons residing within a subdivision subject to this section. The Quimby Act further states that a standard of up to five acres per 1,000 persons could be established if the amount of existing neighborhood and community park area exceeds three acres of per 1,000 existing resident.

9.2.3. Humboldt County General Plan

Humboldt County Park policies and standards are contained in the Framework General Plan, Community Plans, and Zoning Ordinance (as described above). The Framework General Plan also includes by reference the Humboldt County Recreation Element (1976). The Recreation Element is subtitled "A Master Plan for the Development of County Parks and Recreation Areas." The Recreation Element contains goals, policies, and implementation measures, information and maps of County operated and other parks, and narratives describing how the element is to be used in guiding the planning and development of new parks. This element does not provide policies and standards regarding non-County parks.

In 1979, the Board of Supervisors adopted the Humboldt County Trails Plan, in response to the growing popularity of bicycling, horseback riding, jogging, and hiking. The Trails Plan was prepared to provide guidelines for establishing a safe, efficient, and enjoyable County trails program for the transportation and recreation needs of bicyclists, equestrians, hikers, and joggers and to increase participation in bicycling, horseback riding, and hiking activities which can provide physical, social, environmental, and economic benefits for County residents and tourists. Policies and standards contained in the Trails Plan were incorporated into the Framework General Plan Section 4300.

Parks and recreation policies in the Framework General Plan relate to trails and County parks. County trails related policies are contained in the Conservation and Open Space Element of the General Plan Update. The Framework Plan defers specific policies and standards to Community Plans with the following: "policies addressing community recreational needs shall be prepared as part of each community plan" (Policy 4430.7). As part of the General Plan Update, it may be appropriate to centralize parks and recreation policies and standards.

Framework General Plan parks and recreation policies are focused primarily on County parks; acquisition of facilities, supporting the needs of County residents; long-term feasibility; encouraging the development of park facilities by private entities and coordination with other agencies; pursuing feasible sources of funding; and land planning coordination by County Parks Division. The Framework Plan does not identify levels of park service or how community and neighborhood park services are to be provided.

An example of detailed parks and recreation background information, policies and standards can be found in the Eureka Community Plan. The following is excerpted from the Eureka Community Plan:

4400 Parks and Recreation (Eureka Community Plan)

4410 Goal

1. To provide a well balanced system of park and recreation facilities offering a variety of active, passive and cultural recreational opportunities to all residents, and adequate to meet changing recreational needs of Planning Area residents.

4420 Policies

1. The County should encourage a Parkland Dedication fee to fund development of new parkland. The County is encouraged to accept dedication of parkland when a means of securing funding for maintenance, administration and operation of the parkland is created or available.

2. The County shall not exercise the option of accepting in-lieu fees for development of parkland on the McKay Tract South, Robinson/Dunn and Barry properties. At least 5 acres of usable land shall be dedicated for parkland on each of these three tracts during the subdivision phase (the land dedication shall be required when at least 51 lots are created through subdivision). While the dedication of parkland shall not be required until 51 lots are created, no subdivision of land shall occur without a determination being made as to where the park will be located in the future plan.

3. The terrain of park sites should be suitable to accommodate both active and passive recreational activities. The terrain for each 5 acre park shall consist of relatively flat, stable land usable for softball/soccer fields and basketball courts. A small portion of the land may be wooded and sloped to allow for passive recreation uses.

4. Parks should be located and sized and should contain appropriate facilities to serve both the existing and projected population within each service radius.

5. Park sites should be provided with adequate water supply, sewer, police and fire protection services, and should be accessible by foot, bicycle, and automobile.

6. Neighborhood and community park and recreation facilities should, to the extent possible, be located in predominantly residential areas.

7. To the extent possible, all parklands should be dedicated and held inviolate in perpetuity, protected by law against diversion to non- recreational purposes and against invasion by inappropriate uses.

8. The County shall explore funding to develop future recreational programs for each of the proposed parkland areas. This may involve the creation of a County Service Area or other improvement district.

9. The County shall attempt to utilize one of the proposed park sites for youth programs such as those provided by Eureka Babe Ruth Baseball, Redwood Empire Little League, Connie Mack and American Legion, and the Youth Football and Soccer organizations. The County shall be encouraged to develop any facilities for structured recreational activities when such structured activities can be developed, operated and managed by a qualified organization willing and able to accept such responsibility on a long-term basis.

The McKinleyville Community Plan (2002) contains even more specific policies and standards. The following is an excerpt from the McKinleyville Community Plan:

4322 Policies

1. As new development is approved, the goal of this Plan is to ensure that the combined amount of Humboldt County and MCSD park land meet the following minimum standards:

A. Community park land at 3 acres per 1,000 population.

B. Neighborhood and mini park/tot lots at 2 acres per 1,000 population.

C. 50-70% of community and neighborhood parklands should be designated as “natural parks,” as defined herein. For purposes of achieving this policy, state and federal lands do not count toward the community standards set forth above, nor do riparian/wetland open spaces not designated for public access otherwise required in the Community Plan.

2. Humboldt County shall require all new residential development to offer to dedicate land or pay a park fee for public parks sufficient to achieve the above standards.

3. For purposes of compliance with the Quimby Act, the facilities identified in the MCSD Recreation Plan as summarized in Tables I and II of this section are hereby recognized for acquisition and development.

4. The development of private sector recreation facilities shall be encouraged in addition to the above, but shall not substitute for them.

5. Joint public-private development of recreation facilities shall be encouraged.

4323 Standards

1. As development occurs, public neighborhood parks/open space/greenways augmenting the width of trails shall be provided within one-half mile or less for residents living within the urban limit zone of McKinleyville, without pedestrians/bicyclists having to cross major physical or heavy traffic barriers.

2. In the design and maintenance of parks, consideration should be given to impacts on wildlife and impacts on surrounding residential neighborhoods. In particular, it should be recognized that native plant species may be best suited for providing wildlife cover and food sources, and that herbicides, pesticides, and fungicides may be damaging to native plants, wildlife, and people.

3. The design and location of parks shall include features to promote the security of park users, including the incorporation of “safewalk,” “neighborhood watch,” and community-based policing principles and techniques.

4. The County shall develop a schedule for the use of land and fees collected under parkland dedication provisions, including mechanisms for tracking the expenditure of funds for a five-year period in coordination with the MCSD on implementation of their Recreation Plan (i.e., develop a Memorandum of Agreement).

The Freshwater and Jacoby Creek Community Plans also have policies relating to parks and recreation; however, most other Community Plans have only trails related policies.

The policies and standards contained in the McKinleyville and Eureka Community Plans should be used as a guide in developing Countywide parks and recreation policies. Policies should be considered that encourage special districts serving urban areas to provide parks and recreation services, where appropriate.

9.3. Parks and Recreation System & Capacity

The following table summarizes the availability of park and recreation facilities from an authorized local agency within USAs and WSAs and provides an indication as to whether or not such facilities would be available if requested by existing residents or required as a condition of project approval. Reference is also made to park facilities provided by school districts. The column with the heading “Authorized Local Agency” provides the name of the local agencies authorized to provide park and recreation services within the USA. The “Note” column describes other park facilities within the USA and/or indicates whether or not there are park facilities outside that USA that are within one mile of portions of the USA, and the steps that may be required for an existing local agency to become authorized to provide parks and recreation services to the USA.

Table 9-14. Summary of Parks and Recreation Facilities by Urban Study Area

USA	Community Park & Rec. Facilities ¹	Authorized Local Agency	Note
Alderpoint WSA	○	None	There are no neighborhood park facilities within one mile of the WSA. Pursuant to Water Code Section 31130, the Alderpoint County Water District may construct, maintain, and operate any works or facilities appropriate or ancillary to such recreational use with LAFCo approval. Alderpoint however, may not have a sufficient population base to support the development and maintenance of new park facilities.
City of Arcata	●	City of Arcata Northern Humboldt Rec. & Park District	See above list of City of Arcata park and recreation facilities
Arcata USA	○	None	The City of Arcata would be the most appropriate provider upon annexation. There are numerous neighborhood park facilities within one mile of the USA.
Big Lagoon WSA	⊙	None	With LAFCo approval the Big Lagoon CSD could provide park and recreation services; however, Big Lagoon may not have a sufficient population base to support the development and maintenance of new park facilities. Big Lagoon School and Big Lagoon County Park may provide a sufficient level of park

USA	Community Park & Rec. Facilities ¹	Authorized Local Agency	Note
			services for portions of this WSA
City of Blue Lake	●	City of Blue Lake	See above list of City of Blue Lake park and recreation facilities. There are numerous neighborhood park facilities within one mile of the USA.
Blue Lake USA/WSA	○	None	The City of Blue Lake would be the most appropriate provider upon annexation. There are numerous neighborhood park facilities within one mile of the USA.
Benbow WSA	⊙	None	If a local agency is formed to operate the local private water system, enabling park and recreation powers should be considered. Only regional level facilities (Benbow Golf Course and Benbow State Park) are available within one mile.
Briceland WSA	⊙	None	With LAFCo approval the Briceland CSD could provide park and recreation services; however, Briceland may not have a sufficient population base to support the development and maintenance of new park facilities. Skyfish Charter School may provide a sufficient level of park services for this WSA
City of Eureka	●	City of Eureka	See above list of City of Eureka park and recreation facilities. There are numerous City of Eureka neighborhood park facilities within one mile of the Myrtle town and South Eureka USA.
City of Ferndale	●	City of Ferndale	See above list of City of Ferndale park and recreation facilities
Fieldbrook WSA	○	None	With LAFCo approval the Fieldbrook CSD could provide park and recreation services; however, Fieldbrook may not have a sufficient population base to support the development and maintenance of new park facilities. Fieldbrook School may provide a sufficient level of park services for portions of this WSA.
City of Fortuna	●	City of Fortuna, Rohner Rec. & Park District	See above list of City of Fortuna park and recreation facilities. There are numerous City of Eureka neighborhood park facilities within one mile of the Fortuna USA.
Fortuna USA	●	Rohner Rec. & Park District	The City of Fortuna would be the most appropriate provider upon annexation. There are neighborhood park facilities within one mile of portions of the USA.
Freshwater WSA	⊙	None	With LAFCo approval the Humboldt CSD could provide park and recreation services. Freshwater County Park and

USA	Community Park & Rec. Facilities ¹	Authorized Local Agency	Note
			Garfield and Freshwater Schools may provide a sufficient level of service for portions of this WSA.
Garberville USA/WSA	⊙	None	The Garberville SD has expressed interest in reorganizing as a CSD. With LAFCo approval a reorganized Garberville CSD could provide park and recreation services. Tooby Memorial Park operated by the Southern Humboldt Community Park Association may provide an adequate level of park services for this USA/WSA.
Glendale USA/WSA	○	None	With LAFCo approval the Fieldbrook CSD could provide park and recreation services.
Humboldt Hill USA	⊙	None	With LAFCo approval the Humboldt CSD could provide park and recreation services. South Bay Elementary School may provide a sufficient level of service for portions of this USA.
South Eureka USA/WSA	⊙	None	With LAFCo approval the Humboldt CSD could provide park and recreation services. Cutten Elementary, Ridgewood Elementary, Pine Hill Elementary, and Winship Middle School and Redwood Fields (described above) may provide a sufficient level of park services for portions of this WSA.
Hydesville USA/WSA	⊙	None	The Hydesville County Water District may construct, maintain, and operate any works or facilities appropriate or ancillary to such recreational use with LAFCo approval. Hydesville School may provide a sufficient level of park services for portions of this WSA.
Indianola WSA	⊙	Northern Humboldt Rec. & Park District	The northern portion of the Indianola WSA is within the Northern Humboldt Rec. & Park District; however this district only provides one service at a regional level. There are no neighborhood park facilities within one mile of the WSA.
Jacoby Creek WSA	⊙	Northern Humboldt Rec. & Park District	The Jacoby Creek County Water District may construct, maintain, and operate any works or facilities appropriate or ancillary to such recreational use with LAFCo approval. Jacoby Creek School may provide a sufficient level of service for portions of this WSA.
Loleta USA	⊙	None	With LAFCo approval the Loleta CSD could provide park and recreation services; however, Loleta may not have a sufficient population base to support the

USA	Community Park & Rec. Facilities ¹	Authorized Local Agency	Note
			development and maintenance of new park facilities. Loleta School may provide a sufficient level of service for this WSA.
Manila USA	●	Manila CSD Northern Humboldt Rec. & Park District	See above list of Manila CSD park and recreation facilities
McKinleyville USA/WSA	●	McKinleyville CSD	See above list of McKinleyville CSD park and recreation facilities
Miranda USA	⊙	None	With LAFCo approval the Miranda CSD could provide park and recreation services; however, Loleta may not have a sufficient population base to support the development and maintenance of new park facilities. South Fork High School may provide a sufficient level of service for portions of this USA.
Myrtle town USA/WSA	⊙	None	With LAFCo approval the Humboldt CSD could provide park and recreation services. Lafayette Elementary School and Redwood Acres Fairground may provide a sufficient level of service for portions of this USA/WSA.
Myers Flat WSA	○	None	There are no special districts serving Redcrest and there are no neighborhood park facilities within one mile of the WSA.
Orick USA	⊙	None	With LAFCo approval the Orick CSD could provide park and recreation services. Orick Elementary School may provide a sufficient level of service for portions of this USA/WSA.
Orleans WSA	⊙	None	With LAFCo approval the Orleans CSD could provide park and recreation services. Orleans Elementary School may provide a sufficient level of service for portions of this USA/WSA.
Phillipsville WSA	○	None	With LAFCo approval the Phillipsville CSD could provide park and recreation services. There are no neighborhood park facilities within one mile of the WSA.
Redcrest WSA	○	None	There are no special districts serving Redcrest and there are no neighborhood park facilities within one mile of the WSA.
City of Rio Dell	●	City of Rio Dell	See above list of recreation facilities in the City of Dell.
Rio Dell USA/WSA	○	None	Although the city does not directly provide parks and recreation it is authorized to do so. The City of Rio Dell would be the most appropriate provider upon annexation. See above list of recreation facilities in the City of Dell. There are several neighborhood park facilities within

USA	Community Park & Rec. Facilities ¹	Authorized Local Agency	Note
			one mile of the USA.
Redway USA	⊙	None	With LAFCo approval the Redway CSD could provide park and recreation services. Redway Elementary School may provide a sufficient level of service for portions of this USA/WSA.
Riverside WSA	○	None	With LAFCo approval the Riverside CSD could provide park and recreation services however, Riverside may not have a sufficient population base to support the development and maintenance of new park facilities. There are no neighborhood park facilities within one mile of the WSA.
Scotia USA	●	None	PALCO is pursuing the formation of a CSD that would operate the existing company owned park and recreation facilities in Scotia.
Shelter Cove USA/WSA	⊙	Resort Improvement District No. 1	See above list of recreation facilities in Shelter Cove.
Samoa USA	●	None	The Samoa Pacific Group is processing a Local Coastal Plan amendment for the Samoa Townsite which contains existing parks and recreation facilities. It is not known at this time how these facilities will be operated in the future. Peninsula School may also contribute to the level of service for portions of this USA.
City of Trinidad	●	City of Trinidad	See above list of recreation facilities in the Trinidad.
Willow Creek USA/WSA	●	Willow Creek CSD	See above list of recreation facilities in Willow Creek. Trinity Valley School may also contribute to the level of service for portions of this USA/WSA.
Weott USA	⊙	None	With LAFCo approval the Weott CSD could provide park and recreation services. Agnes J. Johnson School may provide a sufficient level of service for portions of this USA.
Westhaven WSA	○	None	With LAFCo approval the Westhaven CSD could provide park and recreation services. There are no neighborhood park facilities within one mile of the WSA.

¹ ○ = Not available ⊙ = Some services available ● = Available throughout USA

9.4. System Expansion

9.4.1. Overview

As new urban development is planned within Humboldt County, policies should be added to the General Plan that guide the development and maintenance of new park and recreation facilities. As described above, several of the existing community plans contain clear park policies and standards that, with modification to reflect the differences between rural and urban areas, could be applied Countywide. Policies should be included requiring the establishment of assessment or special tax districts, or other adequate mechanisms, to fund the ongoing operation and maintenance of facilities. Because parks would be available to existing and new development alike, policies should also encourage the establishment of funding mechanisms that reach all potential park and recreation beneficiaries. In addition, there should be policies encouraging existing community services districts to seek LAFCo approval to provide parks and recreation services within their districts.

Section 12.2..10 (Parks and Recreation) describes many of the actions that would be required to create and maintain new park and recreation facilities in the urban areas of the County. The following is a brief summary of actions that may be required to provide park and recreation services in urban areas.

9.4.2. Policy Considerations

The Eureka and McKinleyville Community Plans could serve as a solid foundation for the development of Countywide policies and standards.

Organization

Outside of the jurisdictions identified above as having the authority to provide parks and recreation services, LAFCo action would be required to either: (1) extend the boundaries of an authorized district, (2) authorize an existing district, or (3) create a new district to provide services. It may also be necessary to establish special policies and standards to reflect the requirements of specific districts or policies that defer to local district standards.

Funding

Adequate and feasible funding mechanisms will be critical to the success of any program to improve opportunities for parks and recreation in the unincorporated areas of the County. The three essential elements will be (1) finding a way to appropriately distribute costs between existing and new development; (2) establishing varied funding mechanisms for new construction and ongoing maintenance such as fees, assessments, and special taxes; (3) adopting plans, in cooperation with local providers, to prioritize neighborhood park improvements Countywide.

10. Schools

This section addresses school district capacity and facilities within the County. Included in this section are a description of current enrollment, future enrollment, and service capacity.

10.1. Description

Humboldt County communities are served by 32 public school districts, private schools, and schools operated by the Humboldt County Office of Education. The largest district in the County in terms of enrollment is the Eureka City Unified School District, which has almost 4,500 students. There are four other districts with enrollments over 1,000 students. Average district enrollment in Humboldt County is approximately 550 students.

10.1.1. Current Enrollment

The following is a listing of school districts and total district enrollment:

District	Enrollment			Average Annual Growth Rate
	1990	2000	2007	
Arcata Elementary	910	899	924	0.09%
Big Lagoon Union Elementary	57	65	49	-0.89%
Blue Lake Union Elementary	355	217	155	-4.76%
Bridgeville Elementary	120	68	48	-5.25%
Cuddeback Union Elementary	132	137	116	-0.76%
Cutten Elementary	576	513	578	0.02%
Eureka City Unified	6,121	5,701	4,426	-1.89%
Ferndale Unified	515	524	472	-0.51%
Fieldbrook Elementary	183	104	107	-3.11%
Fortuna Union Elementary	703	783	734	0.25%
Fortuna Union High	864	1,231	1,218	2.04%
Freshwater Elementary	333	300	315	-0.33%
Garfield Elementary	34	61	59	3.30%
Green Point Elementary	21	18	12	-3.24%
Hydesville Elementary	215	157	150	-2.10%
Jacoby Creek Elementary	408	401	391	-0.25%
Klamath-Trinity Joint Unified	1,257	1,153	1,043	-1.09%
Kneeland Elementary	51	32	20	-5.36%
Loleta Union Elementary	170	326	313	3.66%
Maple Creek Elementary	16	18	11	-2.18%
Mattole Unified	126	610	771	11.24%
McKinleyville Union Elementary	1,511	1,408	1,175	-1.47%
Northern Humboldt Union High	1,544	2,050	1,872	1.14%
Orick Elementary	105	57	45	-4.86%
Pacific Union Elementary	650	609	517	-1.34%
Peninsula Union Elementary	104	88	36	-6.05%
Rio Dell Elementary	377	313	280	-1.73%
Rohnerville Elementary	553	594	673	1.16%

District	Enrollment			Average Annual Growth Rate
	1990	2000	2007	
Scotia Union Elementary	267	356	210	-1.40%
South Bay Union Elementary	638	526	533	-1.05%
Southern Humboldt Joint Unified	1,589	1,277	762	-4.23%
Trinidad Union Elementary	254	120	144	-3.28%
Humboldt County Schools	313		438	2.00%
TOTAL	21,072	20,716	18,597	-0.48%

Source: California Department of Education, Humboldt County Office of Education, 2007.

Although some schools have experienced growth, public school enrollment in the County has declined at an average annual rate of approximately 0.5 percent per year since 1990. The County's largest schools have experienced the most significant enrollment changes:

- Eureka City Unified (Eureka elementary and high schools unified in 1998) saw a decline in enrollment of almost 28 percent between 1990 and 2007, while during the same period the City's population grew at a rate of approximately 0.7 percent. The Eureka Unified School District also includes portions of the South Eureka and Myrtle town USAs, which grew at a faster rate than the City during this period.
- Southern Humboldt Joint Unified declined by 52 percent during this period. Between the 1990 and 2000 Census, the Garberville Census County Division (roughly similar in area to the school district) experienced a nominal growth rate of 0.02 percent.
- Fortuna Union High grew by 41 percent during this period. Fortuna Union High grew at an annual average growth rate of two percent, which is greater than the growth of the Fortuna Census County division between the last two Censuses, or 1.25 percent.

There have also been significant enrollment changes in the smaller school districts. The Orick and Bridgeville School Districts lost approximately 60 percent of total enrollment between 1990 and 2007, dropping from 105 to 45 and 120 to 48 students, respectively. The Peninsula Union Elementary, which services Samoa and Fairhaven, declined by 74 percent, from 104 to 36 students during the same period.

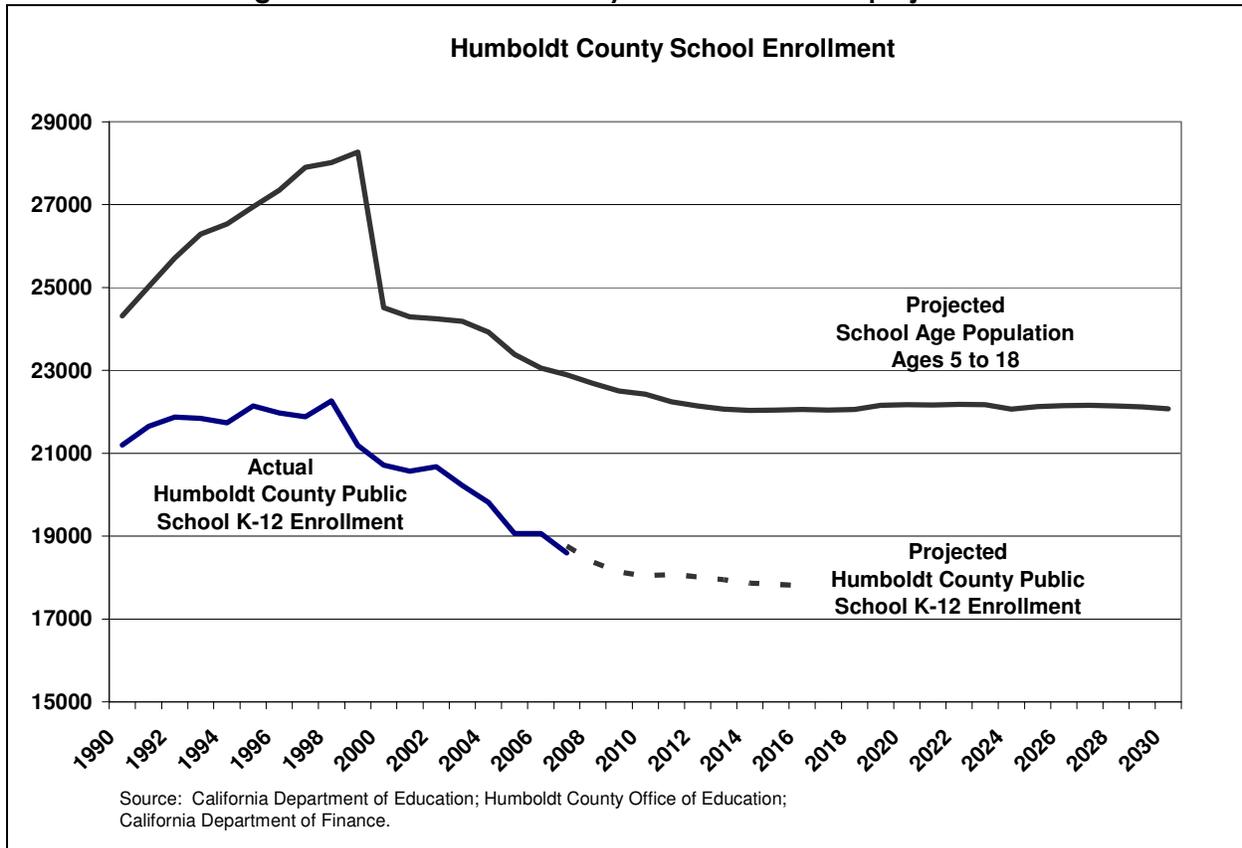
Declines in enrollment have contributed to decisions by districts to close school sites over the last ten to fifteen years. Within the Eureka Unified School District, Marshall Elementary School closed in 2001 and is currently used as part of the high school campus; Worthington Elementary School closed in 2003 and is used for adult education services; and Jefferson Elementary closed in 2006. The Osprey Learning Center in Garberville was closed and moved to the South Fork High School campus in Miranda.

10.2. System Expansion

The decline in Humboldt County school enrollment is expected to continue. Figure 10-1 shows the change in actual enrollment between 1990 and the present as well as projected enrollment between 2007 and 2016 (California Department of Finance School Enrollment Projections by County, 2007). During this period, enrollment is expected to decrease at an annual average rate of 0.6 percent per year, or a total of -5.1 percent. This figure also shows school-age population projections from the Department of Finance school-age population (total persons in Humboldt County between the ages of five and 18) is expected to continue to decline at an

annual average rate of 0.16 percent per year between 2007 and 2030 (California Department of Finance Population Projections with Age Detail, 2000–2050, 2004 and 2007).

Figure 10-1. Humboldt County school enrollment projections.



The differences between school-age population projections and school enrollment projections that are visible on the preceding graph likely reflect the fact that a proportion of Humboldt County children enroll in private schools, are home schooled, or not enrolled in school.

Based on Department of Finance demographic projections, the school-age population is expected to increase slightly between 2015 and 2030. Given how closely enrollment moves with changes in school-aged population, it is likely that total County school enrollment will increase slightly or remain constant during the planning period. However, projected changes in County-wide school-age population or enrollment are not good indicators of enrollment changes in individual districts. Instead, expected community growth rates, based either on past growth rates or the knowledge of local real estate experts may be a better indicator of changes in enrollment of a specific district.

USAs that are likely to grow over the planning period are concentrated in and around the Humboldt Bay area and include: the McKinleyville USA and WSA; the USAs and WSAs served by the Humboldt Community Services District (Humboldt Hill, Myrtle town, and South Eureka); the Glendale USA and WSA; and the Samoa USA. The following table shows the estimate of potential dwelling units (potential development or the full build-out of residential land based on a likely density, not relating to a rate of growth or time period) for each of the USA/WSAs listed above and the school districts that serve the areas.

Table 10-1. Humboldt County school districts expected to grow over the planning period.

Urban Study Area	Estimates of Potential Development (Housing Units)		School Districts	
	Low	High	Elementary	High School
McKinleyville USA/WSA	2,347	4,249	McKinleyville Unified	Northern Humboldt Union High
Humboldt Hill USA	963	2,070	South Bay Union Elementary	Eureka Unified
Myrtle town USA/WSA	521	1,102	Eureka Unified	Eureka Unified
South Eureka USA/WSA	2,700	8,095	Cutten Elementary, South Bay Union Elementary	Eureka Unified
Glendale USA/WSA	21	1,190	Arcata Elementary, Blue Lake Union Elementary	Northern Humboldt Union High
Samoa USA	0	319	Peninsula Union Elementary	Eureka Unified

Other areas of particular interest include the Fortuna and Samoa USAs. The City of Fortuna is experiencing higher levels of growth than the County as a whole and is currently in the process of updating its General Plan. Based on the City's General Plan background information, between 1,514 and 2,893 new housing units could be developed within the City in the next 20 years. This development would occur within the Fortuna Union, Rohnerville, Hydesville, and Fortuna Union High districts. With the exception of Hydesville, all of these school districts have experienced enrollment growth over the last 15 years. The Fortuna General Plan Update background report indicates that all schools (with the exception of continuation and community day schools) are currently below capacity.

The Samoa Town Master Plan is proposed within the Samoa USA and would result in approximately 300 new housing units during the planning period. New students in the Samoa USA would attend schools in Peninsula Union Elementary and Northern Humboldt Union High School Districts. Enrollment in Peninsula Union Elementary District declined by 65 percent between 1990 and the present, and Northern Humboldt Union High School District grew by over 20 percent during the same period. The Samoa Town Master Plan Master EIR concluded that the new enrollment resulting from the proposed project would not, in an of itself, exceed the capacity of schools within the districts, as both districts are well below capacity.

In estimating the potential impact of development on schools, future enrollment is often projected using student yield factors published by the State of California Office of Public School Construction. The Office of Public School Construction assumes that 0.5 elementary school students and 0.2 high school students (or 0.7 unified school district students) are expected from each new dwelling unit (Form SAB-50-01). As new subdivisions in each USA are proposed, these factors, or other factors established by the respective school district, should be applied to evaluate potential effects on the local district.

10.2.1. Policy Considerations

There is a connection between Humboldt County General Plan and school planning and operations. It is important that Humboldt County land use planning decisions be closely coordinated with school districts to ensure that school capacity is available when student

enrollment increases. Planning decisions should also include funding consideration for school facility related impacts. In addition, Section 9, Parks and Recreation, indicates that school facilities are often utilized as community neighborhood park facilities. As such, school districts should be included in park and recreation related planning.

10.2.2. Funding

Ongoing school funding is determined by the California Legislature. Approximately 40 to 50 percent of local property tax revenue is transferred to the State to fund schools, in conjunction with other State general fund revenue. Proposition 98, passed by the voters in 1988, amended the State Constitution to guarantee a minimum level of funding for K-12 schools, based on overall state revenue levels. K-12 education remains the single largest State budget program area, accounting for almost a third of total spending.

School Facilities Funding

Unlike funding for ongoing education services, property owners and developers often fund a portion of the cost of new school facilities. The State of California School Facility Program allows K-12 school districts to apply for funding to buy land, construct new buildings, and modernize or renovate existing buildings. The amount of funding available to a school district is based on a formula that considers the number of students a district expects to enroll that cannot be served in existing facility space. This program requires the state and school districts to share the cost of facilities. For new construction projects, the cost is shared equally by the state and school districts. For modernization projects, the state pays 60 percent and school districts pay 40 percent of the cost. If a school district faces unusual circumstances, it may apply for "hardship" funding from the state to offset its local share of costs.

There are only a few sources that local school districts can draw from to fund their share of the cost of new construction or modernization projects: (1) school general funds or donations; (2) local general obligation bonds; (3) impact fees; or (4) Mello Roos Community Facilities District bond funds. Aside from school funds and donations, Humboldt County schools use general obligation bonds and impact fees to fund the local share of school facility projects.

There are six school districts that have implemented fee programs. Impact fees are imposed on new development within the district and are collected at the city and County building permit counters, on behalf of the school district. The McKinleyville Union Elementary implemented the first school impact fee program in the early 1990's. The following is a listing of school impact fees in Humboldt County:

Table 10-2. Summary of school impact fees in Humboldt County

School District	Land Use Type	Fee Amount (\$/Square Foot)
Ferndale	Residential	\$0.28
	Commercial	\$0.005
	Rental Storage	\$0.003
Fortuna	Residential	\$1.92
Hydesville	Residential	\$0.25
McKinleyville Union	Residential	\$0.75
	Commercial	\$0.26
Pacific Union	Residential	\$2.05
	Commercial	\$0.33
Rohnerville	Residential	\$2.24
	Commercial	\$0.036
	Mini Storage	\$0.001
	Lodging	\$0.018
	Industrial	\$0.027
	Shopping Center	\$0.028

Source: Humboldt County Building Inspection Division, 2007.

11. Public Utilities

This section addresses public utility services within the County. Public utilities include electricity, natural gas, and telecommunications. Included in the section are a description of existing service providers, a discussion of system standards, an assessment of both level of service and unserved areas and recommendations for future service delivery.

11.1. Description

11.1.1. Electricity

Electricity service for most of the unincorporated area is provided by Pacific Gas & Electric Company (PG&E). Other providers of electricity in Humboldt County are as follows: in the Shelter Cove area electricity is provided by Resort Improvement District No. 1, in the Town of Scotia by the Pacific Lumber Company, and in the Town of Samoa by the Samoa Pacific Group. However, as the Towns of Samoa and Scotia develop, or property within the towns is sold, PG&E will likely assume ownership of the electric distribution systems.

Power in Humboldt County comes from PG&E statewide power transmission facilities, the PG&E Humboldt Bay power plant, and several local power generators. PG&E is regulated by the California Public Utilities Commission (CPUC), which establishes rules for operation, customer rates, and PG&E's rate of return. PG&E operates transmission and distribution lines throughout the County and approximately 35 electric substations to serve local communities. The PG&E electric distribution system serving the urban study areas is largely in place, and PG&E is obligated to provide service to users within its service area. New service requests, or requests for additional service, are generally governed by CPUC approved Rule 15 (Distribution Line Extensions) and Rule 16 (Service Extensions). Among other things, the line extension rules specify the allocation of construction cost between PG&E and the customer.

The Resort Improvement District No. 1 is the other entity that establishes rates and provides electric service to multiple privately owned properties. Unlike PG&E, Resort Improvement District No. 1 is a government entity and is not subject to regulation by the CPUC. The Resort Improvement District No. 1 is regulated by the locally elected district Board of Directors, who establish rates, charges, and standards for service. PG&E transmission facilities extend to a substation in Shelter Cove. Resort Improvement District No. 1 operates and maintains the substation as well as its own distribution facilities that serve the residents of the district. Resort Improvement District No. 1 also maintains three 500 kW diesel generators that provide backup service within the district when there are problems with PG&E service.

11.1.2. Natural Gas

Natural gas service within Humboldt County is also provided by PG&E and regulated in a manner similar to electric service. Although natural gas is produced in Humboldt County (Tompkins Hill and Grizzly Bluff gas fields), most natural gas consumed in the County comes from the PG&E natural gas transmission facility that runs from Red Bluff in the Central Valley and ends in Alton.

Natural gas is generally available to residents of the broader Humboldt Bay area communities and as far south as Scotia. As with electricity, PG&E is obligated to provide service to users

proximate to its natural gas facilities. New service requests or requests for additional service are generally governed by Rule 15 (Gas Main Extensions) and Rule 16 (Gas Service Extensions). Where natural gas is not available, residents can purchase propane for cooking and heating, from a variety of suppliers.

11.1.3. Telecommunications

According to "Living in a Networked World: Humboldt County Telecommunications Infrastructure and Usage Assessment" (Neratech, 2004) there are several telephone service providers (local exchange carriers) in Humboldt County: AT&T (formerly Pacific Bell or SBC Communications), Verizon (formerly GTE), and Frontier Communications (formerly Citizens Communications). AT&T provides service to the Humboldt Bay area, and north along U.S. 101 to Big Lagoon and south to the Avenue of the Giants. Verizon provides service to the east County area (Willow Creek, Hoopa, Orleans), Orick, and Southern Humboldt (Garberville/Redway, Alderpoint, and Shelter Cove). Frontier Communications provides service to the Ferndale and Petrolia areas. Like electricity and natural gas service, the CPUC establishes rules for telephone service operations, customer rates, and rates of return.

Not all areas within Humboldt County receive telephone service. Assembly member Patti Berg, and her predecessor Virginia Strom Martin, sponsored Assembly Bills to establish grant funds to extend telephone service to unserved areas. Humboldt County is one of several rural counties across the state that contains communities that do not receive telephone service and due to local income levels cannot afford the line extension costs. The Rural Telecommunications Infrastructure Bill provides grant funds from the CPUC to extend local exchange carrier service to previously unserved areas. Areas without telephone service include portions of the upper Yurok Reservation and the Mad River area.

In addition to the local exchange carriers that provide "plain old telephone service", or POTS, as well as other services to Humboldt County communities, there are wireless telephone companies and cable providers that also provide a range of telecommunications services. Suddenlink (formerly Cox Communications) provides cable television, broadband internet, and telephone service to households in or near the urbanized areas. Starstream Communications provides cable television and broadband internet to the Garberville and Redway area, and Almega Cable provides cable television service to Orick and Willow Creek. In addition, there are a number of cell, or wireless, telecommunications companies that provide telephone, text messaging, and other data services throughout most of the County.

Broadband

It should be noted that Humboldt County can be isolated by outages in the AT&T optical fiber line that carries broadband communications from Humboldt County to the rest of the world through a southern alignment along the U.S. 101 right of way. Prior to the installation of the AT&T optical fiber line, Humboldt County broadband communications followed a microwave link east across the mountains to the optical fiber network. There have been three notable broadband outages due to cuts in the optical AT&T fiber line. The microwave link, which is still operational, is not capable of carrying the same volume of traffic. As a result, Humboldt County will periodically be isolated by outages until a second optical fiber link is established. Policies regarding broadband communications are contained in the Economic Development Element.

11.2.Regulatory Framework

As described above, electricity, natural gas, and telephone providers are regulated by the CPUC. The rules relating to service delivery and rates and charges associated with providing and extending service are set forth in the respective public utilities tariff book. The CPUC adopts General Orders that establish rules for all utilities or a class of utilities, as opposed to decisions rendered in a particular case for a particular utility. As a result, the County has little involvement in the operations of public utilities. Examples of General Orders relating to the utilities analyzed in this section include:

- **General Order 95**, Overhead Electric Line Construction, establishes uniform requirements for overhead electrical line construction to ensure adequate service, and overhead electrical line construction, maintenance, and operation safety.
- **General Order 128**, Construction of Underground Electric Supply and Communication Systems, establishes uniform requirements for underground electrical supply and communication systems to ensure adequate service and safety in construction, maintenance, operation or use.
- **General Order 159**, Construction of Cellular Radiotelephone Facilities in California, establishing procedures for the siting, design, and construction of cell sites and providing and deferring to local government to regulate location and design.
- **General Order 112**, Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission, and Distribution Piping Systems.

The County's interaction with public utilities is confined to franchise agreements, referrals regarding development applications, and activities within the County rights of way, and land use approvals. The Humboldt County Framework General Plan contains two policies regarding transmission and pipelines that encourage the avoidance of tourist and recreation areas and agricultural lands when siting electric transmission lines. Other local jurisdictions often have public utilities related land use policies and standards regarding the undergrounding of utilities, coordination in service planning, energy conservation, and facilities siting.

11.3.Public Utilities System Capacity

Public utilities are reasonably adequate in Humboldt County with the following exceptions: (1) lack of telecommunications in certain rural Humboldt County communities; and (2) lack of redundancy in Humboldt County's connection to the fiber optics network. Humboldt County should closely coordinate with public utility providers to ensure that services are available to all areas where development is occurring and where additional utility needs affect existing development.

11.4.Public Utilities System Expansion

11.4.1. Policy Considerations

There is a connection between Humboldt County General Plan and public utility planning and operations. It is important that Humboldt County land use planning decisions be closely coordinated with public utilities to ensure that service capacity is available when new development occurs. In addition, policies regarding reliable broadband internet infrastructure and accessible broadband services for rural communities are included within the Economic Development Element.

12. Implementation

The focus of this Chapter is the identification of potential capacity building and funding opportunities for infrastructure and service providers in Humboldt County. A considerable portion of facilities and systems serving the area are in poor condition. Improving local infrastructure is fundamental to the implementation of the General Plan.

If requested by the service providers, the County could take a more prominent role in assisting and facilitating infrastructure maintenance and development, especially in more rural areas. Historically, the County has provided water and sewer services through several County Service Areas. To be successful the County needs to take a more active role in these services. Currently, the County is responsible for land use planning and infrastructure, such as roads, storm drainage and community services such as law enforcement, and governance of one Fire District. For other services, communities rely on a multitude of individual special districts to provide water, sewer and fire protection.

The following sections summarize capacity building and funding opportunities for each report topic area, with a focus on funding eligibility, program requirements, and financing terms. In addition, more information on infrastructure funding programs is provided in the attached appendices. Appendix B contains a summary of infrastructure funding opportunities, for community facility projects, roadways, wastewater, and water projects produced by the California Financing Coordinating Committee. Appendix C provides information on roadway and transportation programs. Appendix D contains a summary of infrastructure programs for rural communities, compiled by the United States Department of Agriculture.

12.1. Capacity Building

12.1.1. Water and Wastewater

This report finds that service providers are not setting fees and charges at a level sufficient to adequately invest in existing systems. While the rates may be sufficient to cover cash needs they generally do not cover enough of the depreciation expense. These funds should be accumulating as reserves so that the agencies can replace the existing facilities when that becomes necessary.

Rates and Charges. The majority of this report is an analysis of the current condition of water and water systems and improvements required for these systems to serve new development. This report finds that monthly rates and new connection fees are generally inadequate to cover the full cost of providing services. Very few service providers have an up to date capital improvement plan, which should be one of the basic tools used in rate setting. Rate payers are very suspicious of local agencies and tend to resist proposed rate increases without a comprehensive public information campaign. In addition, the protest procedures in Proposition 218 have added a new hurdle to rate increases. Because the process is often contentious and rarely pleases constituents, rates are infrequently updated and rarely include a component for capital replacement or operating reserve funds.

Local agencies operating water and wastewater systems must complete the planning required to establish adequate rates and connection fees. An important component of this effort will be the completion of long range facilities planning and the identification of loan and grant programs

that can provide assistance in improving facilities and infrastructure. In certain instances, voter approved special assessments or taxes may be appropriate to fund the improvement or rehabilitation of existing systems, in addition to rate increases.

Implementation: Establish monthly rates and connection fees to reflect the full cost of providing utility service.

Recommendations:

- **Support Grant and Loan Funding Requests.** Support requests for grant and low interest loan funds to reduce the local cost to fund major infrastructure improvements (a listing of grant and loan programs is included at the end of this section)
- **Capital Improvement Plans.** Facilitate the development of capital improvement plans
- **Pooled Costs/Shared Resources.** Identify opportunities for districts to reduce operating costs (similar to County Risk Management reducing district workman's compensation costs)
- **Fees and Charges.** Assist in the update of fees and service charges (public information, land use and demographic information, etc)
- **Assessments and Special Taxes.** Support the establishment of assessment or special tax districts to fund major infrastructure improvements

Infrastructure to Support New Development. There may be additional programs that can support major public improvements relating to new development. Impact fees, assessment and special tax districts may be established to finance the construction of public improvements to serve new development, such as water tanks, water distribution systems, and wastewater collection facilities and lift stations, etc. In such cases, projects are often funded through bond proceeds and assessments or special taxes are established to repay the debt. Fees are often used to reimburse agency or developer expenditures or accumulate funds for pay-as-you go projects.

Implementation: Coordinate with utility providers to implement the most appropriate programs.

Recommendations: Coordinate closely with utility providers and implement the appropriate infrastructure financing tools depending upon type, size, and location of development.

- **Coordinated Development Review.** Closely coordinate with local service providers in the evaluation of development proposals
- **Development Agreements.** As appropriate, involve service providers development agreement negotiations
- **Impact Fees.** Support the establishment of impact fees in addition to connection fees, where appropriate, to recover the full cost of development related impacts to utility systems.
- **Assessments and Special Taxes.** Support the establishment of assessment and special tax districts to fund the construction of major public improvements relating to new development

12.1.1.1. Association of Water and Wastewater Service Providers

Water and wastewater service providers in Humboldt County are confronted with serious operational challenges and few resources with which to address them. Challenges facing service providers include aging infrastructure, ever more stringent environmental regulations and accounting requirements, increasing personnel costs, difficulty recruiting qualified operators, and lack of funding. Although there is no simple solution, one way to begin to address these

challenges would be for service providers to come together cooperatively and share experience, resources, and ideas. Upon request, the County could be available to provide assistance.

A first step may be to establish an association of local water agencies. The following is a general description of a potential water resource association.

Purpose. To improve water quality and the capacity and level of service of all water and wastewater services providers in Humboldt County

Membership. Local government agencies and private/mutual water/wastewater companies involved in the provision of domestic water and wastewater services to Humboldt County communities and other allied agencies

Organization. A cooperative agreement or joint powers authority could be used to ensure clear understanding of benefits and responsibilities and to communicate the level of commitment from each member. All providers of water and wastewater services and appropriate allied agencies such as Humboldt County would be parties to the agreement.

Objective. To regularly meet to accomplish the following:

- **Exchange experience and information**
 - Share information regarding cost- or time-saving administrative and management strategies
 - Identify grant funds and loan programs
 - Share successful grant applications
 - Share rates and rate setting documentation
 - Share technical reports regarding new regulations and system improvements
- **Pool resources**
 - Share qualified operators (on a cost share basis or at no cost) with other agencies
 - Make available (on a cost share basis or at no cost) specialized tools and equipment
 - Cooperatively arrange for specialized consultants or technology as a group to achieve price breaks
 - Purchase costly equipment together and rotate use
- **Establish working groups to address specific issues affecting all members**
 - Regulatory or technology working group
- **Develop training programs**
 - Larger agencies could mentor operators from smaller agencies
 - Pool resources to bring in specialized trainers
- **Develop standardized procedures and programs**
 - With the assistance of organizations such as the Rural Community Assistance Corporation, Humboldt State University, College of the Redwoods, establish standardized models for:
 - permit renewal
 - facilities planning
 - projecting future service demands
 - sampling and data management procedures
 - establishing/updating rates/connection fees
 - capital improvement programs
 - annual reporting
- **Coordinate with Humboldt County**

- **Use the association as a forum for the following:**
 - close coordination with statewide funding programs
 - collaboration regarding evaluation of the effects of proposed regulations and suggested changes in existing regulations
 - assistance in development of grant applications
 - make possible watershed based source water and water quality planning
 - establish framework for early and regular consultation in land use development application and building permit review
 - distribute General Plan, Zoning maps, base mapping information, and facility maps (in all forms)
 - collaborate on land use planning
 - cooperate regarding development and regular update of growth projections
 - distribute information regarding service population by land use type
 - coordinate land use planning and capital improvement plans to ensure adequate phasing and provision of services,
 - exchange information such as annual reports pursuant to RWQCB wastewater permits (Waste Discharge Requirements and National Pollution Discharge Elimination System permits), Department of Water Resources water rights and Public Water System Statistics (PWSS) and Department of Health Services annual inspection reports and orders (Sanitary Sewer Overflows, Administrative Civil Liability Order, and Cease and Desist Orders)

12.1.2. Fire Protection

This report and other recent reports find that (1) funding for fire protection in Humboldt County is inadequate; (2) fire districts lack proper facilities, equipment, training, and administrative capacity; (3) fire district boundaries do not include all existing developed areas within USAs or the County as a whole; and (4) significantly different levels of fire protection are available throughout the County. The Humboldt County Fire Chiefs Association and Humboldt County Fire Safe Council, as well as Humboldt County are working to address some of the above findings; however, additional action is required.

District Boundaries. Significant portions of the County are outside the boundaries of fire protection districts. Most of this land is federal and state parkland, which may not need to be within the boundaries of a local agency, but numerous communities are not served by a fire related district. The USAs outside fire related district boundaries include Alderpoint, Benbow, Briceland, Scotia, Redcrest, Westhaven, and portions of numerous others. There are many other communities and developed areas outside USAs that are also outside district boundaries. Current boundaries were drawn to just include the developed area of the community that the district was formed to serve. As a result there are vast expanses of "no man's land" between districts. Districts regularly serve these areas with or without the LAFCo approval required by Government Code Section 56133.

Recommendations:

- **Expand District Boundaries.** All developed and developable land within the County should be within the boundaries of a fire related district. This objective may be difficult to achieve all at once. The following steps could be taken to accomplish this over time:
 - Encourage the inclusion of all developed land within the County in the boundaries of fire related districts.

- As a condition of discretionary project approval require that new development annex to fire related districts
- If annexation is not possible, establish a County Service Area(s) to provide fire protection services to unserved areas

Funding. Ongoing funding sources for the provision of fire protection services is limited to property tax (if the special district was formed prior to 1978); special taxes (approved by 2/3rds majority of registered voters); special assessments (approved by a majority of property owners submitting ballots); and less significant sources such as Timber Yield Tax or revenue from the use of buildings, or Proposition 172 sales tax funds. Many fire departments conduct fund raising efforts, or receive grants; however, these sources are limited and on not reliable on a year-to-year basis.

Due to voting requirements, it is difficult from fire related districts to secure special tax or assessment funding. However, there are very few alternatives to special taxes or assessments for reliable ongoing funding. Arcata Fire Protection District has recently demonstrated that with proper public education a significant new special assessment can be approved by the voters. Based on the experience of Arcata Fire and Humboldt Fire Protection District No. 1, the Humboldt County Fire Chiefs Association is preparing a tool kit to assist other department in their efforts to pursue a new special tax or assessment.

Recommendations:

- **Assistance with Assessments and Special Taxes.** Support the development of the HCFCFA special assessment toolkit and provide additional support (such as assistance from the Auditor-Controller or Assessor) to facilitate the development of new assessments and special taxes to fund fire protection services.
- **Community Facilities Districts.** Support the development of levels of service for fire related districts or other mechanisms to facilitate the establishment of Community Facilities Districts in new development areas (see the generalized description of Mello Roos Community Facilities District Review Process below):
 - Use fire protection levels of service to establish zones that can be used for differential special tax rates for a countywide fire protection services Mello Roos Community Facilities District to which all new discretionary development is required to annex.
- **Impact Fees.** Facilitate the development of capital improvement programs or other similar reports for each fire related district that can be used to establish fire protection impact fees payable by all new development
 - Develop boiler plate documents to facilitate the development of impact fees (methodology for establishing fee amounts, fire impact fee ordinance, agreement between fire related districts and the County, etc.)
- **Pooled Costs/Shared Resources.** Identify opportunities for fire related districts to reduce operating costs (similar to County Risk Management reducing district workman's compensation costs).

12.2. Infrastructure Financing

Funding related implementation measures or programs are required to address two issues: (1) current funding gaps and (2) funding expanded infrastructure, facilities, and services relating to new growth. Developing funding programs to address growth related services and infrastructure impacts is somewhat more straight forward than finding ways to fill current funding gaps.

Infrastructure financing is a critical issue if the County and the other service providers are to be successful in completing the improvements described herein. Historically, jurisdictions within Humboldt County have been successful in obtaining a proper combination of grant and loan funding to feasibly carry out infrastructure projects. Most recently, Humboldt County led a multi-county effort to secure over \$10 million in Proposition 50 grant funds. During the last decade or two many of the grant programs have converted to loan programs and funding in general has become more limited and competitive. While it is impossible to develop specific funding strategies in this report, these should be an element of any project related studies. Funding agencies consider a number of factors including: the median income of the community, current level of rates and indebtedness and how well the proposed project fits the goals of the program. While there are no easy answers, the projects that are more likely to be successful are those that have a well thought out plan that provides clear benefits to their community and then educates the public about those benefits.

Infrastructure funding is evaluated under the following categories:

- Generalize Mello Roos Community Facilities District Review Process
- General
- Potable Water
- Storm Water
- Wastewater
- Transportation
- Hazard Mitigation
- Funding Alternatives

12.2.1. Generalized Mello Roos Community Facilities District Review Process

1. Identify major public facilities or services appropriate for funding through a Mello Roos Community Facilities District and the appropriate service area to be served (initial and future boundaries)

Examples of Eligible Facilities (Area Serving Public Facilities or In-Tract Public Facilities)

- Water (treatment, distribution, storage)
- Wastewater (collection, treatment, use of reclaimed water)
- Storm Drainage (collection, detention, treatment, wetland/riparian restoration)
- Transportation (road, curb, gutter, sidewalk, streetlight, stoplights, landscaping, transit stops)
- Parks and Open Space (land acquisition, construction)
- Municipal Structures (police, fire, or administrative)

(Estimate cost, capacity, and area of benefit)

Examples of Eligible Services

- Law enforcement (Sheriff and other law and justice functions)
- Fire protection and emergency medical services
- Park and recreation maintenance
- Drainage and flood maintenance
- Street lighting, road maintenance

(Estimate cost, level of service, and area of benefit)

Examples of Service Area

- Areas benefiting from specific roadway improvements
- Martin Slough Interceptor area
- Area benefiting from new fire station or Sheriff sub-station or modified patrol beat
- South Eureka development area
- New development county-wide

2. Determine appropriate Level of Service

For non-maintenance related service costs, it may be appropriate to establish a level of service (officers per 1,000 residents, response time or other standard of fire coverage -such as Eureka Standard of Coverage Study, acres of park per 1,000 residents). The level of service will be useful in evaluating existing services and distributing service costs to existing new residents.

3. Evaluate existing service and infrastructure capacity

For those facilities or services to be funded through a CFD, evaluate the capacity of existing service providers/infrastructure and the ability or methods to expand service to accommodate new development.

4. Prepare development program (estimate of total acres/sf of new development by use type)

Prepare a development program consisting of gross project acres and net acres devoted to each use type, total dwelling units by type, total square feet of non-residential uses by type, total acres devoted to roads and public facilities, total acres devoted to parks and open space.

Areas outside of the project area that would benefit from proposed facilities and services and that are likely to develop in the near term should be considered as well.

5. Estimate timing of improvements, development absorption, and ultimate project assessed value

Based on the development program from 5 above, as well as past county-wide or community development trends and the best available growth projections, prepare a market absorption study to identify the expected rate of new unit construction, the timing of infrastructure improvements, and the assessed value of the project area over time and at build out. The market absorption study will provide a good indicator of the feasibility of bonding for infrastructure improvements and of a special tax for supporting the desired levels of service.

6. Prepare preliminary design, estimate of facilities cost, and sources and uses of construction funds

Prepare preliminary designs for infrastructure and facility improvements. Estimate the cost of improvements and the expected sources of construction funding for each improvement type.

7. Prepare Fiscal Impact Analysis

Prepare a fiscal impact analysis of the impact (the net cost of providing the levels of service identified above to each new residential unit or unit of non residential development) of the

new development based on the services identified above. The fiscal impact analysis will identify the funding gap for providing services to new development and establish the basis for the special tax formula.

8. Initiate proceedings to form CFD

POLICY ISSUES TO BE CONSIDERED

1. Identify "eligible public facilities" for the use of bond proceeds
2. Selected services for special tax funding
3. Determine appropriate types and level of security
4. Establish a value to lien ratio
5. Establish a maximum special tax

12.2.2. General

The general funding category captures funding sources that can be applied to two or more infrastructure categories, which may include, but are not limited to, transportation, the environment, water and wastewater, and community development. The primary sources applicable to general infrastructure projects are as follows:

- The Infrastructure State Revolving Fund
- Community Development Block Grants

These funding sources are described below.

Infrastructure State Revolving Fund

The California Infrastructure and Economic Development Bank (I-Bank) oversees the distribution of loans through a state revolving fund program (ISRF). This program provides financing for public infrastructure such as public transit, environmental mitigation, port facilities, solid waste collection and disposal, defense conversion, military infrastructure, power transmission, power distribution facilities, and communications projects.

Eligibility

Eligible applicants are local municipal entities, with projects meeting tax-exempt financing criteria. Projects must comply with California Environmental Quality Act (CEQA) requirements. Acceptable projects include acquiring land and constructing or acquiring facilities. However, funding for privately owned or operated infrastructure or refinancing existing debt is not available through the ISRF.

Funding Terms

Limits for ISRF loans are a maximum of \$10 million per project, except for environmental mitigation projects which are limited to \$2 million. The loan term is up to 30 year terms. Applications for this program are accepted on a continuous basis.

ISRF Program contact information follows:

California Infrastructure and Economic Development Bank
Diane Cummings, Manager
1001 I Street, 19th Floor
Sacramento, CA 95814
Sacramento, CA 95814

(916) 324-4805 (phone)
(916) 322-6314 (fax)
<http://www.ibank.ca.gov> (email)

Community Development Block Grants

Community Development Block Grants (CDBG) are Federal funds from the U.S. Department of Housing and Urban Development. These grants are administered by the State. The funding programs most applicable to infrastructure are the Planning and Technical Assistance, the General Allocation, and the Over the Counter Component. Programs eligibility and funding terms are discussed below.

Eligibility

In general, CDBG funds would be available to Incorporated Cities and Humboldt County public improvement projects. Projects must principally benefit low-income households defined as those with incomes at or below 80% of the county media income, also called the Targeted Income Groups (TIG).

The Planning and Technical Assistance Allocation (PTA) may be used for planning, evaluation, and design studies related to eligible activities, including housing studies, public works, community facilities and economic development activities. Projects must meet one of two national objectives: either 1) benefit at least 51% TIG or 2) prevent slums and blight.

The General Allocation provides funding for housing activities, public works, community facilities, and public service projects. Eligible activities include the costs of acquisition, construction, or installation of public works projects and site or other improvements. Grant applications are evaluated based on several assessments. The current rating system evaluates seven categories as follows:

1. Poverty Index: Percentage of population with incomes below the poverty level;
2. Target Income: Project beneficiaries who earn 80 percent or less of the county's median income;
3. Need for Activity: Documented need for the proposed project;
4. Prior Performance Operating CDBG Grants: Performance administering past CDBG Grants; criteria include timeliness of expenditures, reporting, closeout submittals, resolving outstanding audit issues, and the amount of income in hand;
5. Capacity: Ability to administer the proposed activities, based on experience on past grants and readiness to proceed;
6. Leverage: Documented commitments of additional (non-Federal or state) funding;
7. State Objectives: Additional credit for grants addressing one or more state objectives.

In addition, an Over the Counter Component may be used as grants for publicly owned infrastructure, loans to businesses for construction, onsite improvements, equipment purchases, working capital, and site acquisition.

Funding Terms

PTA Allocation funds two programs, the General Allocation, and the Economic Development Allocation. Currently, the total PTA Allocation provides up to \$140,000 per year per jurisdiction. The PTA General Allocation funds projects on housing, public works, and community facilities. The PTA Economic Development Allocation focuses on job creation and retention through business expansion and retention projects. The projects funded must principally benefit a TIG, which is based on the most recent U.S. Census data.

The General Allocation grant program typically provides between \$500,000 and \$1,500,000 per year to eligible projects based on Federal funding availability. CDBG money is frequently combined with funding from other State and Federal programs to finance the construction of public facilities and other improvement projects.

The Program's California State office may be contacted at:

State of California
Division of Financial Assistance
1800 3rd Street, Suite #330
North Building - Suite 190 or
Sacramento, CA 95833
(916) 552-9398 (phone)
(916) 319-8848 (fax)
cstevens@waterboards.ca.gov (email)

Paula Mushrush
Humboldt County CBDG Contact

Additional information may be obtained online at:

<http://www.hcd.ca.gov/ca/>

12.2.3. Potable Water

This section identifies funding for municipal water system treatment, storage and distribution. Currently, the primary funding sources for potable water infrastructure are Clean Water State Revolving Fund and Proposition 84, the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006.

Safe Drinking Water State Revolving Fund (SDWSRF)

The California Department of Public Health (DPH), recently formed from the Department of Health Services (DHS), administers the program to improve water quality in California through the Federal Safe Drinking Water Act (SDWA). The revolving fund program serves public water systems as follows:

- Administration of the SDWSRF financial assistance program
- Technical assistance to small public water systems
- Source water assessment and protection
- Water system capacity development

Eligibility

The funding system utilizes a multi-year Project Priority List, where some projects receive higher funding priority than other public water service projects. Higher priority projects include projects as follows:

- Addressing public health risk problems
- Complying with the SDWA
- Assisting systems in most need on a per household affordability basis

Funding Terms

Generally, the interest rate is half the general obligation rate. However, disadvantaged systems may obtain a zero interest loans and partial grant funding. Additionally, funding caps for the Department of Public Health SDWSRF are as follows:

- Planning studies may not exceed \$100,000

- Projects may not exceed \$20,000,000
- Each entity may obtain a maximum grant of \$30,000,000

DPH SRF Loan Program state and regional offices may be contacted at:

California Department of Public Health
 Division of Drinking Water and Environmental Management
 Steve Woods
 P.O. Box 997377, MS 7408
 Sacramento, CA 95899-7377
 (916) 449-5624 (phone)
steve.woods@cdph.ca.gov (email)

Additional information may be obtained online at:
<http://www.dhs.ca.gov/ps/ddwem/funding/default.htm>

Proposition 84 Funding for Safe Drinking Water

The DPH also administers funds from Proposition 84 Sections 75021, 75022, and 75025 to provide safe drinking water to California residents by providing access to potable water during emergencies, improving infrastructure and preventing groundwater contamination.

Section 75021: Safe Drinking Water Emergency Funding

Section 75021 of Proposition 84 provides grants and direct expenditures that fund emergency and urgent actions providing access to safe drinking water for California residents.

Eligibility

Eligible applicants are public water systems, local Health Officers, and local Directors of Environmental Health. Eligible water improvement projects are as follows:

- Improving existing water systems
- Establishing connections into adjacent water systems
- Implementing a temporary water treatment system
- Consulting on water system operational problems
- Developing an alternate water supply
- Providing a bottled water supply
- Designing, purchasing, installing and initially operating water treatment equipment and systems

Criteria to assess project eligibility are as follows:

- Degree of contamination
- Nature of contaminants
- Chronic or acute nature of health hazard
- Time of exposure to contaminants
- Amount of actual or suspected illnesses
- Actions taken by the local Health Officer or Director of Environmental Health
- Availability of alternative funding
- Extent and duration of water outages resulting from an emergency
- Extent and duration power outages resulting from an emergency

Funding Terms

A total of \$10 million will be made available to the DPH, and all requests meeting eligibility criteria will be awarded until funds are exhausted. Grants and expenditures may not exceed \$250,000 per project.

Section 75022: Small Community Infrastructure Improvements for Chemical and Nitrate Contaminants

Section 75022 of Proposition 84 provides grants for small community drinking water system infrastructure improvements and related actions to meet safe drinking water standards.

Eligibility

Eligible recipients include public agencies, incorporated mutual water companies and public schools serving disadvantaged communities. Eligible water systems must be in noncompliance with a primary drinking water standard or notification level. Applicable projects may require feasibility studies, technical assistance, and construction to meet applicable drinking water standards.

Priority projects affect small, disadvantaged communities by addressing chemical and nitrate contamination, and/or other health hazards, in drinking water. Criteria to assess project eligibility are as follows:

- Regulatory status of the contaminant in drinking water with the highest health risk, or principal contaminant
- Health risks of the principal contaminant
- Number of contaminates
- Applicant Median Household Income (MHI)
- Water system interconnectivity
- Number of regional drinking water projects

Funding Terms

The maximum grant for a project shall be limited to \$5 million per project, including feasibility and eligibility costs, and not more than twenty five percent of a grant may be awarded in advance of actual expenditures. The maximum amount for a feasibility study is \$500,000. In addition, the total maximum grant awarded for regional projects, with multiple applicants, under Proposition 84 Sections 75022 and 75025 may not exceed \$15 million.

Section 75025: Prevent or Reduce Contamination of Groundwater that Serves as a Source of Drinking Water

Section 75025 of Proposition 84 provides grants and loans for projects to prevent or reduce contamination of groundwater that serves as a source of drinking water. The DPH will require payment for costs that are subsequently recovered from parties responsible for the contamination.

Eligibility

Eligible applicants are community water systems that hold or have applied for a domestic water permit pursuant to Health and Safety Code section 116525, public agencies, and non-profit organizations. Eligible projects are as follows:

- Local and regional remediation projects
- Construction of replacement drinking water wells avoiding contaminated strata

- Refurbishment of existing wells to seal off contaminated zones
- Aquifer storage and recovery
- Appropriate contaminated water blending operations
- Prevention of groundwater contaminant migration
- Proper decommissioning of abandoned wells
- Prevention of contaminated discharges into drinking water aquifers
- Water distribution system improvements for some consolidation projects

Criteria to assess project eligibility are as follows:

- Regulatory status of the contaminant in groundwater with the highest health risk, or principal contaminant
- Health risk of principal contaminant
- Number of contaminants in a drinking water supply exceeding a primary Maximum Contaminant Level (MCL)
- Applicant Median Household Income
- Water system interconnectivity
- Number of Regional Groundwater Projects
- Additional project benefits
- Impact on downstream groundwater sources

Funding Terms

The maximum grant for a project is \$5 million, including feasibility and construction costs. The maximum amount for a feasibility study is \$500,000. For regional projects, with multiple applicants, each applicant is allowed \$5 million up to a total maximum \$15 million, which also includes any grants awarded under Section 75022. This program cannot be used to match funds for Proposition 50 projects.

Proposition 84 Sections 75021, 75022, and 75025 funding inquiries may be directed to:

California Department of Public Health
 Division of Drinking Water and Environmental Management
 P.O. Box 997413, MS 7408
 Sacramento, CA 95899-7413
 (916) 449-5600 (phone)
Prop84@dhs.ca.gov

Additional information may be obtained online at:

<http://www.cdph.ca.gov/programservices/funding/Pages/Prop84.aspx> or
<http://www.dhs.ca.gov/ps/ddwem/Prop84/>

12.2.4. Stormwater

This section discusses funding stormwater system construction and maintenance to improve environmental health of public waters receiving storm water from municipal drainage systems and non-point sources. The addressed programs are as follows:

- Clean Beaches Initiative Grant Program
- Non-Point Source Implementation Grant Program
- Urban Streams Restoration Program
- California Coastal Conservancy Programs
- Proposition 84 Storm Water Grant Program

These programs are presented below.

Clean Beaches Initiative Grant Program

The SWRCB Clean Beaches Initiative (CBI) Grant Program provides grants to help local, state and Federal agencies, Indian tribes, and non-profit organizations implement projects to meet current bacterial standards and improve the water quality of California's coastal waters. The program goal is to reduce or eliminate public beach closures in California. Proposition 84 provides \$37 million to be administered through the Clean Beaches Initiative Grant Program.

Eligibility

Applicants are required to provide public use records and proof that a beach was closed during the year. Eligibility is determined by the following equation:

(Public user days per year) * (Number of days beach was closed by health dept.)

Projects are submitted to the Clean Beaches Task Force (CBTF) for review. The CBTF reviews all project proposals and make recommendations to the SWRCB for funding under the Clean Beaches Program. Eligible projects are placed on a Priority List and ranked according to the potential public health risk, whether the project addresses a specific pollution problem at a coastal beach, and the project location relative to the Coastal Zone.

Funding Terms

The CBI Program requires 20% matching funds for projects ranging from \$1,000,000 and \$5,000,000 and 15% for projects costing less than a million dollars. However, the funding match requirement may be waived for projects within disadvantaged communities upon request. The CBI Program indicates disadvantaged communities as receiving less than or equal to 80% of the statewide annual median income, per the California Water Code Section 79505.5a. These grants generally range from \$125,000 to \$5,000,000.

The CBI Grant Program office may be contacted at:

State Water Resources Control Board
Laura Peters, Senior Water Resources Control Engineer
1001 I Street, 16th Floor
Sacramento, CA 95814
(916) 341-5854 (phone)
lpeters@waterboards.ca.gov

Additional information may be obtained online at:

<http://www.swrcb.ca.gov/cwphome/beaches/>

The Non-Point Source Implementation Grant Program

The Non-Point Source (NPS) Implementation Grant Program (319 Program), is funded through the Clean Water Act Section 319(h). The 319 Program is a federally funded program administered by the SWRCB. Program goals are to reduce, eliminate, or prevent water pollution from polluted runoff and to enhance water quality in impaired waters.

Eligibility

Projects must show the potential to reduce non-point source loading to Section 303(d) listed impaired water bodies. The Section 303(d) list depicts bodies of water that do not fully support beneficial uses or are not meeting water quality objectives. The list also describes pollutants that

limit or prevent attainment of water quality objectives for each water body. Eligible projects should also be characterized in a local watershed plan.

Eligible 319 Program applicants are nonprofit organizations, local government agencies including special districts, Indian Tribes, and educational institutions.

Funding Terms

Approximately \$4.5 to \$5.5 million in grant funds may be available for NPS implementation projects in California for each state fiscal year, and the amount is dependent on the funds available from USEPA. The California State 319 Grant Program office may be contacted at:

State Water Resources Control Board
Lauma Jurkevics, Chief
1001 I Street, 16th Floor
Sacramento, CA 95814
(916) 341-5498 (phone)
lpeters@waterboards.ca.gov

Additional information may be obtained online at:
<http://www.swrcb.ca.gov/funding/319h.html>

Urban Streams Restoration Program

The California Department of Water Resources (DWR) Urban Streams Restoration Program assists communities in reducing damage from stream bank and watershed instability and from floods while restoring the environmental and aesthetic values of streams, and to encourage stewardship and maintenance of streams by the community.

Eligibility

All projects require a local agency and a community group consisting of a public agency and a non-governmental entity, private citizen's group or organization. In addition, all grants must have flood management or erosion control as a primary objective and promote public awareness and local stewardship of streams.

Funding Terms

Urban Streams Restoration assistance is in the form of grants. Approximately \$18 million in Proposition 84 funding will be made available for stream restoration projects for the 2007 funding cycle. DWR anticipates that two application cycles will be held in mid 2007.

The Urban Streams Restoration Program office may be contacted at:

Department of Water Resources
Margie Graham, North District
2440 Main Street or
Red Bluff, CA 96080
(530) 529-7330 (phone)
margieg@water.ca.gov

Department of Water Resources
Sara Denzler, Program Coordinator
P.O. Box 942836
Sacramento, CA 94236
(916) 651-9625 (phone)
sarad@water.ca.gov

Periodically check the following website for further details:
<http://www.watershedrestoration.water.ca.gov/urbanstreams/>

California Coastal Conservancy Programs

The California Coastal Conservancy, established in 1976, is a state agency that uses entrepreneurial techniques to purchase, protect, restore, and enhance coastal resources, and to provide access to the shore. The Coastal Conservancy's Public Access, Resource Enhancement, Agricultural Perseveration, Site Reservation and Urban Waterfronts Programs may be potential sources of grant funding for Humboldt County.

The Coastal Conservancy may be contacted at:

California Coastal Conservancy
Karyn Gear, North Coast Regional Manager
1330 Broadway, 11th Floor
Oakland, CA 94612
(510) 286-1015 (Phone)
(510) 286-0470 (Fax)
kgear@scc.ca.gov

Additional information may be obtained online at:
<http://www.coastalconservancy.ca.gov/>

Flood Protection Corridor Grant Program

The purpose of the California Department of Water Resources (DWR) Flood Protection Corridor Program is reimbursing local agencies with the non-federal share of capital costs associated with federally authorized flood control projects.

Eligibility

Local public agencies, nonprofit organizations, or an organization representing more than one local public agency or nonprofit are eligible applicants. Appropriate projects provide restoration, enhancement, and flood protection in acquired property. Additionally, the California Conservation Corps or community conservation corps takes part when feasible. In addition, sites that are partially located in FEMA Special Flood Hazard Areas are preferable.

Funding Terms

No minimum or maximum funding value is set for projects under this program. DWR is currently developing cost-sharing formulas, which will be dependent on project type and/or component.

Additional information may be obtained online at:
<http://www.floodsafe.water.ca.gov/>

Proposition 84 Storm Water Grant Program

Proposition 84 Storm Water Grant Program funds provide matching grants to local public agencies for the reduction and prevention of storm water contamination of rivers, lakes, and streams. Approximately \$84,000,000 will be available through this program. The California Legislature is currently determining how the funds will be allocated and eligibility requirements. Legislation will further define this emerging grant program. Currently, applications are not being accepted and no projects have been awarded or funded. In addition, to date, neither funding terms nor schedule have been established.

The contact for Proposition 84 Storm Water Grant Program follows:

Division of Financial Assistance
Ms. Erin Ragazzi
Project Development Section 1A
Sacramento, CA 95833
(916) 341-5733 (phone)
enragazzi@waterboards.ca.gov

Additional information may be obtained online at:

<http://www.swrcb.ca.gov/funding/prop84.html>

12.2.5. Wastewater

Some of the more common grant and loan funding sources used for wastewater projects are as follows:

- State Regional Water Quality Control Board State Revolving Fund
- Small Community Wastewater Grant Program
- Rural Utilities Service Grant and Loan Program

These programs are discussed in more detail below.

State Revolving Fund

The State Water Resources Control Board (SWRCB) oversees the distribution of the funds through the State Revolving Fund (SRF) authorized through the Clean Water Act. This program provides low interest loans to address water quality problems associated with discharges from wastewater and water reclamation facilities for estuary enhancement for the construction of publicly owned wastewater treatment plants.

Eligibility

SWRCB SRF projects include, but are not limited to, constructing or upgrading publicly-owned wastewater treatment facilities, local sewers, sewer interceptors, water reclamation facilities, and non-point source pollution control projects. Eligible SRF Loan applicants are public agencies and nonprofit organizations.

Funding Terms

The maximum SRF loan amount is \$25 million per municipality per year. Loans have a 20-year payback period, and an interest rate of one-half of the interest rate paid on the sale of the State's latest general obligation bonds at about 2.5% to 3.5%. A zero percent interest rate may be given with 16.67% matching funds. This program does not provide grants.

The SWRCB contact for wastewater SRF loans follows:

State Water Resources Control Board
Christopher Stevens, Chief
1001 I Street, 16th Floor or
Sacramento, CA 95814
(916) 341-5698 (phone)
cstevens@waterboards.ca.gov

State Water Resources Control Board
North Coast Region (1)
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403
(707) 576-2220 (phone)
(707) 523-0135 (fax)

Additional information may be obtained online at:

http://www.swrcb.ca.gov/funding/index.html#funding_programs

Small Community Wastewater Grant Program

The SWRCB also oversees the Small Community Wastewater Grant Program, funded by Proposition 40 and 50 for construction of improvements to publicly owned wastewater collection and treatment facilities.

Eligibility

Grants are available to local public agencies with populations under 20,000 people and a maximum annual Median Household Income (MHI) of \$37,994. Three project classifications may qualify for funding: Class A, Existing or Potential Public Health Problems; Class B, Pollution Problems; and Class C, Other Projects. Project pre-applications are submitted to the program. Projects are then ranked and must be included on the Statewide Competitive Project List (CPL) before funds can be made available.

Funding Terms

The SCWG Program provides up to \$2 million per project. Grant funding for communities with a MHI of \$28,495 or less will be up to 90 percent of the eligible project cost. The funding level for communities with a MHI between \$28,495 and \$37,994 will be determined by the following formula:

$$\text{Percentage of Grant Funding} = (\$37,994 - \text{MHI}) \times (0.00003158) + 0.6$$

Communities must find other sources of funds for the portion not covered by the grant.

The SWRCB contact for wastewater Small Community Grants follows:

State Water Resources Control Board
David Kern, Regional Board Grant Coordinator
1001 I Street, 16th Floor
Sacramento, CA 95814
(916) 341-5720 (phone)
dkirn@waterboards.ca.gov (email)

Additional information may be obtained online at:
<http://www.waterboards.ca.gov/cwphome/scwg/index.html>

Rural Utilities Service Grant and Loan Program

The U.S. Department of Agriculture Rural Utilities Service (USDA/RUS) administers the Water and Waste Disposal Grant/Loan Program. The goal of the program is to provide financial assistance to promote rural economic development, develop and improve public health, safety, and overall quality of life in rural areas.

Eligibility

The RUS Water and Waste Disposal Program is intended to provide financing to develop water and waste disposal including wastewater, solid waste and storm water systems in rural areas and towns with a population not in excess of 10,000. Funds are available to public entities such as municipalities, counties, special purpose districts, Indian tribes and corporations not for profit.

To reduce water and waste disposal costs to a reasonable level for rural users, grants may be made for up to 75% of eligible project cost. Due to reduced federal funding for this program typical grant amounts do not exceed 20% of eligible project costs.

Funding Terms

The RUS Program allows a maximum loan repayment period of 40 years. However, the repayment period cannot exceed the useful life of facilities financed. Loan interested rates are set periodically based on an index of current market yields for municipal obligation.

RUS typical interest rates vary from 4% to 7% and vary based on the area income.

The USDA Rural Utilities Service may be contacted at:

USDA, California Rural Development	Dave Hartwell
Debbie Coggins	
Humboldt County or	State of California
(707) 443-6714	(530) 792-5817

Additional information may be obtained online at:

<http://www.usda.gov/rus/water/programs.htm>

12.2.6. Hazard Mitigation

The Office of Emergency Services (OES) administers two main grant programs for the prevention of and response to natural disasters via the Federal Emergency Management Agency (FEMA). Pre-Disaster Mitigation (PDM) and Hazard Mitigation Grant Program (HMGP) grants are available for planning, projects and technical assistance.

Pre-Disaster Mitigation Grants

The focus of the Pre-Disaster Mitigation (PDM) program funds hazard mitigation planning and the implementation of mitigation projects prior to a disaster event. This program was authorized by the Stafford Act, 42 USC, as amended by the Disaster Mitigation Act of 2000.

Eligibility

Eligible applicants are states, territories, Indian tribal governments, communities, and universities. Funding these plans and projects should reduce overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations.

Eligible program funding is available for implementing cost-effective hazard mitigation activities that complement comprehensive mitigation programs, reduce injuries, loss of life, and damage and destruction of property.

A Local Hazard Mitigation Plan (LHMP) and a State or Tribal Standard, or Enhanced hazard mitigation plan in accordance with 44 CFR Part 201, approved by FEMA, are required to receive PDM funding.

Funding Terms

PDM grants are awarded on a competitive basis, without reference to state allocations, quotas, or other formula-based allocation of funds. FEMA may fund up to 75% of the eligible costs for disaster related projects. The grantee must provide a 25% match, which can consist of cash

and/or in-kind sources. Funding from other Federal sources cannot be used for the 25% share with one exception. CDBG funds can be used to meet the match requirement.

In addition, the Federal share shall not exceed \$1 million over three years for mitigation planning; and shall not exceed \$3 million over 3 years for mitigation projects.

Additional information may be obtained online at:
<http://www.fema.gov/government/grant/pdm/>

Hazard Mitigation Grant Program

The Hazard Mitigation Grant Program (HMGP) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. Section 404 of the Stafford Act authorizes the HMGP, which is administered by the Federal Emergency Management Agency (FEMA). The purpose of the program is to reduce the loss of life and property due to natural disaster and to enable implementation of mitigation measures immediately after a disaster.

Eligibility

Eligible applicants are state and local governments, Indian tribes and other tribal organizations, and certain non-profit organizations that reside in a Presidentially declared disaster area. Projects must provide a long term solution to a problem, which reduces or eliminates losses from future disasters. Potential saving from the project must exceed the implementation costs. The project must also conform to the State Hazard Mitigation Plan.

Funding Terms

FEMA may fund up to 75% of the eligible costs for disaster related projects. The grantee must provide a 25% match, which can consist of cash and/or in-kind sources. Funding from other Federal sources cannot be used for the 25% share with one exception. CDBG funds can be used to meet the match requirement.

FEMA may be contacted at:

Federal Emergency Management Agency
Disaster Assistance
P.O. Box 10055
Hyattsville, MD 20782-7055
(800) 621-3362 (phone)
(800) 827-8112 (fax)
FEMA-Correspondence-Unit@dhs.gov (Email)

Additional information may be obtained online at:
<http://www.fema.gov/government/grant/hmgrp/>

12.2.7. Transportation

This report finds that, due to deferred maintenance, roads within the County are in substantial need of repair. In addition, the annual County budget alone, which is largely comprised of State Gas Taxes, Property Taxes, Proposition 42 funds, Transportation Development Act (TDA) Funds, Regional Surface Transportation Program (RSTP) Exchange Funds, is not sufficient to fund the rehabilitation of County roads. Programs, such as the establishment of additional Permanent Road Divisions or other special assessment or tax program, and development impact fees should be used to generate additional funds for road maintenance and construction.

- **Permanent Road Divisions.** A permanent road division is a geographic area formed pursuant to California Streets and Highways Code, Section 1160, et. Seq. to provide road improvements and road maintenance. Permanent Road Divisions require the preparation of an engineer's report that calculates and apportions the special benefit to each property within the division. Owners of properties that benefit would vote, pursuant to the provisions of Proposition 218, whether or not to approve the establishment of a division.
- **Community Facilities District.** AB 373 amended state law to include road and street light maintenance as services that can be provided through Community Facilities Districts. A generalized description of Mello Roos Community Facilities District Review Process is provided below.
- **Impact Fees.** Develop a basis for the collection of impact fees to fund new improvements.

Numerous transportation funding programs are available to Humboldt County jurisdictions. These programs are discussed in detail in the Humboldt County 2006 Regional Transportation Plan Update (HCAOG, 2006). A summary of transportation funding programs applicable to Humboldt County is provided in Appendix B. Transportation legislation and funding sources are described below.

Transportation Legislation

Two legislative acts provide the transportation funding for Humboldt County projects:

- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)
- Transportation Infrastructure Finance and Innovation Act. (TIFIA)

These Acts are described in the following sections.

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

On August 10, 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was initiated. SAFETEA-LU guarantees a total of \$244.1 billion Federal dollars for highways, highway safety, and public transportation through 2009. This represents a 42 percent increase in average annual funding over the previous program, the Transportation Equity Act for the 21st Century (TEA-21).

The structure of SAFETEA-LU is similar to TEA-21. SAFETEA-LU encourages private investments and partnerships in constructing transportation facilities and provides opportunities for environmental streamlining, design-build contracting, and private toll projects.

Additional information may be obtained online at:

<http://www.fhwa.dot.gov/safetealu/index.htm>

Transportation Infrastructure Finance and Innovation Act

The Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) established a Federal credit program for eligible transportation projects under the U.S. Department of Transportation (DOT). TIFIA provides three forms of credit assistance: secured (direct) loans; loan guarantees; and standby lines of credit. The primary TIFIA Program goal is to leverage Federal funds by attracting substantial private and other non-Federal investment in critical improvements to the surface transportation system of the nation. The DOT awards assistance to eligible applicants,

which include state departments of transportation, transit operators, special authorities, local governments, and private entities.

Additional information may be obtained online at:
<http://tiffia.fhwa.dot.gov/>

For more information on Federal and state transportation funding, visit the following sites, respectively:

1. <http://www.fhwa.dot.gov/federalaid/projects.cfm?progProj=curr>
2. <http://www.dot.ca.gov/hq/LocalPrograms/>

12.2.8. Law Enforcement

The County is in the process of preparing a facilities master plan that evaluates current and future facilities for County staff, including the Sheriff's Office. This document is expected to be complete by the end of 2007. When complete, this report will likely identify additional facilities needs for the Sheriff's Office relating to the service demands of current and future residents. In addition, this report finds that the Sheriff's Office currently lacks adequate staffing based on generally accepted measures. The most commonly used methods of generating revenue for expansion of facilities to accommodate growth is impact fees (see descriptions of impact fees above). The most commonly used method of generating revenue for expanded law enforcement services are Mello Roos Community Facilities Districts (see the generalized description of Mello Roos Community Facilities District review process above).

12.2.9. Street Lights

This report finds that there are numerous local agencies that provide street lights and that there are many locations within USAs and WSAs outside the boundaries of such agencies. Policies should also be considered that encourage special districts serving urban areas to seek LAFCo approval to provide street lighting services, where appropriate. This report also recommends that development standards be prepared that differentiate between urban and rural settings and that specify when street lights are required based on intersection type and functional classification as well as specify the type of light, wattage of lights, and the spacing of lights. Development standards should specify that certain project approvals be conditioned upon the installation of street lights and the acceptance of a mechanism to fund the operation and maintenance of lights, such as direct charges, special assessments, or special taxes. Such street light direct charges (or fees), special assessments, or special taxes would be developed in conjunction with and in the same manner as those supporting the operation and maintenance of other new facilities such as roads and storm drainage.

12.2.10. Parks and Recreation

This report finds that parks and recreation facilities and services are an important part of the urban setting and that there are locations within USAs and WSAs where such facilities and services are not available. This report also finds that policies should be considered that encourage special districts serving urban areas to provide parks and recreation services, where appropriate. Parks and recreation policies contained in the Eureka and McKinleyville community plans should be made to apply Countywide, and development standards should be prepared that specify the service area and types of parks to which new development should contribute. New policies should encourage that existing development also participate in the operation and maintenance of new park and recreation facilities and services to which they benefit. Funding mechanisms for parks and recreation are similar to those described above.

12.2.11. Funding Alternatives

Although grants and loans can provide for infrastructure funding, other options can be implemented to support needed public systems and facilities. Impact fees and development mitigation measures and agreements are other funding options, discussed in more detail below.

Developer Impact Fees

Developer impact fees are one-time charges for infrastructure projects that pay for required expansion of public facilities needed for new development. Many feasible approaches to charging for the provision of public facilities exist. However, in all cases the fees must be clearly related to the costs incurred as a result of the development. Additionally, fees cannot be used to correct existing problems or pay for improvements needed for existing development.

Development Mitigation Measures/Agreements

Establishment of mitigation measures may be required when developments have a significant impact on existing infrastructure. Generally, mitigation measures are imposed as conditions on tentative maps. These measures reflect required on and off site project mitigations to reduce impacts to existing development. Development agreements are also used to gain cooperation of developers in constructing off-site infrastructure improvements or dedicating rights-of-way needed as a result of the proposed development.

13. REFERENCES

- Carnam, Neal (2007). Personal Communication. Eureka, CA. June 20, 2007.
- City of Arcata (2005). Urban Water Management Plan. Arcata, CA.
- City of Eureka (2006). Elk River Wastewater Treatment Plant and Collections System POTW 2006 Annual Report. Eureka, CA.
- City of Fortuna (2007). Fortuna General Plan Background Report, Administrative Draft. Fortuna, CA. June 2007.
- County of Humboldt (1971). Roadway Design Standards Manual. Department of Public Works. Eureka, CA. 1971.
- County of Humboldt (2002). Natural Resources and Hazards Report. Eureka, CA. September 2002.
- County of Humboldt (2003). 5-Year Road and Bridge Capital Improvement Plan. Department of Public Works. Eureka, CA. July 2003.
- County of Humboldt (2005). Draft Slate of Priority Humboldt County Infrastructure Projects for Proposition 50. Eureka, CA. March, 2005.
- Daniel C. Smith & Associates (2007). Humboldt County Facilities Master Plan and Financing Study. Redwood City, CA.
- Downey, Michael (2007). Personal Communication. Eureka, CA. June 5, 2007.
- Drumm, Markus (2007). Personal Communication. Eureka, CA. August 17, 2007.
- Dyett & Bhatia (2002). Humboldt 2025 General Plan Update. Building Communities – A Discussion Paper for Community Workshops. Eureka, CA. February 2002.
- Garberville Sanitary District (2007). Questionnaire Regarding Services Required for the General Plan Update. Garberville, CA. May 2007.
- Gehrke, Bruce (2007). Personal Communication. Eureka, CA. August 6, 2007.
- Gierlich, Kurt (2007). Personal Communication. Eureka, CA. September 28, 2007.
- Harrington-Dean, Troy (2007). Personal Communication. Redway, CA. July 25, 2007.
- Humboldt County Local Agency Formation Commission (2004). Redway Community Service District – Municipal Service Review. March 2004.
- International Association of Chiefs of Police (2007). Police Officer to Population Ratios, Bureau of Justice Statistics Data. [Online] Available <http://www.theiacp.org/documents/pdfs/RCD/OfficerToPopulationRatios.pdf>, August, 2007.

LACO Associates Consulting Engineers (2005). Project Feasibility Report – Wastewater Treatment Plant Improvements Project. Prepared for Garberville Sanitary District. Eureka, CA. March 18, 2005.

Luce, Mike (2007). Personal Communication. Shelter Cove, CA. August 8, 2007.

Oscar Larson & Associates (2006). Loleta Community Services District Water Supply Upgrade Feasibility Study. Eureka, CA. December 2006.

Oscar Larson & Associates (2006b). City of Fortuna Wastewater Rates Study Report. Eureka, CA. February 2006.

Palmer Creek CSD (2007). Questionnaire Regarding Services Required for the General Plan Update. Palmer Creek, CA. May 2007.

Redway CSD (2007). Questionnaire Regarding Services Required for the General Plan Update. Redway, CA. May 2007.

Resort Improvement District #1 (2007). Questionnaire Regarding Services Required for the General Plan Update. Shelter Cove, CA. May 2007.

Ristow, Don (2007). Personal Communication. Miranda, CA. August 9, 2007.

SHN Consulting Engineers & Geologists, Inc. (2004). Feasibility Study – Wastewater Collection, Treatment, and Disposal Facilities. Eureka, CA. September 2004.

SHN Consulting Engineers & Geologists, Inc. (2007). Town of Scotia Community Service District Municipal Service Review. Eureka, CA. April 2007.

Siemer, Brent (2007). Personal Communication. Eureka, CA. October 2007.

Short, John (2007). Personal Communication. Eureka, CA. June 19, 2007.

Trinity Valley Consulting Engineers (2002). Preliminary Wastewater/Septage Engineering Feasibility Report. Willow Creek, CA. March 2002.

U.S. Department of Justice (2004). Hiring and Keeping Police Officers. Office of Justice Programs, National Institute of Justice. Washington, DC. August 2004.

U.S. Department of Transportation, Federal Highway Administration (1989). Functional Classification Guidelines. Washington, DC. 1989.

Whitworth, Chris (2007). Personal Communication. Eureka, CA. June, 2007.

Winzler & Kelly (2003). Draft Town of Samoa Wastewater Treatment Evaluation. Eureka, CA. September 2003.

Winzler & Kelly (2006). Annexation Study. Eureka, CA.

Winzler & Kelly (2006b). Fieldbrook Glendale Community Services District Intertie with City of Blue Lake. Eureka, CA.

Winzler & Kelly (2007). Project Information for Notice of EIR Preparation – Rio Dell Treated Wastewater Reuse Project. Eureka, CA. June 2007.

Appendix A: Figures

Appendix B: Humboldt County Funding Opportunities

Appendix C: Transportation Funding

Appendix D: USDA Rural Development Funding