

6 PUBLIC FACILITIES AND SERVICES ELEMENT

The Public Facilities and Services Element provides information and policy guidance regarding the availability of public facilities and services needed to support existing and future development in Vacaville. It addresses the changing public services and infrastructure needs of Vacaville and provides for their logical and timely extension to keep pace with growth. This element covers the following topics:

- Fire, Rescue, and Emergency Medical Services
- Law Enforcement
- Schools
- Public Buildings
- Technology and Telecommunications
- Other Community Services
- Solid Waste and Recycling
- Water Service
- Wastewater

State law requires that general plans address “the circulation of people, goods, energy, water, sewage, storm drainage, and communications.” In this General Plan, the Transportation Element and the Public Facilities and Services Element fulfill this requirement. This Public Facilities and Services Element also fulfills the State law requirement that general plans include “the proposed general distribution and general location and extent of the uses of the land for...solid and liquid waste disposal facilities,” as well as information on “the general location and extent of existing and proposed... public utilities and facilities.”

The beginning of each section below contains brief background information on the major planning issues. The second part contains goals, policies, and actions related to the specific public service or infrastructure category.

The coordination of land use, public services, and utilities is discussed in the Land Use Element. Water conservation is addressed in the Conservation and Open Space Element. Stormwater management is addressed in the Safety Element.

Fire, Rescue, and Emergency Medical Services

Background Information

The Vacaville Fire Department (VFD) provides fire and emergency medical services to approximately 28 square miles within the City of Vacaville, as well as emergency medical services to

approximately 160 square miles of unincorporated county land surrounding the city. VFD responds to calls to service for fires, hazardous materials emergencies, certain technical emergencies, vehicle accidents and extrication incidents, and first responder and transport services. VFD also organizes and conducts a fire prevention and public education program in Vacaville, including business and occupancy inspections.

VFD maintains several facilities and a variety of equipment. In addition to its administrative offices at City Hall, VFD has four existing fire stations in the city, as shown in Figure PUB-1: Stations 71 (serves as the main station), 72, 73, and 74. Beyond ambulances and basic fire engines, VFD maintains and operates a variety of specialty and support equipment.

As of the preparation of this General Plan in 2013, there are plans in place to develop three new fire stations and relocate one existing station, which are all shown on Figure PUB-1. Planned fire stations include:

- Station 75, which will be located in and will serve the Southtown area.
- Station 76, which will be located in Lagoon Valley in southwest Vacaville.
- Station 77, which is planned at Orange Drive and Leisure Town Road, but contingent on the planned relocation of Station 73.

Funding for VFD comes from the City's General Fund, ambulance transport fees, Special Paramedic tax, Inspections fees, impact fees from new development, and from public safety ***Community Facilities Districts (CFDs)***, which have been formed for new development areas to offset the costs of providing public safety services to such areas through the levy of special taxes.

Fire service for the areas surrounding the city limits is provided by fire protection districts, including the Vacaville Fire Protection District, Dixon Fire Protection District, and Suisun Fire Protection District. In addition, VFD is actively involved in formal agreements with the City of Dixon, the City of Fairfield, and the Vacaville Fire Protection District to provide automatic aid responses in designated areas. VFD also participates in a Mutual Aid Plan with other fire departments in Solano County.

Goals, Policies, and Actions

Goal PUB-1	Provide adequate fire, rescue, and emergency medical services to serve existing and new development.
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Policies

- Policy PUB-P1.1 Prohibit any development that will not, even with identified mitigation measures, maintain standards for fire, rescue, and emergency medical service. All service standards shall be met prior to project occupancy. Allow exceptions to these services standards only when there are overriding findings of special circumstances or economic or social benefits.
- Policy PUB-P1.2 Ensure that new development pays a fair and equitable amount to offset the costs for fire, rescue, and emergency medical response services by collecting impact fees, requiring developers to build new facilities, and requiring the new areas to create or annex into a Community Facilities District.
- Policy PUB-P1.3 Establish Community Facilities Districts or other funding mechanisms to provide standby fire protection services (i.e. fire protection services during the construction phase of new development, adding permanent staffing levels as construction progresses), if necessary.
- Policy PUB-P1.4 Identify and mitigate fire hazards during the project review and approval process.
- Policy PUB-P1.5 Require that new development satisfy fire flow and hydrant requirements and other design requirements as established by the Fire Department.
- Policy PUB-P1.6 Plan future fire station locations to maintain or enhance current response levels.
- Policy PUB-P1.7 Continue to coordinate fire protection services with the other agencies to ensure coverage for all areas within Vacaville's Planning Area.

Actions

- Action PUB-A1.1 Develop a public safety facilities plan for fire, rescue, and emergency medical services. Include the following elements in the plan:
- Analysis of current fire, rescue, and emergency medical facilities and equipment, and their adequacy to service the existing planning area.

- Projections of the impacts of new development on the provision of fire, rescue, and emergency medical services to the existing and new areas of the community. These projections should include the adequacy of facilities and equipment, response times, communications systems, and the adequacy of the water system for firefighting needs.
- Response time standards for fire, rescue, and emergency medical services, and adequate personnel and facilities to meet the established standards.
- Hazardous materials use, storage, and disposal standards.
- Detailed Wildland Fire Hazard Area map for areas of local responsibility, similar to Figure SAF-9 in the Safety Element.

Law Enforcement

Background Information

The Vacaville Police Department (VPD) provides law enforcement service to the City of Vacaville. Responsibilities of VPD include a 24/7 communication center, crime suppression and prevention, investigations, traffic patrol, and emergency service. In addition, VPD oversees the Reserve Officer and Cadet Programs and administers specialty units. There is one main VPD police station, which is located at 660 Merchant Street, adjacent to Vacaville City Hall. VPD is currently meeting or exceeding its adopted standards for response times.

Funding for VPD mainly comes from the City's General Fund. A small percentage of other funding comes from grants and development impact fees. In addition, public safety CFDs have been formed for new development areas to offset the costs of providing public safety services to such areas through the levy of special taxes.

VPD participates in a regional Office of Emergency Services mutual aid agreement. By participating in this mutual aid agreement, VPD commits staff and other resources to assist with disasters throughout the state. In return, VPD receives assistance from outside entities should a significant emergency occur in Vacaville. Additionally, the Solano County Sheriff's Office provides law enforcement and emergency response in unincorporated parts of Solano County and provides a small degree of support for Vacaville police, assisting the City with police services approximately ten to 15 times per year.

Goals, Policies, and Actions

Goal PUB-2	Maintain a safe environment in Vacaville through the enforcement of the law.
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Policies

- Policy PUB-P2.1 Maintain adequate police staffing, performance levels, and facilities to serve Vacaville’s existing population as well as any future growth.
- Policy PUB-P2.2 Prohibit any development that will not, even with identified mitigation measures, maintain standards for law enforcement service. All service standards shall be met prior to project occupancy. Allow exceptions to these services standards only when there are overriding findings of special circumstances or economic or social benefits.
- Policy PUB-P2.3 Ensure that new development pays a fair and equitable amount to offset the costs for law enforcement services by collecting impact fees and requiring the creation of or annexation into a Community Facilities District.
- Policy PUB-P2.4 Identify and mitigate law enforcement hazards during the project review and approval process.
- Policy PUB-P2.5 Require physical site planning that prevents crime by locating walkways, open spaces, landscaping, parking lots, parks, play areas, and other public spaces in areas that are visible from buildings and streets.

Actions

- Action PUB-A2.1 Develop a public safety facilities plan for law enforcement services. Include the following elements in the plan:
- Analysis of current law enforcement facilities and equipment, and their adequacy to service the existing planning area.
 - Projections of the impacts of new development on the provision of law enforcement services to the existing and new areas of the community. These projections should include the adequacy of facilities and equipment, response times, and communications systems.
 - Response time standards for law enforcement services, and adequate personnel and facilities to meet the established standards.

Action PUB-A2.2 Provide neighborhood security and crime prevention information and training to neighborhood groups and homeowners' associations.

Schools

Background Information

Schools play a central role in the daily life of the city. New families contemplating a home in Vacaville look at the quality of local schools as part of their evaluation of whether to settle in town, and existing residents are actively engaged in schools to help them maintain a high level of achievement. School children require an environment that excites and stimulates learning. Moreover, because children spend a significant part of their lives in school, school buildings constitute important landmarks in the image that the young residents of Vacaville form of their community.

The City of Vacaville does not have jurisdiction over local schools. However, schools are an important part of the community, and the General Plan can support the mission of local school districts and the provision of high-quality education for Vacaville's children.

School Districts

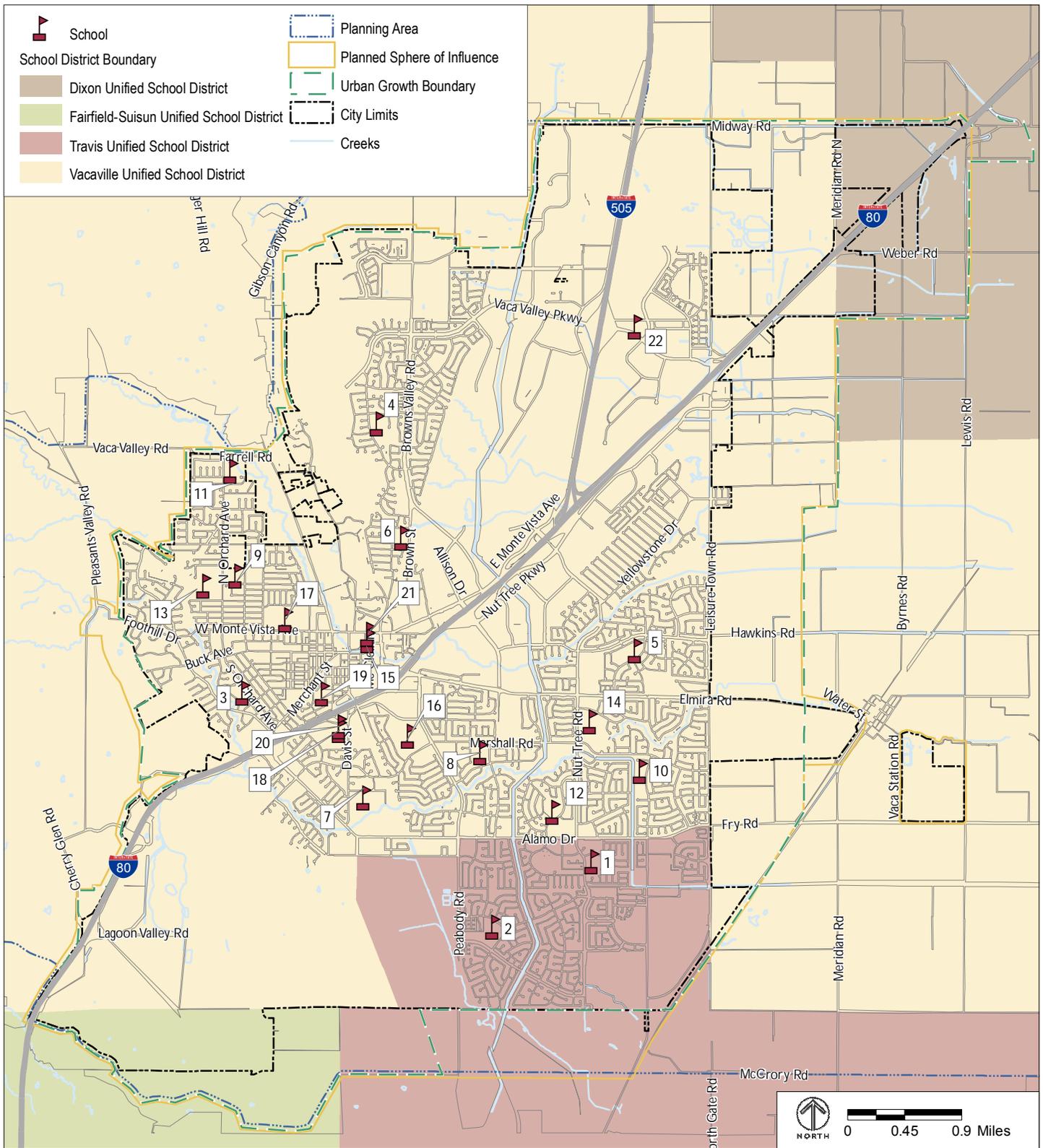
The City of Vacaville is served mainly by the Vacaville Unified School District (VUSD) and the Travis Unified School District (TUSD). However, a portion of the city is located within the Dixon Unified School District (DUSD), and a small portion of the Lower Lagoon Valley area falls within the jurisdiction of the Fairfield-Suisun Unified School District (FSUSD). Figure PUB-2, School Districts and Existing Schools, illustrates the current boundaries of the four school districts serving the City of Vacaville and shows the location of existing schools. Planned school sites, which are considered preliminary, are shown in Figure PUB-3.

Solano Community College

Solano Community College, established in 1945, offers associates degrees in a variety of fields, as well as other academic programming. The college has a main campus in Fairfield and satellite campuses in Vacaville, Vallejo, and Travis Air Force Base. The Vacaville Center of Solano Community College is located at 2000 North Village Parkway, off Vaca Valley Parkway. This satellite campus offers general education courses, job training in computer applications, and training for a variety of vocational programs.

School Funding

Senate Bill (SB) 50, approved by the California Legislature in 1998 and funded by Proposition 1A, limits the power of Vacaville or any other city or county to require fiscal mitigation on home developers as a condition of approving new development, and provides for a standardized developer fee for schools. California Government Code Sections 65995 to 65998 set forth provisions



Source: City of Vacaville, 2010.

- Travis Unified School District
- 1 Cambridge Elementary School
 - 2 Foxboro Elementary School

- Vacaville Unified School District
- 3 Alamo Elementary School
 - 4 Browns Valley Elementary School
 - 5 Cooper Elementary School
 - 6 Edwin Markham Elementary School
 - 7 Eugene Padan Elementary School

- Vacaville Unified School District (con't)
- 8 Fairmont Elementary School
 - 9 Hemlock Elementary School and ACE Charter School
 - 10 Jean Calison Elementary School
 - 11 Orchard Elementary School
 - 12 Sierra Vista Elementary School
 - 13 Willis Jepson Middle School
 - 14 Vaca Pena Middle School
 - 15 Country High School
 - 16 Will C. Wood High School

- Vacaville Unified School District (con't)
- 17 Vacaville High School
 - 18 Elise P. Buckingham Charter School
 - 19 Vacaville Community Prep Day School
 - 20 Vacaville Independent Study Program
 - 21 Vacaville Adult School

- Solano Community College
- 22 Solano Community College
- Vacaville Center

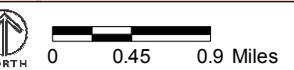
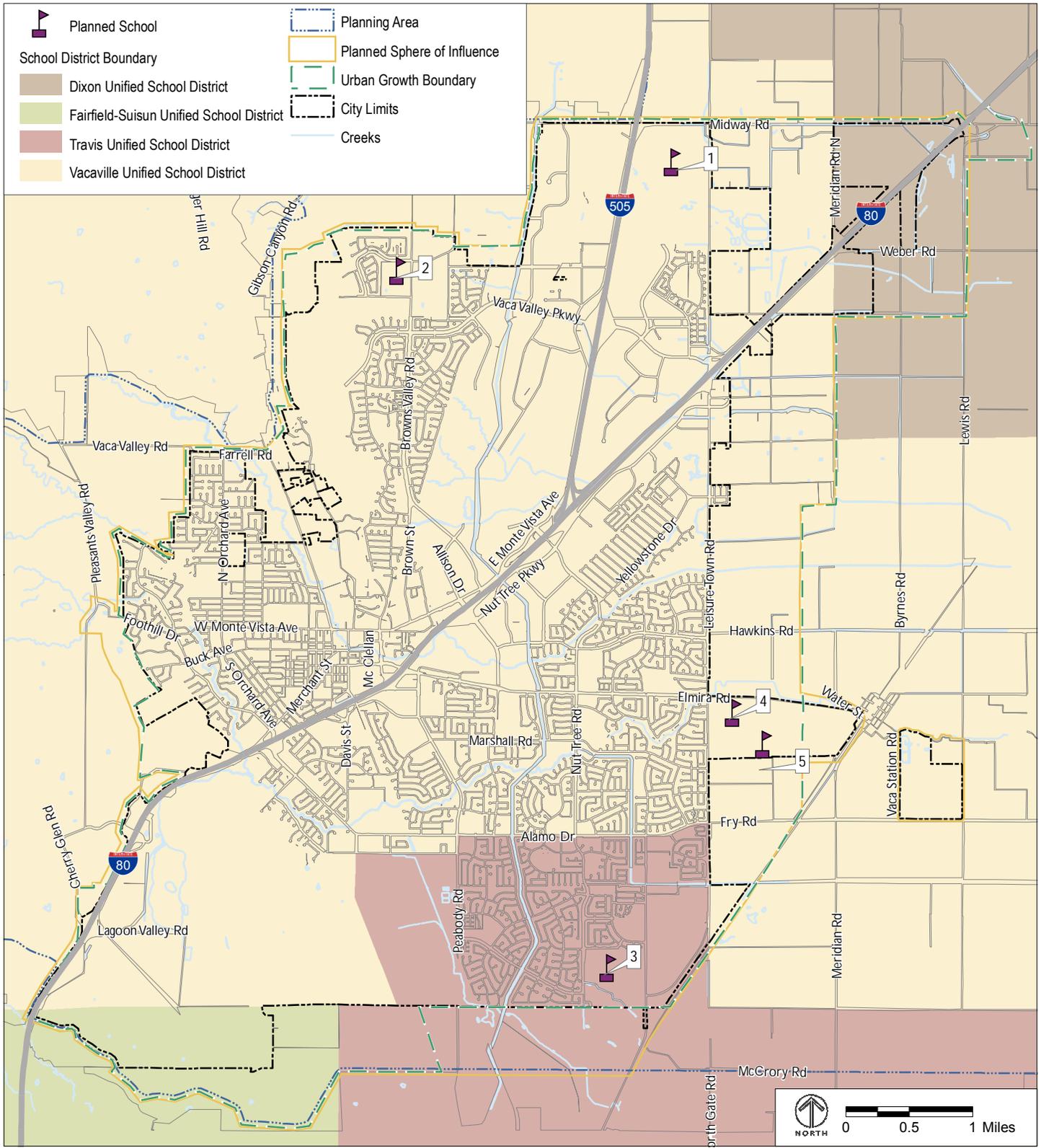


FIGURE PUB-2
 SCHOOL DISTRICTS
 AND EXISTING SCHOOLS

CITY OF VACAVILLE
 VACAVILLE GENERAL PLAN
 PUBLIC FACILITIES AND SERVICES ELEMENT



Source: City of Vacaville, 2010.

- 1 North Village Elementary School
- 2 Rice McMurty Elementary School
- 3 Vanden Meadows Elementary School
- 4 Brighton Landing Private High School
- 5 East of Leisure Town Road Elementary School - South

FIGURE PUB-3
 SCHOOL DISTRICTS
 AND PLANNED SCHOOLS

to implement SB 50. Specifically, according to Section 65995(3)(h), the payment of statutory fees is “deemed to be full and complete mitigation” of the impacts of any land use decision or development project approval on the provision of adequate school facilities. Local school districts in Vacaville are responsible for implementing the specific methods for mitigating school impacts under the Government Code.

In addition to the use of developer fees, school districts may acquire funds to provide school services in specific areas through the creation of a Community Facilities District (CFD). The Mello-Roos Community Facilities Act of 1982 allows the City Council to create such a district with a two-thirds vote by area landowners, and may authorize a special tax and sell bonds to meet service costs. School districts may also initiate the formation of a CFD.

The City of Vacaville should work closely with all school districts to devise an on-going means of financing school construction within the districts to accommodate the anticipated growth under this General Plan.

Goals, Policies, and Actions

Goal PUB-3	Support high quality education for Vacaville's school children as a community priority.
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Policies

- Policy PUB-P3.1 Encourage school districts to provide permanent facilities that are located within close proximity to residential neighborhoods.
- Policy PUB-P3.2 Encourage school districts to promote innovative and high-quality design in school building architecture, landscaping, and campus layout.
- Policy PUB-P3.3 Encourage school districts to locate elementary schools away from major streets to avoid vehicular noise and traffic hazards.
- Policy PUB-P3.4 Encourage school districts to design school sites with adequate on-site pick-up and drop-off areas to prevent school-related traffic congestion on the fronting and surrounding roadways.
- Policy PUB-P3.5 Encourage school districts to locate schools on sites with access to more than one street to avoid congestion on nearby streets.
- Policy PUB-P3.6 Encourage school districts to provide direct, safe, and convenient pedestrian and bicycle access between school sites and nearby residential neighborhoods to provide safe passage for students and teachers.

- Policy PUB-P3.7 Encourage school districts to implement and update, as needed, facility master plans.
- Policy PUB-P3.8 Encourage neighboring school districts to modify jurisdictional boundaries where such changes would benefit the safety of school children and reduce their travel time to school.

Goal PUB-4 Promote close cooperation and coordination between the City of Vacaville and the school districts.

Policies

- Policy PUB-P4.1 Regularly inform the school districts of policies and projects that may affect the provision of educational facilities and services.
- Policy PUB-P4.2 Work with the school districts to plan educational facilities with sufficient permanent capacity to meet the needs of current and projected future enrollment, and ensure that there are mechanisms to provide for the timely construction of the facilities.
- Policy PUB-P4.3 In conjunction with the approval of residential development, cooperate with local school districts to ensure that sufficient school facilities are available to serve the enrollment generated by the new development.
- Policy PUB-P4.4 If planned school sites, as shown in Figure PUB-3, are not required or are needed in an alternate location, as determined by the school districts, the land use designation of the site will revert to the predominant land use in the area through a General Plan Amendment process.

Public Buildings

Background Information

The City of Vacaville owns and/or operates numerous public buildings in the city, including City Hall, a public works corporation yard, remote City offices at the corner of Buck Avenue and Eldridge Street, and the Easterly Waste Water Treatment Plant. City Hall is located at 650 Merchant Street. The facility provides for governance and administrative functions, such as the City Council, City Manager, City Attorney, Finance Department, and the City Clerk, and also houses the administrative offices of multiple City departments, including Community Development, Police, Fire, and Public Works. The Public Works corporation yard is located at 1001 Allison Drive, just east of Downtown Vacaville. It provides facilities for municipal building, engineering, and maintenance, and public works functions. The remote City offices located at the corner of Buck Avenue and Eldridge Street house the City's Community Services and Housing Services

departments. The Easterly Waste Water Treatment Plant, which is discussed further in the wastewater section of this Element, is located at 6040 Vaca Station Road and treats wastewater collected in the city.

There are two libraries in Vacaville and both are maintained by the Solano County Library System in cooperation with the Vacaville Unified School District Library District. The Town Square branch of the Vacaville Public Library, located at 1 Town Square Place, opened in 2005 and features 25,000 square feet of space. The Cultural Center branch, located at 1020 Ulatis Drive, was remodeled in 2005 and features 24,000 square feet of space. Both libraries feature a meeting room, a study room, and a computer center, as well as additional equipment and technological amenities.

Public safety facilities (i.e. police and fire stations) and schools are covered in separate sections of this element. Recreational facilities and community centers are covered in the Parks and Recreation Element.

Goals, Policies, and Actions

Goal PUB-5	Build and maintain public buildings that are a source of civic pride for all residents.
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Policies

- Policy PUB-P5.1 Locate public administrative buildings centrally.
- Policy PUB-P5.2 Design public buildings and facilities to maintain and improve the beauty of Vacaville.
- Policy PUB-P5.3 Design public buildings to fit into and complement their ultimate surroundings, and buffer public buildings from their surroundings to shield unsightly areas from public view.
- Policy PUB-P5.4 Provide adequate landscaping for all public buildings and installations.
- Policy PUB-P5.5 Construct public works satellite facilities as necessary to effectively serve new development.
- Policy PUB-P5.6 Encourage public buildings to accommodate multiple community uses.

Goal PUB-6	Provide sufficient library services to meet the informational, cultural, and educational needs of Vacaville.
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Policies

- Policy PUB-P6.1 Explore opportunities to expand library services in Vacaville to keep pace with new development. Work with the Solano County Library System and the Vacaville Unified School District Library District to expand existing facilities and/or build another branch library to better serve residents located in other areas of the city.
- Policy PUB-P6.2 Encourage the Solano County Library System and the Vacaville Unified School District Library District to maintain or increase library operations funding as budgets allow.
- Policy PUB-P6.3 Encourage the Solano County Library System and the Vacaville Unified School District Library District to ensure that libraries are accessible to all residents, including elderly, disabled, or other underserved populations.
- Policy PUB-P6.4 Support joint use of library facilities by various community groups.
- Policy PUB-P6.5 Support implementation of Solano County’s Libraries Master and Strategic Plans.

Technology and Telecommunications

Background Information

A wide variety of utilities and technologies are central to a modern community. Adequate provision of these utilities and services allows businesses to prosper, homes and schools to be connected to educational resources from across the world, and government services to be easily accessed by citizens. Likewise, lack of these facilities can be a major detriment to the health and development of a community. Since most of these facilities and services are provided by private companies, a partnership between government, industry, and citizens is needed. In addition, because the field of technology and telecommunications changes very rapidly, policies and regulations need to be flexible enough to respond to the changing marketplace.

Many of the facilities necessary to provide telecommunications services are located in the public right-of-way, or in public utility easements adjacent to the right-of-way. To avoid damage to the public investment in landscaping and roads, and to avoid disruption to residential neighborhoods, maintenance and installation work should be coordinated and properly scheduled. Some utility franchises are established by State law (e.g. telephone), while other franchises are left to local negotiations, although both examples have severe and substantial limitations on the exercise of local authority. These franchise agreements provide rights to use of the right-of-way to the franchisee, and provide the City with money to help pay for the repair of damages caused by installa-

tion and maintenance work. Franchise agreements also provide the City with tools to ensure services are provided to areas that may be less economically desirable for the provider to serve.

Telecommunications facilities can impact the appearance of a community. Too many above-ground facilities can detract from the residential character of neighborhoods. In many older residential and commercial areas, electrical distribution lines are located on poles in the public right-of-way, which can disrupt the aesthetic characteristics of a neighborhood or commercial center. In newer developments, the distribution lines for electricity are placed underground, along with cable television, telephone, and natural gas lines.

Access to the Internet is an essential feature of schools and businesses. In addition, more workers are telecommuting, working from their home by connecting to the main office through telecommunications technology. This benefits the community and region by reducing traffic and providing citizens with more time to commit to their families, local organizations, and activities.

As citizens and businesses have come to rely on the Internet for economic and educational activities, they also expect the same sort of access and service from government. The City’s website helps residents sign up for programs, take out permits, and participate in general governance more effectively. In addition, the City has established a “control network” to accurately identify all new parcels and facilities in new development projects, which will assist emergency response planning, modeling to determine future facility needs, and general mapping activities. Telecommunications services have also become important tools for law enforcement and emergency medical services. Not only is radio used to dispatch units, but data on suspects and patient records is commonly sent to vehicle-based computer systems. Global Positioning System (GPS) receivers are also used to keep track of emergency response vehicles, and an Opticom traffic signal system provides green lights for emergency vehicles through intersections.

Goals, Policies, and Actions

Goal PUB-7	Promote the development of state-of-the-art technology and telecommunications facilities that benefit the public.
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Policies

- Policy PUB-P7.1 Ensure that technological facilities and services are available to the broadest possible cross-section of residents, businesses, and institutions in Vacaville.
- Policy PUB-P7.2 Monitor changes to technology and federal and State regulations to ensure that Vacaville is able to respond to those changes in a timely manner.
- Policy PUB-P7.3 Coordinate City telecommunications services with other local, regional, State, and federal governmental agencies to provide citizens the greatest

possible open and convenient access to governmental programs and information.

Policy PUB-P7.4 Support telecommunications and other technologies necessary to develop quality jobs and educational facilities in Vacaville.

Policy PUB-P7.5 Ensure that the City’s telecommunications and Internet services are capable of providing timely emergency information.

Actions

Action PUB-A7.1 Develop and maintain appropriate ordinances, policies, and master plans to regulate the installation of telecommunications facilities for the best interests of the community. As new technologies emerge, amend existing regulations or adopt new ones, consistent with the best interests of the community.

Action PUB-A7.2 Amend the Telecommunications chapter of the Land Use and Development Code as needed to keep up-to-date on changes in telecommunications technology and practices.

Other Community Services

Background Information

As the City grows, there will be an increasing demand and support for community services and cultural facilities. Most services that enhance the quality of life within the city, such as health services, child-care services, and cultural and community facilities, such as theaters, galleries, places of worship, are provided by private businesses or public agencies other than the City. However, the City provides some of these services, such as the Vacaville Cultural Center, which includes a performing arts facility.

Goals, Policies, and Actions

Goal PUB-8	Encourage the development of public and institutional uses in Vacaville, including educational, cultural, health-care, and day-care facilities.
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Policies

Policy PUB-P8.1 Encourage participation by the private sector in funding public or nonprofit facilities and services that will be used by Vacaville residents and jobholders.

- Policy PUB-P8.2 Encourage public and private community facilities such as churches to be located near residential areas on arterial or collector streets.
- Policy PUB-P8.3 In order to facilitate negotiation between potential users and developers during the early stages of project design, encourage designation of sites for membership organizations on development plans.
- Policy PUB-P8.4 Encourage day-care facilities in residential areas if there is sufficient available space for outdoor activity and if traffic, parking, and noise impacts can be mitigated.
- Policy PUB-P8.5 When reviewing development proposals that include significant job-generating uses, coordinate with the project proponent to determine the need for and, where applicable, the location of day-care facilities at the time a specific plan, tentative map, or development plan is approved.
- Policy PUB-P8.6 Continue to develop a cultural resources program, including visual arts and performing arts.

Actions

- Action PUB-A8.1 Implement zoning designation(s) that will clearly delineate major institutions and public facilities and their uses and establish appropriate development standards.

Solid Waste and Recycling

Background Information

The City of Vacaville contracts with a private waste collection company to provide weekly solid waste, green waste, and recyclable material collection to Vacaville residents and commercial businesses. The California Department of Resources Recycling and Recovery (CalRecycle) has allocated the City of Vacaville with a disposal rate target of 6.5 pounds of waste per person per day. In 2010, the City of Vacaville's disposal rate was 4.9 pounds of waste per person per day, which was well below the CalRecycle target.

Recyclable material can also be taken to several drop-off recycling centers throughout the city, including a recycling Center located at 855½ Davis Street. Recyclable material collected by the private waste collection company is sent to a material recovery facility.

Solid waste collected from Vacaville is deposited at the Hay Road Landfill. In 2009, the landfill received 126,000 tons of solid waste, of which 48 percent was from Vacaville residents and

businesses. The total capacity of the landfill is 37 million cubic yards. As of 2012, it is projected that the landfill will reach capacity in 2069.

Vacaville residents can dispose of household hazardous waste at the Household Hazardous Waste Facility. The Household Hazardous Waste Facility also accepts commercial hazardous waste from Conditionally Exempt Small Quantity Generators (CESQGs) that generate less than 220 pounds or 27 gallons of hazardous waste for a fee.

Division 8.08 (Solid Waste, Yard Waste, and Household Hazardous Waste) of the Vacaville Municipal Code regulates the collection and disposal of solid waste, yard waste, and household hazardous materials. All Vacaville residents must pay to have their solid and yard waste collected. Solid and yard waste may not be burned or buried within the city limit. Household hazardous waste must be disposed of at a licensed and permitted collection facility. In addition, the Land Use and Development Code (Division 14.09 of the Municipal Code) requires that residential, commercial, business, industrial, and public districts provide areas for the collection of recyclable material and solid waste.

Goals, Policies, and Actions

Goal PUB-9	Reduce the volume of solid waste generated in Vacaville through recycling and resource conservation.
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Policies

- Policy PUB-P9.1 Improve upon, and expand, waste disposal programs and methods in order to meet or exceed State waste diversion requirements.

- Policy PUB-P9.2 Strive for a minimum 90 percent of City residents to participate in waste diversion programs.

- Policy PUB-P9.3 Maintain and expand the citywide curbside recycling program.

- Policy PUB-P9.4 Maintain and expand the citywide household hazardous waste collection program.

- Policy PUB-P9.5 Maintain and expand the citywide separate yard waste collection and composting program.

- Policy PUB-P9.6 Continue to emphasize public education about the City’s various waste reduction and diversion programs to increase participation and diversion quantities.

- Policy PUB-P9.7 Encourage local businesses to expand their recycling efforts and to reduce packaging of products manufactured in the city.

- Policy PUB-P9.8 Design or improve public buildings with on-site storage facilities for recycled materials.
- Policy PUB-P9.9 Require that construction sites provide for the salvage, reuse, or recycling of construction and demolition materials and debris.
- Policy PUB-P9.10 Require the use of post-consumer recycled paper and other recycled materials in all City operations whenever possible.

Actions

- Action PUB-A9.1 Consider adopting a procurement ordinance to purchase recycled goods, thereby creating a market for recycled materials.
- Action PUB-A9.2 Amend the Land Use and Development Code to require at least 50 percent diversion (i.e. reuse or recycling) of non-hazardous construction waste from disposal.

Water Service

Background Information

The City provides potable water to users within the city limits via a network of water mains, transmission mains, reservoirs, groundwater wells, booster pump stations, and treatment plants.

Water Supply

Water supply for the city comes from both surface water and groundwater, and is drawn from a variety of reserves, including the following:

- **Solano Project.** The Solano Project was constructed by the Bureau of Reclamation in 1958. The main feature of the Solano Project is Monticello Dam, which provides storage for approximately 1.6 million acre-feet (AF) of water in Lake Berryessa. In addition to its direct entitlement, Vacaville entered into an agreement with the Solano Irrigation District (SID) that augments the city's allocation of Solano Project water.
- **State Water Project (North Bay Aqueduct).** Pursuant to agreements with the Solano County Water Agency (SCWA) and the Kern County Water Agency (KCWA), surface water received from the State Water Project is delivered through the North Bay Aqueduct (NBA) to the City of Vacaville. Because the NBA is part of the entire State Water Project, any shortages occurring in the State Water Project impact the water availability from the NBA, making it a less reliable source than the Solano Project.
- **Settlement Water.** The California Water Code includes area-of-origin statutes, which state that an area shall not be deprived of the prior right to water reasonably required to adequately supply the beneficial needs of the area. In settlement of area-of-origin water

right applications by the cities of Fairfield, Benicia, and Vacaville, the California Department of Water Resources (DWR) provides “Settlement Water” to Vacaville. This is part of the State Water Project.

- **Municipal Groundwater Wells.** The City owns and operates twelve municipal groundwater wells with very high quality groundwater. Vacaville continues to explore well field expansion as a means of maintaining adequate water supply.

Areas outside the city limits are generally agricultural and/or rural residential and rely on private groundwater wells and/or potable water service from the Solano Irrigation District (SID).

In 2002, the California legislature passed Senate Bill (SB) 610, which requires new development projects to assess the sufficiency of water supply. SB 610 requires the local public water system to prepare a Water Supply Assessment for large development projects, which are defined in the legislation. A Water Supply Assessment must document water supply sources, quantify existing and future demand for water, evaluate potential impacts of short and prolonged droughts, and compare water supply and demand in order to evaluate water supply sufficiency.

Water Treatment and Distribution

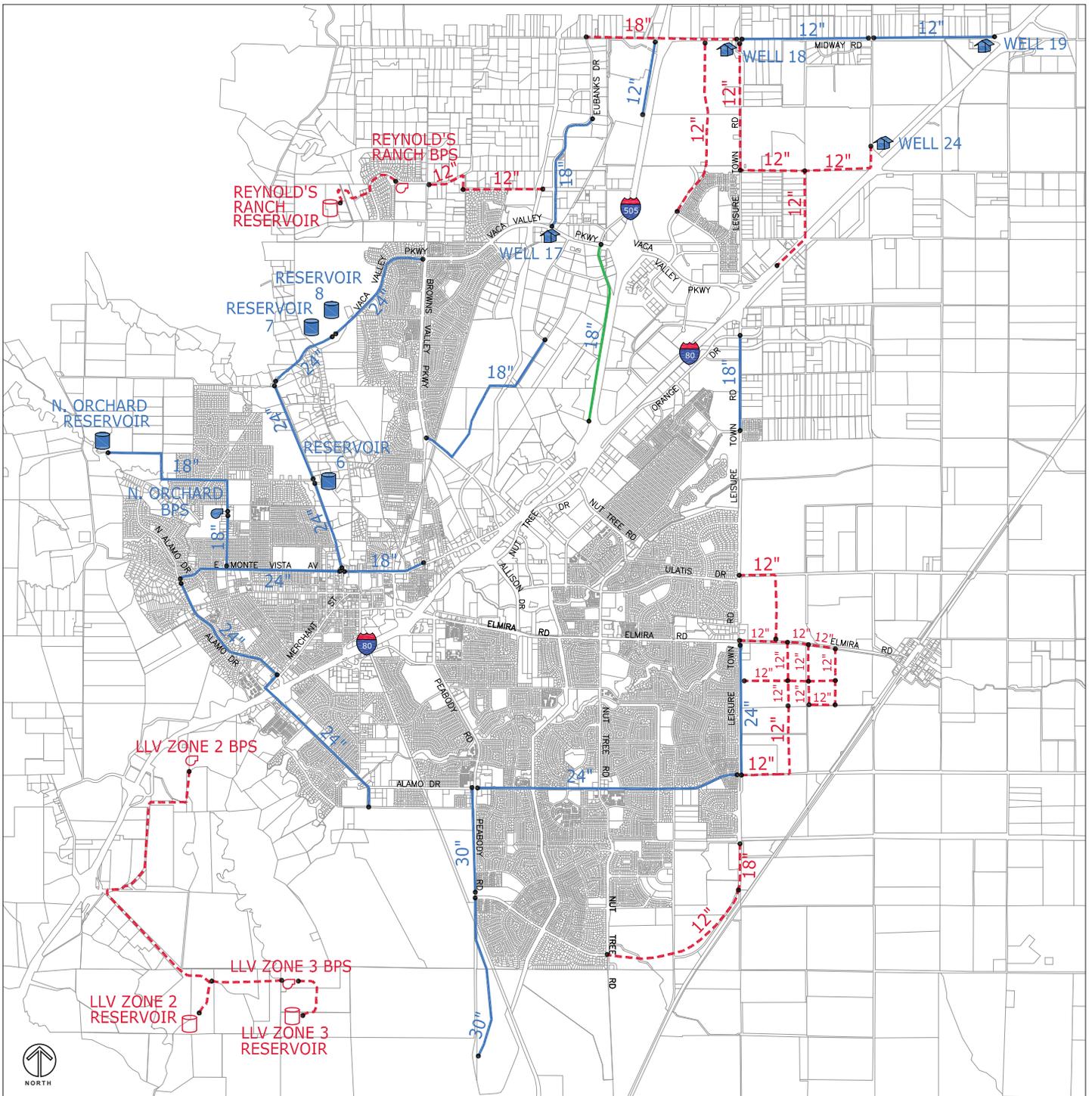
The City operates two water treatment facilities:

- The Diatomaceous Earth Water Treatment Plant (DE Plant), which is located on Elmira Road and owned by the City.
- The North Bay Regional Water Treatment Plant (NBR Plant), which is located in Fairfield and jointly owned with the City of Fairfield.

The City’s distribution system consists of one main pressure zone, which primarily serves development with building pad elevations between 82 and 222 feet, and several upper pressure zones, which serve development above 222 feet. The system includes approximately 292 miles of distribution pipelines, including 18-inch, 24-inch, and 30-inch transmission mains, as well as 4-inch to 12-inch water distribution mains. In addition, water is stored by the City in various elevated storage reservoirs, including five reservoirs in the main zone and three reservoirs in the upper pressure zones. New major water distribution system infrastructure required to serve the General Plan by its horizon year of 2035 is shown in Figure PUB-4.

Urban Water Management Plan

In accordance with State law, the City has adopted an Urban Water Management Plan (UWMP), which compares projected water use to available water supply sources over the next 20 years. The UWMP is updated every five years.



Source: NV5, 2012.

- PLANNED WATER LINES (CITY)
- PLANNED WATER LINES (DEVELOPER)
- 🏠 PLANNED WELLS/PLANTS (CITY)
- 🏠 PLANNED RESERVOIRS (DEVELOPER)
- 🏠 PLANNED RESERVOIRS (CITY)
- ⚙️ PLANNED BOOSTER PUMP STATIONS (DEVELOPER)
- ⚙️ PLANNED BOOSTER PUMP STATIONS (CITY)
- WATER LINES UNDER DESIGN/CONSTRUCTION (CITY)

FIGURE PUB-4

YEAR 2035 PLANNED WATER SYSTEM IMPROVEMENTS

Goals, Policies, and Actions

Goal PUB-10	Ensure that a reliable water supply can be provided within the city.
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Policies

- Policy PUB-P10.1 Continue to pursue additional water supplies to meet the city's future demands.
- Policy PUB-P10.2 Require new development to construct water source or storage facilities if the project's Water Supply Assessment indicates a deficiency in the water source.

Actions

- Action PUB-A10.1 Continue to update the Urban Water Management Plan every five years.

Goal PUB-11	Provide adequate water infrastructure facilities to meet current and future populations.
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Policies

- Policy PUB-P11.1 Maintain water storage, conveyance, and treatment infrastructure in good working condition in order to supply domestic water to all users with adequate level of service.
- Policy PUB-P11.2 Replace existing water mains with larger mains, as necessary, to serve intensified land use in developed areas per the adopted Water System Master Plan.
- Policy PUB-P11.3 Assess the adequacy of water utilities in existing developed areas, and program any needed improvements in coordination with new infrastructure that will serve developing areas.

Actions

- Action PUB-A11.1 Continue to update the five-year Capital Improvement Plan to provide for needed water facilities in relation to the City's financial resources.
- Action PUB-A11.2 Develop a long-range strategic capital development plan for water facilities consistent with the General Plan.

Goal PUB-12	Promote coordination between land use planning and water facilities and service.
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- Policy PUB-P12.1 Prohibit any development that will not meet standards of water service. All service standards shall be met prior to project occupancy.
- Policy PUB-P12.2 Do not allow development in the main water pressure system (Zone 1) to exceed a pad elevation of 222 feet (NAVD 88) unless, and until, an upper pressure zone water storage and distribution system (Zone 2) has been constructed to serve such development, or until it can be demonstrated to the satisfaction of the Director of Public Works that equivalent standard pressures to the street and to all structures can be provided by the Zone 1 water system without modification.
- Policy PUB-P12.3 Ensure that new development provides fair share funding for all required water utility infrastructure and facilities.
- Policy PUB-P12.4 Require that new development designates water service corridor easements or routes when tentative maps or specific plans are approved.
- Policy PUB-P12.5 Require buffer landscaping and multiple use, where feasible, of water utility sites and rights-of-way to harmonize with adjoining uses.
- Policy PUB-P12.6 Prohibit extension of water service infrastructure into the Upper Lagoon Valley that would promote its urban development.

Wastewater

Background Information

Wastewater collection and treatment is provided by the City of Vacaville.

Wastewater Collection

The City owns and operates the wastewater collection system in Vacaville, which consists of gravity and pressure sewers, lift stations, and associated facilities. The City performs routine wastewater collection system flow monitoring at various permanent metering locations throughout the city and at the Easterly Wastewater Treatment Plant (WWTP). Additionally, the City maintains a collection system model for the purpose of simulating peak flow conditions in major sewers to determine existing and future needs for collection system improvements. Based on this model, the City uses Development Impact Fees to replace undersized facilities, giving priority to those facilities that are expected to reach capacity in the near future.

New major wastewater collection infrastructure required to serve the General Plan by its horizon year of 2035 is shown in Figure PUB-5.

Wastewater Treatment

The Easterly Waste Water Treatment Plant (WWTP), located east of the city, near Elmira, provides treatment of wastewater from residential, commercial, and industrial dischargers throughout the city. Effluent from the Easterly WWTP is discharged into Old Alamo Creek adjacent to the WWTP site. Current wastewater flows are within the design capacity of the WWTP.

The City of Vacaville has an adopted Sewer System Management Plan that responds to the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems and provides a general framework for collection system operation, maintenance, and overflow prevention.

Goals, Policies, and Actions

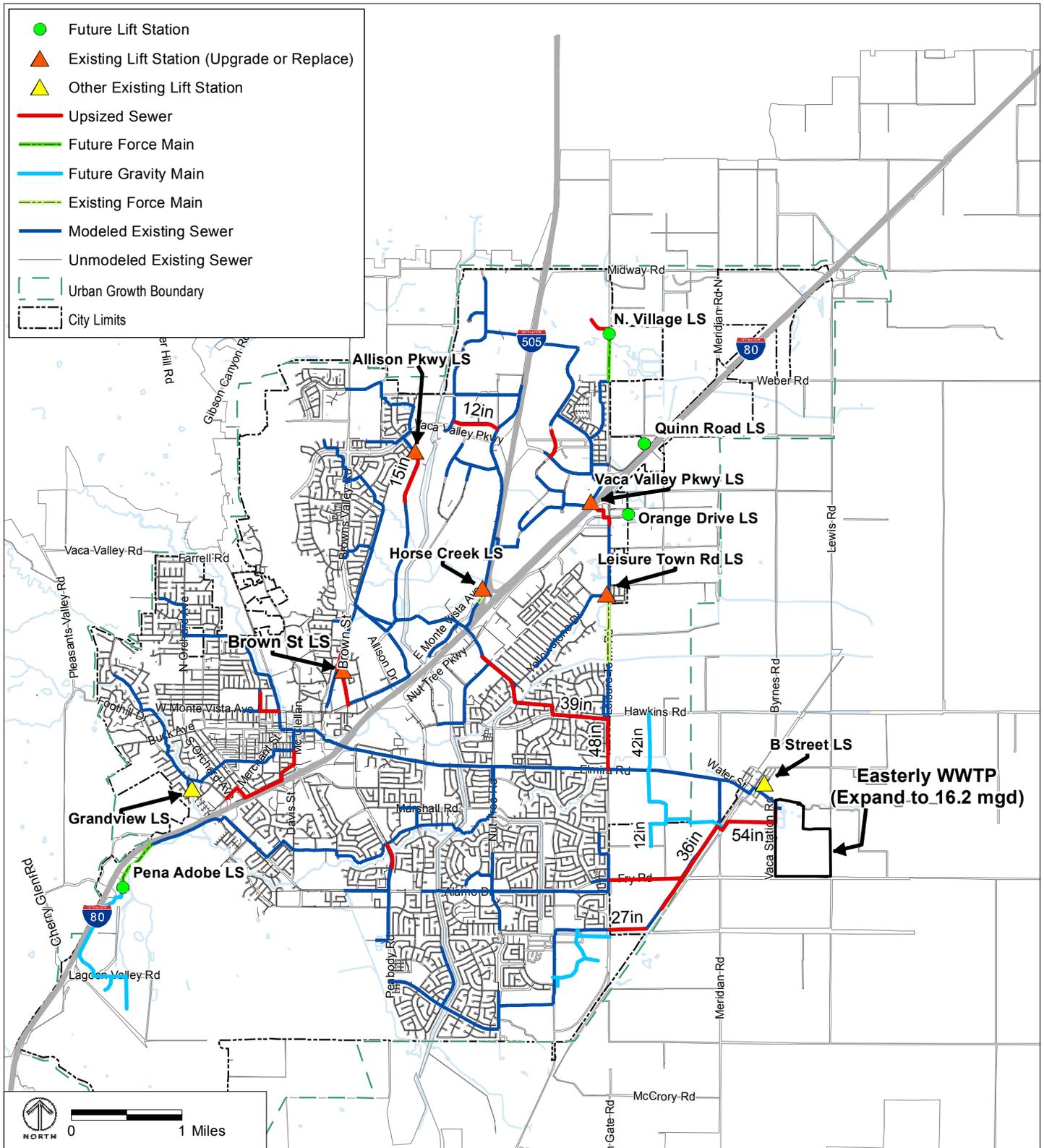
Goal PUB-13	Collect, transmit, treat, and dispose of wastewater in ways that are safe, sanitary, and environmentally acceptable.
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Policies

- Policy PUB-P13.1 Maintain wastewater conveyance, treatment, and disposal infrastructure in good working condition in order to supply municipal sewer service to the city's residents and businesses.
- Policy PUB-P13.2 Provide for the replacement of future obsolete or deteriorated wastewater infrastructure in long-range strategic capital planning.
- Policy PUB-P13.3 Require that new habitable structures located within the city limits connect to the public wastewater collection system.
- Policy PUB-P13.4 Plan, construct, and maintain wastewater treatment facilities to provide a level of wastewater treatment that meets State discharge requirements and to plan for expanding wastewater treatment capacity, consistent with anticipated needs.

Actions

- Action PUB-A13.1 Implement and maintain the Sewer System Management Plan in accordance with regulatory requirements to ensure that the wastewater collection system is adequately sized, protected from deleterious substances, and maintained to minimize the risk of sanitary sewer overflows.



Source: West Yost Associates, 2012.

Notes: 1. WWTP = Wastewater Treatment Plant

2. LS = Lift Station

3. The modeled gravity sewer lines consist of all trunk sewers 12 inches in diameter and greater, plus selected smaller diameter sewers in key areas.

4. Alignment, identification, and sizing of improvements subject to change through periodic Master Planning activities.

FIGURE PUB-5

MAJOR WASTEWATER FACILITIES UPGRADES IN 2035

Goal PUB-14	Coordinate wastewater conveyance, treatment, and disposal with land use planning.
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Policies

- Policy PUB-P14.1 Assess the adequacy of wastewater infrastructure in existing developed areas, and program any needed improvements in coordination with new infrastructure that will serve developing areas.
- Policy PUB-P14.2 Replace existing sewers, lift station pumps, and associated equipment and facilities with larger facilities as necessary to serve intensified land use in developed areas.
- Policy PUB-P14.3 Ensure that new development provides adequate funding for all wastewater infrastructure and facilities.
- Policy PUB-P14.4 Prohibit any development that will not maintain adequate standards for wastewater service. All wastewater service standards shall be met prior to project occupancy.
- Policy PUB-P14.5 Require that new development designate sewer easements or routes when tentative maps or specific plans are approved.
- Policy PUB-P14.6 Prohibit extension of wastewater infrastructure into the Upper Lagoon Valley that would promote its urban development.
- Policy PUB-P14.7 Long-range strategic capital development plans for areas with concentrations of unoccupied Business Park or Technology Park shall be in accordance with the sewer master plan that may include one or more unassigned “point loads” in order to accommodate large employers with high wastewater flows.

Actions

- Action PUB-A14.1 Continue to update the five-year Capital Improvement Plan to provide for needed wastewater facilities in relation to the City's financial resources.
- Action PUB-A14.2 Develop and maintain, through regular updates, a long-range strategic capital development plan for wastewater facilities consistent with the General Plan.

Goal PUB-15	Pursue innovative solutions for wastewater treatment and disposal or reuse that are compatible with the environment.
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Policies

- Policy PUB-P15.1 Require buffer landscaping and multiple use, where feasible, of wastewater utility sites and rights-of-way to harmonize with adjoining uses.
- Policy PUB-P15.2 Seek out cost effective and environmentally sustainable methods of distributing and using recycled water for non-potable uses.