

4.9 PUBLIC SERVICES AND UTILITIES

This section addresses the potential effects of implementation of the Specific Plan on availability and adequacy of public services and utility service in Larkspur. The public services addressed in this analysis include schools, parks and recreational facilities, police protection, and fire protection. Utilities addressed in this analysis include water, wastewater treatment, storm drainage, and solid waste disposal. The information presented in this section is based on communication with personnel from local school districts and utilities and from the Twin Cities Police Department, as well as review of existing documents and Internet sites regarding levels of service (Eischens, J., pers. comm., 2003).

4.9.1 ENVIRONMENTAL SETTING

SCHOOLS

Public elementary school students residing in Larkspur attend Neil Cummins Elementary School. The school, which provides education for students in grades kindergarten (K) through 5th grade, is located at 58 Mohawk Avenue in Corte Madera, about 1.5 miles from the Specific Plan area. Students in grades 6 through 8 in the Larkspur area attend the 9.7-acre Hall Middle School, which is located directly north of the Specific Plan area at 200 Doherty Drive. The Larkspur School District operates both of these schools.

Public school students in grades 9 through 12 attend Redwood High School at 395 Doherty Drive. The Tamalpais Union High School District operates this high school. The 60-acre high school campus is located east of the Specific Plan area, separated by Larkspur Creek and high school district facilities. The 2002-2003 enrollment and the capacity of each of the area schools is shown in Table 4.9-1.

School	Grades	Enrollment	Capacity	Difference
Neil Cummins Elementary School	K-5	634	701*	-60
Henry C. Hall Middle School	6-8	316	391*	-75
Redwood High School	9-12	1,446	1,900	-454

* School district-estimated capacity numbers.
Sources: Toukonen, pers. comm., 2003; Winkler, pers. comm., 2003

PARKS AND RECREATIONAL FACILITIES

One neighborhood park, Doherty Park, is located within Subarea 1 west of the Larkspur Plaza shopping center. The small triangular-shaped 9,674-square-foot neighborhood park offers a green area, picnic tables, and benches for area visitors and residents.

Piper Park, a 22-acre community park located across Doherty Drive from Subarea 3, offers a variety of active and passive recreational opportunities. Thirty picnic tables and 14 barbeque grills are available, as are restrooms, a walking path, a community garden, drinking fountains, playground equipment, and an enclosed dog run (Canine Commons). Activity areas include four tennis courts, two softball fields, one soccer field, two sand volleyball courts, and two horseshoe pits. A fishing dock is also located within the park.

Adjacent schools also provide recreational facilities for the public, although access is limited to after-school hours. There is a basketball court and asphalt and turf play area at Hall Middle School. Redwood High School has a gymnasium, two baseball fields, a swimming pool, a court games facility, tennis courts, and other athletic facilities on 17 acres that are available for public use under certain conditions. Seventeen acres with a baseball field, three softball fields, and a soccer field are conditionally available for public use (Hahn, Jim, pers. comm. 2003).

Also within the vicinity of the Specific Plan area is Dolliver Park on Magnolia Avenue, with play equipment, restrooms, and a picnic area, and Hamilton Park on South Eliseo Drive, with a sitting and picnic area.

The City currently maintains 51.3 acres of public parkland, consisting of Piper Park and 11 mini-parks, or approximately 4.2 acres per 1,000 residents.

There are a number of existing and planned bicycle/pedestrian routes in the city. The Bicycle/Pedestrian Circulation Plan in the Larkspur General Plan indicates that a planned Class 1 path would run along the southern boundary of the Specific Plan area on Ward Street and adjacent to Larkspur Creek. Class 2 lanes are also planned on either side of Doherty Drive.

POLICE PROTECTION

The Twin Cities Police Department Field Operations Division (Larkspur Facility—Station One) is located on 1.5 acres directly across Doherty Drive from the Specific Plan area in the southern portion of Piper Park at 250 Doherty Drive. The facility houses the Chief of Police, Field Operation Commander, and Public Safety Dispatch. The station is maintained 24 hours a day with limited counter service between 5:00 p.m. and 8:30 a.m.

The Support Services Division of the Twin Cities Police Department is located at 342 Tamalpais Avenue, approximately 1.4 miles from the Field Operations Division. The Support Services Division facility houses the Investigations and Juvenile sections, and the Support Services Captain.

The police department employs 35 sworn personnel (including the police chief, three captains, two detectives, one juvenile officer, and one training support supervisor) and 11 nonsworn personnel (three community service officers, one dispatch supervisor, five dispatchers, one communications specialist, and one chief's secretary); it also maintains 24 vehicles (10 marked patrol units, nine unmarked patrol units, two community service officer units, and three

motorcycles). During each of two 12-hour shifts per day, the police department maintains a minimum staffing level of one sergeant and three beat officers. At full staffing there would be one watch commander and five beat officers per shift. At the time of preparation of this Revised Draft EIR, however, the department was not fully staffed; the department was under a hiring freeze for two vacant beat officer positions and one community service officer position, and another sergeant position was anticipated to be frozen upon the expected departure of the incumbent sergeant in December 2003 (Horn, pers. comm., 2003).

FIRE PROTECTION

The Specific Plan area is located within 0.25 mile of Larkspur Fire Station No. 1, which is located at 400 Magnolia Avenue at the corner of King Street. Larkspur Fire Station No. 2 is located in Greenbrae at 15 Berry Way, across Corte Madera Creek at Sir Francis Drake Boulevard and Eliseo Drive. The Larkspur Fire Department has a professional staff of 18 (one fire chief, one deputy fire chief/fire marshal, six captains, and 10 firefighters/engineers). About 20 volunteer firefighters augment the professional staff, primarily on nonemergency tasks. At Fire Station No. 1, which is equipped with two front-line fire engines and a support van, there are at least two firefighters on duty during every shift. At Fire Station No. 2, which is equipped with a front-line fire engine, a reserve fire engine, and a water tanker, there are three firefighters on duty during each shift. The fire department also maintains two staff cars. Mutual Aid Agreements are in force between the Larkspur Fire Department and fire departments in other Marin County jurisdictions.

WATER RESOURCES

Water in the Specific Plan area is provided by the Marin Municipal Water District (MMWD), which obtains water from seven reservoirs on Mt. Tamalpais in West Marin and through the transfer of water from Sonoma County Water Agency (SCWA). MMWD imports water from the Russian River, and receives approximately 75% of its water supply from local reservoirs and 25% through contracts with SCWA.

MMWD plans for long-term supplies based on the buildout of the general plans of the cities it serves. Based on the General Plan land use designation, over 21 afa of water are currently reserved for future development in Subarea 3, and additional water would be available if necessary (Conklin, pers. comm., 2003). Also, MMWD has additional water for potential development in Subareas 1 and 2.

MMWD's operational yield (the amount of water that can be supplied in all but the driest years) is 29,500 acre-feet annually (afa), while the average annual use within the district is 28,622 afa (MMWD 2003). MMWD's current Water Supply Master Plan requires that MMWD provide a minimum storage of 10,000 af in local reservoirs to serve as an emergency reserve during drought years. However, in 2000 MMWD identified an annual deficit in water supplies of 1,650 af. Without a new supply source, MMWD expects this annual shortfall to increase to 8,800 af by 2025. According to the MMWD Urban Water Management Plan 2000, SCWA is projected not to be able to deliver above its current supply level until at least 2005. In

addition, in 2000 the MMWD Board of Directors opted not to improve its pipeline to the Russian River because of concern about long-term reliability of this water source and the potential impact of increased Russian and Eel River diversions on salmon and steelhead populations (McGuire, pers. comm., 2003). MMWD is exploring opportunities to partner with the Las Gallinas Valley Sanitary District for water recycling and exploring a new water supply source based on desalination of water from San Francisco Bay. (McGuire, pers. comm., 2003.)

A 24-inch major supply line runs through the Specific Plan area within the former railroad right-of-way. Existing lines in the area consist of an 8-inch main in Magnolia Avenue, an 8-inch main in Doherty Drive, a 6-inch line in Ward Street, an 8-inch main in Meadowood Drive, and an 8-inch loop in the Larkspur Plaza shopping center.

WASTEWATER TREATMENT

Ross Valley Sanitary District No. 1 is responsible for wastewater collection in the Specific Plan area. A 10-inch-diameter sanitary sewer main is located under Doherty Drive and Magnolia Avenue and currently serves the Specific Plan area, and a pump station is located directly across Doherty Drive from Subarea 3, near Hall Middle School. The pump station experiences operational problems during peak demand times because of the buildup in pressure in the force mains served by the station and will require upgrading to accommodate future wastewater discharges. The sanitation district has not yet determined the full extent of the needed improvements to the pump station, but improvements could include upgrades to the generator, pump, and electrical system, and changes to the structure of the pump house and well.

The Central Marin Sanitation Agency (CMSA), located on Sir Francis Drake Boulevard, in San Rafael, provides wastewater treatment for Larkspur, Corte Madera, San Rafael, and Ross Valley. The CMSA wastewater treatment plant has a treatment capacity of 10 million gallons of wastewater per day in dry weather and up to 30 million gallons secondary (biologically) treated wastewater per day in wet weather; the plant's rated peak wet-weather capacity is 90 million gallons per day of blended primary and secondary treatment processed wastewater (Central Marin Sanitation Agency 2003). Any wastewater in excess of 30 million gallons per day receives primary (mechanical) and disinfection treatment before discharge into San Francisco Bay. Currently the average flow during dry weather conditions is 8 million gallons per day. Wet weather flows can exceed 100 million gallons per day (Rose, pers. comm., 2003).

STORM DRAINAGE

Stormwater runoff generated in the Specific Plan area currently drains to a 42-inch storm drain located under East Ward Street that outfalls to Larkspur Creek and by a 24-inch storm drain located along the north side of Doherty Drive, with 12-, 24-, and 36-inch connections to the Specific Plan area. An open channel storm drain is also located along the north side of East Ward Street. This channel collects stormwater from properties south of East Ward Street beyond the Specific Plan area via two 12-inch storm drains under East Ward Street and a 32-inch storm drain under East Ward Street that carries runoff from Subarea 1.

SOLID WASTE DISPOSAL

Marin Sanitary Service, by contract with the City of Larkspur, is responsible for the collection, recycling, and disposal of solid waste and implementing state mandates, including Assembly Bill (AB) 939 regarding recycling of landfill waste. Marin Sanitary Service is in compliance with AB 939's 50% recycling requirement, as it recycles 65% of waste it collects. In 2002, 50% of the waste generated from the city of Larkspur was recycled. (Sarkela, pers. comm., 2003). After newspaper, cardboard, glass, and metals have been removed from the waste stream at the Marin Resource Recovery Center, solid waste is hauled to the Redwood Sanitary Landfill for disposal. The Redwood Sanitary Landfill, located in the unincorporated area near Novato, receives virtually all of the solid waste generated by the cities in Marin County (King, pers. comm., 2003).

4.9.2 ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

Implementation of the Specific Plan would have a significant impact on public services if it were to result in:

- < substantial adverse physical impacts associated with the construction or expansion of school facilities;
- < the construction or expansion of recreational facilities that might have an adverse physical effect on the environment;
- < an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated;
- < substantial adverse physical impacts associated with the construction or expansion of police facilities;
- < substantial adverse physical impacts associated with the construction or expansion of fire protection facilities;
- < the need for new or expanded entitlements to water supply resources;
- < the construction of new or expanded wastewater treatment facilities that could cause significant environmental effects;
- < exceedance of wastewater treatment requirements of the RWQCB;
- < a determination by the wastewater treatment provider that serves (or may serve) the area that it would not have adequate capacity to serve the anticipated demand in addition to the provider's existing commitments;
- < the construction of new stormwater drainage facilities (or the expansion of existing facilities) that could cause significant environmental effects;

- < development that could not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs;
- < noncompliance with federal, state, and local statutes and regulations related to solid waste; or
- < substantial adverse physical impacts associated with the construction or expansion of other public facilities.

PROJECT-LEVEL IMPACTS

Impact
4.9-1

Potential for Exceedance of School Student Capacity. *The maximum residential development permitted in the Specific Plan area is anticipated to add 50 elementary and middle school students, and 26 high school students. The resulting enrollment in local schools would be less than the estimated student capacity. This impact is considered less than significant.*

The residential development that could be permitted within the Specific Plan area could be anticipated to add students to Neil Cummins Elementary School, Henry Hall Middle School, and Redwood High School. For 1997-98, the most recent school year for which student yield rate information is available, the Larkspur School District calculated student yields for grades K-8 ranging from 0.13 to 0.38 student per residential unit, depending on neighborhood (Lapkoff & Gobalet Demographic Research 1998). For purposes of this EIR analysis, a conservative approach was taken and the 0.38-student yield rate was used. Tamalpais Union High School District does not collect impact fees (additional school capacity comes from improvement of existing schools); therefore, the district does not have established student yield rates that can be used to estimate the number of high school students that would be generated per residential unit. For purposes of this EIR analysis, however, the district estimated that one student in grades 9-12 is generated per five households (Toukonen, pers. comm., 2003); therefore, the estimated student yield rate for Redwood High School is 0.20. The maximum number of units that could be constructed in the Specific Plan area is 58 single-family and 74 multifamily residential units. Table 4.9-2 shows the total number of students anticipated to be generated under the Specific Plan given the district's student yield rates.

The Larkspur School District estimated that an additional 60 students would be able to attend Neil Cummins Elementary School and 75 students would be able to attend Hall Middle School (Winkler, pers. comm., 2003). As shown in Table 4.9-2, the maximum residential development permitted in the Specific Plan area is anticipated to add up to 50 elementary and middle school students. The resulting enrollment would be less than the estimated student capacity. Therefore, no physical impacts associated with the construction or expansion of school facilities in the Larkspur School District would occur as a result of development under the Specific Plan.

Students in the Specific Plan area would attend Redwood High School. Approximately 26 students in grades 9 through 12 could be generated by the Specific Plan. Given current enrollment trends and the capacity limit of 454 additional students, the Tamalpais Union High School District expects to be able to accommodate these 26 students within existing facilities,

without the need for additional classroom space (Toukonen, pers. comm.(1), 2003). This impact is considered less than significant.

Table 4.9-2					
Student Generation per Residential Unit					
Grade	No. of Units			Student Yield Rate	Total Number of Students ²
	Single-Family ¹	Multifamily	Total Units		
K-8	58	74	132	0.38 ³	50
9-12	58	74	132	0.20 ⁴	26
Total	-	-	-	-	76

¹ Includes both single-family dwellings and cottage homes.
² Totals rounded to the nearest whole number.
³ K-8 factor represents a conservative approach, as student yields ranged from 0.13 to 0.38 for the 1997-98 school year, the most recent student yields available.
⁴ 9-12 student yield represents an estimate.
Sources: Lapkoff & Gobalet Demographic Research 1998; Toukonen, pers. comm., 2003; EDAW 2003

**Impact
4.9-2**

Increase in Use of Parks and Other Recreational Facilities. *Although the Specific Plan calls for a public park in Subarea 3, addition of new residents in the Specific Plan area could result in an incremental increase in the use of existing parks and other recreational facilities. Property owners within the Specific Plan area, like other local property owners, would provide a portion of the total funds needed for ongoing park maintenance through payment of annual taxes. This impact is considered **less than significant**.*

Specific Plan Land Use Policy 35 (Public Park) calls for a public park in Specific Plan Subarea 3, the size of which would be determined based on the City’s park and recreation land and fees regulations (Chapter 17.13 of the Larkspur Municipal Code). Chapter 17.13 of the Larkspur Municipal Code requires park dedication only at locations designated in the General Plan for public parks; however, the location of the park proposed for Subarea 3 has not been designated in the General Plan. Nonetheless, the proposed park would meet the Municipal Code’s size requirements, and would meet the community’s recreational needs. No public expenditures are expected to be involved unless the amount of land required for dedication exceeds the approximately 0.9 acre required by these regulations. The developer(s) of Subarea 3 would be responsible for dedicating an improved site, under the provisions of Chapter 17.13, §§2 and 3 (which include street and utility connections, fencing, and other improvements essential to the City’s acceptance of land for recreational purposes). The developer would also be responsible for the payment of park improvement fees to cover the cost of landscaping and the installation of recreational equipment.

Even if a new park were built within the Specific Plan area, new residents would probably also use other local parks and recreational facilities nearby—particularly Piper Park and the facilities at Redwood High School, which are within easy walking distance. Construction at or expansion of existing parks and recreational facilities would not be needed as a result of this incremental increase in park/recreational facility use. However, the increase in use would

contribute to routine wear and tear on the playing fields and recreational equipment. It would be difficult to determine exactly how much wear and tear could actually be attributed directly to residents from the Specific Plan area, because most local parks and recreational facilities are widely used by large numbers of local residents and others within the region. The ongoing maintenance of local parks and recreational facilities is funded through the City's Public Works budget; property owners in the Specific Plan area would provide a portion of the total funds needed for this task through the payment of annual taxes, as would all other local property owners (Wilkinson, pers. comm., 2002). This impact is considered less than significant.

Impact
4.9-3

Increased Demand for Police Services. *Development of the Specific Plan area would result in an incremental increase in the local demand for police services, which could result in a need for additional police officers, support staff, and related equipment. However, no new police facilities or facility expansion that could affect the physical environment would be needed. This impact is considered **less than significant**.*

The development of the Specific Plan area would result in an incremental increase in the local demand for police services. When combined with the demand associated with anticipated population growth and other potential development projects within the Larkspur-Corte Madera area, this could mean that additional police officers, support staff, and related equipment would be required to effectively maintain existing service levels and response times. However, as described in Section 4.2 Population and Housing, the population increase with the Specific Plan would be small; therefore, the Specific Plan-related demand for police services would not necessitate the construction of any new police facilities (or the expansion of any existing police facilities) that could entail changes in the physical environment. The Twin Cities Police Department is in the process of preparing a bond measure to place on the ballot to provide funds for the construction of a new police station at the site of the existing station in Piper Park. If local voters approve the bond measure, construction of a new police station would then take place, with or without future development in the Specific Plan area (Horn, pers. comm.(1), 2003). This impact is considered less than significant.

Impact
4.9-4

Increased Demand for Fire Protection and Emergency Medical Response Services. *Development of the Specific Plan area would result in an incremental increase in demand for fire protection and emergency medical response services, which could result in a need for additional firefighters, support staff, and related equipment. However, no new fire protection facilities or facility expansion that could affect the physical environment would be needed. This impact is considered **less than significant**.*

Development of the Specific Plan area would result in an incremental increase in the local demand for fire protection and emergency medical response services, which could require additional firefighters, support staff, and related equipment to effectively maintain existing service levels and response times. However, as described in Section 4.2 Population and Housing, the population increase with the Specific Plan would be small; according to the Larkspur Fire Department, the Specific Plan-related demand for fire protection and emergency services would not necessitate the construction of any new fire protection facilities or the expansion of any existing fire protection facilities that could result in changes in the

physical environment (Sinnott, pers. comm., 2002). This impact is considered less than significant.

Impact
4.9-5

Increased Demand for Water Supply, Conveyance, Water Storage, or Water Treatment Services. *The existing water lines serving the Specific Plan area have sufficient capacity to serve the maximum level of development permitted under the Specific Plan. The 32.2 afa of water needed to serve the development in the Specific Plan area has been included in MMWD’s water planning efforts and is reserved for the Specific Plan area. As such, sufficient water system capacity and water supply are expected for the Specific Plan area, and impacts would be considered **less than significant**.*

The existing water lines serving the Specific Plan area have sufficient capacity to serve the maximum level of development permitted under the Specific Plan. The existing facilities include a 6-inch line under East Ward Street, an 8-inch main under Magnolia Avenue, an 8-inch main under Meadowood Drive, an 8-inch main under Doherty Drive, and an 8-inch loop under the Larkspur Plaza shopping center. The Specific Plan identifies the following conditions for development in the Specific Plan area:

- < Water conservation measures shall be included in the conditions of approval for development proposals.
- < New development shall comply with MMWD Ordinance No. 385.

MMWD water-use estimates for residential and commercial uses were used to estimate water required to serve the development that may occur in the Specific Plan area. Estimates provided are 0.26 afa for apartments and townhouses; 0.33 afa for single-family dwellings; 0.11 afa per 1,000 square feet for small retail; 0.10 afa per 1,000 square feet for community center; and 0.15 to 0.168 afa per room for motel/hotel, depending on whether the motel/hotel includes a restaurant, bar, and laundry (McGuire, pers. comm., 2003). (The highest water-use estimate for the motel/hotel use was assumed.) Based on these estimates, the new development that may occur in the Specific Plan area is expected to require up to approximately 41.2 afa of water. According to MMWD, over 21 afa of water are currently reserved for future development in Subarea 3, and additional water supply is available if necessary (Conkling, pers. comm. 2003). Also, MMWD has additional water for development in Subareas 1 and 2. MMWD currently does not have any programs in effect to limit water supply to the Specific Plan area (Eischens, pers. comm. 2003). Prior to the approval of all development projects within the Specific Plan area, a “will-serve” letter from MMWD, stating that MMWD would be able to provide water to the proposed development, would be required by the City, and this would ensure that development would generate water demand beyond the water supply capacity of MMWD. As such, no water supply insufficiency impacts would be expected.

Impact
4.9-6

Increased Demand for Wastewater Treatment Services. *CMSA has the capacity to serve the anticipated development of the Specific Plan area without expanding existing facilities. The Ross Valley Sanitary District will review development plans submitted for individual parcels within the Specific Plan area, and will identify specific facilities that may be*

*necessary to provide sufficient conveyance capacity to support the Specific Plan. This impact is considered **less than significant**.*

CMSA treats approximately 8 million gallons of wastewater per day during dry weather, which is 2 million gallons under the capacity level. Based on a general wastewater generation factor of 200 gallons per person per day, future development in the Specific Plan area, with an estimated increase of 264 new residents, may generate approximately 52,800 gallons per day. Therefore, CMSA currently has the capacity to serve the anticipated development in the Specific Plan area without expanding its existing facilities (Rose, pers. comm., 2002). CMSA has indicated that it can serve future development in the Specific Plan area but would require consultation with and confirmation from CMSA at the time future developments are proposed (Dow, pers. comm. 2003).

Improvements to Ross Valley Sanitary District's generator, pump, and electrical system and changes to the pump house would be required before future wastewater conveyance could be provided. When development plans are submitted for individual parcels within the Specific Plan area, the district will review them to determine whether the existing conveyance system capacity constraints would limit its ability to provide sewer service, and will identify specific upgrades that may be necessary to provide sufficient capacity to support the individual development projects in the Specific Plan area (Hogue, pers. comm., 2002). This impact is considered less than significant.

Impact
4.9-7

Need for Improvements to Stormwater Collection System. *Various improvements to the stormwater collection system may be necessary to provide adequate storm drainage within the Specific Plan area. The Specific Plan incorporates several policies regarding control of stormwater runoff and includes upgrades to culverts and BMPs to reduce the overall quantity of stormwater. This impact is considered **less than significant**.*

The Specific Plan incorporates several policies related to the control of stormwater runoff:

- < Provide necessary onsite storm drainage facilities to protect property and public safety (Utilities Policy 8 [Storm Drainage Service]).
- < A detailed drainage plan shall be required for the development of Subarea 3 (Utilities Policy 10 [Drainage Plan, Subarea 3]).
- < Minimize discharge of surface pollutants to Larkspur Creek and Corte Madera Creek and to offsite drainage facilities by implementing site planning and design techniques that may include but are not limited to the following:
 - Infiltration systems such as basins and grassy swales, to filter pollutants through the soil.
 - Stormwater retention and detention systems to reduce downstream peak flows, capture fine sediments and to allow wetland vegetation to uptake dissolved nutrients.
 - Biofilters, including vegetated slopes and channels.

- Design approaches such as pervious concrete and porous asphalt, narrow streets to reduce impervious surfaces, and brick pavers on sand (Utilities Policy 11 [Pollutants]).
- < Improvements should include onsite grass/vegetated swales and detention areas along the west, south and east edges of Subarea 3 to filter, receive, and detain stormwater before discharge into Larkspur Creek (Utilities Policy 12 [Subarea 3, Drainage Improvements]).

However, as described in Impact 4.4-3, Exceedance of Capacity of Existing Onsite or Adjacent Drainage System, improvements to the stormwater collection system may be necessary to provide adequate storm drainage within the Specific Plan area. Future development in the Specific Plan area that drains to these facilities could exacerbate existing deficiencies. The Specific Plan includes several components to improve drainage conditions. These are:

- < upgrading the 32-inch-diameter East Ward Street culvert to 42 inches (see “Stormwater Drainage” in Chapter 6, Utilities, of the Specific Plan);
- < upgrading the culvert at the northeastern corner of Subarea 3 under Doherty Drive to 42 inches (see “Stormwater Drainage in Specific Plan Chapter 6); and
- < implementing various BMPs designed to reduce the runoff of contaminants from the Specific Plan area during storms, which would also reduce the overall quantity of stormwater and its impact on site drainage facilities (Utilities Policy 11 [Pollutants]).

According to the City, and as mentioned in Impact 4.4-3, required design of facilities would need to pass the 25-year flood event (Hill, pers. comm., 2002). Future development in the Specific Plan area must comply with this existing requirement. As such, this impact is considered less than significant.

Impact 4.9-8 **Increase in Solid Waste Disposal.** *Anticipated uses in the Specific Plan area are typical of urban areas, and would not violate any statutes or regulations related to solid waste. Landfill space and material recovery capacity are expected to remain sufficient through at least the year 2043. This impact is considered **less than significant**.*

Anticipated uses in the Specific Plan area are typical of urban areas, and would not violate any federal, state, or local statutes or regulations related to solid waste. Marin Sanitary Service has indicated that it can serve future development in the Specific Plan area without the need to expand its Marine Resource Recovery Center. The Redwood Sanitary Landfill has contracted with disposal companies for providing landfill space until the year 2043; at that point, if space still exists at the landfill, they will continue to contract with disposal companies (King, pers. comm., 2003). Therefore, this impact is considered less than significant.

CUMULATIVE IMPACTS

The city of Larkspur is approximately 2,065 acres in size and is predominantly built out. As discussed in Existing Setting in Section 4.2, Population and Housing, less than 252 acres

remain undeveloped; of which only 138 difficult-to-develop acres are actually available for future development. Public services and utilities are developed and upgraded in anticipation of buildout of the city in accordance with the General Plan. Several projects are currently proposed within the city in addition to the Specific Plan; however, these projects include a total of only about 50 residential units. The Specific Plan represents the largest area of new development in the city.

There is adequate capacity in the local schools to accommodate up to 76 students potentially generated by development in the Specific Plan area as well as the approximately 29 students that could be generated by known projects in the area (50 single-family units); therefore, no physical impacts associated with the construction or expansion of school facilities in the Larkspur School District or Tamalpais Union High School District would be anticipated to occur as a result of development under the Specific Plan and cumulative development.

The addition of new residents in the area could result in an incremental increase in the use of existing parks and the need for additional facilities. Property owners provide a portion of the total funds needed for ongoing park maintenance through payment of annual taxes. The developer(s) of residential projects would be responsible for either dedicating land or contributing in-lieu fees for parks, as well as for paying improvement fees for parks.

Development would result in an incremental increase in the local demand for police, fire, and emergency medical services, which could result in a need for additional police officers, support staff, and related equipment. However, as described in Section 4.2, Population and Housing, the population increase with the Specific Plan would be small and would be accommodated by existing facilities or their replacements; therefore, no new police facilities that could affect the physical environment would be needed.

New development under the Specific Plan would require a minimum of approximately 41.2 afa of potable water annually; water supply for development consistent with the General Plan has been reserved and included in MMWD's water supply planning efforts and MMWD has indicated that additional water supply would be available. As such, the Specific Plan would not contribute to water shortage as future developments, consistent with the General Plan, are constructed and operated. MMWD would continue to expand its water conservation program and secure additional water supplies to meet future demand (McGuire, pers. comm. 2003). The existing water line has enough capacity to serve the project and no adjacent development to be served by this water line is expected.

CMSA provides wastewater treatment and currently has the capacity to serve anticipated development in the area without expanding its existing facilities. The Ross Valley Sanitary District would review development plans submitted for individual parcels within the area, and would identify specific measures that may be necessary to provide sufficient conveyance capacity.

Site-specific improvements to the stormwater collection system may be necessary to provide adequate storm drainage to new development in the area. The City Public Works Department

reviews plans for individual development projects to ensure that the improvements, which may include storm drain upgrades and detention basins, are adequate to carry the stormwater generated by that development. Development within the Specific Plan area would incrementally contribute to the need to upgrade portions of the regional storm drainage system.

Anticipated development in the City of Larkspur is typical of urban areas, and would not be expected to violate any statutes or regulations related to solid waste. Landfill space is expected to remain sufficient through at least the year 2043.

The Specific Plan contribution to cumulative impacts on public services and utilities would not be cumulatively considerable.

4.9.3 MITIGATION MEASURES

PROJECT MITIGATION MEASURES

No mitigation measures are required for the following less-than-significant impacts.

- 4.9-1: Potential for Exceedance of School Student Capacity
- 4.9-2: Increase in Use of Parks and Other Recreational Facilities
- 4.9-3: Increased Demand for Police Services
- 4.9-4: Increased Demand for Fire Protection and Emergency Medical Response Services
- 4.9-5: Increased Demand for Water Supply, Conveyance, Water Storage, or Water Treatment Services
- 4.9-6: Increased Demand for Wastewater Treatment Services
- 4.9-7: Need for Improvements to Stormwater collection System
- 4.9-8: Increase in Solid Waste Disposal

CUMULATIVE MITIGATION MEASURES

No mitigation measures are required. There would be no significant cumulative impact related to public services and utilities.

4.9.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No significant impacts on public services and utilities would result from implementation of the Specific Plan.

