

VEGETATION AND WILDLIFE

This chapter describes the biological resources within the Specific Plan study area. It also discusses laws and regulations that may apply to resources within the area. Finally, it sets standards for determining significant impacts to biological resources and provides mitigation measures for reducing or avoiding those impacts.

15.1 SETTING

Biological resources for the project site were evaluated by site surveys supplemented with existing documentation. Documents used include the *State Route 4 / Bailey Road Interchange Improvement Project EIR*¹ and the *Pittsburg General Plan Update Existing Conditions Report*.² Field surveys were conducted for both projects. More recent general site surveys were done in May and July of 1998 as part of this project. However, no surveys were conducted for special status species. Although wetlands and riparian habitat were observed within the Specific Plan study area no jurisdictional delineation was conducted as part of the Specific Plan studies or this Master EIR.

Existing Vegetation and Wildlife

The study area is mainly developed land with typical urban uses such as roads, parks, shopping centers, residential districts, and the Pittsburg/Bay Point BART Station. The Specific Plan area (or “study area”) is bordered on the south by open hills used for cattle grazing. Vacant lots and undeveloped areas are scattered throughout the study area as well. Three general habitats exist in the study area: weedy annual grassland, freshwater wetland and riparian habitat, and urban landscape. The first two communities have been affected by the surrounding development, changing both species composition and diversity from their original condition. Urban landscape is the main habitat type within the Specific Plan area.

Annual Grassland and Ruderal Habitat

The most common natural vegetation in the study area consists of annual grassland and ruderal (weedy) species. These grasslands occupy hillsides, graded areas, and vacant lots, and are dominated by introduced, annual species, such as wild oat (*Avena* spp.) and various brome grasses (*Bromus* spp.). The dominant broad-leaf plants include yellow star thistle (*Centaurea solstitialis*), summer mustard (*Hirshfeldia incana*), and dove weed (*Eremocarpus setigerus*). These species are typical of habitats disturbed by grazing, grading, and other agricultural and urban activities. Vacant lots in the area are usually disked or graded and are particularly rich in

ruderal species. Vegetation along the State Route 4 right-of-way is dominated by ruderal species.

The annual grassland community provides habitat for a variety of wildlife species. However, because these areas are highly disturbed and fragmented, they have limited value to wildlife. Animal species using these areas are mostly those adapted to human environments.

At least two raptor species have been observed in area grasslands. These are the red-tailed hawk and American kestrel, which use the grassland for foraging. Additional raptors probably using grassland include the turkey vulture, red-shouldered hawk, and possibly several owl species. Other bird species commonly inhabiting annual grasslands that could be present within the study area include the western meadowlark, horned lark, Say's phoebe, and savannah sparrow.

Grasslands also provide habitat for various reptiles, including the western fence lizard, western skink, gopher snake, common kingsnake, and western rattlesnake. Lizards may be particularly common in vacant lots.

Mammals commonly found in annual grasslands include a number of small rodents, such as the California vole, western harvest mouse, house mouse, Botta's pocket gopher, and deer mouse. Ground squirrels are common in the surrounding grassland and in the larger open graded areas within the study area. The study area generally lacks suitable habitat for larger mammal, such as deer or coyote, although deer might browse hills around Lawlor Creek on the southern boundary.

Freshwater Wetland and Riparian Habitat

Three wetlands occur within the study area as shown on Figure 15-1. Wetland A is a constructed mitigation wetland of approximately 1.2 acres east of Ambrose Park on the south side of State Route 4. Monitoring studies on the wetland in 1997 show that it is dominated by umbrella sedge (*Cyperus eragrostis*) and Italian ryegrass (*Lolium multiflorum*).³ Small amounts of other grasses and annual broad-leaf species were also present.

Wetland B of about 0.4 acre occurs between Canal Street and Mims Road. This wetland is on a triangular lot surrounded by development and fill, but it contained standing water in the spring of 1998. Water collects in the southeast and southwest corners of the site and drains toward the northwest corner where it empties into a culvert. Vegetation in the wetland includes (*Typha* sp.) and bulrush (*Scirpus* sp.) in the wettest areas. Drier portions support crabgrass (*Digitaria sanguinalis* and *D. ischaemum*) and dallisgrass (*Paspalum dilatatum*). Upland habitat surrounding the wetland is highly disturbed and dominated by ruderal species.

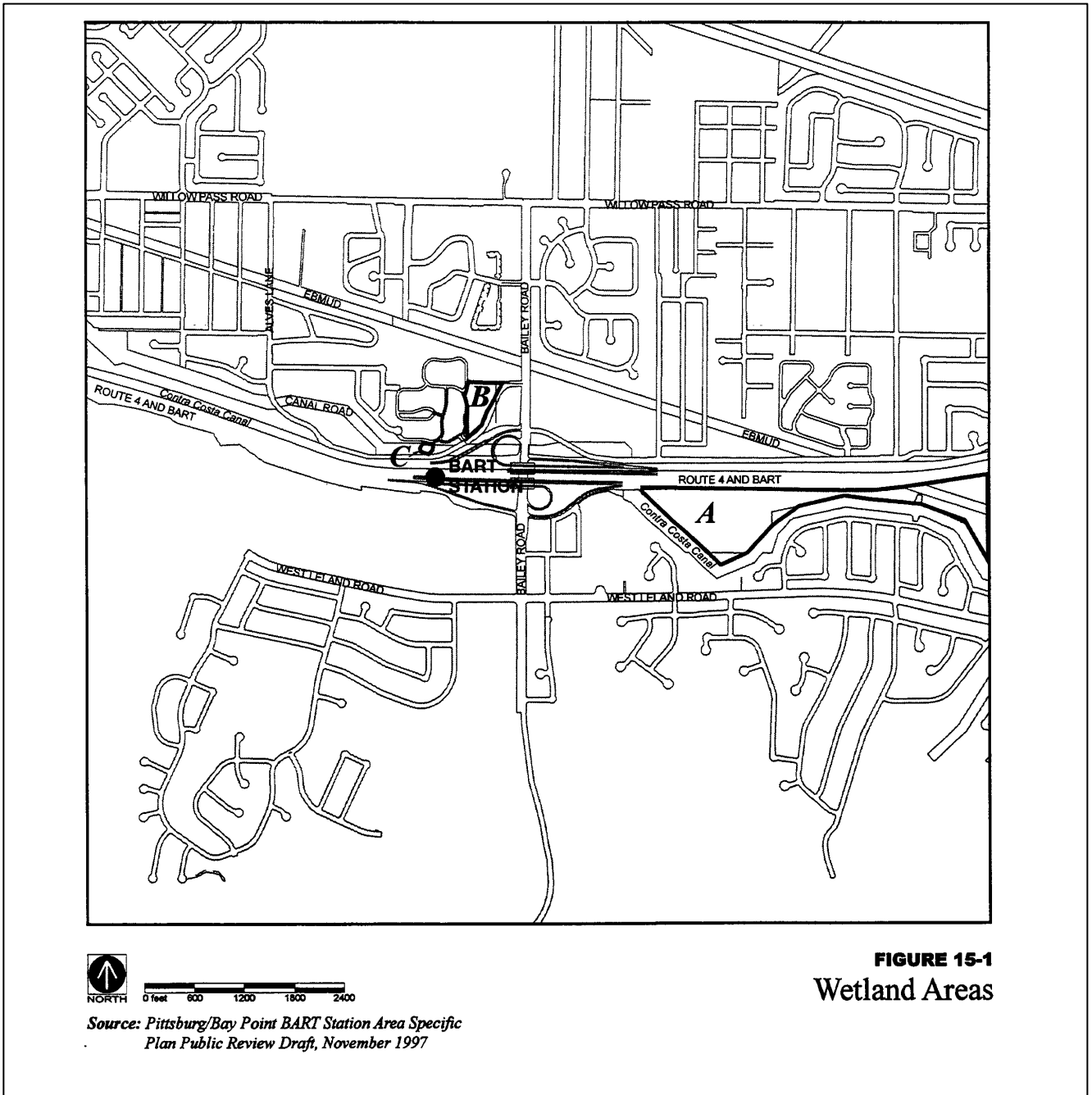


FIGURE 15-1
Wetland Areas

NORTH
0 feet 600 1200 1800 2400
*Source: Pittsburg/Bay Point BART Station Area Specific
Plan Public Review Draft, November 1997*

The third wetland (Wetland C) is a water detention basin just south of Canal Road. The bottom of the basin supports a stand of cattails (*Typha* sp.). This wetland area is approximately 0.02 acre.

Riparian habitat occurs along Lawlor Creek just east of Bailey Road. Portions of the ravine support vegetation such as Fremont cottonwood (*Populus fremontii*), Eucalyptus (*Eucalyptus* spp.), and Northern California black walnut (*Juglans californica* var. *hindsii*). The black walnut is a native species and is on the California Native Plant Society's List 1B; however, this population probably came from seed of trees planted for orchards. South of West Leland Avenue native willows and ornamental trees and shrubs are the dominant woody vegetation. Lawlor Creek is a blue line (perennial) stream on the Honker Bay 7-½ minute USGS map, and is consequently considered waters of the United States.

Small pockets of additional wetland may be found along roads, ditches, and canals in the study area and may be within the jurisdiction of the U.S. Army Corps of Engineers. Freshwater wetland and riparian vegetation typically provide valuable habitat for a variety of wildlife species. However, the highly disturbed condition of wetlands in the study area and their close proximity to urban environments probably limits their habitat value.

Common birds that might use area wetlands include the house finch, white crowned sparrow, song sparrow, northern mockingbird, common yellowthroat, American goldfinch, bushtit, and redwinged blackbird. The mature trees located along Lawlor Creek north of Canal Road could support nesting habitat for birds such as red-tailed hawk, red-shouldered hawk, and northern oriole. Wading birds and wetland-edge species such as the Virginia rail, sora rail, great blue heron, great egret, snowy egret, and American bittern could use the open marshes in the study area during wet years. However, the wetlands are small and their proximity to human environments probably precludes some of these species, especially those that are secretive and avoid human contact.

Most amphibians are dependent on freshwater for all or part of their life cycle. Common amphibians that could occur in wetlands and riparian habitats within the study area include the Pacific tree frog and western toad. The small size of the wetlands and their proximity to human environments may render these habitats unsuitable for California red-legged frogs and California tiger salamanders, but no recent surveys for these species have been done. Various reptiles may use wetland edges, including the western garter snake, ringneck snake, western fence lizard, and alligator lizard.

Small mammals that may inhabit wetland areas include the broad-footed mole, western harvest mouse, and California vole. Larger mammals such as the Virginia opossum, raccoon, and skunk also may use these areas.

Urban Landscape Habitat

Although not often considered wildlife habitat, urban landscape vegetation does have some value to wildlife, and it is the main vegetation in the study area. Vegetation in this habitat consists of trees, shrubs, and herbs having horticultural value. Urban landscapes with very few plant species offer relatively little habitat value; however, more value can be obtained where plant species diversity is high. Higher plant diversity provides wildlife with more sources and types of food and greater structural complexity for feeding, nesting, and resting.

Animal species attracted to urban landscapes are primarily birds, including the house finch, woodpeckers and sapsuckers, Anna's hummingbird, goldfinches, the introduced house sparrow, and various native sparrows in the winter. Orioles are occasionally attracted to food in urban environments.

Lizards, particularly alligators and western fence lizards, are common in urban vacant lots and more open places. Rats, mice, raccoons, skunks, and opossums are often common in semi-rural urban areas, especially where water and food are available.

Special Status Plant and Animal Species

Appendix E is a list of special status plant and animal species that are known to occur or that could occur within the study area or in surrounding areas. The list was taken from the Pittsburg General Plan Update (City of Pittsburg 1998) and checked against the most recent California Natural Diversity Data Base (CNDDDB) report for the study area. Because the area is mostly urban, and the undeveloped areas have been highly disturbed, it is unlikely that any species given in Appendix E would occur within the study area. Several reports for other projects in the area indicate that no special status species were found during field studies (Contra Costa County 1991; City of Pittsburg 1998). Nevertheless, the California Department of Fish and Game and the U.S. Fish and Wildlife Service may require surveys for California red-legged frogs for any Specific Plan projects that might affect Lawlor Creek. Lawlor Creek could have habitat for this species.

Although only a few raptors are listed species, all raptors are protected under the California Fish and Game Code. Raptors have been observed in the study area, but it is not known whether they nest there.

Regulatory Background

This section discusses the laws, regulations, and policies that protect biological resources, and identifies those agencies charged with conserving those resources.

Endangered Species Acts

The Federal act is administered by the U.S. Fish and Wildlife Service. This act prohibits activities that harm threatened or endangered species or their habitat, although plants have less protection than animals. Under some conditions, the U.S. Fish and Wildlife Service issues permits for taking listed species or their habitat. Where the proposed project is a Federal

action, the Service will enter into a Section 7 consultation with the other Federal agency. If the project is not a Federal action, the project proponent may obtain a permit to take a listed species under Section 10 of the Endangered Species Act. Section 10 requires preparation of a Habitat Conservation Plan (HCP) designed to offset project impacts and provide long-term benefits to the species. The Service has available a manual to guide preparation of a HCP. The California Endangered Species Act is administered by the California Department of Fish and Game. The Department of Fish and Game can issue permits for taking State-listed species.

The list in Appendix E includes both Federal- and State-listed species. The appropriate State and Federal agencies should be consulted when projects might affect special status species or their habitat, and surveys for these species should be conducted according to current agency protocols. If a species or its habitat is found, regulatory agencies usually require measures to reduce impacts. Such measures can include habitat restoration, enhancement, or creation.

Clean Water Act

Section 404 of the Clean Water Act authorizes the U.S. Army Corps of Engineers to issue permits for projects that would discharge fill into waters of the United States, including wetlands. Regulated wetlands and waters of the United States in the study area are within the Corps' Section 404 jurisdiction. These resources include all streams, marshes, Bay waters, and seasonal wetlands.

In the Corps' permit process, some projects may require individual permits. Others may qualify for one or more of several general or nationwide permits. Currently, Nationwide 26 (for isolated wetlands and those above the headwaters) applies if the total wetland area affected would be between one-third and 3 acres, or if the project affects less than 500 linear feet of creek channel. Nationwide 26 expired in December 1998, and it is not known what regulations will be used for projects filling small amounts of wetlands.

In California, various Regional Water Quality Control Boards are authorized to issue Clean Water Certifications under Section 401 of the Clean Water Act. These certifications are required for projects receiving Section 404 permits. The SWRCB, acting through the Regional Boards, must certify that a Corps permit action meets State water quality objectives. Regional Boards also regulate waste discharge into waters of the United States under Section 402 of the Clean Water Act. Both the Corps and the Regional Water Quality Control Board may require measures to offset wetland losses for those projects affecting wetlands. Appendix E contains the Federal and California wetland definitions.

California Fish and Game Code

The California Fish and Game Code has provisions for protecting various resources within the State. The California Department of Fish and Game is the State agency authorized to implement provisions of the Code.

Lakes and Streams

Under Section 1601-1603 of the Fish and Game Code, the Department of Fish and Game has the authority to issue Streambed Alteration Agreements for projects affecting the bed or bank of lakes, rivers, creeks, and streams. These agreements usually have measures designed to reduce impacts, which can include habitat restoration, enhancement, or creation. Specific Plan projects that could affect Lawlor Creek would probably require a Streambed Alteration Agreement.

Raptors

The Fish and Game Code prohibits harming any raptor or destroying their eggs or nests. Consequently, the Department of Fish and Game usually restricts tree removal or activities that would disturb nesting raptors by prohibiting these activities until after the nesting season.

Contra Costa County Policies Related to Vegetation and Wildlife

- To protect ecologically significant lands, wetlands, plant and wildlife habitats. (Conservation Element, Goal 8-D, page 8-26)
- To protect rare, threatened and endangered species of fish, wildlife and plants, significant plant communities, and other resources which stand out as unique because of their scarcity, scientific value, aesthetic quality or cultural significance. Attempt to achieve a significant net increase in wetland values and functions within the County over the life of the General Plan. The definition of rare, threatened and endangered includes those definitions provided by the Federal Endangered Species Act, the California Endangered Species Act, the California Native Plant Protection Act, and the California Environmental Quality Act. (Conservation Element, Goal 8-E, page 8-26)
- Significant trees, natural vegetation, and wildlife populations generally shall be preserved. (Conservation Element, Policy 8-6, page 8-26)
- Important wildlife habitats which would be disturbed by major development shall be preserved, and corridors for wildlife migration between undeveloped lands shall be retained. (Conservation Element, Policy 8-7, page 8-26)
- Significant ecological resource areas in the County shall be identified and designated for compatible low-intensity land uses. Setback zones shall be established around the resource areas to assist in their protection. (Conservation Element, Policy 8-8, page 8-26)
- Areas determined to contain significant ecological resources, particularly those containing endangered species, shall be maintained in their natural state and carefully regulated to the maximum legal extent. Acquisition of the most ecologically sensitive properties within the County by appropriate public agencies shall be encouraged. (Conservation Element, Policy 8-9, page 8-26)

- Any development located or proposed within significant ecological resource areas shall ensure that the resource is protected. (Conservation Element, Policy 8-10, page 8-29)
- The County shall utilize performance criteria and standards which seek to regulate uses in and adjacent to significant ecological resource areas. (Conservation Element, Policy 8-11, page 8-29)
- The ecological value of wetland areas, especially the salt marshes and tidelands of the bay and delta, shall be recognized. Existing wetlands in the County shall be identified and regulated. Restoration of degraded wetland areas shall be encouraged and supported whenever possible. (Conservation Element, Policy 8-17, page 8-29)
- The planting of native trees and shrubs shall be encouraged in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are sustained in urban areas. (Conservation Element, Policy 8-21, page 8-29)
- Applications of toxic pesticides and herbicides shall be kept at a minimum and applied in accordance with the strictest standards designed to conserve all the living resources of the County. The use of biological and other non-toxic controls shall be encouraged. (Conservation Element, Policy 8-22, page 8-29)
- Runoff of pollutants and siltation into marsh and wetland areas from outfalls serving nearby urban development shall be discouraged. Where permitted, development plans shall be designed in such a manner that no such pollutants and siltation will significantly adversely affect the value or function of wetlands. In addition, berms, gutters, or other structures should be required at the outer boundary of the buffer zones to divert runoff to sewer systems for transport out of the area. (Conservation Element, Policy 8-23, page 8-30)
- The County shall protect marshes, wetlands, and riparian corridors from the effects of potential industrial spills. (Conservation Element, Policy 8-25, page 8-30)
- Seasonal wetlands in grassland areas of the County shall be identified and protected. (Conservation Element, Policy 8-27, page 8-30)
- All efforts shall be made to identify and protect the County's mature native oak, bay, and buckeye trees. (Conservation Element, Policy 8-28, page 8-30)

Contra Costa County Tree Preservation Ordinance⁴

Contra Costa County has adopted a tree protection and preservation ordinance (Ordinances 94-59, 94-22) that defines “protected trees” and regulates their removal. Trees meeting all of the following criteria are “protected trees”: 1) trees native to Contra Costa County; 2) trees at least 20 inches in circumference as measured 4.5 feet above the ground; and 3) trees occurring on any properties in unincorporated areas of the County, developed properties within any commercial district, or any areas designated on the General Plan as recreational or open space. Persons wishing to remove or alter protected trees from their property must first obtain a permit from the County. The County will regulate the removal of trees from properties proposed for development by setting the conditions for removal when approving project applications. All protected trees to be affected by development must be shown on all grading, site and development plans. A tabulation of all trees proposed for removal must also be provided to the County.

City of Pittsburg Policies Related to Vegetation and Wildlife⁵

Creeks and Watershed Protection

Guiding Policies

- Preserve and enhance Pittsburg’s creeks for their value in providing visual amenity, drainage, and wildlife habitat.
- Minimize cost and hazard to homeowners created by creeks infringing on private property.
- Where possible integrate creeks with trails and other recreational open space. Encourage provision of public access to creek corridors.
- Preserve and protect water resource areas, including the watershed area for the raw water reservoir.

Implementing Policies

- Develop regulations for creek setback standards.
- Discourage culverting of creeks of significance to the Planning Area.
- Develop standards requiring restoration of creeks following construction.
- Protect existing stream channels by requiring buffering or landscaped setbacks and storm runoff interception.
- Consider the establishment of maintenance districts to ensure uniform maintenance for selected channels and creeks.
- Encourage preservation of mature trees; require a permit to remove existing mature trees. Require replacement of any mature tree removed.

Wildlife and Vegetation

Guiding Policies

- Protect natural environments in recognition of their importance as wildlife habitats and visual amenities.
- Manage open space in a manner consistent with wildlife protection.
- Retain unique vegetation and wildlife areas adjacent to the water in the northern portion of the planning area in a natural condition. Such areas include the salt marshes and special habitat areas (for birds and mammals).

Implementing Policies

- Require preservation or, where preservation is not possible, replacement of riparian vegetation. Resource protection regulations should address conservation of riparian vegetation.
- Minimize removal of woodland habitat.
- Provide wildlife corridors, where feasible, to enable free movement of animals and minimize wildlife-urban conflicts.

15.2 STANDARDS OF SIGNIFICANCE

The following standards of significance were derived from the State and Federal Endangered Species Acts, the Clean Water Act, the California Fish and Game Code, the CEQA Initial Study Checklist, and local ordinances.

The Specific Plan would have a significant effect on biological resources if it would:

- adversely affect a designated rare, threatened, or endangered species of plant or animal, or habitat of the species;
- adversely affect breeding raptors;
- interfere substantially with the movement of any resident or migratory fish or wildlife species;
- result in a the loss or degradation of waters of the United States, including wetlands; or
- require removal of substantial numbers of mature, scenic heritage trees.

15.3 IMPACTS AND MITIGATION MEASURES

The following assessment of impacts and mitigation measures are based on the Standards of Significance in Section 15.2, recent environmental documents for projects in and around the project area, and individuals knowledgeable about the project area.

Impact to Rare or Endangered Species

IMPACT 15-1. Activities associated with the Specific Plan could adversely affect rare, threatened, or endangered species. This impact is considered potentially significant.

Since habitats within the study area are severely disturbed, it is unlikely that rare, threatened, or endangered plant or animals species are present on the site. It is possible, however, that portions of Lawlor Creek could support California red-legged frogs. Although none have recently been reported from Lawlor Creek, this species is known to occur in other drainages in this general area of Contra Costa County.

MITIGATION MEASURE 15-1. If construction of projects proposed in the Specific Plan would affect Lawlor Creek, the appropriate State and Federal agencies would be consulted by the agency (City or County) with land use and environmental review authority for that project. These agencies may require surveys, which would be done according to current protocols. If California red-legged frogs are found, regulatory agencies will likely ask that the area be avoided. If the species or its habitat will be affected, the U.S. Fish and Wildlife Service may require preparation of a HCP under Section 10 of the Endangered Species Act. The Service has prepared a manual for preparing a HCP. The Service and that manual should be consulted prior to preparing a HCP. If these measures are followed, impacts to California red-legged frogs (or other special status species) would be reduced to a less-than-significant level.

Impact to Nesting Raptors

IMPACT 15-2. Activities associated with the Specific Plan could adversely affect nesting raptors. This impact is considered potentially significant

Some raptors are known to nest in urban habitats, particularly those with vacant lots or nearby open space. Trees within the study area, especially along Lawlor Creek, could provide raptors with nesting habitat. Activities that would adversely affect nesting raptors are considered significant.

In the short term, the 3.45-acre vacant parcel adjacent to the existing BART parking lot may be developed for 380 parking spaces for use by BART patrons. This parcel is made up of primarily grasses and ruderal (weedy) plant species. This site does not serve as habitat for endangered plant or animal species. No trees or roost areas exist on the parcel which could be used by raptors. It is possible that the parcel is habitat for common rodents and reptiles that serve as prey for local raptors; however, its habitat value is extremely limited by the surrounding urban development of the BART station, Oak Hills Shopping Center, and adjacent housing.

MITIGATION MEASURE 15-2. The agency (City or County) with land use and environmental review authority would assess the potential for tree removal as part of project planning and environmental review. Before large trees are removed, or where heavy construction would take place near large trees, surveys for nesting raptors would be done by a qualified biologist. If nesting raptors are located, the Department of Fish and Game would be consulted. This consultation would likely result in some restriction on tree removal or construction, and would reduce this impact to raptors to a less-than-significant level.

Impact to Migratory Fish or Wildlife

IMPACT 15-3. Activities associated with the Specific Plan could interfere with the movement of resident or migratory fish or wildlife species. This impact is considered less than significant.

Developments that fragment habitat or disrupt migratory corridors can have an adverse affect on migratory animals. However, the habitat in the study area is already highly fragmented and disturbed. Consequently, it is unlikely that any Specific Plan activities would significantly affect migratory species.

MITIGATION MEASURE 15-3. None required.

Impact to Area Wetlands

IMPACT 15-4. Activities associated with the Specific Plan could adversely affect waters of the United States, including wetlands, located in the Lawlor Creek drainage, and along Canal Road west of Bailey Road. This impact is considered potentially significant.

Wetlands and riparian habitat do occur within the Specific Plan study area. In most cases, they are highly disturbed and surrounded by urban areas. Two wetland locations may be subject to encroachment by development proposed in the Specific Plan. The first location is the Bailey Road Interchange Mitigation Area (Wetland A in Figure 15-1), an area of 1.2 acres, in Zone II. The Specific Plan proposes up to 70 units of multi-family residential, low-density housing adjacent to and overlooking the existing wetland mitigation area. The second location is Wetland B of 0.4 acre along Canal Road, west of Bailey Road, in Zone III. The Specific Plan proposes up to 70 units of multi-family, low-density housing north of this area. These areas may be considered to be within the jurisdiction of the U.S. Army Corps of Engineers. Impacts to waters of the United States are normally considered to be significant. Care must be taken to

ensure that construction activities do not impact these wetlands, either through physical encroachment or activities that could adversely affect wetland soils, vegetation, or hydrology.

MITIGATION MEASURE 15-4. Wetland areas A and B are located within the jurisdiction of Contra Costa County. As the agency with land use and environmental review authority, the County would require a precise assessment of wetlands as part of project planning. A wetland delineation would be done on any wetland areas before approving any project that could potentially affect those areas. The delineation would be submitted to the U.S. Army Corps of Engineers for verification. The County would use the approved wetland delineation to establish an appropriate buffer zone around a subject wetland, to preclude disturbance or project construction. If the waters are isolated or above the headwaters, they may be eligible for a Nationwide Permit and may require measures to offset wetland loss.

A Section 401 Clean Water Certification will be needed from California Regional Water Quality Control Board San Francisco Bay Region. Currently, the Board asks for measures to offset wetland loss regardless of the amount of wetland fill. The Board would be consulted before any activity that would potential fill wetlands. If these measures are followed, potential impacts to waters of the United States would be reduced to less-than-significant levels.

Impact to Mature or Scenic Trees

IMPACT 15-5. Development associated with the Specific Plan could remove substantial numbers of mature, scenic trees. This impact is considered potentially significant.

Development may require the removal of large trees, either native or landscape in Zones II and III of the plan area. Both the City of Pittsburg and the County have ordinances and/or policies requiring protection of heritage trees. Consequently, any activity or development that would eliminate large, mature, or scenic trees would be considered significant if it violates a local ordinance.

MITIGATION MEASURE 15-5. Depending on project location, the agency with land use authority (the City or County) would determine if this tree protection ordinance applies. If it is determined that heritage trees exist, the review agency would ensure compliance with the tree protection ordinance. Compliance would reduce impacts to heritage trees to a less-than-significant level.

NOTES - Vegetation and Wildlife

¹ Contra Costa County, *Draft Environmental Impact Report on the State Route 4 / Bailey Road Improvement Project*, June 1991.

² City of Pittsburg, *Pittsburg General Plan Update: Existing Conditions and Planning Issues Report*, June 1998.

³ LSA Associates, Inc., *1997 Monitoring Report for the State Route 4 Wetland Mitigation Projects*, report submitted to the Contra Costa County Public Works Department, 1998.

⁴ *Cowell Ranch Project Draft EIR*, October 1996.

⁵ Pittsburg General Plan Update, 1998.