

# 7

## BIOLOGICAL RESOURCES

### BACKGROUND

*Additional Text will be inserted; this gives an overview. This will include references to the ROSA, Alameda County Tree Ordinance, Existing Watercourse Ordinance, etc.*

The western and central portions of the Castro Valley General Plan Area are largely developed. There are small pockets of areas that provide wildlife habitat woven through these areas of residential lots; primarily along creeks. Native habitats include primarily oak/riparian woodland occurring along creeks. Other undeveloped areas support isolated patches of non-native dominant habitat.

The eastern portions of the General Plan Area support primarily native habitats. There have been large undeveloped areas here set aside as open space as part of planned unit developments, typically on steep hillsides or in canyons.

### Vegetation

The Castro Valley project area supports both native and non-native vegetation types. Native vegetation types include oak riparian woodland and coastal scrub. Non-native vegetation types include non-native annual grassland and a non-native dominant habitat type. For this project, non-native dominant habitat is defined as areas supporting ruderal vegetation (non-native plant species favoring

disturbed sites), ornamental or naturalized non-native trees, such as Monterey pine and eucalyptus, and shrubs, such as cotoneaster. Non-native vegetation supports few native species.

### **Wildlife Corridors**

As shown in Figure 7-1, oak riparian woodland, coastal scrub and grassland vegetation serve as the primary wildlife movement corridors for common and special-status wildlife species within the Castro Valley project area. Non-native dominant habitats also may serve as movement corridors when continuous with habitats supporting native vegetation. Wildlife corridors are very important so that species have an adequate range of habitat area to search for food, flee from predators, find protected areas for newborns, etc. In an urbanized area, continuous wildlife corridors such as creeks are particularly important.

### **Creeks**

There are several perennial and seasonal creeks within the Castro Valley project area (refer to Figure 7-1). The main creeks include Crow Creek, Cull Creek, San Lorenzo Creek, Castro Valley Creek and Chabot Creek. Several unnamed tributaries convey flows to these creeks; however, only few of them are shown on this map. Portions of the creek segments are natural, concrete-lined, earthen, and/or within a closed conduit (culvert). Crow Creek and San Lorenzo Creek are deeply incised creeks with well-developed riparian areas. These two creeks serve as a primary migration route through the eastern half of the planning area for both aquatic and terrestrial species. San Lorenzo Creek, Chabot Creek and Castro Valley Creek have been improved over the years to convey adequate flows. Several ponds are present at Cull Creek, San Lorenzo and Chabot Creek as a result of dams. Natural ponds may occur within some of the creeks, such as the unnamed tributaries to San Lorenzo Creek.

### *Sensitive Habitat Areas*

All areas supporting native vegetation or providing suitable habitat for special-status species are considered sensitive habitat areas, including oak riparian woodland and naturalized native trees that provide potential nesting habitat for bird species. Sensitive habitat areas also include streams and wetlands with the potential to be considered jurisdictional by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act or by California Department of Fish Game under California Fish and Game Code Sections 1600-1607.

### **Special Status Species**

The California Natural Diversity Database (CNDDDB) (CDFG 2006), California Native Plant Society Electronic Inventory (CNPS 2006), and U. S. Fish and Wildlife Service website species list search (USFWS 2006) were used to develop a list of known and potential occurrences of special-status species within the Castro Valley project area. Based on the CNDDDB (CDFG 2006), yellow warbler, a state species of special concern, is the only known special-status species occurrence within the Castro Valley Planning Area (refer to Figure 3.5-1).

Steelhead is the only known special-status fish species to have been observed within the project area (San Lorenzo Creek, Castro Valley Creek, and Crow Creek) in the last ten years (Leidy et al., 2003). The Castro Valley Planning Area potentially supports the following special-status plant and animal species: Santa Cruz tarplant, Steelhead, California tiger salamander, California red-legged frog, Alameda whipsnake, Western pond turtle, California horned lizard, Yellow warbler, Burrowing owl, Sharp-shinned hawk, white-tailed kite, Bats (*Myotis* spp., Pacific western big-eared bat, and greater western mastiff bat), alkali milk vetch, Santa Cruz tarplant, big-scale balsamroot, fragrant fritillary, Diablo helianthella, Robust monardella, Lum's micro-blind harvestman, Great blue heron, Cooper's hawk, and red-tailed hawk. In addition, ornamental landscaping may support large trees, shrubs and other vegetation that provide potential nesting habitat for raptors known to nest in urbanized areas, such as Cooper's hawk, and other special-status bird species. Refer to Table 7-1 for a list of special-status species with associated vegetation type found within the Castro Valley planning area.

### Habitat Type Preservation Priority

This element proposes a prioritization scheme that will, when adopted by the Board of Supervisors, guide land use policies in Castro Valley and other unincorporated areas of the County. Future field surveys within the Castro Valley General Plan Area could identify features within grassland and non-native dominant habitats that would increase the preservation value of certain areas within these habitat types (i.e. wetlands and other aquatic features).

#### *High Priority*

- Drainages
- Oak Riparian Woodland
- General Plan proposed open space areas
- Coastal scrub adjacent to either side of the Improved Channel reach of Castro Valley Creek
- Coastal scrub just east of Cull Canyon Drive
- Coastal scrub between Jensen Road and Castro Valley Blvd/Villareal Drive

#### *Moderate Priority*

- Other Coastal Scrub areas
- Grassland

#### *Low Priority*

- Non-native Dominant Habitat

*Insert Habitat Map*

## 7.1 BIOLOGICAL RESOURCES

---

### GOAL 7-1:

Protect and enhance the County's native wildlife through conservation and restoration of a continuous network of connected natural habitat.

### POLICIES

- Policy 7.1-1 ***Protection of Major Wildlife Corridors.*** Protect the County's major wildlife corridors that run through Castro Valley: (1) the corridor along the East Bay Hills in the forest and chaparral between major interstate highways; and (2) along streams, especially those with riparian vegetation. (Reference – Draft ROSA Policy RC-41, Protection of Wildlife Corridors)
- Policy 7.1-2 ***Comprehensive Habitat Preservation.*** Preserve a continuous band of open space consisting of a variety of plant communities and wildlife habitats to provide comprehensive rather than piecemeal habitat conservation for all of Alameda County. (Reference – Draft ROSA Policy OS-3, Contiguous Habitat Conservation)
- Policy 7.1-3 ***Design Guidelines for Property Within or Adjacent to the Biological Resources Overlay Zone.*** Incorporate design features that minimize the impacts of development on biological resources in any development planned on or adjacent to high and moderate priority areas designated on the Figure 7-2, Biological Resources Overlay Zone. (Reference – Draft ROSA Policy RC-24, Minimization of Biological Impacts)
- Policy 7.1-4 ***Preservation of Open Space.*** Preserve as permanent open space the undeveloped areas designated as open space within planned unit developments.
- Policy 7.1-5 ***Conservation of Riparian Woodlands and Wetlands.*** Discourage loss of riparian woodlands and seasonal and perennial wetlands, including ponds, by requiring replacement mitigation at a ratio to be determined by the value of the habitat to be lost. To facilitate replacement mitigation, the County shall support the creation of wetland or other habitat mitigation banks. (Reference – Draft ROSA Policy RC-32 - Replacement Mitigation Ratio)

- Policy 7.1-6 **Funding Habitat Restoration.** Explore property tax credits and other possible funding sources for habitat restoration on larger size private lands as an incentive to foster the implementation of habitat restoration actions by private landowners. (Reference Draft ROSA Policy RC-3, Foster restoration by private landowners)
- Policy 7.1-7 **Wildlife Movement Corridors.** Protect the Wildlife Movement Corridors where they cross under I-580 for special status species such as the California red-legged frog. (Reference – Draft ROSA Policy RC-42 - Corridors for Special Status Species)
- Policy 7.1-8 **Protection of Creek and Flood Channels.** Protect all creeks and flood channels that traverse the urbanized area of Castro Valley, because they serve as movement corridors for wildlife. (Reference – Draft ROSA Policy RC-43, Water Channels as Wildlife Corridors)
- Policy 7.1-9 **Local Land Trusts and Easements.** Encourage local land trusts and other easement holders to prioritize acquire easements that serve to protect wildlife corridors. (Reference – Draft ROSA Policy RC-45, Protective Easements)
- Policy 7.1-10 **Protection of Wildlife Corridors, Creeks and Regional Trails During Public Infrastructure Projects.** Actively encourage agencies responsible for public infrastructure to site and design roadways and other linear facilities (e.g. sewer and other utility lines) in such a way as to minimize impacts to wildlife corridors, creeks, and regional trails. Where appropriate, grade-separated crossings and/or other features should be used to maintain the viability of the affected corridor. (Reference Draft ROSA Policy RC-46, Public Infrastructure)
- Policy 7.1-11 **Open Space Requirements for New Development.** Require that open space provided as part of a development project be designed to achieve multiple open objectives, including but not limited to: recreation, scenic values, habitat protection, and public safety. (Reference, Draft ROSA Policy OS-11, Open Space Provided by Development)

## ACTIONS

Action 7.1-1 **Biological Resource Preservation Requirements for Subdivisions/New Development.** In the review of new subdivisions and other new development, require the preservation of adequately wide strips of undisturbed land to connect larger tracts of natural habitat or areas with biological resources.

Action 7.1-2 **Establishment of a Biological Resources Overlay Zone.** Establish a biological resources overlay zone delineating high, moderate, and low priority areas for habitat preservation, to ensure maximum protection of biological resources.

- Require discretionary review for all development applications on properties within the high priority biological resources overlay zone, and for large sites over two acres in size with moderate or low priority biological resources. Discretionary review could include one or more of the following: environmental assessment per the California Environmental Quality Act; site plan and development review; and/or the application of Board policy or other ordinance requirements.
- Establish in the ordinance that on lands with biological resources, new development is not necessarily entitled to be built to the maximum density allowed by the underlying zoning. An environmental assessment may be required, prepared by a qualified biologist, which shall be the basis for establishing development constraints specific to the property in question. Development intensity may be required to be reduced up to 50 percent of the intensity allowed by the underlying zoning, depending on the extent and value of the biological resources on the site.
- Establish thresholds of review for different types of projects. For example, a comprehensive environmental assessment should be required for new subdivisions, whereas minor improvements such as fences or decks may be exempt from special review if they meet specific standards.

Action 7.1-3 **Protection of Biological Resources Through Design Guidelines.** Develop design guidelines for development projects about how to minimize the impacts of development

on biological resources. Apply these guidelines through the Planning Department’s project review process. Include information about ways in which special-status plant and wildlife populations on private properties can be protected over time. Specify that watercourses and areas dominated by native trees and shrubs be left undisturbed by development to the maximum extent feasible. (Reference – Draft ROSA Program RC-27, Minimize Development Impacts)

- Action 7.1-4 **Biological Resources Maps and Inventories in Development Review Process.** Maintain maps and inventories of biological resources to use when conducting site plan and development review. Update these resources to include new information from site surveys that are conducted in the Planning Area.
- Action 7.1-5 **Mechanisms for Encouraging Open Space Preservation.** Explore mechanisms such as zoning, fee title purchase, purchase of easements, or dedication of easements through density transfer or density bonuses as ways to preserve open space that preserves wildlife habitat. (Reference – Draft ROSA Policy OS-8, Mechanisms to Preserve Open Space.)

## 7.2 CREEKS AND STREAMS

---

### GOAL 7-2:

Preserve creek channels and riparian habitat to protect and enhance wildlife corridors, flood protection, and the quality of surface water and groundwater.

### POLICIES

- Policy 7.2-1 ***Protection of Streams and Stream Buffers.*** Encourage protection of streams and adequate stream buffers to maintain and where appropriate enhance important stream functions, including: flood protection, recreational corridors, wildlife movement corridors, wildlife habitat, and aesthetic resources. (Reference – Draft ROSA Policy RC-7, Stream Protection)
- Policy 7.2-2 ***Management of Streams for Multiple Uses.*** Manage streams for multiple uses where the County has responsibility for flood control and maintenance of channels and detention basins. Such uses include maintaining scenic quality, facilitating

recreation, improving water quality and soil conservation, providing groundwater recharge and protecting and restoring both natural riparian vegetation and wildlife habitats. (Reference – Draft ROSA Policy RC-8, Stream Management for Multiple Uses)

Policy 7.2-3 **Natural/Nonstructural Stormwater Drainage Systems.** Encourage use of natural or nonstructural stormwater drainage systems to the maximum extent feasible on sites outside the Central Business District and Residential Mixed Density Areas. (Reference – Draft ROSA Policy RC-9, Nonstructural Stormwater Drainage)

Policy 7.2-4 **Right-of-way and Setback Requirements for New Development.** Require new development to set aside sufficient right-of-way and setback areas to accommodate multi-use objectives for storm drainage, flood control features, recreation, habitat protection, and other appropriate uses. (Reference – Draft ROSA Program 6 - Require Setbacks)

Policy 7.2-5 **Creek Setback Requirements.** New development shall be set back from the centerline of a creek, and shall not disturb any riparian habitat. In areas where existing development has already encroached upon the stream channel, new development shall not encroach any closer towards the creek channel or riparian habitat.

## ACTIONS

Action 7.2-1 **Revision of Alameda County’s Watercourse Protection Ordinance.** Revise the County’s Watercourse Protection Ordinance to ensure maximum protection of creeks and adjacent riparian habitat, because those creek areas serve to control flooding, improve water quality, and provide critical habitat for biological resources. Provisions to include are:

- Do not allow grading or structures within a creek bed, unless flooding and erosion pose an imminent hazard to public health and safety, or are required to prevent serious property damage. Improvements must preserve natural drainage and habitat to the maximum extent feasible, and not cause further acceleration of water flow or erosion further

downstream.

- Establish revised setbacks between structures and open creek channels, and require construction methods that minimize flooding and erosion. Establish different setbacks depending on the type of structure, for example fence posts may be closer to a creek channel than houses. Increase the setback for habitable structures to be greater than the existing standard of 20 feet.
- Limit the amount of impervious surface within 100 feet of the top of the creek bed channel to limit erosion and acceleration of water flow into the creek channel.
- Establish basic standards for construction in or near creekside areas, so applicants have a clear understanding of what is expected. Basic requirements for accessory structures like decks and fences should be established so permits can be issued expeditiously.
- For construction of new homes or significant expansion of existing homes on creekside properties, require preparation of a creek protection plan. The creek protection plan shall be prepared by qualified professionals such as biologists and hydrologists. The creek protection plan should establish areas most suitable for construction, and procedures to be used during construction that will minimize impacts on the creek channel and riparian vegetation.

Action 7.2-2 **Establishment of Review Procedures and Regular Meetings to Accomplish Stream Goals.** The Planning Department, and other County agencies responsible for any private or public project, shall establish review procedures and convene regular meetings to facilitate coordination among all relevant public agencies in order to centralize and better accomplish stream goals. Relevant public agencies include those with jurisdictional interests (inside and outside the County) and those able to provide technical assistance (such as local, state, or federal resource agencies. (Reference – Draft ROSA Policy RC-10, Agency Coordination)

Action 7.2-3 **Public Works/Clean Water Staff Review of Stream-Side Proposals.** Develop guidelines and a review process that will facilitate the participation of Public Works /Clean

Water staff in the Planning Department’s review of all development projects on stream-side parcels, and that will ensure compliance with all applicable local, state and federal regulations. (Reference – Draft ROSA Program 5, Review Stream-Side Development)

Action 7.2-4 **On-Site Flood Control Features Design Criteria.** Develop design criteria for on-site flood control features such as detention and retention ponds and for stream channel improvements that address multiple use objectives. Criteria shall address integrating visual and other multi-use concerns in to the physical design of flood control features and shall encourage use of permeable materials to enhance on-site percolation. (Reference – Draft ROSA Program 7 - Develop Criteria for Flood Control)

Action 7.2-5 **Comprehensive Creek Corridor Open Space Plan.** Work with public agencies, nonprofit organizations, and other interested parties to develop a Comprehensive Creek Corridor Open Space Plan, identifying key acquisitions along creek corridors. Also identify restoration potential along creek corridors, and develop alternative management practices to better provide multiple open space values along creek corridors. (Reference – Draft ROSA Program OS-13, Develop Comprehensive Creek Corridor Plan)

Action 7.2-6 **San Lorenzo Creek Action Plan.** Implement the San Lorenzo Creek Action Plan, prepared as part of the County Public Works Stormwater Quality Management Plan, as well as other restoration and trail projects in the San Lorenzo Creek watershed, to the extent that funds are available. (Reference – Draft ROSA Program RC-22, San Lorenzo Creek Action Plan)

Action 7.2-7 **Stream Protection/Restoration Efforts for Multiple Uses.** Work with non-governmental organizations such as the Urban Creeks Council on stream protection and restoration efforts in order to support multiple use, community involvement, and resource enhancement. (Reference – Draft ROSA Program 25 - Work with NGO’s on Creek Enhancement)

## 7.3 VEGETATION

---

### GOAL 7-3:

Maintain, preserve, and enhance trees and vegetation to provide habitat and protect the natural environment.

### POLICIES

- Policy 7.3-1 ***Alameda County Tree Ordinance.*** Continue to implement the Alameda County Tree Ordinance to protect trees in the public right-of-way.
- Policy 7.3-2 ***Enhancement of Natural Environment through Development Requirements.*** Ensure that new development contributes to the maintenance and enhancement of the community's natural environment by preserving existing native trees whenever feasible, replacing trees on-site, and adding trees and other vegetation in the public right-of-way.
- Policy 7.3-3 ***Promotion of Native Trees and Plant Species.*** Promote the use of native tree and plant species in public and private landscaped areas.
- Policy 7.3-4 ***Restoration of Historical Woodlands and Grasslands.*** Encourage the East Bay Regional Park District to restore historical woodlands and grasslands to provide natural habitat and reduce fire danger.

### ACTIONS

- Action 7.3-1 ***Enforcement of Alameda County Tree Ordinance.*** Provide sufficient funding to ensure enforcement of the Alameda County Tree Ordinance to require permits for planning, pruning, or removing trees in the public right-of-way.
- Action 7.3-2 ***Paving Planter Strips.*** Consider amending the County zoning ordinance to prohibit paving of planter strips.
- Action 7.3-3 ***Preservation and Protection of Heritage Trees.*** Consider adopting an ordinance to preserve and protect heritage trees including native oaks and other significant native trees on private property.

Action 7.3-4 **Use of Landscaping Guidelines to Promote Use of Native Trees/Plants.** Consider adopting guidelines to promote the use of native trees and plants when landscaping on any County property.

Action 7.3-5 **Preservation and Protection of Riparian Vegetation.** Consider adopting an ordinance to preserve and protect riparian vegetation, with exceptions for clearing hazards, clearing blocked channels, and other activities necessary for public safety.