

## Section 7

# Open Space and Environmental Protection Element

## 7.1 Introduction

The purpose of the Open Space and Environmental Protection Element is to establish policies for the preservation of open space and the conservation of natural resources. This element of the General Plan designates open space and sets forth policies and programs defining ways in which open space will be used, water and air quality will be enhanced, and natural resources will be protected and managed. Community workshops have identified the following concerns or issues:

- (1) Protect resources such as designated open space, ridges, separators between cities, the bayfront, Garrity and Pinole Creeks, Duncan Canyon, and the Shady Draw watershed.
- (2) Regulate development, air emissions, dumping, and water quality.
- (3) Restore Pinole Creek.
- (4) Enhance the bayfront.
- (5) Provide access to the creek and bayfront.
- (6) Acquire open space while considering property rights.

The subject matter of the Open Space and Environmental Protection Element also overlaps with the policies and programs contained in the Land Use and Economic Development, Health and Safety, and Circulation Elements of the General Plan. For example, areas designated for open space are also intended to minimize damage due to geologic hazards, and trails plans link local and regional open space areas while at the same time providing recreation and offering an alternative to driving.

## 7.2 Open Space and Environmental Protection Element Requirements

State legislation requires general plans to contain both an open space and a conservation element. Pinole's Open Space and Environmental Protection Element addresses both of these requirements. An open space element must establish a comprehensive and long-range plan for the preservation and conservation of open space to preserve natural resources, manage the production of resources, provide outdoor recreation and assure public health and safety. The following summarizes the requirements for open space elements.

*“Open space land is any parcel or area of land or water which is essentially unimproved and devoted to an open space use as defined in this section, and which is designated on a local, regional or state open space plan as any of the following:*

- (1) Open space for the preservation of natural resources*
- (2) Open space used for the managed production of resources.*
- (3) Open space for outdoor recreation.*
- (4) Open space for public health and safety...”*

Government Code Section 65302(d) requires each general plan to include a conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. The following citation is from the Government Code concerning conservation elements.

*“A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. That portion of the conservation element including waters shall be developed in coordination with any countywide water agency and with all district and city agencies which have developed, served, controlled or conserved water for any purpose for the county or city for which the plan is prepared...”*

## 7.3 Open Space and Environmental Protection Background

### *Existing Open Space*

The City of Pinole has substantial open space and natural resources in various forms of ownership. The City itself has large holdings, while other parcels are under the stewardship of homeowners associations, the West Contra Costa Unified School District, and the Contra Costa County Flood Control District as well as private land owners.

Existing open space resources are a considerable asset to the community. They are, however, fragmented and discontinuous, and do not function effectively as an integrated community-wide open space and recreation system or contiguous wildlife habitat. The lack of unifying elements or organizing framework in the current holdings should be remedied by an open space system that links Pinole with surrounding open space resources, that provides pedestrian connections from the city center to other parts of the community, and that meets both the active and passive recreation needs of City residents. Substantial natural resources exist in and adjacent to the City of Pinole. Directed actions should be taken to identify, preserve and/or acquire key elements of the open space system. Planning efforts with adjacent jurisdictions and agencies should address open space and trails on a regional level with Pinole leading the effort.

On the bay shore, both the City and EBRPD have acquired parcels to contribute to the shoreline trail. A dedication led to the creation of a portion of the Bay Trail, and future dedications could extend the development of this trail further. Well planned dedications alongside Sunnyview Drive and Bay View Farm Road could provide a connection between the shoreline and the utility easement where Pinon Park is planned. County and school district holdings near Garrity Creek, along with undeveloped private land on Tara Hills Drive, could provide additional connections to the shoreline.

Pinole Creek has some developed pedestrian trails already. Potential enhancements to the creek include development and patrolling of the creek access near the high school, and development of a trail on the Bundy parcel. Because back yards abut the creek between the tennis courts and the swim center and Ellerhorst Park, an alternative route may be needed to provide a continuous trail from the bay shore to the ridges and the EBMUD watershed property. This might be possible as a loop from the high school to Duncan Canyon, across Rancho Road and alongside Galbreth Road or Pinole Valley Road to Adobe Road in Pinole Valley Park.

Hillside property has been preserved in Pinole Valley Park and the Crown Ridge Subdivision (Marsten Ranch). Preserving undeveloped land near the end of Wright Avenue would connect Crown Ridge Subdivision (Marsten Ranch) open space to the EBMUD watershed open space. Trail systems could be developed to and along Pinole and Sobrante ridges. In order to develop a community-wide system, the General Plan recommends that critical linkages and pieces of open space should be identified, and priorities set for protecting, acquiring or regulating them.

Examples include Pinole Creek, the San Pablo Bay shoreline, ridgelines and portions of key parcels in private ownership subject to development pressure. Many private parcels that could provide valuable connections between large parcels of open space are currently undeveloped. Once key areas have been identified and prioritized, specific steps toward implementation should be developed. These may include regulations dedication, or acquisition. Priority decisions must consider the City's ability to operate and maintain additional facilities.

#### *Habitat Values*

Pinole's open space is diverse, including the San Pablo Bay shoreline, creeks and ridges. The shoreline provides habitat for shorebirds in the salt water marsh surrounding Finale Bayfront Park. Riparian corridors include Pinole Creek, Garrity Creek and its tributary, and drainages such as those in Duncan Canyon and Shady Draw. Pinole Creek is especially valuable upstream from I-80, with the most valuable portions being in the southeastern end of Pinole. Garrity Creek, although largely disturbed, contains freshwater wetlands that are unique in the City; some are in the new Louis Francis Park. Portions of Finale and Garrity Creek provide potential Salmonid habitat. Hillsides covered in a mosaic of grassland and oak woodland shelter a community of mammals, birds and reptiles.

*Maintenance Costs* Maintenance costs for any City-owned open space would include fire prevention, weed control, litter and safety patrol, and cleaning of drains and culverts. Facilities such as restrooms, playgrounds, game courts and the possible equestrian center involve additional maintenance costs. Liability for fire, landslides, flooding and injuries is another operational cost. Long-term expenses need to be considered when priorities are set for acquiring land and developing recreational facilities.

#### *Acquisition Methods*

The type of acquisition that is appropriate for a given parcel depends on the location, physical characteristics, designation and intended use of the land. If the parcel's value is its visual amenity, then a scenic easement would be sufficient. If the only reason to keep a parcel in open space is to avoid hazards, the existing open space designation and/or adopting a ridge protection ordinance would serve this purpose. To preserve habitat in areas already designated open space, all that is needed is to maintain the designation.

Although recreational uses generally require more than a designation or granting of an easement, fee ownership by the City may not always be necessary. A neighborhood park for a new development could be set aside as a dedication to a neighborhood association, which could maintain it. Play areas can be developed in cooperation with schools. Regional acquisitions can provide connections in regional trail corridors, such as the EBRPD parcel near Wilson Point. Access easements can provide passageways to "landlocked" parcels.

Creating large contiguous areas that contain a variety of habitat types is a bigger challenge. Maintaining and following existing open space designations is a first step. When dedications are made as part of development, they can be designed early in the development process as a part of the City's overall open space system. School parks can also be selected and designed to provide vital links in this system. To complete the puzzle, the City can purchase *key* connecting parcels where other acquisition methods are not available.

## 7.4 Open Space and Environmental Protection Goals

- OS1      **PRESERVE NATURAL RESOURCES.** Preserve natural resources which provide important habitat, ecological or archeological value, and maintain clean air and water quality.
- OS2      **PROTECT VISUAL RESOURCES.**  
Enhance the City of Pinole’s character by protecting key visual resources.
- OS3      **PROVIDE RECREATION OPPORTUNITIES.** Provide for a wide variety of recreational activities in open space areas, parks, and school grounds within the City of Pinole, balanced with the protection of important habitat.
- OS4      **OPEN SPACE PRESERVATION AND MANAGEMENT.**  
Maintain and effectively manage an integrated pattern of open space areas.

## 7.5 Open Space and Environmental Protection Policies

OS1      **PRESERVE NATURAL RESOURCES.** PRESERVE NATURAL RESOURCES WHICH PROVIDE IMPORTANT HABITAT, ECOLOGICAL OR ARCHEOLOGICAL VALUE, AND MAINTAIN CLEAN AIR AND WATER QUALITY.

OS1.1      **Habitat Protection.** Preserve oak/woodland, riparian vegetation, creeks, fisheries, saltwater and freshwater marsh, native bunchgrass grasslands, wildlife corridors and sensitive nesting sites. Loss of these habitats should be fully offset through creation of habitat of equal value. Compensation rate for habitat re-creation shall be determined by a qualified biologist.

	Primary Implementing Programs
OSIP-1	Habitat Protection Ordinance
OSIP-2	Riparian and Stream Restoration Programs
OSIP-21	Water Quality Strategies
OSIP-22	Consultation on Fish and Wildlife Impacts

OS1.2      **Rare and Endangered Species.** Limit development in areas which support rare and endangered species. If development of these areas must occur, any loss of habitat should be fully compensated on-site. If off-site mitigation is necessary, it should occur within the Pinole planning area whenever possible, and must be accompanied by plans and a monitoring program prepared by a qualified biologist.

	Primary Implementing Programs
OSIP-1	Habitat Protection Ordinance
OSIP-2	Riparian and Stream Restoration Programs
OSIP-9	Water Quality Strategies

OS1.3        **Minimize Environmental Impacts.** Encourage development patterns which minimize impacts on the City’s biological, visual and cultural resources, and integrate development with open space areas.

Primary Implementing Programs

- OSIP-1        Habitat Protection Ordinance
- OSIP-2        Riparian and Stream Restoration Programs
- OSIP-2I       Water Quality Strategies

OS1.4        **Cluster Development.** Encourage cluster development and other creative site planning techniques to preserve open space, trails and visual, habitat, recreation and archaeological resources.

Primary Implementing Programs

- OSIP-1        Habitat Protection Ordinance
- OSIP-5        Shoreline Corridor Overlay Zone
- OSIP-8        Scenic Easements
- OSIP-9        Ridgeline Preservation Ordinance

OS1.5        **Riparian Areas and Creek Setbacks.** Lands adjacent to riparian areas should be protected as public or private permanent open space through dedication or easements. Require new development adjacent to creeks and major drainages to provide adequate building setbacks from creek banks, provision of access easements for creek maintenance purposes, and creek improvements such as bank stabilization. Riparian vegetation outside the setback should also be protected. Until such time as Program OSI-1 (Habitat Protection Ordinance) is completed, creeks and major drainages include: (1) Pinole Creek (2) Catty Creek (3) Duncan Canyon/Cole Creek; (4) Shady Draw; (5) Faria Creek and (6) Roble Creek.

Primary Implementing Program

- OSIP-1        Habitat Protection Program
- OSIP-2        Riparian and Stream Restoration Programs
- OSIP-3        Environmental Education Programs

OS1.6        **Air Quality.** Strive to achieve federal and state air quality standards by managing locally generated pollutants, coordinating with other jurisdictions and implementing measures to reduce automobile trips in Pinole and the region.

Primary Implementing Programs

- OSIP-20       Air Quality Strategies

OS1.7        **Water Quality.** Maintain, at a minimum, the water quality levels established by the Environmental Protection Agency (EPA) and achieve the highest possible level of water quality reasonable for an urban environment in City creeks.

Primary Implementing Programs

- OSIP-1        Habitat Protection Program

OSIP-2 Riparian and Stream Restoration Programs  
OSIP-21 Water Quality Strategies

**OS2 PROTECT VISUAL RESOURCES. ENHANCE THE CITY OF PINOLE'S CHARACTER BY PROTECTING KEY VISUAL RESOURCES.**

**OS2.1 Scenic Resources.** Preserve significant knolls, stands of trees, rock outcrops and ridgelines within the city that further the image of Pinole.

Primary Implementing Programs  
OSIP-8 Scenic Easements  
OSIP-9 Ridgeline Preservation Ordinance  
OSIP-7 Shoreline Corridor Overlay Zone  
OSIP-13 Tree Preservation Ordinance

**OS2.2 View Protection.** Preserve prominent views of scenic resources and the bay, and consider visual access and view corridors when reviewing development proposals.

Primary Implementing Programs  
OSIP-8 Scenic Easements  
OSIP-9 Ridgeline Preservation Ordinance  
OSIP-7 Shoreline Corridor Overlay Zone  
OSIP-14 Critical Public Views and Ridgelines

**OS2.3 Open Space Separators.** Maintain a continuous open space separator between Pinole and the cities of Hercules (Pinole Ridge), and El Sobrante/ Richmond (El Sobrante Ridge).

Primary Implementing Programs  
OSIP-5 Scenic Easements  
OSIP-6 Ridgeline Preservation Ordinance

**OS2.4 Major and Minor Ridgelines.** Preserve ridgelines through the designation of Ridges as Major and Minor as shown on the Visual Resources map (see map GP-12). Where possible, properties shall provide for a ridgeline setback of 400 feet horizontally from major ridgelines, 100 feet from minor ridgelines and a vertical setback of 100 feet from both.

Primary Implementing Programs  
OSIP-8 Scenic Easements  
OSIP-9 Ridgeline Preservation Ordinance

OS2.5      **Ridgeline Protection.** Natural contours and vegetation on ridgelines should be maintained. Locate and design structures and other public and private improvements so as to minimize cut and fill areas that will impact public views, safety and surrounding uses, and avoid building profiles (silhouettes) being located above the ridgeline when viewed from public streets and designated public access areas.

	Primary Implementing Programs
OSIP-5	Scenic Easements
OSIP-6	Ridgeline Preservation Ordinance
OSIP-13	Tree Preservation Ordinances
LUIP-3	Grading and Subdivision Ordinance
LUIP-12	Design Review Guidelines and Procedures
LUIP-13	Hillside Development Guidelines
LUIP-21	Environmentally Sensitive Sites

OS2.6      **Street Beautification.** Provide visual linkages through the use of street trees.

	Primary Implementing Programs
OSIP-11-	Street Tree Master Plan
OSIP-12	Signature Plantings

OS3      **PROVIDE RECREATION OPPORTUNITIES.** PROVIDE FOR A WIDE VARIETY OF RECREATIONAL ACTIVITIES IN OPEN SPACE AREAS, PARKS, AND SCHOOL GROUNDS WITHIN THE CITY OF PINOLE, BALANCED WITH THE PROTECTION OF IMPORTANT HABITAT.

OS3.1      **Public Use and Access to Open Space.** Clearly delineate public use and access areas from those areas to be protected from human disturbance.

	Primary Implementing Programs
OSIP-3	Environmental Education Programs
OSIP-4	Open Space Management Plan

OS3.2      **New Development Requirements.** Require new development to provide a pro-rata share of active recreation or open space to accommodate new residents.

	Primary Implementing Programs
OSIP-7	Open Space/Recreation Standards
OSIP-17	Park Dedication Fees
OSIP-18	Open Space Presentation Actions
OSIP-24	Parks Facilities Plan

OS3.3      **Joint Use of School Property.** Maintain the levels of recreational service in Pinole by coordinating with the West Contra Costa Unified School District in the joint use and maintenance of school recreation facilities.

	Primary Implementing Programs
OSIP-15	Potential Park and Open Space Areas
LUIP-38	Closed School Sites (Zoning)
OSIP-23	City/Schools Joint Use Agreement

**OS4 OPEN SPACE PRESERVATION AND MANAGEMENT. MAINTAIN AND EFFECTIVELY MANAGE AN INTEGRATED PATTERN OF OPEN SPACE AREAS.**

**OS4.1 Open Space Plan.** Attempt to preserve for visual resources, public health and safety reasons, and for recreational use the open space areas identified on the Open Space Plan map (see map GP-1O).

	Primary Implementing Programs
OSIP-1	Habitat Protection Ordinance
OSIP-4	Open Space Management Plan
OSIP-7	Open Space/ Recreation Standards
OSIP-5	Shoreline Corridor Overlay Zone
OSIP-8	Scenic Easements
OSIP-9	Ridgeline Preservation Ordinance
OSIP-15	Potential Park and Open Space Areas
OSIP-16	Open Space Funding
OSIP-17	Park Dedication Fees
OSIP-18	Open Space Preservation Actions
OSIP-19	Potential Open Space Acquisition Priorities

**OS4.2 Preservation Strategy.** Maximize open space preservation through the private development review process and other approaches that minimize ongoing City costs and liability exposure and still achieve City open space goals. Preference should be for retaining open space in private ownership.

	Primary Implementing Programs
OSIP-1	Habitat Protection Ordinance
OSIP-15	Potential Park and Open Space Areas
OSIP-16	Open Space Funding
OSIP-17	Park Dedication Fees
OSIP-18	Open Space Preservation Actions
OSIP-19	Potential Open Space Acquisition Priorities

## 7.6 Open Space and Environmental Protection Programs

**OSIP-1 Habitat Protection Ordinance.** Consider adoption of a habitat protection ordinance that would identify and protect areas of biological value, including streams, creeks and wetlands. The ordinance would include setbacks from creeks, guidelines for avoidance of filling of creeks or wetlands and destruction of riparian vegetation, standards for compensation of habitat loss (as established by

a qualified biologist), and requirements for mitigation, monitoring and habitat enhancement plans. It would also cover implementation and enforcement of specific criteria to ensure that safety, natural resources and aesthetic values of Pinole Creek, other creeks and major drainages are protected and enhanced.

- OSIP-2      **Riparian and Stream Restoration Programs.** Establish riparian and stream restoration programs that include erosion control measures, stream clean-up projects, and revegetation plans for denuded areas.
- OSIP-3      **Environmental Education Programs.** Establish public information/education programs to enhance public knowledge about environmental protection and conservation measures.
- OSIP-4      **Open Space Management Plan.** Develop an Open Space Management Plan to identify criteria for use and maintenance; responsibilities of fire, police and public works; and conditions of approval for development.
- OSIP-5      **Shoreline Corridor Overlay Zone.** Consider adoption of a shoreline corridor overlay zone which promotes visual and physical access to the San Pablo Bay Shore. This overlay zone should include a plan for public amenities such as parking areas, trails, access and activity areas and guidelines to reduce long term “parking” of railroad tank cars on the San Pablo Bay shoreline.
- OSIP-6      **Pinole Valley Park Master Plan.** Develop a new master plan for Pinole Valley Park as Pinole’s citywide recreation and open space park.
- OSIP-7      **Open Space/Recreation Standards.** Identify current ratio of open space/recreation facilities per resident.
- OSIP-8      **Scenic Easements.** Require scenic easements on landforms or parcels with key visual resources that are subject to development.
- OSIP-9      **Ridgeline Preservation Ordinance.** Create a ridgeline preservation ordinance which includes an enforcement mechanism
- OSIP-10     **Landscape and Sound wall Design Standards.** Develop landscape and sound wall design standards, and work closely with CalTrans on the design and placement of I-80 sound walls and landscape elements.
- OSIP-II     **Street Tree Master Plan.** Develop a street tree master plan for major streets. The plan should promote the use of indigenous species and be guided by the concept of interconnected open space in Pinole, linked visually via dense street tree planting. The plan should include special planting at creek crossings and gateways to the city.
- OSIP-12     **Signature Plantings.** Define and accentuate gateways to the city and creek crossings through the use of signature plantings.
- OSIP-I3     **Tree Preservation Ordinance.** Consider adoption of a tree preservation ordinance that will define types and size of trees to be protected, and will include

specific criteria, procedures and mitigation when trees are proposed to be removed.

- OSIP-14     **Critical Public Views and Ridgelines.** Require assessment of critical public views and ridgelines as pan of the project review process to assure that projects protect natural resources through proper site planning, building design and landscaping.
- OSIP-15     **Potential Park and Open Space Areas.** There are a number of areas and/or parcels in the City of Pinole which may play an important role in the City’s future open space system. These are mapped on the Open Space Plan (map GP-10). Policies related to some of these parcels are included in the Land Use and Economic Development Element. Options that may be explored for preserving these areas are described in the Open Space Background Report.
- OSIP-16     **Open Space Funding.** Identify funding sources for acquisition and ongoing maintenance of new open space lands.
- OSIP-17     **Park Dedication Fees.** Review current requirements for park dedication fees for new development and revise as needed.
- OSIP-18     **Open Space Preservation Actions.** The following means will be considered for preserving open space resources, in order of priority: (1) private development review process; (2) public-private partnerships; and lastly, (3) public funds. Possible means are described below.

**Private Resources**

- (1) Require permanent dedication of open space areas with high habitat, visual, recreational or archaeological values as a condition of development. These lands should be owned and maintained by homeowner associations unless they are appropriate for use as trails or other public-access uses.
- (2) Use visual or public-access easements and building setbacks to protect open space resources while allowing development on private parcels.
- (3) Use impact fees from development of land with lower open-space values to acquire easements or ownership on land with higher open-space values
- (4) Encourage clustering of units to protect areas with high open space values.
- (5) Encourage grants and donations of undeveloped property with high open-space values from private individuals or organizations.
- (6) Encourage private, non-profit and other public agencies to acquire and maintain undeveloped land for open space preservation. These methods are preferred over the use of city funds for acquisition.

**Public-Private Partnerships**

- (1) When parcels on planned trail corridors are developed, require the developer to construct the portion of the trail crossing the parcel as one of the conditions of development.
- (2) Work with organizations such as the Urban Creeks Council, Trust for Public Lands, EBRPD, Nature Conservancy, Coastal Conservancy, and other cities and counties, to perform creek restoration and other tasks

related to open space.

**Public (City) Funds**

- (1) Prioritize parcels with high habitat, visual, archaeological or recreational values for purchase by the City if funds become available.

- OSIP-19 **Potential Open Space Acquisition Priorities.** Review potential open space and establish priorities for acquisition by the City or by other agencies, or protection through other means. High priority will be given to biologically sensitive and visually prominent lands that seem most at risk from development. The following are examples of possible sites for acquisition based these criteria:
- (1) The Doidge/Wright area is highly ranked for acquisition by the City as being both environmentally sensitive and highly visible (ridgelines).
  - (2) The Bundy parcel is highly ranked for acquisition by the City because it includes a stretch of Pinole Creek and valuable riparian vegetation. The geologic and biologic sensitivity of the site are additional reasons for preservation and acquisition.
  - (3) The Tidelands, Trailer Storage Lot and Garrity Creek are highly ranked for acquisition by an outside entity such as the EBRPD or The Trust For Public Lands. Although these parcels are in private ownership, each is a potential candidate for acquisition by an outside entity because of their unique features. The proximity to other park lands, the unusual nature of the Tidelands site, and habitat value of Garrity Creek are reasons for acquisition by other entities.
- OSIP-20 **Air Quality Strategies.** Implement trip reduction and energy conservation measures for jobs/housing balance, TDM and transit, as identified in the Land Use, Circulation and Housing Elements, and coordinate with regional and state agencies and other West County jurisdictions in enhancing air quality.
- OSIP-21 **Water Quality Strategies.** Implement habitat protection programs and evaluate proposed projects for potential water quality impacts which may require sediment basins as part of grading activities, grease/oil traps where concentrations of such pollutants are anticipated, or other measures.
- OSIP-22 **Consultation on Fish and Wildlife Impacts.** The City will continue to notify and consult with the California Department of Fish and Game and the Army Corps of Engineers when development projects are proposed in locations where there may be impacts to fish and wildlife and their habitats.
- OSIP-23 **City/Schools Joint Use Agreement.** The City investigate establishing a joint use agreement with the West Contra Costa Unified School District (WCCUSD) for the use and maintenance of WCCUSD facilities.
- OSIP-24 **Parks Facilities Plan.** The City will consider adopting and regularly review a Parks Facilities Plan which would address the need for new, and maintenance of existing and planned park facilities. This plan would be used as a basis for establishing park in-lieu fees, review of the City's Capital Improvement Program, park use fees, volunteer assistance needs and ADA requirements.