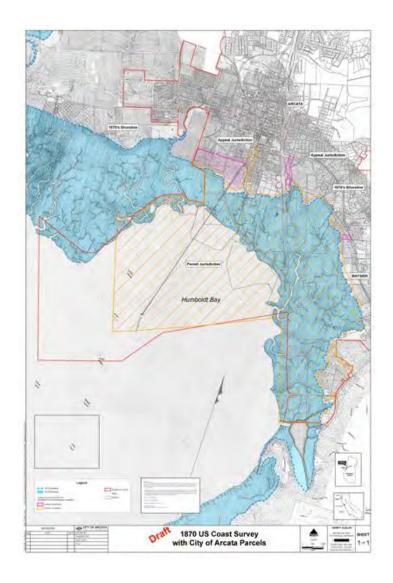
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City of Arcata

LOCAL COASTAL ELEMENT



February, 2022

TABLE OF CONTENTS

1.0	Introduction	3
2.0	Planning and Locating Development	9
3.0	Industrial Development and Energy	17
4.0	Recreation and Visitor Serving Facilities	19
5.0	Water Quality	23
6.0	Environmentally Sensitive Habitat Areas	27
7.0	Coastal Hazards	36
8.0	Sea Level Rise	42
9.0	Public Access	58
10.0	Scenic and Visual Resources	63
11.0	Archeological and Cultural Resources	66
12.0	Agricultural Resources	68
13.0	Glossary	73

1.0 Introduction

1.1. City of Arcata Local Coastal Element

Approximately one-third of the City of Arcata lies within the Coastal Zone. The California Coastal Act of 1976 (California Public Resources Code Section 30000 *et seq.*) requires the City to have a Local Coastal Program (LCP) certified by the Coastal Commission that implements the Coastal Act at the local level. A Local Coastal Program consists of a Land Use Plan and an Implementation Plan.

This Local Coastal Element of the City of Arcata General Plan is a component of the Land Use Plan as described in the Coastal Act, Section 30108.5 and 30108.55. This Element identifies the policy to enact the Coastal Act locally and contains implementation measures where necessary to enact the provisions and policies of the Coastal Act that are not adequately implemented by the Coastal Zoning Ordinance.

The City of Arcata uses the Local Coastal Element as the standard of review for required Coastal Development Permits in the Coastal Zone under the City's permit jurisdiction. The Coastal Commission retains original permit jurisdiction over the immediate shoreline, tidelands, submerged lands, public trust lands, and land within a certain distance of wetlands, estuaries, streams, and coastal bluffs. In these areas, the standard for review is the Chapter 3 policies of the Coastal Act. The Local Coastal Element, however, may be used as guidance in the areas where the City retains jurisdictional authority (retained jurisdiction).

The Local Coastal Element is a legal mandate that governs both private and public actions. For purposes of administering the Coastal Act, the Local Coastal Element is at the top of the hierarchy of City laws regulating land use in the Coastal Zone. Unless explicitly exempted, other City laws and policies, such as specific plans, subdivision regulations, and zoning ordinances, are subordinate to, and must be consistent with, the Local Coastal Element as a whole.

Local Coastal Element and the Coastal Zoning Ordinance

As a component of the Land Use Plan, the Local Coastal Element indicates the kinds, location, and intensity of land uses and the applicable resource protection and development policies. The Local Coastal Element must include development and resource protection policies sufficient to carry out the policies of Chapter 3 of the Coastal Act. Arcata's Land Use Plan also includes the certified Coastal Land Use Map.

The Coastal Zoning Ordinance, chaptered in Title IX of the Arcata Municipal Code, is a component of the Implementation Plan. The Coastal Zoning Ordinance contains the land use and development regulations necessary to carry out the Local Coastal Element. The Coastal Zoning Ordinance includes specific regulation on the kinds, location, and intensity of land uses, while the Local Coastal Element primarily addresses the policy related to land use. These documents together meet the requirements of, and implement the provisions and policies

of, the Coastal Act at the local level.

Local Coastal Element Organization

Arcata's Local Coastal Element consists of 13 chapters, generally following the Coastal Commission's Local Coastal Program Update Guide. Each chapter contains a short introduction and a detailed policy section.

Public Participation in Creating the Plan

The City recognizes the importance of public participation in the development of the guiding principles, policies, and implementation measures that will frame land use within the City's Coastal Zone for years to come. In 2014 and 2015, the City Council held joint study sessions with the Planning Commission to discuss updates, goals, and schedules. Throughout the summer of 2015, the Planning Commission conducted six public scoping meetings advertised in the local paper, through standard noticing practices, and on social media in an effort to provide opportunities for the public to provide its vision on coastal issues, such as sea level rise, annexations, zoning changes, coastal hazards, and development in specific neighborhoods. Progress on the update was also provided to the public on the City's website where staff posted draft documents, maps, and meeting announcements.

Throughout 2016 and 2017, the City Council held study sessions and joint study sessions with the Planning Commission to provide feedback on key issues. In the summer and fall of 2017, public workshops were held to discuss sea level rise issues. The Planning Commission reviewed and commented on Element chapters in 2021. The Planning Commission and City Council held noticed public hearings to review and adopt the Local Coastal Element in early 2022.

Regional and Local Setting

Regional Setting. The City of Arcata is located on the Northern California coast, approximately 275 miles northwest of San Francisco, in the heart of the redwood region. It is in the west-central portion of Humboldt County, six miles north of the City of Eureka, the County seat. Arcata is situated at the north end of Arcata Bay, which is part of Humboldt Bay, the second largest marine embayment in California. The City is located on U.S. Highway 101, which connects to Eureka and the San Francisco Bay Area to the south, and to Crescent City and the Oregon Coast to the north. The City is at the western terminus of State Highway 299, which connects Arcata and the north coast to Redding and the Upper Sacramento Valley to the east. State Highway 255 also bisects the City west to east.

Local Setting. Arcata is situated on a coastal terrace, the lower portions of Fickle Ridge and the easterly portions of the Arcata Bottoms, between Arcata Bay and the Mad River. As shown in Figure 1-1, the area of Arcata within the Coastal Zone contains approximately 4.75 miles of Arcata Bay shoreline and consists of a mix of agricultural lands, commercial, light and heavy industrial uses, natural resource lands, and residential uses.

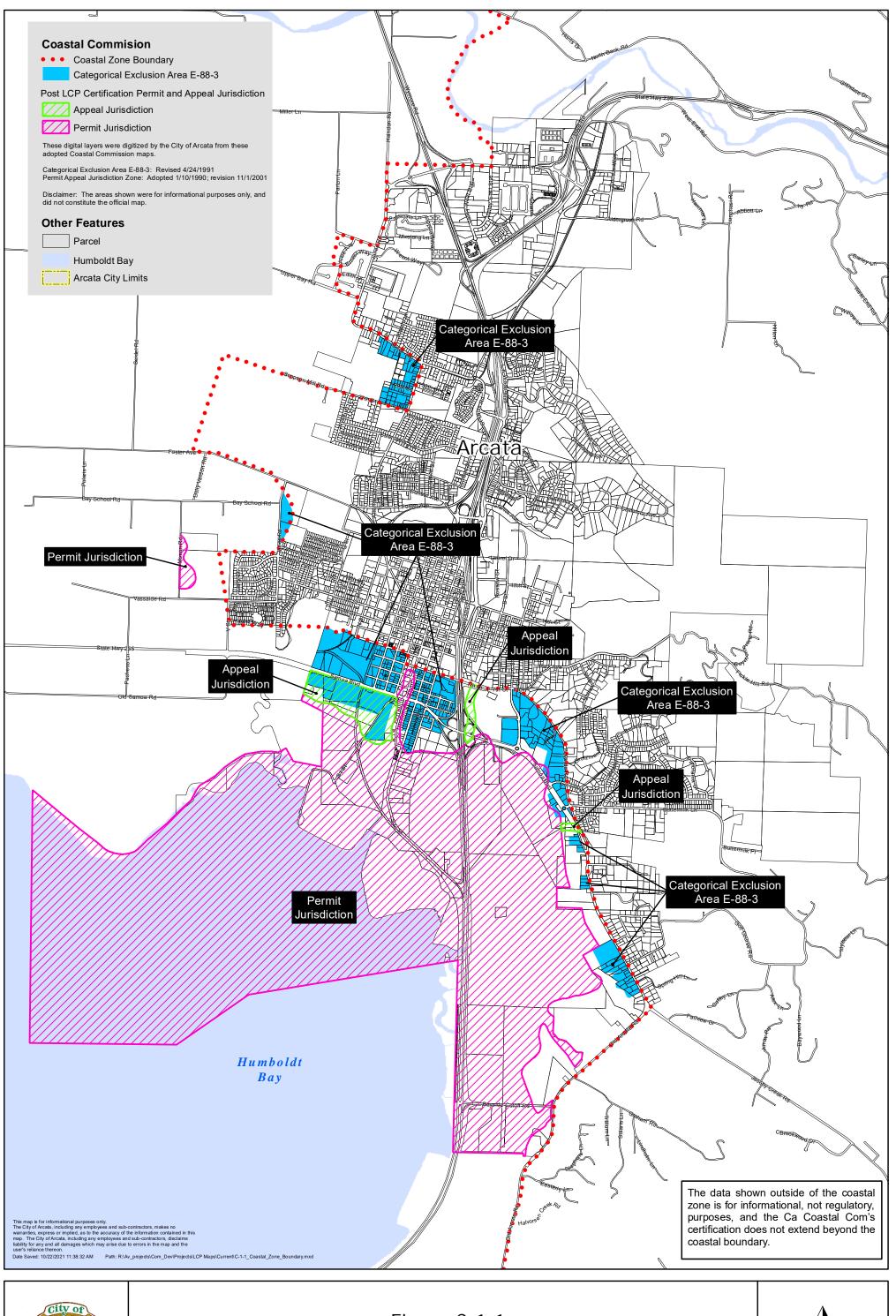
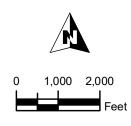




Figure C-1-1 Coastal Zone Boundary



Future Trends and Assumptions

The Local Coastal Element includes goals, policies and implementation measures that anticipate and help shape future changes to ensure that they reflect the community's shared sense of values. Future trends will reflect changes in social, economic, cultural, and environmental factors, but will be shaped locally by the guidelines expressed in this element.

Arcata embraces environmentally sustainable principles which encourage infill development, brownfield remediation, multi-modal transportation, and zoning districts that emphasize and encourage mixed-use developments where compatible. Arcata recognizes the value of natural resource lands, and has implemented strong regulatory protections that discourage sprawl and protect open spaces. Arcata aspires to preserve sufficient lands for both active and passive recreational activities and coastal access to serve the present and future needs of the community. The City has set aside a large amount of land for resource protection and must maximize the use of the remaining agricultural, industrial, commercial and residential lands. It is expected that there will be increased use of vacant and underdeveloped parcels within the City as opposed to outward expansion of the City limits.

Administering the Local Coastal Element

All land use and development decisions in the Coastal Zone must be consistent with the Local Coastal Program. Unless otherwise exempt, development in the Coastal Zone requires a Coastal Development Permit. A Coastal Development Permit may be issued by the City in its delegated jurisdiction if the City finds that the development conforms with the standards of the certified Local Coastal Program. The City must also make any other Local Coastal Element findings in the Coastal Zoning Ordinance.

1.2. Implementation Principles

- **1.2.1. Coastal Act Direction.** The policies of Chapter 3 of the California Coastal Act (California Public Resources Code Sections 30210 through 30264) shall direct the interpretation of the Local Coastal Element.
- **1.2.2.** Coastal Act Direction. The policies of Chapter 3 of the California Coastal Act (California Public Resources Code Sections 30210 through 30264) shall direct the interpretation of the Local Coastal Element.
- **1.2.3. Conflicts with General Plan.** Where the policies of the Local Coastal Element appear to conflict with the provisions of any other element of the General Plan, the policies of the Local Coastal Element shall take precedence in the Coastal Zone.
- **1.2.4. Descriptive Text.** Descriptive text outside of enumerated policies is for background information only and does not govern the issuance of Coastal Development Permits. If a perceived conflict occurs between the wording of the enumerated policies and the accompanying descriptive text of the Local Coastal Element, the enumerated policy language shall take precedence. Where enumerated policy language conflicts with maps

- or graphics in the Local Coastal Element, the policy language shall take precedence.
- **1.2.5. Inconsistent Policies**. Where policies within the Local Coastal Element overlap or seem inconsistent, the policy which is the most protective of coastal resources shall take precedence.
- **1.2.6. Conflicts with Coastal Zoning Ordinance.** Where provisions of the Coastal Zoning Ordinance or other implementation measures appear to conflict with the policies of the Local Coastal Element, the policies of the Local Coastal Element shall take precedence.
- **1.2.7. Findings Required.** Prior to the approval of any development permit, the City, or the Coastal Commission on appeal, shall make the finding that the development meets the standards set forth in all applicable Local Coastal Element policies and Coastal Zoning Ordinance regulations.

2.0 Planning and Locating Development

2.1. Introduction

Most of the land within the City's Coastal Zone is designated Coastal Agricultural (:CA), Coastal Resource & Open Space Lands (:CROS), or Coastal Industrial (:CI). An area within the City's urban core is designated Coastal Residential Medium Density (:CRM) for medium density residential uses and Coastal Commercial Central (:CCC) for commercial uses. The most significant vacant and underutilized portions of the City within the Coastal Zone that are available for development are industrial lands located along the State Route 255/Samoa Boulevard corridor on the west side of town, designated Coastal Mixed Use (:CMU).

Strict protective standards for natural resources and agricultural designated areas require the City to utilize the developable portions of the City more intensely. City policy emphasizes the reuse of former industrial lands and promotes compact, high-density, infill development over the encroachment of services into resource lands. Infill development maximizes use of existing infrastructure and transportation facilities, reduces air quality impacts, and protects against the conversion of agriculture and open space lands.

Coastal Act Policies

The following Coastal Act policies are most relevant to planning and locating development in Arcata:

Section 30250:

- (a) New residential, commercial, or industrial development, except as otherwise provided in this Coastal Land Use Plan, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. Land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.
- **(b)** Where feasible, new hazardous industrial development shall be located away from existing developed areas.
- **(c)** Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.

2.2. Local Coastal Element Policies

2.2.1. Coastal Land Use Designations. The western and southern portions of the City are within the Coastal Zone. The Coastal Zone boundary and Coastal Land Use Designations are depicted in Figure 2.1. The maximum intensity for each designation is shown in Table 2-1, below. To calculate the residential density for a parcel, the gross parcel size shall be used.

Table 2-1 Allowable Residential Density by Land Use Designation

		Maximum Intensity	
Coastal Land Use Plan Designations		Dwelling Units Per Acre*	Floor Area Ratio
Coastal Resource & Open Space Lands	:CROS	None allowed	No maximum
Coastal Agricultural	:CA	1 du/60 acres	N/A**
Coastal Residential Very Low Density	:CRVL	2 du/acre	No maximum
Coastal Residential Low Density	:CRL	7.5 du/acre	No maximum
Coastal Residential Medium Density	:CRM	30 du/acre	No maximum
Coastal Residential High Density	:CRH	60 du/acre	No maximum
Coastal Commercial Central	:CCC	No Maximum	5.0
Coastal Mixed Use	:CMU	No Maximum	5.0
Coastal Industrial	:CI	No Maximum	3.0
Coastal Public Facility	:CPF	None allowed	1.5

^{*}Excludes Accessory Dwelling Units pursuant to Government Code Sec. 65852.2 et seq.

- **2.2.2. Development Permit Approval.** Prior to the approval of a Coastal Development Permit required by the Local Coastal Program, the City shall make the finding that proposed development meets the standards set forth in all applicable Local Coastal Element policies and the Coastal Zoning Ordinance.
- **2.2.3.** Land Use Plan Map. The Coastal Land Use Map (Figure 2.1) shows the land use designations that apply within the Coastal Zone.
- **2.2.4.** Location of New Development. New infill development and redevelopment shall be allowed and encouraged within and adjacent to existing developed areas, and shall be subject to the density and intensity limits and resource protection policies of the Local Coastal Program.
- **2.2.5. Development in Areas with Public Services.** New development shall be located in areas with adequate public services or in areas that are capable of having public services extended or expanded without significant adverse effects on coastal resources.

^{**}Maximum buildout is a function of building type and use as described in Section 2.3

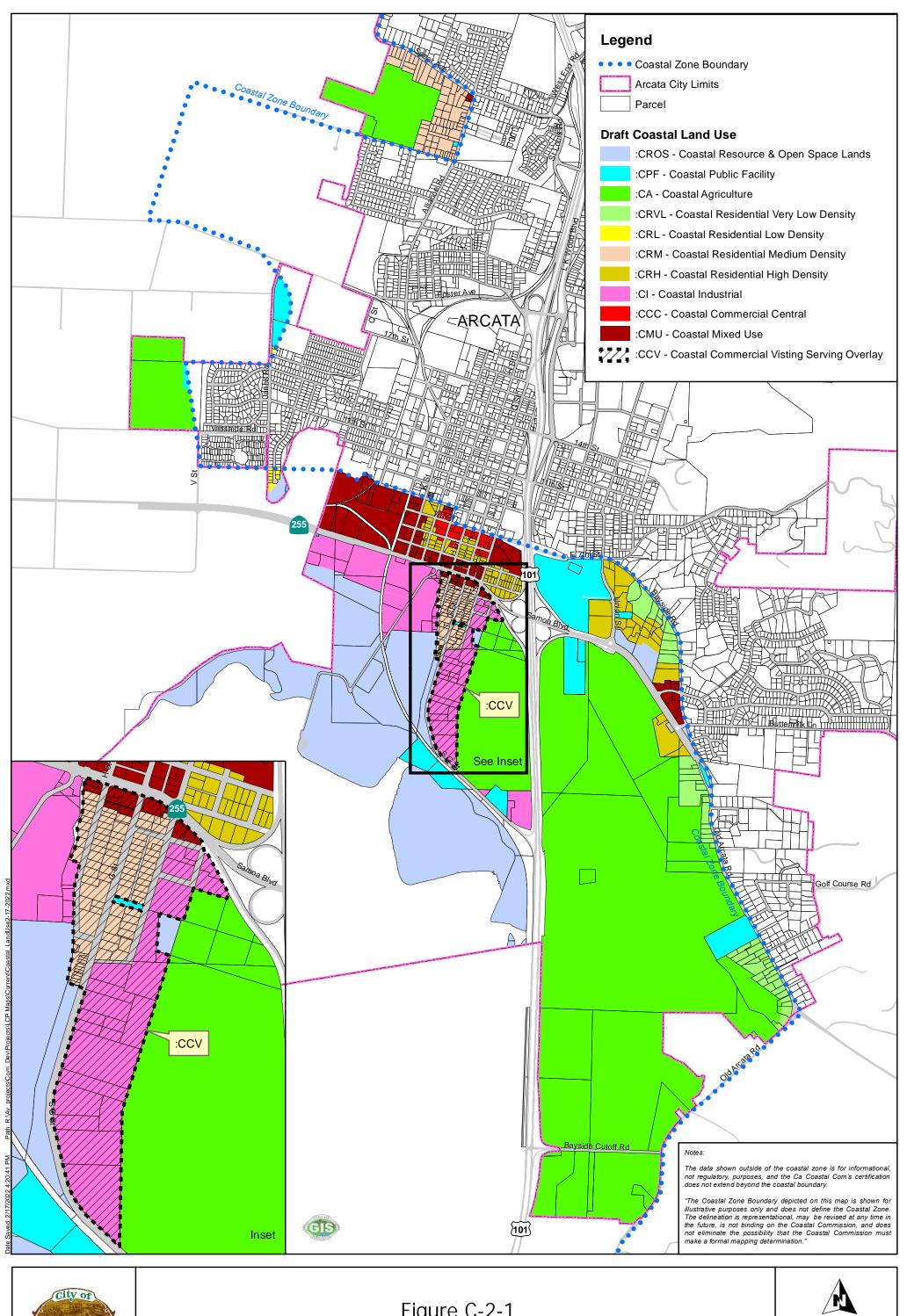
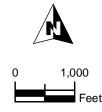




Figure C-2-1 Coastal Land Use



Date: 2/17/2022

- 2.2.6. Promoting Infill Development. The City shall encourage appropriate redevelopment of certain parcels of land which are either underutilized, brownfields, or vacant but surrounded by existing urban development. Consistent with all other Local Coastal Program policies, infill development may include new residential units on upper floors of commercial structures, development of accessory dwelling units on residential lots, and new or expansion of existing residential and commercial structures. The Planned Development procedure shall be encouraged for coordinated development on larger infill sites
- 2.2.7. Coastal Dependent Land Uses. Coastal dependent developments shall have priority over other development or uses on or near the Arcata Bay shoreline. Where appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal dependent uses they support. Arcata's coastal dependent uses are predominantly recreational, as the Arcata Bay coastline is shallow and does not support coastal dependent industrial activities. Recreational uses including coastal access and coastal visitor serving uses are considered coastal dependent uses.
- **2.2.8. Clustering New Development.** New development shall be concentrated in areas that can accommodate it without significant adverse effects on coastal resources. Siting shall take potential coastal hazards into account by concentrating development outside of hazard areas. New development in areas adjacent to ESHAs should be clustered away from land where wetlands and other coastal habitats could migrate as sea level rises. New development should be clustered into existing developed areas such as the Urban Protection Zone as shown in Figure 8-2 (Proposed Urban Protection Areas).
- **2.2.9. Subdivisions.** The City may approve new subdivisions of land only if the resulting parcels can be developed consistent with the Local Coastal Program.

2.3. Land Use Designations

- **2.3.1. Residential Designations.** The objective of the residential designations is to allow for a mix of housing types and densities to meet the physical, social, and economic needs of residents, with new and converted housing designed to be compatible with the established neighborhood character. Allowed uses in residential designations include:
 - Residential Uses as described below;
 - Neighborhood-serving Retail Uses (e.g., small convenience stores)
 - Commercial Services Uses (e.g., day care centers, bed & breakfast inns, accessory offices, extended medical care services);
 - Agricultural Uses and Open Space;
 - Recreation, Education, and Public Assembly Uses;
 - Transportation, Communications, and Infrastructure Uses (e.g., public utilities);
 and

• Other uses compatible with a residential setting.

The City shall review and act on accessory dwelling unit applications consistent with Government Code Section 65852.2 et seg.

Residential Very Low Density (:CRVL). The :CRVL designation allows the lowest density residential development in areas where physical constraints, protection of natural features, or preservation of low density character are important considerations. The :CRVL designation is applicable to lands with steep slopes where the open space character of Arcata's hillsides and perimeter lands are to be preserved. Development in hillside areas shall avoid Environmentally Sensitive Habitat Areas (ESHA) and erosion.

Newly created lots in this designation must contain a buildable area of sufficient size and flatness to allow development without significant environmental damage or landform alteration. This designation is also intended to provide a transition between urban uses and rural and agricultural areas.

Residential Low Density (:CRL). The :CRL designation primarily provides for single-family homes on individual lots.

Residential Medium Density (:CRM). The :CRM designation is applied to areas appropriate for a variety of housing types, including small-lot single-family housing and various types of multifamily housing.

Residential High Density (:CRH). The :CRH designation is designated primarily for high-density residential development.

2.3.2. Agriculture & Natural Resource Designations. The objective of the agriculture and natural resource designations is to preserve and promote management of agricultural, forest, and aquaculture lands; protect public natural resource/open space lands, including stream courses, wetlands, tidelands, and open space areas; and provide for complementary uses including farm housing, processing of agricultural and aquaculture products, and public access for coastal recreation in designated areas.

Coastal Agricultural (:CA). The :CA designation is intended to preserve land for agricultural production. The :CA designation is appropriate for lands with prime agricultural soils and wetlands that could be used as grazed agricultural lands, as well as other areas with non-prime soils suitable for protecting their current uses as, or potential for, agricultural production. Appropriate structures in the :CA district include structures necessary for agricultural production and structures that are accessory, incidental to, and compatible with agricultural production. Allowed uses in the :CA designation include:

- Agricultural and Open Space Uses;
- Parks, Playgrounds, and Recreation Uses;
- Residential Uses (max. two units per parcel);

- Transportation, Communications, and Infrastructure Uses (e.g., public utilities);
 and
- Other uses compatible with agricultural operations.

See Chapter 12 for policies protecting agricultural uses within the :CA designation.

Coastal Resource and Open Space Lands [:CROS]. The :CROS designation is applied to public or private lands where protection of unique and/or sensitive natural resources, or managed production of resources, are the primary objectives. This designation is also applicable to productive resource lands and aquaculture in Arcata Bay, though tidelands are within the Coastal Commission's retained Coastal Development Permit jurisdiction. See Policy AG-12.2.4 for limitations on aquaculture as an allowed use in the :CROS designation.

The :CROS designation is not applied to small or "pocket" wetlands that exist on parcels large enough to accommodate development without adversely impacting wetlands. The designation is also not applied to wetlands used as grazed agricultural lands. See Chapter 6 for policies protecting all wetlands, regardless of designation. Allowed uses in the :CROS designation include:

- Agricultural and Open Space Uses;
- Parks, Playgrounds, and Recreation Uses;
- Transportation, Communications, and Infrastructure Uses (e.g., public utilities);
 and
- Other uses to protect and enhance natural resources.
- **2.3.3. Commercial and Mixed Use Designations.** The objective of the commercial and mixed use designations is to provide sufficient land areas and locations for a variety of retail, commercial services, and mixed-use housing to serve the consumer needs of the community and visitors.

Commercial Central (:CCC). The :CCC designation applies to the downtown center of the City and is designed to be a high-density, pedestrian-oriented activity area, with shops and services, banks, offices, restaurants, and entertainment supporting a variety of day and night activities. Allowed uses in the :CCC designation include:

- Recreation, Education, and Public Assembly Uses;
- Residential Uses;
- Commercial and Service Uses;
- Transportation, Communications, and Infrastructure Uses (e.g., public utilities);
- Agricultural and Open Space; and

Mixed Use (:CMU). The :CMU designation allows high-density, large-scale, infill development with a high degree of flexibility around uses. This land use designation is applied only to parcels suitable for infill development, redevelopment, and densification where development will cause no or negligible impacts to coastal natural resources, ESHAs, or coastal access. Allowed uses in the :CMU designation include:

- Recreation, Education, and Public Assembly Uses;
- Residential Uses;
- Commercial and Service Uses;
- Industrial Uses;
- Transportation, Communications, and Infrastructure Uses;
- Agricultural and Open Space Uses; and
- Other uses appropriate in a mixed-use district.

Commercial Visitor Serving (:CCV). The :CCV overlay applies to areas where visitor-serving uses are allowed in addition to uses allowed by the base designation. Allowed uses in the :CCV designation include:

- Open Space Uses;
- Visitor-serving Recreation and Public Assembly Uses;
- Visitor-Serving Commercial and Service Uses;
- Transportation, Communications, and Infrastructure (e.g., public utilities); and
- Other uses appropriate in a visitor-serving commercial area.
- 2.3.4. Public Facilities (:CPF). The objective of the :CPF designation is to provide appropriate locations and sites for water storage and delivery; wastewater collection and treatment; drainage; solid waste management; fire protection; parks and recreation; civic and institutional uses; and educational (public and private) facilities. The :CPF designation applies to lands used for various types of public purposes. Public facility uses may be owned by private individuals, private organizations, or private institutions, as well as by government entities. Allowed uses in the :CPF designation include:
 - Agricultural and Open Space Uses;
 - Recreation, Education, and Public Assembly Uses;
 - Limited Residential Uses (e.g., group quarters, residential care-facilities, caretaker units);

units);

- Commercial and Service Uses serving a governmental function (e.g., recycling collection facilities, governmental offices);
- Transportation, Communications, and Infrastructure (e.g., public utilities); and
- Other uses appropriate in a public facility.
- **2.3.5. Industrial (:CI).** The objective of the :CI designation is to provide for uses which will retain and generate higher paying jobs, including labor intensive manufacturing, processing, assembly, warehousing, services, and complementary non-industrial uses, in appropriate locations. The :CI designation is intended to provide attractive industrial areas suitable for light manufacturing and limited commercial uses. Allowed uses in the :CI designation include:
 - Recreation, Education, and Public Assembly Uses;
 - Commercial and Service Uses;
 - Industrial Uses;
 - Transportation, Communications, and Infrastructure Uses (e.g., public utilities);
 - Agricultural and Open Space Uses; and
 - Other uses appropriate in an industrial district.

3.0 Industrial Development and Energy

3.1. Introduction

Industrial land uses are important to retain as they generate a variety of jobs, and produce goods that are often sold outside of the community, both of which provide economic benefits to the City. Industrial uses within the City include labor-intensive manufacturing, processing, assembly, warehousing and services, as well as complementary non-industrial uses, such as restaurants and child-care facilities, in appropriate locations. In Arcata, substantial areas in the Coastal Zone near Arcata Bay were developed by the timber industry adjacent to Samoa Boulevard. With the transition from resource extraction industries such as timber harvesting and wood product manufacturing, many of these properties present opportunities for re-use as industrial and commercial sites oriented toward new markets. The land use designations applicable to industrial lands are identified in Chapter 2, *Planning and Locating Development*.

Energy facilities in Arcata's Coastal Zone include transfer stations, power lines, and transformer poles. No municipal electrical power generation or similar large-scale energy facilities are located within Arcata's Coastal Zone. Electrical power for the City is delivered primarily from Pacific Gas & Electric's Humboldt Bay Power Plant, which generates power from natural gas. Pacific Gas & Electric also maintains a natural gas delivery network throughout the City with a major transmission line that runs parallel to Highway 101. Alternative energy resources such as solar, wave, and wind technologies may also be important to the city.

Coastal Act Policies

The following Coastal Act policy is most relevant to industrial development and energy in Arcata:

30260: Location or Expansion. Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this local coastal plan. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this local coastal plan, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 of the California Coastal Act if: (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

Additional Coastal Act policies that relate to industrial development and energy include:

30262: Oil and Gas Development.

30263: Refineries or petrochemical facilities.

- 3.2. Local Coastal Element Policies
- **3.2.1. Conversion and Reuse of Old Industrial Sites.** The City shall encourage the conversion and reuse of abandoned or inactive industrial sites, such as former lumber mills. An environmental site assessment shall be required for sites where prior uses may have caused soil contamination. Light and moderate manufacturing, other industrial uses, and mixed-uses (commercial, industrial, residential) are encouraged in these locations. The City will accommodate coastal-dependent development, coastal-related development, visitor-serving uses, and public recreational uses in these locations as appropriate consistent with the Coastal Land Use Plan Map.
- **3.2.2. Concentration of Industrial Uses.** Industrial uses should be concentrated in existing industrially developed properties.
- **3.2.3. Oil and Gas Development.** On and off shore petroleum product exploration, recovery, and processing is prohibited within the Coastal Zone except when otherwise allowed by Coastal Act Sections 30262 and 30263.
- **3.2.4.** Hazardous Industrial Development. Hazardous industrial development is allowable in the Coastal Zone only when demonstrated that all risks associated with the industrial operations are fully mitigated to a level consistent with existing adjacent development and uses.
- **3.2.5. Energy Generation.** The City will encourage new and retrofitted development to incorporate distributed energy generation, such as solar and wind power generation. Development of these systems will be designed to protect scenic and visual qualities of coastal areas, wildlife including birds and bats, sensitive coastal resources, marine life, water quality, and public access.

4.0 Recreation and Visitor Serving Facilities

4.1. Introduction

The City of Arcata strives to protect and maximize recreation and visitor serving land uses, including free or low-cost opportunities. Recreational activities within the City occur in many different zoning classifications. There are nearly 350 acres of land dedicated to recreational and visitor serving land uses in the Arcata Coastal Zone, mostly within the Arcata Marsh & Wildlife Sanctuary (Arcata Marsh). There are also commercial recreational and visitor serving uses in Arcata outside of the Coastal Zone which provide lodging, restaurants, entertainment and other facilities for Coastal Zone visitors. The Arcata Marsh provides 5.4 miles of walking and bicycling paths and also provides access to Humboldt Bay via Arcata's only boat launch. Figure 4-1 identifies existing shoreline and near-shore recreational areas, facilities and support facilities (e.g. parks, parking areas, visitor-serving commercial) in the Arcata Coastal Zone.

Coastal Act Policies

The following Coastal Act policies are most relevant to recreation and visitor serving facilities in Arcata:

30220 Protection of certain water-oriented activities. Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

30221 Oceanfront land; protection for recreational use and development. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

30212.5 Public facilities; distribution: Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

30222 Private lands; priority of development purposes: The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but do not have priority over agriculture or coastal-dependent industry.

30223 Upland areas: Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

30224 Recreational boating use; encouragement; facilities: Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

30213 Lower cost visitor and recreational facilities; encouragement and provision; overnight room rentals: Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

30234 Commercial Fishing and Recreational Boating Facilities: Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

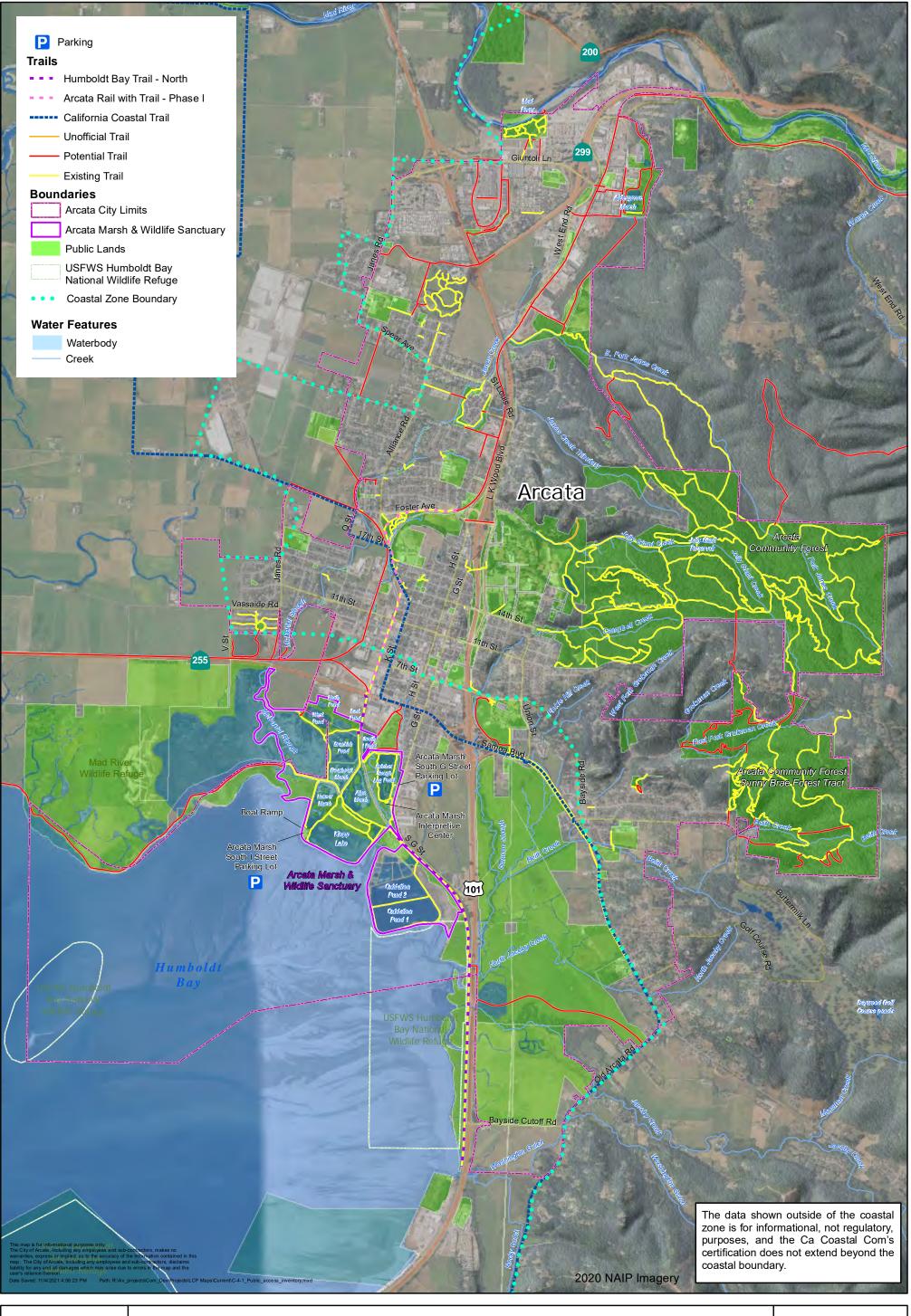
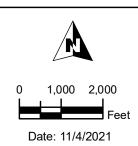




Figure C-4-1

Existing shoreline and near-shore area Public Access Inventory



Local Coastal Element Policies

Recreation Uses

- **4.1.1. Existing Recreational Facilities.** Existing recreational areas and facilities within the Coastal Zone shall be retained and maintained to provide water-oriented recreational opportunities for visitors and residents.
- **4.1.2. New Recreational Facilities.** Undeveloped areas suited for water-oriented recreational activities shall be protected for such uses. New water-oriented recreational opportunities in these areas shall be provided where needed to meet present and foreseeable future demand for additional recreational facilities. The City encourages new recreational facilities that are low-cost or free to use.
- **4.1.3. Accessory Recreation Areas.** Passive recreational activities that are secondary and accessory to the primary permitted uses, such as public access trails and bird watching, may occur in any land use designation when consistent with all applicable Local Coastal Program regulations and policies. Such activities shall be subject to restrictions protecting proximate environmentally sensitive areas.
- **4.1.4. Trail Connectivity and Amenities.** Development shall connect to the trail network when located adjacent to designated, existing, or planned trail routes. Facilities to accommodate pedestrians and bicyclists shall be provided where feasible. Facilities may include benches, wayfinding signage, bicycle and pedestrian access, bicycle parking, water stations, picnic tables, bike repair stations, kiosks, and walk-up windows.

See also Chapter 9 for additional trail policies.

- **4.1.5.** Coastal Commercial Visitor Serving and Recreation Facilities. The City shall support and encourage commercial visitor serving and recreation facilities, such as guiding services or equipment rentals in the Samoa Boulevard and South "G" corridor neighborhoods, to provide services to visitors and residents.
- **4.1.6. North of Samoa Recreational Area.** The area south of 10th Street, west of "K" Street, and north of Samoa Boulevard includes vacant and underutilized parcels. Recreational facilities shall be developed in this area in accordance with the type of development that occurs.

See also Chapter 12 for recreation policies in agriculture designations.

Visitor Serving Facilities

4.1.7. Visitor Serving Facilities. Visitor serving facilities that provide food, lodging, recreational, and shopping opportunities shall be located in existing developed areas.

- **4.1.8. Lower Cost Overnight Accommodations.** The City shall encourage new overnight visitor accommodation development that serves all income levels, including lower-cost overnight accommodations such as campgrounds, RV parks, hostels, lower cost hotels, and motels.
- **4.1.9. Visitor Parking.** Free and low-cost visitor parking shall be provided within the Coastal Zone to accommodate visitors at coastal access points. If feasible, new parking areas shall be developed adjacent to coastal access points, such as the Samoa Boulevard entrance to the McDaniel's Slough.
- **4.1.10. Visitor Public Transportation.** The City shall work with local transit agencies to explore public transportation options that connect visitors from the Valley West lodging areas and northern portions of Arcata to coastal resources such as Mad River Beach and the Arcata Marsh and Wildlife Sanctuary.

5.0 Water Quality

5.1. Introduction

Improving water quality in and around Humboldt Bay is important to the City of Arcata. The Humboldt Bay Management Plan (2007), prepared by the Humboldt Bay Harbor Recreation and Conservation District (Harbor District), identifies that cities adjacent to Humboldt Bay put pressure on the area's natural resources and affect water quality. Nonpoint source pollution is cited as the leading cause of water pollution in both coastal and inland waters, and regulatory efforts at the state level have expanded to address surface water and runoff pollution into drainage channels, streams, and groundwater. Nonpoint source pollution from stormwater is a primary cause of impacts to water quality, waterways, and the coastal environment. Controlling nonpoint source pollution is an important goal for agencies and municipalities working to maintain or improve water quality. The City's watersheds located within and surrounding the Coastal Zone are mapped in Figure 5-1.

Coastal Act Policies

The following Coastal Act policies are most relevant to water quality protection in Arcata:

Section 30230: Marine resources; maintenance. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231: Biological productivity; water quality. The biological productivity and the quality of coastal waters, streams, wetlands and estuaries shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

5.2. Local Coastal Element Policies

- **5.2.1. Biological Productivity of Coastal Waters.** Development shall maintain, and where feasible, restore the biological productivity and quality of coastal waters, streams, wetlands, estuaries, and lakes.
- **5.2.2. Stormwater Impacts.** To minimize adverse impacts to coastal waters, development shall be planned, sited, designed and managed to minimize adverse changes in stormwater runoff volume, flow rate, timing, and duration, and to minimize pollutants in stormwater runoff.

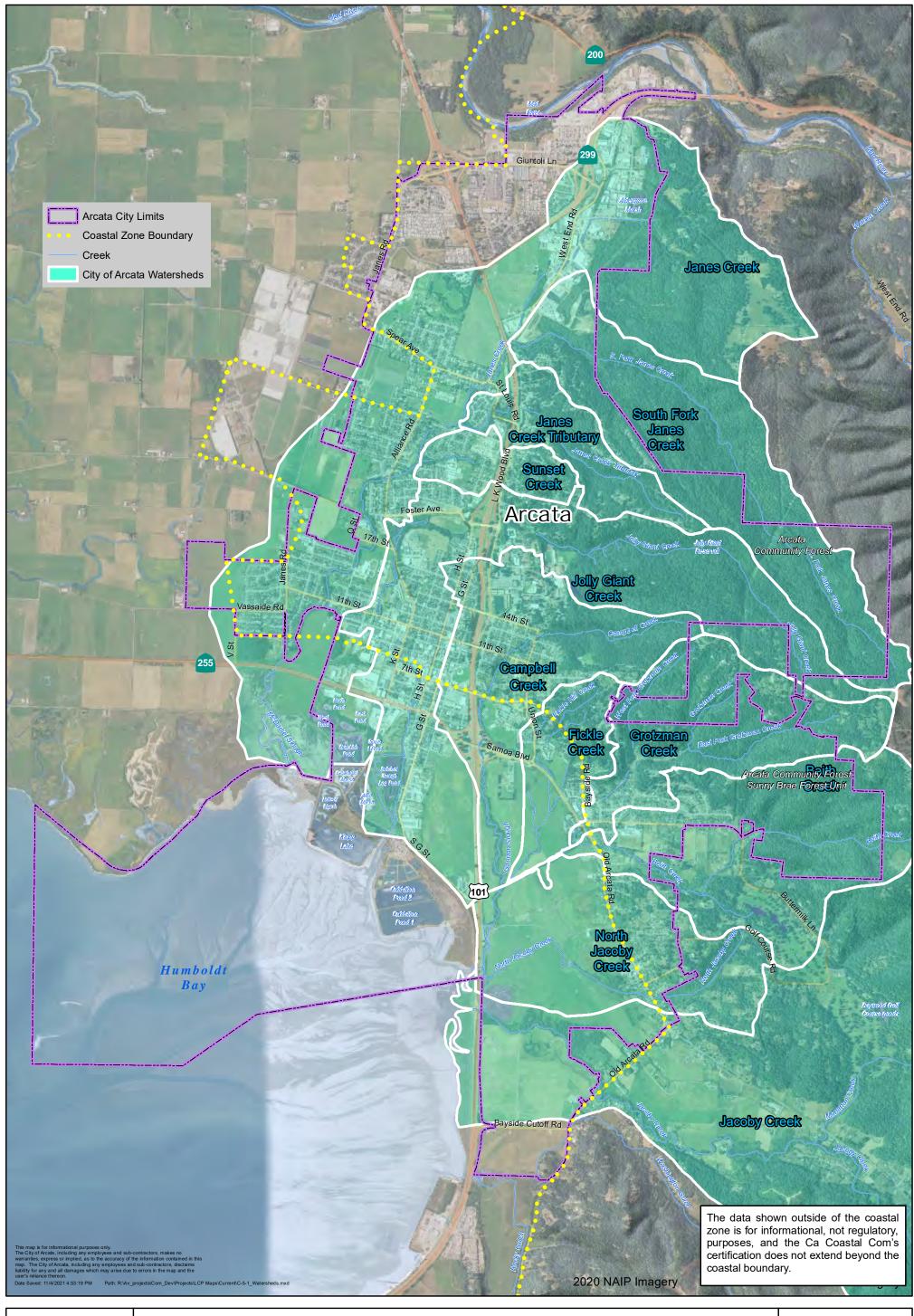
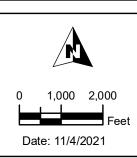




Figure C-5-1 City of Arcata Watersheds



- 5.2.3. Construction Pollution Prevention Plan. All development that has the potential for adverse water quality or hydrologic impacts to coastal waters during construction shall prepare a Construction Pollution Prevention Plan to be reviewed and approved by the City Engineer or their designee prior to the issuance of any building or grading permits. The purpose of the Construction Pollution Prevention Plan is to minimize erosion and the discharge of sediment during construction, and to minimize pollution of runoff and coastal waters by construction chemicals and materials. The level of detail provided to address the Construction Pollution Prevention Plan's requirements shall be commensurate with the type and scale of the development, and the potential for adverse water quality impacts to coastal waters.
- **5.2.4. Post-Development Runoff Plan.** All development that has the potential for adverse water quality or hydrologic impacts to coastal waters shall prepare a Post-Development Runoff Plan to be reviewed and approved by City staff prior to the issuance of any building or grading permits. The purpose of the Post-Development Runoff Plan is to minimize stormwater pollution and adverse changes in runoff flows from the site for the life of the development. The Post-Development Runoff Plan shall comply with the following requirements:
 - The level of detail provided to address the Post-Development Runoff Plan's requirements shall be commensurate with the type and scale of the development, and the potential for adverse water quality impacts to coastal waters.
 - The Post-Development Runoff Plan shall give precedence to a Low Impact Development approach to stormwater management in conformance with Policy 5.2.5.
 - The Post-Development Runoff Plan shall include a requirement for ongoing management of post-construction stormwater management Best Management Practices (BMPs) for the life of the development in conformance with Policy 5.2.6.
- **5.2.5.** Low Impact Development (LID). The City shall give precedence to a Low Impact Development (LID) approach to stormwater management in all development. LID integrates preventive Site Design strategies with small-scale, distributed Best Management Practices (BMPs) to replicate the site's pre-development hydrologic balance through infiltration, evapotranspiration, harvesting water for later on-site use, detention, or retention of stormwater close to the source.
- **5.2.6. Ongoing Management of Best Management Practices (BMPs).** The City shall require ongoing management of all post-development BMPs (including operation, inspection, and maintenance) for the life of the development as a condition of Coastal Development Permit approval. No additional Coastal Development Permit is required for management activities approved as a condition of the Coastal Development Permit.
- **5.2.7. Alterations to Rivers and Streams.** The City shall prohibit channelizations and other substantial alterations to rivers, streams, and creeks except for necessary water supply projects, necessary flood control projects, and fish and wildlife habitat restoration

- projects. Such projects must incorporate all feasible Best Management Practices to mitigate impacts to the river or stream habitat value. This policy applies to projects in creeks regardless of whether a creek is defined as ESHA.
- **5.2.8. Stormwater outfalls**. Construction of new stormwater outfalls discharging into coastal waters, streams, wetlands, estuaries, and lakes should be avoided. Stormwater should be directed to existing facilities with appropriate treatment and filtration where feasible. Where new outfalls are necessary, stormwater outfalls shall be planned, sited and designed to minimize adverse impacts on coastal resources. Consolidation of existing and new outfalls are encouraged where appropriate.
- **5.2.9. Increase Capacity of Stormwater Infrastructure**. The City shall work to reduce impacts from higher water levels by widening drainage ditches, improving carrying and storage capacity of tidally-influenced streams, installing larger pipes and culverts, converting culverts to bridges, creating retention and detention basins, and developing contingency plans for extreme events.

6.0 Environmentally Sensitive Habitat Areas

6.1. Introduction

The City of Arcata sets a high priority on the protection of Environmentally Sensitive Habitat Areas (ESHA), which include various types of wetlands, riparian areas, coastal prairies, woodlands and forests, and other natural resources in the Coastal Zone. The City's Local Coastal Program provides for protection of ESHA.

Coastal Act Policies

The following Coastal Act policies are most relevant to ESHA in Arcata:

Section 30233: Diking, filling or dredging; continued movement of sediment and nutrients

- (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
 - (I) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
 - (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
 - (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
 - (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
 - (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
 - (6) Restoration purposes.
 - (7) Nature study, aquaculture, or similar resource dependent activities.
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.
- (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary.
- (d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area."

Section 30240: Environmentally sensitive habitat areas; adjacent developments.

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30236: Water supply and flood control. Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to: (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

30607.1. Wetlands dike and fill development; mitigation measures. Where any dike and fill development is permitted in wetlands in conformity with Section 30233 or other applicable policies set forth in this division, mitigation measures shall include, at a minimum, either acquisition of equivalent areas of equal or greater biological productivity or opening up equivalent areas to tidal action; provided, however, that if no appropriate restoration site is available, an in-lieu fee sufficient to provide an area of equivalent productive value or surface areas shall be dedicated to an appropriate public agency, or the replacement site shall be purchased before the dike or fill development may proceed. The mitigation measures shall not be required for temporary or short-term fill or diking if a bond or other evidence of financial responsibility is provided to assure that restoration will be accomplished in the shortest feasible time.

Additional Coastal Act policies that relate to ESHA include:

Section 30230: Marine resources; maintenance.

Section 30231: Biological productivity; water quality.

6.2. Local Coastal Element Policies

Policies in the "Natural Resources Protection and Enhancement" section below apply to all ESHA. Policies in subsequent sections provide additional protections for specific natural resources, which supplement the policies applicable to all ESHA.

Natural Resources Protection and Enhancement

- **6.2.1. Native Biotic Resources.** The native biotic resources of river and creek riparian zones, the Arcata Marshes, and Arcata Bay tidelands and sloughs are unique ecosystems that have important habitat values far beyond their values as open space. The City shall restore and maintain these systems for the benefit of residents, visitors, fish, and wildlife.
 - The Arcata Bay and Tidelands represent an important natural edge and open space feature of the City. Buildings, landform alterations, or access routes in this area shall be of a design and scale that preserves open space and natural characteristics and maintains public views to the bay.
 - Creeks that flow openly through the developed portion of the community shall have biological corridors and greenways established, and shall be maintained as visual assets. The natural features of the Mad River corridor, Arcata's creeks and adjacent areas, marshes, and other wetland areas, shall be retained.
 - Unique Habitat and Wildlife Areas shall remain in a natural condition. Such areas include salt marshes and special habitats such as nesting areas.
- **6.2.2. ESHA Definition.** The City declares the following to be ESHA within the Coastal Zone.

- 1. Rivers, creeks, sloughs, and associated riparian habitats such as: Jacoby Creek; Beith Creek; Grotzman Creek; Campbell Creek; Jolly Giant Creek; Janes Creek; Fickle Hill Creek; North Jacoby Creek; Washington Gulch; Gannon Slough; Butcher's Slough; and McDaniel Slough.
- 2. Wetlands, estuaries, and associated riparian habitats such as: Arcata Bay; Mad River Slough; Liscom Slough; Butcher Slough; and the Arcata Marsh and Wildlife Sanctuary.
- 3. Other unique habitat areas such as water bird rookeries; shorebird concentration sites; habitat for all rare, threatened or endangered fully protected, and special concern plant and animal species and natural communities on federal or state lists; and plant species appearing on the California Native Plant Society List "1b" and "2" lists.
- 4. Any areas not specifically designated in the Local Coastal Program that meet the definition of ESHA in Section 30107.5 of the Coastal Act shall be accorded all the protections provided for ESHA in the Local Coastal Program.
- **6.2.3. Protect ESHA Functions.** All ESHAs in the Coastal Zone shall be protected from conversion to other uses except as allowed by Policy 6.2.5. To the extent practicable, open space easements will be established when development is proposed adjacent to ESHAs, to allow for migration of these habitats as sea level rises.
- **6.2.4. Habitat Value Protection.** ESHAs shall be protected against any significant disruption of their habitat values, and only uses dependent on and compatible with maintaining those resources shall be allowed within these areas. Proposed development in areas adjacent to ESHAs and park and recreation areas shall be sited and designed to prevent impacts that would significantly degrade such areas, and must be compatible with the continuance of such habitat areas.
- **6.2.5. Exceptions to ESHA Use Limitations.** The following developments and uses may be authorized within particular categories of ESHA regardless of demonstration of their dependency upon the resources area: (1) Diking, dredging, and filling of wetlands consistent with Section 30233 of the Coastal Act; and (2) development entailing channelization, damming, or other substantial alterations of rivers and streams consistent with Section 30236 of the Coastal Act.
- **6.2.6. Biological Assessment.** Proposed development requires a biological assessment to identify and map potential ESHA if 1) an initial screening conducted by the City finds the potential for ESHA within 100 feet of any site disturbance; and 2) The City determines that the proposed development may adversely impact ESHA.
- **6.2.7. Environmental Buffer Area Requirements.** All permitted development shall be set back from adjacent coastal ESHA to provide buffers around these areas. The minimum buffer width shall be as required by the Coastal Zoning Ordinance. An increased buffer width may be required where necessary to ensure the biological integrity and preservation of the adjacent ESHA. The purpose of such buffers are to prevent any degradation of the ecological functions provided by the habitat area as a result of the development. Allowable

uses in a buffer are limited to uses that will sustain biological productivity, protect against any significant disruption of habitat values, and maintain or enhance the ESHA functional capacity.

- **6.2.8. Conservation Easement or Deed Restrictions.** New development shall dedicate or offer to dedicate a conservation easement or equivalent deed restriction as part of a proposed development. The easement shall encompass the area within the ESHA and the associated environmental buffer area, if an environmental buffer area is established. Easements may be conveyed to the City of Arcata, to another governmental agency, or City-approved nonprofit entity, which shall manage the easement to protect the ecosystem.
- **6.2.9. Economic Viability Determination.** If the application of these Local Coastal Element policies or the Coastal Zoning Ordinance standards regarding use of property designated as ESHA or environmental buffer area would not avoid a taking of private property, then a use that is not consistent with the ESHA policies of the Local Coastal Program shall be allowed on the property. This is provided that such use is consistent with all other applicable policies and is the minimum amount of development necessary to avoid a taking as determined through an economic viability determination. If relevant, the applicant shall apply for an economic viability determination with their Coastal Development Permit application, to meet the provisions of the Coastal Zoning Ordinance.

An applicant must provide a biological assessment identifying resources present on the property in order to determine whether all of the property, or part, shall be subject to development restrictions. This is required to evaluate whether development restrictions would still allow an economically viable use of the property with an ESHA or environmental buffer area designation.

In addition, the least environmentally impactful, feasible alternative as determined by the City shall be selected. Impacts to ESHAs or ESHA buffer that cannot be avoided shall be mitigated to the maximum extent feasible, with priority given to on-site mitigation. Off-site mitigation measures shall only be approved when on-site mitigation is not feasible. Mitigation shall not substitute for implementation of the feasible project alternative that would avoid adverse impacts to ESHAs and environmental buffer area.

- **6.2.10. Non-native Plant and Animal Species.** Development shall use only non-invasive plant species for landscaping and may not allow invasive plant species to be naturalized or persist on the site. Developments that incorporate landscaping into their site plans to mitigate adverse environmental impacts and/or to meet planning and zoning provisions, and which are located in proximity to ESHAs, shall use native species and local plants where feasible. The City shall provide public information that explains why invasive species are a problem. The City shall also maintain a program that recommends effective but non-toxic eradication measures, and shall eradicate invasive species on public lands where they are displacing native species. invasive plant species means any plant species with a "High" rating in the California Invasive Plan Council's Cal-IPC inventory of invasive plants,
- **6.2.11. Land Divisions Involving ESHAs.** The City may approve land divisions, including subdivisions, lot splits, and lot line adjustments that are within proximity to ESHAs for

which protective buffers are required, only if the resulting parcels contain adequate space to place all development (e.g., buildings and appurtenant structures and features such as detention/retention ponds and biofiltration swales) outside of areas required for watercourse and/or other environmental buffer area protection. If the division is specifically for the purpose of protecting the ESHA and does not propose development on the divided parcel, the division is exempt from this requirement. In such a case, uses of the divided parcel shall be restricted to uses allowed within ESHA and environmental buffer areas through a recorded deed restriction or offer to dedicate an easement.

Streams Conservation & Management

- **6.2.12. Designation of Protected Streams.** The provisions of this section shall apply to those streams shown on the Protected Watercourse Map (Figure 6-1). These watercourses and associated riparian areas serve as habitat for fish and wildlife, provide for the flow of stormwater runoff and flood waters, and provide open space and recreational areas for the City. This map is only intended to serve as a repository of collated data for use as a screening tool in the review of future development proposals and is not a comprehensive inventory of all protected watercourses within the City, nor is it a delineation of ESHA.
- **6.2.13. Environmental Buffer Area.** An environmental buffer area is hereby established along both sides of the streams identified on the City Protected Watercourse Map (Figure 6-1). The environmental buffer area along streams shall comply with general ESHA requirements in Policy 6.2.7. The purpose of the environmental buffer area is to remain in a natural state in order to protect stream ecosystems and associated riparian habitat areas.

Wetlands Management

- **6.2.14. Environmental Buffer Area.** New development shall establish an environmental buffer area to separate all permitted development from adjacent existing wetlands which are to be preserved in a natural state and new wetland areas which are created as mitigation. The extent of the environmental buffer area shall be established based upon analyses and recommendations contained in a site-specific wetland delineation study. The environmental buffer area from wetlands shall comply with general ESHA requirements in Policy 6.2.7. The applicant must submit evidence to the satisfaction of the City that, with the addition of other mitigative features, such as landscaped screening and berming, the reduced-width buffer would afford adequate protection to the wetlands resources from direct, indirect, and cumulative adverse impacts.
- **6.2.15. Requirement for Wetland Delineation and Study.** All development applications shall include a site plan that shows the precise location of existing wetlands on the subject property. Any application for development on a parcel where wetlands may be present shall include a wetland reconnaissance or delineation report prepared in a manner consistent with the Coastal Zoning Ordinance.

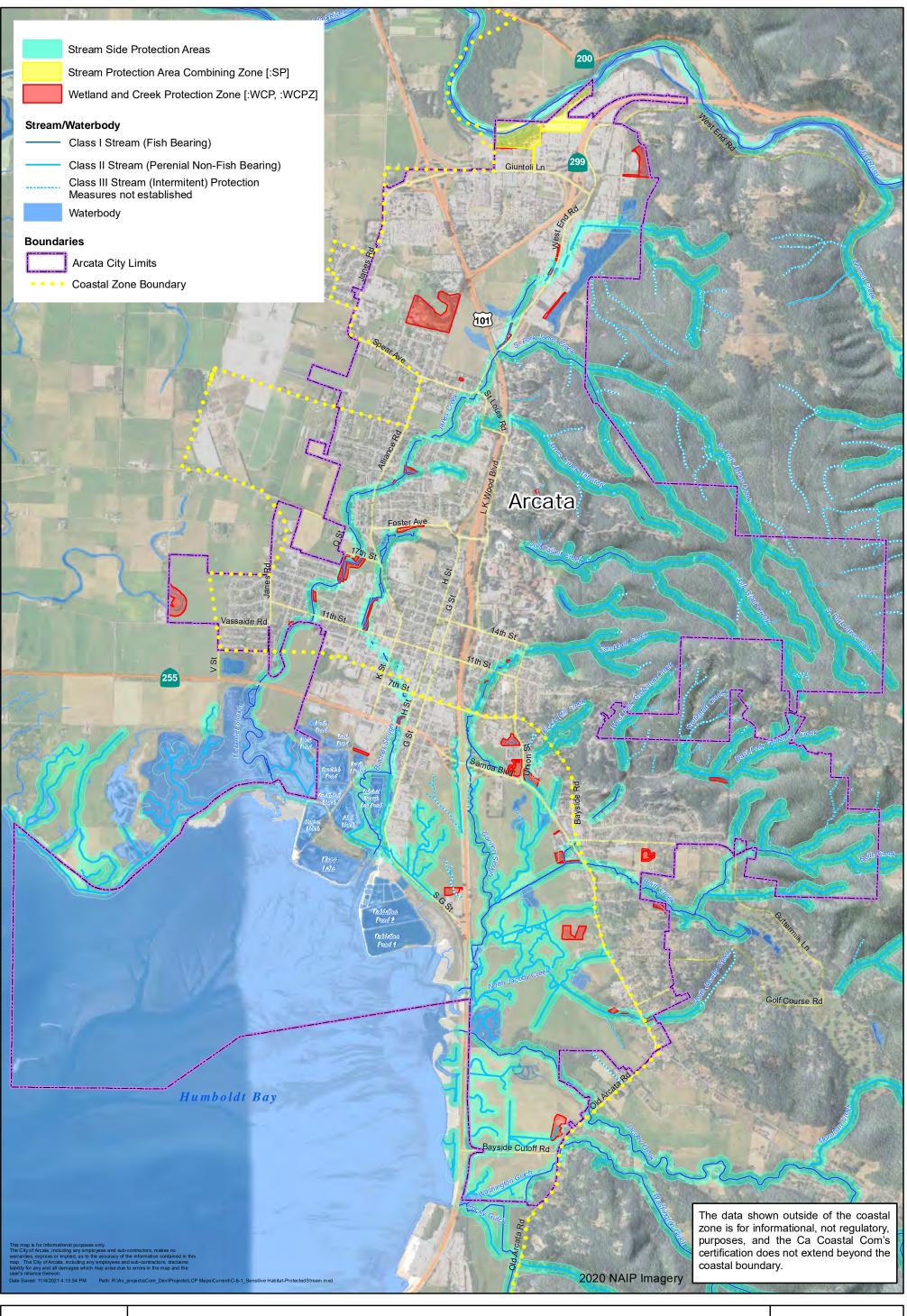
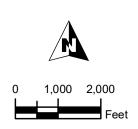




Figure C-6-1 Sensitive Habitats & Protected Stream Courses



- 6.2.16. Diking, Filling or Dredging of Wetlands. Diking, filling or dredging of a wetland that is otherwise in compliance with this Land Use Plan, shall, at a minimum, require mitigation measures, a monitoring program, and adequate funding as determined by the review authority. Filling of wetlands shall only be authorized if feasible mitigation measures have been provided to minimize adverse environmental effects, resulting in "no net loss" in area and value of wetlands. Mitigation shall consist of creating and maintaining a new wetland or substantial restoration of previously degraded wetlands, at an appropriate ratio of 1:1 to 10:1 as required by the Coastal Zoning Ordinance. Mitigation shall offset temporal and other losses to ensure that compensatory wetlands are of equal or greater functional capacity and value than the wetland proposed to be filled. Required wetland mitigation ratios shall fully mitigate the adverse impacts of the dike or fill project. Diking, filling, or dredging of a wetland or estuary shall maintain or enhance the functional capacity of these resources.
- **6.2.17. Uses Allowed in Diked/Reclaimed Former Tidelands.** Allowable uses and development in grazed or farmed wetlands are limited to existing uses compatible with the Public Trust.
- **6.2.18.** Compatibility with Humboldt Bay National Wildlife Refuge and Arcata Marsh and Wildlife Sanctuary. Development within the area bounded by Samoa Blvd., Butcher's Slough and Gannon Slough shall include local native plant landscaping, screenings and other measures to ensure compatibility with scenic coastal resources and with the uses of the Humboldt Bay National Wildlife Refuge and the Arcata Marsh and Wildlife Sanctuary.

Open Waters of Arcata Bay & Tidelands

Note: In those areas where the Commission retains Coastal Development Permit authority on submerged lands, tidelands, and public trust lands (Public Resources Code Section 30519), the standard of review used by the Coastal Commission for proposed Coastal Development Permit applications is the Chapter 3 policies of the California Coastal Act, not the Local Coastal Program. The Local Coastal Program may be used as guidance.

- **6.2.19. Protection of Open Waters/Tideland Areas of Arcata Bay.** The tidal and water areas of Arcata Bay constitute a fragile Public Trust resource. Access shall be controlled to avoid resource degradation, while maintaining the public's right to navigation. Tidal marshes shall be enhanced and maintained, especially in the areas of McDaniel, Gannon, and Butcher's Sloughs, to protect wetland values.
- **6.2.20.** Coastal-dependent and Public Trust Uses of Arcata's Tidelands. Tidelands of Arcata Bay support a variety of wildlife as well as human activities. The following provisions shall be made for managing tideland areas.
 - 1. New development shall not restrict access to the shoreline. Access to coastal areas may be required for new development.
 - 2. Tidelands and water areas of Arcata Bay shall be designated Coastal Resource (:CNR), and identified as passive use recreational areas.

- 3. The Arcata Marsh and Wildlife Sanctuary shall be designated as Coastal Resource (:CR) and the recreational component of the marsh identified as a passive use recreational area.
- 4. The continued use of tidelands for scientific and educational studies is encouraged.
- 5. The Arcata Marsh and Wildlife Sanctuary shall be maintained and new facilities shall be consistent with the Arcata Marsh Plan adopted by the City Council.
- 6. The South "I" Street boat launch shall be enhanced and maintained to accommodate small watercraft and non-motorized watersports.
- 7. The placement of interpretative sites along the Arcata Bay shore, including Nature and Wildlife Centers, shall be coordinated with other agencies, and serve as an educational focal point for Arcata's natural resource areas.
- 8. Access on the levee from the Arcata Marsh westward to the City limit will be provided for passive recreation including nature observation.
- **6.2.21.** Management of Bayfront And Marsh Areas for Coastal Access, Recreation, and Tourism. Tidelands and water areas of Arcata Bay shall be designated Coastal Resource (:CR) and protected from uncontrolled access. The following guidelines shall be used when permitting access to these areas:
 - 1. Motorized vehicles shall be restricted to designated paved roads and parking lots.
 - 2. Pedestrians shall be allowed on designated trails and facilities.
 - 3. Valid scientific and educational studies of the wetlands and tidelands shall be encouraged.

New development shall provide and not restrict public access to the shoreline. Where consistent with the Humboldt Bay National Wildlife Refuge's (Wildlife Refuge) Management Plan, controlled public access to the Wildlife Refuge's Jacoby Creek Unit shall be developed along Arcata Bay from the Arcata Marsh to the City's westward limit.

- **6.2.22. Diking, Dredging, Filling, and Shoreline Structures.** Diking, filling, or dredging of Bay waters, wetlands, and estuaries shall be permitted for uses allowed in Coastal Act Section 30233 where it has been demonstrated that: there is no feasible and less environmentally damaging alternative; Public Trust resources and values are being protected; and feasible mitigation measures have been provided to minimize adverse environmental effects.
- **6.2.23. Coastal-related and Coastal-dependent Industrial Development.** The City of Arcata's coastline consists of intertidal areas and mudflats, riparian areas where small creeks meet Humboldt Bay, the Arcata Marsh, and a system of sloughs. Aquaculture is encouraged as a desirable use on bayfront lands, consistent with the resource protection policies of the Local Coastal Element.
- **6.2.24. Aquaculture Use of Coastal Wetlands/Tidelands.** To protect aquaculture activities in Arcata Bay, the City shall:

- 1. Ensure that its wastewater discharge does not exacerbate existing coliform loading problems in Arcata Bay.
- 2. Take measures to reduce coliform loading of perennial streams within its jurisdiction, as part of a stream maintenance program. Measures shall include controlling identified sources of coliform loading such as septic tank leachate and runoff from agricultural operations.

Aquaculture shall not adversely impact natural ecological processes nor native wildlife or fisheries or their habitat in the Bay. Aquaculture shall include adequate precautions to prevent new adverse impacts to natural ecological processes. The City shall continue its management of:

- a. Integrated wetland enhancement and wastewater treatment; and
- b. The tidelands, for commercial and native oyster harvesting.

7.0 Coastal Hazards

7.1. Introduction

The City of Arcata requires that new development reduce risks to life and property and avoid substantial changes to natural landforms. While the City of Arcata has no dunes or coastal bluffs, many of the low- lying areas around Humboldt Bay are protected from flooding by levees that are subject to erosion or overtopping during storm events or extreme high tides. The Arcata Bottoms and other low-lying areas adjacent to Arcata Bay including McDaniel, Butcher's and Gannon Sloughs, and the Arcata Marsh are susceptible to flooding from extreme Bay tidal action, tsunami run-up, seiche, dike or tidegate failure, heavy rainfall, and, extremely rarely, Mad River flood events.

In addition to coastal flooding, the Coastal Act also requires the Local Coastal Program to address geologic, fire, and other coastal hazards. Arcata is in a seismically active region where earthquakes can damage the built environment through groundshaking, fault rupture, and liquefaction. Fire hazard is considered moderate throughout the Arcata coastal zone. High fire hazard areas do exist in Arcata, but these are located in upland areas well outside of the coastal zone.

This chapter contains policies to minimize risks to life and property from natural hazards and hazardous materials. The City defines coastal hazards as environmental factors that, when triggered, result in immediate and dramatic impacts which may impact life, property, and natural landforms. The City's definition of Coastal Hazards does not include the relationship between the effects of climate change on the prevalence, frequency, and magnitude of coastal hazards. While many conflate the causal relationship between climate change, which alters the conditions precedent to a coastal hazard, and coastal hazards themselves, the City clearly demarcates the environmental condition from the risks associated with the state of those conditions as they manifest over time.

The principal environmental condition that will cause changes in coastal hazard risk with modeled climate change is the elevation of Humboldt Bay. As such, the Local Coastal Element addresses sea level rise under a separate chapter so as not to conflate the hazards and responses thereto with the environmental conditions. Chapter 8 contains policies that address sea level rise caused by global warming and expected changes to coastal hazards in Arcata over time.

Development within Arcata's coastal zone is subject to additional flood regulations, such as Title VIII, Chapter 4 (Flood Hazard Mitigation Standards) of the City's Municipal Code, which are not certified as part of the Local Coastal Program. These regulations do not govern the review and

approval of coastal development permits (CDPs) and do not serve as a basis for appealing a local CDP action to the Coastal Commission.

Coastal Act Policies

The following Coastal Act policy is most relevant to coastal hazards in Arcata:

Section 30253. Minimization of adverse impacts. New development shall do all of the following:

- a. Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- b. Assure [sic] stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

...

Section 30610 Developments authorized without permit. Notwithstanding any other provision of this division, no coastal development permit shall be required pursuant to this chapter for the following types of development and in the following areas:

g. (1) The replacement of any structure, other than a public works facility, destroyed by a disaster. The replacement structure shall conform to applicable existing zoning requirements, shall be for the same use as the destroyed structure, shall not exceed either the floor area, height, or bulk of the destroyed structure by more than 10 percent, and shall be sited in the same location on the affected property as the destroyed structure.

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7.2. Local Coastal Element Policies

- **7.2.1. Minimize Risk.** New development shall be sited and designed to minimize risk to life and property in areas of high geologic, flood, and fire hazard. Where complete avoidance of hazards is not feasible, development shall be designed to minimize hazards to the greatest extent feasible.
- **7.2.2.** Ensure Stability and Structural Integrity. New development shall ensure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area.
- **7.2.3. Preliminary Hazards Review.** The City shall review all applications for new development to determine the presence of geologic, flood, or fire hazards. The City shall use current maps of hazardous areas (known and potential) and other information as necessary and available as part of this review.
- **7.2.4. Specific Study Requirement.** If a preliminary hazards review finds the presence of geologic, flood, or fire hazards, a site-specific study is required for all applications unless the Director determines that the proposed development is located and designed in a manner that clearly avoids all hazards on the site and will not increase or exacerbate hazards in surrounding areas. The study contents shall be as required by the Coastal Zoning Ordinance. If a specific study identifies areas that are not suitable for certain types of

- development on a property, this does not necessarily prohibit all development in that area.
- **7.2.5. Mapped Hazard Area Limitations.** City maps of known hazardous areas are not an indication of a definite hazard on a specific parcel. A site-specific study may determine that a parcel is not exposed to hazards despite being mapped as a hazardous area. Likewise, a parcel may be subject to hazards despite its location outside of previously mapped hazardous areas.
- **7.2.6. Acceptable Hazard Risk.** Hazards pose varying degrees of risk to life and property depending on the type of use or structure and its potential for human occupancy. The City shall require development to be located and designed to minimize risks to a level that is safe for the intended use.
- **7.2.7. Replacing Destroyed Structures.** Any structure, other than a public works facility as defined by this Element, destroyed by a disaster may be replaced without a Coastal Development Permit. The replacement structure shall conform to applicable existing zoning requirements, shall be for the same use as the destroyed structure, shall not exceed either the floor area, height, or bulk of the destroyed structure by more than 10 percent, and shall be sited in the same location on the affected property as the destroyed structure.
- **7.2.8. Nonconforming Development.** Existing, lawfully established development that is nonconforming to a standard in the Local Coastal Program may be maintained and continued, provided that such development is not enlarged or intensified.
- **7.2.9. Coastal Redevelopment.** If an existing structure located in an area subject to potential hazards is proposed to be redeveloped, the structure shall be deemed new development under this Local Coastal Program and must be made to conform with all applicable Local Coastal Program policies

Geologic and Seismic Hazards

- **7.2.10. Identification of Geologic Hazard Areas.** New development within a mapped geologic hazard area shall require a site-specific study that describes geologic conditions and hazards and specifies mitigation measures to avoid, if feasible, or mitigate the risk associated with the hazard.
- **7.2.11. Development Within Fault Zone / Surface Rupture Areas.** Development in identified fault zones and probable surface rupture areas shall be avoided, unless structures and facilities are set back, engineered, and designed to meet the seismic standards of the California Building Code and the Alquist-Priolo Act.
- **7.2.12. Failure of Matthews Dam.** All new buildings designed for human occupancy or use that are located in the area of potential inundation resulting from a catastrophic failure of Matthews Dam shall have an early-warning system and evacuation plan in place for those persons living and working there.

Fire Hazards

- **7.2.13. Review of Development for Fire Safety.** Roadways shall have an all-weather surface and grades shall not exceed the Arcata Fire Department's maximum slope standards for emergency access.
- **7.2.14. Management of Wildland Fire Hazards.** Buildings in natural resource areas shall use materials such as non-flammable perimeter vegetation and roofing materials to prevent exposure to wildland fires. Methods to reduce wildfire hazard risks that do not require removal of native vegetation, such as locating buildings away from hazard areas and use of fire-retardant materials, are strongly encouraged.
- **7.2.15. Vegetation Removal.** Vegetation removal to reduce wildland fire hazards shall occur in a manner that is most protective of coastal resources. Adverse impacts to ESHA and ESHA buffers shall be avoided to the maximum extent feasible.

Hazardous Materials

- **7.2.16.** Accidental Spills of Petroleum Products. Design, siting, and measures to protect against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be required for any development that stores or uses such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills.
- **7.2.17. Siting of Facilities Handling Hazardous Waste.** Businesses and agencies that use, store, or produce hazardous materials shall train employees and other users in safe handling and storage procedures, and shall post current Occupational Safety and Health Act (OSHA) and Humboldt County hazardous materials requirements. Businesses shall meet Federal "community right-to-know" regulations. The City shall consider proximity to sensitive receptors, such as schools, hospitals and other health care facilities, day care centers, and other vulnerable populations, when reviewing new facilities and businesses that handle or produce hazardous waste.
- 7.2.18. Hazardous Waste Management (Recycling, Treatment, Disposal). All commercial and industrial businesses and operations that use, store, or produce hazardous materials shall contract with a licensed hauler for pickup and disposal of waste materials in compliance with County, State, and Federal requirements. All hazardous materials shall be stored in safe containers and locations. Use, storage, and disposal of these materials shall be in compliance with County, State and Federal standards.

Flood Hazards

- **7.2.19. Minimize Flood Hazard Risks.** New development shall minimize risks to life and property in flood hazard areas.
- **7.2.20. Site-Specific Flood Hazard Evaluation.** When required by policies 7.2.3 and 7.2.4, the City

shall evaluate proposed development in a flood hazard area based on site-specific hazard information and environmental hazards identified in this **element** and in other current information sources. Materials to be reviewed include but are not limited to:

- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps;
- Coastal storm surge maps; and
- Tsunami inundation/run-up maps and models prepared by applicable state and federal emergency management and research agencies.
- **7.2.21. Low Intensity/Occupancy Uses.** Low intensity/occupancy uses, such as open space and recreational facilities, are allowable in floodways or flood hazard Zone V areas when consistent with all applicable policies of the Local Coastal Program.
- **7.2.22. Limitations on Development Within Special Flood Hazard Area.** Development in flood hazard areas shall meet the following requirements:
 - Flood hazard areas shall be kept free of structures and other obstructions that would restrict flood flows.
 - New construction shall protect human safety and minimize property damage through such measures as elevating structures, flood-proofing, allowing flood flows and drainage through structures, and providing access for evacuation and emergency response.
 - Landform alterations shall not impede flood flows in adjacent upstream or downstream areas.
 - Development shall comply with setbacks for flood hazard zone areas based on sitespecific studies as part of the development review process.
- **7.2.23.** Development Standards in Floodplains / Surface Drainageways and Detention Areas. All plans for new construction that could potentially encroach into a floodplain must incorporate measures for flood protection, and show that there will be no adverse impact to the carrying capacity of the floodway. Primary measures such as siting, setbacks, easements covering flood zones, and minimal use of impervious surfaces are strongly encouraged. Elevation of structures, anchoring, flood-proofing, and construction of detention basins are considered secondary and less desirable measures.
- **7.2.24.** Limitations to Development Adjacent to Arcata Bay and Along Bay Shoreline. The following requirements apply to the following flood hazard areas: 1) the Arcata Bottom and other low lying areas adjacent to Arcata Bay; 2) McDaniel, **Butcher's** and Gannon Sloughs; and 3) the Arcata Marsh:
 - Where otherwise permissible, habitable structures and related improvements shall be elevated above flood levels, designed so as not to restrict flood flows, and comply with applicable provisions of the Environmentally Sensitive Habitats section of this Coastal Land Use Element.

- Land alterations for recreation and natural resource uses shall not restrict, increase, or channelize flood flows in a way that could cause inundation to adjacent areas.
- **7.2.25.** Other Floodplain Approvals. City action on permits and approvals required by Chapter 4 (Flood Hazard Mitigation Strategies) of Municipal Code Title VIII (Building Regulations) must occur prior to action on a **Coastal** Development Permit. In case of conflict between of Municipal Code Title VIII Chapter 4 and the Local Coastal Program, the Local Coastal Program standards control for purposes of Coastal Development Permit review.

Tsunami Hazards

- **7.2.26. Tsunami and Tidal Flooding Hazards.** New essential public services and other development necessary for tsunami recovery shall not be located within a mapped tsunami inundation area.
- **7.2.27. Best Available Science.** The City shall use the best available, up-to-date adopted scientific information regarding local tsunami hazards when evaluating Coastal Development Permit applications for new development within the tsunami inundation area.
- **7.2.28. Minimize Risk.** Development within a mapped tsunami inundation area shall be sited and designed as needed to minimize risk to life and property in the event of a tsunami to the extent feasible.
- **7.2.29. Development that Exacerbates Tsunami Damage.** New development that would significantly exacerbate tsunami damage (e.g., hazardous material storage) is prohibited within a mapped tsunami inundation area.
- **7.2.30. Non-Coastal Dependent Critical Infrastructure.** Critical infrastructure that is not coastal dependent should be avoided, if possible, within a mapped tsunami inundation area.
- **7.2.31. Emergency Broadcasting Systems.** The City shall use available emergency broadcasting systems to communicate tsunami warnings.
- **7.2.32. Signage.** Appropriate signage shall be posted if additional coastal access within a mapped tsunami inundation area is provided in the future.
- **7.2.33. Tsunami Safety Plans.** All new development intended for human occupancy within a mapped tsunami inundation areas shall prepare a tsunami safety plan with information on the nature of the tsunami threat, tsunami warning signals, a communication plan, and evacuation instructions and routes. The City shall ensure that tsunami safety plans for development that is hard to evacuate (e.g., high-occupancy buildings, senior/youth/sick/physically disabled care facilities) incorporate all feasible measures to protect public safety to the maximum extent feasible. Tsunami safety plans shall demonstrate the feasibility of safe pedestrian evacuation time given tsunami travel times to Arcata from dominant, disaggregated tsunami sources.

8.0 Sea Level Rise

8.1. Introduction

The City of Arcata's Coastal Zone includes areas of reclaimed, former tidelands of Humboldt Bay. In 1870, the shoreline was mapped by the USGS, and the bay inundated approximately the same footprint shown on the projected sea level rise inundation extent maps (Figure 8-1). The reclaimed tidelands were protected by a system of earthen dikes, which have been in service for over 100 years.

Development in the potential inundation zone was originally largely to establish agricultural uses. The dike network, which extends to Mad River Slough, allowed modified development patterns around Arcata Bay and lands on the Arcata Bottom. While most of this area was never filled, and is still in agricultural uses, the areas immediately south of Samoa Boulevard, and the lands extending to the City of Arcata Wastewater Treatment Plant (Treatment Plant) on South G Street, between G and I Streets, was developed for industrial purposes in the 1900s. This area forms a highly-developed urban 'peninsula' that extends into the diked former tidelands.

The urban peninsula includes a mix of land uses and is developed on a fill prism that is on average 1.78 feet higher in elevation than the surrounding bottomlands. This peninsula is the site of the Treatment Plant; the renowned Arcata Marsh and Wildlife Sanctuary (Arcata Marsh); a high-density lower-income residential neighborhood; and several industrial and commercial uses. These uses have changed over time, but the peninsula as a development has been in constant use and redevelopment for more than 100 years, with some areas having been diked and filled in the 1850s. This peninsula includes segments of dike that have been constantly repaired, enhanced, and maintained for decades.

By contrast, the lower lying bottomlands adjacent and surrounding the urban peninsula were not filled. Land uses in the City's Coastal Zone outside of the urban developed areas include agriculture, open space, recreation, and natural resources preservation. Historically, these lands were in agricultural production. The City has actively pursued conservation easements, land acquisition, and restoration partnerships (e.g., McDaniel Slough Restoration) to provide both current improvements to natural areas and hundreds of acres of natural buffer from sea level rise.

If the earthen dike system failed, these bottomlands would be inundated, while the peninsula would be protected by the elevated fill prism. This existing condition indicates the City's strategy for sea level rise: defend the peninsula to the extent practicable while planning to accommodate floodwaters and tidal inundation in lower lying areas that have been preserved for the purpose.

The City recognizes the importance of the peninsula due to its natural resources, critical public infrastructure, significant industrial and commercial private investment, lower-income housing, and residential racial diversity. In addition, this area may be desirable for coastal recreational and visitor serving uses in the future. Since there is no feasible, socially equitable relocation option for these land uses currently, the City's sea level rise strategy includes both a protect in place and a measured retreat approach for the peninsula.

The City of Arcata will continue to add lands to its natural resource buffer inventory. Currently, the approximate XXX acres of lowlands that are in mapped potential inundation zones, include XX acres owned or controlled through easement and agreement for habitat values and open space. These areas will be the first to transition as the tidal patterns change. Furthermore, the City's strategy does not include adding protective barriers to any developed or undeveloped areas that are not currently protected by the existing dike system around the Bay.

The City has worked to protect and enhance wetlands around the Arcata Bay for decades. In 1981, the City created the Arcata Marsh and Wildlife Sanctuary (75 acres including 30 acres of freshwater wetlands). In 1986, the City expanded the Sanctuary by realigning Butchers Slough to reestablish a more natural meandering course, restore salt marsh habitat, and create an adjacent freshwater wetland from the remains of an old log pond. The City then purchased a 74-acre property that is the core of the McDaniel Slough project area, and in 1999 worked with the Coastal Conservancy to prepare an enhancement plant for this area. In 2014 the McDaniel Slough enhancement project was built.

Furthermore, the City is positioned well for sea level rise adaptation due to acquisitions and actions dating back decades. The City has strategically invested in conservation easements, land acquisition and restoration, and land use limitations in areas subject to future inundation. Notably, the City owns the 322-acre Bayview Ranch, purchased in 2004. The City has since added 81.1 acres to its inventory. The principal first phase strategy for the City's future impacts related to sea level rise is to accommodate the higher water levels and increased inundation from flooding in these low-lying areas.

Of these potentially vulnerable lands, approximately XX acres are developed with residential uses. These uses include approximately XX per acre. While relocating these uses and accepting the loss of public and private lands in these areas over time will not be easy, these land uses will adapt over time, until and unless the uses cannot be conducted at these sites. As a result, the City's policy in these areas is to continue to support conversion of uses to allow for adaptation and accommodation.

Though some parcels are in mapped potential inundation areas, sea level rise is an issue with city-wide implications that require city-wide solutions. The impacts of rising sea level will be felt beyond the boundary of the coastal zone as high tides back up into the City's creek system, causing potential flooding upstream. Utilities, roads, recreational opportunities, and major infrastructure that service the City at large will face impacts from sea level rise either directly or indirectly.

The overall goal to address sea level rise impacts is to provide feasible and sustainable adaptation that preserves the economic, cultural, and social functions for as long as practicable, taking into account ecological integrity and social justice and racial equity. This goal focuses on adaptation

in the way that best maintains utility services and transportation capabilities, preserves cultural resources, maximizes public access and recreational opportunities, maximizes agricultural viability, maximizes habitat values, and protects water quality. However, the City cannot value every policy area equally in all geographic areas, but will instead focus policy in various areas. Roughly ninety percent of lands in the City's projected inundation area will be preserved for ecological and other coastal resource functions. The remaining ten percent of the City's projected inundation area that contains the current urban interface will be primarily focused on preserving economic viability and promoting social/racial equity.

8.2. Overall Strategy

Climate change science and sea level rise projections are continually evolving. This assessment includes analysis of a wide range of possible scenarios between now and 2100, but it does not include the most extreme emerging science. Depending on future global climate mitigation efforts and the behavior of Antarctic ice sheets, the City may need to assess higher water levels in the future.

This assessment provides actionable information for near- and mid-term adaptation, but the work to increase the City's resilience to sea level rise is not complete. Adapting to sea level rise and other climate hazards and impacts will require ongoing monitoring of the science and local impacts, as well as applying lessons from the implementation of adaptation solutions within the City of Arcata and the larger Humboldt Bay Area region.

The City's sea level rise response is a mix of adaptation strategies including measured retreat of the built environment and accommodation where land uses and landforms allow. Structures, uses, and features that have higher adaptive capacity or lower sensitivity will remain in use in-place until such time as the environmental conditions impose changes to those uses. Adaptation is, in this way, a continuum with phases dictated by the interplay between environmental conditions and the adaptive capacity and sensitivity of the asset, feature, or landform.

The City's adaptation strategy considers the full range of impact factors. These factors include more than the individual asset's sensitivity and adaptive capacity. The adaptation strategy also considers economic, social justice, racial and social equity, and environmental impacts. In this way, the City has integrated planning across a variety of sectors involved or impacted by decisions related to sea level rise adaptation.

It is equally poor public policy to retreat without cause as it is to fail to adequately plan and implement measures to safeguard life and property. Given the uncertainty in timing and magnitude of sea level rise projections, the plan is flexible, allowing retreat strategies to be implemented based on monitoring input rather than arbitrarily conservative timeframes. This will result in the application of measures suited to the environmental conditions. Flexible timeframes for adaptation that plan for appropriate measures, which can be delayed or advanced as the evidence warrants, form the basis of the City's adaptation strategy.

The City plans to continue to protect and defend significant investments where feasible and practical, as long as the benefits of protection outweigh the costs. Accommodating and adapting to the rising seas will occur in areas where planned when it is infeasible to defend or relocate

development. Retreat will occur where and when it is not feasible to defend development or accommodate the rising seas.

Protect and Defend

Protection strategies employ some sort of engineered structure or other physical measure to defend development in place without changes to the development itself. Existing development endangered by flooding, such as the waste water treatment plant, South "G" Street commercial and industrial uses, working agricultural lands, and infrastructure shall be permitted to be protected by the least environmentally damaging means practicable. Where feasible, protective devices shall visibly blend into adjacent natural surroundings and form eco-levees. This strategy will afford continued public access to the coast line, agricultural practices, economic activities, residential uses, and critical infrastructure until and unless the means to maintain the uses becomes infeasible.

Recognizing the areas potentially subject to flooding from higher sea level is all currently protected from daily or periodic inundation by a network of anthropogenic structures, this strategy will continue to maintain and improve structures that are consistent with existing function.

Accommodate and Adapt

Accommodation strategies employ methods that modify existing developments or design new developments to decrease hazard risks and thus increase the resiliency of development to the impacts of sea level rise. Over time, sea level rise will result in conversion of habitat types, especially in low lying areas including former tidelands. Structures and other development within areas that experience tidal flooding may need to adapt to accommodate periodic flooding and eventually inundation. Accommodation can also take other forms such as addressing drainage issues and locating new development away from low lying areas.

Retreat

Retreat strategies result in relocation or removal of existing development out of hazard areas and limitation on the construction of new development in vulnerable areas. Retreat will be slow and measured, with a goal of minimizing economic impacts on both taxpayers and property owners and renters of development in the area of retreat. Explicit measures will be developed to preserve economic viability of existing and new development for as long as feasible, recognizing that in some cases, development in hazard areas will be safe from projected Sea Level Rise for its estimated design life.

Retreat will be initiated as a second phase in the Sea Level Rise Adaptation Zone 1. Zone 1 comprises urban development on historic fill prism dating to the early 1800s. This area includes residential, commercial, recreational, and industrial uses, as well as the City's wastewater treatment plant. The economic, financial, and social impact of a hasty and early retreat from this area significantly outweighs the benefits of an early retreat. Notwithstanding, the policies in this Local Coastal Element establish the framework for market driven retreat and conversion of uses to higher return and lower investment land uses. These land uses will more readily

accommodate periodic inundation and eventual removal than current uses.

Coastal Act Policies

The following Coastal Act policy is most relevant to sea level rise in Arcata:

Section 30253. Minimization of Adverse Impacts. New development shall do all of the following:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.
- (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.
- (4) Minimize energy consumption and vehicle miles traveled.
- (5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

Section 30236. Water Supply and Flood Control. Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for the public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Section 30235. Construction Altering Natural Shoreline. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.

8.3. Local Coastal Element Policies

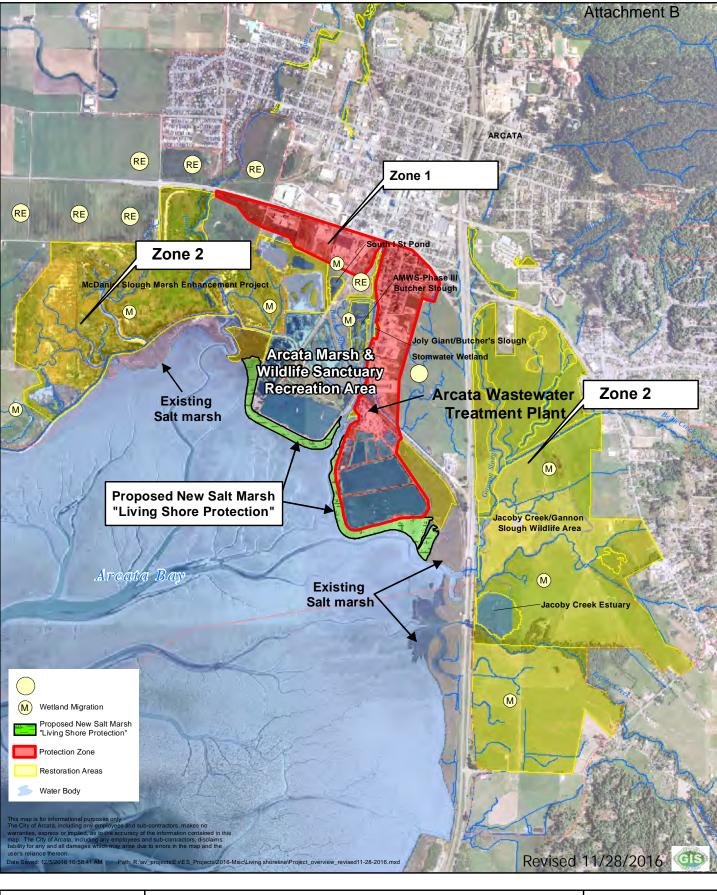
The following policies are not intended to be viewed as a stand-alone regulatory document. These regulations are one section of the City's overall Local Coastal Program. The City's Local Coastal Program includes many other policies related to development, environmentally sensitive habitat areas, public access, recreation, agriculture, and other coastal issues.

PLANNING AND LOCATING DEVELOPMENT

All Sea Level Rise Adaptation Zones

The following policies apply to development in all Sea Level Rise Adaptation Zones shown in Figure 8-2.

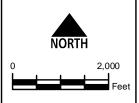
8.3.1. Siting and Design. Development shall be sited to avoid adverse impacts from sea level rise over the anticipated life of the development. Where complete avoidance of impacts is not feasible, development shall be designed to minimize impacts to the greatest extent feasible.





City of Arcata

Figure 8-1 Sea Level Rise Adaptation Zones



Existing Development

- **8.3.2. Innovative Development.** To ensure continued economic, recreational, coastal dependent, and other beneficial uses of existing development, the City shall allow the use of innovative accommodation strategies that minimize flooding risk when consistent with all policies of the LCP. This may include elevating structures over water or over areas that are periodically inundated. For areas subject to the Public Trust doctrine of the State of California, the uses on those lands will be compatible with Chapter 1238 of the Statutes of 1989, including commerce, navigation, fisheries and other public trust purposes, including but not limited to preservation of the lands in their natural state for scientific study, open space, wildlife habitat, and recreational and visitor-oriented uses.
- **8.3.3.** Long-Term Plan for Critical Facilities. The City shall develop a long-term management plan to address sea level rise evaluating options for adaptation or relocation and incorporates any potential maintenance, relocation, protection, or retrofits and structural changes to critical city-owned facilities to accommodate changes in sea level. The management plan shall include strategies to protect and defend existing facilities, accommodate and adapt to sea level rise, and retreat from sea level rise hazard areas as appropriate consistent with City's overall strategy for sea level rise adaption described in this chapter. The management plan shall be used to inform annual Capital Improvement Program (CIP) discussions and goal setting.
- **8.3.4. Retrofitting Inadequate Stormwater Infrastructure.** The City shall identify and prioritize retrofits to inadequate stormwater infrastructure for existing development in low-lying areas over other less critical improvements when budgeting limited resources. The City shall work with property owners to retrofit these systems to better accommodate flooding due to sea level rise. The City shall encourage the use of green stormwater infrastructure strategies where feasible.

New Development

- **8.3.5.** New Structures Design for Sea Level Rise. New development in the Sea Level Rise Adaptation Zones shown in Figure 8-2 shall meet all of the following criteria:
 - (1) Development shall be designed to ensure safety from anticipated hazard impacts caused by future sea level rise, including increased velocity of floodwaters, where applicable.
 - (2) Development shall be sited and/or designed in such a way to avoid flooding related to the current estimated 100-year storm event, plus three feet to finished floor elevation.
 - (3) If there is inadequate space to feasibly meet such siting and design requirements, development shall be sited on the portion of the site that best meets these requirements, and floodproofed and/or elevated to be resilient to sea level rise over the economic life of the development.
 - (4) Development shall provide for adequate ingress/egress and all applicable service connections (e.g., for water, wastewater, electricity, gas, etc.), all of which shall

be sited and designed to avoid impacts from flooding and to protect coastal resources to the maximum feasible extent.

- **8.3.6. Development Duration.** Development shall be removed and the affected area restored to a natural condition if:
 - (1) A government agency declares the development unsafe for occupancy and/or use:
 - (2) The development encroaches onto public trust land (including as the public trust migrates) and its use is inconsistent with the public trust; and/or
 - (3) Access and utilities are no longer available to serve the development.
- **8.3.7.** No New Hospitals and Public Safety Facilities. No new hospitals, public safety facilities, power generation plants, airports, public corporation yards, and schools, except for permitted coastal-dependent infrastructure, shall be developed within the area on the seaward side of Old Arcata Road/Samoa Boulevard. This policy shall not apply to new energy facilities covered by Policy 8.3.8.
- **8.3.8.** Design Coastal-dependent Infrastructure to Accommodate Sea Level Rise. Coastal-dependent infrastructure, such as industrial, transportation, and energy facilities that must be sited in near-coast locations, shall be designed to withstand future impacts associated with sea level rise. Infrastructure shall minimize risks to other coastal resources through initial siting, design, and features that will allow for future adaptation to rising sea levels, based on the best available scientific data.

Shoreline Protective Devices

- **8.3.9.** When Allowed. The development of new shoreline protective devices or the augmentation of existing shoreline protective devices beyond ordinary repair and/or maintenance is allowed when required to (1) serve a coastal-dependent use, or (2) protect a principal structure in existence prior to the effective date of the Coastal Act (i.e. January 1, 1977) that is in danger from erosion. Limitations on shoreline protective devices in this section should only apply to dikes, seawalls and other hard protective devices. This policy shall be interpreted to allow for "soft" shoreline protective devices to protect the Sea Level Rise Adaptation Zone 1 as described below.
- **8.3.10. No Feasible Alternative.** Shoreline protective devices are permitted only if there are no other feasible and less environmentally damaging alternatives to address erosion hazards, minimize risk of flooding, and provide structural stability. Alternatives include non-structural options (e.g., relocation of threatened development, habitat restoration) and soft protection strategies (e.g., living shorelines).
- **8.3.11. Mitigation.** Shoreline protective device projects shall be subject to proportional mitigation for all unavoidable coastal resource impacts.

- **8.3.12.** Hard Coastal Protective Devices. When shoreline protection is needed, hard protective devices are allowed only when non-structural options or soft armoring are infeasible or more environmentally damaging. Hard coastal protection includes engineered features such as seawalls, revetments, dikes and levees, roads, and trails that block the landward retreat of the shoreline and provide little or no habitat value but may provide recreation and coastal access opportunities.
- **8.3.13. Soft Coastal Protective Devices.** When choosing among shoreline protective devices, soft protective devices shall be used and prioritized over hard protective devices wherever possible. Soft protective devices may include the construction of engineered islands, reefs, marshes, living shorelines (horizontal levees) and other biotechnical habitat restoration approaches that mimic natural biological processes, and/or provide ancillary or incidental shoreline protection. If structural shoreline protection is needed in a particular location and soft protective devices are not possible, hard protective devices may be used when consistent with the City's Local Coastal Program.
- **8.3.14. Living Shoreline.** The City may use an engineered living shoreline or fringe salt marsh to protect vulnerable City facilities when consistent with the City's Local Coastal Program. The City shall promote green infrastructure pilot projects (e.g. horizontal levees, dune restoration, etc.) with environmental benefits that may help protect assets from sea level rise and increased storm surges. Study and monitor such projects over time and share lessons learned with other jurisdictions.
- **8.3.15. Green Infrastructure Pilot Projects.** The City shall promote green infrastructure pilot projects such as engineered islands, reefs, marshes, living shorelines (horizontal levees) and other biotechnical/habitat restoration approaches that may help protect assets from sea level rise and increased storm surges and provide ancillary or incidental shoreline protection. The City will study and monitor such projects over time and share lessons learned with other jurisdictions
- **8.3.16.** Avoiding and Mitigating Impacts. A shoreline protective device shall be sited and designed to avoid coastal resource impacts to the maximum feasible extent, including visual and public access impacts.
- **8.3.17.** Beneficial Reuse of Sediment through Dredging Management. The City shall work with other local jurisdictions and agencies to reuse clean sediment from bay dredging operations to create living shorelines where needed and appropriate, when consistent with the City's Local Coastal Program. Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation.
- **8.3.18. Re-Assessment of Need.** If an existing shoreline protective device is reconstructed, expanded, and/or replaced, a re-assessment of the need for the device and the potential for removal based on changed conditions shall be required.
- **8.3.19. Maintenance of Shoreline Protection Structures.** Routine monitoring and maintenance of shoreline protection structures shall be required as a condition of permit authorization for

construction, augmentation, or repair. Structures shall be examined for structural deterioration, excessive scour, or other damage, and repaired to maintain viability. Maintenance can only occur if properly permitted or determined to be exempt. Consider a requirement for a City-approved monitoring and maintenance program for shoreline protection structures.

WITHIN THE SEA LEVEL RISE ADAPTATION ZONE 1

The Sea Level Rise Adaptation Zone 1 as shown on Figure 8-2 is a starting point for where the City plans to continue to protect existing development endangered from flooding. As part of the City's adaptation strategy, given uncertainty regarding timing and rates of sea level rise, boundaries and protective devices will change over time as part of a measured retreat strategy. The City's objective is to retain existing development within this area, and to allow for redevelopment as well. The City will further study this area to determine where, specifically, to enhance protection and where to begin retreat. Triggers for different adaptations will be developed with associated monitoring by the City for all development within the Sea Level Rise Adaptation Zone 1. For all development within the Sea Level Rise Adaptation Zone 1, the following policies shall apply.

Existing Development

- **8.3.20.** Wetland Fill Allowed to Protect Sea Level Rise Adaptation Zone 1. In the Sea Level Rise Adaptation Zone 1, if it can be shown that all less environmentally damaging feasible alternatives have been exhausted and impacts on coastal resources are mitigated, the City may fill wetlands for the installation of hard or soft protective structures. Wetland fill shall be the least amount practicable to provide necessary protection and meet the "least environmentally damaging and feasible alternative" requirement. Compensatory mitigation for wetland fill may include but is not limited to creating wetlands.
- **8.3.21. Wastewater Treatment Plant.** The City will continue to protect and adapt the wastewater treatment plant with existing armoring and continual augmentation as necessary and additional soft armoring, pursuing the least environmentally damaging alternative that is economically feasible. The City will explore opportunities to shrink the footprint of the plant and the protective devices by transitioning to a new technology or a traditional wastewater treatment system.
- **8.3.22. Citywide Funding to Protect Wastewater Treatment Plant.** The City shall pursue a funding mechanism to protect the wastewater treatment plant functionality and access to critical plant infrastructure. Funding sources could include a citywide assessment or other means.
- **8.3.23. Limits on Corporation Yard Expansion.** Development of the City corporation yard facilities shall be restricted to the existing boundaries, or moved to an alternate location that is not subject to flooding impacts from sea level rise during the lifespan of the improvements.

New Development

- **8.3.24.** Infill Development Allowed within the Sea Level Rise Adaptation Zone 1. New development and redevelopment that is protected from sea level rise impacts by dikes and other means shall be allowed within the Sea Level Rise Adaptation Zone 1. Property owners will be informed of the elevation to which the area is designed to be protected. If and when a property is no longer protected by dikes or other means, the property must obtain a CDP to address sea level rise hazards through alternative accommodation and/or retreat strategies.
- **8.3.25. Subdivisions.** Subdivisions that increase development potential are not allowed within the Sea Level Rise Adaptation Zone 1.

Shoreline Protective Devices

- **8.3.26. Protective Devices.** Shoreline protective devises may be constructed and maintained to protect development within the Sea Level Rise Adaptation Zone 1.
- **8.3.27.** Existing Hard Protective Devices. Existing hard coastal protection may be augmented to protect existing development endangered from flooding, and gaps may be filled where planned to afford such protection when consistent with the Local Coastal Program. For the existing Industrial, Commercial, and Residential developments south of Samoa Boulevard, including the Arcata wastewater treatment facility as mapped on Figure 8-2, shoreline protection shall be retained, monitored, and augmented to protect existing developed areas to an elevation of at least 15 feet (NAVD 88 elevation), or to an alternative elevation given the best available science and economic feasibility of protecting the area. Saltwater and stormwater into the Wastewater Treatment Plant will be controlled through pumping.
- **8.3.28.** Siting and Design of New Shoreline Protective Structures. The siting and design of shoreline protective structures should take into account anticipated future changes in sea level, based on the best available scientific information and projections or range of projections of future sea level, and be designed for anticipated sea level rise. When feasible, hard shoreline protective devices shall be designed to minimize impacts to public views by incorporating design features that mimic surrounding natural features.
- **8.3.29. Protective Device Funding.** The City shall seek funding from state and federal programs to construct and maintain protective devices for the Sea Level Rise Adaptation Zone 1. A City-wide fee, tax, or other assessment may also be collected to construct and maintain protective devices in this area.
- **8.3.30. Easements for Adaptation Planning.** The City shall work with property owners within and adjacent to the proposed Sea Level Rise Adaptation Zone 1 to secure easements for future sea level rise protective devices.

INSIDE SEA LEVEL RISE ADAPTATION ZONE 2

The following policies apply to development inside the Sea Level Rise Adaptation Zone 2 as shown

in Figure 8-2.

- **8.3.31. Resiliency to Sea Level Rise**. New development in Sea Level Rise Adaptation Zone 2 shall be resilient to the effects of sea level rise without development of new protective devices except where planned to protect existing developed areas and coastal-dependent development.
- **8.3.32. Conditions Prohibiting Future Protective Structures**. Non-coastal dependent new development or substantial improvement on parcels potentially subject to sea level rise inundation shall only be approved with conditions requiring that no shoreline protective structure be constructed in the future to protect the development from erosion or flooding.
- **8.3.33. Sea Level Rise Vulnerability Report.** A sea level rise hazards report shall be prepared for new development in the Sea Level Rise Adaptation Zone 2 requiring a CDP. The report shall describe potential sea level rise impacts on the project, projects impacts on coastal resources given sea level rise, and recommended measures for the project to avoid or reduce sea level rise impacts consistent with the LCP.
- **8.3.34.** Removal of Shoreline Protective Structures. Authorization and permitting of shoreline protective structures will have terms and conditions for maintenance, removal, or modification of the structures over time as conditions change. A shoreline protective device shall only be authorized until the time when the existing principal structure that is protected by such device (1) is no longer present; or (2) is no longer requires armoring. Permittees shall be required to submit a CDP application to remove the authorized shoreline protective device within six months of a determination that the shoreline protective device is no longer authorized to protect the structure it was designed to protect because the structure is no longer present or no longer requires armoring. Removal may not be authorized if flooding or other deleterious impacts would result to adjacent properties.

OTHER POLICIES RELATED TO COASTAL RESOURCES

VISUAL RESOURCES

- **8.3.35. Minimizing Impacts to Visual Resources.** Shoreline protective structures and other sea level rise adaptation strategies shall minimize adverse impacts to visual resources to the extent feasible.
- **8.3.36. Strategies with No Impacts.** The City shall encourage sea level rise adaptation strategies that will not impact visual resources, including short-term retrofits of existing structures and longer-term relocation or removal of structures within scenic areas.

ENVIRONMENTALLY SENSITIVE HABITATS

8.3.37. Sea Level Rise in Habitat Projects. Sea level rise impacts shall be addressed in management plans for coastal habitats. Such evaluations should consider both

topographic features as well as habitat and species sensitivities (for example, sensitivity to inundation and saltwater intrusion). Habitat management plans and/or other habitat projects should use an adaptive management approach with clearly defined triggers for adaptive actions, to ensure that coastal habitats are able to migrate and transition with changes in sea level.

8.3.38. Habitat Connectivity to Allow Species Movement. New structures such as highways, medians, bridges, culverts, walls, fences and other development in response to sea level rise shall be designed to facilitate movement of wild animals along wildlife corridors.

WATER QUALITY PROTECTION

8.3.39. Sea Level Rise in Stormwater Control Plans and Actions. Stormwater control plans for private development subject to MS4 requirements shall include measures to minimize impacts to water quality from pollutants, sediments, and nutrients entering water bodies through precipitation-generated runoff. Required stormwater control plans should address Sea level rise and extreme storm events. Metrics to establish minimization are identified in the Coastal Zoning Ordinance.

PUBLIC ACCESS

- **8.3.40. Protect Coastal Access Opportunities.** When feasible, shoreline protective structures shall be designed to incorporate public access features. The City will pursue opportunities to secure easements over shoreline protective structures specifically for public access.
- **8.3.41. Coastal Trails.** The City will work with Caltrans and applicable agencies to incorporate portions of the California Coastal Trail and other trails within rights of way using retrofit options to avoid impacts from future sea level rise (boardwalks, bridges, etc.). The California Coastal Trail will remain within sight of Humboldt Bay where feasible.
- **8.3.42.** Designing New Public Access Sites. Newly proposed public access sites, segments of the California Coastal Trail, and recreation and visitor serving facilities shall be sited and designed to minimize impacts from flooding and coastal erosion due to sea level rise. For facilities that can be safely sited for the near term but future impacts are likely, an adaptive management plan detailing steps for maintenance, retrofitting and/or relocation shall be required.

ARCHAEOLOGICAL AND CULTURAL RESOURCES

8.3.43. Sea-level Rise and Cultural, Archaeological and Paleontological Resources. The City will support local tribes' efforts to identify, document, and, where appropriate, preserve cultural resources threatened by the effects of sea level rise and coastal flooding.

AGRICULTURAL RESOURCES

- **8.3.44. City-Owned Agricultural Lands East of Highway 101.** Sea level rise will eventually impact the city-owned agricultural lands east of Highway 101, south of Samoa Boulevard, and west of Old Arcata Road. Coastal wetland habitats will be allowed to migrate unto the City-owned Jacoby Creek/Gannon Slough Wildlife Area as part of the overall management of the wildlife area consistent with Coastal Act Section 30241-30242.
- **8.3.45. Saltwater Intrusion Conversion.** Agricultural lands converted to marsh land by saltwater intrusion due to sea level rise or other natural conditions may be redesignated as Coastal Resource (:CR) lands at such time as agricultural uses are no longer viable.
- **8.3.46. Replacement of Recreation Areas.** Sea level rise may eventually convert agricultural land west of Highway 101, south of Samoa Blvd. and west of Old Arcata Road to tidal lands. Once agricultural lands are converted to coastal wetland habitats, the City may provide recreational trails to replace other passive recreational areas lost to sea level rise.
- **8.3.47. Agricultural Water Quality Impacts.** Agricultural practices may need to be updated or enhanced to ensure water quality protection as required by federal, state, or local regulations if climate change or other natural conditions result in more frequent flooding of agricultural lands.
- **8.3.48. Rising Groundwater.** Clean fill material may be imported and placed on previously compacted or subsided agricultural lands to raise the surface elevation of these former tide lands to make them more resilient to rising groundwater and sea level rise as part of a permitted habitat restoration/enhancement project to allow for future migration of saltmarsh habitat. In areas where fill material is placed on existing wetlands, the depth of fill must allow continuation of wetland characteristics such that no net loss of wetlands shall occur.
- **8.3.49. Agriculture Protection, Maintenance and Adaptation of Dikes and Levees.** Existing agricultural areas within the City's Coastal Zone are partially protected by a series of dikes and drainage structures. These dikes may be repaired, maintained, and enlarged/augmented to protect the agricultural lands from sea level rise impacts for as long as feasible. The method of repair, maintenance, and enlargement/augmentation shall be the least environmentally damaging feasible alternative and feasible mitigation measures shall be provided to minimize adverse environmental effects.

REGIONAL APPROACHES – COLLABORATION WITH REGIONAL PARTNERS

Sea level rise will affect all jurisdictions and agencies within the Humboldt Bay region. The City will work with the City of Eureka, the County of Humboldt, the Humboldt Bay Harbor Recreation and Conservation District, Caltrans, Pacific Gas and Electric, the North Coast Railroad Authority, landowners, and other stakeholders to collaborate on regional approaches to sea level rise.

8.3.50. Stakeholder Collaboration. The City will assist in developing collaborative stakeholder

group(s) that include: other jurisdictions, critical asset owners, property owners, shoreline protective structure managers, business owners, regulatory agencies, and interested public members. These stakeholders will assist in developing or reviewing bay-wide, watershed, drainage basin, and project specific, multipurpose sea level rise adaptation strategies and measures.

- **8.3.51. Collaboration with Regional Partners.** The City will work with regional partners to explore and encourage innovative solutions to adapt to sea level rise. Potential regional solutions may include:
 - (1) Installing hard engineered tidal barriers at the Humboldt Bay entrance, Eureka Slough entrance, and/or between Indian, Woodley, and Daby Islands that allow continued navigation, fish passage, and sediment transport while allowing temporary sea gates, pump stations, and offshore structures to be put in place.
 - (2) Constructing soft engineered islands, reefs, marshes, living shorelines or other features which mimic natural processes and offer shoreline protection.
 - (3) Utilizing oyster shells, navigation channel dredge spoils and other safe, local, suitable material to implement adaptation measures inland, along the shoreline, and within the waters of Humboldt Bay.
 - (4) Identifying the areas where it is feasible and appropriate to protect dikes, railroads, highways and roads in place as a way of serving to protect existing development, and identifying those areas where elevating or relocating these features would be more appropriate to allow for wetland migration and restoration.
 - (5) Exploring a regional ocean outfall or other regional solutions for treated wastewater.
 - (6) Increasing the number and size of tide gates to enhance the drainage capacity of the lands behind the dikes.
- **8.3.52. Mitigation Program.** The City supports development of a regional mitigation program to address the region's potential to fill wetlands in an effort to protect existing development. The program would involve creating wetland areas to be used as compensation for filling wetlands to create protective devices for existing development.
- **8.3.53. Education.** The City will work with community partners to educate the community about sea level rise impacts, including how to implement best management practices throughout the City to reduce vulnerability and risk from flooding hazards associated with sea level rise.
- **8.3.54. Preserve Undeveloped Shorelines.** The City shall encourage preservation and habitat enhancement of natural shoreline areas throughout Humboldt Bay that are vulnerable to future flooding, contain significant habitats or species, are suitable for ecosystem enhancement, and allow area for habitat migration as sea level rises.
- **8.3.55. Regional Adaptation Strategies.** The City will promote and participate in development of a regional entity for protection of existing development, restoration of coastal habitats, and preservation of public access and recreational opportunities on Humboldt Bay. The

- City will participate in regional efforts to seek funding for regional solutions to accommodate higher sea levels.
- **8.3.56.** Acquisition and Buyout Program. The City will collaborate with regional partners to seek funding, and work with property owners to acquire property at risk from flooding or inundation due to sea level rise.
- **8.3.57. Retrofit Transportation Infrastructure.** The City will work with Caltrans and the County of Humboldt to address sea level rise impacts to Highway 101, Highway 255, and adjacent County roads to maintain transportation functions as the sea level rise. The City will work with these entities to identify which existing roadways should be retrofitted to withstand flooding and provide a barrier to flooding inland and to plan for these projects to be completed over time as roads are maintained.
- **8.3.58.** Phased Implementation of Transportation Projects. As sea level rises and existing roads are periodically flooded, alternate transportation routes shall be established to accommodate traffic. Recognizing that periodic flooding of low-lying roads could result in hazardous conditions or delays, transportation routes shall be maintained, retrofitted, and re-routed to accommodate sea level rise, until such time as retreat is the only viable option. The City will coordinate with Caltrans, the County of Humboldt, and the City of Eureka to ensure that planned transportation networks meet the needs of the City and the region.

9.0 Public Access

9.1. Introduction

The City of Arcata strives to strives to provide maximum public access to the coast and shall protect existing access and provide new public access where appropriate. The City of Arcata Coastal Zone contains approximately four miles of Humboldt Bay shoreline; however, there is no direct access to the Pacific Ocean within the City's Coastal Zone. Public access to the shoreline of Humboldt Bay is primarily located in the Arcata Mach and Wildlife Sanctuary (Arcata Marsh) and McDaniel Slough. Figure 9-1 identifies these access points, as well as other existing, required, and planned access points, including segments of the California Coastal Trail, Humboldt Bay Trail (Rail with Trail Connectivity Project) and the Pacific Coast Bike Route.

The Arcata Marsh is a publicly owned conservation and recreation area on the northern edge of Humboldt Bay that contains 307 acres of freshwater marshes, salt marshes, brackish marsh, tidal sloughs, tidal mudflats, and grassy uplands. The Arcata Marsh's primary purpose is to provide tertiary, sustainable wastewater treatment for the City, while also providing habitat and recreational value. The Arcata Marsh provides wildlife habitat and recreational opportunities with parking areas, a boat launch, and approximately 5.4 miles of walking and biking paths which provide access to the levees surrounding the sanctuary. An additional mile of trail was added as a portion of the Humboldt Bay Trail rail with trail project.

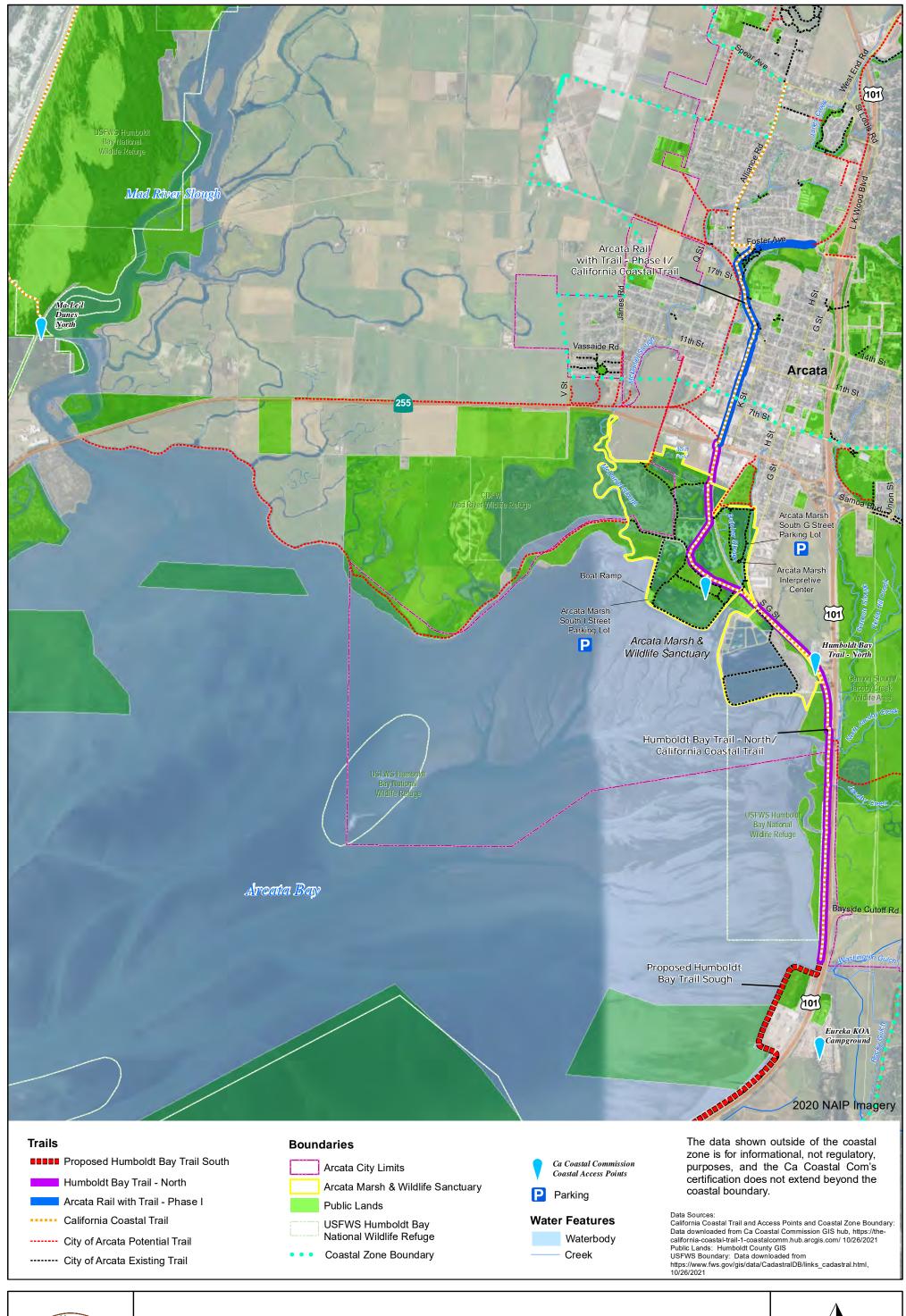
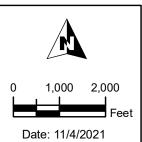




Figure C-9-1
Coastal Acce**ss**



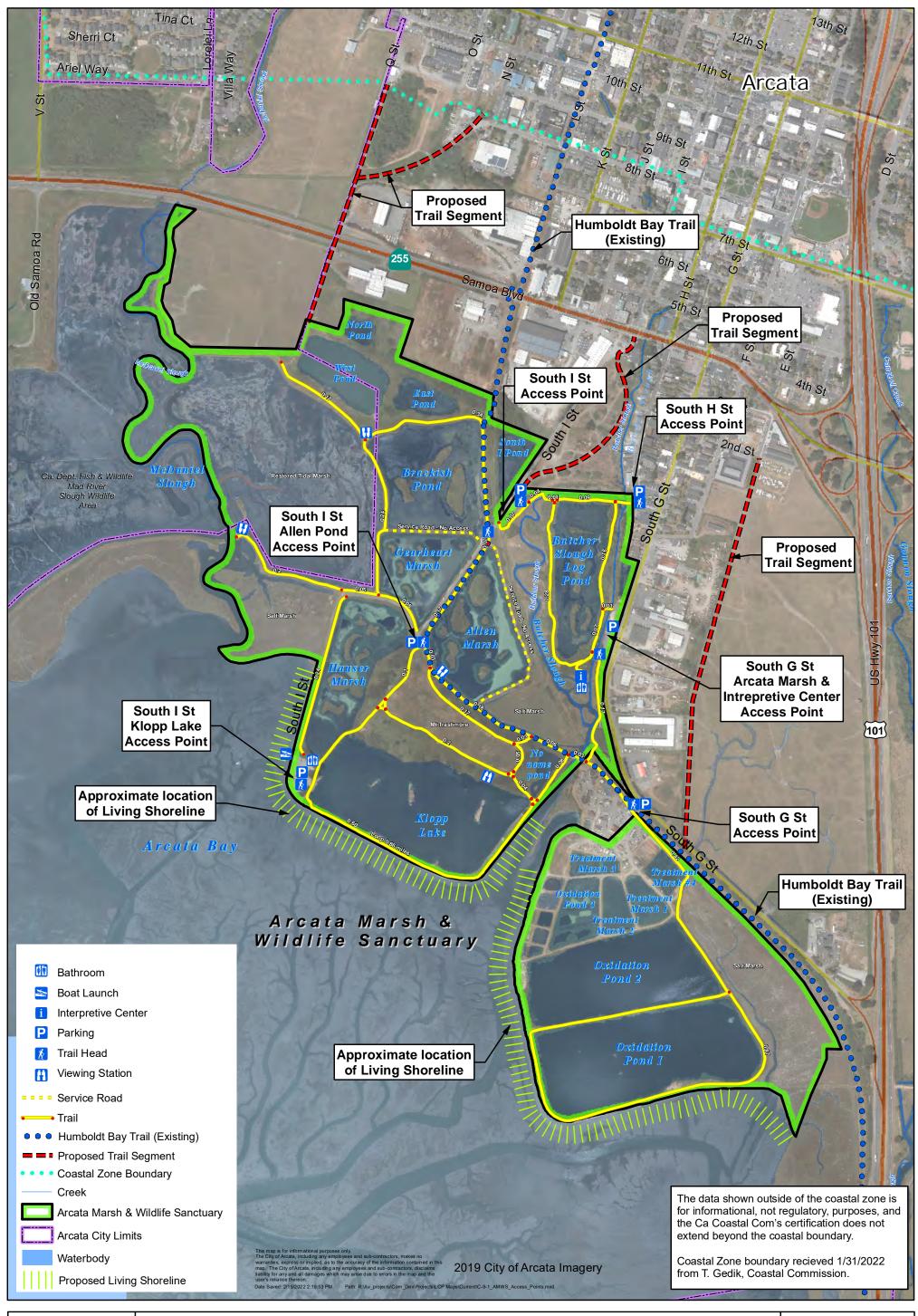
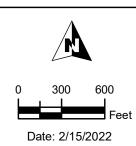




Figure C-9-2
Arcata Marsh & Wildlife Sanctuary
Access Points



Coastal Act Policies

The following Coastal Act policies are most relevant to shoreline access in Arcata:

Section 30252: The location and amount of new development should maintain and enhance public access to the coast by: (1) facilitating the provision or extension of transit service; (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads; (3) providing non-automobile circulation within the development; (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation; (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings; and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

Section 30210: Maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211: Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212: Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected. Dedicated accessways shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Section 30214: The public access policies of this coastal land use plan shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following: (1) Topographic and geologic site characteristics; (2) The capacity of the site to sustain use and at what level of intensity; (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses; and (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

The public access policies of this coastal land use plan shall be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this policy shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.

In carrying out the public access policies of this coastal land use plan, the City shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

9.2. Local Coastal Element Policies

- **9.2.1. Public Coastal Access.** The City shall maintain and improve public access to and along the coastline consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.
- **9.2.2. Multi-use Trails**. The City shall provide a network of multi-use trails to serve both recreational and commuter needs. Trails should connect parks and natural areas with business, commercial, industrial and residential sections of town to allow for non-motorized transportation alternatives. Existing and proposed trails should be aligned for interconnectivity. New dikes, revetments, and other similar structures shall provide non-motorized access ways to the extent feasible where planned.

- 9.2.3. Connection to the Regional Trail System. The City shall develop a continuous trail system developed with connections to the California Coastal Trail system. Alignments and interconnectivity of proposed bike paths and trails shall be coordinated. These include the Arcata Rail with Trail Connectivity Project, the Pacific Coast Bike Route, and the California Coastal Trail system. The City will work with the appropriate agencies to encourage trail development and access to the Humboldt Bay National Wildlife Refuge and the Mad River Slough Wildlife Area west of the City limits. The City will work with the County of Humboldt to explore road shoulder and bike path improvement options for County roads west of the City of Arcata in the Arcata Bottom, to provide access to Mad River Beach and the Hammond Trail.
- 9.2.4. California Coastal Trail. the California Coastal Trail shall be maintained and enhanced to:
 - Provide a continuous, nonmotorized public trail through Arcata located as close to the coast as possible;
 - Connect with contiguous trail links in adjacent unincorporated Humboldt County;
 - Include connections to the shoreline ("vertical access") at appropriate intervals: and
 - Include sufficient transportation access to encourage public use.
- **9.2.5. Public Coastal Access in New Development.** New development located between the Bay and the first public road shall provide vertical (perpendicular) access from the public road and lateral access along the shoreline in the following areas:
 - In the locations shown in Figure 9-1; and/or
 - Where the Coastal Development Permit review authority determines the need for additional public access on and/or through the site, or the need for additional access created by the project.
- **9.2.6. Exemptions to Public Coastal Access Requirements.** The following development projects are exempt from the public coastal access requirements of Policy 9.2.4:
 - Improvement, replacement, demolition or reconstruction of certain existing structures, as specified in Coastal Act Section 30212(b); and
 - New development under Coastal Act Section 30212(a) where (1) public access would be inconsistent with public safety, military security needs, or the protection of fragile coastal resources; (2) adequate public access exists nearby; or (3) agriculture would be adversely affected.
- **9.2.7. Dedication of Public Coastal Access.** If a coastal accessway is required as a condition of development pursuant to Policy 9.2.4, the City shall require guarantee of the access through deed restriction, offer of dedication, or grant fee interest or easement.
- 9.2.8. from New Development. Approved new development shall maintain coastal access

- corridors and shall not restrict or interfere with the public's right of access to and along the shoreline.
- **9.2.9. Public Access Signage.** In coordination with Caltrans and the County of Humboldt, the City shall provide adequate directional signage to assist the public in locating, recognizing, and utilizing the public accessways shown in Figure 9-1.
- **9.2.10. Parking**. New development shall provide off-street parking to the extent necessary to adequately serve the development and ensure that the development does not adversely impact public access to the coast.
- **9.2.11. Transit Service Collaboration**. The City will work with transit service providers to maintain and enhance coastal access by bus and other forms of public transportation.

10.0 Scenic and Visual Resources

10.1. Introduction

Protecting scenic resources and views of the coast is a central focus of the Coastal Act and local coastal programs. The Coastal Act requires protection of the scenic and visual qualities of coastal areas, since they are important public resources. Scenic resources in Arcata's coastal zone include Arcata Bay, shoreline areas, and open space and natural features outside of but visible from the coastal zone. Public views of these scenic resources are enjoyed from roadways, public vista points, and trails. The Coastal Land Use Element contains policies to protect the scenic and visual qualities of coastal areas and to ensure that new development does not adversely impact public views of scenic resources.

Coastal Act Policies

The following Coastal Act policy is most relevant to scenic and visual resources in Arcata:

Section 30251: The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

10.2. Local Coastal Element Policies

10.2.1 Designation of Scenic Resources. The following natural features are designated as scenic resources:

- Open waters of Arcata Bay.
- Habitat areas and natural features along the shoreline, including coastal lagoons, marshes, estuaries, sloughs, and mudflats.
- Visually prominent natural features located outside of but visible from the coastal zone, including agricultural lands, gulches, forested slopes, hillsides, ridgelines and mountain tops.

These areas and features are not considered a "highly scenic area" pursuant to Coastal Act Section 30251.

10.2.2 Protected Views. The following are designated as protected views:

- **Scenic Roadway Segments.** Views of designated scenic resources from scenic roadway segments shown in Figure 10-1.
- **Vista Points.** Views of designated scenic resources from designated vista points shown in Figure 10-1.

- **Scenic Trail Segments.** Views of designated scenic resources from designated scenic trail segments shown in Figure 10-1.
- **10.2.3 Visual Impacts.** New development that would result in a significant adverse impact to a protected view is prohibited. A significant adverse impact to a protected view occurs only when development substantially blocks or disrupts views of a scenic resource in a manner that significantly diminishes the public enjoyment of that scenic resource.
- **10.2.4 Initial Project Evaluation.** The City shall evaluate all Coastal Development Permit applications to determine if a proposed project may adversely impact a protected view.
- **10.2.5 Visual Impact Analysis.** Applicants shall prepare a visual impact analysis where an initial evaluation finds that a project may result in a significant adverse impact to a protected view. The analysis shall include recommendations to avoid or minimize impacts to protected views prepared in accordance with Coastal Zoning Ordinance requirements.
- **10.2.6 Open Space Preservation.** The open and natural character of farmlands and undeveloped countryside within the Coastal Zone shall be protected and maintained consistent with the parcel's coastal zoning designation and applicable Local Coastal Program policies and standards.
- **10.2.7 Visual Compatibility.** New development shall be visually compatible with the character of surrounding areas, and, where feasible, restore and enhance visual quality in visually degraded areas.
- 10.2.8 Marsh-Adjacent Development. New development within the area bounded by Samoa Blvd., Butcher's Slough, and Gannon Slough shall include local native plant landscaping, screenings, and other measures to ensure compatibility with scenic coastal resources and with the educational, recreational, wildlife, and other uses of the Humboldt Bay National Wildlife Refuge and the Arcata Marsh and Wildlife Sanctuary.
- **10.2.9 Public Infrastructure.** The City shall minimize impacts to protected views resulting from City-controlled utilities, traffic signals, governmental signs, and other similar improvements in the public right-of-way.

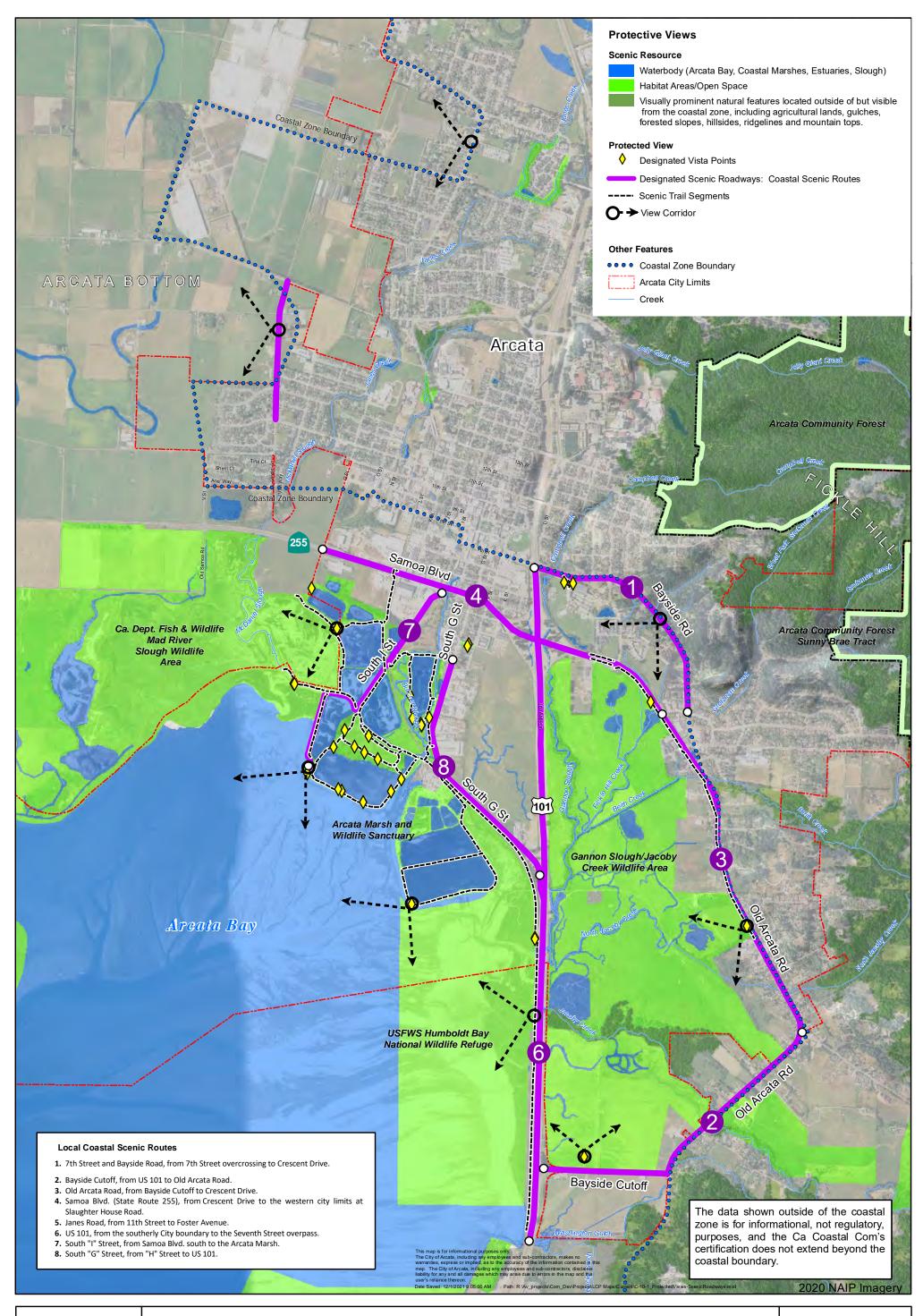
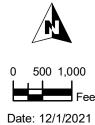




Figure C-10-1

Protected Views & Scenic Roadways



11.0 Archeological and Cultural Resources

11.1. Introduction

The City of Arcata strives to protect archaeological, tribal cultural, and paleontological resources. Section 30244 of the Coastal Act states that where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required. The City of Arcata generally relies on the 1870 Tideland survey map prepared by the federal government, which delineates the former Arcata Bay shoreline, as a guide to show where Native American settlements might have been located. The City's practice for discretionary permit review includes a referral to each of the three local Wiyot territory Tribal Heritage Preservation Officers to facilitate positive collaborative working relationships.

Coastal Act Policies

The following Coastal Act policy is most relevant to cultural resources in Arcata:

Section 30244: Archaeological or paleontological resources. Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

11.2. Local Coastal Element Policies

- **11.2.1. Protection of Archaeological and Paleontological Resources.** Development shall protect and preserve archaeological, tribal cultural and paleontological resources from destruction, and avoid and minimize impacts to such resources.
- 11.2.2. Cultural Resources Consultation. As part of project environmental review for development that has the potential to adversely impact archaeological, tribal cultural, or paleontological resources, the City of Arcata shall, at a minimum, consult with the Northwest Information Center of the California Historical Resources Information System at Sonoma State University (or its successor) and Tribal Governments of the Blue Lake Rancheria, Wiyot Tribe, and Bear River Band of the Rohnerville Rancheria, each of whom have recognized Wiyot ancestral ties to lands within Arcata's Coastal Zone.
- **11.2.3. Cultural Resources Report.** A cultural resources report shall be prepared prior to project approval if: 1) initial project screening concludes that the project area may contain potentially significant archaeological, paleontological, and/or Native American tribal cultural resources; and 2) the project has potential to adversely impact these resources. The City will require reports to evaluate potential impacts to archaeological resources in consultation with the three Wiyot area tribes. The purpose of the report is to determine

whether or not significant cultural, paleontological, or archaeological resources are present; determine the size, nature, and significance of any identified resource; and provide measures that result in the avoidance, or if avoidance is not feasible, minimization of impacts to resources that are present on the site. All reports shall be prepared by a qualified archaeologist/paleontologist.

- **11.2.4. Mitigation of Potential Impacts.** Significant impacts to archaeological, tribal cultural, and paleontological resources shall be avoided or mitigated in consultation with affected tribes and other responsible agencies.
- **11.2.5. Coordination with State Historic Preservation Officer**. The City shall consult with the State Historic Preservation Officer and affected tribes to identify actions to protect archaeological, tribal cultural, and paleontological resources.
- 11.2.6. Review Required for City Projects. The City will, as a matter of process, inform the local Tribal Heritage Preservation Officers of ground disturbing activities that occur on City sites or within City rights-of-way within ¼ mile of known sensitive sites even when no permit is required. The City will rely on updates of sensitive locations from the Tribal Heritage Preservation Officers at their discretion.

12.0 Agricultural Resources

12.1. Introduction

The Coastal Act requires the protection of agricultural lands within the Coastal Zone. It directly mandates that the maximum amount of prime agricultural land be maintained in production, and supports various measures to limit threats to agricultural productivity. The City's definition of prime agricultural land within the Coastal Zone as discussed in this chapter is consistent with Coastal Act §30113 and Government Code §5120. All land meeting this definition is mapped in Figure 12-1.

Agricultural lands are an important resource within Arcata's Coastal Zone. Agriculture is the largest non-urban use in the City, representing 25 percent of the land base in total. Arcata's agricultural lands are generally used for grazing, silage, and hay production, as well as flower and vegetable crops including lilies, daffodils, raspberries, strawberries, potatoes, corn, artichokes, and other shallow-rooted crops. The City of Arcata owns approximately 80 percent of the agricultural land within the Coastal Zone and manages this land as seasonal grazing and natural resource open space.

Coastal Act Policies

The following Coastal Act policies are most relevant to agriculture in Arcata:

Section 30241 Prime agricultural land; maintenance in agricultural production. The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses ...

Section 30241.5 Agricultural land; determination of viability of uses; economic feasibility evaluation

(a) If the viability of existing agricultural uses is an issue pursuant to subdivision (b) of Section 30241 as to any local coastal program or amendment to any certified local coastal program submitted for review and approval under this division, the determination of "viability" shall include, but not be limited to, consideration of an economic feasibility evaluation

Section 30242 Lands suitable for agricultural use; conversion. All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (I) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.

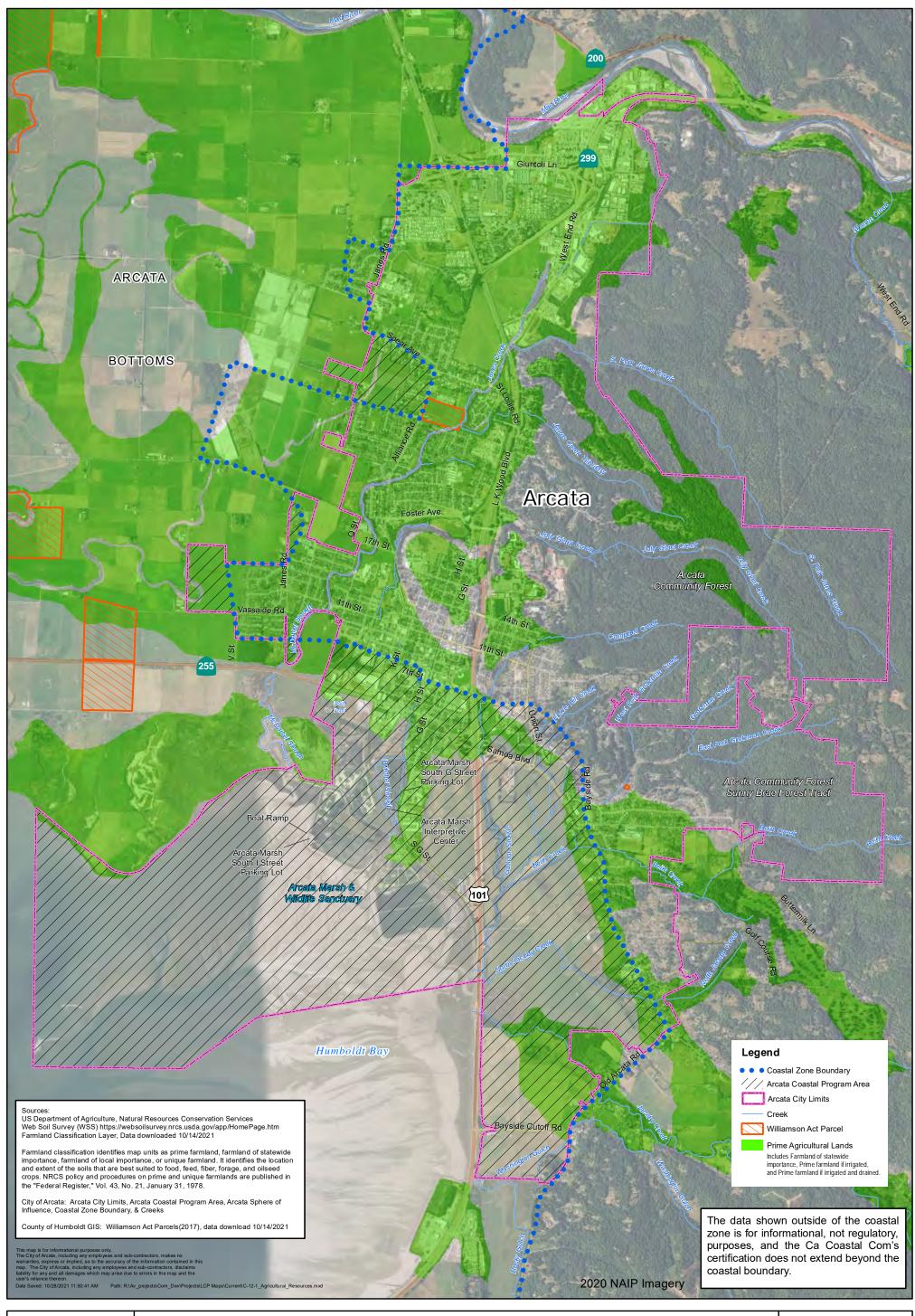
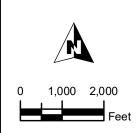




Figure C-12-1
Agricultural Resources



12.2. Local Coastal Element Policies

Agricultural Lands

- **12.2.1. Agricultural Classifications**. The agricultural classification in the City's Coastal Zone is Coastal Agricultural [:CA]. This designation is intended to preserve land for agricultural production. The :CA designation is appropriate for lands with prime agricultural soils and wetlands that could be used as grazed agricultural lands as well as other areas with non-prime soils suitable for protecting their current uses as, or potential for, agricultural production. Structures accessory, incidental to, and compatible with agricultural production, such as barns and farmhouses, are appropriate uses in :CA areas.
- **12.2.2. Land Use Compatibility.** Agricultural practices can include spraying of herbicides, application of fertilizer, operation of farm equipment, and use of local roads by slow-moving and large vehicles, along with other activities that are not commonly considered compatible with urban uses. These practices can cause noise, health, light, odor, and travel impacts for residents in adjacent non-agricultural areas. To minimize these impacts, development of new non-agricultural uses that locate adjacent to existing agricultural uses shall maintain setbacks and establish buffers. The potential impacts of adjacent agricultural practices is required to be disclosed to future residents. Where new agricultural uses locate adjacent to existing non-agricultural areas, the agricultural user shall be responsible for maintaining setbacks and establishing buffers as set by the Coastal Zoning Ordinance.
- **12.2.3. Uses Allowed in Diked/Reclaimed Former Tidelands**. Allowable uses in grazed or farmed wetlands are limited to existing uses compatible with the Public Trust as follows:
 - 1. Specific agricultural operations limited to apiaries, field and truck crops, livestock raising, and orchards.
 - 2. Farm-related structures including barns, sheds, and farmer-occupied housing necessary for the performance of agricultural operations.
 - 3. Restoration projects.
 - 4. Nature study, aquaculture, and similar resource-dependent activities.
 - 5. Incidental public service purposes which may temporarily impact the resources of the areas (such as burying cables or pipes).
- **12.2.4. Aquaculture**. Bayfront land that is suitable for coastal dependent aquaculture shall be protected for that use, and proposals for aquaculture facilities located on those sites shall be given priority, except over other coastal dependent developments or uses. Aquaculture in the C-ROS designation shall avoid, if possible, or mitigates adverse impacts to coastal resources.

Agricultural Resources Management

12.2.5. Prime Agricultural Lands. The City shall maintain the maximum amount of prime agricultural land in agricultural production and minimize conflicts between agricultural and urban land uses through use of strategies identified in Coastal Act Section 30241.

- 12.2.6. Protecting Agricultural Land. For areas within the City's Coastal Development Permit jurisdiction, the City shall protect existing agricultural land, especially prime agricultural land, from conversion to other uses. Protection shall be in the form of zoning and land use restrictions as well as proactive measures. These may include but are not limited to affirmative conservation easements, or recordation of "right-to-farm" deed restrictions for development occurring in proximity to such agricultural lands. For coastal agricultural lands within the City's Planning Area, to the west of the City limits within the County of Humboldt, the City shall encourage the retention of Agricultural Exclusive zoning, and shall not convert any prime agricultural lands to other uses if the land is annexed into the City limits.
- 12.2.7. Reports for Agricultural Conversions. For proposed conversions of prime agricultural lands around the periphery of urban areas, the City shall require the applicant to submit an economic feasibility evaluation consistent with Coastal Act Section 30241.5. The City shall also require the applicant to submit a report prepared by a qualified professional demonstrating that the conversion will not diminish the productivity of adjacent prime agricultural lands. The City may approve the proposed conversion only after approving the reports, as required by the Coastal Zoning Ordinance
- 12.2.8. Subdivision of Agricultural Land. The City shall allow the subdivision of prime agricultural lands only when consistent with Coastal Act Section 30250(a). For proposed subdivisions of prime agricultural land, the City shall require the applicant to submit a continued viability report and economic management plan prepared by a qualified professional demonstrating that the subdivided land will remain viable for, and actively engaged in, agricultural use. The City may approve the proposed subdivision only after approving the report and plan.
- **12.2.9. Non-Prime Agricultural Land Conversions.** As provided in Coastal Act Section 30242, the City shall prohibit the conversion of non-prime agricultural land to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Coastal Act Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.
- **12.2.10. Development on Agricultural Lands**. All structural development, including farm dwellings, on agriculturally zoned lands shall be subject to siting, design and performance standards as required by the Coastal Zoning Ordinance to protect the maximum amount of agricultural lands and minimize interference with production activities to ensure that agricultural lands do not lose their long-term productivity.
- **12.2.11. Development Adjacent to Agricultural Lands.** New non-agricultural development immediately adjacent to agricultural areas shall include location, design, construction, and maintenance techniques that do not impair agricultural viability, diminish the productivity of agricultural lands, and are compatible with continued agricultural use on surrounding lands, as required by the Coastal Zoning Ordinance.
- **12.2.12. Prime Agriculture Soils Reuse**. The long-term productivity of soils shall be

protected. Prime agricultural soils removed in the construction of agricultural-related structures that could not be feasibly located elsewhere to avoid such impacts, shall be stockpiled and reused on productive agricultural lands.

12.2.13. Recreational Activities on Agricultural Lands. Private and public non-vehicular recreational activities such as hiking, riding, fishing, hunting, kayaking, and paddle-boarding that are consistent with the City's municipal code and which do not require permanent structures, facilities, or foundations, may be permitted in areas designated :CA. These activities are allowed only if they do not interfere with adjacent agricultural uses, or limit potential of the site to return to agricultural use, or significantly displace the wildlife utilizing the area, especially in wetlands.

13.0 Glossary

This section defines terms and phrases used in the Local Coastal Element that are technical or specialized, or that may not reflect common usage. If a definition in this section conflicts with a definition in the General Plan Glossary, the definition in in this chapter governs when interpreting and applying Local Coastal Element requirements. If a term or phrase is not defined in this section or int he General Plan Glossary, the Director shall determine the correct definition.

Aquaculture. A form of agriculture as defined in Section 17 of the Fish and Game Code. Aquaculture products are agricultural products, and aquaculture facilities and land uses shall be treated as agricultural facilities and land uses in all planning and permit-issuing decisions governed by the Local Coastal Element.

Coastal Access. The ability of the public to reach, use or view the shoreline of coastal waters or inland coastal recreation areas and trails.

Coastal Act. The California Coastal Act of 1976, as amended.

Coastal-dependent Development. Any development or use which requires a site on, or adjacent to, the sea to be able to function at all.

Coastal Development Permit. A permit for any development within the coastal zone that is required pursuant to Coastal Act Section 30600(a).

Coastal Hazards. Include, but are not limited to, episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunami, tidal scour, coastal flooding, liquefaction, and the interaction of same.

Coastal-related Development. Any use that is dependent on a coastal-dependent development or use.

Coastal Resources. Include, but are not limited to, public access and public access facilities and opportunities, recreation areas and recreational facilities and opportunities (including for recreational water-oriented activities), public views, natural landforms, marine resources, watercourses (e.g., rivers, streams, creeks, etc.) and their related corridors, waterbodies (e.g., wetlands, estuaries, lakes, etc.) and their related uplands, ground water resources, biological resources, environmentally sensitive habitat areas, agricultural lands, and archaeological and paleontological resources.

Coastal Zone. The geographic zone adjacent to the shoreline, the land and water area boundaries of which are determined by the California Coastal Act of 1976, as amended

Coastal Zoning Ordinance. Division 2 of Title IX of the Arcata Municipal Code, certified as part of the Implementation Plan of the City of Arcata Local Coastal Program.

Development. Any of the following, whether on land or in or under water:

1. The placement or erection of any solid material or structure.

- 2. Discharge or disposal of any dredged material or of any gaseous, liquid, solid or thermal waste.
- 3. Grading, removing, dredging, mining or extraction of any materials.
- 4. Change in the density or intensity of use of land, including, but not limited to, subdivisions, and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use.
- 5. Change in the intensity of use of water, or access thereto.
- 6. Construction, reconstruction, demolition or alteration in the size of any structure, including any facility of any private, public or municipal utility.
- 7. The removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973.

Energy Facility. Any public or private processing, producing, generating, storing, transmitting, or recovering facility for electricity, natural gas, petroleum, coal, or other source of energy.

Environmental Buffer Area (EBA). An area of land separating all permitted development from adjacent sensitive habitat, streams and wetlands. The purpose of the buffer area is to prevent any degradation of the ecological functions provided by the area as a result of the development. This term includes ESHA buffers as defined by the Coastal Commission.

Environmentally Sensitive Habitat Areas (ESHA). Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. In addition, the following areas are categorically ESHA as identified in Arcata's LCP:

- Rivers, creeks, sloughs, and associated riparian habitats including Jacoby Creek, Beith Creek, Grotzman Creek, Campbell Creek, Jolly Giant Creek, Janes Creek, Gannon Slough, Butcher Slough, and McDaniel Slough.
- 2. Wetlands, estuaries, and associated riparian habitats including Arcata Bay, Mad River Slough, Liscom Slough, Butcher Slough, and the Arcata Marsh and Wildlife Sanctuary.
- 3. Other unique habitat areas including water bird rookeries; shorebird concentration sites; habitat for all rare, threatened, or endangered fully protected, and special concern plant and animal species and natural communities on federal or state lists; and plant species appearing on the California Native Plant Society List "1b" and "2" lists.

Erosion. The wearing away of land by natural forces. On a beach, the carrying away of beach material by wave action, currents or the wind.

Estuary. A coastal water body usually semi-enclosed by land, but which has open, partially obstructed, or intermittent exchange with the ocean and in which ocean water is at least

occasionally diluted by fresh water runoff from the land.

Farm Dwelling. A dwelling unit on an agricultural property owned by the farm owner or operator.

Farmed Wetland. A wetland that has been diked or drained to prevent the saturated soil conditions that would normally occur, to conduct agricultural activities (e.g., grazing), that do not require the most productive agricultural soils. These lands would typically revert to freshwater, brackish, or saltwater marsh should the dike barriers be removed. In their present state, these lands are frequently covered by shallow water during the rainy season.

Feasible. Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors. These factors may include topographic contour, orientation, grading, slope stability, tree preservation, access to existing streets, and others.

Fill. The deposit of earth material caused or placed by artificial means.

Flood Hazard Area. The floodplain boundaries for Special Flood Hazard Areas ash shown on the current FEMA Flood Insurance Rate Map (FIRM).

Geologic Hazard. A risk associated with geologic processes or events including fault line surface rupture, liquefaction, subsidence, landslides, and coastal erosion.

Habitat. The physical location or type of environment in which an organism or biological population lives or occurs.

Hard Shoreline Protective Device. Engineered features such as seawalls, revetments, dikes and levees, roads, and trails that protect against coastal hazards by blocking the landward retreat of the shoreline.

Incidental Public Service Purposes. Projects, such as burying cables and pipes, inspection of piers, etc., which may temporarily impact the resources of a habitat area.

Infill Development. Development, redevelopment or reuse of land that is either underutilized, brownfield or vacant, but substantially surrounded by existing urban development. In all instances, infill development occurs on sites that already have sufficient City services immediately available. Infill development may include new residential units on upper floors of commercial structures, development of second units on residential lots, and new or expansion of existing residential and commercial structures and uses consistent with the provisions of the applicable land use designations.

Land Use. The purpose for which a lot or structure is or may be leased, occupied, maintained, arranged, designed, intended, constructed, erected, moved, altered, and/or enlarged in accordance with the applicable land use designations.

Land Use Plan. the relevant portion of a local government's general plan, or local coastal element which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies and, where necessary, a listing of implementing actions.

Lateral Access. A recorded dedication or easement granting to the public the right to pass and

repass over real property generally parallel to, and up to 25 feet inland from, the mean high tide line.

Local Coastal Element. The portion of a general plan applicable to the coastal zone which may be prepared by local government pursuant to this division, or any additional elements of the local government's general plan prepared pursuant to Section 65303 of the Government Code, as the local government deems appropriate.

Local Coastal Program. A local government's (a) land use plans, (b) zoning ordinances, (c) zoning district maps, and (d) within sensitive coastal resources areas, other implementing actions, which, when taken together, meet the requirements of, and implement the provisions and policies of, this division at the local level.

Low-impact Development. A stormwater management approach with the basic principle that rainfall be managed and retained at the source using uniformly distributed decentralized microscale controls to capture, treat and infiltrate stormwater runoff on site to maintain the site's pre-development runoff characteristics.

Mixed-Use. Properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A "single site" may include contiguous properties.

Nonconformity. A legally-established lot, land use, structure, or other form of development that does not conform with the certified Local Coastal Program.

Non-prime Agricultural Land. Land suitable for agriculture that does not meet the definition of prime agricultural land.

Person. Any individual, organization, partnership, limited liability company, or other business association or corporation, including any utility, and any federal, state, local government, or special district or an agency thereof

Prime Agricultural Land. Those lands defined in paragraph (1), (2), (3), or (4) of subdivision (c) of Section 51201 of the Government Code.

Public Access. The right or privilege for persons to visit an area or resource.

Public Trust Lands. Lands to which California received title upon its admission to the Union and that are held by virtue of its sovereignty under the authority of the California State Lands Commission. These are lands under navigable waters including the ocean and navigable streams, and include lands formerly under water.

Public Works.

- 1. All production, storage, transmission, and recovery facilities for water, sewerage, telephone, and other similar utilities owned or operated by any public agency or by any utility subject to the jurisdiction of the Public Utilities Commission except for energy facilities.
- 2. All public transportation facilities, including streets, roads, highways, public parking lots and structures, ports, harbors, airports, railroads, and mass transit facilities and stations,

bridges, trolley wires, and other related facilities.

- 3. All publicly financed recreational facilities and any development by a special district.
- 4. All community college facilities.

Public Infrastructure. Roads, sidewalks, bikeways, trails, water delivery systems, stormwater facilities, sewer systems, gas and electric, and other similar facilities to serve the general public.

Recreational Facility. Non-commercial or commercial facilities that allow for the public to engage in outdoor and/or water-dependent leisure activities. Includes public parks and recreational facilities; public plazas; public marinas, boat launches, and piers; open space and wildlife areas; and trails. Also includes commercial facilities offering harbor cruises, fishing charters, eco tours, kayak and boat rentals, guided tours, carriage rides, and other similar activities.

Redevelopment.

Development involving an existing structure that consists of one or more of the following:

- (1) Alteration (including interior and/or exterior remodeling and renovations, demolition or partial demolition, etc.) of 50 percent or more of major structural components (including exterior walls, floor and roof structure, and foundation) considered individually (i.e., percentages are calculated by the individual structural component being altered, and are not additive between different structural components);
- (2) Additions and alterations to such development that lead to a 50% or more increase in floor area for the development; and/or
- (3) Additions and alterations to such development that costs 50% or more of the market value of the existing structure before construction. Changes to floor area and individual major structural components and the costs of such changes are measured cumulatively over time starting from January 1, 1977, with deduction for inflation and depreciation (i.e., 50% in 1977 dollars less depreciation).

Scenic Resource. Aspects of the natural and built environment identified in Chapter 3: Visual and Scenic Resources of this Land Use Plan that contribute in a positive manner to Eureka's unique sense of place.

Shoreline. Intersection of the ocean or sea with land; the line delineating the shoreline on National Ocean Service nautical charts and surveys approximates the mean low water line from the time the chart was prepared.

Shoreline Protective Device. Constructed features such as seawalls, revetments, riprap, earthen berms, cave fills, deep piers/caissons, and bulkheads built in a way that protects land or structures or other features against sea level rise, erosional forces and other coastal hazards.

Soft Shoreline Protective Devices. Types of shoreline protection that use natural or "green" infrastructure such as beaches, dune systems, wetlands, and other systems to buffer coastal areas; may include strategies such as beach nourishment, dune management, and living shorelines.

Streams. Streams in the coastal zone, perennial or intermittent, which are mapped by the

United States Geological Survey (USGS) in the National Hydrographic Dataset. Includes streams and waterways governed by the Arcata Creeks Management Plan, as amended, including McDaniel Slough, Gannon Slough and Butcher Slough. This definition differs from the definition on the Land Use Code.

Tidelands. Lands located between the lines of mean high tide and mean low tide.

Vertical Access. A recorded dedication or easement granting to the public the privilege and right to pass and repass over dedicator's real property from a public road to the mean high tide line. Vertical accessways should be used for pass and repass and passive recreational use, unless specified otherwise.

Visitor. Any person visiting the coastal area for leisure and/or recreational purposes. Visitors to coastal areas include out-of-town guests and Arcata residents residing in locations outside of the coastal zone.

Visitor-Serving Facilities. Any land use that serves a visitor as defined by this Local Coastal Element. Visitor-serving facilities include restaurants, cafes, shops, hotels and motels, parks, trails, recreational facilities, leisure activities, and entertainment attractions.

Watercourse. Natural or once natural flowing (perennially or intermittently) water including rivers, streams, and creeks. Includes natural waterways that have been channelized, but does not include manmade channels, ditches, and underground drainage and sewage systems.

Wetlands. Lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.