

## ***PUBLIC FACILITIES & INFRASTRUCTURE ELEMENT***

### **2.10 INTRODUCTION**

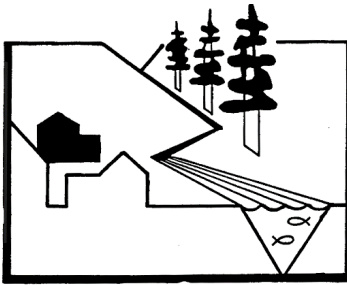
The Public Facilities and Infrastructure Element covers: Water Supply and Delivery; Wastewater Collection, Treatment, and Disposal; Stormwater Management; Integrate Waste Management; Educational Facilities; and Community Facilities. Policy addressing these topics is included in this section. There are many other kinds of infrastructure, physical and social, that this element does not address. See the Parks and Recreation Element, Open Space and Resource Conversation Element, and Health Element for infrastructure-related material more specific to those topic areas.

**Overview of Arcata's Water Supply and Delivery System.** Community water systems divert free-flowing and subsurface water sources for domestic, commercial and industrial uses. The City of Arcata recognizes that water and other natural resources are vital to the community, and also must be used efficiently and conserved. The City provides economic incentives and educational materials for water conservation, and also integrates water reclamation with wastewater treatment at the Arcata Marsh and Wildlife Sanctuary.

The City of Arcata uses a system of trunk lines and mains, above ground water tanks, and booster pumps to deliver potable water to residents, businesses, industry, and other facilities within the City's Urban Services Boundary. The City water supply, drawn from Ranney subsurface collectors located in the bed of the Mad River, is provided by the Humboldt Bay Municipal Water District, which pumps, treats, and sells the water to the City. The City's Urban Water Management Plan defines water sources, conservation measures, usage projections and shortage contingencies. In addition to the existing Mad River water source, the Management Plan also identifies a moderately deep groundwater aquifer in the north Arcata area as an additional water source. The City's Urban Water Management Plan addresses the function and capacity of the water system, including equipment efficiency and life expectancy, water storage, pumping, storage, and fire flows.



### **Overview of Arcata's Stormwater and Wastewater Collection and Treatment Systems.**



Arcata's best known public facility is the Arcata Marsh and Wildlife Sanctuary (Wildlife Sanctuary) where municipal wastewater is treated and re-used for wetlands, and related wildlife habitat. The Wildlife Sanctuary complies with North Coast Regional Water Quality Board and California Coastal Zone Wetlands Enhancement Program policies and standards. But more importantly, the Wildlife Sanctuary employs natural systems as part of the wastewater treatment system to enhance water quality before final discharge to Arcata Bay while providing water reuse to support beneficial uses associated with

constructed freshwater wetlands. Arcata's wastewater treatment system uses traditional mechanical treatment systems, oxidation ponds, and treatment wetlands to purify the city's wastewater. The treated wastewater effluent then flows through three enhancement wetlands in the Wildlife Sanctuary, where natural processes further polish the effluent before it is disinfected and released into Arcata Bay. Stormwater ponds, distinct from the enhancement wetlands, provide habitat related benefits separate from the enhancement wetlands. The wetland habitat attracts more than 200 species of birds, as well as other species. The City has a Wastewater Treatment Facility Plan to guide the rehabilitation and upgrade of the treatment system and enhancement wetlands to meet up to date regulatory requirements.



The City also manages a stormwater drainage system; it has a Drainage Master Plan and Stormwater Management Program to guide management practices of the system.

The Drainage Master Plan includes a hydrological analysis, drainage management alternatives, a capital improvement program, needs-assessment and financial summary, and a recommended operational plan. The Plan's objectives are to: 1) identify and quantify the existing stormwater and drainage system, including channels, wetlands, creeks, culverts and pipes in order to determine the available

capacity of the system, and 2) identify design, maintenance, and repair alternatives to improve the capability of the system.

The Stormwater Management Program was developed in 2005 to comply with the City's Municipal Separate Storm Sewer System (MS4) Permit (Water Quality Order No. 2003 – 0005 – DWQ), which regulates stormwater runoff within City limits. As part of the MS4 Permit, the City was required to develop a Storm Water Management Program in 2005 that included a variety of measures to reduce pollutants discharged into receiving water. The program continues to apply, and has been augmented through the City's compliance with the Phase II MS4 Permit (Water Quality Order No. 20913-0001-DWQ) that was issued by the State Water Resources Control Board in 2013.

**DRAINAGE MASTER PLAN MANAGEMENT GOALS**

- Minimize increases in the volume and the flow of stormwater runoff associated with new development so as to minimize an increase in the hazards and the costs associated with flooding.
- Minimize the erosion potential from a development or construction site so as to prevent deposition of sediment into streams and other receiving water bodies.
- Maintain the integrity of stream hydrology by preventing stream channel erosion so as to sustain the hydrologic functions of streams.
- Reduce the pollutant load in stormwater runoff from developing and urbanizing areas so as to preserve the natural biological functions of streams and other receiving water bodies (and flood management and stream habitat quality)
- To the extent practical, acquire easements and properties necessary for effective drainage management.

**Overview of Arcata's Educational and Public Facilities.** The educational opportunities available in Arcata include public and private schools for kindergarten through twelfth grades, vocational training programs, and Cal Poly Humboldt. These facilities have been integrated into the community and represent an important facet of Arcata's identity as a place to live, work, and learn.

There are three public school districts (Pacific Union, Arcata, and Jacoby Creek Elementary School Districts) and several private schools that provide kindergarten through eighth grade education. High school education is provided by the Northern Humboldt Union High School District, which also serves the community of McKinleyville to the north. The College of the Redwoods Community College, located approximately fifteen miles south of Arcata, offers occupational, transfer and Associate degree programs.

Cal Poly Humboldt, the northernmost of California State University's system of twenty-three campuses, offers undergraduate and graduate degrees in more than fifty subject areas. The University also offers cultural activities, music, art, theater and athletic events that are open to the community.

Public facilities offer locations for community interaction and events, ranging from community-wide celebrations to group meetings, instructional classes, and weddings. The City has enclosed spaces such as the Community Pool, Community Center, City Hall, schools, and places of worship. The City also has twenty-four separate parks including Redwood Park, the Marsh and its interpretive center and the Arcata Ballpark. Collectively, they provide gathering places for all manner of social, cultural, political, recreational, religious, educational, and entertainment events. Their physical form and design are also important in representing recognizable features that strengthen community identity. Arcatans have come to recognize that their public facilities are important components of community character.

**Overview of Arcata's integrated waste management program.** Arcata residents have a long-standing tradition of active commitment to resource conservation. Being far from the

production centers of consumer goods, local indigenous peoples and the City's early settlers were resourceful and "made do" with what they had. The civic and church-led drives for scrap metal and newspapers during WWI and WWII, and the youth and volunteer drives of the 1950s and 1960s set the stage for the citizen recycling activism following Earth Day 1970.

Over the years the City's role in waste prevention, waste disposal, recycling, and composting components of waste management has shifted from facilitative to managing contracts for collection and processing of solid waste and recyclable materials, composting organic materials, and public education responsibilities.

The State of California has an extensive history of solid waste laws resulting in significant waste-related legislation. In 1989, the State passed Assembly Bill (AB) 939, requiring every city and county in the State to develop an integrated waste management planning document called a Source Reduction and Recycling Element. AB 939 and its accompanying regulations specified the content for the City's Source Reduction and Recycling Element and required a detailed plan for achieving "landfill diversion" goals of 25% by 1995, and 50% by 2000. In 2017, the City adopted a Zero Waste Action Plan that built upon the Source Reduction and Recycling Element, with a goal of achieving 90% landfill diversion by 2027. The Zero Waste Action Plan included guiding principles, goals, and near-, mid-, and long-term implementation programs.

The City developed integrated waste management goals from the Source Reduction and Recycling Element, as well as a list of goals from the City's Zero Waste Action Plan, which are summarized as follows:

**ARCATA INTEGRATED WASTE MANAGEMENT GOALS:**

1. Reduce the quantity of waste generated.
2. Educate Arcata residents to reduce, re-use, repair, compost, and recycle.
3. Maximize public involvement.
4. Minimize negative environmental impacts of solid waste management.
5. Increase economic incentives for source reduction, re-use, repair, composting, and recycling.
6. Improve measurement and standardize accounting of source reduction, re-use, composting, recycling, waste hauling, and disposal activities to increase knowledge and create a database for long term use.
7. Integrate source reduction, re-use, repair, composting, and recycling programs into all City activities.

**ZERO WASTE ACTION PLAN GOALS:**

1. Zero waste public education will create behavioral change and a citywide zero waste culture.
2. City operations and policies will integrate zero waste strategies.
3. Waste prevention is Arcata's top priority for sustainable materials management.
4. Materials reuse is Arcata's second priority for zero waste strategies.
5. Recycling drop-off and collection options are fully used by residents.
6. Increase effective and efficient food and organics waste prevention and reuse options.
7. Reduce construction and demolition waste and promote materials reuse.
8. Zero waste and recycling market development is an integral component of local economic development.
9. Support State and Federal legislation that results in waste reduction in rural communities and Arcata.
10. City will work cooperatively with strategic partners and key stakeholders to accomplish ZWAP goals.

Building on AB 939, AB 1826 became effective on January 1, 2016 and required businesses and multi-family complexes (with 5 or more units) that generate specified amounts of organic waste (compost) to arrange for organics collection services. On January 1, 2022 the requirements for AB 1826 were eclipsed by those of SB 1383.

The most recent major waste-related legislation is SB 1383, which was signed by Governor Jerry Brown in September 2016 and addresses short-lived climate pollutants. The final implementing regulations were adopted in November 2020 and require a 50% reduction in the level of statewide disposal of organic waste from the 2014 level by 2020 and a 75% reduction in the level of statewide disposal of organic waste from the 2014 level by 2025. Included in the regulations is a goal of rescuing at least 20% of currently disposed edible food. SB 1383 is the largest overhaul of the State's solid waste and recycling structure in over 30 years and requires significant action by local jurisdictions, including the City, residential and commercial organics generators, haulers, and facilities to reduce organics disposal.

SB 1383 includes requirements within six main categories:

1. Provide organics collection services to all residents and businesses
2. Establish an edible food recovery program
3. Conduct education and outreach to the community
4. Procure recyclable and recovered organic products
5. Secure access to recycling and edible food recovery capacity
6. Monitor compliance and conduct enforcement

### **Guiding Principles and Goals.**

- A. Provide an adequate water supply and delivery system for day-to-day and emergency needs.
- B. Maintain the Arcata Marsh and Wildlife Sanctuary as an exemplary model of how natural systems can be effectively and efficiently used to treat and reclaim wastewater.
- C. Utilize natural systems and processes for managing stormwater.
- D. Advance waste diversion goals set forth in state mandates and the City's Zero Waste Action Plan.
- E. Promote lifelong learning by supporting educational facilities and programs at all levels.
- F. Recognize that public facilities are gathering places for social, cultural, political, educational, and entertainment events and celebrations, and that these facilities are important components of the community's identity. Protect public civil and Constitutional rights in Arcata's public sphere, and especially on City property and public rights of way, and in any facility that receives City support.

## 2.11 POLICIES

The Public Facilities and Infrastructure Element contains the following policies:

- PF-1 Water Supply and Delivery
- PF-2 Wastewater Collection, Treatment and Disposal
- PF-3 Stormwater Management
- PF-4 Educational Facilities
- PF-5 Community Facilities
- PF-6 Integrated Waste Management

### POLICY PF1-1 WATER SUPPLY AND DELIVERY

**Objective.** Manage the City's potable water resources to ensure adequate quantities for community use, to promote water conservation, to maintain water quality, and not to deplete source supplies.

PF-1a **Water supply.** Surface and subsurface water quantities that supply the City are dependent on rainfall and adequate upstream storage. The City shall continually monitor the water quantity and quality in its system and adhere to the Humboldt Bay Municipal Water District's rationing system to ensure that adequate supplies reach all users.

PF-1b **Capacity and management of City water delivery system.**

The City shall update its Urban Water Management Plan, at least every five years, to maintain current projections, management, and contingency programs for water delivery. The City water system shall not be extended beyond the Urban Services Boundary (except as provided for in Policy GM-4b of the Growth Management Element).

The City shall continue to assess through its Capital Improvement Program needed water delivery system improvements and storage capacity to meet demand and capacity to respond to emergencies including fire and disruption in water service from Humboldt Bay Municipal Water District.

PF-1c **Water conservation.** The City shall use a combination of economic incentives, educational programs, and auditing to promote water conservation and shall remain in compliance with Humboldt Bay Municipal Water District policy regarding its Five-Stage Water Rationing System.

Water rates will continue to be higher for consumption above baseline usage. Information about conservation devices such as flow restrictors, and practices such as off-peak irrigation, will be made available to the public. Building and site development

permits that require connections to the City's water system shall incorporate water conservation design features and best management practices.

The City shall also implement water conservation measures through the water, wastewater, and drainage master plans, and through leak detection and inflow and infiltration (I/I) reduction programs.

In response to water shortages, the City will work cooperatively with the regional water supplier and the supplier's other municipal customers to implement an effective water shortage contingency plan that defines response actions based on the severity of the water shortage. End use prohibitions shall be determined based on current conditions, recommendations of a regional task force, and historic water use data and trends, and will be considered for mandatory penalties, charges and other escalating enforcement actions including education and outreach, issuing a verbal/written warning, penalty assessment, and water service termination. The City may consider imposing sharply graduated excessive use rates and/or excessive use fines, additional forms of water rationing, warnings, and physical flow restrictions to water users who fail to respond to less severe sanctions.

**PF-1d Water quality.** The City shall perform periodic testing and, if necessary, treatment of its domestic water supply to ensure that it meets all state and federal safe drinking water standards, as required by the federal safe drinking water act.

**PF-1e Water Loss.** The City shall perform annual water loss audits to identify and better understand the type of and quantity of water losses occurring in the water distribution system. The City shall ensure that it meets any water conservation/water loss standards promulgated by the State Water Resources Control Board.

## **POLICY PF-2 WASTEWATER COLLECTION, TREATMENT, & DISPOSAL**

**Objective.** Collect and treat wastewater to achieve safe water quality standards, utilizing the City's internationally renowned marsh treatment facility.

**PF-2a Capacity and management of City wastewater collection system.** The wastewater collection system is designed to transport community sewage to the treatment plant. The City shall update its Sewer System Management Plan at least every five years, to maintain current projections, management, and contingency programs for wastewater collection. The Plan shall identify needed collection system improvements and anticipated extensions, so that they can be budgeted for in the City's Capital Improvement Program. The City shall continue to monitor groundwater infiltration and surface water inflow (I/I) and take necessary action to ensure that these sources do not cause the collection system or the treatment plant to exceed capacity. The City shall also consider adopting building and land use code policies that provide incentives for design, operation, and technology for buildings and sites to minimize wastewater as well

as stormwater loads. The City wastewater collection system shall not be extended beyond the Urban Services Boundary except as provided in Policy GM-4b.

- PF-2b **Arcata wastewater treatment system.** The City shall continually review and update its Arcata Wastewater Treatment Facility Operations and Maintenance Manual, at least every five years, to evaluate the entire system; reflect any changes in treatment standards; ensure wastewater treatment is meeting current standards; verify that there is adequate treatment system capacity; and ensure adequate water flows to maintain habitat. The City shall ensure ongoing treatment system planning and investments are consistent with mid- and long-range climate adaptation goals, which balance preserving the City's existing investments with habitat restoration and sea level adaptation priorities. Goals, priorities, planning assumptions, and the best available science on which they are based, shall be reviewed publicly through City committees and the Planning Commission at the discretion of the City Council.
- PF-2c **Protecting, improving and restoring water quality:** Protecting surface and ground water quality, preventing water pollution, restoring water quality in waterways and wetlands within the City and in receiving waters of California and the United States shall guide design, construction, and operation of the City's water management infrastructure. The City shall use necessary resources to comply with State Regional Water Quality Control Board wastewater treatment and discharge standards. The City shall regularly test its wastewater discharges and make necessary adjustments in treatment processes to ensure that effluent meets the State Regional Water Quality Control Board and National Pollution Discharge Elimination System (NPDES) permit standards.
- PF-2d **Composting and beneficial reuse of biosolids and other system byproducts.** The City includes biosolids in compost processed at the treatment plant. The City uses this composted material as a soil amendment. The City shall continue this practice as an efficient means of recycling treatment plant by-products and shall investigate the possibility of selling excess compost to generate revenue. This requires the City to protect the quality of its sludge by implementing an industrial and high-volume discharger wastewater pre-treatment program. (See Policy PF-2g Source Control Program, below.)
- PF-2e **Treatment of wastewater from other communities.** The City accepts for treatment wastewater from the Fieldbrook Glendale Community Services District. This practice may continue as long as there is adequate treatment system capacity. The City shall not enter into any new agreements for processing wastewater from other communities, nor shall the City accept additional loadings from any connection from other communities through the Fieldbrook Glendale system.
- PF-2f **Maintain the Joint City/ Cal Poly Humboldt Wastewater Utilization Program.** Recognize that Cal Poly Humboldt faculty and students were instrumental in the design, testing, and development of the Arcata Marsh and Wildlife Sanctuary. The City and the



University jointly participate in a wastewater utilization program, which provides ongoing research projects for students and faculty studying wastewater, stormwater, and water quality issues. The City and University maintain an agreement to operate the program. The City shall renew the program with the University when the current agreement ends, and should collaborate with Cal Poly faculty in seeking funds for future research.

**PF-2g Source Control Program.** The City shall maintain a source control and pretreatment program that provides the legal authority to regulate non-domestic sewer use to control discharges of industrial waste. The source control and pretreatment program shall include legal authority, local limits, pretreatment permitting, and an enforcement response plan.

### **POLICY PF-3 STORMWATER MANAGEMENT**

**Objective.** Implement the City's Drainage Master Plan and abide by the MS4 Permit to utilize natural drainage systems; minimize increases in stormwater runoff, flooding, and erosion; maintain the integrity of stream hydrology; and reduce pollutant loads.



**PF-3a Utilization of City streams and watercourses as natural drainage systems.**

Arcata's network of creeks provides a natural drainage system, however, this system is very susceptible to damage from urban pollutants carried by stormwater runoff, and from drainage facilities that alter creek flows and natural functions. The City shall utilize creeks for urban drainage only when the basic natural functions of the creeks will not be degraded.

**PF-3b Control of stormwater runoff, flooding, and erosion.** Stormwater runoff, especially at peak flows, can cause significant flooding and erosion if adequate precautions have not been taken. As stated in the Drainage Master Plan, the City shall manage the storm and surface water system in Arcata to maintain a hydrologic balance in order to protect water quality, prevent property damage, provide for the safety and enjoyment of citizens, and preserve and enhance habitat and sensitive areas.

**PF-3c Stormwater quality.** Implement the City's Phase II MS4 Permit to reduce the discharge of pollutants to the maximum extent practicable and protect water quality. Manage surface water controls, facilities such as detention basins and natural infiltration areas, and education programs to protect surface and ground-water quality.

**PF-3d City drainage system.** The City shall take a comprehensive approach to drainage system management in order to effectively control the quantity of stormwater runoff, protect

water quality, and reduce potential flood damage from peak flows. As stated in the City Drainage Master Plan, the City shall gradually expand the City managed drainage system to:

1. Continue maintenance of all drainage facilities within public right-of-way, regardless of size.
2. Extend responsibility onto private property only when permanent easements are dedicated or otherwise available from the private property owner, and need is established based on technical criteria.
3. Define service limits upstream of the City as the point at which runoff from a publicly (not County) dedicated street enters the drainage system, or when a drainage feature needs repairs/improvements which have public benefits that exceed the cost of said repairs/improvements.

**PF-3e Easements and properties for drainage management.** The City shall secure the easements and properties necessary to complete and maintain the drainage system identified in the Drainage Master Plan.

#### **POLICY PF-4 EDUCATIONAL FACILITIES**

**Objective.** Value Arcata's educational institutions and facilities as keys to achieving the high educational standards that will lead to prosperity and community wellbeing. Partner with schools and the University in support of Arcata's future prosperity, and our diverse and tolerant cultures. Seek the cooperation of Arcata's educational institutions to achieve City goals. Identify student enrollment increases, based on the projected future population of the City, and coordinate with local school (public and private) districts, and other education providers to maintain and improve educational facilities and services. Coordinate with Cal Poly Humboldt to project demand for City services and facilities based on anticipated increases in enrollment and employment. .

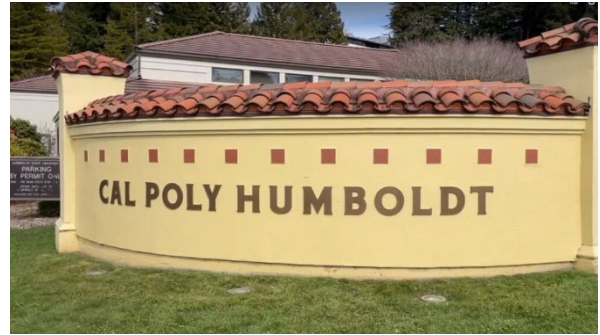


ARCATA HIGH SCHOOL

**PF-4a Coordination with Arcata, Pacific Union, and Jacoby Creek school districts, the Northern Humboldt Unified High School District, and Charter School Operators.** The City shall provide demographic information to assist the School Districts and charter schools in projecting future student enrollments. The City shall encourage the school districts and charter schools to expand existing schools rather than designating new sites for this purpose. Public and charter schools are allowed in all residential zones, in the Gateway Area, and in Public Facilities zoned parcels.

**PF-4b Coordination with private and specialized education providers.** The City shall accommodate providers of private, vocational, and specialized education that fills an identified community need, when they desire to locate in the City.

PF-4c **Coordination and development review with Cal Poly Humboldt.** The City shall designate at least one member of the City Council as liaison to Cal Poly Humboldt and request that the designated Council member be appointed to the University President's Advisory Council.



PF-4d **Joint use of school facilities for community events and recreation.** School facilities are primary locations for neighborhood level events and recreational activities. The City, school districts, and community organizations shall develop and maintain partnerships for the joint use of school facilities.

**Figure PF-a City of Arcata School Districts**

**POLICY PF-5 PUBLIC FACILITIES**

**Objective.** Provide adequate facilities for services and programs administered by the City and other public service providers, including City administrative and meeting facilities (City Hall), police and fire departments, libraries, and community centers.

**PF-5a Facilities for community service and private organizations.**

Community service organizations, as well as non-profit and private organizations serve an important and vital role in the health of our community and offer shelter, assistance, training and other human services. These organizations also offer places for religious, cultural, social, entertainment and recreation activities. The City shall allow facilities, operated by community service and private organizations, to be located in incorporated areas designated General Commercial [C-G]; Central Commercial [C-C]; Residential High Density [RH]; Limited Industrial [I-L]; and Public Facility [P-F]. Operations and functions of these facilities may be subject to a use permit, to be granted and revocable at the discretion of the City.



**PF-5b City Corporation Yard.** The City shall limit development of the Corporation Yard facilities to within existing boundaries, and shall maintain a landscaped screen along the northern and eastern perimeter of the oxidation pond. The City shall continue to explore opportunities for relocation of the corporation yard outside of the tsunami inundation zone and sea level rise vulnerability zone in collaboration with local, state, and federal regulatory and funding partners.

**PF-5c Public libraries and civic facilities operated by other agencies.** The City shall coordinate with Humboldt County to provide public library facilities in the City. The City shall also coordinate with other agencies, such as the Humboldt Transit Authority, to maintain joint-use facilities in the City.

**PF-5d Telecommunications facilities.** Telecommunication towers, commercial dishes and antenna, monopoles, and other transmitting and receiving facilities shall be co-located (grouped together) to minimize the number of facilities and shall be screened to reduce impacts. Placement of commercial (serving more than a single user) telecommunication facilities shall require a use permit and shall be limited to the zoning designations outlined in the City's Zoning Ordinance.

These facilities shall be screened from view and associated equipment rooms and switching devices shall be designed and landscaped to blend with their surroundings. In approving a use permit, findings must be made that the proposed location is the most appropriate for the neighborhood, that the facility is of the minimum size necessary for

the intended use, and that it is set back and screened to reduce visual and safety impacts. Any proposed city construction projects involving trenching shall be reviewed for opportunities to extend high speed networking infrastructure.

**PF-5e Maintenance of City streets and rights-of-way.** The City's streets and rights-of-way shall be adequately maintained for public use. Utilities within rights-of-way shall be placed underground, when feasible, to reduce obstructions such as poles and above-grade utility boxes on sidewalks. Pavement and landscape management programs shall be periodically reviewed and prioritized. The City shall comply with Americans with Disabilities Act requirements as a minimum, and seek to develop City rights-of-way beyond those requirements to safely accommodate mobility by people of all abilities and disabilities.

**PF-5f Energy conservation and decarbonization of City facilities.** Continue reducing City facility energy consumption, including conservation and weatherization measures exceeding building code standards, electric only appliances/ HVAC/ water heating systems and renewable energy sources. Consider Greenhouse Gas Reduction measures in all new facility, renovations, site design and connectivity decisions. Develop and implement City practices to increase electrification equity and affordability for all residents.

## **POLICY PF-6 INTEGRATED WASTE MANAGEMENT**

**Objective.** Reduce solid waste generation at the source; maximize re-use and repair of appropriate items and material; promote composting and recycling; and properly transport non-recyclable solid waste to approved disposal sites. Coordinate with regional bodies to develop effective regional solid waste management systems. Ensure new development is adequately sited and designed, including adequate physical space for solid waste bins.

**PF-6a Source reduction.** Source reduction and materials re-use are the most cost-effective ways to minimize solid waste. Source reduction, or waste prevention, reduces the growing costs of collection, recycling, and disposal systems. Source reduction and re-use shall be promoted through educational programs and incentives. Examples of effective source reduction and re-use activities that shall be promoted are:

1. Backyard composting, landscaping with low water needs, and grass mulching.
2. Purchasing durable re-usable goods instead of disposable items (e.g., cloth diapers, rechargeable batteries).
3. Repairing equipment and appliances.
4. Purchasing goods from second-hand stores, flea-markets and swap meets.
5. Reducing the use of packaging by buying in bulk or purchasing fresh food at farmers markets.
6. Moving away from using paper copies for as much City business as possible by working with electronic mail, forms, and agendas, and re-using of scrap paper if possible, if copying is necessary.

7. Reusable coffee cups and beverages provided in dispensers.
8. Termination of unwanted mail.
9. Incentives such as on-call garbage collection and differential solid waste fees shall be used to encourage source reduction.

PF-6b **Recycling.** The City's recycling program shall continue and expand, unless a more efficient and cost-effective method of collecting and reusing materials is identified. The City shall continue to contract for recycling, collection, and processing, in order to help meet and exceed the State diversion goal. The following programs shall also be promoted:

1. Collection of commercial corrugated cardboard.
2. Collection of office paper.
3. Collection of organic waste.
4. City procurement policies and practices reflecting State requirements for purchasing recycled content paper products.
5. Implementation of density bonuses for buildings designed to promote recycling.
6. The City's active involvement in the Humboldt County Recycling Market Development Zone.
7. Public education to "close the loop" and buy locally-made products with recycled content.
8. Public education on recycling that includes self-haul services for recyclable materials not collected curbside.
9. Support for development and expansion of recycling-based manufacturing.

In order to minimize increases in solid waste volumes and maximize the amount of material returned to productive use, the City shall continue these programs with a target of reducing landfill volumes as specified in the Zero Waste Action Plan.

PF-6c **Collection, transport and disposal of non-recyclable solid waste.** The City shall continue to contract for solid waste and recycling collection, transport, and disposal and will amend relevant Franchise Agreements to include the collection and transport of organic waste in the future to comply with state waste and organics regulations (e.g. SB 1383). The City is supportive of organic processing and will work with regional partners to develop an in-County organics processing facility. The City will provide educational materials about proper use and disposal of household hazardous waste, non-toxic alternatives to household hazardous waste, and recycling of materials (e.g., motor oil, anti-freeze, paint, batteries) in conjunction with local governmental and businesses partners.

## 2.12 IMPLEMENTATION MEASURES

#	IMPLEMENTATION MEASURE DESCRIPTION	RESPONSIBLE PARTY	TIME FRAME
PF -1	<b>Urban Water Management Plan</b> Update the City Urban Water Management Plan, at least every five years, to assess system efficiency and ensure there is adequate storage capacity and fire flow. The Management Plan will also include economic incentives, education programs, and monitoring measures to promote water conservation.	Environmental Services Department	Every five years
PF -2	<b>Wastewater Collection System Maintenance Program</b> Update the City Wastewater Collection System Maintenance Program, at least every five years, to assess collection system capacity and condition, ensure there is adequate treatment and disposal capacity, and recommend improvements necessary to reduce groundwater infiltration and surface water inflow. The Maintenance Program will also include economic incentives, education programs, and monitoring measures to reduce wastewater generation.	Environmental Services Department	Every five years
PF -3	<b>Drainage Master Plan and Phase II MS4 Permit</b> Update the City's Drainage Master Plan to implement current provisions for minimizing increases in stormwater runoff, maintaining the integrity of stream hydrology, and reducing pollutant loads.. Implement the City's MS4 permit requirements through ordinance No. 1463, which sets forth standards for discharge into the stormwater drainage facilities for the City of Arcata, and establishes a stormwater pollution control program in compliance with the Clean Water Act.	Environmental Services Department	Ongoing
PF -4	<b>Zero Waste Action Plan</b> Update the Zero Waste Action Plan , every ten years, to implement the most current technology for reducing solid waste generation at the source, maximize re-use and repair of goods, promote composting and recycling, and properly transport non-recyclable solid waste to approved disposal sites. The Zero Waste Action Plan will also include economic incentives, education programs, and monitoring measures to achieve the City's goal of reducing solid waste volume by a defined amount, and the overall long-term strategy for "zero-waste."	Environmental Services Department	Every ten years
PF-5	<b>Arcata Wastewater Treatment Facility Operations and Facilities Plan.</b> Review and update the WWTP operations and facilities plan periodically to take into account changes associated with sea level rise and climate change.	Environmental Services Department	Ongoing