

Chapter 18. Waste Management

18.1 Introduction

The purpose of this section is to provide consideration of waste management. This section provides a summary of the County's Integrated Waste Management Plan, which is currently administered by the Humboldt Waste Management Authority (HWMA).

18.2 Background

California general plan law requires that the land use element designates areas for various uses, including solid and liquid waste disposal facilities. The California Integrated Waste Management Act (PRC 40000 *et seq*) directs counties to prepare a Countywide Integrated Waste Management Plan. The Countywide Siting Element of that Plan is required to be consistent with the County General Plan.

The County's Integrated Waste Management Plan, which is jointly adopted by the cities, provides for an integrated approach to waste management and includes the following elements:

- Source Reduction and Recycling Elements - addressing county and city program plans for source reduction, recycling, composting, special wastes management, education, funding, and organization
- Household Hazardous Waste Elements - addressing County and city program plans for the safe reduction, recycling, and disposal of household hazardous wastes
- Countywide Siting Element - quantifying landfill capacity needs, identifying general areas of the county potentially suited for landfill development or landfill expansion, and demonstrating a strategy for long-term disposal capacity
- Non-Disposal Facility Elements - identifying long-term recycling, composting, transfer and other facility needs for the county and cities
- Integration Summary Plan - summarizing county wide goals and objectives for integrated waste management, administration of the plan, current waste management practices, future diversion and disposal strategies, education needs and programs financing.

Revisions to the Integrated Waste Management Plan require approval from the California Integrated Waste Management Board. The Plan includes a process and schedule for future review and revision of each element. This approval and revision process may trigger amendments to the General Plan to insure consistency between the documents.

The County is currently (2007) achieving the objectives set in the Integrated Waste Management Plan, including a 58% landfill diversion rate for the unincorporated area (8% above the state mandated rate of 50%).

The County conducted an extensive municipal landfill siting study in the mid 1990's to locate a replacement site for the Cummins Road landfill which was due to close. While the County identified some potentially feasible sites for further study, it determined that it was more cost effective to export to a proven site. The County, through HWMA, currently (2007) trucks its solid waste to a site near Medford, Oregon under a long-term contract. It has a subsequent contract to utilize a landfill located in Anderson, California. Together, the County has committed to contracts which meet its landfill disposal needs over the next 20 years. Consequently, no additional local municipal landfill capacity is expected to be required during the 20 year planning horizon of this General Plan.

Additional waste handling facilities that may be required over the life of this plan include specialized waste handling facilities such as green waste and composting sites, household hazardous waste transfer, and recycling. Such facilities can be accommodated in various general plan land use designations, depending on the nature, scale, and duration of the facility. While not expected, it may also be necessary to consider siting non-municipal solid waste facilities such as woodwaste landfills. Land use clearance standards are included to address that potential need.

18.3 Goals and Policies

Goals

- WM-G1 Establish Comprehensive System.** Establish and maintain a dynamic and flexible system for the management of solid wastes and waste resources which encompasses the storage, collection, transportation, separation, processing, reduction, reuse and repair, recycling, recovery, marketing, and disposal of solid waste and resources which would otherwise become solid waste, on a Countywide basis.
- WM-G2 Protect Environment, Health, Safety.** Protect and improve the County' environment, public health, safety, and economy.
- WM-G3 Reduce Waste.** Reduce the amount and toxicity of waste generated by residents, businesses, industries, and institutions in the County to the greatest degree possible.
- WM-G4 Establish Hierarchy.** Establish an integrated waste management hierarchy consisting of the following: source reduction, reuse and repair, recycling, composting, materials recovery, environmentally safe energy recovery, environmentally safe transformation, and landfill disposal.

- WM-G5 Maximize Achievement of Objectives.** Maximize the achievement of integrated waste management objectives through education, economic incentives and voluntary participation in waste reduction programs.
- WM-G6 Maximize Opportunity to Participate.** Maximize the opportunity for individuals and groups to participate in the planning and the implementation of waste reduction programs.
- WM-G7 Maximize Reuse.** Maximize the use of previously discarded materials as a resource for local businesses and manufacturers.
- WM-G8 Ensure Coordination.** Ensure the coordination of and cooperation with all Federal, State and local programs and regulations.

Policies

- WM-P1 Basic Principles.** The basic principles for program selection include:
- a. achieving the maximum feasible reduction in volume and/or weight of waste requiring landfill disposal;
 - b. maximizing the economic value of materials heretofore discarded; and,
 - c. accomplishing both of the above in ways which protect the quality of the environment and the health and safety of county citizens.
- WM-P2 Target Implementation.** Target program implementation efforts and funding to the greatest concentrations of disposed waste, and to cost-effective programs with the greatest potential for increased waste diversion.
- WM-P3 Support Successful Programs.** Support successful existing programs and diversion activities through increased promotion and technical assistance. Identify, develop, and fund existing programs with the potential to satisfy the requirements of policy guideline WM-P2, above.
- WM-P4 Begin with Easy Programs.** Begin as soon as possible to implement any and all additional programs which may be implemented cost-effectively, easily and safely, which are consistent with IWM guidelines, and which do not adversely affect other existing or planned diversion programs.
- WM-P5 Reduction and Recycling.** Develop and implement programs to increase waste reduction and recycling opportunity for all county residents and all segments of waste generators.
- WM-P6 Implement Sustainable Programs.** Implement programs with the greatest potential to be supported and sustained by residents and businesses.
- WM-P7 Local Level Preference.** Programs should be implemented at the local level whenever possible and cost-effective.

- WM-P8 Joint Facility Planning.** Facilities which are intended to serve all county residents should be jointly planned and implemented by all affected stakeholders. Facilities recommended for inclusion are:
- County disposal facility: local new landfill, expansion, or export;
 - centralized composting facility: materials to be included, size, location, design, and cost; and,
 - household hazardous waste transfer facility; ownership, operation, funding & liability issues.
- WM-P9 Joint Program Planning.** Other Countywide programs and events should be jointly planned and implemented on an as-needed basis.
- WM-P10 Information Sharing.** Providing an opportunity for ongoing dialogue between city and county integrated waste management staff for sharing information and ideas will reduce duplication and increase effectiveness at all levels of government.
- WM-P11 Administrative Structure.** The effective implementation of countywide programs depends upon the development and adoption of a workable administrative and funding structure.
- WM-P12 Illegal Waste Disposal.** Reduce litter and other illegal waste disposal such as automobiles and e-wastes through proactive and innovative programs.
- WM-P13 Participate in Revisions.** The County shall participate in revisions to the Integrated Waste Management Plan lead by Humboldt Waste Management Authority and consider the need to amend this general plan to maintain consistency.

18.4 Standards

This section summarizes the various agency clearances and requirements associated with approval of a solid waste facility¹ project.

Health Department Clearance

- WM-S1** In seeking approval for the construction or expansion of a solid waste facility in Humboldt County, project applicants must obtain a Solid Waste Facility Permit from the Humboldt County Health Department with concurrence by the California Integrated Waste Management Board pursuant to the requirements of the California Code of Regulations, Title 14, Division 7, or successor regulations.
- WM-S2** Prior to submitting application for a Solid Waste Facility Permit, a project applicant must obtain clearances, approvals or permits listed below:

¹ A solid waste facility includes non-disposal facilities such as transfer stations and container sites, and disposal facilities such as landfills, incinerators, or woodwaste disposal sites.

- a. Certification of compliance with the California Environmental Quality Act (CEQA) pursuant to the requirements of the California Code of Regulations Division 6.3.
- b. Land Use approval from the appropriate City or County Land Use Authority (Planning Commission). See County Planning Land Use Clearance section.
- c. Approval from the Northcoast Unified Air Quality Management District.
- d. Approval from the Regional Water Quality Control Board (RWQCB), Northcoast Region. Note that RWQCB approval may require permits for Stormwater Discharges (NPDES) and/or Waste Discharge permits.
- e. Other approvals and clearances such as streambed alteration agreements, Williamson Act Cancellation, Timberland Conversion approval from the Board of Forestry, a Section 404 permit from the Army Corps of Engineers if wetlands are involved, and any others which are required as a result of site design or facility location.

WM-S3 Any proposed new or expanded solid waste facility must be in conformance with the County Integrated Waste Management Plan. To be in conformance with the Integrated Waste Management Plan, the facility must be described in either the Countywide Siting Element or the appropriate jurisdiction's Non-Disposal Facility Element(s).

Project shall meet the requirements of the Resources Conservation and Recovery Act (RCRA) Subtitle D; the California Integrated Waste Management Board regulations [California Code of Regulations (CCR), Title 14, Division 7]; requirements of the State Water Resources Control Board regulations, (CCR, Title 23, Division 3), or successor regulations as applicable.

County Planning Land Use Clearance

- WM-S4** Prior to approval of a solid waste disposal project, the applicant shall submit a solid waste disposal initial study plan which includes:
- a. Estimations of the quantity of waste to be disposed of and the area and volume required for disposal, on an annual basis, including 5 and 10 year projections;
 - b. Description of toxicity and harmful effects on people, plants, and animals;
 - c. Site alternatives and description of impacts associated with each;
 - d. Relationship of the disposal project to other disposal projects in the area;
 - e. A monitoring and mitigation program to insure the prevention of damage to soil, plant and animal life, and surface and subsurface water supplies;

f. A post closure plan including descriptions of recontouring, revegetation, visual buffering during and after the project, and a list of possible future uses for each of the sites considered, and a list of uses which would not be possible after project completion; and

g. Assessment of conformity with the Integrated Waste Management Plan.

WM-S5 Any solid waste disposal project is to conform to the Integrated Waste Management Plan.

WM-S6 Projects should take place at approved disposal sites, as designated in the Integrated Waste Management Plan. New wood waste, sludge, and non-toxic drilling muds projects may, however, be allowed by conditional use permit in any land use designation, except Residential, if the least environmentally damaging alternative is selected. Such projects (those not designated in the Integrated Waste Management Plan) in agricultural and timberland designations shall be limited to non-toxic materials that would be compatible with continued agriculture or timberland use.

WM-S7 Projects shall demonstrate consistency with this General Plan.

18.5 Implementation

WM-I1 Implementation is provided through the Integrated Waste Management Plan administered by Humboldt Waste Management Authority.

NOTE: The section below will fall out of the ‘final’ version of the General Plan when it is adopted. It is provided here to assist the review process.

3.4 Staff Analysis and Alternatives

Background

Section 18.2 of the Chapter text provides background for this topic, based on an Integration Summary Plan provided by Humboldt Waste Management Authority (HWMA). The Humboldt Waste Management Authority was established through a joint powers agreement among the County and participating cities within the County (all but Fortuna) to provide a coordinated implementation of the California Integrated Waste Management Act (PRC 40000 *et seq*).

The Implementation measures, which have been incorporated by reference in Section 18.5 of the Chapter text, are summarized as Attachment A, Integrated Waste Management Plan – Implementation Summary, for ease of reference and to provide additional background.

Staff Recommendations

The policies of this chapter come out of the Integrated Waste Management Plan (IWMP) adopted by the County in 1995. Since the Humboldt Waste Management Authority has assumed the lead role in administering the Plan and overseeing revisions to it, staff is recommending that substantive revisions be deferred. The choices for this chapter are largely a matter of how the Integrated Waste Management Plan is summarized.

Two changes to the 1995 Integrated Waste Management Plan are being recommended in this draft. The first is two policy additions, **WM-P12** regarding illegal waste disposal which has been problematic; and, **WM-P13** which helps ensure consistency between the IWMP and this General Plan. HWMA staff agreed these would be good additions. The second change is the deletion of the siting criteria and search area overlays for municipal solid waste landfills. As noted in the background text, due to the long term contracts with out of County landfills, no additional local landfill capacity is needed. Both staff of Public Works and HWMA thought that if in the event such a facility were needed locally, the siting criteria and search areas would be out of date and require amendment. Standards were retained to accommodate other solid waste facilities such as woodwaste disposal areas.

Alternatives

Because HWMA staff have recommended that their agency take the lead role in developing and considering revisions to the IWMP, planning staff have not developed a full set of

alternatives. The policy addition of **WM-P12**, regarding illegal waste disposal, addresses an issue that has been before the Planning Commission and Board of Supervisors in a number of cases. An example of one type of program is the junk car amnesty programs that Rio Dell and Eureka have assisted with where junk cars can be dropped off at a participating auto wrecker without charge. Another alternative regarding junk cars would be to amend the zoning ordinance to add auto wrecking yards as a conditionally permitted use to the Heavy Industrial (MH) and possibly the Light Industrial (ML), as is done in the coastal zoning ordinance.

The policy addition of **WM-P13** helps ensure consistency between the Integrated Waste Management Plan (IWMP) and this General Plan.

Another choice for summarizing the IWMP could be to include additional background information and/or include the IWMP Implementation directly rather than by reference. The Implementation that could be included as plan text is included as Attachment A, Integrated Waste Management Plan – Implementation Summary.

Preliminary CEQA Analysis

The mandates of the California Integrated Waste Management Act (PRC 40000 *et seq*) provide a legislatively directed set of mitigation measures in response to the significant impacts of waste management. This proposed general plan essentially incorporates the locally adopted Integrated Waste Management Plan (IWMP) by reference.

The more compact development patterns of *Alternatives A and B* will increase the feasibility and efficiency of waste collection and recovery processes over the more dispersed development patterns of *Alternatives C and D*.

Plan Alternatives Comparison Chart

In lieu of a comparison chart, the existing text from the Framework Plan is provided as a basis of comparison in Attachment B. The Framework Plan language of the Integrated Waste Management Plan, drafted in 1993, became outdated upon the adoption of the final Integrated Waste Management Plan (IWMP) in 1995. The Framework Plan language no longer represents a valid policy choice.

Attachment A

Integrated Waste Management Plan Implementation Summary

This section includes a description of the diversion programs selected in each Integrated Waste Management Plan component, and a list of the non-disposal facilities and the jurisdictions they serve.

This section also identifies and describes those programs that could be coordinated on a countywide basis.

Source Reduction and Recycling Element (SRRE) Implementation Summary

A. Current and Planned Diversion Programs:

Each city and the unincorporated area of Humboldt County have begun implementation of programs included in the SRRE and HHWE submitted to the state. Those programs are described below:

UNINCORPORATED HUMBOLDT COUNTY

1. SOURCE REDUCTION

a. **Rate Structure Modifications** - Short-term equalization of per unit collection rates has been implemented. Medium term evaluation of the use of higher rates for successive units will be conducted.

b. **Education/Public Information** - The County's annual waste awareness media campaign targeted Waste Prevention during 1994. This campaign included production and airing of a video entitled "Understanding Waste Prevention." Source reduction information is included in all printed materials distributed to the public. Current activities include development and distribution of a "Reuse and Repair" Guide, and a training video for building material salvage.

c. **Commercial Waste Audits** - The County has produced and distributed a do-it-yourself Waste Audit Guide, entitled "Cut to the Bottom Line", to help local businesses target, reduce, and recycle waste.

d. **Backyard Composting** - The waste awareness campaign theme for 1995 will be "Back to the Earth - Composting Organic Materials". Planned activities include the distribution of low-cost compost bins to participants in the County's pilot curbside collection program, sponsorship of a contest and survey for students at County schools, and preparation/distribution of "worm composting" guides for both students and adults. Previously implemented activities include the distribution of compost bins to selected demonstration projects and schools throughout the County, as well as the printing and distribution of the composting and grasscycling brochures developed by the CIWMB.

e. **Materials Exchange** - The County's Materials Exchange program consists of a public-private partnership between the Integrated Waste Management Program and a local advertising publication, the Tri-City Weekly Advertiser. Free listing space is provided, and the County pays for the cost of a 2" by 1 column display heading. The materials exchange is promoted through the recycling hotline, and through inclusion in printed materials.

2. RECYCLING

a. **Neighborhood Drop-off** - During 1992-94, Humboldt County operated a rural drop-off facility grant program, which expanded or established twelve recycling drop-off sites. Although all programs are still

operating, oversight and reporting has been difficult. At least four additional sites will be implemented in the medium term.

b. Commercial Collection - The two largest concentrations of population in the unincorporated county, other than city planning areas, are McKinleyville and Garberville/Redway, both of which are currently served by commercial curbside collection programs. Materials collected include newspaper, corrugated cardboard, bottles and cans. City planning areas in the County receive services through the franchised waste haulers, although this service is not part of existing franchise agreements. Under local ordinance, businesses may contract privately for the collection of recyclables, although these collectors are regulated by the County.

c. Curbside (pilot) - During 1995-96, five areas of the unincorporated County, with varying service providers and demographic compositions, will participate in a pilot study to measure and evaluate the effectiveness of curbside collection in contributing to waste reduction goals. Program objective will be to determine the ability of curbside collection, when combined with waste prevention education and backyard composting, to allow one-can-per-week residents to reduce from 32 to 20 gallons of disposed waste. Results will be evaluated, and increased implementation of neighborhood drop-off locations will occur if curbside collection does not meet adequate levels of participation and diversion.

d. Market Development Programs - Humboldt County has served as the lead agency in implementing the Recycling Market Development Zone program. Other programs implemented include -

- an all-day workshop on local secondary materials business development;
- a local materials exchange program in conjunction with a weekly advertising newspaper;
- a "buy-recycled" public education campaign, including awards;
- a local recycled-content and recycling products show;
- a survey of local collectors and processors and publication of materials guide;
- a publicity project to advertise market development zone incentives;
- a survey of local manufacturers to determine the potential for the substitution of recycled materials in existing production processes:
- a quarterly newsletter to recyclers, economic development organizations, manufacturers, and other potential participants in the development of local markets for materials;
- a conference on the development of regional markets for recycled materials;
- a procurement policy for County offices and departments; and
- a training seminar on building demolition for reuse

Currently, efforts are underway to more fully incorporate the recycling market development program into the mainstream economic development community, in order to maximize the potential economic benefit to the community, as well as to maximize the potential to cost-effectively divert materials from the waste stream.

Future market development activities will be included in the list of programs selected for countywide consolidation.

e. Salvaging at Transfer Stations - Increased emphasis on the collection of source-separated materials, as a means of ensuring highest possible material quality, has largely replaced salvaging efforts to recover materials. However, salvaging continues to be useful in the recovery of metals, appliances, and some corrugated cardboard. Efforts to develop source-separated drop-off of compostable materials and construction/demolition wastes at transfer stations are impeded by lack of available space, and difficulty securing reliable local markets for materials. Once market availability improves, drop-off will be encouraged by the provision of rate incentives for source-separation.

f. School Programs - Technical assistance is provided to schools throughout the county in establishing and expanding recycling programs. Additional assistance to schools is described in the "Education and Information" section.

g. Buy-back/Drop-off Centers - The main area of the county inadequately served through buy-back and drop-off opportunities are the eastern and northern areas, particularly Willow Creek. A medium term priority will be finding ways to meet this need.

h. Seasonal/Special Materials - Phone book collection has been conducted for the past four years, but requires increased promotion and coordination to increase success. Selection of this program for countywide coordination should improve performance. Christmas tree collection has also increased since 1990, with most areas of the county provided an opportunity to divert trees from the landfill. Coordination of information has helped increase diversion through this program, although collection of information is hindered by the number and diversity of collection programs. One medium term objective for both programs is to improve reporting.

i. MRF/Mixed Waste Processing (Cont.) - Information gathering continues regarding operating conditions and diversion achievements of existing mixed waste processing facilities. Annual monitoring of progress towards achieving mandated diversion goals will be considered as a measure of the potential need for a mixed waste processing or manual sorting facility.

3. COMPOSTING

a. Yard Waste Drop-off - Opportunity for yard waste drop-off throughout the county is slowly increasing. Several small facilities exist, currently below the regulatory threshold, and accept compostable materials from the public at no charge, or for a small fee. End use for these collected materials varies, including product sales, on-site gardening & nursery use, and use by local jurisdictions. Increasing availability and size of drop-off facilities depends on the establishment of increased processing capability for yard waste materials.

b. Vermicomposting - Small-scale vermicomposting projects are being implemented at schools throughout the unincorporated area, and provide a cost-effective and educational method of diverting food waste and closing the loop. Much of the compost produced by this method is used in on-site gardens. One medium-scale vermicomposter is operating commercially in this area, and has expressed continued interest in expanding his ability to accept and process collected food waste.

c. Salvaging at Transfer Station - Increased collection of source-separated organics will begin as soon as processing capability has been further developed.

d. Centralized Processing Facility - Design and implementation of this program has been selected for countywide consolidation, and will be discussed further in section 5.7 of this chapter.

e. Co-composting; Food, fish, ash - Pilot-phase co-composting is currently being conducted by a local lumber company, and will be evaluated for expansion in the medium term.

4. SPECIAL WASTES

a. Ash Diversion - Virtually all the wood-waste ash landfilled at the time of Humboldt County's baseline waste generation study is now being diverted, an estimated 60,000 Tons per year. Increased disposal costs provided ample incentive to cogeneration plant operators for the development of alternatives uses for this ash, including soil amendments and co-composting feedstock, and water purification. In addition, technological improvements to plant equipment have substantially reduced generated tonnages, and improved ash characteristics for use as a soil amendment.

b. Tire Recycling - Currently, most of Humboldt County's tires are being transported to Shasta County for use as fuel in a cement plant. However, two projects are underway to provide local options for tire diversion. Tire mats will be produced from tire strips, woven together and sold through local distributors. A larger scale project involves the use of baled tires in wall construction, and is currently the subject of a grant application to the state.

c. **Construction/demolition Reduction** - Two programs have been implemented thus far to reduce landfilled construction and demolition materials. Local efforts have focused on increasing the feasibility of salvaging materials from demolition, particularly lumber. Several pilot and training projects have been conducted, and further work to identify barriers to increased salvaging is currently in progress. A training video and guide will be produced. In addition to salvaging activities, substantial quantities of demolition wood-waste are being ground on-site, and sent to cogeneration facilities. Additional options are still needed for recycling sheetrock and concrete. Most recycling equipment for these materials requires larger feedstocks than are available locally in order to support purchase and operation.

d. **Fish** - Some fish waste which would otherwise be unmarketable is being incorporated into a pilot windrow composting operation. This facility has a large enough buffer zone to eliminate potential odor concerns among neighbors.

5. PUBLIC EDUCATION AND INFORMATION

a. **Use of the media** - Humboldt County conducts an annual media campaign, and provides ongoing information, including articles, newsletters, posters, public interviews and public service announcements.

b. **Preparation, distribution and collection of printed information** - Fact sheets, guidelines and handbooks, directories, reports and surveys, are produced and distributed throughout the community.

c. **Other available services** - The recycling hotline handles 5-10 calls per day, on subjects ranging from where how and what to recycle, to information about household hazardous waste. Displays in public places and demonstrations at public events often focus on the annual media campaign theme. The development of waste reduction & recycling programs and educational curriculum packages and field trips for local schools has also been a high priority for short-term implementation, and includes the development and distribution of a video and guidebook for waste reduction activities in the classroom.

d. **Providing technical assistance** - Includes providing recycling outreach services and the development of a resource library, training volunteers in backyard composting, and conducting business and industry workshops and waste audits.

e. **Planning special events and promotional "kick-offs"** - Includes annual awards and public recognition, bonuses and incentives for program participation, and holding contests and competitions to make recycling "fun".

Table 5-1 Summary of Programs Selected in the SRREs								
PROGRAM:	Jurisdictions							
	Arcata	Blue Lake	Eureka	Ferndale	Fortuna	Rio Dell	Trinidad	Unincorporated County
SOURCE REDUCTION:								
Rate Structure Modifications	X		X		X		X	X
Education/Public Information	X	X	X	X	X	X	X	X
Waste Audits			X					X
Backyard Composting	X		X		X			X
Materials Exchange	X							X
RECYCLING:								
Neighborhood/ Drop-off Sites	X	X	X	X	X	X	X	X

Curbside Collection		X	X	X	X	X	X	XP
Commercial Collection	X	X	X	X	X	X	X	X
Market Development Programs	X	X	X	X	X	X	X	X
Salvage at Transfer Stations			X		X			X
School Programs	X	X	X	X	X	X	X	X
Drop-off and Buy-back Centers	X	X	X	X	X	X	X	X
Seasonal/Special Materials	X							X
MRF/Mixed Waste Processing								C
COMPOSTING:								
Yard Waste Drop-off	X	X	X	X	X	X	X	X
Residential Curbside Collection	X		X					
Vermicomposting								X
Salvage at Transfer Station			X					X
Shared Processing Facility	X		X	X		X	X	X
Co-composting								X
SPECIAL WASTE:								
Ash diversion		X						X
Tire recycling	X	X		X	X	X	X	X
Construction/demolition	X		X					X
Fish waste								X
Sludge	X					X		
Appliances	X	X	X	X	X	X	X	X
EDUCATION/PUBLIC INFORMATION:								
Promote Recycling & Composting	X	X	X	X	X	X	X	X
Source Reduction Campaign	X							X
"Buy Recycled" Campaign								X
Waste Reduction in Schools	X	X	X	X				X
Awards Program								X
Information Hotline								X
X = Selected for implementation; XP = Pilot Program Implementation; C = Medium term Contingency								

B. Contingency Diversion Programs:

Contingency programs for all jurisdictions have been indicated in Table 5-1 with the letter "C".

C. Targeted Material Types and Marketing Strategies:

Targeted materials are indicated, for each jurisdiction, by SRRE component. SRREs prepared by most Humboldt County jurisdictions do not provide program-specific information regarding types and quantities of materials to be diverted. This information is provided for each component, rather than each program, so this section has been prepared using this available information.

Marketing strategies are denoted by the following code:

PS = private sector responsibility: (generating business or processing facility)

This marketing strategy is the cornerstone of planned programs in most Humboldt County jurisdictions. Either through reliance on private sector activity, or through the development of public-private partnerships, most jurisdictions believe that the development of long-term stability in recycling markets depends on the private sector for economic viability.

CG = city or county government responsibility:

Government will work with private and non-profit businesses and community organizations to provide technical and financial assistance, ensure adequate supplies of usable, high-quality feedstock, and to support markets by making a commitment to purchase and promote recycled-content, recyclable, reusable, durable and repairable products and materials. In some cases, jurisdictions may provide support for the marketing of materials by guaranteeing "floor" prices for collected materials, or by providing "diversion credits" to reflect avoided disposal costs. Government agencies may also provide public sector markets as a contingency in cases of market instability.

SH = shared responsibility for marketing between private sector and government agency. This identifies materials targeted by the Recycling Market Development Zone for public sector technical and financial assistance, but may include other partnerships as well. In some cases, public agency utilization of materials, particularly compost products, may serve as a market strategy contingency. Although most diversion programs will involve some level of shared responsibility, this notation will be used to indicate programs, which involve some form of agreement, or structured partnership.

The following tables have been set up to help identify both selected programs and targeted materials for each jurisdiction. These tables will be reviewed to determine the potential for implementing countywide or regional marketing strategies.

Source Reduction: Materials diverted through source reduction do not require markets; either materials are not generated at all (reduced packaging), are used on-site by generator (backyard composting), or are re-used outside of the solid waste system (materials exchanges)

Recycling, Composting, and Special Waste: Primary focus in these tables will be on materials diverted through recycling, composting, and special waste diversion programs. In many cases, targeted materials currently are experiencing strong markets, particularly in the areas of paper and metals. These categories will be indicated as **Private Sector (PS) responsibility**. **Public market development** efforts will concentrate primarily on the need to develop markets for plastics, textiles, tires and compost products, and to support and stabilize markets for glass. **Public Sector responsibility** will also include support for "buy-recycled" programs and materials exchanges.

Education and Public Information Programs: Education and information program support diversion through other components, and do not directly result in the need to provide markets for diverted materials. To the degree that education promotes waste prevention and the purchase of recycled-content materials, these programs will help reduce market pressures for diverted materials.

Household Hazardous Waste Collection Element (HHWE) Implementation Summary

A. Planned Diversion Programs:

Each city and the unincorporated area of Humboldt County have begun implementation of programs included in the HHWE. Those programs are described below:

Household Hazardous Waste Collection:

All jurisdictions have designated Humboldt County as the lead agency for the implementation of Household Hazardous Waste collection programs. The County has implemented a collection strategy consisting of periodic (annual) events, beginning in October, 1991, which will continue until a planned temporary storage facility is constructed. Target date for operation of this facility is mid-1996.

Once this facility is operating, the County and Cities will begin development of a mobile collection and outreach program, with collected materials consolidated at the "hub" facility, in order to better serve distant and rural communities.

Household Hazardous Waste Recycling and Source Reduction:

Existing opportunities for recycling of household hazardous wastes include auto batteries and motor oil, and limited recycling of antifreeze. Planned programs to be implemented by the County, to serve all jurisdictions, include the support and development of private sector programs to accept all recyclable materials. Specifically, this includes the development of a latex paint "take-back" program at paint retailers, and the development of increased automotive products recycling - batteries, oil filters, and antifreeze- through local automotive maintenance facilities such as radiator shops and oil change services.

Source reduction programs will include not only information and education to promote safer substitutes and wiser buying habits, including the production of a video to be shown on local television stations, but will also include increased support for paint and materials exchange networking.

Household Hazardous Waste Education:

The County will develop and provide information regarding the reduction, reuse, recycling, and proper disposal of household hazardous waste materials and products. This information will include media campaigns, an information hotline, an education video, and an HHW display, as well as various types of printed materials. Cities will share the responsibility for distributing this information to residents, and will also produce locally-specific program information. The City of Eureka also plans to distribute existing videos, develop and establish a school curriculum for HHW, and to provide information to city residents through the use of utility bill inserts.

Household Hazardous Waste Load Checking:

The existing load checking program at transfer stations, in addition to the efforts of waste haulers to spot check waste at the curb, will be supported and verified through improved documentation, and expanded if necessary.

**Table 5-3
Summary of Programs Selected in the HHWEs**

PROGRAM:	Jurisdictions							
	Arcata	Blue Lake	Eureka	Ferndale	Fortuna	Rio Dell	Trinidad	Unincorporated County
COLLECTION:								
periodic collection events	X	X	X	X	X	X	X	X
mobile collections	C			X	X	X	X	X
transfer station for HHW/SQG	C	X	X	X	X	X	X	X
drop-off for recyclables			X					X
curbside collection	C							
RECYCLING & SOURCE REDUCTION: (other than at collection)								
reduction - see education								
reuse & exchange	X			X	X	X	X	X
paint recycling		X	X	X	X	X	X	X
oil, antifreeze & battery recycling	X	X	X	X	X	X	X	X
EDUCATION:								
media campaign/promotion	X	X		X	X	X	X	X
information hotline		X	X	X	X	X	X	X
safer substitutes & proper disposal	X	X	X	X	X	X	X	X
point-of-purchase information	X		X					X
reuse & recycling information	X	X	X	X	X	X	X	X
HHW display	X	X		X	X	X	X	X
distribute videos			X					
establish school curriculum			X					
utility bill inserts			X					
LOAD CHECKING:								
at the curb	X		X					X
at transfer stations	X	X	X	X	X	X	X	X
improve recordkeeping	X		X					X
mandatory separation	C							
X = current or planned program; C = contingency program								

B. Contingency Diversion Programs:

Contingency diversion programs for all jurisdictions have been indicated in Table 5-3 with the letter "C".

C. Targeted Materials Types and Marketing Strategies:

In most cases, the cities have designated Humboldt County as the "lead agency" for household hazardous waste program implementation, and collection and marketing of recyclable and reusable materials will be the County's responsibility. This will be indicated in Table 5-4 with the initials "HC". Where jurisdictions operate or implement recycling programs, marketing responsibility will be indicated by the initials "CG" (City or County government) or "PS" (Private sector responsibility).

**Table 5-4
Targeted Materials and Marketing Responsibility for HHW**

PROGRAM:	Jurisdictions							
	Arcata	Blue Lake	Eureka	Ferndale	Fortuna	Rio Dell	Trinidad	Uninc. County
COLLECTION: Latex paint Motor oil/antifreeze auto batteries empty cans, as feasible household batteries, as feasible fluorescent tubes, as feasible all materials, as appropriate, for reuse and exchange	HC	HC	HC	HC	HC	HC	HC	CG/PS PS PS PS PS CG/PS
RECYCLING: Latex paint Motor oil Antifreeze Auto batteries	PS PS PS PS	HC	PS PS PS PS	HC	PS PS PS PS	HC	HC	PS PS PS PS
EDUCATION:	Supports diversion & recycling through other programs							
LOAD CHECKING: Transfer stations	Transfer station employees recycle or keep materials salvaged from load checking programs, if materials are usable or recyclable. (PS)							
PS = Private Sector responsibility; HC = Countywide responsibility; CG = Individual Jurisdiction responsibility								

Summary of Facilities Identified in the County Non-disposal Facility Element (NDFE)

The Non-disposal Facility Element for Humboldt County was updated in 2006. It was passed by the County Board of Supervisors on May 2, 2006 and approved by the California Integrated Waste Management Board on June 13, 2006.

Table 1: Unincorporated Non-Disposal Facilities

FACILITY NAME	TYPE	Capacity	DIVERSION RATE	Participating Jurisdictions	LOCATION	Additional Information
Arcata Community Recycling Center: Dual-stream processing facility	Recycling (dual-stream) Processing <i>(not regulated by LEA)</i>	95 tons per day	95% or greater	All local jurisdictions	New Vance Road, Samoa, CA 95564	Fact Sheet 1
Eel River Disposal's Construction & Demolition Facility	Construction, Demolition & Inert debris (CDI)	<175 tons per day	60% or greater	All local jurisdictions; mainly the unincorporated area, Fortuna, Ferndale, & Rio Dell	930 Riverwalk Drive, Fortuna, CA 95540	Fact Sheet 2
Mad River Compost: Greenwaste Composting Facility	Regional composting facility – Phase I - Green Material Compost Operations	15 tons per day	99-100%	All jurisdictions	6360 West End Road, Arcata, CA 95521	Fact Sheet 3
Kernan Construction – Glendale Yard	Limited Volume Inert Debris Type A Processing Operation	<1500 tons per day	0%	All jurisdictions	2350 Glendale Drive, Blue Lake, CA 95519	Fact Sheet 4
	C&D Recycling	None Specified	99-100%			
Grindables Recycling	Small Volume CDI operation	<25 tons per day	99-100%	All jurisdictions	5115 Boyd Road, Arcata, CA 95521	Fact Sheet 5
COUNTY CONTAINER SITES: Alderpoint Blocksburg Carlotta	Limited volume transfer stations;	60 cubic yards or 15 tons per day per facility	COMBINED FOR ALL SITES. 1990: 2772 tons SW 148 ton REC = 5.1% total diversion 1995: 2702 tons SW	Unincorporated only; open to all county residents. Residents from the incorporated cities of Fortuna and Rio Dell contribute 6%	See text, p. 10	Fact Sheet 6

Fruitland Orick Orleans Petrolia Redwood Valley Shelter Cove Shively Whitethorn Willow Creek			268 tons REC = 9% total diversion 2000: 1551 tons SW 677 tons REC = 30% total diversion 2004: 2178.45 tons SW 142.12 tons REC = 6.12% total diversion	and 5% each.		
Humboldt Sanitation	Limited volume transfer operation	60 cubic yards or 15 tons per day	1995: 3900 tons SW 1580 tons REC = 29% total diversion 2000: 5500 tons SW 2550 tons REC = 32% total diversion 2005: 2800 tons SW 4200 tons REC = 60% total diversion	Unincorporated only; includes some waste & recycling from incorporated Arcata, Blue Lake, and Trinidad.	2585 Central Avenue, McKinleyville, CA 95519	Fact Sheet 7
Redway Transfer Station	Medium-volume transfer/processing facility	≥60 cubic yards or 15 tons per day, <100 tons/day	1990: 4385 tons SW 422 tons REC = 8.8% total diversion 1995: 4800 tons SW 865 tons REC = 15% total diversion 2000: 5150 tons SW 1430 tons REC = 22% total diversion 2005: 3600 tons SW 900 tons REC = 20% total diversion	Unincorporated only; open to all county residents	Eel River Conservation Camp Road, Redway, CA	Fact Sheet 8
Regional Composting Facility (planned)	Regional composting facility - Phase II	2000: planning stages 2007: 40-50 tons per day	2007: facility to receive 4,000 tons per year of compostable organics	Unincorporated county plus all incorporated cities	To be determined; unincorporated area in Humboldt Bay location zoned industrial or agricultural	Fact Sheet 9
Steve Morris Chipping and Grinding	Chip & Grind	200 tons per day	2005: 3596.14 tons of compostable greenwaste with additional material from timber industry	Unincorporated county plus all incorporated cities	1500 Glendale Drive, Blue Lake, CA 95519	Fact Sheet 10

Table 2: Incorporated/Other Facilities

FACILITY NAME	TYPE	CAPACITY	DIVERSION RATE	PARTICIPATING JURISDICTIONS	LOCATION	Additional Information
Hawthorne Street Transfer Station	Large volume transfer/processing facility	550 tons per day	1995: 52 tons/day SW 4 tons/day REC = 56 tons/day total 7.14% total diversion 2000: 16 tons/day SW 7 tons/day REC = 23 tons/day total 30.43% total diversion 2005: 219 tons/day SW 21 tons/day REC = 240 tons/day total 8.75% total diversion	Unincorporated county plus all incorporated cities	1059 West Hawthorne Street, Eureka, CA 95501	Fact Sheet 11
Eel River Disposal & Resource Recovery	Medium volume transfer/processing facility	15 to 100 tons/day	1995: 4 tons/day SW 1 ton/day REC = 5 tons/day total 20% total diversion 2000: 10 tons/day SW 2 tons/day REC = 12 tons/day total 16.67% total diversion 2005: 57.5 tons/day SW 3.3 tons/day REC = 60.8 tons/day total 5.42% total diversion	All local jurisdictions; mainly the unincorporated county, plus Fortuna, Ferndale, & Rio Dell	965 Riverwalk Drive, Fortuna, CA 95540	Fact Sheet 12
North Coast Quality Compost	Green Material Compost Operations	<12,500 cubic yards on site	2004: 2106 tons greenwaste 100% total diversion	All local jurisdictions; mainly Arcata and unincorporated area	3000 St. Louis Road, Arcata, 95521	Fact Sheet 13
City of Arcata Compost Facility	Bio-solids composting operation	204 tons/year	2004: 52 tons/year sludge 98 tons/year greenwaste and other materials = 150 tons/year 100% total diversion	City of Arcata only	600 South 'G' Street, Arcata, CA 95521	Fact Sheet 14

Summary of Programs Considered for Countywide Implementation

These programs are potential candidates for Countywide implementation, because they were selected for implementation in the SRREs/HHWEs of the individual jurisdictions or because the LTF or city/county Integrated Waste Management staff identified them for consideration.

- A. Source Reduction Programs**
 - 1. disposal rate structures with incentives for reduction
 - 2. waste audits for businesses and institutions
 - 3. backyard composting for residents
 - 4. materials exchange column
- B. Recycling Programs**
 - 1. residential curbside collection
 - 2. commercial collection
 - 3. buy-back and drop-off centers
 - 4. seasonal/special collection programs (phone books, Christmas trees, books)
 - 5. MRFs and/or mixed waste processing facilities
 - 6. Recycling Market Development Zones
- C. Composting Programs**
 - 1. curbside collection of yard debris
 - 2. centralized processing and composting of organic material
 - 3. co-composting with sewage sludge
- D. Special Waste Programs**
 - 1. tire diversion
 - 2. construction/demolition diversion
 - 3. appliances
- E. Disposal of Solid Waste**
 - 1. development of new disposal capacity
 - 2. existing/future disposal site contract(s)
 - 3. coordination/unification of collection systems & contracts
- F. Education and Public Information (EPI) Programs**
 - 1. promotion of recycling and composting programs
 - 2. waste prevention information campaign
 - 3. "Buy Recycled" campaign
 - 4. waste reduction/recycling in schools
 - 5. awards program
 - 6. information hotline
- G. HHW Programs**
 - 1. periodic collection events
 - 2. mobile collection program
 - 3. hhw transfer station
 - 4. collection points for recyclable HHW
 - 5. HHW reduction and prevention education
- H. Regulatory Issues**
 - 1. lobbying at the local/state level
 - 2. illegal disposal
 - 3. reducing disposal of hazardous materials
 - 4. consistency among local ordinances
- I. Administration of "Countywide" Programs**
 - 1. establishing organizational structure
 - 2. budget & funding development
 - 3. reporting and recordkeeping
 - 4. state planning requirements