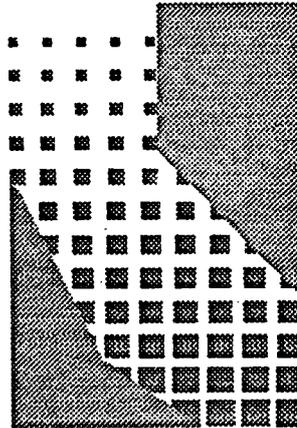


HOW TO PREPARE A COUNTYWIDE OR REGIONAL AGENCY INTEGRATED WASTE MANAGEMENT SUMMARY PLAN

Including a Model Summary Plan



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CHAPTER 1

INTRODUCTION

The California Integrated Waste Management Act directs counties and regional agencies to prepare a Countywide or Regional Agency Integrated Waste Management Plan. This plan consists of the Source Reduction and Recycling Elements (SRREs) of each jurisdiction, the Household Hazardous Waste Elements (HHWEs) of each jurisdiction, the Nondisposal Facility Elements (NDFEs) of each jurisdiction, the Countywide or Regional Agency Siting Element, and the Countywide or Regional Agency Integrated Waste Management Summary Plan.

The Countywide or Regional Agency Integrated Waste Management Summary Plan, or Summary Plan, shall, according to the statutes:

... include a summary of significant waste management problems facing the county or city and county. The plan shall provide an overview of the specific steps that will be taken by local agencies, acting independently and in concert, to achieve the purposes of this division (of the law). The plan shall contain a statement of the goals and objectives set forth by the countywide task force. . . (Public Resources Code (PRC) Section 41751).

One purpose of the Summary Plan is to aggregate all the elements of the countywide or regional solid waste management planning process. The regulations detailing the preparation of the Summary Plan, (Title 14, Chapter 9, Article 6.6 of the California Code of Regulations (CCR)), require the county or region to establish countywide or regional goals and objectives for integrated waste management planning, and to establish an administrative structure for preparing and maintaining the Summary Plan. The county or region is also required to describe the current system of solid waste management in the county or region and to summarize the programs and facilities selected in the planning documents of the individual jurisdictions. The county and region must also consider whether any programs should be implemented on a countywide or regional basis, and if so, how such programs will be structured, designed, financed, and administered.

This handbook is intended to assist preparers of the Summary Plan interpret and meet the requirements of the regulations pertaining to preparation of the Summary Plan. This handbook is also intended to help local governments reduce the cost of complying with the regulations. The handbook will reduce cost by including for each section of the regulations, a review and interpretation of the requirements, suggestions for approaches to take in fulfilling the requirements, and generic examples of format, wording, and content. Jurisdictions are not required to use this handbook or any of the suggested formats.

The handbook does not substitute for the statutes and regulations governing preparation of the Summary Plan; rather, it is intended to be a guide for facilitating compliance with the statutes and regulations, and for producing an acceptable, useful Summary Plan with a minimum of effort and cost.

CHAPTER 2

GOALS, POLICIES, AND OBJECTIVES

(CCR Section 18757.1)

2.1 Summary of Requirements

This chapter of the Countywide or Regional Agency Integrated Waste Management Plan requires a description of the goals, policies, and objectives of the county or regional agency for coordinating efforts to divert, market, and dispose of solid waste during the medium term planning period through the year 2000.

2.2 Specific Requirements

A. Required Goals

CCR Section 18757.1(a) requires the Local Task Force (LTF) to develop goals, policies, and objectives to provide the county or regional agency guidance in coordinating countywide or regional diversion programs, marketing, and disposal strategies. The county or regional agency may use the goals, objectives, and policies developed by the LTF or develop their own based on the LTF's guidance. The goals should be consistent with the hierarchy of waste management practices mandated in PRC Section 40051. The hierarchy requires local jurisdictions to develop integrated waste management programs that place greatest emphasis on source reduction (including reuse), recycling, and composting, and that give final consideration to environmentally safe land disposal or environmentally safe transformation.

B. Required Policies

Subsection (b) requires the identification of policies that facilitate the reduction of solid waste as stated in the Source Reduction and Recycling Elements and Household Hazardous Waste Elements prepared by the incorporated cities, the county for the unincorporated area, or by the regional agency.

C. Required Objectives

Subsection (c) requires the setting of specific, measurable objectives for the implementation of the goals stated in (A). This section requires an implementation schedule which denotes the tasks necessary to reach each objective, and specific milestones.

D. Defining Goals, Policies, and Objectives

A clear distinction should be drawn between goals, policies, and objectives. While definitions and usages of these three terms often overlap, the Board has been consistent in the use of these terms in the regulations. Goals are generally qualitative, and may be seen as the key features of a vision of an integrated waste management future. Goals may include, for example, an overall decrease in the production of solid waste; the establishment of firm markets for recycled materials; and disposal by landfilling of material which cannot be diverted, in a manner such that environmental impact is minimized.

Policies are guidelines that delineate the types of specific actions that will be taken to realize the objectives and achieve the goals of the plan. Policies should be drafted from the point of view of a public agency with the power to alter the essential character of how wastes are managed locally.

Objectives should be specific and measurable. Objectives may be looked at as recognizable milestones that must be achieved on the way to fulfillment of goals. For example, objectives may include achievement of a countywide or regional diversion rate of 25% by 1995, and 50% by 2000; and, achievement of 5% quantifiable source reduction by the year 1995.

Some Local Task Forces (LTF) have already drafted clear, applicable goals, policies, and objectives for countywide or regional planning. Other counties and regional agencies may have little to start with, and may have to draft altogether new goals, policies, and objectives for the Summary Plan. In either case, it will be useful to first review all of the goals and objectives in the individual SRREs and HHWEs, and to review the deliberations of the LTF.

Also required in this section is an implementation schedule that identifies the specific tasks necessary to achieve the objectives. These may include the implementation of programs, the opening of processing or disposal facilities, or other events that will produce progress towards the achievement of the objectives. For each objective, the schedule should indicate major tasks necessary to achieve the objective, the milestones toward which tasks will move, and the projected date of implementation and the agency or agencies responsible for the task.

2.3 Model Goals, Policies, and Objectives

This section presents examples of goals, policies, and objectives that may be adapted to local conditions and incorporated in Summary Plans.

A. Model System Goals

To ensure an effective and economical integrated waste management system throughout the County, all of the Cities and the County agree to the following goals:

1. In order to help ensure the sustainability of our communities for present and future generations, and to conserve natural resources and landfill capacity, the Cities and the County shall implement a new integrated waste management system that gives highest priority to the prevention of waste, and secondary priority to the recycling and composting of waste materials. Those materials which cannot be recycled or composted shall be landfilled in an environmentally safe and effective manner.
2. The implementation of integrated waste management shall be a joint effort of the Cities and the County. New source reduction, recycling, and composting programs shall be coordinated or implemented on a multi-jurisdictional basis to the greatest feasible extent in order to ensure the least cost to ratepayers and the most effective programs, and to avoid unnecessary duplication of programs, efforts, and administration.
3. The Cities and the County shall strive to strengthen markets for recycled and composted materials. In order to maintain effective diversion programs, all jurisdictions shall develop their own market development programs, and shall support the efforts of those jurisdictions included in the County's Recycling Market Development Zone.

4. All residents of the County shall have access to a program that safely and effectively handles and disposes of household hazardous wastes. To the greatest extent possible, the Cities and the County shall facilitate a decrease in the production, consumption, use, and disposal of hazardous household products. For those materials that are used and disposed, the goal shall be to reuse or recycle as much of the material as possible, and to dispose of the remainder in an environmentally safe manner.
5. The Cities and the County will strive to reduce the amount and hazard of special wastes generated, to maximize recycling, reuse, and composting of special waste generated in the County, and to ensure environmentally safe disposal of the special waste generated which cannot be reused, recycled, or composted.
6. To ensure long-term availability of landfill capacity, and to comply with the goal of reducing our impact on the natural environment, the Cities and the County will, at each revision of this plan, consider increasing the diversion objective. Such a revision will depend upon changing market conditions, and the development of new institutions and technologies that may allow for higher diversion levels than are presently feasible.

B. Model Countywide Policies

The Cities and the County have established the following countywide policies for reducing waste and for implementing the programs identified in the individual SRREs and HHWEs, and in this Countywide Plan. All of these policies are intended to reduce costs, streamline administration of programs, and encourage a coordinated and carefully planned approach to implementing integrated waste management.

1. Similar programs selected by neighboring jurisdictions should be combined when and if this will result in the achievement of economies of scale in capitalizing and operating programs, and as long as such consolidation does not conflict with the interests of the jurisdictions.
2. The Cities of the County will work together to ensure that new diversion and disposal facilities are appropriately sized, designed, and sited, in order to avoid duplication of effort, unnecessary expenditure of funds, and environmental degradation, and so that the specific integrated waste management needs of each jurisdiction are met.
3. In order to avoid duplication of effort and confusion, all of the jurisdictions in the County will form a task force or joint powers authority to coordinate and oversee implementation of new integrated waste management programs, to administer programs selected for countywide implementation, and to address issues of regional or countywide concern, as these arise.

C. Model Plan Objectives

The overall objectives of this plan are as follows:

1. The Cities and the County will implement an integrated waste management system in which a majority of the waste stream is diverted from landfill disposal. Specifically, the combined jurisdictions of the county will divert at least 25% of 1990 base year materials by 1995, and 50% by the year 2000.

2. Source reduction programs will be designed to achieve at least 3% diversion in the short term, and 6% in the medium term.
3. Recycling programs will be designed to achieve at least 17% diversion in the short term and 34% in the medium term.
4. Composting of yard wastes will divert 15% of the yard wastes generated countywide by the year 1998.

Implementation Schedule

Table 2-1 identifies the tasks necessary to achieve the objectives, and indicates the milestones that each task will achieve, and projected date of implementation.

**Table 2-1
Implementation Schedule for Achieving Objectives**

Objective/Task	Milestone to be Achieved	Date of Implementation	Responsible Agency
Objective 1: Achieve 25% and 50% Diversion Goals (1990 diversion is 12.5%)			
Implement short term recycling programs	Additional 12% diversion	1992-94	Individual jurisdictions
Implement short term composting programs	Additional 3% diversion	1994-95	Individual jurisdictions, Fauna County, City of Sheepsberg
Implement short term education and public information (EPI) programs	Increase participation in other programs	1992-95	Fauna County CDD, individual jurisdictions
Implement medium term recycling programs	Additional 8% diversion	1995-98	Individual jurisdictions
Implement medium term composting programs	Additional 14% diversion	1995-99	Individual jurisdictions
Implement medium term EPI programs	Increase participation in other programs	1996-99	Fauna County CDD, individual jurisdictions
Expand Dogtown MRF	Allow for processing of additional recycled materials	1994	City of Dogtown
Start-up of Dog's Tip Compost Facility	Ability to Process approx. 70% of collected yard debris	1995	City of Dogtown
Start-up of Sheepsberg Compost Facility	Ability to process approx. 30% of collected yard debris	1998	City of Sheepsberg

Continued...

...Table 2-1, Continued

Objective 2: Achieve through source reduction diversion of 3% short term, and 6% medium term (1990 source reduction was .7%)

Implement short term source reduction programs	Additional 2.5% diversion	1992-95	Fauna County CDD, individual jurisdictions
Implement medium term source reduction programs	Additional 3.3% diversion	1996-99	Fauna County CDD, individual jurisdictions

Objective 3: Consider increasing diversion objective

Evaluate feasibility of increasing diversion objective	Determination of feasibility	1997, 2002	LTF
Set increased diversion objective	Increased diversion objective	1997, 2002	LTF, individual jurisdictions

CHAPTER 3

COUNTY OR REGIONAL PROFILE AND PLAN ADMINISTRATION

(CCR Section 18757.3)

3.1 Summary of Requirements

This chapter of the Summary Plan requires a general, descriptive summary of the geography and demography of the county or region; a description of how integrated waste management is administered in the county or region; and identification of the entities responsible for administering and implementing the Countywide or Regional Agency Plan.

3.2 Specific Requirements

A. Required Description of the County or Region

CCR Section 18757.3(a) requires a general description of the county or region, including topography, major roadways, city boundaries, and climate. Section (b) requires a summary of demographic data for the county or region, including population, ethnicity, average age, average income, and information on housing, seasonal demographic fluctuations, and transportation patterns.

Much of the information required in Sections (a) and (b) should be present in County General Plans or the old County Solid Waste Management Plans. Regional agencies with borders not contiguous with single counties may have to extrapolate information from one or more County General Plans, or write new descriptions, based on general knowledge of the area, as well as statistics from the California Department of Finance, U.S. Bureau of the Census and Bureau of Labor Statistics, regional transportation planning agencies, and regional associations of local governments.

B. Required Description of Governmental IWM Structure

Subsection (c) requires a description of the governmental integrated waste management infrastructure currently in place in the county or region that includes all local waste management entities, agencies, authorities, and districts that have some responsibility for refuse collection, transfer, and disposal, composting, recycling, and source reduction throughout the county or region. Entities included in this description might include city or county public works departments, sanitary districts with franchising authority, joint powers authorities formed to oversee planning, implementation, or operation of disposal or recycling programs, and any other governmental entities with some responsibility for integrated waste management in the county or region, and the specific tasks with which they are charged.

The information for Section (c) is unlikely to be present in one place, unless it has already been compiled by the LTF. If the county or region is large, with numerous agencies involved in waste management, this task may be quite complex. The description should include:

1. which agencies have franchising authority and fee-setting authority for refuse and diversion services;
2. who administers or oversees planning of major solid waste facilities;
3. who has land use authority over these facilities;

4. the roles of any joint powers authorities, task forces, or committees;
5. which agency or agencies are designated as the local enforcement agency; and
6. responsible agencies for any other significant aspect of integrated waste management in the county or region.

C. Required Identification of Plan Administration

Subsection (d) requires identification of the agency or agencies (or other entities) responsible for administering Plan-related functions such as public information; budgeting; plan implementation; and administration, coordination, maintenance, and revision of plan-related documents.

In preparing this section of the Summary Plan, it may be desirable to give a narrative description of any multi-jurisdictional agencies, such as the LTF and any JPA's, that are involved in integrated waste management. Such a description might include purpose, membership, date formed, and specific roles in integrated waste management in the county or region.

3.3 Model Plan Format

A. Model Outline of County/Regional Description

Counties and regional agencies may wish to modify the following outline to meet their own needs for fulfilling the requirements of Sections (a) and (b):

- A. Location
 1. Within California
 2. Within the regional area of California
- B. Topography
 1. General aspect
 2. Major features of the landscape
 3. Adjacent features (bodies of water, mountains, valleys, etc.)
- C. Climate
 1. Temperature, rainfall regimes; major climatic events
- D. Political Units
 1. Boundaries of the county or region; planning regions; boundaries of cities. A map would be useful for this section, though it is not required
- E. Transportation
 1. Major roadways and railroads; ports and airports; mass transit systems
 2. Transportation patterns
- F. Demography and Social Characteristics
 1. Current population, recent and projected growth

2. Demographic and social characteristics
 - a. average age
 - b. ethnic composition
 - c. income
 - d. variations in demographic characteristics between areas of the county or region
3. Seasonal fluctuations in population

G. Employment and Major Industries

1. Sources of current income and employment
2. Prospects for economic growth or decline
3. Relationship of land use and community services to economic growth or decline

H. Housing

1. Percent of population in single family and multi-unit dwellings
2. Trends in development of housing
3. Property values

B. Model Governmental IWM Structure and Plan Administration

The following example of an approach to compliance with CCR Sections 18757.3 (c) and (d) is taken from the draft Contra Costa County Countywide Plan. Contra Costa County is a diverse county in the Bay Area with a population of approximately 800,000 in 18 cities and the unincorporated area, and with a complex system of administering waste management.

This section describes the administrative structure for integrated waste management in the County as of June 1992. This structure is evolving rapidly, and can be expected to be in flux for some time.

1. Each City (and the County for the unincorporated area) remains responsible for SRRE planning, implementation, and monitoring, with the exception of Lafayette, Moraga, Orinda, and Danville, which have delegated this responsibility to the Central Contra Costa Sanitary District (CCCSD) through franchising authority. Each City (and the County for the unincorporated area) is responsible for public information, budgeting, and enforcement. In some cases, this responsibility may be delegated to a franchised service provider, or in the case of a program that becomes a Countywide or subregional program, transferred to the implementing agency.
2. East County: The County, Pittsburg, and Antioch have entered into a Global Agreement that gives the Delta Diablo Sanitary District (DDSD) the authority to construct and operate the East County Community Collection Center. The agreement also provides for joint oversight and monitoring of the facility.
3. Central County: Currently, Acme transfer station and MRF is privately owned, and since it is in the unincorporated county, the County provides administrative oversight for this facility. Presently, negotiations are proceeding for the purchase of Acme by the County and the Central Contra Costa Solid Waste Authority (comprised of San Ramon, Walnut Creek, and the Central Contra Costa Sanitary District (CCCSD)--but not the County; the cities of Pleasant Hill and Martinez have written letters expressing

interest in joining the Central Contra Costa Solid Waste JPA). If these entities do purchase Acme, oversight would fall to a combined JPA/County body.

4. West County: The 5 cities and the County have delegated oversight and administration for planning, siting, constructing, and operating the Integrated Resource Recovery Facility to the West Contra Costa Integrated Waste Management Authority (WCCIWMA), a JPA.
5. The County Community Development Department's Resource Recovery Program staff is responsible for the preparation of the Countywide Summary Plan and Siting Element.
6. To provide advice and assistance for the preparation of the Countywide Plan, the LTF was established, and is comprised of representatives selected by the Cities and the Board of Supervisors; representatives of the solid waste and recycling industries; and representatives of environmental organizations. The LTF has two committees: the Compost Advisory Committee, and the Source Reduction and Recycling Committee. In addition, the AB 939 program managers from several Cities and Sanitary Districts have formed a group that serves as a technical advisory committee to the LTF.
7. The CIWMB has designated a Recycling Market Development Zone (RMDZ) consisting of twelve agencies arrayed along the County's shoreline: the County, the WCCIWMA, DDS, and the Cities of Brentwood, Antioch, Pittsburg, Martinez, Pinole, Hercules, San Pablo, Richmond, and El Cerrito. A Recycling Market Development Zone Council will be established, comprised of two members of the WCCIWMA, two members of the DDS, and one member each from the County and from the Cities of Brentwood and Martinez. At least for the first 18 months of the existence of the RMDZ, the County will serve as the lead agency, providing staffing and administration.
8. The Contra Costa Solid Waste Authority is a joint powers authority which has been in formation for the past year. Presently, 17 Cities and four Special Districts which franchise solid waste collection are members.
9. The County Health Department serves as the Local Enforcement Agency for all of the unincorporated areas. The Cities have designated the County Health Department as the LEA within their jurisdictions, but with specific stipulations allowing the Cities to review the actions of the LEA. Currently, the CIWMB is discussing provision of the LEA function with at least 10 of the Cities.
10. Under the State Map Act, land use authority is reserved to each City, and the County for the unincorporated area, for any facility located within individual jurisdictional boundaries.
11. Prior to the first revision of the Plan, it is expected that a permanent, on-going

structure for coordinating Countywide planning and program implementation will be developed. Until such a structure is developed, the LTF will maintain its role as the advisory body for coordinating Countywide planning and program implementation.

CHAPTER 4

DESCRIPTION OF CURRENT SOLID WASTE MANAGEMENT PRACTICES

(CCR Section 18757.5)

4.1 Summary of Requirements

The previous chapter of the Summary Plan included a description of how integrated waste management is administered in the county or region. This chapter requires a description of current integrated waste management practices in the county or region, including refuse collection, transfer, and disposal practices; solid waste facilities located within the county or region; diversion programs already in place; and a summary of countywide or regional market development efforts.

4.2 Specific Requirements

CCR Section 18757.5 requires the compilation of detailed information on the nature of the existing solid waste management system. This section of the chapter is divided into four major parts:

- A. Required Description of Factors Affecting the Current Waste Management System
- B. Required Description of Permitted Solid Waste Facilities
- C. Description of Unpermitted Waste Diversion Facilities
- D. Required Description of Market Development Activities

A. Required Description of Factors Affecting the Solid Waste System

Subsection (a) requires a description of all factors affecting the current system of collection, removal, and disposal of solid wastes:

1. **Service Areas:** these are the areas, defined by jurisdictional or other boundaries, in which a particular governmental entity has jurisdiction or responsibility for waste management.
2. **Territories served through franchises, permits, contracts, or governmental services:** how waste management is organized in each of the service areas listed in (1).
3. **The quantity of materials collected:** this information must be expressed both in tons and cubic yards, both per day and per year, and presented separately for each jurisdiction in the county or region.
4. **Storage and transportation needs:** existing and anticipated methods for handling collected targeted materials.
5. **The final destination of materials collected:** i.e., landfilled, transformed and landfilled, or exported, by quantity expressed in tons and cubic yards per year for each destination. All of the collected material in all of the jurisdictions in the county or region must first be aggregated, and then broken down as to the final disposition of the materials.

Much of this information should be in the SRREs of the individual jurisdictions, and in the last version of the county's CoSWMP. CoSWMP data on service areas and territories may, however, be

out of date, and the SRREs may not have this information organized in an accessible, complete manner. Regional agencies and counties may wish to gather the information on service areas and territories, using a survey. The survey might include the following questions:

1. Does your jurisdiction administer or operate its own solid waste collection, removal, or disposal programs, or is this done by another agency? If another, which one?

For questions 2-4, please indicate how the stated solid waste function is administered; is it:

- a. run by the jurisdiction;
 - b. exclusively franchised or contracted (if so, please name the franchisee or contractor);
 - c. non-exclusively franchised or permitted;
 - d. other.
2. Collection (from point of generation):
 - 1) Residential _____
 - 2) Commercial _____
 - 3) Industrial _____
 - 4) Other (institutions, government offices, etc.; please indicate) (_____) _____
 3. Removal (hauling from a central collection point, such as a transfer station, to the point of final disposal)
 - 1) Residential _____
 - 2) Commercial _____
 - 3) Industrial _____
 - 4) Other (_____) _____
 4. Disposal (landfill or transformation)
 - 1) Residential _____
 - 2) Commercial _____
 - 3) Industrial _____
 - 4) Other (_____) _____

Data for parts (3) and (5) of subsection (a), on quantities of materials collected and their final disposition, should be available in the Facility Capacity Components of the SRREs. Please note that the figures required for these parts is the total of materials collected by solid waste haulers in refuse collection programs, not diversion programs. Since material collected as refuse may later be sorted and some recyclable or reusable materials removed, preparers of the Summary Plan may have to do more than use the "disposed" figures in the Disposal Facility Capacity Components; they may have to check whether there are any materials being salvaged after they have been collected in a refuse collection program. Examples of this situation may include dump-and-pick recycling of commercial materials, in which "rich" loads are pre-selected by haulers, taken to a MRF, and sorted on a floor or conveyor belt; and mixed waste processing facilities, in which residential wastes are run over a conveyor belt and certain recyclable materials are removed. Counties and regional agencies may have to draw a distinction, based on their own situations, between diversion programs and disposal programs that have a diversion component to them.

The figures used for parts (3) and (5) should, therefore, be the sum total of all materials collected in refuse collection programs, however defined by the county or regional agency. This information must be presented for each jurisdiction in the region or county for part (3), and totalled. For part (5), the

total figure should be broken down into the total amount landfilled, transformed, recycled, and exported (see Tables 4-2 and 4-3 for examples).

Subsection (a)(4) requires a description of storage and transportation needs and existing and anticipated methods for handling targeted materials collected through diversion programs. This information should be in the SRREs and HHWEs and may be provided in a table (see Table 4-4 for an example).

Conversion Factors

Several of the requirements in CCR Section 18757.5 include the amounts of waste materials expressed in both tons and cubic yards. Also, there are several requirements for the materials handled to be expressed on a per year and per day basis. The Board is in the process of establishing weight:volume conversion factors, but has not yet completed these studies. Preparers of the Summary Plan should check with Board Staff in the Plan Implementation Branch to determine which method to use.

To translate tons to cubic yards, use the following formula:

$$\text{tons} \times (\text{conversion factor}) = \text{cubic yards.}$$

Most tonnage figures in the SRREs will be in tons per year. To convert to tons per day, counties and regional agencies must decide whether to use a basis of five days per week, six days per week, or seven days per week. The most logical approach to this decision would be to use the number of collection or disposal days that most of the service providers or large solid waste facilities in the area use. The conversion factors for 5, 6, and 7 day weeks are as follows:

- 5 day week: 260 days per year
- 6 day week: 312 days per year
- 7 day week: 365 days per year

To translate tons per year to tons per day, use the following formula:

$$\text{tons per year} \div \text{conversion factor} = \text{tons per day.}$$

B. Required Description of Permitted Solid Waste Facilities

Subsection (b) requires an identification of all permitted solid waste facilities located in the county or region. The description must contain for each facility, at a minimum:

1. The facility name and location; and
2. A map showing the permitted solid waste facilities in the county or region. The map should be drawn to scale and include a legend. The type of map may be a 7.5 or 15 minute USGS quadrangle.

The map must include the scale (graphic scales are best, since they remain accurate when the map is reduced or enlarged) and a legend. The legend should differentiate the various types of facilities shown on the map: transfer stations, MRFs, compost facilities, landfills, and transformation facilities. The map should clearly show the boundaries of the county or region, boundaries of incorporated areas, and the location of all facilities described in section (b). Optional information that would make the

map more useful might include the daily tonnage rating of each facility, the watershed of each facility, and the location and nature of unpermitted solid waste facilities.

Preparers of the Summary Plan may use USGS 7.5 or 15 minute series maps as base maps. In this case, all permitted facilities are not likely to fit onto one quadrangle, so several may be needed. In addition to the USGS quadrangles, preparers of the Summary Plan may wish to prepare a single map sheet depicting the entire county or region with the locations of all permitted solid waste facilities. Such a map, while less accurate than the USGS quadrangles, would be useful for showing relative location and proximity to cities, towns, roads, bodies of water, and other important geographic features. A county or region map should show the boundaries of the county or region, the boundaries of the incorporated cities, other major cultural or physiographic features if desired, and the location of each permitted solid waste facility described in section (b). The Summary Plan may also refer to maps in the Siting Element that provide the location of the permitted solid waste disposal facilities. However, a map or maps for showing the location of nondisposal facilities will need to be provided.

C. Description of Waste Diversion Facilities

Subsection (c) may include a description of any waste diversion facilities within the county or region which are exempt from a Solid Waste Facility Permit (SWFP), or which have been granted an exclusion from this requirement. These descriptions should include, for each such facility:

1. the reason the facility is exempt from a SWFP or was granted an exclusion from this requirement;
2. the estimated amount and types of materials handled, recovered, or processed at the facility; and
3. the names of the operators and owners of the facility.

The types of facilities covered by this section may include recycling buy-back and drop-off centers, intermediate processing facilities, and exempt compost facilities. Information on these facilities should be available in the "existing conditions" sections of the SRREs, from city and county staff charged with AB 939 oversight, and from facility operators. For more information on facilities eligible for exclusions or exemptions, check with Board staff in the Permits Branch.

D. Required Description of Market Development Activities

For subsection (d), preparers of the Summary Plan shall include a description of any designated Recycling Market Development Zones within the county or region. In addition, this section must include, for any countywide or regionwide programs, a general discussion of strategies that the county, regional agency, or other regional entities will employ to improve the processing and marketing of secondary materials, including forming marketing associations or joining associations outside jurisdictional boundaries. The description must also include the county's or regional agency's role in developing markets.

The description of countywide or regional market development strategies may include:

- recycled materials purchase preferences;
- "buy recycled" public information campaigns;

- construction or promotion of waste exchanges, such as CalMax;
- efforts to attract new secondary materials end-users to the area, or to assist existing manufacturers to substitute secondary materials for their feedstock; and
- cooperative processing and marketing of secondary materials.

The specific actions being taken by the county or regional agency in aiding local jurisdictions to secure markets for the secondary materials produced in their diversion programs may include technical assistance programs, coordination of marketing cooperatives, coordination of purchase preferences programs, and assistance with developing the private sector's secondary materials remanufacturing capacity. For more information on market development, please see Appendix B.

4.3 Model Format

The following is a detailed example of how a county or regional agency could comply with the requirements of CCR Section 18757.5.

A. Model Description of Factors Affecting the Current System

This subsection describes the factors affecting the current solid waste management system, including service areas, organization of services, and the amounts of refuse collected and its final disposition.

1. Service areas

The service areas in the County are contiguous with the boundaries of the individual jurisdictions, with the following exceptions:

- a. the unincorporated area is divided into three service areas, North, South, and Central, corresponding with the County's planning areas.
- b. Mount Eagle and Grizzly City, along with the North County Area of the unincorporated County, have their waste management services administered by the Opossum Sanitary District.

2. Organization of Services

Within each of the service areas, waste management services may be exclusively or non-exclusively franchised, provided as a government service, permitted, or contracted, as indicated in the Table 4-1.

3. Quantity of Solid Waste Collected, and Final Disposition of Materials

In Table 4-2, information from the SRREs is compiled to indicate the daily and annual tonnage and volume of solid waste produced in the County. Daily tonnages are based on annual tonnages, using six collection and disposal days per week (312 days per year); conversion of tonnages to cubic yards uses a standard conversion factor of 1,500 pounds per cubic yard (1.33 cubic yards per ton). Table 4-3 indicates where this material goes after it is collected: to landfill, exported, or diverted. Diversion in this table indicates materials collected in solid waste collection programs, then diverted, for example, through salvage at transfer stations and landfills. Table 4-4 indicates storage and transportation needs of targeted materials. *[Please note: information for one program is provided as an example.]*

**Table 4-1
Organization of Services**

Service Area	Residential			Commercial/Industrial		
	Collection	Removal	Disposal	Collection	Removal	Disposal
County: South	Franchised	Franchised	Contract	Permit	Permit	Contract
County: Central	Franchise	Contract	Contract	Permit	Contract	Contract
Opossum S.D.	Franchise	Franchise	County	Franchise	Franchise	County
Dogtown	City	City	City	City	City	City
Catville	Franchise	Contract	Contract	Non-exclusive Franchise	Contract	Contract
Sheepsberg	Franchise	Franchise	City	Permit	Permit	City
Mouse Haven	Franchise	Franchise	Contract	Franchise	Franchise	Contract
Port Salmon	City	City	Contract	City	City	Contract

**Table 4-2
Quantities of Solid Waste Collected (1990)**

Jurisdiction	Tons		Cubic Yards	
	Daily	Annual	Daily	Annual
Unincorporated Area	80	24,960	106	33,197
Grizzly City	35	10,920	47	14,524
Mount Eagle	40	12,480	53	16,598
Dogtown	220	68,640	293	91,291
Catville	68	21,216	90	28,217
Sheepsberg	22	6,864	29	9,129
Mouse Haven	6	1,872	8	2,490
Port Salmon	12	3,744	16	4,980
Total	483	150,696	642	200,426

**Table 4-3
Disposition of Solid Waste Collected Annually (1990)**

	Total	Landfilled	Transformed	Diverted	Exported
Tons per year	150,696	128,092	4,521	3,014	15,070
Cubic Yards Per Year	200,426	170,362	6,013	4,009	20,043
Percent of Total	100%	85%	3%	2%	10%

Table 4-4 Targeted Materials Transportation and Handling Needs By Jurisdiction, Component, and Program		
Jurisdiction: Dogtown Component: Recycling Program: Commercial Curbside		
Targeted Material	Present Storage and Transport	Storage and Transport Needs
Corrugated cardboard	By service provider	Storage in service provider's facility; existing space is adequate. Transportation by service provider or purchaser of material.
CRV glass containers	By service provider	As above.
Aluminum cans and scrap aluminum	Storage at service provider's facility; transport by end user	Material may have to be graded before marketing; otherwise, use of existing storage and transport facilities.

B. Model Description of Permitted Solid Waste Facilities

Currently, four facilities are permitted to receive solid waste in the County: the North County Landfill, Dogtown MRF and Transfer Station, Dog's Tip Landfill, located in the unincorporated area but serving primarily Dogtown and Catville, and Sheepsberg Landfill. Figure 4-1 is a County map indicating the location of the facilities. Figures 4-2a through 4-2e [please note: only one map is included in the model] are USGS 7.5 minute series quadrangles that have been reduced for insertion into this document. The USGS maps show the exact location of each of Fauna County's permitted solid waste facilities.

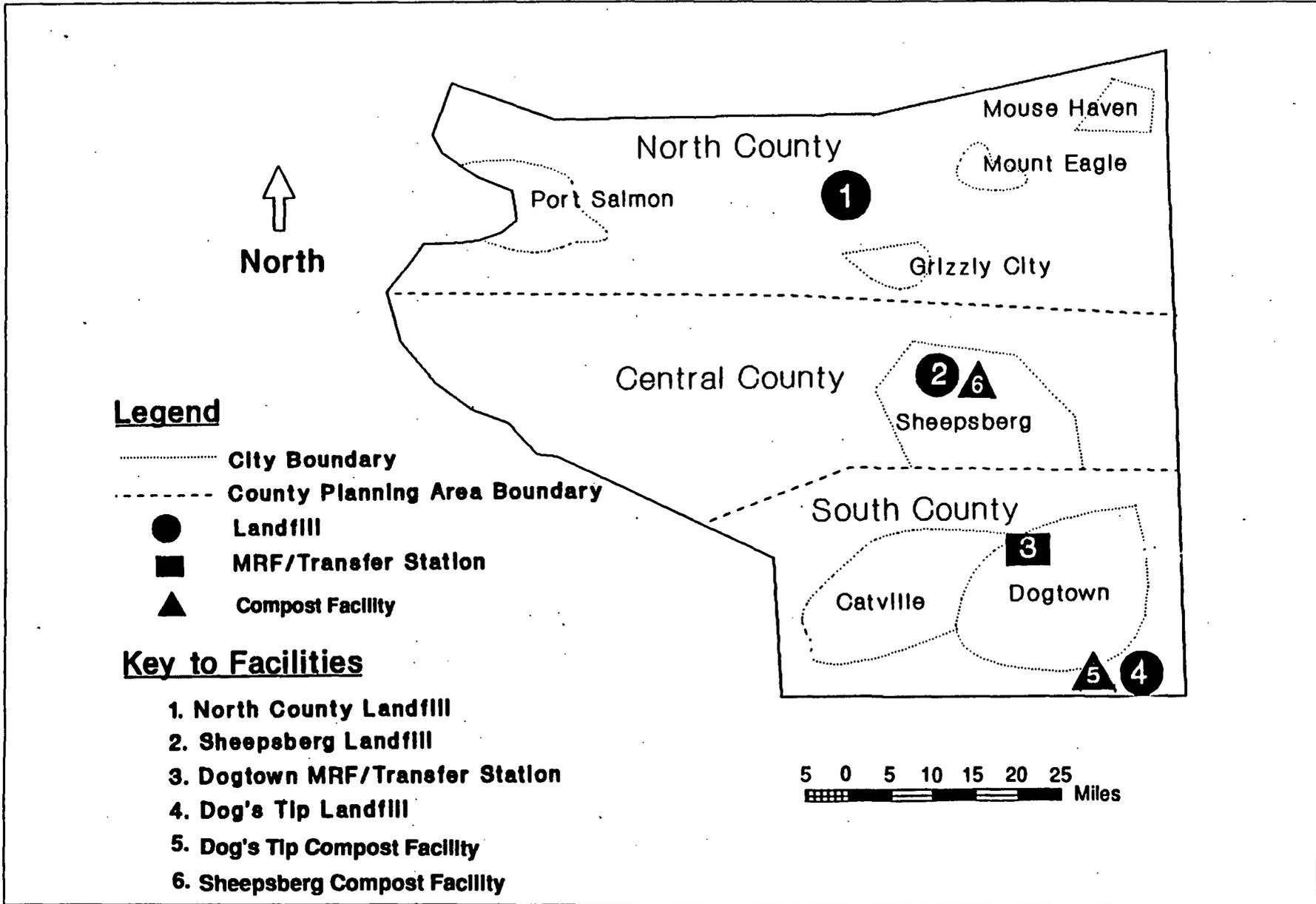
Descriptions of these facilities follow [Please note: one example is given here]:

North County Landfill: The North County Landfill is in the North County area off of Highway 122, at the end of Sowbug Road, and serves the unincorporated North County area, as well as the incorporated Cities of Grizzly City, Mount Eagle, Port Salmon, and Mouse Haven.

C. Model Description of Waste Diversion Facilities

[Please note: one facility is described here.]

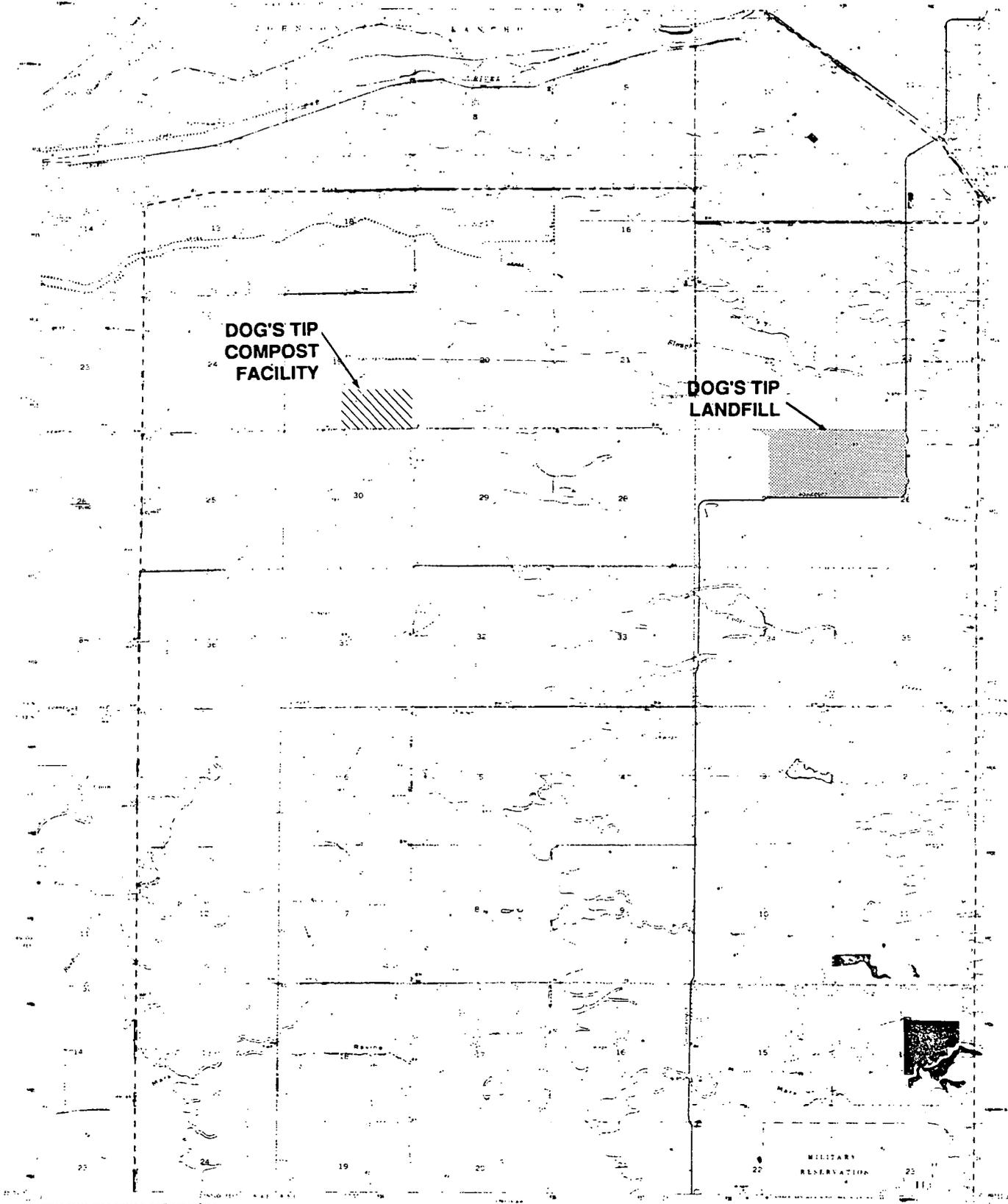
A large buyback facility is located in Port Salmon. The Community Buyback is at the corner of First Street and Chinook Road. The facility has been in operation for three years and now purchases CA redemption cans and bottles, cardboard, scrap aluminum, and high-grade office paper.



SOURCE: Fauna County Planning Department

Model CIWMP / 920279 ■

Figure 4-1
Fauna County
Solid Waste Facilities



Mapped 1918; 1910 published by the Geological Survey.
Control by U.S.G.S. and NAD 83/1983.
Contours and drainage contours from aerial photography
taken 1986. Topography by Plane-table surveys 1951.
Polyconic projection. 1827 North American Datum.
10,000 foot grid based on California coordinate system.
Zone 7.
100-meter Universal Transverse Mercator grid also zone 17
shown at base.
The alternate datum: 1971 North American Datum and North
American Datum of 1883 (NAD 83) are 7.5 inches (19.05 centimeters) in
elevation (1955 datum) 1871. The NAD 83 is shown by dashed
contour lines.
Boundaries shown in this map are based on aerial photography
taken 1973. This information is for informational purposes only.

SCALE 1:25,000
NATIONAL GEOSPATIAL INTENSITY 1:25,000
NATIONAL GEOSPATIAL INTENSITY 1:25,000
FOR SALE BY U.S. GEOLOGICAL SURVEY, DIVISION OF GEOLOGIC MAPS OF RESTON, VIRGINIA 22062
A QUANTITY OF THESE MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

COON CREEK, CALIF
38°27'44" N 121°03'
PHOTOGRAPHIC 1976
PHOTOGRAPHIC 1951
PHOTOGRAPHIC 1918
DATE 1971 N. 100 5085 5000

Community Buyback also accepts free of charge other grades of paper, and non-redemption cans and bottles. Community Buyback is a venture of the Pelagic Center, a Port Salmon-based non-profit organization. In 1993, Community Buyback accepted and processed a total of 180 tons of material, or 5% of Port Salmon's generated waste.

D. Model Description of Countywide Market Development Programs

The development of markets adequate to ensure stability of the IWM system is a critical issue facing Fauna County jurisdictions. Several trends emerging in the County will affect market development. Fauna County is relatively remote from end users of most recycled materials, and the isolation of several population centers, particularly in North County, complicates problems of processing and marketing secondary materials. The national and international fluctuations in secondary materials markets are exacerbated in Fauna County, since transportation costs are high, and profit margins, even in the best of times, are small. Since recycling is accomplished by a number of small and mid-sized operators too small to justify purchase of advanced processing technologies, much of the material that is marketed from Fauna County is not optimally processed.

In order to address the marketing problems found throughout the County, discussions have begun regarding establishment of a multi-jurisdictional marketing association. In concept, the association would involve both service providers and governmental agencies, and would improve the market position of the recyclers in the County by marketing materials in larger volumes. Discussions have included establishing regional processing centers where materials would be prepared for market.

In order to ensure that the service providers in the County produce the highest quality, most marketable products, the Fauna County Community Development Department has established a technical assistance program that provides advice, small grants, and low-interest loans to assist recyclers and processors in upgrading their processing capacities. To date, three processors have taken advantage of this program. The County hopes that the function of this body will be taken over by the cooperative marketing association, if it is formed.

At the writing of this document, Fauna County, in cooperation with several of the Cities and with neighboring Flora County, has applied to the CIWMB for designation of a Recycling Market Development Zone (RMDZ) that would include areas of both Counties. If designated, the RMDZ will include the Cities of Dogtown and Catville, as well as unincorporated South County. The application for the RMDZ emphasizes targeting of new industries to process and consume compost, paper, and plastics.

CHAPTER 5

SUMMARY OF SRREs, HHWEs, AND NDFEs

(CCR SECTION 18757.7)

5.1 Summary of Requirements

This chapter of the Summary Plan requires a descriptive summary of the types of diversion programs selected in each SRRE and HHWE, and a list of the types and numbers of nondisposal facilities and the jurisdictions they serve, as described in each of the NDFEs. Furthermore, this section must include the identification of those programs in the SRREs and the HHWEs that could be coordinated on a countywide or regional basis.

5.2 Specific Requirements

This portion of the chapter describes the four main requirements of this portion of the Summary Plan: (a) a required description of programs selected in the SRREs; (b) a required description of programs selected in the HHWEs; (c) a required list of facilities identified in the NDFEs; and (d) a required identification of programs that could be coordinated on a countywide or regional basis.

A. Required Description of Programs Selected in the SRREs

Subsection (a) requires the compilation and organization of the following information which is to be extracted from each SRRE by component:

- a listing and description of the current and planned diversion programs;
- a listing and identification of all planned and contingency programs and measures; and
- a listing of targeted material types and marketing strategies for each planned and contingency program.

1. Methods for Describing Current and Planned Countywide/Regional Diversion Programs

A brief description of all current and planned diversion programs is required by subsection (a)(1). While the contents of this description are not specified in the regulations, the description should include the overall purpose and scope of the program or activity, and the design of the program or activity; as well as program type, and targeted materials.

2. Methods for Listing Programs Selected in the SRREs

Subsection (a)(1) further requires a listing of all programs selected in the SRREs. This may best be approached as a series of tables. Separate tables would be prepared to summarize programs from the Source Reduction, Recycling, Composting, Special Waste, and Education and Public Information Components (see Table 5-1 for an example). In each table, one axis would indicate individual jurisdictions, and the other the range of programs selected by one or

more jurisdictions in the region or county. For each program for each jurisdiction, the table should indicate whether the program was selected for implementation, selected as a contingency program, or not selected. Some SRREs make mention of existing programs which the jurisdiction does not intend to foster or further develop, or of programs which will be phased out. Separate symbols may be used to indicate such circumstances.

Preparers of the Summary Plan must rely on the information presented in the SRREs in preparing this section. Where confusion arises over whether a program has been selected, preparers of the Summary Plan should either query the jurisdiction, or after completion of a draft of all of the tables, distribute them to the jurisdictions for cross-checking and comment.

3. Methods for Listing the Targeted Materials and Marketing Strategies

The information required for this subsection may best be gathered with a series of forms, one prepared for each program for each jurisdiction, accompanied by explanatory text. These forms would indicate the following:

- a) jurisdiction, component, and type of program;
- b) materials targeted in this program;
- c) marketing strategies for each targeted material.

This information may be organized as a table with a separate table prepared for each program for each jurisdiction (see Table 5-2 for an example). Or, one table may be prepared for each jurisdiction with the required information organized by component and by program. If the data are entered in a computer database, future tabulation and manipulation of diversion data will be greatly simplified.

B. Required Description of Programs Selected in the HHWEs

The information required for subsection (b), the description of programs selected in the HHWEs, is very similar to the information required in Subsection (a) for the SRREs. However, the information required for Subsection (b) is not as extensive. The following information is to be extracted from each HHWE:

- a listing and identification of all planned and contingency programs and measures;
- a listing of targeted material types and marketing strategies for each planned and contingent program.

1. Methods for Listing Household Hazardous Waste Programs, Targeted Materials, and Marketing Strategies

The suggested methods for listing selected household hazardous waste programs, targeted materials, and marketing strategies are identical to the methods for SRRE programs presented in the previous subsection.

C. Required Summary of Facilities Identified in the NDFEs

Subsection (c) requires a list of all new or expanded facilities identified and planned in all of the NDFEs in the region or county, and which jurisdictions are served by or use these facilities.

1. Methods for Listing the Facilities Identified in the NDFEs

Subsection (c) requires preparers of the Summary plan to list the types and numbers of solid waste facilities specified in the Nondisposal Facility Elements. These include permitted transfer stations, materials recovery facilities, and compost facilities. Furthermore, this section requires an identification of which jurisdictions are served by or use each facility. This requirement can be organized as a table that categorizes and lists all of the facilities identified in the NDFEs, the jurisdictions where the facilities are located or planned to be located, and the jurisdictions using these facilities (see Table 5-3 as an example).

D. Required Identification of Programs for Coordination or Consolidation on a Countywide or Regional Basis

Subsection (d) requires identification of those programs in (a) and (b) above that could be considered for coordination or consolidation on a countywide or regional basis. The following information should be included:

- identification and description of those programs that were or will be coordinated or consolidated into countywide or regional programs;
- implementation schedules for coordination or consolidation of programs.

1. Methods to Select Programs for Countywide/Regional Coordinating

Subsection (d) requires the identification and description of programs that will be coordinated or consolidated. Coordination may involve the combination of similar programs selected by several jurisdictions within a region or county into a single program that serves multiple jurisdictions. In other cases, where uniformity of services is desirable, coordinating the implementation of essentially identical programs throughout the region may be all that is required. In still other cases, coordination may involve cooperative design and implementation of programs; for example, by developing guidelines or recommendations for the structure, function, or oversight of a type of program.

Coordination requires considerable deliberation to select appropriate programs for multi-jurisdictional implementation, and the agreement of all jurisdictions involved to proceed with coordination. Once a program is selected and approved for coordination or consolidation, the jurisdictions involved may need to allot responsibility for program administration, design, implementation, and oversight; work out ownership of facilities; develop strategies for marketing recovered materials; and develop methods for ascribing diversion achieved in the program to the participating jurisdictions.

Preparers of the Summary Plan should note that the Integrated Waste Management Act does not require any countywide or regional combination of programs; the Act does require *consideration* of coordinating or consolidating programs. These considerations should be

carried out in a logical and reasonable manner in order to ascertain whether there are distinct advantages to combining or coordinating development of programs. Those charged with responsibility for preparation of the Summary Plan may wish to establish criteria for determining the suitability of particular types of programs for integration, and should work out a system of evaluating, ranking, and selecting programs and contingency programs. It may be most expedient if the agency responsible for preparation of the Summary Plan first puts forth suggestions for the coordination of particular programs based on the selected evaluation procedure. Then, after receiving comments and approval from the coordinating jurisdictions, the agency could revise and finalize this section of the Summary Plan. Further information on methods to select programs for coordination or consolidation is presented in Appendix C.

2. Schedule and Description of Coordinated or Consolidated Programs

Once programs have been selected for coordination or consolidation, preparers of the Summary Plan must draft a schedule for consolidation of the programs into countywide or regional programs, or coordinated or cooperatively implemented programs. This schedule should indicate the major steps necessary to achieve consolidation. Steps may include: formation of a JPA or signing of an MOU to proceed with coordination and consolidation; specification of agencies responsible for implementation and oversight; establishment of a financing mechanism; and establishment of an accounting mechanism (see Table 5-4 for an example).

The function and structure of a consolidated program may be different from the programs that were consolidated to form it. While the regulations do not require preparers of the Summary Plan to write a detailed description of programs selected for coordination, it may be useful to do so. Descriptions of programs selected for coordination and consolidation may include the following:

- reasons the program was selected for consolidation;
- a general description of the function, scope, design, and operation of the program;
- the administrative structure of the program; and
- targeted materials, and materials handling and marketing strategies.

Funding for coordinated programs is addressed in the next chapter.

5.3 Model Format for Summary and Coordination or Consolidation of Programs

This section presents examples of format, language, and approaches that preparers of Summary Plans may wish to consider in drafting the portions of the Plan complying with CCR Section 18757.7. The examples used in this model are for recycling programs, and the evaluation method used is the narrative method, as described in Appendix C.

The model presents the listing of planned and contingency programs in two formats. In one, the information is presented in a series of tables. The second is a simple listing of the programs. Both are only suggestions for providing the required information. The tables are optional and do not fully meet requirements, since a description of the program is required.

A. Model Summary of Selected Diversion Programs from the SRREs

Table Format

The following tables show the various types of source reduction, recycling, composting, special waste, and household hazardous waste programs selected by all of the jurisdictions in the County. *[Please note: Table 5-1, for recycling programs, is an example of one of the tables that would be presented here. A similar table would also be prepared for each of the other components: Recycling, Composting, Special Waste, Education and Public Information, and for the Household Hazardous Waste Element.]* For each program for each jurisdiction, the tables indicate whether the program is selected for implementation (marked with an "X"), as a contingency (C), or not selected (blank). Some SRREs and HHWEs make mention of existing programs which the jurisdiction does not intend to foster or further develop (marked with an "E"), or of programs which will be phased out (Z).

Text Format

This section summarizes the diversion programs already operating in each of the eight jurisdictions in Fauna County. *[Please note: for purposes of brevity, only the programs of one of the eight jurisdictions are described here.]*

Catville

1. Source Reduction

- a. The City of Catville Community Development Department has been operating a "Precycling" education and public information campaign since 1989. This program encourages residents and businesses to reduce their consumption of disposable, non-durable, and non-recyclable goods. In addition, the Catville CDD has published a brochure on Backyard composting, which is being distributed to the public.
- b. In 1991, the City instituted volume-based variable can rates for franchised collection of residential solid waste.

2. Recycling

- a. Catville's franchised waste hauler operates a voluntary curbside collection program that services all single family dwellings. The program will add multi-family dwellings in 1994. The service provider processes materials at their facility on Feline Street.
- b. Several commercial recycling operations serve the commercial and industrial sectors; these operators have their own processing facilities.
- c. The local chapter of the Lion's Club operates a drop-off recycling facility that accepts a broad range of materials.
- d. Two certified redemption centers operate in supermarket parking lots in Catville, and accept CRV beverage containers only.

**Table 5-1
Summary of Recycling Programs Selected in the SRREs**

Program	Jurisdictions							
	Dogtown	Catville	Sheeps- berg	Mouse Haven	Grizzly City	Port Salmon	Unincor- porated County	Mount Eagle
Single family curbside	X	X	X		X	X	X	X
Multi-family dwellings	X	X	X			X		
Commercial franchise	X				X	X		
Encouraging free market commercial recycling	C	X				X	X	
Salvage at transfer stations and landfills	X		X				X	
School programs	X	X	X	E		X		X
Drop-off and buy-back centers	X	X	X	X	X	X		X
Construction and demolition debris recycling	X	C	X			X	X	
Government offices	X	X	X	E	X		X	

Key: X = Selected for implementation; C = Contingency program; E = Existing program; Z = Existing program, to be discontinued.

3. Composting

- a. A private tree trimming operation grinds and composts a small amount of organic matter. This operation, however, is expected to be phased out by the beginning of 1996.
- b. The City of Catville operates an annual Christmas Tree collection program. Trees are ground and sold for animal bedding.

Model Listing of Targeted Materials and Marketing Strategies

Table 5-2 shows, for each selected program for each jurisdiction: the materials targeted for diversion in the program; the percent of the jurisdiction's wastestream represented by this material type; the projected diversion, in tons, for the benchmark years 1995 and 2000; and marketing strategies for the material. *[Please note: information for only one program is presented in the model.]*

B. Model Summary of Selected Household Hazardous Waste Programs

Household Hazardous Waste

The 1988 County Hazardous Waste Management Plan indicates that Fauna County households generate on average 6.75 pounds of household hazardous waste (HHW) per year. This figure was used by all of the jurisdictions in their HHWEs, with the exception of Catville, which determined that the annual per household generation of HHW is 7.22 pounds based on their waste characterizations study and a survey of legal and illegal disposal practices. The major constituents of HHW are used motor oil, latex paint, used antifreeze, dry cell batteries, aerosol containers, cleaning products, garden chemicals, and solvents.

In the past, a large proportion of the HHW generated entered the solid waste stream. In 1989, however, the County Environmental Health Department, in cooperation with the cities, implemented several programs to reduce illegal disposal of HHW. The County has implemented a load checking program at transfers stations and landfills that, combined with informational fliers and a standard procedure for refusing loads, has resulted in a significant decrease in household hazardous wastes arriving in self-haul and debris box loads.

Beginning in June, 1989, the County Environmental Health Department began holding periodic HHW collection events in different locations around the County. Three events were held in 1989, and six have been held each year since then. All events are open to all residents of Fauna County. Each event has attracted between 150 and 250 residents. The program places great emphasis on reducing the amount of material requiring landfilling. All recyclable materials collected (i.e., latex paint, batteries, motor oil, and anti-freeze) are recycled; solvents and oil-based paints are sold for fuel, and reusable products, such as roof tar and cleaning products, are used by the County Public Works Department, or given away. Those materials that cannot be recycled or reused are labpacked and shipped to a hazardous waste disposal facility.

Three recycling centers in the County accept recyclable HHW: these are the Community Recycling Center in Catville, the Barking Dog Buy Back center in Dogtown, and the Port Salmon Recycling Center.

The County Public Works Solid Waste Division runs a public education program encouraging residents to reduce their use of hazardous materials; to use safe, effective substitutes for hazardous products; to recycle motor oil, latex paint, batteries, and antifreeze; and to use the County's periodic collection events for those hazardous wastes they cannot recycle.

Table 5-2 Materials Targeted and Handling in Each Selected Program				
Jurisdiction: Dogtown Component: Recycling Program: Commercial Curbside				
Targeted Material	% of Waste-stream	Tons Diverted: 1995	Tons Diverted: 2000	Marketing Strategy
Corrugated cardboard	4.5	4,560	5,670	Service provider markets all materials
CRV glass containers	2.1	2,405	2,614	Materials directed to local processor
Aluminum cans and scrap aluminum	.8	954	1,059	Service provider markets materials

Model Listing of Targeted Materials and Marketing Strategies

The next set of tables shows, for each selected program for each jurisdiction: the materials targeted for diversion in the program; the percent of the jurisdiction's wastestream represented by this material type; the projected diversion, in tons, for the benchmark years 1995 and 2000; and marketing strategies for the material. *[Please note: the format used for Table 5-2 can also be used for HHW programs.]*

C. Model Summary of Nondisposal Facilities

Table 5-3 lists all of the existing and planned nondisposal facilities in the County, their location, and the jurisdictions within their watersheds. Nondisposal facilities include permitted composting, materials recovery, and transfer facilities.

D. Model for Coordination of Programs

1. Model Consideration of Programs for Countywide Coordination

General Considerations

In this section, programs and facilities are considered for consolidation. Coordination may involve the combination of similar programs selected by most of the jurisdictions within the County into a single program that is then implemented within, or on behalf of, the participating jurisdictions. Consolidation of programs may also take the form of establishing an administrative structure for coordinating implementation of essentially identical programs throughout the County, or it may involve cooperative design and implementation of programs. An example of cooperative design is the development of guidelines or recommendations for the structure and function of a particular type of program.

**Table 5-3
Nondisposal Facilities in Fauna County**

Jurisdiction Where Located	Name of Facility	Operations Begin	Jurisdictions Utilizing the Facility
Transfer Stations			
Dogtown	Dogtown Transfer Station	1985	Dogtown, Catville, Unincorporated County
Materials Recovery Facilities			
Dogtown	Dogtown Materials Recovery Facility	1990	Dogtown, Unincorporated South County, Sheepsberg
Composting Facilities			
Unincorporated South County	Dog's Tip Compost Facility	1995	Unincorporated South County, Dogtown, Catville
Sheepsberg	Sheepsberg Compost Facility	1998	Sheepsberg, Grizzly City, Unincorporated Central County

Selection of programs for Countywide implementation will be based on the following:

- a. the data presented in the individual jurisdictions' documents, and summarized in Section A of this chapter;
- b. the development and application of criteria for evaluating the suitability of programs and facilities for coordination or consolidation. This process is presented below; and
- c. the LTF's discussions and deliberations of, and the jurisdictions' concurrence in, recommendations for programs and facilities to be consolidated into Countywide programs and facilities.

The following section first identifies programs selected for consideration for Countywide implementation. The criteria that will be used for evaluating the suitability of the candidate programs for Countywide coordination or consolidation and the evaluation of candidate programs are provided at the end of this chapter. The criteria and the evaluation are not required by regulations, but are provided as additional information.

Model Identification of Programs for Evaluation

In this section, programs are identified as potential candidates for coordination or consolidation and implementation as Countywide programs. The following programs are considered appropriate candidates for Countywide implementation, either because they were broadly or universally selected for implementation in the SRREs and HHWEs of the individual jurisdictions (See Table 5-1), or because the LTF identified them as appropriate programs for Countywide implementation. *[Please note: this list includes some types of programs that typically may be considered appropriate for consideration as countywide or regional programs.]*

Source Reduction Programs

- a. variable can rates
- b. waste audits
- c. backyard composting

Recycling Programs

- a. residential curbside collection
- b. commercial collection
- c. buy-back and drop-off centers
- d. school programs
- e. mixed waste processing
- f. Recycling Market Development Zones

Composting Programs

- a. curbside collection of yard debris
- b. processing and composting of organic material
- c. co-composting with sewage sludge

Special Waste Programs

- a. tire diversion
- b. baghouse waste reduction

Education and Public Information (EPI) Programs

- a. promotion of residential curbside programs
- b. disposable diaper reduction
- c. precycling
- d. "Buy Recycled" campaign

HHW Programs

- a. periodic collection events
- b. mobile collection program

2. Model of Programs Selected for Countywide Implementation

The following programs have been selected for Countywide implementation, based on a methodical evaluation of the programs listed above (see below), and the individual jurisdictions' concurrence in the conclusions reached in the evaluations:

Source Reduction Programs
Backyard composting

Recycling Programs
Standardized reporting procedures for diverted materials
Cooperative Marketing of collected materials

Education and Public Information Programs
Buy recycled campaign

3. **Model Description of Programs Selected for Countywide Implementation**

This section describes the programs selected for Countywide implementation. For each selected program, there is a description of the reasons that the program is being integrated; the form, scope, and function of the integrated program; the agencies responsible for implementing, monitoring, and evaluating the program; materials handled by the program, and market development strategies for the program; and a schedule for coordination and consolidation. *[Please note: two programs are described here.]*

Coordination of Program Number 1: Coordination of Countywide Recycling

Reasons for Selecting the Program

While no single type of recycling program was found to be appropriate for consolidation into a Countywide program in Fauna County, the LTF has recommended, and the jurisdictions have concurred in, the creation of a Countywide program to oversee and coordinate implementation of individual jurisdiction's recycling programs. The evaluation of recycling programs considered for coordination or consolidation reached the conclusion that none were suitable for consolidation. However, the evaluations highlighted the advantages that may be achieved by coordinating development of the County's recycling programs, including standardization of services provided, standardization of reporting, increased efficiency and effectiveness of public education programs, and a possible increase in the marketability of products.

Program Design

The Countywide Recycling Coordination Program will take the form of a Countywide Recycling Coordination Committee made up of staff from each of the jurisdictions. The purpose of the Committee will be: to share information on program developments; to work to standardize services, particularly for jurisdictions adjacent to one another; to establish a standard reporting method for all of the curbside operators in the County; to cooperate on building stronger markets for secondary materials produced in the County; and to cooperate on Countywide public information programs.

Administrative Structure

The Committee will be organized as a technical advisory committee to the County, and will be staffed by the County Solid Waste Division. While the Committee will not have its own budget, it may plan and implement programs under memoranda of understanding signed by jurisdictions wishing to delegate responsibility for some programs to the Committee. The

Committee will consist of one staff member from each jurisdiction in the County. Meetings will be open to the public.

Materials Handling and Marketing

This program will not itself collect or process materials, but instead will coordinate and oversee other collection and processing programs. One function of this program will be to coordinate development of a regional materials marketing cooperative whose function will be to combine, process, and market secondary materials on a scale larger than can be achieved by the individual recycling programs. (See previous chapter.)

Consolidation of Program 2: Education and Public Information

The Public Information Subcommittee of the Local Task Force is responsible for developing and coordinating Countywide education and public information (EPI) programs. It is the goal of the Subcommittee to plan Countywide EPI programs that reduce costs, eliminate duplication of effort, and increase the effectiveness of education and public information programs. Furthermore, it is the goal of the Subcommittee to coordinate and increase the effectiveness of source reduction programs. Since source reduction is achieved primarily through changing the behavior of individuals, effective education and public information is crucial to the County's source reduction efforts.

Two EPI programs have been selected for Countywide implementation: the "Precycling" program and the "Buy Recycled" campaign. In addition, Fauna County has taken the initiative to develop two public information programs to serve the entire County: an information hotline, and a guide to diversion programs in the County. The following list includes EPI programs selected for Countywide implementation, and the County's Countywide programs.

1. Establishment of an information hotline
2. Guide to waste reduction and recycling programs in Fauna County
3. Precycling program
4. Buy recycled campaign

The County has responsibility for implementing programs 1 and 2; the LTF, with the concurrence of the Cities and the County, intends to designate individual jurisdictions for the development of the other Countywide programs. Table 6-1 provides cost and revenue details about each program and the following section outlines the dimensions of each selected Countywide EPI program.

Program Descriptions *[Please note: one example is provided here.]*

1. Establishment of an Information Hotline

The County Community Development Department is in the process of implementing a Countywide information hotline. The purpose of the hotline is to provide a single, central information source on the particulars of all of the diversion programs operating in the County. The hotline uses a toll-free 800 number, relies on an interactive computer database, and is staffed 6 hours per day, 5 days per week. Residents and businesses can query the hotline about local diversion programs, tips on source reduction, or service providers for special jobs. The hotline can refer users to waste exchanges and other services, and callers to the hotline are

offered a copy of the County's Waste Reduction and Recycling Guide. The hotline may eventually be combined with an organic waste reduction "rotline."

2) Model Implementation Schedule

Please refer to Table 5-4 for the Implementation of Coordinated Programs

4. Evaluation of Programs for Countywide Implementation

The following section provides the criteria used to evaluate programs in the previous examples for possible coordination or consolidation on a countywide basis. An evaluation of a program is then provided. This procedure is not required by the regulations and is only provided as additional assistance in making the determination of which programs a county or regional agency may desire to coordinate or consolidate for implementation on a countywide or regional basis.

Criteria Used for Evaluation

This section lists the nine criteria that the LTF established to evaluate the appropriateness of programs for coordination or consolidation. Each criterion is posed as a question that must be answered to determine the program's suitability for coordination or consolidation. *[Please note: in this example, the narrative method is being used; for the quantitative or qualitative methods, preparers of the Summary Plan should assign a scoring schedule for each criterion; see Appendix C].*

- 1) Is the program selected by at least a two-thirds majority of the jurisdictions, containing at least a two-thirds majority of the County's population?
- 2) What is the likelihood that coordinating or consolidating the program would result in a diversion rate higher than that achieved by individual implementation?
- 3) Would coordination or consolidation of the program result in overall lower capital, operating, or administrative costs?
- 4) Would coordination or consolidation of the program result in an advantageous market position for the entity marketing the recovered materials?
- 5) Would coordination or consolidation of the program result in a streamlining of administrative structures for the program?
- 6) Would coordination or consolidation of the program improve education and/or public information opportunities?
- 7) Would coordination or consolidation of the program result in centralization to the extent that local small businesses, minority-owned businesses, or non-profit organizations would be forced to suspend or reduce their diversion activities?

Table 5-4
Schedule for Coordination of Countywide (Regional) Programs
[Please Note: examples of two programs are given]

Program/Task	Responsible Agency	Time Frame (Quarter/Year)
Backyard Composting		
Design administrative structure for program	LTF Source Reduction Subcommittee	1/94
Appoint lead agency for coordinating program	Participating jurisdictions	2/94
Establish funding mechanism	Lead Agency/participating jurisdictions	2/94
Specific program design	Lead Agency	3/94
Program implementation	Lead Agency	3/94-4/94
Program begins operation	Lead Agency	4/94-1/95
Monitoring and Evaluation	Ad hoc committee of participating jurisdictions	annually, beginning 4/1994
Countywide Recycling Coordination		
Form Committee by appointing staff members	All jurisdictions	6/94
Staff committee	County	6/94
Committee meets	All jurisdictions	Monthly or more often, commencing 6/94
Produce a standard method of reporting for curbside programs	All jurisdictions	10/94
Recommendations on forming a marketing cooperative	All jurisdictions	12/94
Other Committee functions	All jurisdictions	Ongoing

- 8) To what extent would coordination or consolidation of the program facilitate accounting procedures for determining the amount of diversion the program is achieving?
- 9) Would coordination or consolidation lead to centralization, and the need to expand existing facilities or build new facilities?

E. Model Program Evaluations

[Please note: the following is an example of how each program under consideration could be evaluated with the model criteria listed above].

Program: Residential Curbside Collection

- 1) *Is the program selected by at least a two-thirds majority of the jurisdictions, containing at least a two-thirds majority of the County's population?*

The program is selected by all of the jurisdictions, with the single exception of Mouse Haven (population 2,200).

- 2) *What is the likelihood that coordinating or consolidating the program would result in a diversion rate higher than that achieved by individual implementation?*

There is no evidence that combining residential curbside programs would result in higher diversion rates. Currently, four service providers (including the City of Dogtown's own Public Works Department) provide curbside collection service. In general, participation rates are high, and facilities are adequate to handle the addition of materials planned in several jurisdictions.

- 3) *Would coordination or consolidation of the program result in overall lower capital, operating, or administrative costs?*

Some economies of scale may be achieved if processing of curbside materials is centralized; however, this gain would probably be offset by a loss of efficiency in collection, since the County's communities are spread out over a large area.

- 4) *Would coordination or consolidation of the program result in an advantageous market position for the entity marketing the recovered materials?*

Again, some gains would probably be realized if processing, and therefore marketing, were centralized. However, the jurisdictions in the County are exploring the possibility of cooperative marketing of materials, which, if successful, would largely preclude the necessity for centralized processing and marketing.

- 5) *Would coordination or consolidation of the program result in a streamlining of administrative structures for the program?*

Combining the existing programs might actually complicate administration, since interjurisdictional arrangements would have to be worked out, fee-setting, billing, and public information overhauled, and existing franchise agreements modified.

- 6) *Would coordination or consolidation of the program improve education and/or public information opportunities?*

The differences in the existing curbside programs may result in some confusion, e.g., between Dogtown and Catville, which are adjacent to one another, and which have significantly different curbside service. Standardizing programs would enable uniform education and public education, and might be an advantage there.

- 7) *Would coordination or consolidation of the program result in centralization to the extent that local small businesses, minority-owned businesses, or non-profit organizations would be forced to suspend or reduce their diversion activities?*

Currently, one public agency, one non-profit organization, and two for-profit businesses operate curbside programs in the County. Some existing franchise agreements are in effect until 1999. Combining programs may have a negative impact on local businesses and community development.

- 8) *To what extent would coordination or consolidation of the program facilitate accounting procedures for determining the amount of diversion the program is achieving?*

Currently, each program reports the tonnage of each type of material collected to the jurisdiction. Standardization of this information would greatly facilitate the County's accounting for diversion, but coordination or consolidation of the programs themselves is not necessary to achieve this.

- 9) *Would coordination or consolidation lead to centralization, and the need to expand existing facilities or build new facilities?*

No single processing facility in the County has the capacity to handle all of the projected tonnage from all of the curbside programs. Combining programs would, therefore, likely require construction of new processing facilities.

- 10) *Summary and Conclusion*

Coordinating or consolidating curbside programs would not result in significant advantages, and the disadvantages are serious. However, some standardization, e.g., of reporting of diverted materials, and of EPI programs, would facilitate operations of the program, and the efforts to establish a cooperative marketing system should continue.

CHAPTER 6

FINANCING OF COUNTYWIDE OR REGIONAL PROGRAMS

(CCR SECTION 18758)

6.1 Summary of Requirements

CCR Section 18758 requires preparers of the Summary Plan to estimate costs and summarize funding and revenue sources for countywide and regionwide programs and facilities.

6.2 Specific Requirements

CCR Section 18758(a) requires cost estimates for the countywide or regional programs and facilities scheduled for implementation.

Section (b) requires that counties and regional agencies summarize funding sources and allocation of revenues for the planning and implementation of all countywide or regional programs and facilities identified in the Summary Plan.

All of the specific cost and revenue information required for this section may be organized into a single table. An example of such a table appears in the following section. In addition, preparers of the Summary Plan may wish to discuss, in more general and descriptive terms, the sources of funding that will be used for planning, implementation, and operation of countywide or regional programs and facilities.

6.3 Model Format for Financing of Countywide or Regional Programs

This section details costs of implementation of Countywide programs and facilities, and identifies probable funding sources for Countywide programs and facilities. Costs and revenue sources are summarized in Table 6-1.

There will be several sources of funds for planning, operating, and monitoring those programs selected for Countywide implementation:

- the Integrated Waste Management fee, a \$1.50 per ton surcharge placed on all material going to landfill in the County. Two thirds of the revenues from this fee are distributed to the jurisdictions on a per capita basis and are earmarked for integrated waste management planning and program development. One third of the revenues from this fee accrue to the County, to be used for Countywide planning and program development;
- grants and loans from state and other agencies that may be used for funding Countywide programs;
- revenues from waste collection fees or franchise fees; and

- member contributions from jurisdictions participating in Countywide programs. Funds may originate from franchise fees, general funds, or other sources, at the discretion of each jurisdiction.

Any programs that will be funded with grants, loans, and participating jurisdictions' contributions will necessarily involve establishing written agreements between all participating jurisdictions spelling out financial responsibilities as well as programmatic responsibilities.

**Table 6-1
Costs and Revenue Sources for Countywide Programs**

Program	Start Date	Program Cost (\$): Start-up/Annual	Revenue Sources and Annual Contributions
Hotline	1992	not applicable	County's portion of the IWM Fee
		25,000	Total revenues for the County are approx. \$100,000 per year
Waste reduction and recycling guide	1992	25,000	County's portion of the IWM Fee
		10,000	Total revenues for the County are approx. \$100,000 per year
Backyard composting	1993	30,000-100,000	Contributions from jurisdictions on a per capita basis; total population is 200,000; per capita contributions will be \$.15-\$.50 for start-up.
		40,000-80,000	Same source and formula; annual contributions will be \$.20-\$.40.
Precycling	1993	not applicable	Staff time only
		not applicable	Staff time only

Appendix A

ADMINISTRATIVE STRUCTURE OPTIONS FOR WASTE MANAGEMENT

Neither the statutes nor the regulations require preparers of the Summary Plan to specify administrative structures for programs and facilities selected for countywide or regional implementation. Nevertheless, establishing an administrative structure is an essential step for implementing countywide or regional programs. This appendix briefly discusses the kinds of interjurisdictional agreements that may be appropriate for administering different types of countywide or regional programs and facilities; however, this appendix does not contain an exhaustive discussion of all the possible agreements from which jurisdictions could choose.

Jurisdictions involved in implementing a countywide or regional program or facility can choose from a variety of widely recognized structures for allocating responsibility and authority between themselves. For facilities and programs requiring a formal legal structure, jurisdictions can select from a number of interjurisdictional governmental structures and contractual relationships. For programs requiring less structure, there are numerous formal and informal cooperative arrangements they can employ to ensure equitable and clear allocation of responsibilities and sharing of resources. Brief discussions of the major organizational structures are provided below.

Interjurisdictional Governmental Structures and Formal Agreements

Formal structures and agreements are appropriate when jurisdictions are involved in countywide or regional programs that involve development, purchase, ownership, operation, or administration of a facility, such as a MRF, compost facility, or transfer station. Formal structures and agreements are also appropriate when jurisdictions are planning to jointly capitalize, operate, or oversee a single collection program that serves them all. Four of the possible formal structures are discussed below.

1. Lead Jurisdiction

A single jurisdiction sponsors a facility or program primarily for its own use, but cooperates in some elements with neighboring communities through contractual agreements. The lead jurisdiction may own, build, operate, or contract for operation of the facility or program, while other jurisdictions contract with the lead jurisdiction to specify certain rights and responsibilities of both parties. Contracts may include provisions for rights to deliver materials to a facility, rate and payment structures, and equity shares. The agreement specifies how the facility or program is to be administered, and how revenues are to be allocated if the program is a revenue generator. The lead jurisdiction model may be used for development of MRF's, compost facilities, and transfer stations that serve several jurisdictions. It may also be used for non-facility programs where one jurisdiction capitalizes, operates, or contracts for a service that they also provide to other jurisdictions.

2. Joint Powers Authority (JPA)

JPA's are multi-jurisdictional consortia in which individual jurisdictions sign an agreement (the joint powers agreement) that allocates certain powers and responsibilities to the consortium. JPA's are legal, governmental bodies whose members may include any combination of counties, cities, and special districts. In the integrated waste management arena, JPA's are usually used for jointly

planning programs and facilities, and for ownership or administration of facilities. Depending on the purpose of a particular JPA and the terms of the joint powers agreement, a JPA's powers may include the following:

- holding property in its own right;
- entering into contracts;
- constructing and maintaining facilities;
- incurring debts, liabilities and obligations;
- issuing bonds;
- levying tipping fee surcharges;
- expropriation of property, but only with approval of the jurisdiction where located; and
- preparation of elements of the Countywide or Regional Agency Integrated Waste Management Plan.

3. Special District

Special districts may be formed by any combination of unincorporated communities, cities, and counties to take responsibility for specified aspects of waste management. Veto rights of participating jurisdictions are limited, while the special district has broad powers. Special districts may have all of the powers of a JPA, and in addition can draft district-wide ordinances, finance facilities and programs through property tax levies, and expropriate property through power of eminent domain. Special districts may have franchising authority, and may have the authority to impose fees to fund solid waste management programs. Jurisdictions that fall within the boundaries of the special district may transfer some planning and administrative functions to the district, such as franchising authority and responsibility for integrated waste management planning.

4. Memorandum of Understanding (MOU)

MOU's can be used to establish a cooperative agreement between jurisdictions. MOU's are a type of legally binding contractual agreement. They are most often used to delineate rights and responsibilities where authority overlaps, for example, between special districts and cities or counties who share the same geographic space; and for establishing a basis for proceeding with a project involving more than one jurisdiction, the details of which will be worked out at a future date. One example for countywide program planning and implementation is the use of an MOU between a county and sanitary districts located in the unincorporated areas that delineates franchising authority, as well as responsibilities for developing, implementing, and administering diversion programs. Another example is a preliminary agreement between jurisdictions to proceed with initial planning for a MRF or other facility. The agreement may be replaced at a later date with an agreement or structure that more clearly defines roles and responsibilities of the participating jurisdictions.

Informal Agreements and Cooperative Efforts

Countywide and regional programs that do not involve ownership of property, purchase of equipment, or transfer of authority between jurisdictions may be administered with informal agreements or through a committee or task force. Programs that may require only minimal administrative structure include efforts to jointly or cooperatively design and oversee collection programs where the actual operation of the program remains the responsibility of each individual jurisdiction; information coordination and sharing; and programs that coordinate public education and outreach efforts. Such programs may best be administered through a technical advisory committee, made up of staff from the participating

jurisdictions, by the AB 939 Local Task Force, or through a verbal, non-binding agreement between staff or elected officials to cooperate.

Considerations in Selecting an Appropriate Administrative Structure

Administrative structures should be matched to the requirements of the countywide or regional program or facility, and to the needs of the participating jurisdictions. When considering what sort of administrative structure to use for a countywide or regional program or facility, preparers of the Summary Plan may wish to determine whether the following points pertain to their situation, and if so, whether they should be addressed in an agreement:

- whether property ownership is involved;
- how to share responsibilities and delineate decision-making authority in the least burdensome manner;
- what level of autonomy is desired by individual jurisdictions;
- how liability and benefits are to be allocated;
- how to compensate host communities for any degrading social or environmental impacts of facilities; and
- what types of warranties and protections the parties to the agreement desire.

A major consideration in regionalization of programs and facilities is whether there exist significant differences between the jurisdictions involved that might complicate the ability to successfully execute a countywide or regional program or facility. Jurisdictions must be able to work together productively if a countywide or regional program is to be effective. Some issues that have the potential to produce conflicts and which preparers of the Summary Plan may wish to consider include:

- differences between jurisdictions in terms of form of government or political orientation that could affect the decision making process or the ability to come to agreements;
- variations in the degree of urbanization of participating jurisdictions;
- significant differences in the demographics of individual jurisdictions;
- differing financial capacities of jurisdictions that may affect funding obligations, financing modes, and related allocations of liability; and
- geographical distribution, accessibility and other attributes of facility or program location.

References

CIWMB, *Waste Diversion in Rural California*. CIWMB, September 1991*

CIWMB, *Literature Survey on Regionalization of Solid Waste Management*, CIWMB, December 7, 1992*

Rassbach, Kate, et. al., "Institutional Strategies for Developing MRFs, *BioCycle*, April 1992

U.S. EPA, *Public Private Partnerships for Environmental Facilities: A Self-Help Guide for Local Governments*. Washington, D.C., USEPA, May 1990.

*Available upon request from the CIWMB.

Appendix B

MARKET DEVELOPMENT ISSUES AND STRATEGIES

This planning guide is intended to highlight important issues to be addressed by counties and local jurisdictions in establishing and implementing market development programs for recyclable materials. The guide:

- focuses on the fundamental steps in designing and implementing a market development program;
- describes some strategic considerations for creating a viable program and identifies some of the barriers that might be encountered in implementing a program;
- discusses how local government policies and actions can facilitate the market development process; and
- identifies sources of information and assistance on market development.

MARKET DEVELOPMENT STEPS

Market development is the process of managing the supply of collected materials in such a way that it meets the demand from buyers who design and produce products, buy materials for their own consumption, or sell to other end users. A key objective of market development should be to guide the planning and implementation of a materials collection program so that it enhances the marketability of materials and avoids the pitfalls of over-collection and under-processing which can result in collecting materials that cannot be sold. Market development is an iterative process with three basic steps:

Step 1. Select Target Materials: Identify marketable (and potentially marketable) materials in the waste stream, determine sources, quantities, and factors that affect the supply.

Step 2. Identify Markets: Identify potential public and private buyers of the available materials and determine their specifications for material quality and quantity. Estimate the demand for each material, taking into consideration prices and the factors that cause price fluctuations.

Step 3. Collect, Process and Sell Materials: Determine how much of each material should be collected, how it will be collected, and to what extent it must be processed in order to market it. Establish appropriate agreements with buyers.

Given the changeable nature of materials markets, these three basic steps become a continuous process of analyzing and reanalyzing materials to ensure they can be collected, processed and marketed cost-effectively. Marketing a particular material may be infeasible if prices do not

cover collection, transportation and processing costs. Following is an overview of major strategic issues that could affect the successful implementation of these steps.

Step 1: Select Target Materials

Selection of waste materials to target in a market development program is basically a question of supply and demand. Identification and selection of materials initially should focus on specific high-volume components of municipal solid waste, as well as industrial, construction and demolition, and green wastes. Waste generation reports should be reviewed and all major components of the waste stream should be considered as potential target materials. [NOTE: All jurisdictions should have a Waste Characterization Component in their Source Reduction and Recycling Element (SRRE).]

Step 2. Identify Markets

For economic reasons, local governments should look as close to home as possible to find markets for materials, with local or regional businesses serving as the primary market for the available supply. Governments should look first to local businesses as a market for materials. Second would be regional buyers who buy quantities of materials. When this is not possible for specific materials, planners should look farther afield, taking into consideration transportation logistics and costs for selling to distant buyers.

The major outlets for secondary materials are brokers (or dealers) and end-users:

Brokers purchase particular materials and sell them to end users as "raw material feedstock." End-users like to buy from brokers because they can guarantee large quantities of materials at a uniform quality. Brokers often buy materials even when the market is down, stockpiling in anticipation of higher prices. Many provide for transportation and processing (usually a clean product is all that is demanded).

End-users are the facilities that actually reprocess or remanufacture the post-consumer materials. Selling to end users can result in a better price, but usually requires meeting more stringent specifications and delivery of the materials.

There are fairly well-developed, although unstable, markets for several recyclable materials that are currently traded nationally and internationally. Included are paper and related products, plastic containers (particularly PET and HDPE), used beverage cans and glass containers. Markets for other materials are less well organized, with great demand fluctuations based on availability of potential end-users and other factors such as available technology and customer acceptance. Included among these are mixed glass cullet, mixed paper, green wastes, tires, wood wastes, white goods, ash, sludge and other process residuals.

To assist in tracking market conditions, CIWMB has produced a series of market status reports and action plans for waste paper, plastics, compostables, glass, construction and demolition debris, metals and tires.

Keeping an eye on innovations will assist in long-range market development. Planners should devise methods of tracking pertinent research and development activity associated with

materials that are in abundance in the local waste stream, but which currently have few economically feasible applications in the marketplace. Innovations are underway with regard to uses for tires, compost products, plastics, sewage sludge, newspaper, and other materials for which commercial applications are being developed and tested. When market conditions evolve (or are induced) to make marketing such materials economically feasible, they should be targeted for collection. Evaluating the pool of potential buyers should be an on-going activity which feeds back into the materials selection process as buyers emerge for previously unmarketable materials.

Step 3. Collect, Process, and Sell Materials

In selecting materials for collection, market developers should consider how price and cost fluctuations will affect the viability of a target material. Some materials are susceptible to significant price drops when supply increases; others become difficult when processing or transportation costs rise. Prices that do not cover collection, transportation, and processing costs may render the recycling of a particular material economically infeasible. Furthermore, unmarketed recyclables may end up in landfills. In some cases, local governments should also factor into their costs analysis the avoided costs of *not* landfilling particular materials. Monitoring of costs and prices will help to determine the continuing viability of marketing specific materials.

Jurisdictions need to decide how to collect targeted materials to ensure that collection will be efficient and that processing equipment will be able to handle the materials as collected. Issues to consider include:

- the nature of the collection system (curbside, drop-off, etc.);
- number of different materials to accommodate through a given collection component;
- desired condition of collected materials (source separated, co-mingled);
- type, number and size of collection containers and vehicles;
- procedures for adding or deleting materials from the collection program; and
- collection costs, including personnel, equipment, and processing.

Collected materials which do not meet buyer specifications may not be sold. A workable market development strategy should include the specific types and levels of processing needed to meet specifications. For several recyclables, sorting collected materials is a key requirement (e.g., color sorting glass). In such cases, front-end source separation is usually more cost effective than back-end processing. Localities should consider approaches to increasing front-end source separation to reduce costs and increase the quality of recyclables.

Many materials available in the waste stream require industrial processing capacity, which in many cases is not well-developed. Where these materials are a large proportion of the waste stream (such as tires), long-range planning for market development should concentrate on increasing or initiating processing capacity.

Monitoring of costs and prices will help to determine the continuing viability of programs for marketing specific materials. When communities are unable to market a specific material they collect, several choices are available before resorting to discarding the unmarketed material:

1. Stop collecting the material, making sure that its lack of marketability is neither seasonal nor likely to be reversed in the short term. It is important not to go back and forth on the same material, as this can confuse and frustrate residents.
2. Stockpile materials in anticipation of an upswing in the market.
3. If not collecting particular a material will significantly impact attainment of the community's diversion goals:
 - a. Give materials to a processor willing to transport and use them; or,
 - b. Pay processors to take the materials.

LOCAL GOVERNMENT POLICIES, REGULATIONS AND ADMINISTRATIVE ACTIONS

At the present time and in the foreseeable future, local governments will be required to play an active role in creating a conducive environment for market development. Local governments should assess their individual situations and select appropriate strategies to optimize market development efforts. This includes actions to help ensure an adequate volume of marketable materials and actions to bolster demand by processors and end-users.

Local Government Interventions

Both the supply and demand sides of the market equation will benefit from government policies and actions that provide incentives for consumers and private businesses to participate in recycling efforts and buy secondary materials and products. Specific interventions might include:

Supply Side Interventions

- Establishing variable disposable rates (e.g., charging higher tipping fees for loads containing large amounts of recyclables to encourage collectors to keep those materials separate);
- establishing weight-based rates for households and businesses, combined with making recycling bins accessible, to provide an incentive to reduce waste disposal;
- enacting mandatory source separation requirements through use of citations, fines, or refusal to collect unseparated garbage;
- instituting disposal bans for selected recyclable materials with proven markets;

- increasing charges for residential garbage collection, with increasingly higher fees for additional waste containers;
- passing anti-scavenging ordinances to deter removal of recyclables before they can be collected; and
- implementing public information programs about the importance of recycling and the objective to collect specific materials.

Demand Side Interventions

- Establish government procurement policies that promote use of recycled-content products;
- set minimum content requirements for the use of post-consumer materials in products purchased by government agencies; and
- develop local and regional markets to purchase compost products.

Regional and Cooperative Marketing Efforts

Regional and cooperative strategies offer opportunities to increase efficiency of collections, make processing and transportation more cost-effective, and reduce administrative costs. Regionalization could enable a community to:

- meet needs of buyers who purchase large quantities of materials;
- pursue difficult-to-recycle materials markets;
- market materials with a variety of different grades and requirements; and,
- develop markets for alternative and experimental uses of recycled materials.

Planning for market development in any community should include an examination of the potential for regionalizing some (or all aspects) of recycling and establishment of cooperative marketing programs. This could be particularly applicable in rural areas that have a single significant industrial waste component. Markets for such materials, including ash, wood waste and other organics, are easier to develop cooperatively on a regional basis so that the supply of recyclables can be drawn from larger geographic areas.

Economic Development Strategies

The CIWMB has determined that through integrated waste management, potentially 20,000 jobs could be created in California's manufacturing sector, along with another 25,000 in sorting and processing, and thousands more from multiplier effects. An important step in market development is to coordinate the efforts of local economic development agencies and local solid waste management officials to combine their respective resources in creating new

markets, new businesses and new jobs. Among the economic development strategies county and local governments can implement are:

- recruit out-of-area manufacturers to site new plants that will use local recycled materials;
- work with existing industries to help them re-tool to accommodate local recycled materials;
- offer incentives for entrepreneurs to create new recycling enterprises tailored to the needs of local markets and the availability of local recycled materials;
- provide economic incentives to local industries that use local recycled materials; and
- in areas threatened by plant closures, industry downsizing, military base closings, or reductions in local defense industries, strategically focus on development of local recycling enterprises as a vehicle for economic renewal.

A key economic development initiative of the CIWMB has been the establishment of Recycling Market Development Zones (RMDZs) which are modeled after the state's Enterprise Zones. RMDZs are designed to develop regional processing and manufacturing capacity, create local markets for recycled materials, create jobs, and increase the local tax base. The RMDZ law encourages communities to expedite permit processing, reduce business fees and offer other incentives, such as low interest financing.

To provide capital for the RMDZs, the state established the Market Development Zone Loan Program, which makes low-interest loans to businesses located in the RMDZs and to local government agencies. Loans can be up to \$1,000,000, or 50 percent of funding needs, whichever is less. Loan proceeds may be used by businesses for real property, equipment, working capital, or refinancing of current debt. Funds may be used by governments to finance public works infrastructure that will directly support businesses using post-consumer or secondary waste material.

To date, 17 zones have been approved throughout the state. More than \$2.5 million in loans have been awarded to seven companies located in the Recycling Market Development Zones. By 1996, it is planned that 40 zones will be designated, with preference given to zones that benefit more than one jurisdiction. Jurisdictions which have not already done so should consider applying for designation, either independently or with other jurisdictions.

SOURCES OF INFORMATION AND TECHNICAL ASSISTANCE

The California Materials Exchange (CALMAX) Service helps waste generators and potential users of unique commercial and industrial waste materials communicate with one another throughout the State and beyond. CALMAX provides listings of available materials and wanted materials, as well as listings of other material exchange and reuse programs.

Several CIWMB publications provide information about State goals and programs, as well as useful data on waste materials. The following may be of particular utility in selecting materials and adopting local government strategies for carrying out a program.

Meeting the Challenge, A Market Development Plan for California, March 1993.

Interim Data Base Project, "Estimated Average 1990 Waste Stream Composition,"
Revised April 16, 1993.

Waste Diversion in Rural California, September 1991.

Recycling Market Development Zones, "Background on CIWMB Market Development
Efforts" (undated).

"Recycling Market Development Zone Loan Program and Financial Technical
Assistance," April 1993.

CALMAX Materials Listings Catalog

Market status reports and action plans for waste paper, plastics, compostables, glass,
construction and demolition debris, metals and tires.

The U.S. Environmental Protection Agency has handbooks that provide details on planning
and implementing market development programs and useful examples of efforts of other states
and localities, including:

Recycling Works, State and Local Solutions to Solid Waste Management Problems,
January 1989.

Decision-Makers Guide to Solid Waste Management, EPA/530SW-89-072, 1989.

For additional information on market development call the Board's Markets, Research, and
Technology Division at 255-2319.

APPENDIX C

EVALUATION METHODS TO SELECT PROGRAMS FOR COORDINATION OR CONSOLIDATION

This Appendix provides information to jurisdictions to assist in the evaluation of programs for countywide or regionwide coordination or consolidation. The following evaluative methods may be used by jurisdictions when considering the coordination or consolidation of programs. Jurisdictions are not required to use these methods.

Evaluation Methods

The statutes and regulations do not specify what method should be used to evaluate and select programs for coordination or what criteria may be used to evaluate the suitability of programs for coordination. Therefore, preparers of the Summary Plan must establish their own methods and criteria. The following are suggested criteria for evaluating programs. Each suggested criterion is followed by a discussion.

1) *The program or facility is selected by a large majority of the jurisdictions in the county or region.*

The tables or lists prepared for CCR Section 18757.7 (a)(1) and (b)(1) will provide preparers of the Summary Plan with a quick means of assessing which programs are widely or universally selected. Preparers of the Summary Plan may wish to make this criteria more objective or specific (e.g., by determining not only whether a majority of jurisdictions have selected the program or facility, but also the percent of the county's or region's population residing in these jurisdictions, or the geographic proximity of the jurisdictions selecting the program).

Alternatively, if a program or facility is selected by all of the jurisdictions within a particular subregion of the region or area of the county, the program may be appropriate for integration at the subregional level.

2) *Combining the program or facility may result in higher diversion rates.*

Since the primary goal of the Integrated Waste Management Act is to divert more materials from landfill and transformation, an important consideration may be whether coordination of programs would result in higher diversion levels than implementing programs individually. In most cases, an increased diversion potential would result from the fulfillment of one of the other criteria listed here: the achievement of economies of scale, resulting in freeing up of funds for improvements in service; increased marketability resulting in higher prices being for recovered materials; increased effectiveness of education and public information programs, resulting in higher participation rates and better prepared materials for recycling or composting; more effective administration of the program, resulting in better response to problems and deficiencies in design or operation.

3) *Combining the program or facility would result in economies of scale and cost savings.*

Determining whether consolidating a program would result in economies of scale and cost savings is not a simple or straightforward matter. Economies of scale may, however, be a crucial determinant in the integration process. Economies of scale are achieved when equipment and facilities are maximized,

when larger capacity equipment or facilities cost less than several similar, smaller items; and when management and administrative costs are not duplicated. Most collection programs are inherently modular (i.e., one collection vehicle only has the capacity to service a limited number of customers). As long as the vehicles in multiple, similar programs are operating at capacity, economies of scale probably would not be achieved through combining programs.

Processing programs and facilities, on the other hand, sometimes experience significant economies of scale, since duplication of equipment, management, planning, permitting, and administration can be avoided, and in some cases, total construction costs lowered. However, larger facilities that serve a broader geographic area may cause diseconomies for collection programs, since vehicles may have to travel longer distances to unload materials, and unless the facility is planned with great care, bottlenecks may occur for vehicles waiting to off-load.

Preparers of the Summary Plan who are evaluating the potential economies of scale for combining programs or facilities may have to research their own county's or region's situation carefully, in order to apply this criterion objectively and accurately.

4) *Combining the program would facilitate marketing of recovered materials.*

In some cases, combining programs that produce the same recovered materials may result in an advantageous position for marketing the recovered material. This position may occur because a single processor will handle larger amounts of a material, and may be able to market more directly to end-users. Also, collectors may achieve a sufficient economy of scale to justify the purchase of equipment that is able to produce a higher quality of recovered materials. For example, combining the materials processing from the curbside programs of several small communities would enable the processor to afford the purchase of a horizontal baler capable of producing export-quality bales of various grades of paper. This would allow the processor to find the best foreign or domestic market for their materials.

5) *Combining the program or facility would simplify administration and/or minimize duplication of effort on the part of the participating jurisdictions.*

In some situations, combining similar programs may result in a simplification of administrative structures. In counties or regions where there are numerous, sometimes overlapping agencies involved in integrated waste management, or where programs selected by many jurisdictions are most logically administered centrally, combining programs may facilitate successful implementation and operation of the program.

An example of successful coordination of a source reduction program is the Alameda County Home Composting Program. Originally, this Program was administered centrally in association with the County Vector Control Agency, and received funding from the Alameda County Waste Management Authority (ACWMA), a JPA, and from some of the participating Cities. The Program is now administered directly by the ACWMA. The Program consists of a "Rot-line" that provides information to callers; a mobile demonstration unit that can be taken to schools, fairs, farmers markets, and other events; and four permanent demonstration gardens. Each garden is located in a park or recycling center, and is a joint project of the Program and the City in which the garden is located. Each garden has a part-time manager, who maintains the garden and the compost bins, and also runs scheduled training workshops. In addition, the Program distributes subsidized composting bins to residents who request them, and trains "Master Composters" who, after receiving a certificate, are obligated to train members of their community in composting practices. The centralization of the administration ensures a coordinated outreach effort, effective scheduling of workshops, and the provision of uniform

information to the public. Each garden takes on some of the characteristics of the community in which it is situated, and is designed to serve that community. The project could easily be expanded by adding more gardens in more cities. With this structure, the individual jurisdictions are able to participate in the program to the extent they desire.

6) *Combining the program would make education and public information regarding the program more effective and less costly, and may increase participation in the program.*

Where similar programs are implemented in adjacent or proximate jurisdictions, but differences occur in the programs, the public may become confused regarding what materials are accepted by a program and how they must be prepared and where to get information about the programs operating in their community. If confusion levels are high and participation levels are low, jurisdictions may benefit from combining, or at least coordinating, the programs in question. If adjacent jurisdictions are providing the same services, either with the same or separate service providers, they may benefit from more accurate word of mouth communication between residents of the two jurisdictions. Furthermore, mass media public information campaigns can generally be made more effective and less costly on a per capita basis if they cover a wider geographic area. Television and radio stations generally serve media markets not contiguous with city and county borders. If, however, a county or region makes up a significant portion of a station's market, public service announcements on that station may be quite effective in informing the public about the existence and the particulars of similar or combined programs.

7) *Combining the program would not impinge upon the legitimate business activities or the economic development potential of existing diversion service providers.*

Some jurisdictions may be concerned that coordination or consolidation of a program they have selected may interfere with local businesses or local economic development activities. This may occur, for example, when coordination or consolidation would involve centralization of recycling processing and would therefore preempt the role of several, scattered, smaller firms or organizations; or when the importance of a small business or non-profit recycler within the community is not recognized by a more distant administrator of a program. Therefore, a criterion such as this may be useful for screening out programs which would have a negative effect on local businesses or economic and community development.

8) *Combining the program or facility would facilitate accountability and calculation of diversion rates.*

Assembly Bill 2494 (Statutes of 1992) altered the method of accounting for progress toward diversion goals, changing the method from "diversion-based" to "disposal-based". In other words, jurisdictions will now calculate their diversion rate by determining the decrease in the amount of materials going to landfill and transformation facilities. AB 2494 does, however, require jurisdictions to monitor and summarize the diversion resulting from recycling and composting programs they operate or fund (PRC Section 40901 (2)). Prior to passage of AB 2494, accounting for diversion was imperative, and many jurisdictions looked toward combination and centralization of programs and facilities as means of simplifying this accounting. Now that this requirement has been modified and made less stringent, there is less of an imperative to combine and centralize merely to account for diversion.

9) *The extent to which integrating programs would require the construction of new facilities.*

Existing processing capacity for curbside recyclables may exist in several locations throughout the county or region. No one of these facilities, however, may have sufficient capacity to handle most or all of the curbside materials from the county or region. If coordination or consolidation of the curbside programs would involve directing these materials to a single facility, then a new facility, or the expansion of an existing facility, would have to be planned.

Selecting Programs

Once criteria have been established, it will be necessary to apply them to each program under consideration in a consistent and logical manner. Neither the statutes nor the regulations specify a process for applying criteria or selecting programs. Presented below are three methods that preparers of the Summary Plan may wish to consider: the narrative method, the quantitative method, and the qualitative method.

Narrative Method

The narrative method consists of a discussion of how each criterion applies to each program under consideration. The discussions should be objective and factual, and should lead to a logical conclusion regarding the suitability of the program for coordination. The advantages of this method include the following:

- a more thorough discussion of the issues surrounding coordination of a program;
- avoidance of trying to force a quantitative consideration of essentially qualitative issues; and
- it serves as a basis for discussion and revision among the participating jurisdictions.

Disadvantages of this method include:

- it may be more difficult to maintain objectivity; and
- it is more difficult to compare the suitability of different programs to each other.

Quantitative Method

The quantitative method is a means of ranking programs numerically, by scoring them on how they fulfill each criterion. This method involves several steps. First, it is necessary to determine the relative importance of each criterion, and assign each criterion a total possible number of "points" based on this determination. For example, preparers of the Summary Plan may determine that the criterion "increases diversion potential" is extremely important, and should be given a maximum of 200 points; "simplifying administration and minimizing duplication of effort" may be considered less important, and be given a maximum of only 100 points. After all of the criteria are weighted, guides must be drawn for scoring each program. For each criterion, cut-off points should be established, and a score ascribed to each. For example, for the criterion "increases diversion potential," a scoring schedule may be as follows:

Potential to divert an additional 3% of the County/Region waste stream:	200 points
Potential to divert an additional 1-2.9% of the waste Stream:	150 points
Potential to divert an additional .3-.9% of the waste stream:	100 points
Little or no potential to increase diversion:	0 points

Next, each program under consideration should be scored, the scores tallied, and the programs ranked according to score. Those programs receiving the top scores should then be considered good candidates for coordination or consolidation.

Advantages of the quantitative method include the following:

- much is learned in the process of deciding weighing of criteria, scoring schedules, and the scoring itself;
- the method is more objective, within the context of the pre-set weightings and scorings; and
- the method results in an easily comparable "score" for each program.

Disadvantages include:

- determination of a score for some criteria may itself be subjective, and so the entire method may result in an apparent, but false, sense of objectivity;
- decisions on how to score particular programs may not themselves be open to discussion, and the reasons for assigning scores may not be clearly stated; and
- the method may, therefore, inadequately serve as a basis for further discussion and revision.

Qualitative Method

The third suggested method for assigning criteria and selecting programs for coordination or consolidation is the qualitative method. The qualitative method is similar in some respects to the quantitative method, but differs in that no numerical score is obtained for each program being considered. In the qualitative method, criteria are not weighted, and not given numerical scores. Criteria are, as in the quantitative method, clearly defined, and assigned cut-off points. Instead of the cut-off points corresponding to numbers, however, they correspond to a more qualitative ranking system which indicates the degree to which the program fulfills the terms of the criterion (e.g., "high, medium, or low", or "+, 0, or -"). Next, a matrix can be constructed, with the programs being considered along one axis, the criteria along another, and the rankings aligned side-by-side for easy visual comparison. A subjective consideration of the rankings then leads to a conclusion regarding the suitability of each program for coordination or consolidation.

Advantages of the qualitative method include the following:

- it is a relatively quick and simple method of comparing programs; and

- it leaves the way open for more subjective decisions regarding coordination or consolidation.

Disadvantages include:

- comparisons are less clear and not as meaningful as with the quantitative method;
- consideration of issues is more superficial than the narrative method; and
- it does not necessarily lead to a solid, objective conclusion regarding the suitability of a program for coordination or consolidation.