

Appendix C

ALTERNATIVES WORKING GROUP

Report to the Legislature— A COMPREHENSIVE ANALYSIS OF THE INTEGRATED WASTE MANAGEMENT ACT DIVERSION RATE MEASUREMENT SYSTEM

August 8, 2001

Appendix C
Table of Contents

MEETING 1..... 1
Summary of Comments on Alternatives at the January 25 and 31, 2001 Workshops..... 1
Summary of SB 2202 Workshop Attendees Expressed Interest in Accuracy Issues..... 11

MEETING 2.....23
Clarification of SB 2202 Alternative Methods Working Group’s purpose..... 23
ALTERNATIVES WORKING GROUP PRELIMINARY CRITERIA RANKING..... 26
EXPANDED INFORMATION TO ASSIST WORKING GROUP MEMBERS IN
EVALUATING ALTERNATIVES..... 27
PRELIMINARY CALCULATIONS FOR 1999 ALL-COUNTY DIVERSION Rates..... 47

Alternatives Scoring Tool74

MEETING 3.....76
Priority List Statements of Alternatives Organized by Draft Priority Ranking (High to Low or
Not Recommended).....76

ALTERNATIVES WORKING GROUP FINAL RECOMMENDATIONS133

SUMMARY OF RECOMMENDATIONS FOR ALTERNATIVES GROUP.....152

ALTERNATIVES WORKING GROUP

Meeting 1

SUMMARY OF COMMENTS ON ALTERNATIVES AT THE JANUARY 25 AND 31, 2001

WORKSHOPS

ALT Ref. #	ISSUE	POTENTIAL ALTERNATIVE SOLUTION	COMMENTS (not guaranteed to be comprehensive)
ALT 1	Regional/Tiered Measurement System		<p>General comments:</p> <ul style="list-style-type: none"> • Overall, some people really like the idea of measuring at the county or regional level, some people really don't. Various permutations of how this could be done were proposed.
ALT 1-a	California's waste system is complex and it is very difficult and costly to accurately measure diversion at the jurisdiction level.	<p>Measure diversion and disposal at the county level, not city level.</p> <p>Measure diversion at the county level. If the countywide diversion rate is less than 50%, then look at diversion program implementation for each jurisdiction.</p> <p>Measure diversion at the "waste shed" level, not based on jurisdiction boundaries.</p> <p>Increase incentives for forming</p>	<ul style="list-style-type: none"> • Measure diversion at the county or regional level and concentrate on program implementation at the jurisdiction level. • Counties, waste sheds, and regions are more appropriate and measurable units to calculate disposed tonnages. Reduces errors in accuracy and allocation. Frees up local government staff time and resources. • To deal with "less conscientious" cities in a county - survey local govt. staff to assess attitudes about implementation efforts of neighboring jurisdictions, and staff time needed for reporting purposes. • Solutions listed here are unrealistic. • Waste sheds can cross city and county boundaries and complicate measurement.

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		regional agencies consisting of one or more entire counties.	<ul style="list-style-type: none"> • Dislikes countywide measurement; problems with conscientious jurisdictions being angry if grouped with ones who have made less effort to meet goals; problems with determining who should be fined. • Keep emphasis on program implementation even if change how numbers are measured. • Real numbers should be used to calculate diversion rates, as well as looking at programs. • Uninc. county areas frequently agricultural and can have large ag. diversion which could unfairly help “less conscientious” cities. • Very difficult to regionalize in some counties. • If overall county or area is at or over 50% diversion, then any of the included jurisdictions that are below could be “cut some slack”, but don’t employ the corollary. • Diversion rate should be indicator, not used for punitive action. Program information also important.
ALT 2	Emphasize Diversion Program Implementation, Not Diversion Rates		<p>General comments:</p> <ul style="list-style-type: none"> • Where numerical discrepancies exist that are beyond the ability of a local jurisdiction to correct, don’t put the onus of validating the entire DRS & goal measurement system on the part of the jurisdiction. Allow jurisdictions the option of being judged strictly upon implementation of diversion programs where numerical compliance is “incalculable”, rather than imposing costly waste studies. • The current law includes consideration of both programs and rates in assessing compliance. The degree to which the CIWMB can shift that focus on a regulatory basis should be explored.
ALT 2-a	Small, rural jurisdictions contribute very little to the	Evaluate small and rural jurisdictions based on diversion program	<ul style="list-style-type: none"> • Instead of choosing either programs or diversion rates, allow jurisdictions greater flexibility in satisfying the

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	statewide waste stream (collectively less than 5%) and have very limited resources for solid waste management. They are faced with a choice of using resources to measure or implement diversion programs.	implementation, not on diversion rate measurement. Base criteria to qualify for this approach on low disposal amounts to provide incentives for small, rural jurisdictions to maintain low disposal amounts.	requirements of AB 939 through diversion rates, if they have reliable base year and disposal reporting information, or through demonstrating the implementation of programs, not necessarily both.
ALT 2-b	Diversion programs, not measurement activities, reduce waste. Since the waste system in California is complex, more diversion could be achieved through focus on programs rather than measurement activities.	Establish a menu of diversion programs appropriate for jurisdiction characteristics and evaluate jurisdiction performance based on implementing programs and meeting effectiveness criteria such as participation levels.	<ul style="list-style-type: none"> • Concerns with the state telling jurisdictions which programs to implement. • Develop local government consensus of criteria.
ALT 3	Change What Is Measured		<p>General comments:</p> <ul style="list-style-type: none"> • Many of these options are worth further discussion. Still need to look forward, not just fix current problems. Changing the rules can cause anger and frustration for jurisdictions. Don't lose the focus on reducing waste. Provide several alternative methods to document performance as well as allowing the current system to be used. • Look at program implementation versus bean counting. Must look at demographics. • Try at least three of the proposed solutions; adopt regs establishing a procedure jurisdictions may use to document performance using an approved alternative method.
ALT 3-a	Disposal of some materials	Change the definition of solid waste in	<ul style="list-style-type: none"> • Help develop C&D recycling infrastructure.

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	is extremely variable year-to-year which makes it difficult for jurisdictions to plan and implement diversion programs.	PRC section 40191(a) – for example, don't include construction and demolition waste, so that it does not count in disposal measurement.	<ul style="list-style-type: none"> • Concern over changing the rules of what counts and definitions. • If C&D removed from counting as disposal, also won't count as diversion – could have major impact on diversion rates and current efforts. • Disposal of different materials does vary. • Don't change definition of solid waste – consider certain exemptions for certain waste types like special waste.
ALT 3-b	Many jurisdictions say that disposal reporting system numbers are more accurate than diversion measurement, new base years and the adjustment method.	Change measurement system to only consider disposal data, not diversion or generation.	<ul style="list-style-type: none"> • Disposal numbers are often more accurate than other data collected on the waste stream. • Jurisdictions are now tracking diversion more accurately, so this data should still be considered. • Review what are the best indicators of reduction of waste. • Diversion data difficult to measure and can be controversial. Look at changes in amounts of materials going to landfills related to changes in secondary materials markets. Also relate markets info to diversion programs. • Source Reduction is at the top of the Board's hierarchy. If Board does not allow jurisdictions to take full credit for Source Reduction, it will lead to problems with agencies meeting the 50% requirement. • If only consider using disposal information (like comparing disposal between a benchmark year and a reporting year, without considering diversion information) – make an additional option rather than using this to replace the current system, since jurisdictions have invested in generation-based studies and collecting diversion information. • Allow either method to be used.
ALT 3-c	New methods of measurement, other than	Use other bases of measurement in achieving goals, such as per capita	<ul style="list-style-type: none"> • Per capita measures are useful indicators – could be used in conjunction with diversion rate measurements.

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	50% diversion in a jurisdiction, might improve measurement accuracy.	generation or disposal and/or per employee generation or disposal.	<ul style="list-style-type: none"> • Per capita indicators should be used for SB 1066 decision making and in Annual Reports • Don't add more measures for compliance – use these other methods as indicators. • Will some jurisdictions inflate generation if this is done?
ALT 3-d	There is no cross-check on diversion rates in new base years or those estimated using the adjustment method.	Use waste sorts to see if large amounts of recyclables are still being disposed as a cross check for diversion rates.	<ul style="list-style-type: none"> • Waste sorts too labor intensive and expensive. Can we publish the amounts diverted by material type, that would show good faith? • Require waste sorts only for diversion rates based on new base years.
ALT 3-e	Focus should be on measurement of diversion not on generation (disposal + diversion) to improve accuracy.	<p>Measure only diversion, not disposal, and develop a standard system to measure diversion.</p> <p>Measure only recycling and composting, but allow jurisdictions a source reduction credit.</p>	<ul style="list-style-type: none"> • This “ivory tower” approach is not consistent with Board’s hierarchy; source reduction is at top, should not be capped. Cannot measure diversion without guide of disposal. • Source Reduction is at the top of the Board’s hierarchy. If Board does not allow jurisdictions to take full credit for Source Reduction, it will lead to problems with agencies meeting the 50% requirement. Who will set source reduction credits? • First one is a step backward, might hinder waste prevention efforts. How would we determine source reduction credit?
ALT 3-f	Improve accuracy by giving set diversion credits for various diversion programs.	Change measurement system to give “diversion credits” towards the goals for implementation of a suite of programs – for example, 3% toward the 50% if a curbside program is implemented, 5% for green waste, etc.	<ul style="list-style-type: none"> • If allocate credits based on type of program, no way to account for variability of what a program means to different jurisdictions. Credits too hard to standardize. • Shudders to think this is a feasible solution. Cannot give percentage if implement certain program because programs are not the same across the board. More appropriate to look at effectiveness. • It is dangerous to evaluate both programs and numbers. • Support looking at programs, not numbers, but need to look at all the variables.

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			<ul style="list-style-type: none"> • Allow cities the option of being judged solely on programs? • Diversion tonnage per program should be listed in PARIS. • This could work on a very limited basis for source reduction and/or market development. However, giving a set credit for programs such as curbside would fail to hold jurisdictions responsible for the effectiveness of their programs, possibly resulting in lower diversion.
ALT 3-g	Jurisdictions have very variable waste streams with differing amounts of waste that can be diverted. The diversion rates they can achieve will be different based on waste stream characteristics.	<p>Re-evaluate suitability of 50% diversion for all jurisdictions, and determine if different levels can be based on waste stream characteristics.</p> <p>Measure disposal separately for residential, commercial/industrial, and construction/demolition. Set separate/different goals for each sector and concentrate on the sector(s) that can provide the most diversion.</p>	<ul style="list-style-type: none"> • Reasonable goals set by State? Develop more focus on different waste sector characteristics. • There are existing methods to change diversion rate requirements if deemed appropriate. Supports the methodology looking at sectors that have the most effective programs and can provide the most diversion. Identify the best programs for different industries; focus on sectors to determine where most diversion can be accomplished. • Sounds like more bean counting. • Second idea is worth pursuing, but everyone must be held to the same standard otherwise credibility of board and importance of meeting goal will suffer.
ALT 3-h	Jurisdictions change over time and their waste streams change over time. Focus on improving measurement accuracy by establishing accurate base for the adjustment method.	Require a new base year every 5 years, or when there is a significant shift in the nature of production of solid waste (e.g. closure of a military base).	<ul style="list-style-type: none"> • 3h and 3i are problems masquerading as solutions. Board has the authority to require new base year. To require every jurisdiction to perform new base year leads to more work and diverts money from programs; too expensive. • Perhaps should require new base year for everyone. Must understand that system different from 1990. New base year more adequately represents what generation is. A new base year makes the playing field level; make it level for all with one time requirement now that we are up on learning curve. Any new one is more accurate than an old one.

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			<ul style="list-style-type: none"> Does not like idea of doing new base years more frequently, troublesome, expensive... How accurate are these studies, anyway??? Value of new studies limited unless everybody does them; some show greatly increased generation, which reduces credibility of the studies and the statewide measurement system.
ALT 3-i	Looking at diversion rate measurement data over time may avoid problems with short-term inaccuracies in the data.	Look only at the diversion rate TREND within each jurisdiction. Jurisdictions meeting the requirements would have a positive trend with increasing diversion rate.	<ul style="list-style-type: none"> Look at previous reviews. If see upward trend and now plateau, do not penalize for doing a good job. Trends should be looked at, any new tools to do that would be great. Would like to explore this more. Many jurisdictions do not show clear trends; DRS inaccuracy may be the cause in some cases.
ALT 4	Emphasize Market Development Rather than Measurement		General comments: <ul style="list-style-type: none"> Major consensus on market development as a necessary component. Markets are extraordinarily important and should be more emphasized.
ALT 4-a	Materials are not diverted without markets. Market development could eliminate need for waste measurement system; may be more efficient way to reduce disposal.	Focus on developing markets for recycled materials to “pull” materials out of the waste stream, rather than focusing on measurement of waste.	<ul style="list-style-type: none"> This is “<i>THE</i>” issue. Better markets mean more recycling. A new statewide market development strategy needs to be developed by the board. One of great areas board should strengthen. This is a big area of failure for AB939. Without markets, programs go flat. RMDZ is a key market program and should be expanded. Market-assisted diversion programs aren’t the only factor. Another way to view this issue is to stop landfill capacity expansion to strengthen recycling and increase the incentive to recycle. Stop permitting landfills until everybody gets back on track. Ending corporate welfare will force the creation of secondary markets. This should be 1/3 of the solution. This is a major aspect

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			<p>of market development. RMDZs are important.</p> <ul style="list-style-type: none"> Local jurisdictions can't do everything to develop markets but the state can. Need to elevate market development in the strategic hierarchy. Government preferential procurement to aid market development and create incentives for business start-ups (low interest loans, etc.). Focus more on market development efforts since (pursuant to Sec. 40001© of the PRC) it is the central tenant to the successful and cost-effective implementation of AB939.
ALT 5	Emphasize Measurement of Disposal to Promote Conservation of Landfill Capacity		
ALT 5-a	Conserve landfill capacity, one of the goals of the law, and improve measurement accuracy, by focusing on disposal tons or capacity used.	<p>Allot jurisdiction disposal as half of estimated generation (50% diversion) and then impose a fine per ton disposed over that limit.</p> <p>Base the 50% goal on reducing landfill capacity used by 50%.</p>	<ul style="list-style-type: none"> Dislike of first solution. Conserve landfill capacity by applying bioreactor/ anaerobic bioreactor approach. Could fall under transformation. Landfill may be solution to some energy problems. Use gas to generate more electricity. Look at landfill capacity in relation to ability to implement diversion programs which are economically competitive. CIWMB could look more at effects of increased capacity on achievement of diversion. Look at tipping fees/price of disposal in relation to diversion rate of jurisdictions around the state. Not all landfills are the same, so may be complications to implement this. Fining cities over 50% is ridiculous. City has no control over waste stream. The public can't be forced to recycle by jurisdictions. Penalizing the city for the commercial sector's failure is not right. Landfill capacity is plentiful and has increased. There is not enough jurisdiction

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			<p>control over the public to implement this idea.</p> <ul style="list-style-type: none"> • Fines per ton discriminate against medium and large jurisdictions. This creates another problem for jurisdictions to deal with. • AB939 was adopted (and is supported by the public) to conserve natural resources and reduce waste, not simply to ensure landfill capacity. If jurisdictions are allowed to build landfills to show capacity, rather than cut disposal then the above proposals (1 & 2) would effectively defeat a 12-year old law that has wide public support.
ALT 6	Require Responsible Parties to Meet Diversion Requirements		
ALT 6-a	Jurisdictions typically don't have control over all the waste generated within their borders. More diversion could be achieved by moving responsibility for reducing waste "upstream" on those that may have more control or impact on waste generation.	<p>Move responsibility of meeting the goals to those that have control over waste, such as government agencies, schools, and local districts.</p> <p>Put responsibility on generators of waste, such as manufacturers (packaging), by implementing advanced disposal fees or other system.</p> <p>Increase individual awareness and responsibility for waste by requiring meaningful pay-as-you-throw programs; include true cost of disposal in garbage bills, etc.</p> <p>Take "gross polluters" approach – focus on largest individual generators, largest sectors, and most common materials.</p>	<ul style="list-style-type: none"> • Overall, comments ranged from characterizing these solutions as too radical to intriguing ideas that would augment voluntary recycling. Many thought market development was a better solution. • Some believed that the state needs to move away from the system where a city reviews its waste to a district wide or administrative system. Other comments stated that recycling requirements should be imposed on state agencies and special districts and the circle of responsibility for waste reduction needs to be extended. • In regards to implementing advanced disposal fees or other systems, many commenters favored an air pollution credits system applied to solid waste reduction, while another thought diversion credits wouldn't be meaningful. • Comments included the idea that a "Pay as you throw" system would be a good way of increasing waste stream awareness in citizens. Another idea was to review the relationship of disposal price and diversion rate in jurisdictions throughout the state. Finally one person suggested that recycling should be mandatory for all

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			individuals, businesses and suppliers. <ul style="list-style-type: none"> Comments included focusing on sectors where the most waste diversion can be accomplished and placing more responsibility on generators of waste.
ALT 7	Provide Incentives to Divert, Not Penalties		
ALT 7-a	More diversion might occur by providing incentives to divert than penalties for not diverting. Positive reinforcement may be more effective than negative reinforcement.	Change diversion rate measurement system to provide incentives rather than fines.	<ul style="list-style-type: none"> Incentives should be incorporated into future waste reduction regulations and the conditions for incentives should be clearly defined. Opportunities for recognition should be developed that don't rely on self-nomination.

Other general comments:

- Some strongly oppose any attempt to make wholesale changes to goal measurement and the DRS.
- Support legislation which provides incentives for new technologies (e.g., conversion technologies) which divert waste from landfills and incinerators.
- Support legislation to focus on keeping certain materials out of the waste stream.
- Landfill capacity and needs should be taken into account. Good DRS data can help in analyzing landfill capacity and needs.
- Don't make wholesale changes to DRS or measurement; let new measurement techniques be options.
- Keeping the existing system, with modifications, is also an option and so we recommend that we continue measuring diversion achievement (as a means to assess the success of the various programs) but consider overall margin of error of the methodology used to measure this diversion achievement. Also, until CIWMB has established the margin of error for the methodology, jurisdictions should not be penalized for mathematical non-compliance as long as they have implemented the waste diversion programs identified in their CIWMB-approved SRRE.
- Future legislation should focus on the development of options presented in Alt. 4-7. Initiate renewed discussion of the 21st Century project to include shifting the future focus of waste reduction legislation from supply and measurement to demand and implementation.
- Degree of accuracy may need to be different for different jurisdictions – perhaps more accuracy is needed for large jurisdictions because of the larger waste stream, and the present system may suffice for smaller jurisdictions.
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SUMMARY OF SB 2202 WORKSHOP ATTENDEES EXPRESSED INTEREST IN ACCURACY

ISSUES

[Both the Sacramento Meeting (1/25/2001) and the Diamond Bar Meeting (1/31/2001) Included]
 [Note: Colored Background Portions Indicate Multiple Issues Combined.]

Ref.#	Issue	Potential Solution
DRS 1	Disposal Reporting	
DRS 1-aa	Allocation to Jurisdictions	Fund innovative proposals to overcome allocation problems Focus more on diversion programs implemented and less on diversion rates/numbers
DRS 1-a	Drivers for haulers and self-haulers cannot accurately identify what jurisdiction the waste is from because of complicated boundaries	Form a region to reduce issues of waste origin Set local or state standards for waste origin surveys Ask where the waste is from, not the city it is from or where the driver is from
		Ask self-haul driver to point to origin location on map
		Self-haulers supply origin information to purchase punch card that allows disposal Focus on commercial self-haulers and self-haul loads greater than 1 ton

		<p>Get information on waste origin from hauler dispatchers rather than drivers</p> <p>Haulers have two-part weight ticket with a code for each jurisdiction. Hauler keeps half, landfill keeps other half</p> <p>Require schools and government agencies to provide waste origin information</p> <p>Allocate self-haul to host jurisdiction</p> <p>Require facility operators to track amounts and origin of self-haul</p>
DRS 1-b	Language barrier may prevent accurate allocation	<p>Hire bilingual staff at disposal facilities for origin surveys</p> <p>Post signs explaining origin surveys in several languages</p>
		Get information from hauler dispatchers rather than from drivers
DRS 1-c	Disposal facility limits on where waste is accepted from and different fees for waste from different places may impact accurate allocation	<p>Local jurisdictions establish ordinances and penalties with requirements for accuracy, type of information and timeliness of information</p> <p>Establish statewide standards for information collected, and penalties for misinformation and untimely information</p>
DRS 1-d	No penalties for misinformation or untimely information	See DRS 1-c
DRS 1-e	Need more timely information to resolve allocation problems	See DRS 1-c

DRS 1-f	Lack of scales at disposal facilities may create allocation problems	Require scales at all disposal facilities Offer grants/loans to purchase scales for disposal facilities without scales
DRS 1-g	Lack of standard conversion weight for self-haul vehicles	Set local conversion standards based on periodic sample of vehicles at disposal facilities Statewide standard for conversion factors
DRS 1-h	One week waste origin survey not accurate because waste flows fluctuate	Require waste origin information for a longer survey period Require waste origin information every load, every day
DRS 1-i	Develop methods to reconcile allocation	Establish local fee/business license program for waste haulers. Conduct local audits
DRS 2	Special Waste Classifications	See DRS 1-c
DRS 2-a	Inequity because some waste types are counted as disposal and others are not depending on location and permit status of disposal facility	Exclude some special waste materials from counting as disposal
DRS 2-b	There are limited diversion opportunities for special wastes as a whole	Require separation of waste at construction and demolition sites to maximize potential reuse.

	Special waste handling takes away from the implementation of diversion programs	Promote incentives for development of landfill alternatives
DRS 2-c	ADC Special waste may be overused at some landfills	Eliminate ADC from counting as diversion
DRS 3	Accuracy Issues	Increase focus on ADC use at inspections by Local Enforcement Agency and Board staff
DRS 3-a	One-week survey may not accurately estimate disposal	Require automated, electronic reports from haulers and dispatchers verified through gate survey audits. Require all landfills to install and use scales. Require measuring disposal on a region-wide / waste shed basis, rather than by jurisdiction
		Survey and weigh every load every day Increase incentives for forming regional agencies
DRS 3-b	Impact of using a survey week to estimate tonnage impacts small jurisdictions more than large jurisdictions	See DRS 3a

DRS 3-c	Disposal data is more accurate for larger geographical areas (e.g., county/region)	See DRS 3a
DRS 3-d	Errors in estimating disposal tons	See DRS 3a
DRS 3-e	Major waste generating events that occur during the survey week skew disposal numbers	Implement Board-approved alternative reporting system to survey in a different week Require more frequent surveys/survey and weigh every load every day
Adjustment Method		
AM 1	Accuracy	
AM 1-a	Is Adjustment Method premise still correct, i.e., do population, employment, and taxable sales correlate well with waste generation?	Research adjustment methods currently used by mandatory diversion goal states that use disposal-based goal measurement formulas. Identify factors used to estimate waste generation.
		Statistically analyze jurisdiction waste generation correlation with population, employment, taxable sales, and other demographic and economic factors.
AM 1-b	Adjustment Method factors may not work well for jurisdictions at high and low ends of the scale for each factor.	Measure diversion goal achievement at countywide, or multiple county, levels.

		<p>Research appropriate factors for jurisdictions at high and low ends of the scale.</p> <p>Require jurisdictions to measure disposal and diversion each year.</p>
		Increase incentives to form regional agencies.
AM 1-c	Adjustment Method factors vary more for small jurisdictions.	Measure diversion goal achievement at countywide, or multiple county, levels.
AM 1-d	Changes in Adjustment Method factors are outside the range of change determined to be accurate when the method was adopted.	<p>Increase incentives to form regional agencies.</p> <p>Using new data, perform statistical analysis of accuracy outside tested range.</p> <p>Require a new generation study when Adjustment Method factors are outside tested range.</p>
AM 1-e	Adjustment Method factors may not be weighted correctly, e.g., increased population may not have same impact on waste generation as increased economic activity.	See AM 1-a.
AM 1-f	CPI overestimates true inflation and this reduces the impact of the taxable sales adjustment factor.	See AM 1-a.

AM 1-g	Changes in the nature of the production of solid waste in a jurisdiction over time may make a base-year, and Adjustment Method estimates of generation, inaccurate.	Require a new base-year when there are significant changes in nature of solid waste produced, e.g. increased electronic waste, military base closure, new industries.
AM 1-h	Board of Equalization (BOE) fourth quarter taxable sales data is not available until mid-August to mid-September of the following year, and estimates of fourth quarter data may not be accurate.	<p>Since taxable sales estimate error increases as taxable sales amount decreases, measure diversion goal achievement at countywide, or multiple county, level.</p> <p>Determine if BOE can release data earlier.</p> <p>Move Annual Report due date from August 1 to November 1 to use actual data.</p> <p>Develop better fourth quarter estimation method.</p>
AM 2	Awareness	
AM 2-a	The Adjustment Method is misunderstood.	Conduct periodic Board-sponsored Diversion Rate Measurement workshops that cover Adjustment Method.
		Develop tutorials for new local government diversion rate measurement staff.
	Alternatives	
ALT 1	Regional/Tiered Measurement System	
ALT 1-a	California's waste system is complex and it is very difficult and costly to accurately measure diversion at the	Measure diversion and disposal at the county level, not city level.

	jurisdiction level.	
		<p>Measure diversion at the county level. If the countywide diversion rate is less than 50%, then look at diversion program implementation for each jurisdiction.</p> <p>Measure diversion at the “waste shed” level, not based on jurisdiction boundaries.</p> <p>Increase incentives for forming regional agencies consisting of one or more entire counties.</p>
ALT 2	Emphasize Diversion Program Implementation, Not Diversion Rates	
ALT 2-a	<p>Small, rural jurisdictions contribute very little to the statewide waste stream (collectively less than 5%) and have very limited resources for solid waste management. They are faced with a choice of using resources to measure or implement diversion programs.</p>	<p>Evaluate small and rural jurisdictions based on diversion program implementation, not on diversion rate measurement. Base criteria to qualify for this approach on low disposal amounts to provide incentives for small, rural jurisdictions to maintain low disposal amounts.</p>

ALT 2-b	Diversion programs, not measurement activities, reduce waste. Since the waste system in California is complex, more diversion could be achieved through focus on programs rather than measurement activities.	Establish a menu of diversion programs appropriate for jurisdiction characteristics and evaluate jurisdiction performance based on implementing programs and meeting effectiveness criteria such as participation levels.
ALT 3	Change What Is Measured	
ALT 3-a	Disposal of some materials is extremely variable year-to-year which makes it difficult for jurisdictions to plan and implement diversion programs.	Change the definition of solid waste in PRC section 40191(a) – for example, don't include construction and demolition waste, so that it does not count in disposal measurement.
ALT 3-b	Many jurisdictions say that disposal reporting system numbers are more accurate than diversion measurement, new base years and the adjustment method.	Change measurement system to only consider disposal data, not diversion or generation.

ALT 3-c	New methods of measurement, other than 50% diversion in a jurisdiction, might improve measurement accuracy.	Use other bases of measurement in achieving goals, such as per capita generation or disposal and/or per employee generation or disposal.
ALT 3-d	There is no cross-check on diversion rates in new base years or those estimated using the adjustment method.	Use waste sorts to see if large amounts of recyclables are still being disposed as a cross check for diversion rates.

ALT 3-e	Focus should be on measurement of diversion not on generation (disposal + diversion) to improve accuracy.	Measure only diversion, not disposal, and develop a standard system to measure diversion.
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ALT 4	Emphasize Market Development Rather than Measurement	

ALT 4-a	Materials are not diverted without markets. Market development could eliminate need for waste measurement system; may be more efficient way to reduce disposal.	Focus on developing markets for recycled materials to “pull” materials out of the waste stream, rather than focusing on measurement of waste.
ALT 5	Emphasize Measurement of Disposal to Promote Conservation of Landfill Capacity	
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		Increase individual awareness and responsibility for waste by requiring meaningful pay-as-you-throw programs; include true cost of disposal in garbage bills, etc.

		Take “gross polluters” approach – focus on largest individual generators, largest sectors, and most common materials.
ALT 7	Provide Incentives to Divert, Not Penalties	
ALT 7-a	More diversion might occur by providing incentives to divert than penalties for not diverting. Positive reinforcement may be more effective than negative reinforcement.	Change diversion rate measurement system to provide incentives rather than fines.
Total Number of Attendees		

Meeting 2

CLARIFICATION OF SB 2202 ALTERNATIVE METHODS WORKING

GROUPS'S PURPOSE

1. Clarification of SB 2202 Alternative Methods Working Group's purpose:

Develop recommendations to forward to the synthesis group on how to improve the measurement system to make it

- more accurate,
- more flexible, and
- more conducive to shifting resources from measurement to program implementation.

The recommendations from the Alternatives Working Group fall outside the realm of specific recommendations on the disposal reporting system and the adjustment method, because those areas are being covered by the other two working groups.

Additionally, the working group may choose to make recommendations that are not directly related to the measurement system, but that will improve our ability to meet the goals and spirit of AB 939.

Two "mission statements" that were agreed upon:

1. Consider alternatives to the way the state determines compliance with AB 939.
2. Consider alternative ways to meet the goals of AB 939.

2. SB 2202 – Language in the Public Resources Code related to DRS

Evaluation and Working Groups

41821.5 (e) On or before January 1, 2002, the board shall submit a report to the Legislature that evaluates the implementation of this section. The report shall include, but not be limited to, all of the following:

- (1) An evaluation of the accuracy of the disposal reporting system under differing circumstances.
- (2) The status of implementation of the disposal reporting system at the local level by waste haulers, landfills, transfer station and material recovery operators, and local agencies.
- (3) The need for modification of the disposal reporting system to improve accuracy.
- (4) Recommendations for regulatory and statutory changes needed to

address deficiencies in the disposal reporting system.

(5) Recommendations to improve implementation and to streamline the reporting system, including ways to assist agencies to meet the reporting and tracking requirements.

(f) The board shall convene a working group composed of representatives of stakeholder groups, including, but not limited to, cities, counties, regional agencies, the solid waste industry, recyclers, and environmental organizations, to assist the board in preparing the report required pursuant to subdivision (e).

3. Excerpts from the ISSUE PAPER FOR THE JANUARY 25 AND 31, 2001 WORKSHOPS REGARDING GOAL MEASUREMENT AND DISPOSAL REPORTING POTENTIAL SOLUTIONS (GMDRPS)

EXCERPT 1 regarding tasks of the Working Groups:

The Board has heard about many issues regarding the diversion rate measurement system. Many of these issues have been raised during the Board's Biennial Review on the progress each city, county and regional agency has made in implementing diversion programs to achieve the diversion requirements. Disposal reporting system issues were presented to the Board at a November 1999 hearing and adjustment method issues were identified at a September 2000 Board workshop on diversion rate measurement. Additionally, there may be alternatives to the current system such as a determining pounds disposed per person as a more accurate indication of disposal reduction.

The working group members will participate in several day-long working group meetings (in northern and southern California), review and comment on materials prepared for each meeting, act as a liaison for reviewers or other interested parties, report others' input to the working group, and develop recommendations for the Board to consider.

Anyone who has an interest in following the issues closely, but is not a working group member, may request to be a reviewer. Reviewers will be provided with all materials developed for and by the working group, and may submit comments to Board staff and/or working group members to be considered by the working groups in developing recommendations.

Each of the three working groups will develop recommendations. To ensure that the Board identifies workable changes to the existing diversion rate measurement system, all the recommendations will be considered by a synthesis working group, made up of a limited number of members from each of the working groups. The synthesis group will develop a final set of recommendations for the Board to consider.

EXCERPT 2 regarding alternatives:

ALTERNATIVES TO THE PRESENT GOAL MEASUREMENT SYSTEM

OVERVIEW

The Integrated Waste Management Act addresses California's need to conserve resources by reducing the disposal of solid waste generated in the state. These resources include landfill space as well as water, energy, and other natural resources. The Integrated Waste Management Act specifies waste reduction goals that each jurisdiction in the state must meet, and a system has been developed to measure achievement of the goals. As this new system has been implemented over the years, issues have been identified concerning the accuracy and efficacy of the system. Potential ways to address these issues have also been identified, which range from minor or major adjustments in the present system to perhaps completely different systems designed to meet waste reduction and resource conservation goals in new ways.

The table below identifies some alternatives to the present measurement system that go beyond adjustments that can be made within the existing system. Some of them propose eliminating the present system entirely. While some of these alternatives may not seem viable to everyone, they may stimulate creative thinking and provide new perspectives that can lead to an improved way to reach our waste reduction goals.

ALTERNATIVES WORKING GROUP PRELIMINARY CRITERIA

RANKING

March 8, 2001

RANK

CRITERIA

1. Meets goals/spirit of AB 939.
2. Reasonable resources required.
3. Falls within purview of Alternatives Group.
4. Ease of implementation – logistically.
5. Flexibility in implementation.
6. Ability to measure progress.
7. Cost.
8. Compatibility with existing efforts.
9. Political feasibility.
10. Minimum regulatory/statutory changes needed.

EXPANDED INFORMATION TO ASSIST WORKING GROUP MEMBERS

IN EVALUATING ALTERNATIVES

The following consists of brief background information and some points to consider for the alternatives discussed at the first Alternatives Working Group meeting on March 8, 2001. Including the new alternatives added to the list by the working group there are 33 alternatives. Because of the time constraints between meetings, and to help focus on the alternatives the group viewed more favorably, no information was included for the 4 “least popular” alternatives (alternatives 3-e-1, 3-e-2, 3-h, and 5-a-1). Also, for 4 of the 10 alternatives that were less directly related to measurement issues, no background information was developed, mainly due to time constraints (alternatives 6-a-2, 7-a, 11, and 14). Please see the separate document “Alt table ranked.doc”, which shows the working group’s preliminary ranking.

Some of the alternatives lend themselves more to data analysis, some more to descriptive information. Some of them may have several permutations of how the idea could work out. All of them have many points to consider. Please view the information provided here not as the end of the analysis or evaluation process, but as the beginning, as a springboard for your own ideas and considerations. It is provided to assist you in formulating your own ideas to bring to the next meeting, to present to the group succinctly.

A separate form is provided to evaluate each of the alternatives according to the criteria discussed at the March 8, 2001 meeting. This evaluation will be used to set the order of discussion of the alternatives, to help the group focus on the ideas they feel are most worthwhile. The alternatives are listed in the same order as in the document “Alt table ranked.doc.”

Quick Reference:

<u>Alt #</u>	<u>Page #</u>
3-a	2
2-a	3
2-b	8
3-c	9
3-d	11
3-f	13
3-g-1	14
10	16
1-a-4	18
1-a-1	19
9	22
3-b	26
3-g-2	28
5-a-2	29
1-a-2	30
13	31
12	32
1-a-3	33
3-i	34
4-a	36
6-a-1	39
8	40

6-a-3	41
15	42
6-a-4	45

ALT 3-a: Change the definition of solid waste in PRC section 40191(a) – for example, don't include construction and demolition waste, so that it does not count in disposal measurement.¹

General Topic/Issue: Change What Is Measured. Disposal of some materials is extremely variable year-to-year which makes it difficult for jurisdictions to plan and implement diversion programs.

Background: Several sources exist for information on the variability of waste types in California. The board's waste characterization study web site (www.ciwmb.ca.gov/WasteChar/dbmain.htm) provides information for both the residential and commercial sector waste streams and waste types for cities and counties in California. Several waste characterization studies done by local governments and consultants in California are also available. Certain types of waste, such as special waste, may have unpredictable and adverse impacts on jurisdictions' diversion rates. These impacts could be avoided if these materials weren't included in the waste stream that is measured for DRS.

Considerations:

- What criteria would be used to exclude a waste type from disposal?
- Is the excluded waste type delivered to disposal facilities separately, or is it typically mixed in with other waste, making it difficult to measure the excluded waste type?
- Only waste types that are “normally disposed” in a landfill can count as diversion, e.g., if construction and demolition (C&D) waste does not count as disposal, a jurisdiction could not count C&D diversion.
- Excluding a waste type may have a major impact on current waste reduction efforts and waste diversion programs related to the excluded waste type.
- Statute and/or existing regulations may require revisions to change the definition of solid waste.
- Current markets may be severely impacted if certain waste types are excluded
- Changes to the current measurement system may complicate measurement.
- Excluding waste types could create fewer waste streams to measure and waste types to divert.
- More information is needed on the variability of waste types that would be considered for exclusion.
- Research is needed to identify the effects of removing a waste type from the definition on current waste reduction efforts.
- Other considerations:

¹ Comment from Karen Coca: the group agreed to strike this part of the wording.

ALT 2-a: Evaluate small and rural jurisdictions based on diversion program implementation, not on diversion rate measurement. Base criteria to qualify for this approach on low disposal amounts to provide incentives for small, rural jurisdictions to maintain low disposal amounts.

General Topic/Issue: Emphasize Diversion Program Implementation, Not Diversion Rates. Small, rural jurisdictions contribute very little to the statewide waste stream (collectively less than 5%) and have very limited resources for solid waste management. They are faced with a choice of using resources to measure or implement diversion programs.

Background: Rural jurisdiction definition from Title 14 CCR Section 18775 – Reduction in Diversion and Planning Requirements.

(a) A rural jurisdiction, as defined in Public Resources Code sections 40183 and 40184, may petition the Board, at a public hearing, to reduce the planning requirements and diversion requirements specified in Public Resources Code section 41780. To petition for a reduction, the jurisdiction shall present verification to the Board which indicates that achievement of the requirements is not feasible. To qualify to petition for a reduction in the diversion and planning requirements, a jurisdiction must meet the following:

- (1) For a rural city, a geographic area of less than 3 square miles or a population density of less than 1500 people per square mile and a waste disposal rate of less than 100 cubic yards per day or 60 tons per day.
- (2) For the unincorporated area of a rural county, the county's population shall be 200,000 or less.
- (3) For a rural regional agency, consist of rural cities and counties, not to exceed more than two rural counties, unless authorized by the Board.
- (4) Be located in a rural area. "Rural area" means those counties and cities located in agricultural or mountainous areas of the state and located outside the Department of Finance's Primary Metropolitan Statistical Areas.

(b) Based on information presented at the hearing, the Board may establish reduced diversion requirements, and alternative, but less comprehensive, planning requirements. A petitioner may identify those specific planning requirements from which it wants to be relieved and provide justification for the reduction. Examples of reduced planning requirements could include, but would not be limited to, reduced requirements for solid waste generation studies, and reduced requirements and consolidation of specific component requirements. These reduced planning requirements, if granted, must ensure compliance with Public Resources Code section 41782.

(c) Rural jurisdictions requesting a reduction in the diversion and planning requirements must include the following information in the reduction petition:

- (1) A general description of the existing disposal and diversion systems, including documentation of the types and quantities of waste disposed and diverted. Documentation sources may include, but are not limited to, the following:
 - (A) Solid Waste Generation or Characterization Studies;
 - (B) Diversion data from public and private recycling operations;
 - (C) Current year waste loading information from permitted solid waste facilities used by the jurisdiction;
- (2) Identification of the specific reductions being requested (i.e. diversion or planning requirements or both);
- (3) Documentation of why attainment of mandated diversion and planning requirements is not feasible. Examples of documentation could include, but are not limited to:
 - (A) Evidence from the documentation sources specified in paragraph (c)(1) of this section;
 - (B) Verification of existing solid waste budget revenues and expenses from the duly authorized designated representative of the jurisdiction;

(4) The planning or diversion requirements that the jurisdiction feels are achievable, and why.

(5) Documentation verifying that the rural city or county has implemented those programs identified in Public Resources Code section 41787(a) (3).

(6) Documentation verifying that the rural regional agency has implemented those regionwide programs identified in Public Resources Code section 41787.1(c)(2).

Note: Authority cited: **Section 40502 of the [Public Resources Code](#)**.

Reference: **Section 40183, 40184, 41787, 41787.1, 41787.2, 41802, and 40973 of the [Public Resources Code](#)**.

See list below of Rural Jurisdictions

Considerations:

- Makes better use of small, rural resources.
- Need to develop a way to determine low-disposal amount threshold (per capita?).
- Requires a low disposal amount to qualify for a program-only measurement.
- Doesn't require burdensome or additional changes to current system.
- Creates inequities in goal measurement requirements between small vs. large jurisdictions.
- Statute and regulations may need to change the way diversion is reported.
- May increase Board and Local Government staff workload to verify that programs are actually in place, continuing and/or progressing, which would shift more local assistance resources to a small part of the waste stream.
- Should any extra effort in the program area(s) be required of these jurisdictions if they are allowed to avoid the diversion rate measurement? Or, should they be required to show how the most resources are now spent on programs and those results?
- Other considerations:

List of 82 Rural Jurisdictions

Jurisdiction	County	Regional Agency	Rural Status*
Alpine-Unincorporated	Alpine	N/A	Rural
Biggs	Butte	N/A	Rural
Oroville	Butte	N/A	Rural
Angels Camp	Calaveras	N/A	Rural
Calaveras-Unincorporated	Calaveras	N/A	Rural
Firebaugh	Fresno	N/A	Rural
Fowler	Fresno	N/A	Rural
Huron	Fresno	N/A	Rural
Kerman	Fresno	N/A	Rural
Kingsburg	Fresno	N/A	Rural
Mendota	Fresno	N/A	Rural
Orange Cove	Fresno	N/A	Rural
Parlier	Fresno	N/A	Rural
San Joaquin	Fresno	N/A	Rural

Jurisdiction	County	Regional Agency	Rural Status*
Blue Lake	Humboldt	N/A	Rural
Ferndale	Humboldt	N/A	Rural
Humboldt-Unincorporated	Humboldt	N/A	Rural
Rio Dell	Humboldt	N/A	Rural
Trinidad	Humboldt	N/A	Rural
Calipatria	Imperial	N/A	Rural
Holtville	Imperial	N/A	Rural
Imperial	Imperial	N/A	Rural
Imperial-Unincorporated	Imperial	N/A	Rural
Westmorland	Imperial	N/A	Rural
California City	Kern	N/A	Rural
Maricopa	Kern	N/A	Rural
McFarland	Kern	N/A	Rural
Shafter	Kern	N/A	Rural
Avenal	Kings	N/A	Rural
Clearlake	Lake	N/A	Rural
Lakeport	Lake	N/A	Rural
Lake-Unincorporated	Lake	N/A	Rural
Chowchilla	Madera	N/A	Rural
Madera-Unincorporated	Madera	N/A	Rural
Mariposa-Unincorporated	Mariposa	N/A	Rural
Fort Bragg	Mendocino	N/A	Rural
Mendocino-Unincorporated	Mendocino	N/A	Rural
Point Arena	Mendocino	N/A	Rural
Willits	Mendocino	N/A	Rural
Alturas	Modoc	N/A	Rural
Modoc-Unincorporated	Modoc	N/A	Rural
Mammoth Lakes	Mono	N/A	Rural
Mono-Unincorporated	Mono	N/A	Rural
Carmel-by-the-Sea	Monterey	N/A	Rural
Del Rey Oaks	Monterey	N/A	Rural
Gonzales	Monterey	N/A	Rural
Greenfield	Monterey	N/A	Rural
King City	Monterey	N/A	Rural
Pacific Grove	Monterey	N/A	Rural
Sand City	Monterey	N/A	Rural
Soledad	Monterey	N/A	Rural
Nevada City	Nevada	N/A	Rural
Nevada-Unincorporated	Nevada	N/A	Rural

Jurisdiction	County	Regional Agency	Rural Status*
Plumas-Unincorporated	Plumas	N/A	Rural
Portola	Plumas	N/A	Rural
Del Mar	San Diego	N/A	Rural
Escalon	San Joaquin	N/A	Rural
Ripon	San Joaquin	N/A	Rural
Buellton	Santa Barbara	N/A	Rural
Carpinteria	Santa Barbara	N/A	Rural
Guadalupe	Santa Barbara	N/A	Rural
Solvang	Santa Barbara	N/A	Rural
Hughson	Stanislaus	N/A	Rural
Newman	Stanislaus	N/A	Rural
Patterson	Stanislaus	N/A	Rural
Riverbank	Stanislaus	N/A	Rural
Waterford	Stanislaus	N/A	Rural
Trinity-Unincorporated	Trinity	N/A	Rural
Exeter	Tulare	N/A	Rural
Farmersville	Tulare	N/A	Rural
Woodlake	Tulare	N/A	Rural
Sonora	Tuolumne	N/A	Rural
Tuolumne-Unincorporated	Tuolumne	N/A	Rural
Amador County Integrated Solid Waste Management Agency	Amador	Yes	Rural*
Colusa County Regional Agency	Colusa	Yes	Rural*
Del Norte Solid Waste Management Authority	Del Norte	Yes	Rural*
Glenn County Waste Management Regional Agency	Glenn	Yes	Rural*
Inyo Regional Waste Management Agency	Inyo	Yes	Rural*
Lassen Regional Solid Waste Management Authority	Lassen	Yes	Rural*
Sierra County Regional Agency	Sierra	Yes	Rural*
Siskiyou County Integrated Solid Waste Management Regional Agency	Siskiyou	Yes	Rural*

****Rural status of regional agencies subject to change as of 8/31/00.***

ALT-2b: Establish a menu of diversion programs appropriate for jurisdiction characteristics and evaluate jurisdiction performance based on implementing programs and meeting effectiveness criteria such as participation levels.

General Topic/Issue: Emphasize Diversion Program Implementation, Not Diversion Rates. Diversion programs, not measurement activities, reduce waste. Since the waste system in California is complex, more diversion could be achieved through focus on programs rather than measurement activities.

Background: One way to approach this could be by using the Board's Strategic Plan (July 1997) to require each jurisdiction to, at a minimum, show progress in the four priority strategies: 1) A focused reduction in construction and demolition waste; 2) Improved local government performance in diversion; 3) Compliance with protection of public health and safety and the environment (i.e., number of approved closure plans for solid waste landfills, etc.); and, 4) A focused reduction in organics through programs.

Considerations:

- Places emphasis on program implementation, but the mandate requires that both programs and numbers be considered together.
- Could create inequities among jurisdictions if comparisons are made and some are required to do more than others. Who makes that judgment call? Without measurement, it would be difficult to defend.
- Compliance Orders could be very straightforward; i.e., if programs are not put in place, fines could be assessed.
- Jurisdictions and the Board becomes supporters of programs without having the benefit of a measurement of effectiveness. Jurisdictions and the Board would only have participation levels upon which to assess success.
- Who establishes the menu? Is the SRRE good enough? Do SRREs need to be updated to reflect current conditions as a part of this alternative?
- How are effectiveness criteria established and how is success determined?
- Other states that emphasize programs vs. rates can be used as examples of this approach, and evaluated for how it could work in California. Also, a study was done for City of Los Angeles to assign diversion "credits" to diversion programs. This could also possibly be used to develop a model.
- May need changes in statute and/or regulations.
- Other considerations:

ALT 3-c: Use other bases of measurement such as per capita generation or disposal and/or per employee generation or disposal.

General Topic: Change what is measured. New methods of measurement, other than 50% diversion in a jurisdiction, might improve measurement accuracy.

NOTE: Using per capita or per employee generation would require gathering diversion data as part of the measurement system. Because AB 2494 changed our measurement system to no longer required diversion data, this analysis focuses on using disposal data only.

Background: Rather than looking at the total amount of waste disposed by a jurisdiction to determine goal achievement, use a per capita and/or per employee basis. Three ways to do this are described below, and there are probably other ways.

Option 1: Per capita waste disposed by the entire jurisdiction.

Calculation: $\frac{\text{total_amount_disposed_by_jurisdiction}}{\text{total_population_of_jurisdiction}} = \text{per capita waste disposed}$

Option 2: Divide the jurisdiction's waste stream into residential and commercial, and base the goal on residential per capita disposal and commercial per employee disposal.

Calculations: $\frac{\text{residential_disposal}}{\text{population}} = \text{residential per capita disposal}$

$\frac{\text{commercial_disposal}}{\text{employment}} = \text{commercial per employee disposal}$

Option 3: Use population and employment data together as a type of "per capita" basis for measuring goal achievement.

Calculation: $\frac{\text{total_waste_disposed_by_jurisdiction}}{\text{total_population} + \text{total_employment}} = \text{"per capita" res./comm. disposal}$

Considerations:

- DRS would still be needed to determine total amount disposed by the jurisdiction, so all the errors and problems with DRS would affect the accuracy of this method.
- Population data would be obtained from the state Dept. of Finance.
- For Options 2 and 3, accurate employment data would be required for each jurisdiction, which may be difficult to obtain. The employment data currently used in the adjustment method is "employed residents in the jurisdiction" which is different from number of employees (i.e., number of jobs) in the jurisdiction.
- A goal amount would need to be set to determine if the jurisdiction has met the goal. Some options:

1. Determine the base year tons/person/year (or tons/employee/yr, etc. according to the method chosen) that was generated, and have the goal be that no more than 50% of this amount could be disposed. This would allow for individual goals for each jurisdiction.
 2. Determine a statewide goal for all jurisdictions, and compare each jurisdiction to this goal.
 3. Determine several goals for different classes of jurisdictions, based on size and characteristics of each sector. For example, should lot size, proportion of multi-family and single-family residences, income, or other demographic factors be taken into account for the residential goal? Should types and sizes of businesses be taken into account? Per employee disposal and generation rates, and types of materials generated vary according to business type. For example, a city full of office buildings may find it much easier to divert and reduce waste than a city full of restaurants.
 4. Some other way of setting the goal.
- There may be difficulty and/or controversy in determining an appropriate goal for each jurisdiction with this method. Each of the ways of setting the goal described above has its strengths and limitations. For example, if a jurisdiction did not grow in population but grew in its business sector, basing the allowed disposal amount strictly on population may be unfair.
 - If base year data is used, the problems with outdated and inaccurate base years would affect the accuracy of the method.
 - Option 1 may not be fair to all jurisdictions because some may be heavily weighted toward residential or commercial characteristics. This method just looks at the waste stream as a whole, and doesn't address the residential/commercial affects. The following table summarizes information submitted by jurisdictions in their Annual Reports on the percent of their generated waste stream that is residential in the base year:

Percent of Base Year Generation that is Residential					
Res. %	0-19.99%	20-39.99%	40-59.99%	60-79.99%	80-100%
No. of Jurs	26	194	177	64	8

- Depending on which variation of this method is used, only base year generation, population, and reporting year disposal data would be needed. No adjustment method would be needed to estimate current year generation. No measurement of diversion is needed.
- For Option 2, we would need to measure the residential and commercial disposal for each jurisdiction separately. Self-haul would also have to be tracked as residential or commercial to be included in the totals for each sector
- Simple calculation
- Can address both commercial and residential sources of waste.
- May need changes in statute and/or regulations.
- Other considerations:

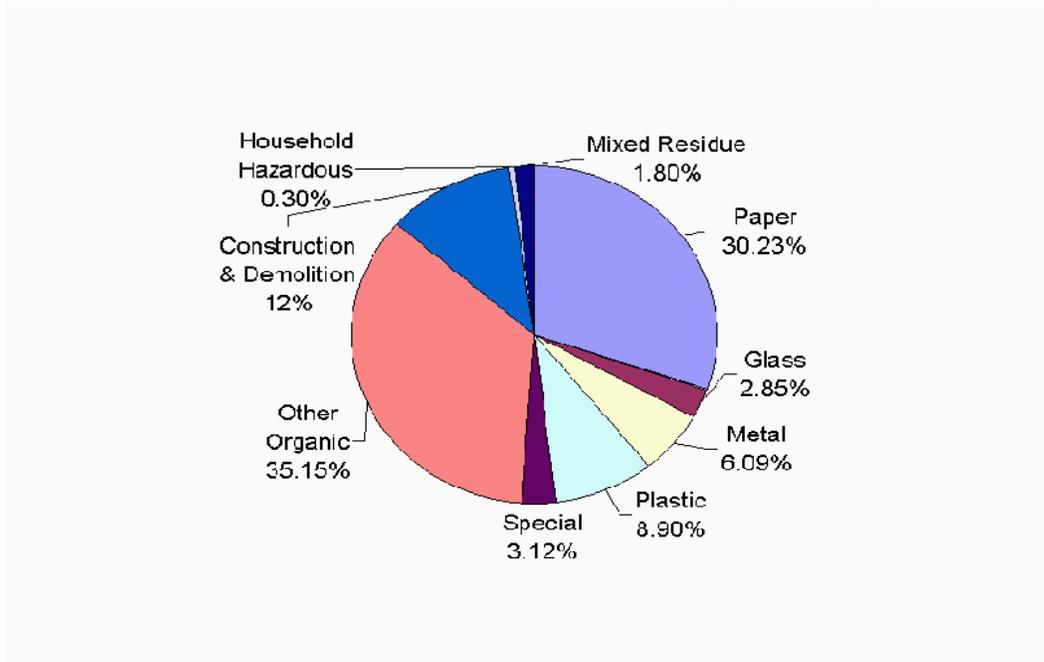
ALT 3-d: Use waste sorts to see if large amounts of recyclables are still being disposed as a cross check for diversion rates.

General Topic: Change what is measured. There is no cross-check on diversion rates in new base years or those estimated using the adjustment method.

Background: This could be a way to “check up” on jurisdictions with large diversion rates that may not appear to have sufficient programs to correspond to those rates, and have no other way to demonstrate that their diversion rate is “real”. Conversely, it could also be a way for jurisdictions with low diversion rates which they consider to be inaccurate to demonstrate good faith efforts. For example, if there are many private recyclers that work directly with businesses in a city, and it is not possible for the city itself to get information on tonnages recycled in its jurisdiction, waste sorts could confirm that recyclables are not being disposed (or scarcely being disposed) by the commercial sector. Or, it could be used as a rough assessment of program effectiveness; for example, if a city has residential programs such as curbside pickup and grasscycling programs, samples could be taken from residential garbage trucks and characterized for yard waste and recyclables.

In 1999, the Board conducted a statewide waste characterization study on the disposed waste stream. The executive summary and charts and graphs can be viewed on the Board’s website at <http://www.ciwmb.ca.gov/WasteChar/Study1999/>. The pie chart below shows the breakdown of the waste stream by the 9 major material categories. Paper and other organic materials (which includes food waste and green waste) account for about 65% of the disposed waste stream.

Material Classes in the Overall Waste Stream, Statewide, 1999



The table below shows the top 10 specific material type in the state's overall waste stream. Two very recyclable materials are included in this list: cardboard and newspaper. Although much progress has been made in the past 10 years, clearly we have more work to do. Waste sorts could provide very useful data to either confirm the effectiveness of diversion programs or point out areas needing improvement.

Top 10 Material Types in the Overall Statewide Disposed Waste Stream

Material Type ²	Estimated Percent	Estimated 1999 Tons	Cumulative Percent
Food	15.7	5,893,241	15.7
Remainder/Composite Paper ³	9.6	3,605,147	25.3
Leaves & Grass	7.9	2,963,968	33.2
Remainder/Composite Organic ⁴	6.9	2,589,575	40.1
Lumber	4.9	1,842,527	45.1
Uncoated Corrugated Cardboard	4.6	1,720,481	49.6

² For complete material type definitions, see the Board's web page at

<http://www.ciwmb.ca.gov/WasteChar/MatDefs.htm>.

³ "Remainder/Composite Paper" means items made mostly of paper but combined with large amounts of other materials such as wax, plastic, glues, foil, food, and moisture. Examples: This type includes waxed corrugated cardboard, aseptic packages, plastic-coated paper milk cartons, waxed paper, tissue, paper towels, blueprints, sepia, onion skin, fast food wrappers, carbon paper, self adhesive notes, and photographs.

⁴ "Remainder/Composite Organic" means organic material that cannot be put in any other type or subtype. This type includes items made mostly of organic materials, but combined with other material types. This type does not include any subtypes. Examples: This type includes leather items, carpets, cork, hemp rope, garden hoses, rubber items, hair, carpet padding, cigarette butts, diapers, feminine hygiene products, small wood products (such as Popsicle sticks and tooth picks), and animal feces.

Other Miscellaneous Paper ⁵	4.4	1,651,999	54.0
Newspaper	4.3	1,605,283	58.3
Film Plastic	3.9	1,453,588	62.2
Other Ferrous Metal	2.4	914,632	64.6

Considerations:

- Waste sorts can provide extremely useful information, as borne out by the fact that many jurisdictions have undertaken extensive waste characterization studies for their own planning purposes in the past few years, even though not required by AB 939.
- Study methods are established, and are not very complicated.
- Sorting is labor-intensive and time-consuming, so field studies can be expensive.
- Methods may be modified to target specific data needed, and costs may be reduced this way. For example, if data is only needed on recyclables in the waste stream, only a few waste types need to be sorted. Or, only one part of the waste stream may need to be targeted (such as commercial waste or multi-family residential waste).
- Allows for assessment of progress in diverting waste apart from using DRS data and the adjustment method.
- May only be an inexact indicator of progress.
- May be excellent indicator of where further progress can be made.
- Other considerations:

⁵ "Other Miscellaneous Paper" means items made mostly of paper that do not fit into any of the above subtypes. Paper may be combined with minor amounts of other materials such as wax or glues. This subtype includes items made of chipboard, ground wood paper, and deep-toned or fluorescent dyed paper. Examples: This subtype includes cereal and cracker boxes, unused paper plates and cups, goldenrod colored paper, school construction paper, butcher paper, and hard cover and soft cover books.

ALT 3-f: Change measurement system to give “diversion credits” towards the goals for implementation of a suite of programs – for example, 3% toward the 50% if a curbside program is implemented; 5% for green waste, etc.

General Topic/Issue: Change what is measured. Improve accuracy by giving set diversion credits for various diversion programs

Background: Under the current measurement system for determining diversion rates, jurisdictions can use the CIWMB’s default measurement system, a disposal based method; or approved adjustment factors different from the default factors; or a generation-based study. This would propose another way to determine compliance by not measuring disposal or diversion, by only implementation of a sufficient number and type of programs based on “credit” for each program.

Considerations:

- How will the value of the programs be determined?
- Who will determine the program value?
- No guarantee that this would be a better indicator of diversion than the current system. Accuracy of diversion rate is dependent on other factors.
- Equity of program value may be difficult to determine. A jurisdiction may implement a program, but programs vary from one jurisdiction to another. For example, using curbside collection as a diversion program, one program might collect many categories of materials and have extensive promotion while another may collect only a few categories and do infrequent promotion. Do both programs receive equal value?
- Would programs that are farther from markets get different diversion credits than the same programs that are closer to markets?
- Who reports the program and who verifies the implementation?
- This gives flexibility to a jurisdiction to choose programs that fit their local situation.
- Weight can be given to programs on the basis of what the Board believes has a greater to lesser value.
- Would this eliminate arguments over diversion “bean-counting”?
- Provides a way to demonstrate compliance with this new type of goal, with no measurement of the waste stream whatsoever.
- Would this eliminate use of adjustment factors to estimate waste generation?
- People can direct more of their attention to implementing programs instead of tracking numbers.
- Jurisdictions with money might be able to accumulate more diversion credits than poorer jurisdictions.
- Likely to require changes in statute and/or regulations.
- Other considerations:

Alt 3-g-1 Re-evaluate suitability of 50% goals for all jurisdictions, and determine if different levels can be based on waste stream characteristics.

General Topic/Issue: Change What Is Measured. Jurisdictions have very variable waste streams with differing amounts of waste that can be diverted. The diversion rates they can achieve will be different based on waste stream characteristics.

Background: Current law, amended by SB 1066 in 1997, provides for temporary reduced diversion goals or extra time needed to reach the 50 percent goals.

Public Resources Code 41785: (a) On and after January 1, 1995, and upon the request of a city or county, the board may establish an alternative source reduction, recycling, and composting requirement to the 50-percent requirement established under Section 41780, not to exceed three years unless another alternative requirement is granted by the board, if the board holds a public hearing and makes both of the following findings based upon substantial evidence on the record:

(1) The city or county and has made a good faith effort to effectively implement the source reduction, recycling, and composting measures described in its board approved source reduction and recycling element and has demonstrated progress toward meeting the alternative requirement as described in its annual reports to the board and the city or county has been unable to meet the 50-percent diversion requirement despite implementing those measures.

(2) The alternative source reduction, recycling, and composting requirement represents the greatest diversion amount that the city or county, may reasonably and feasibly achieve.

PRC Section 41820 imposes essentially the same requirements on jurisdictions requesting a time extension before meeting the 50 percent goal. In either case, the reduced diversion goal is temporary and will expire no later than January 1, 2006.

With a change in law, permanent reduced goals could be allocated based on one or more factors, such as:

- Population density
- Per capita income
- Average home value
- Rural or small designation, as defined
- Distance to recycling markets
- Landfill capacity
- Proportions of residential and commercial waste; types of residences (single family v. multi-family); types of businesses and industry in the jurisdiction
- Waste stream characteristics such as high proportions of materials that are hard to divert, or low proportion of easily divertible materials such as green waste.

Considerations

- Could be viewed as inconsistent with the spirit of AB 939
- Could result in decreased diversion and increased disposal
- Increases flexibility of ways to demonstrate compliance with diversion goals, especially for jurisdictions with large amounts of “hard to divert” materials in the waste stream
- Will not decrease the costs of measuring diversion performance
- Will not increase accuracy of diversion measurement system

- Will decrease costs of AB 939 compliance for some jurisdictions
- Could provide unintended “loopholes” for less conscientious jurisdictions
- Can be perceived as unfair by high-performing jurisdictions which have met the diversion requirements
- Will require legislation
- Other considerations:

ALT 10: Remove the 10% limit and count waste sent to non-burn transformation (such as bioreactor) facilities to count as diversion, not disposal.¹

General Topic/Issue: Change the definition of transformation to allow more or all transformation to count towards diversion.

Background: Statewide, three Integrated Waste Management Board (Board) permitted transformation facilities incinerate about 2.3 percent of California's solid waste disposal originating from about 155 jurisdictions. Starting in the year 2000 transformation can be counted as diversion if no biomass diversion credit is claimed, and the diversion does not exceed 10 of the 50 percent diversion rate in 2000 for a jurisdiction. (PRC Section 41783) Alternative 10 calls for counting all transformation as diversion with no limits on the amount that transformation affects the diversion rate. This is effectively already the case as described below.

In 1990 jurisdictions were required to measure waste generation (disposal + diversion). This was a generation-based system to measure diversion rates. Measuring diversion (waste prevention, recycling and composting) was very costly because diversion is decentralized and many businesses were reluctant to provide diversion data that could give their competitors an advantage. Measuring disposal at Board-permitted disposal facilities was easier to accomplish and less costly. Statute was changed in 1993 to allow jurisdictions to obtain credit for base-year diversion activities, and simplify future diversion rate measurement. The statute was changed to a disposal-based measurement system to determine diversion rates. Under the disposal-based measurement system, jurisdictions estimate current year generation, through use of an adjustment method applied to base-year generation. Then current year disposal at Board-permitted facilities is divided by the current year estimated generation to determine a disposal rate. The disposal rate is subtracted from 100% current year generation to determine a current year diversion rate.

For purposes of estimating the diversion rate, disposal is limited to materials disposed at Board-permitted disposal facilities. If material that historically was sent to a Board-permitted disposal facility is subsequently sent to an activity such as agricultural land spreading of materials or a facility not permitted by the Board (such as a biomass, distillation, or gasification facility), it reduces tons disposed and will increase the diversion rate. Thus, materials sent outside the measured waste stream are effectively all diversion. This was discussed during the debates about changing to disposal-based measurement and the Board determined that use of a disposal-based measurement system made Board review of diversion programs implemented critical.

Prior to 1994 when provisions were added to statute regarding biomass, all biomass and transformation at non-Board permitted facilities effectively counted as diversion. The statute added limits so that now biomass diversion is limited to a maximum of 10% of estimated generation. Biomass diversion cannot be claimed if a jurisdiction claims diversion credit for transformation at Board-permitted waste-to-energy facilities. The statute also included criteria each biomass facility must meet in order for jurisdictions to qualify for biomass diversion credit. While the statutory limits on biomass were supported by the industry at the time the bill was passed, shortly thereafter many biomass industry members expressed concern about the requirements and asked to have the requirements repealed.

¹ Comment from Bob Barker: Alt 10 should read "count waste sent to transformation facilities to count as diversion, not disposal." The group discussed the "non-burn" limitation and I believe elected to include all transformation in the alternative, and not just non-burn. There was discussion that the group might later re-impose the "non-burn" phrasing, depending on subsequent discussions.

Points to Consider:

- Could provide a viable way for hard-to-divert materials to be kept out of landfills and put to beneficial use (such as generation of energy)
- Could be seen as moving transformation up the hierarchy as a more desirable option for waste management
- Would increasing transformation statewide impact air and water quality and create hazardous materials such as ash from burn transformation?
- Statute and regulations limit the number of transformation facilities in the diversion rate measurement system to three waste-to-energy facilities that participate in the Disposal Reporting System.
- If facilities other than the three waste-to-energy facilities are to be part of the diversion rate measurement system, the other facilities are likely to be regulated by the Board.
- Maintains or increases landfill capacity.
- Could reduce the incentive for jurisdictions to implement waste reduction programs that emphasize reuse and recycling (which are higher up in the hierarchy) if the majority of waste can be transformed and counted as diversion.
- Some jurisdictions may not have access to transformation facilities and would not benefit from a change.
- If more transformation facilities are permitted and built, they could increase the energy produced within California.
- Would require changes in statute and regulations.
- Other considerations:

Alt 1-a-4: Increase Incentives for forming Regional Agencies

General Topic/Issue: Regional/Tiered Measurement System. California's waste system is complex and it is very difficult and costly to accurately measure diversion at the jurisdiction level.

Background: In 1990 jurisdictions were required to individually prepare waste management plans to meet the diversion requirements. Many jurisdictions requested the ability to work with other jurisdictions to reduce costs of:

- waste management plan preparation
- measuring diversion rate achievement and improving measurement accuracy
- reporting progress to the Board,
- collecting, processing and transporting materials to markets and
- implementing diversion programs by taking advantage of economies of scale.

In 1993, statute was changed to allow for formation of regional agencies to meet the diversion requirements. The Board must review and approve each regional agency agreement to determine whether it meets specific criteria. As of March 2001, there are 22 Board-approved regional agencies with 106 member jurisdictions. The largest of these, the Marin County Hazardous and Solid Waste Management Authority, comprises 12 jurisdictions. Smaller regional agencies may boast only two or three member jurisdictions. Many regional agencies have reduced costs and improved diversion rate measurement accuracy. Some of the impediments to regional agency formation are requirements that the regional agency must specify how any Board fines will be apportioned and the size of the potential maximum daily fine (\$10,000 per day X number of jurisdictions within a regional agency).

Additional incentives for regional agencies could include:

- Addressing one of the barriers to regional agencies: not wanting to include jurisdictions that are struggling to meet the goals (due to resource constraints, nature of waste, or any other reason). One incentive could be giving diversion point credits for RAs which take in these jurisdictions.
- Low-interest loans or grants exclusively for RAs, to be used for new diversion programs, equipment, education or special waste events
- Streamlined or automatic time extension or temporary reduced diversion goal for newly formed RAs
- Reduced annual reporting requirements for RAs showing progress, such as abbreviated annual reports or biennial reporting rather than standard annual reports
- Reduce potential maximum fines for a RA from \$10,000 per day per jurisdiction to a lesser amount.

Considerations:

- What kind of scale can we use to determine the diversion point credits for each low-performing J taken into a new or existing RA?
- Increases the accuracy of the diversion measurement system by measuring larger areas.
- Does not necessarily reduce disposal or increase diversion
- Does not change the way diversion is measured
- Can shift resources from diversion measurement to programs
- Increases cooperation between jurisdictions and fosters regional outlook
- Cost of incentives to Board
- May require legislation or regulatory changes.
- Can incentives truly overcome the significant barriers to forming regional agencies such as allocation of fines if goals are not met?
- Other considerations:

●
ALT 1-a-1: Measure diversion rates and disposal at the county level, not the city level.

General Topic: Regional/tiered measurement system.

Background: There are two basic options under this proposal: the first option is to shift the responsibility and enforcement of meeting AB 939 goals to the county level, where all jurisdictions in the county are measured together as one entity, rather than at the individual jurisdiction level. All local governments within the county would need to work together and their performance would be judged together as one large jurisdiction.

The second option is to shift measurement of the AB 939 goals to the county level and measure diversion countywide. If there are any measurement issues, the board would judge individual jurisdictions on diversion program implementation.

The following data contains preliminary information on diversion rates taking counties as single entities, that is, all cities in the county and the county unincorporated area are treated as one “all-county” jurisdiction.

Diversion rates are based on the Board’s default data, not on information submitted in the 1999 Annual Reports. This consists of DRS data reported for each jurisdiction in 1999 by the counties, and does not include any corrections that may have been submitted by jurisdictions in their 1999 Annual Reports. It also consists of the default adjustment method factors, and does not include any alternate factors that may have been submitted by jurisdictions in their 1999 Annual Reports.

Diversion rates were calculated using 2 methods. The first is the “AM Method” which uses the adjustment method to put all jurisdictions in the same base year of 1990. This means that for a jurisdiction with a base year later than 1990, the adjustment method was used to estimate its 1990 generation amount. Then, the 1990 generation amounts for all the jurisdictions in the county are added together to get the all-county 1990 generation amount. The adjustment method is then used with this base year to calculate the 1999 all-county generation amount, and 1999 all-county disposal is used to determine the 1999 diversion rate.

The second method is the “Sum Method”. For each jurisdiction in the county, the 1999 generation is calculated using the adjustment method in the normal way, using whatever base year the jurisdiction currently has. These generation amounts are then summed, and compared to the all-county disposal amount to calculate the diversion rate.

Preliminary diversion rate calculations for 1999 show that only about 7 of the 58 counties would be at or above 50% diversion if measured this way. Only 17 to 20 (depending on measurement method used) would be at or above 45%.

**PRELIMINARY CALCULATIONS FOR 1999 ALL-COUNTY DIVERSION
RATES**

Table 1: Most Prevalent Materials in Overall Self-Haul Waste..... 70

County	1999 Countywide Div. Rate (AM Method)	1999 Countywide Div. Rate (Sum Method)	Number of Juris. in County*	No. of Jur. Over 40%	No. of Jur. Under 40%	No. of Jur. Over 50%	No. of Jur. Under 50%
Imperial	71%	71%	8	1	7	1	7
Trinity	66%	66%	1	1	0	1	0
Amador	60%	60%	1	1	0	1	0
Humboldt	53%	56%	8	4	4	3	5
Ventura	48%	55%	11	4	7	3	8
Lassen	53%	54%	1	1	0	1	0
Alpine	53%	52%	1	1	0	1	0
Glenn	49%	49%	1	1	0	0	1
Orange	42%	49%	32	24	8	12	20
Riverside	46%	49%	25	17	8	8	17
San Luis Obispo	49%	49%	2	1	1	1	1
Shasta	49%	49%	2	1	1	1	1
Solano	49%	49%	8	7	1	6	2
Tuolumne	47%	48%	2	2	0	1	1
Kern	44%	46%	12	8	4	7	5
Santa Clara	45%	46%	16	13	3	5	11
Tehama	46%	46%	1	1	0	0	1
Tulare	33%	46%	5	3	2	1	4
Del Norte	45%	45%	1	1	0	0	1
San Diego	45%	45%	19	15	4	3	16
Nevada	44%	44%	4	3	1	2	2
Santa Barbara	44%	44%	8	7	1	3	5
Siskiyou	44%	44%	1	1	0	0	1
Colusa	43%	43%	1	1	0	0	1
Merced	43%	43%	1	1	0	0	1
Alameda	39%	42%	15	10	5	6	9
Marin	42%	42%	1	1	0	0	1
Inyo	41%	41%	1	1	0	0	1
Kings	13%	41%	2	1	1	0	2
Mono	41%	41%	2	1	1	1	1
Yolo	41%	41%	5	3	2	0	5
Los Angeles	37%	40%	89	35	54	22	67
El Dorado	39%	39%	3	1	2	0	3
Modoc	41%	39%	2	1	1	0	2
San Bernardino	35%	39%	25	11	14	4	21

County	1999 Countywide Div. Rate (AM Method)	1999 Countywide Div. Rate (Sum Method)	Number of Juris. in County*	No. of Jur. Over 40%	No. of Jur. Under 40%	No. of Jur. Over 50%	No. of Jur. Under 50%
Stanislaus	35%	38%	10	1	9	1	9
Sonoma	38%	37%	1	0	1	0	1
Calaveras	35%	36%	2	0	2	0	2
Napa	37%	36%	4	1	3	1	3
Madera	34%	35%	3	1	2	0	3
Monterey	34%	35%	13	6	7	4	9
Sacramento	34%	35%	5	2	3	1	4
Santa Cruz	37%	35%	5	3	2	1	4
Fresno	33%	34%	16	8	8	6	10
Plumas	33%	34%	2	0	2	0	2
San Mateo	32%	34%	21	8	13	1	20
Butte	30%	32%	3	1	2	0	3
San Francisco	32%	32%	1	0	1	0	1
Contra Costa	27%	31%	15	5	10	2	13
Mariposa	31%	31%	1	0	1	0	1
Placer	24%	30%	7	3	4	1	6
Sierra	28%	29%	1	0	1	0	1
San Joaquin	24%	28%	8	2	6	2	6
Yuba/Sutter	26%	26%	1	0	1	0	1
Mendocino	20%	21%	5	1	4	0	5
Lake	17%	17%	3	0	3	0	3
San Benito	11%	10%	1	0	1	0	1
Totals			445	227	218	114	331

* One jurisdiction in county indicates a regional agency.

Considerations:

- The DRS system would only need to track the county that waste is from, rather than the city. A lot of inaccuracies in the current system could be avoided this way. The system would be less complicated and less cumbersome.
- Local resources could be shifted from measurement activities to program implementation.
- Base years would need to be established for entire counties, probably by combining the information in the individual SRREs.
- Newly incorporated cities would have no effect on the measurement system.
- Adjustment factors may better reflect changes in waste at the county level than the city level (for example, employment is only available at the county level at present).
- More conscientious cities that have spent a lot of time and effort, and made great strides in reducing waste disposal, may be grouped with “less conscientious” or less successful cities, thus effectively negating their efforts.
- Cities may have less incentive to reduce disposal if they are not directly measured and held accountable.
- If a county does not meet the goal and is fined, an equitable way of paying the fine would have to be developed in the county. This may result in individual city disposal amounts being measured, which would not decrease time and effort for DRS.

- Another way of assessing individual jurisdiction performance within a county, rather than disposal measurement, could possibly be developed.
- Could be viewed as contrary to the spirit of AB 939, which was set up to measure at the individual jurisdiction level.
- Could also be considered in keeping with the spirit of AB 939, because more resources could be directed toward actually diverting waste rather than measuring it.
- Requires statutory and regulatory changes.
- Other considerations:

ALT 9: Don't require a new base year every five years as proposed in ALT 3-h, but require a second base year to be established. If jurisdictions have already done a new, more accurate base year, they have already met this requirement. If jurisdictions are still relying on a 1990 or 1991 base year, they need a new one.

General Topic: Change What Is Measured. Jurisdictions change over time and their waste streams change over time. Focus on improving measurement accuracy by establishing accurate base for the adjustment method.

Background: The Board has developed a Diversion Study Guide to help jurisdictions with information and tools to calculate new base years. The Board has also established a process that can be used to correct an existing Board-approved base-year or use a recent generation-based (diversion) study to substitute for, or officially change, a Board-approved base year.

The original solid waste generation studies quantified the amounts and identified the types of solid waste disposed and diverted from each jurisdiction and established its base year. These studies helped jurisdictions understand their waste streams, implement cost-effective diversion programs, and divert waste. However, most jurisdictions are still relying on base years established in 1990 and using the adjustment method to calculate diversion rates. These base years may no longer be a good basis for using the adjustment method, therefore a one-time update of base year information may reduce inaccuracies with the current goal measurement method. The first step in establishing a new base year is a new generation study. A generation study consists of disposal amounts from disposal reporting and diversion amounts from a new diversion study. A new generation study compiles the "best available information" to accurately measure a jurisdiction's diversion efforts.

The table below shows the jurisdictions that have had one or more base year changes. There were 80 total completed between 1995 and 1998.

Jurisdiction	County	Total Base Years (Includes Initial Year)	Current Base Year	Approved Div. Rate %
Butte-Unincorporated	Butte	2	1995	16
Chico	Butte	2	1995	43
Oroville	Butte	2	1995	36
Martinez	Contra Costa	2	1999	45
Pittsburg	Contra Costa	2	1998	59
Coalinga	Fresno	2	1997	33
Firebaugh	Fresno	2	1997	45
Kerman	Fresno	2	1997	28
Shafter	Kern	2	1996	25
Kings Waste and Recycling Authority	Kings	2	1998	37
Agoura Hills	Los Angeles	2	1997	29
Azusa	Los Angeles	2	1995	17
Calabasas	Los Angeles	2	1997	26
Carson	Los Angeles	2	1997	49
Claremont	Los Angeles	2	1999	40
Covina	Los Angeles	2	1997	28
El Monte	Los Angeles	2	1995	14

Jurisdiction	County	Total Base Years (Includes Initial Year)	Current Base Year	Approved Div. Rate %
Hermosa Beach	Los Angeles	2	1998	45
Hidden Hills	Los Angeles	2	1995	26
Industry	Los Angeles	2	1998	48
La Mirada	Los Angeles	2	1995	19
Lakewood	Los Angeles	2	1999	23
Lomita	Los Angeles	2	1998	32
Long Beach	Los Angeles	2	1998	33
Los Angeles	Los Angeles	2	1995	45
Malibu	Los Angeles	2	1995	18
Manhattan Beach	Los Angeles	2	1998	32
Montebello	Los Angeles	2	1999	51
Norwalk	Los Angeles	2	1999	28
Paramount	Los Angeles	2	1998	ND
San Dimas	Los Angeles	2	1998	43
Santa Fe Springs	Los Angeles	2	1998	62
Santa Monica	Los Angeles	2	1995	15
South El Monte	Los Angeles	2	1998	63
South Gate	Los Angeles	2	1998	42
Temple City	Los Angeles	2	1998	38
Vernon	Los Angeles	2	1998	43
Walnut	Los Angeles	2	1999	37
Westlake Village	Los Angeles	2	1995	30
Alturas	Modoc	2	1998	22
Modoc-Unincorporated	Modoc	2	1998	16
Monterey	Monterey	2	1998	54
Napa-Unincorporated	Napa	2	1995	29
Costa Mesa	Orange	2	1998	51
Dana Point	Orange	2	1998	37
Fountain Valley	Orange	2	1998	44
Huntington Beach	Orange	2	1998	63
Irvine	Orange	3	1998	40
Laguna Beach	Orange	2	1998	40
Lake Forest	Orange	2	1998	62
Mission Viejo	Orange	2	1998	42
San Clemente	Orange	2	1998	37
San Juan Capistrano	Orange	3	1998	42
Santa Ana	Orange	2	1998	54
Westminster	Orange	2	1998	54

Jurisdiction	County	Total Base Years (Includes Initial Year)	Current Base Year	Approved Div. Rate %
Colfax	Placer	2	1999	50
Loomis	Placer	2	1997	26
Galt	Sacramento	2	1998	41
Lathrop	San Joaquin	2	1998	74
Atherton	San Mateo	2	1997	15
Colma	San Mateo	2	1998	47
East Palo Alto	San Mateo	2	1995	ND
Redwood City	San Mateo	2	1997	43
Santa Barbara	Santa Barbara	2	1998	34
Palo Alto	Santa Clara	2	1996	49
Capitola	Santa Cruz	2	1999	42
Benicia	Solano	2	1998	43
Dixon	Solano	2	1998	63
Rio Vista	Solano	2	1998	69
Solano-Unincorporated	Solano	2	1998	49
Suisun City	Solano	2	1998	58
Vacaville	Solano	2	1998	53
Vallejo	Solano	2	1998	44
Tehama County Sanitary Landfill Regional Agency	Tehama	2	1998	43
Consolidated Waste Mgt Authority	Tulare	2	1997	51
Tulare-Unincorporated	Tulare	2	1997	43
Woodlake	Tulare	2	1998	42
Oxnard	Ventura	3	1998	66
San Buenaventura	Ventura	2	1998	59
Ventura-Unincorporated	Ventura	2	1995	32

TOTAL = 80

Considerations:

- A new generation study could help a jurisdiction better understand its waste stream and would provide more accurate data from which to plan/revise programs.
- Would provide a better representation for each jurisdiction as waste streams change over time.
- This data will become dated and need to be revised; requiring only a second base year does not address future years when another base year study may be needed
- Is usually costly and time consuming for jurisdictions to establish a new base year through consulting work or other sources.
- Requiring an accurate base year may allow the present measurement system to stay intact and yet improve accuracy of its use.
- May require changes in statute and regulations.
- Other considerations:

ALT 3-b: Change the measurement system to only consider disposal data, not diversion or generation data.

General Topic: Change what is measured. Many jurisdictions say that disposal reporting system numbers are more accurate than diversion measurement, new base years and the adjustment method.

Background: Disposal data is the only piece of the waste stream puzzle that is actually measured in our current system. Some individual jurisdictions measure diversion as they establish new base years, but the vast majority have not measured diversion since 1990. The current generation data is estimated from the adjustment method. Therefore, even with the errors in the system, disposal data is the best information we have on the waste stream. It is also the easiest part of the waste stream to measure.

There are various ways a measurement system could be devised to only consider disposal data. Some of per capita schemes described in Alternative 3-c use only disposal data. Also, changes in disposal over time could be used, as described in Alternative 3-i. Another possible scheme is described below (as developed by a Board staff in the Waste Analysis Branch).

PER CAPITA DISPOSAL RATE CALCULATIONS

One premise is that the best way to determine a reduction in disposal is to compare disposal rates over time. The theory is that residents dispose at home and employees dispose at work. Therefore, if one were to take all the disposal (residential, commercial, self haul) allocated to a particular entity (in this case, the State) and divide that number by the sum of the number of people who live in that entity plus the number of people who work in that entity, one would have a measurable disposal rate. By computing this rate for a base year and each subsequent year, one could determine a rate for any given year, plus establish a trend over time. The following are calculations for the statewide disposal rate reduction from 1989 to 1999. The data on population and employment were taken from DOF data. The disposal info is from BOE data.

1989:

Population = 29,142,000
 Work Force = 13,780,000
 Annual Amt Disposed (Tons) = 44,000,000

1989 Per Capita Disposal Rate = $44,000,000 / [29,142,000 + 13,780,000]$
 = 1.03 T/P/Y

1999:

Population = 34,036,000
 Work Force = 15,851,063
 Annual Amt Disposed (Tons) = 38,283,259

1999 Per Capita Disposal Rate = $38,283,259 / [34,036,000 + 15,851,063]$
 = 0.77 T/P/Y

Rate Decrease:

Rate Decrease = $\{[1989 \text{ Rate} - 1999 \text{ Rate}] / 1989 \text{ Rate}\} \times 100$
 = $\{[1.03 - 0.77] / 1.03\} \times 100$
 = 25.2 %

Considerations:

- Shifting to a strictly disposal-based system could eliminate errors in the existing measurement system that are related to base years and the adjustment method.
- DRS would still be needed, and errors in disposal data would still need to be dealt with.
- AB 939 originally used a generation basis for measurement so that jurisdictions that had already achieved good levels of diversion would not be penalized by looking only at disposal data. A new disposal-only system might be unfair to some jurisdictions who have had diversion programs for many years.
- If DRS data is inaccurate for a jurisdiction, and the errors cannot be corrected, the jurisdiction might still need another recourse to demonstrate compliance with AB 939, such as submitting diversion data or relying on program implementation.
- A new way of measuring goal achievement would need to be developed, as discussed for the other alternatives such as 3-c (using other bases of measurement such as per capita) and 3-i (looking at diversion rate trends).
- Other considerations:

ALT 3-g-2: Measure disposal separately for residential, commercial/industrial, and construction/demolition. Set separate/different goals for each sector and concentrate on the sector(s) that can provide the most diversion.

General Topic/Issue: Change What Is Measured. Jurisdictions have very variable waste streams with differing amounts of waste that can be diverted. The diversion rates they can achieve will be different based on waste stream characteristics.

Background: To enact such a system, the Board would have to identify, test and adopt methods to measure each waste stream sector. Similarly, the Board would have to consider and approve several goals per jurisdiction, instead of one, and several diversion rates, as well as a way to combine those rates into a single benchmark. Jurisdictions would have to find ways to keep track of several waste streams, as well as their performance in each sector. Once this is done, jurisdictions with a lot of manufacturing could focus on the manufacturing sector, jurisdictions with a lot of restaurants could focus on food waste, etc. and still meet their overall targets.

Considerations:

- Could divert even more resources toward measurement and away from programs
- Increases flexibility in the diversion measurement system.
- May increase accuracy of diversion measurement system.
- Does not necessarily increase diversion, but information gathered could identify where to focus efforts.
- Appears to meet the spirit of AB 939
- Recognizes that each jurisdiction is unique
- May foster the development of new measurement techniques or targeted diversion programs
- Greatly increases complexity of diversion measurement system.
- Increases paperwork for jurisdictions and the Board, including increasing the complexity of the biennial review and shifting more resources to document preparation and review rather than program implementation and assistance.
- Would require legislative or regulatory changes
- Could lead to “custom” goals for each jurisdiction which may be more equitable than holding everyone to the same standard.
- May be perceived as unfair or difficult to compare one jurisdiction’s performance to another’s.
- Increases costs for jurisdictions, haulers, and the Board.
- Other considerations:

ALT 5-a-2: Base the 50% goal on reducing landfill capacity used by 50%.

General Topic/Issue: Emphasize Measurement of Disposal to Promote Conservation of Landfill Capacity. Conserve landfill capacity, one of the goals of the law, and improve measurement accuracy, by focusing on disposal tons or capacity used.

Background: AB 939 established the current organization, structure, and mission of the CIWMB in 1989. The enactment of AB 939 resulted from an unprecedented political consensus. Driving factors for that consensus included a national crisis in landfill capacity and broad acceptance of the hierarchy (reduce, reuse, recycle, environmentally sound landfiling and transformation) as the desired approach to solid waste management. Since that time, landfill capacity has increased. Regional capacity problems exist, but capacity is no longer considered the statewide crisis it once was. Auditors estimate the state has enough landfill capacity for 47 years worth of garbage, far above the state's initial goal of 15-year capacity levels.

Considerations:

- Currently there is no uniformity in California in the way capacity is measured- some facilities use tonnage while others use cubic yards. A standard landfill capacity measurement system would have to be developed measuring at a quarterly or yearly level.
- The state is moving toward material management and not waste management so landfill capacity is not the main focus of waste reduction.
- California has ample landfill capacity so should capacity even be an issue?
- Switching to a capacity measurement system may simplify disposal measurement.
- How would the measurement system account for jurisdictions using multiple landfills statewide or exporting waste out of state? Would jurisdictions be required to reduce capacity for all landfills receiving their waste?
- Focusing on capacity could discourage current waste reduction efforts in California, especially if landfill capacity is abundant.
- Would require statutory and regulatory changes.
- Other considerations:

References

ⁱ "Capacity Crisis Eliminated – But Dumps Still Pose Danger to Environmental and Safety:", *The Sacramento Bee* December 17, 2000.

ⁱⁱ "Landfill Capacity Raised" *Inside Cal/EPA* March 24, 2000.

ALT 1-a-2: Measure diversion at the county level. If the countywide diversion rate is less than 50%, then look at diversion program implementation for each jurisdiction.

General Topic/Issue: Regional/Tiered Measurement System. California’s waste system is complex and it is very difficult and costly to accurately measure diversion at the Jurisdiction level.

Background: *See Background for Alt. 1-a-1 and countywide diversion rates.*

Considerations:

- Local resources could be shifted from measurement activities to program implementation.
- More conscientious cities that have spent a lot of time and effort, and made great strides in reducing waste disposal, may be grouped with “less conscientious” or less successful cities, thus effectively negating their efforts.
- Cities may have less incentive to reduce disposal if they are not directly measured and held accountable for the results of their programs.
- If a county does not meet the goal and is fined, an equitable way of paying the fine would have to be developed in the county. This may result in individual city disposal amounts being measured anyway, which negates one of the main advantages of this alternative. Another way of assessing individual jurisdiction performance within a county, rather than disposal measurement, could possibly be developed.
- Could be viewed as contrary to the spirit of AB 939, which was set up to measure at the individual jurisdiction level.
- Could also be considered in keeping with the spirit of AB 939, because more resources could be directed toward actually diverting waste rather than measuring it.
- This approach allows opportunities for considering countywide opportunities that might not be available by each individual city.
- This might stimulate efforts to increase countywide collaboration and program development/implementation.
- It has the potential to reduce the workload on CIWMB staff if each jurisdiction doesn’t have to be reviewed for diversion programs, and this would allow the Board to shift resources from review to more hands-on assistance.
- It has the potential to reduce the workload on jurisdictions if program responsibilities are spread out countywide.
- It could create a greater economic pool of resources for programs.
- It could create divisiveness if there is an inequitable pool of resources for implementing programs.
- It could create divisiveness if a jurisdiction isn’t seen as “carrying” their share of program implementation.
- Looking at the programs on a jurisdictional level may not explain why the diversion rate is less than 50%. Appropriate programs may be implemented effectively, but due to the nature of the waste stream, 50% diversion may not be being achieved – a close look may be needed.
- Other considerations:

ALT 13: Allow Jurisdictions to Self-Certify Compliance with AB939.

General Topic: Jurisdictions should oversee administration and implementation of AB939 and enforce and certify compliance.

Background: The CIWMB certifies whether or not a Jurisdiction is in compliance with AB939 and the Jurisdiction must prove to the CIWMB whether or not it has met the criteria for approval.

Considerations:

- If Jurisdictions could self-certify for a number of years and the CIWMB could verify the certification periodically (i.e., every 5 years) it would save the time that has been used in the submission and review of Annual Reports.
- Will the Board and Legislature be comfortable with trusting jurisdictions to certify their compliance with AB939?
- Perhaps Jurisdictions can self-certify that they are meeting portions of AB939, like program implementation.
- If a Jurisdiction doesn't comply with AB939, what then?
- How will all Jurisdictions have the tools necessary to carry out the tasks of self-certification (training, facilities, equipment, staff, money)?
- An equitable system of self-certification must be developed in which the Board and Legislature would have confidence.
- Would self-certification be compatible with existing biennial review requirements?
- Would require changes in statute and regulations.
- Other considerations:

ALT 12: Annual Reports Are Submitted To and Processed By CIWMB, Not Counties

General Topic: There's a disconnect between local governments in implementation and coordination of AB939 because of reporting to the state, not the county. Shift administration and enforcement for AB939 compliance to counties.²

Background: All jurisdictions report disposal and program information to the CIWMB.

Considerations:

- County governments understand the local situations better than the state and can administer and enforce AB939 more effectively than the state because of that local perspective.
- Shifting implementation and coordination to the County can improve levels of trust and confidence in local jurisdictions.
- Counties may not have the tools for implementation and coordination of AB939 – staff, facilities, equipment, training, and money. Shifting the responsibility to County level may impose a significant hardship.
- Will the county administer and enforce AB939 for itself?
- Perhaps the “disconnect” can be significantly reduced so state can be a better administrator and enforcement agent for AB939 within the existing structure of the law, rather than shifting responsibilities to the counties.
- There is an assumption that every county is more qualified than the state to oversee implementation and coordination of AB939 – this might not be true in all cases.
- A system in which jurisdictions apply for self-certification, and the Board approves the application, could be developed.
- Would require statutory and regulatory changes.
- Shifts costs from Board to counties.
- Some cities have indicated concern about conflicts of interest between the city and the county.
- Would an appeal process for cities be needed?
- Other considerations:

² Comment from Bob Barker: Alt 12 should refer to shifting administration and enforcement for AB 939 compliance to "county/regional task forces." This was discussed by the group and I believe there was understanding that the local task force was in the better position legally and administratively to do this than the county jurisdiction.

ALT 1-a-3: Measure diversion at the “waste shed” level, not based on jurisdiction boundaries.

GENERAL TOPIC/ISSUE: Regional/Tiered Measurement System. California’s waste system is complex and it is very difficult and costly to accurately measure diversion at the jurisdiction level.

Background: Two possible definitions for a waste shed: (1) a larger regional area composed of many jurisdictions and/or counties without jurisdiction specific boundaries. For an example of regions in California view the following link on the board’s web site. (<http://www.ciwmb.ca.gov/lgcentral/Summaries/Regional/Regions.htm>). (2) Another possible definition is areas in the state with the highest concentration of waste disposal. Currently the closest representation of a waste shed is a regional agency. Regional agencies consist of several jurisdictions that have legally joined as one agency for compliance purposes.

Considerations:

- What criteria would be used to determine a waste shed? Possible criteria could include geographic boundaries, highly populated regions or concentrated areas of waste disposal.
- Do waste sheds differ significantly enough from regional agencies to merit this additional type of entity?
- Is measuring disposal and diversion at the waste shed level more accurate than the jurisdiction level?
- Jurisdictions forming waste sheds could combine resources and effort reducing the time and cost of complying individually.
- Small or rural jurisdictions that don’t meet 50% diversion requirements may be able to meet the goal as part of a waste shed.
- Differences or conflicts between jurisdictions and counties may make it hard for regions to agree to form a waste shed.
- The current disposal reporting system would have to be revised to measure at the waste shed level.
- How would fines and compliance work? Who would pay the fine?
- How would areas outside of waste sheds comply with AB 939?
- Would waste shed measurement focus on several large waste shed as opposed to the current jurisdiction measurement system or would it be an option added to the existing jurisdiction measurement system?
- Other considerations:

ALT 3-i: Look only at the diversion rate TREND within each jurisdiction. Jurisdictions meeting the requirements would have a positive trend with increasing diversion rate.

General Topic/Issue: Change What Is Measured. Looking at diversion rate measurement data over time may avoid problems with short-term inaccuracies in the data.

Background: Instead of comparing a jurisdiction's diversion rate against the 50 percent benchmark, compare it against prior year's diversion rate performance. Since the problems of measuring any jurisdiction's diversion, such as a bad base year or the adjustment factors not working, should not change much year to year, the appearance of a trend suggests a relatively accurate measure of improvement.

Considerations:

- How much of a trend is deemed necessary for compliance? Will it vary based upon diversion performance as compared to the 50 percent benchmark?
- May be viewed as not keeping in the spirit of AB 939.
- Will this reduce diversion greatly over time, compared to present system?
- Does not reduce resources spent on measuring compliance
- Does not necessarily increase accuracy of measurement system
- Provides more flexibility in the compliance measurement system
- Recognizes that jurisdictions are unique
- Jurisdictions would not be penalized for short-term variations in tons disposed.
- There could be a perception of unfairness if jurisdictions with lower general diversion rates have the same trend as jurisdictions with higher general diversion rates.
- Does not treat all jurisdictions the same: perception of unfairness
- Will require legislation
- Eliminates need for base years and use of the adjustment method, and therefore the errors associated with them. It uses the type of data considered the most accurate: measurement of disposal amounts.
- Other considerations:

NOTE: The following information considers a form of this alternative which considers disposal data trends rather than diversion rate trends.

Look only at the disposal trend within each jurisdiction. Jurisdictions with decreasing disposal are considered meeting the requirements.

Background: The Board has been accumulating disposal data, submitted by counties, for five years, and can now start looking at trends in that disposal data. From that data and population data, it becomes possible to track per capita residential disposal. With the addition of base-year residential percentage and taxable sales data, and it becomes possible to track non-residential disposal against taxable sales. If the goal of AB 939 is simply to reduce the volume of waste going into landfills, then perhaps all that is needed is to track disposal, and if it is declining, that would be evidence enough of compliance.

WAB staff put together an Excel file which charts per capita residential disposal and non-residential disposal per \$10 in taxable sales for all jurisdictions. It compares jurisdictions to their region and also to other, similar jurisdictions. This data has not yet been fully analyzed. At 10 mb, the file is too large for easy downloading, and will not fit on a diskette, therefore it is not included here.

A disposal trend-based system would require greater accuracy and accountability in disposal reporting. In areas where there are disposal allocation issues, new systems may need to be introduced to more accurately allocate waste.

Considerations:

- How would a trend that demonstrates compliance be determined? Will the level of progress necessary to be deemed in compliance vary depending upon the current jurisdiction diversion performance? What would such a sliding scale look like?
- May penalize jurisdictions that have invested in program implementation and already achieved the 50% diversion rate.
- May be viewed as not in keeping with the spirit of AB 939 if 50% goals are not achieved.
- Reduces resources spent on measuring compliance
- Should decrease disposal but may not increase diversion much
- Does not necessarily increase accuracy of measuring compliance
- Greatly simplifies measurement system by eliminating the need for base years or the adjustment method.
- May magnify impact of disposal reporting errors and intensify disposal allocation issues.
- Impacted by other factors, such as the economy, disasters, etc.
- May require more accurate residential percentages for all jurisdictions, which could mean measuring residential and non-residential tonnages as part of DRS.
- Will require legislation
- Higher performing jurisdictions may feel penalized because they could have a more difficult time maintaining an trend that indicates progress, as they approach their maximum diversion potential.
- Solely relies on DRS data, so errors there have an even greater impact.
- Other considerations:

ALT 4-a: Focus on developing markets for recycled materials to “pull” materials out of the waste stream, rather than focusing on measurement of waste.

General Topic/Issue: Emphasize Market Development Rather than Measurement. Materials are not diverted without markets. Market development could eliminate need for waste measurement system; may be more efficient way to reduce disposal.

Background: The Board currently has a Recycled Market Development Zone program with 40 zones located all around the state, in both rural and urban areas. RMDZs offer help to recycling-based businesses with local grants and loans, permitting and siting assistance, reduced local fees, and the availability of low-interest loans from the Board. The low-interest loan program has loaned \$47 million to 93 recycling-based businesses since 1993. There was \$10 million available in loan funds at the beginning of this fiscal year; however, funding for loans is expected to decline significantly in the coming years. There are two reasons for this: 1) The Board’s overall funding is based on the amount of materials landfilled, and those amounts should decline as jurisdictions divert more materials; and 2) The Board now has discretion over the amount of money transferred from its primary fund to the loan account (Prior to July 1, 1991, \$5,000,000 annually was automatically transferred into loan subaccount). Due to funding constraints, the Board reduced the RMDZ loan fund for the 2000-2001 and 2001-2002 fiscal years and is pursuing potential leveraging options with other public and private sources to provide additional funds for recycled-based businesses. RMDZ loans are available to new and expanding recycling based-businesses within the zones who either use recycled feedstock or switch from virgin feedstocks to recycled to further process recyclables or produce finished products.

For recycled-based businesses outside the RMDZs, the Board also operates a “R-Team” program which offers these companies a wide variety of technical, marketing, financial and general business assistance.

Recently, a model for establishing regional markets for recyclables, where related recycling-based businesses were established in close proximity of waste processing facilities, is being developed in Alameda County. A \$200,000 “Jobs Through Recycling” grant from the US EPA funded the project in 1997 and project is scheduled to end October 2001. The Board set aside \$1 million in low-interest loans for businesses there. The project has met all its targets so far, diverting more than 100,000 tons of materials, while providing more than 50 new jobs. It is the only such project in the state. It is hoped that this model can be replicated in other regions of the state.

The Department of Toxic Substances Control, part of Cal-EPA, is beginning a new program to help potential business owners assess the environmental problems of, and clean up, used industrial sites (brownfields). These sites are often in choice locations, but usually suffer from some degree of contamination. Once cleared of immediate health hazards, the sites can be used for new businesses. There may opportunities for more programs to help recycling-based businesses use brownfields sites.

To increase the usage of old auto and truck tires, the Board has three loan programs. The first offered \$450,000 in loans for new playgrounds and running tracks made out of rubber from California tires, the second offered \$300,000 for any building project which uses green building materials made from recycled California tires, and the third offered \$300,000 to assist with the development of processes and technologies that will lead to increased use of tires. All loan figures were for the 1999-2000 fiscal year. Despite these efforts, many producers of California crumb rubber have difficulty selling their product.

Additionally, the state has enormous market development power through its purchasing. State agency diversion plans include increased procurement of recycled content products. Statute could be changed to

require state agencies to purchase more recycled goods and expand the state's commitment to using recycling products when building new offices around the state.

Statute could be changed to require manufacturers to use more recycled materials in their products(?) feedstocks. Currently, it does this with newsprint, with rigid plastic containers and with fiberglass insulation. It could potentially do this with asphalt, plastic furnishings, computer cases or garden products, re-bar, steel 2 x 4s, etc.

Potential solutions:

- Initiate a "Jobs through Recycling" Grant program much like USEPA.
- Target market development at specific waste stream components, as the board has done with tires.
- Change statute to specify minimum recycled content for more products, as has been done with newsprint, rigid plastic containers and fiberglass insulation.
- Require state offices, schools or others to purchase more recycled products, and to expand the range of recycled products they purchase.
- Increase amount of money available for low-interest RMDZ loans.
- Modify RMDZ loan requirements, RMDZ loan interest rates, or offer no-interest loans or grants.
- New Board programs that augment DTSC programs for brownfields conversion, to extend extra help to locate recycling businesses on brownfields sites.
- Board supported basic research into recycled materials sorting, processing, separation or purification.
- Tax incentives for existing product manufacturers who switch to recycled feedstocks who are not located within RMDZs.
- Create special tax credits to offset cost of purchasing machinery which processes recycled materials or manufactures using recycled materials.
- Develop new programs to pay local fees and taxes for start-up businesses using recycled feedstocks

Considerations:

- Increased demand for recycled materials will result in decreased disposal.
- Does not make changes in, or specifically address problems in the current measurement system.
- Does not decrease resources spent by jurisdictions on measurement.
- Increased use of recycled materials could drive up the price for recycled commodities, which will help jurisdictions that collect those materials and sell them to processors. Also, franchise haulers who collect materials on behalf of jurisdictions will see increased profits from their sale, which could result in lower franchise fees for jurisdictions.
- More loan availability should help increase the number of companies using recycled commodities.
- More companies using recycled feedstocks means more jobs, more value added to materials and more tax revenues.
- Basic research into recycled commodity sorting and processing could result in dramatically better recovery rates and/or a significantly higher quality feedstock, which would make recycled commodities more competitive with their virgin counterparts.
- Increased costs of recycled commodities will hurt the profit margins of those manufacturers already using them, and could result in their products becoming less competitive and actually losing market share.

- More loans issued or lower loan standards could result in more non-performing loans, with corresponding financial loss for the Board and potential political repercussions for the program.
- Possible political opposition against tax credits or research subsidies from virgin commodity producers and their allied manufacturers.
- Increased Board focus on market development could draw money and resources away from other issues that have a bigger impact on public health or quality of life.
- May require changes in statute and regulation.
- Other considerations:

ALT 6-a-1: Move responsibility of meeting the goals to those that have control over waste, such as government agencies, schools, and local districts.

General Topic/Issue: Require Responsible Parties to Meet Diversion Requirements. Jurisdictions typically don't have control over all the waste generated within their borders. More diversion could be achieved by moving responsibility for reducing waste "upstream" on those that may have more control or impact on waste generation.

Background: Current responsibility for meeting waste reduction goals falls on local governments only. This alternative considers shifting the burden of compliance to entities that generate the waste. Waste generators such as school districts may comply with local area recycling programs but aren't individually responsible for complying with AB 939 waste reduction goals.

A recent example of shifting the burden to generators is AB 75. The bill mandates that each state agency or large state facility divert at least 25 percent of its solid waste from landfills or transformation facilities by January 1, 2002, and 50 percent by January 1, 2004.

Responsibility could also be shifted upstream to commercial and industrial generators.

Considerations:

- This proposal could focus on the government/public sector, private sector or both.
- Research is needed to determine which parties have the most impact and control on the waste stream. Even with shifting more of the burden to such public sector entities such as school districts and other local districts, in some jurisdictions, the bulk of the waste may originate from private corporations or residents, and targeting these public entities may not result in significant diversion.
- Will upstream generators be willing to shoulder the responsibility of AB 939 waste reduction goals?
- What type of measurement and compliance system will be used to regulate "upstream" generators?
- Will changing the focus to upstream generators impact current waste reduction efforts if jurisdictions consequently reduce their diversion efforts?
- Legislation will be needed to shift responsibility to upstream generators.
- Other considerations:

ALT 8: CIWMB should provide standard curriculum or training for local government staff (especially new recycling coordinators) and/or set up a certification program to have minimum standards for staff responsible for program implementation and other AB 939 and waste management duties.

General Topic/Issue: Local government staff assigned to waste management may not have background and expertise in the field and that can impact effective program implementation.

Background: There are few opportunities for college-level training in waste management. The State of California and CIWMB could provide the funding and programs for various levels of certification, standard curriculum and training for waste managers at all levels: private businesses (i.e., large corporations) as well as State and local government staff (especially new recycling coordinators). The program could eventually include the University, state, and community college programs. The first step would be a CIWMB certification program that would cover minimum standards, program implementation, and other AB 939 and waste management duties. Industry engineers, manufacturers, product designers, commercial and government property managers, and personnel responsible for waste generation and the State and local government staff assigned to waste management programs and code enforcement need information, libraries and formal training in the field of resource conservation and recovery, to analyze and implement effective programs.

Considerations:

- Programs used by the Board and other state and local agencies can be used as models, such as the Board's LEA Certification program; the Energy Commission Title 24 Standards for Building Energy Conservation Measures where city inspectors, builders, architects and others are offered state training and certification; and federal training programs for the Clean Air and Clean Water Act. Also, a committee of educators, and practitioners could be convened to make institutional recommendations.
- Provides a uniform understanding and practice of AB 939 programs, principles, etc.
- Adds to CIWMB responsibilities; would need new staff or reassigned staff to develop and provide training.
- If training is not required, there would still be differing levels of expertise which can affect program implementation.
- Without a training program, waste managers at many levels are left to develop their own expertise, and this expertise may become more and more important in the future as resource conservation becomes a more pressing issue.
- May require changes in statute and regulation.
- Other considerations:

ALT 6-a-3: Increase individual awareness and responsibility for waste by requiring meaningful pay-as-you-throw programs; include true cost of disposal in garbage bills, etc.

General Topic/Issue: Require Responsible Parties to Meet Diversion Requirements. Jurisdictions typically don't have control over all the waste generated within their borders. More diversion could be achieved by moving responsibility for reducing waste "upstream" on those that may have more control or impact on waste generation.

Background: AB939 places responsibility for meeting requirements with the jurisdictions, however, most jurisdictions do not have control over all generation of waste and the management of discards within their boundaries.

Considerations:

- Programs such as extended producer responsibility, take-back, fines, etc. must come at the state (or multi-state or national) level.
- Legislation and regulatory changes would be required to implement this alternative.
- Who will be required to implement compliance for these new requirement? What will be the results of non-compliance?
- Pay-As-You-Throw programs that encourage waste minimization and improve reuse and recycling have been very effective in many jurisdictions. Decision-makers need more information on the benefits of Pay-As-You-Throw programs in order to expand the number of jurisdictions using this approach.
- Local politics could be a barrier to changing collection systems.
- Various local contracts between haulers and jurisdictions may cause changing to Pay-As-You-Throw programs to be costly and time-consuming.
- How is the "true cost of disposal" calculated for garbage bills? How is the billing for the "true cost" of collection of materials that won't be landfilled handled?
- Some jurisdictions are prohibited from charging residents the "true cost" of waste disposal.
- Changing to Pay-As-You-Throw programs may result in changes to billing systems and the added costs associated with that changeover.
- Rural jurisdictions may have higher "true" costs than urban locales and yet have fewer economic resources to cover the costs - are there issues of equity?
- Increased resource diversion from Pay-As-You-Throw programs can create jobs and improve the economy.
- Could provide waste generators with a better understanding of the real cost of wastefulness, and the cradle to the grave impacts of services and products on the waste stream and the environment.
- Efforts to increase "individual awareness and responsibility for waste" has been going on for many years and there is still controversy over whether or not there is a waste problem that people need to be responsible for. How will/can the state deal with that controversy to create a significant change in behavior.
- Many jurisdictions are short on staff, time and money so that efforts to increase individual awareness over and above what they already do now may not be possible without more assistance.
- Improving Pay-As-You-Throw programs can have a significant impact on the reduction of waste and the diversion of resources and help a jurisdiction reach, or exceed, AP 939 goals.
- Interstate commerce and movement of products between states may raise equity issues for single-state efforts to move more responsibility to businesses.
- Other considerations:

ALT 15: Require disposal facilities, transfer stations, and MRFs to have diversion programs for the self-haul waste stream.

General Topic/Issue: Require Responsible Parties to Meet Diversion Requirements. Jurisdictions typically don't have control over all the waste generated within their borders. Jurisdictions have no control over the self-haul waste stream.

Background: Statewide, the percent of the waste stream consisting of self-haul is 13.1%. This can vary from facility to facility, from city to city, and region to region. For more detailed information, please see the two documents provided to the DRS Working Group called "Self Haul Study Data.doc" and "Self Haul Data.xls" including in the first meeting documents on the LG Talk website. The figure and table below include information from the statewide waste characterization study conducted in 1999.

Figure 1: Overview of Overall Self-Haul Waste, Statewide, 1999

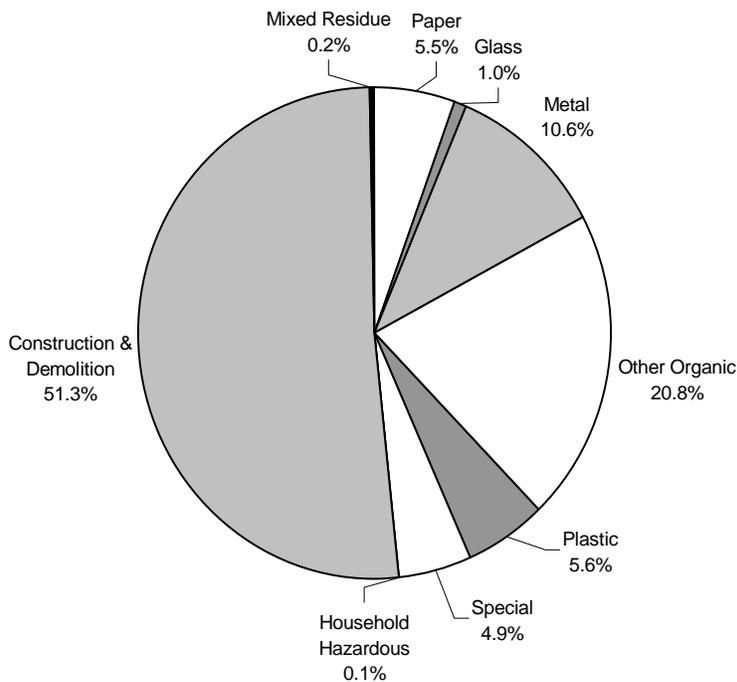


Table 1: Most Prevalent Materials in Overall Self-Haul Waste

Material Type¹	Est. Pct.	Est. Tons	Cumulative Pct.
Lumber	19.2%	894,304	19.2%
Remainder/Composite Construction & Demolition ²	10.6%	491,760	29.8%
Remainder/Composite Organic ³	8.2%	379,753	38.0%
Other Ferrous Metal	6.7%	312,257	44.7%
Concrete	6.7%	311,396	51.4%
Gypsum Board	5.5%	254,298	56.8%
Prunings & Trimmings	5.4%	250,685	62.2%
Asphalt Roofing	5.4%	249,748	67.6%
Leaves & Grass	4.0%	185,816	71.6%
Bulky Items	3.9%	182,372	75.5%

¹ For complete material type definitions, see the Board's web page at <http://www.ciwmb.ca.gov/WasteChar/MatDefs.htm>.

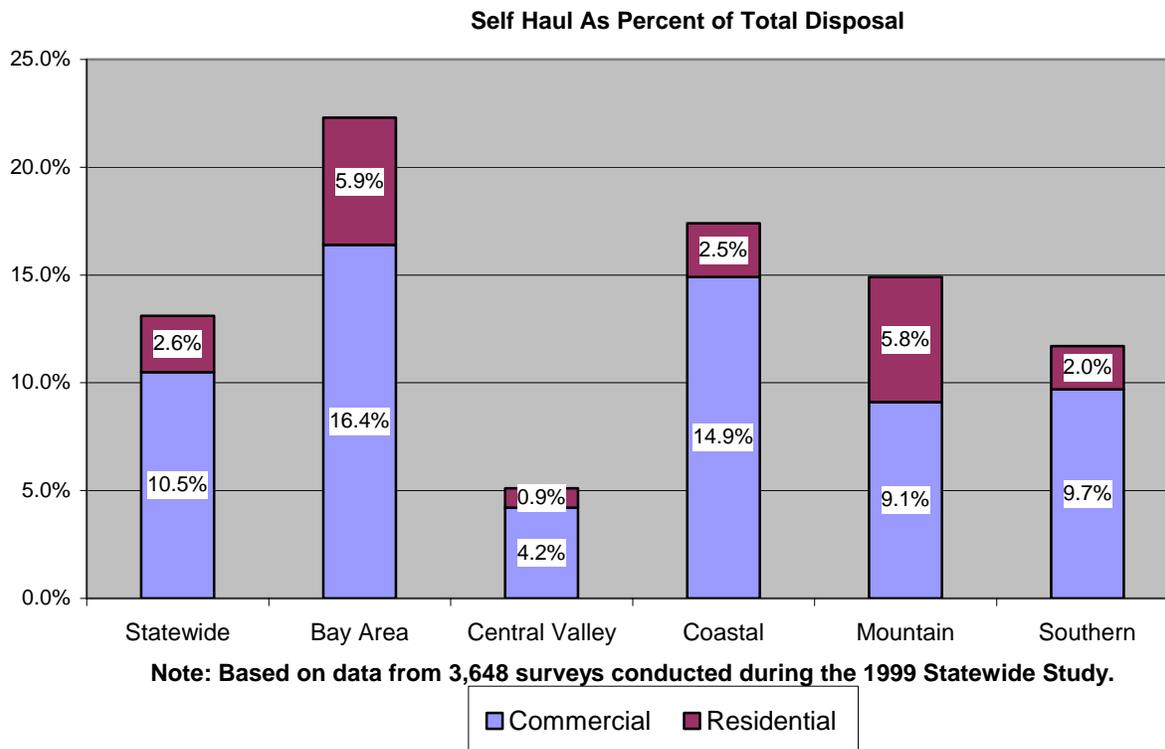
² "Remainder/Composite Construction and Demolition" means construction and demolition material that cannot be put in any other type or subtype. This type may include items from different categories combined, which would be very hard to separate. This type does not include any subtypes. Examples: This type includes brick, ceramics, tiles, toilets, sinks, and fiberglass insulation. This type may also include demolition debris that is a mixture of items such as plate glass, wood, tiles, gypsum board, and aluminum scrap.

³ "Remainder/Composite Organic" means organic material that cannot be put in any other type or subtype. This type includes items made mostly of organic materials, but combined with other material types. This type does not include any subtypes. Examples: This type includes leather items, carpets, cork, hemp rope, garden hoses, rubber items, hair, carpet padding, cigarette butts, diapers, feminine hygiene products, small wood products(such as Popsicle sticks and tooth picks), and animal feces.

The table below shows the sources of self-haul waste.

Source	Percent of Self-Haul, Statewide, 1999
Residential	19.8
Commercial – C&D activities	34.3
Commercial – Roofing	8.4
Commercial – Landscaping	6.9
Commercial - Other	31.3

These proportions can vary, as shown by the regional data collected in the statewide study shown below.



Considerations:

- Jurisdictions have very little control over the self-haul waste stream, therefore requirements from the state level, such as those for operation permits, may be very effective.
- Facility operators may have objections to further requirements.
- The majority of the self-haul waste stream is construction and demolition waste, which are materials for which it may be relatively simple to set up diversion programs.
- Programs may not be appropriate at all facilities, depending on the amount and type of self-haul coming in to the facility, space available, and potential environmental impacts.
- Many facilities already have on-site programs for diverting C&D and landscape waste, and may serve as model programs for other facilities.
- The issue of whether and how these requirements would be enforced would need to be addressed.

- There may be great potential for much diversion with relatively cost-effective programs for the self-haul waste stream.
- Would require changes in statute and regulations.
- Other considerations:

ALT 6-a-4: Take “gross polluters” approach – focus on largest individual generators, largest sectors, and most common materials.

General Topic/Issue: Require Responsible Parties to Meet Diversion Requirements. Jurisdictions typically don't have control over all the waste generated within their borders. More diversion could be achieved by moving responsibility for reducing waste “upstream” on the largest waste generators.

Background: Accountability for meeting AB 939 compliance currently falls solely on jurisdictions and local governments. Currently “upstream” generators of waste are not directly accountable to the waste board for complying with AB 939.

Considerations:

- The Board’s waste characterization database can be a useful tool to help jurisdictions generally identify the most common materials and largest individual generators to focus on, but waste audits may still be needed.
- Some current examples of the “gross polluters” approach:
 - Germany adopted its Packaging Ordinance of 1991 which shifted "the costs of collecting, sorting and recycling used packaging from municipal government to private industry,"
 - European directive on scrapping "end-of-life vehicles". By 2007 all car manufacturers will be forced to cover the cost of recycling vehicles.
- What type of measurement and accountability system will be used to track individual generators and target sectors?
- How does the Disposal Reporting System fit into a new measurement system for gross polluters?
- Will AB 939’s focus shift from jurisdictions complying to gross polluters complying?
- Gross polluters may react positively if recycling and reuse programs save them money.
- Gross polluters may react negatively to the costs of complying.
- Could greatly complicate the measurement system and tracking of compliance.
- Would the state or would local governments be responsible for measuring and tracking compliance?
- Can other methods besides waste audits be used to determine “gross polluters”?
- Need to determine methods of measuring the effectiveness of waste reduction efforts by “gross polluters”.
- Would require changes in statute and regulations.
- Other considerations

Alternatives Scoring Tool

Note: This is set up to calculate scores automatically. If you print this out and do it manually, delete the values in the score column before you print it out.

Write in Alt #	Weight of Criteria	Scale of 0 (doesn't meet criteria) through 5 (meets criteria extremely well)	Score = Weight times scale	
Meets goals/spirit of AB 939.	10		0	
Reasonable resources required.	9		0	
Falls within purview of Alternatives Group.	8		0	
Ease of implementation – logistically.	7		0	
Flexibility in implementation.	6		0	
Ability to measure progress.	5		0	
Cost.	4		0	
Compatibility with existing efforts.	3		0	
Political feasibility.	2		0	
Minimum regulatory/statutory changes needed.	1		0	
Final Score			0	

Write in Alt #	Weight of Criteria	Scale of 0 (doesn't meet criteria) through 5 (meets criteria extremely well)	Score = Weight times scale	
<u>Meets goals/spirit of AB 939.</u>	10		0	
Reasonable resources required.	9		0	
Falls within purview of Alternatives Group.	8		0	
Ease of implementation – logistically.	7		0	
Flexibility in implementation.	6		0	
Ability to measure progress.	5		0	
Cost.	4		0	
Compatibility with existing efforts.	3		0	
Political feasibility.	2		0	
Minimum regulatory/statutory changes needed.	1		0	
Final Score			0	

Write in Alt #	Weight of Criteria	Scale of 0 (doesn't meet criteria) through 5 (meets criteria extremely well)	Score = Weight times scale	
<u>Meets goals/spirit of AB 939.</u>	10		0	
Reasonable resources required.	9		0	
Falls within purview of Alternatives Group.	8		0	
Ease of implementation – logistically.	7		0	
Flexibility in implementation.	6		0	
Ability to measure progress.	5		0	
Cost.	4		0	
Compatibility with existing efforts.	3		0	
Political feasibility.	2		0	
Minimum regulatory/statutory changes needed.	1		0	
Final Score			0	

Meeting 3

Note: All of this material has already been e-mailed to the group by the preparer except for alternatives 1-a-4, 4-a (1 through 5), addendum to 3-g-1, 3-c, and 3-g 2. See last page for table of contents and page numbers.

PRIORITY LIST STATEMENTS OF ALTERNATIVES ORGANIZED BY DRAFT PRIORITY RANKING (HIGH TO LOW OR NOT RECOMMENDED)

High Priority Group

Alternative 2-A

Prepared by: Jim Hemminger

Alt 2-a: Allow rural jurisdictions (as defined in Public Resources Code) to demonstrate AB 939 compliance based on local program implementation and effectiveness instead of requiring annual calculation and quantification of waste diversion and source reduction volumes

This alternative would address the problems associated with accurately measuring diversion in rural areas of the State with “low volume” waste loadings. Errors in calculating waste generation (diversion, disposal, and source reduction) are generally higher in rural jurisdictions than in other areas and these errors are compounded by inherent inaccuracies in the “waste adjustment methods” because small demographic and economic events can significantly impact waste generation. These events are not often accounted for in the standard adjustment method because of the limited amount of waste generation. Similarly, errors in the disposal reporting system (because of a high percentage of self-haul) are significant and difficult to control in rural areas. In combination, these factors mean that waste quantification may not be the best method of determining AB 939 compliance in some rural areas. Considering that “rurals” represent less than 5% of the waste loading in California, increased costs to try to improve data accuracy are of questionable value and limited rural resources could be better used for program implementation, expansion, and increased effectiveness.

Meets goals/spirits of AB 939: Would meet the goal of AB 939 by increasing waste diversion in rural counties and by promoting program development. AB 939 recognized the need for “reduced requirements” for rural jurisdictions and this alternative would extend this recognition to allow substituting program implementation as a compliance measure instead of using numerical estimates.

Reasonable resources required: Implementation of this alternative would “free up” resources in rural counties to allow increased program development and would also allow the Waste Board to focus its staff efforts on larger waste streams where the potential for significantly contributing to the statewide goal of 50% is greater. Both local and State resources would be saved because this alternative would mean that

rural jurisdictions could choose not to undertake the expense and time required to prepare, review, revise, and approve new “waste generation studies”.

Falls within the purview of the Alternative Group: Yes—it is an alternative measure of AB 939 compliance which effectively addresses “accuracy” issues in rural areas.

Ease of implementation, logistically: Relatively easy to implement, but would require development of new Waste Board reporting procedures.

Flexibility in implementation: Very flexible. Rural jurisdictions would have the option of using the existing reporting systems, filing for “rural petitions for reduction”, or using the proposed “program reporting system”.

Ability to measure progress: High. Would require rural jurisdictions to evaluate program effectiveness on an annual basis.

Cost: Should result in cost savings for some rural jurisdictions and for the Waste Board.

Compatibility: Would integrate well with existing systems. Rural jurisdictions would still be required to be part of the statewide “disposal reporting systems (DRS)”, but would have the option of using program effectiveness, rather than DRS numbers, as a measure of AB 939 compliance.

Political feasibility: Possible concerns from some environmental groups and larger jurisdictions that may be reluctant to allow deviation from existing numerical methods. It may be necessary to provide better understanding of the difficulties of accurate quantification in small-volume jurisdictions and it may be necessary to demonstrate that measuring program effectiveness will provide a meaningful measure of waste diversion efforts in rural jurisdictions.

Regulatory/Statutory changes required: Changes in regulation would definitely be required and, depending on interpretation of the existing “rural reduction statute”, legislative changes may be needed.

Improves accuracy of measurement: Would eliminate “inaccurate” quantification methods and would provide a more accurate measure of “good faith efforts” in rural jurisdictions. This alternative presumes that effective program implementation correlates well with waste diversion quantities.

Alt 2A Tabular Summary

Ref No.	Solution Considered	WG Recommendation	Issue Addressed	Meets Criteria and other Considerations
Alt 2-a	In addition to existing statutory provisions for "rural reductions", allow rural jurisdictions (as defined in Public Resource Code) to demonstrate their AB 939 compliance based on local program implementation and effectiveness instead of requiring annual calculation and quantification of waste diversion and source reduction volumes as a basis for compliance determination.		This solution addresses the inherent difficulties associated with getting accurate waste and diversion data from rural counties and would obviate the necessity of using limited local resources in small jurisdictions to conduct new base year studies in an effort to try and reduce the extent of these inaccuracies.	<ol style="list-style-type: none"> 1. Meets the intent of AB 939 by focusing on effective program implementation and requiring "good faith performance efforts" 2. Waste loadings from rural jurisdictions represent < 5% of State's total waste volume 3. Waste Board staff time and Board time could focus on more significant waste streams 4. Counties would still need to follow DRS 5. May require legislative action

Alternative 2-b

Prepared by: Karen Coca

Emphasize Diversion Program Implementation, Not Diversion Rates

General Topic/Issue

Diversion programs, not measurement activities, reduce waste. Since the waste system in California is complex, more diversion could be achieved through focus on programs rather than measurement activities.

Solution Considered

The State would produce a list of potential programs with evaluation criteria by examining current programs and investigating new programs as they arise. WRAP awards criteria can be used to get ideas. Each jurisdiction would choose specific programs based on their demographics and other local issues. This programmatic document would be certified by the state as adequate, with audit and monitoring by state staff. Criteria would include program guidelines, monitoring for effectiveness, and proof of implementation, to be reported each year. Many local jurisdictions already monitor program effectiveness for their yearly budgeting process. This would be considered an alternative to diversion rate measurement.

Issue addressed

Jurisdictions currently spend the majority of their waste diversion budgets on documentation of existing diversion rather than program implementation. By shifting the emphasis to development of programs and implementation, millions of dollars in resources each year can be shifted, resulting in higher overall diversion.

Meets Criteria/Considerations

Meets goals/spirit of AB939: This alternative will shift resources from documentation to implementation; therefore more diversion can be achieved.

Reasonable Resources required: The same resources are required, but again would require a shift in responsibility. Less money spent on bean-counting.

Falls within the purview of the Alternatives Group: This is an alternative to the current measurement system.

Ease of implementation, logistically: Would still require monitoring and enforcement at State level.

Flexibility in implementation: Provides flexibility in that each jurisdiction builds its own menu of programs.

Ability to measure progress: Can use program criteria to establish progress; can use survey both to educate and check participation. Targeted waste sorts used as a tool can establish amounts of recyclables

left in selected wastestream. Doesn't result in a 'diversion number', but provides a more accurate measure of the resources actually spent on program implementation and results.

Cost: Would cost far less to document diversion, but resources would be shifted to program implementation and monitoring.

Compatibility with existing efforts: Would be a 'good faith effort' without a compliance order to initiate it. Already being used with cities under compliance orders.

Political feasibility: No publishable diversion rate may be unpopular with some politicians.

Minimum regulatory/statutory changes needed: Would require revision to allow 'good faith effort' before enforcement action (help me out here)

Alternative 10 and 10+
Prepared by: Jim Hemminger

Alt 10: Remove the existing statutory limit for counting certain types of transformation processes as “diversion”

This alternative would eliminate existing problems in the AB 939 accounting systems because waste materials undergoing certain “transformation processes” (such as gasification, hydrolysis, bioreactors) are not included as either “disposal” or “diversion”. This problem is not manifest in the annual reporting system, but will likely become an issue as new “waste generation studies” are undertaken and jurisdictions need to account for and categorize all waste streams.

Also, elimination of the existing 10% diversion restriction will encourage jurisdictions to develop innovative diversion technologies for certain waste types that are not amenable to composting or other types of reuse.

Meets goals/spirits of AB 939: Would meet the goal of AB 939 by encouraging other types of waste diversion from landfills, but may require changes to the “waste management hierarchy” for certain transformation processes.

Reasonable resources required: Minimal to prepare new regulations and reporting procedures.

Falls within the purview of the Alternative Group: Yes—it is an alternative measure of AB 939 compliance by extending the type of diversion that “count” toward diversion.

Ease of implementation, logistically: Would require modification of existing diversion reporting systems and would require development of new regulatory “definitions”.

Flexibility in implementation: Would increase flexibility by allowing for counting of additional types of waste “diversion”.

Ability to measure progress: Would enable measurement of progress in diverting specified material types through non-burn transformation processes. Currently there is no system in place for this type of measurement.

Cost: Could result in cost savings for some jurisdictions.

Compatibility: Would integrate well with existing systems

Political feasibility: Possible concerns from some groups about extending the types of “transformation” (beyond “composting”) that “count” toward diversion. Possible strong support because of energy considerations.

Regulatory/Statutory changes required: Yes

Improves accuracy of measurement: Would not improve accuracy, but would eliminate a confusing and internally inconsistent measurement problem involving “waste” which is neither “diverted” not “disposed”.

Alt 10(+): Remove the existing statutory limit for counting certain types of transformation processes as “diversion” including “direct burn” technology

In addition to allowing full diversion credit for “non-burn transformation processes” (such as gasification, hydrolysis, bioreactors), this alternative would allow for unrestricted “diversion credits” for direct burning of forest debris and wood waste provided these feedstocks are used for electrical power generation

Particularly in rural foothill regions of the State, the amount of forest debris is increasing because of fire control requirements and other reasons. This material is “woody” and has a relatively high heat content. The material provides very poor feedstock for composting operations. Also, many existing co-generation facilities in the rural areas are operating at reduced capacity because of loss of feedstock associated with reduced timber processing activities. Eliminating the 10% diversion restriction for direct burn transformation of forest debris and wood waste would encourage jurisdictions to divert these materials from landfills, would provide fuel for power generation, and would provide a “disposal-diversion” alternative that is cost-effective for many rural jurisdictions. Co-generation facilities are often located near the waste generation source and the forest debris provides an excellent fuel source that composters do not want. Forest debris, yard waste, and wood waste comprise up to 15-20% of the waste stream in many rural foothill counties. Current statute (i.e., 10% of 50%) only allows credit for 5% of the waste stream.

Meets goals/spirits of AB 939: Would meet the goal of AB 939 by encouraging other types of waste diversion from landfills, but would require a major change to the “waste management hierarchy” which ranks “direct burn technologies” equal to landfills as least desirable waste management methods.

Reasonable resources required: Minimal to prepare new regulations and reporting procedures.

Falls within the purview of the Alternative Group: Yes—it is an alternative measure of AB 939 compliance by extending the types of diversion that “count” toward diversion.

Ease of implementation, logistically: Would require changes in reporting systems and development of new “definitions”.

Flexibility in implementation: Would increase flexibility by allowing for counting of additional types of waste “diversion”.

Ability to measure progress: Would enable measurement of progress in diverting specified material types through “direct burn” transformation. Currently there is no system in place for this type of measurement or volume tracking.

Cost: Would result in cost savings for some rural jurisdictions.

Compatibility: Would integrate well with existing reporting systems. Would, however, be considered “incompatible” with existing hierarchy of management practices.

Political feasibility: Very slim unless the “energy crisis” were to worsen considerably. Environmental and industry groups generally have a consolidated and unambiguous opposition to allowing any direct burn processes to be considered as desirable “landfill diversion” methods. There has been concern expressed that lifting of the proposed limitations on direct burn of forest debris and wood waste could eventually be extended to other waste types and this could lead to increased “waste-to-energy” projects statewide as an alternative to landfilling of commingled mixed waste.

Regulatory/Statutory changes required: Yes, definitely.

Improves accuracy of measurement: Would not improve accuracy, but would eliminate a confusing and internally inconsistent measurement problem involving “waste” which is neither “diverted” nor “disposed” at permitted solid waste facilities.

Alt 10 Tabular Summary

Ref No.	Solution Considered	WG Recommendation	Issue Addressed	Meets Criteria and other Considerations
Alt 10	Remove the existing 10% "diversion limit" for "non-burn" transformation processes such as bioreactors, gasification, hydrolysis, etc.		Under existing law, jurisdictions can "claim" only a portion of "transformed waste as "diversion". This has created a waste stream that is neither "disposed" nor "diverted". It also serves to discourage development of innovative non-burn technologies that provide a means of waste diversion from landfills.	<ol style="list-style-type: none"> 1. Meets the intent of AB 939 by providing "credit" for diverting waste from landfills. 2. Would eliminate confusion about reporting certain types of unclassified waste stream that are neither "diversion" nor "disposal" under existing rules. 3. Provides incentives for innovative waste diversion activities. 4. Would require legislative action.
Alt 10+	Extend the provisions of Alt 10 to remove the 10% "diversion limit" for "direct burn" transformation processes for yard waste and wood waste materials used for power generation.		There are concerns that this extension would "open the door" to allowing "credits" for incineration of other types of waste. However, legislation could limit the "scope" based on material type and apply the allowance only to areas where there are no alternative, economical ways of handling forest debris, except landfilling.	<ol style="list-style-type: none"> 1. Meets the intent of AB 939 to the extent that waste materials are diverted from landfills, but would "elevate" direct burn disposal in the waste hierarchy. 2. Would address Statewide energy issues by increasing feedstock materials for under-utilized cogeneration facilities. 3. Forest debris and wood waste are poor feedstock materials for compost operations and there are limited alternative re-use options for these materials. 4. Would require controversial legislative action.

Alternative 1-a-4
Prepared by: Bill Worrell

Alt 1-a-4 Increase incentives for forming regional agencies consisting of one or more entire counties.

Regional Agencies

Solution Considered	Working Group Recommendation	Issue Addressed	Meets Criteria/Considerations
<p>Alt 1-a-4</p> <p>Regional/ Tiered Measurement System/</p>	<p>Increase incentives for forming regional agencies consisting of one or more entire county's, e.g. grant programs for regional agencies only, reduced reporting requirements.</p>	<p>California's waste system is complex and it is very difficult and costly to accurately measure diversion at the jurisdiction level.</p>	<ol style="list-style-type: none"> 1. Meets the intent of AB 939 by focusing on regional management and measurement of waste reduction and recycling programs and allows for the measurement to be taken by region. 2. This would encourage regional approaches and result in savings in time and cost for program implementation, measurement, and reporting. 3. There are many existing regional authorities demonstrating the feasibility and practicality of the regional approach. 4. There would be no major statutory changes needed. 5. A regional measurement and reporting system would improve accuracy by unifying the reporting procedure under one authority for all jurisdictions in the region.

Alternative 4-a: Market Development
Prepared by: Robert Barker and John Davis

**** SAMPLE FOR DISCUSSION ****

Alternative 4-a: Market Development

Sub-Alternative 4-a.41:
Enhance Recycling Market Development Zone Program

Description:

This proposal would make revisions to the Recycling Market Development Zone (RMDZ) program. The revisions are intended to enhance program effectiveness, and to assure that adequate loan funds are available. The revisions were originally developed by a working group of Zone Administrators and CIWMB board members, advisors, and staff.

1. Expand RMDZ loan program eligibility to include sustainable business practices, including energy conservation, sustainable energy generation, and water conservation.
2. Provide RMDZ businesses with a state tax credit for the full value of the capital investment in sustainable recycling, energy conservation, sustainable energy generation or water conservation.
3. Create a secondary market for RMDZ loans by implementing the recommendations of the report “Creating a Secondary Market for Community and Economic Development Loans: a Feasibility Study” prepared for the California State Legislature pursuant to AB 1219 (chaptered 10/12/97). Designate CIWMB as lead agency to implement the recommendations, with cooperation from Trade and Commerce and the Treasurer.
4. Clarify RMDZ revolving loan program, including:
 - a. Authorization to assist start-up businesses through credit enhancements, including financial assurances and interest write-downs, and equity participation through the RMDZ revolving loan program
 - b. Clear authority for CIWMB loan sales, if needed
 - c. Sunset extension, coterminous with zone redesignation and new zone designation
5. CIWMB prepare an updated Market Development Plan, considering the expanded sustainable program eligibility and secondary market financing resources. CIWMB shall include the California Association of Recycling Market Development Zones in all aspects of the Market Development Plan update.
6. The updated Market Development Plan shall include consideration of renewable and sustainable energy generation, as distinct from transformation.

Benefits:

1. Includes identified program changes needed to increase effectiveness.
2. Provides means to adequately fund RMDZ loan program.
3. Enhances incentives to RMDZ businesses.
4. Extends RMDZ focus in sustainable business practices.

Drawbacks:

1. Requires legislative authority.
2. Changes CIWMB role by expanding RMDZ focus.

3. Requires CIWMB effort to update Market Development Plan

Regulatory Changes Required:

Public Resources Code Sections 42010 – 42024

Criteria Ranking:

Meets goals/spirit of AB 939:	highest
Reasonable resources required:	additional CIWMB resources required
Falls within Alternatives Group purview:	very high
Ease of implementation:	intensive work for CIWMB and Zone Administrators
Flexibility in implementation:	much local flexibility, loan program is defined
Ability to measure progress:	very high
Cost:	program already funded
Compatibility with existing efforts:	very high
Political feasibility:	high by focusing on sustainable economy and energy
Minimum reg./statutory changes needed:	legislation is necessary

**Sub-Alternative 4-a.2:
Mandating minimum recycled content from
manufacturers for an expanded list of materials**

Description:

Currently, State statute (PRC Division 12.9 and Division 30, Part 3) requires products manufactured or sold in the State to use a minimum amount of recycled materials for newsprint (min. 25% of feedstock must come from a min. 40% post-consumer recycled content material), rigid plastic containers (min. 25% of feedstock must come from 100% post-consumer rigid plastic), plastic trash bags (min. 30% of feedstock must come from 100% post-consumer plastic), and fiberglass insulation (min. 10% of feedstock must come from 100% post-consumer glass cullet), among others.

This alternative would apply similar mandates to manufacturers of products utilizing other materials. Targeted materials could include: Paper (other than newsprint), Glass (other than fiberglass), Tires, and Construction.

Benefits:

1. Increased amount of material being recycled, which means more material is diverted from landfills.
2. More companies using recycled feedstock, which means more jobs, more value added to materials (since consumers prefer products made with recycled content) and more tax revenues.
3. Increased supply of recycled content raw material, which in turn encourages more recycling.

Drawbacks:

Requires changes in statute or regulation.

Criteria Ranking:	Considerations
Meets goals/spirit of AB 939:	very high compliance
Reasonable resources required	very high compliance
Falls within Alternatives Group purview:	very high compliance
Ease of implementation:	moderate work for CIWMB to draft legislation
Flexibility in implementation:	CIWMB can set reporting stds
Ability to measure progress:	very high compliance
Cost:	possible very modest cost increases
Compatibility with existing efforts:	very high compliance
Political feasibility:	moderate
Min. regulatory/statutory changes needed:	a simple bill needed to enact

**Sub-Alternative 4-a.3:
Mandating minimum recycled content from purchasers: expanded list of materials**

Description:

Many State agencies, county departments, city offices, municipalities, and other governmental bodies throughout California have already voluntarily or by State statute (PRC Division 30, Part 3) adopted requirements or preferences for the purchase of materials with a certain minimum recycled content.

This alternative would mandate that governmental bodies purchase selected materials with a certain minimum percent of recycled content, as determined by material. Governmental bodies required to comply with these mandates should include, at the least, all agencies obligated to meet diversion requirements as a result of either AB 939 or AB 75, as well as all school districts. Projects or groups directly receiving State funds may also be included. Targeted materials can be chosen on the basis of the California Integrated Waste Management Board's Recycled Content Market Development Plan, and could include: Paper, Plastic, Glass, Wood, Tires, Construction and Demolition, and Computers/Electronics.

Another way to address this goal (rather than mandating through State statute) would be to provide grant funding for local governments or non-profits to purchase recycled content materials for specific projects (for instance, the construction of "green structure"), but this option would not have as much impact on market development.

Benefits:

1. Increased amount of material being recycled, which means more material is diverted from landfills.
2. More companies using recycled feedstock, which means more jobs, more value added to materials (since consumers prefer products made with recycled content) and more tax revenues.
3. Increased supply of recycled content raw material, which in turn encourages more recycling.

Drawbacks:

1. May decrease revenue available to local jurisdictions for other programs
2. Requires changes in statute or regulation.

Criteria Ranking:

<u>Meets goals/spirit of AB 939:</u>	<u>very high compliance</u>
<u>Reasonable resources required:</u>	<u>very high compliance</u>
<u>Falls within Alternatives Group purview:</u>	<u>very high compliance</u>
<u>Ease of implementation:</u>	<u>moderate work for CIWMB to draft legislation</u>
<u>Flexibility in implementation:</u>	<u>CIWMB can set reporting stds.</u>
<u>Ability to measure progress:</u>	<u>very high compliance</u>
<u>Cost:</u>	<u>possible very modest cost increases</u>
<u>Compatibility with existing efforts:</u>	<u>very high compliance</u>
<u>Political feasibility:</u>	<u>moderate</u>
<u>Min. regulatory/statutory changes needed:</u>	<u>a simple bill needed to enact</u>

**Sub-Alternative 4-a.4:
Quantification of Recycled Product Market Development
Efforts and Programs Implemented by the State**

Description:

This proposal would require the California Integrated Waste Management Board (CIWMB) to quantify (by tonnage) the results of their statewide recycled product market development efforts and programs. The CIWMB would also be required to increase the amount of recycled content material used throughout the State and due to its programs by at least 50% no later than January 1, 2005.

Data collected by the CIWMB and analyses made in the implementation of this program should be made freely available via the Internet so that jurisdictions and other stakeholders around the State can benefit from the information in their efforts to expand market development. Beginning in 2005, the CIWMB shall prepare Annual Reports to the Legislature reporting their attainment of the goal. These Reports should also be made freely available on the Internet.

Benefits:

1. Show progress made in developing markets for recycled-content products, and establish a baseline whereby new efforts and programs can be measured against.
2. Encourage the State, which is in the best position to do so, to develop more markets for recycled content material, which would in turn encourage much more material to be recycled and kept from being disposed.

Drawbacks:

1. Increases work load on the CIWMB.

Criteria Ranking:

Meets goals/spirit of AB 939:	very high compliance
Reasonable resources required:	additional CIWMB resources req'd
Falls within Alternatives Group purview:	very high compliance
Ease of implementation:	moderate work for CIWMB
Flexibility in implementation:	CIWMB can set measurement stds.
Ability to measure progress:	very high compliance
Cost:	modest costs to CIWMB, savings to local gov'ts
Compatibility with existing efforts:	very high compliance
Political feasibility:	moderate; will appeal to fiscal conservatives
Min. regulatory/statutory changes needed:	a simple bill needed to enact

**Sub-Alternative 4-a.5:
California Jobs Through Recycling**

Description:

In 1997, the U.S. EPA awarded a \$200,000 “Jobs Through Recycling” grant for a model program in Alameda County. This program helped establish regional markets for recyclables by encouraging the development of related recycling-based businesses in close proximity to waste processing facilities.

This alternative proposes instituting a similar program Statewide, managed by the California Integrated Waste Management Board (CIWMB). Through matching grants (preferably) and/or low interest loans (optionally), the CIWMB could encourage the development of recycling facilities, material processors, and businesses that utilize those recycled materials. The Alameda County model encourages the development of recycling businesses in close proximity to collection facilities, minimizing transportation concerns and ensuring a steady supply of materials to both processors and end users. This model was successful not only in diverting materials from landfills but in creating new jobs as well.

Benefits:

1. Increased amount of material being recycled, which means more material is diverted from landfills.
2. More companies using recycled feedstock, which means more jobs, more value added to materials (since consumers prefer products made with recycled content) and more tax revenues.
3. Increased supply of recycled content raw material, which in turn encourages more recycling.

Drawbacks:

Increases expenditures for the CIWMB, which has already taken steps to reduce funding for Statewide Recycled Market Development Zones, a program similar in nature to this proposal.

Criteria Ranking:

Meets goals/spirit of AB 939:	<u>very high compliance</u> very high
Reasonable resources required: <u> </u>	<u>minor</u> additional CIWMB resources req'd
Falls within Alternatives Group purview:	<u>very high compliance</u>
very high	
Ease of implementation:	moderate work for CIWMB
Flexibility in implementation:	CIWMB can set measurement-application stds.
Ability to measure progress:	very-high
Cost:	modest costs to CIWMB, savings to local gov'ts
Compatibility with existing efforts:	very high <u>compliance</u>
Political feasibility:	moderate; will appeal to fiscal conservatives
Min. regulatory/statutory changes needed:	a simple bill needed to enact

Alternative 7-a

Prepared by: Connie Donovan

Alternative 7-a: Change diversion rate measurement system to provide incentives rather than fines.

Meets goals/spirit of AB939: Meets the spirit and goals of AB939 insofar as it promotes the achievement of the 50% diversion goal; however, if a jurisdiction does not take the carrot as an incentive, what are their consequences? This goes back to the point that 50% is a mandate rather than a goal. What would incentives be? Money for programs? Where would the money come from? What non-financial incentives could there be? Something not related to waste mgt?? Should still have consequences for missed 50%.

Reasonable resources required: Resources to reach the goal are no different than current – would just mean you got something for it.

Falls within purview of Alternatives Group: This is an alternative way to meet the goals, so it does fall within the group.

Ease of implementation, logistically: Unable to determine, since we don't know what those incentives would be.

Flexibility in implementation: Again, unable to determine. Most impact would be at the state level.

Ability to measure progress: Does not impact the ability to measure progress – uses current system.

Cost: Could be significant.

Compatibility with existing efforts: Compatible in the sense that it would not change the actual measurement system and it should not change the type of programs selected for implementation to meet the goal. The motivation is the factor that changes. May actually provide disincentive. If the incentives are less than the cost to implement the programs, then incentive is to not implement programs; consequences are removed.

Political feasibility: Probably subject to fairly strong resistance given that there is then no consequence for jurisdictions that do not meet the goal. Also, funding may be difficult to obtain.

Minimum regulatory/statutory changes needed: Minor.

(Improves accuracy of measurement:) Same system as current – accuracy would not be affected.

7-a	Weight	Scale	Score
Meets goals/spirit of AB 939.	10	4	40
Reasonable resources required.	9	5	45
Falls within purview of Alternatives Group.	8	5	40
Ease of implementation logistically.	7	1	7
Flexibility in implementation.	6	1	6
Ability to measure progress.	5	4	20
Cost.	4	1	4
Compatibility with existing efforts.	3	5	15
Political feasibility.	2	2	4
Minimum regulatory/statutory changes needed.	1	4	5
Final Score			186

Alternative 11

Prepared by: Cynthia Battenberg

Alt 11: Remove institutional barriers to diversion programs. Examples: work with enforcement branch to facilitate permitting of diversion activities such as C&D processing; lack of support on siting of businesses that process gypsum. CIWMB should look at its own policies as well as other barriers that needlessly inhibit the development of diversion programs.

Meets goals/spirits of AB 939: Meets the goal of AB 939 by facilitating the development of facilities to process and/or remanufacture recyclables which helps create viable diversion programs and markets for materials.

Reasonable resources required: Minimal resources would be required. CIWMB would need to evaluate barriers within the organization, may need to revise procedures, and would need to develop programs to educate staff on innovative and new technologies.

Falls within the purview of the Alternative Group: Yes. This alternative would assist cities in meeting the 50% waste reduction mandate by helping develop processing alternatives and markets.

Ease of implementation, logistically: Should be easy to implement since CIWMB departments take direction from the Board.

Flexibility in implementation: Since changes are at the State level, this alternative should be relatively easy to implement.

Ability to measure progress: Difficult to determine.

Cost: Could reduce costs to develop a site which processes recyclables or uses recyclable feedstock in manufacturing process. May create competition for materials which could reduce costs to jurisdictions.

Compatibility: Would integrate well with existing systems.

Political feasibility: Local governments, recyclers & material manufacturers as well as other affected parties should support this option.

Regulatory/Statutory changes required: Unknown.

Improves accuracy of measurement: This alternative would not improve the accuracy of the current measuring system.

Medium Priority Group

Alternative 3-b

Prepared by: Alan Balch

Alt 3-b: Using Disposal Data to Track Compliance with AB 939

This alternative is grounded in the notion that using disposal data alone to track solid waste efforts is more rational and realistic than combining this data with the “adjustment method factors” to create hypothetical and theoretical generation estimates. Of course, creating a more accurate DRS is a must for any compliance measurement system grounded in disposal data, but the same is true for the current measurement system. Unless the current measurement system is scrapped entirely, DRS will have to be improved regardless. One proposal would be to take out the “adjustment method” component and keep only an improved DRS component. Thus, this alternative is not a radical departure from the present system since it is based upon one of the fundamental components of the current system.

What to do with disposal data? How would compliance be measured?

The difficulty inherent in using disposal data alone is the diversion requirements under AB 939. The law required that jurisdictions “divert 50% of all solid waste from landfill disposal or transformation.” Using disposal data alone to estimate diversion could be a tricky proposition and politically ill advised given the fact that jurisdictions have been operating under the current system for many years. Shifting to a disposal based compliance scheme would probably be more appropriate for deciding what to do once 50% has been achieved under the present measurement scheme. In other words, a DRS based compliance system could be designed as the next step once 50% diversion has been achieved (perhaps as way to insure continued diversion efforts) or it could be designed as a replacement to the 50% diversion mandate. How you design the measurement system thus depends heavily upon the regulatory context in which it would be applied (i.e., how you define compliance). Rather than try to resolve these issues, I will simply summarize two basic types of disposal data and then provide examples of how these disposal measurements could be used to create a compliance system.

Two Basic Types of Disposal Data

1) Disposal Alone

Using the raw data without any adjustments is the more empirically “clean” approach. One need only take steps to insure that the disposal data is as accurate as possible. The difficulty with this approach is trying to devise compliance schemes based on “disposal only” data. It is also difficult to compare jurisdictions with each other using just disposal data (e.g., comparing LA to Arcata).

2) “Controlled Disposal” Example: Disposal per Day and Night Time Occupants

To enable comparisons between jurisdictions, disposal data could be “controlled” to a certain extent by factoring in both the residential population and the daytime work force population (i.e., employees by place of work). Other controls could also be considered, such as taxable sales and per capita income. However, the more “numbers” you introduce to the system, the more potential error you introduce into the system. Not only do you need accurate disposal data, but also you need accurate population, employee, income, and sales data. Fortunately, all this data is already collected for other reasons and will continue to be collected regardless of AB 939. The reliability of the “control” factors would have to be taken consideration.

Possible Compliance Systems Using Either Disposal Measure

1) Jurisdiction measured against itself

Examples: a. Disposal must stay at current levels

- b. Disposal must be reduced by X% per year
- c. Disposal must be reduced by X% per year until amount X is reached and maintained
- d. Disposal must be reduced to level X by year X and level X must then be maintained
- e. Disposal cannot grow above level X
- f. Disposal cannot grow more than X% per year
- g. Disposal cannot grow more than X% per year until a certain max level is reached

2) Jurisdiction competes with similar jurisdictions

This would require grouping jurisdictions of similar size with similar demographics and economics etc (similar to what is currently done with the API index for California schools). Jurisdictions would then be evaluated based on their performance within their group.

Examples: a. Each jurisdiction in a group could be required to meet waste targets similar to the examples from 1), but the percentages and levels could vary depending upon the group

- b. Each jurisdiction in a group could be given a score or a ranking based on disposal data, which would be publicized (regulation by embarrassment)

Meets goals/spirit of AB939: Focus would be on monitoring landfilled waste and also could be on reducing landfilled waste depending on the program.

Reasonable resources required: Requires a reliable DRS system.

Falls within purview of Alternatives Group: A clear variation on the current measurement system

Ease of implementation, logistically: Arguably easier to implement than current system because no adjustment method factor. Depends largely on how hard it is to create a reliable DRS, but that effort will be undertaken in almost any case. IT could remove the need for base year generation studies.

Flexibility in implementation: Jurisdictions still able to determine their waste management programs.

Ability to measure progress: For starters, you are measuring “real” data to track disposal, which could be considered an “output” in political speak. It could also produce a more accurate picture of change than the current system. You would certainly be measuring what some think is a good indication of the problem (i.e., landfilled waste).

Cost: Could save time and money by shifting away from base year estimates and adjustment methods.

Compatibility with existing efforts: Very similar to current system, except no adjustment method factor. Based on DRS data. If used controlled data, then could still use many of the same variables included in adjustment method: population, employment, and taxable sales.

Political feasibility: still measure waste; could improve accuracy of measurement system; could be a simpler measuring system (i.e., lower costs to jurisdictions and the Board).

Minimum regulatory/statutory changes needed: Not really a radical departure from current system.

Addendum on this topic: Thoughts submitted by Dan Sicular and Cary Kalscheuer to the LG Talk discussion website.

Topic: Disposal-Based Counting (1 of 2), Read 48 times **NEW**

Conf: [Alternative Methods](#)

From: [Dan Sicular dsicular@esassoc.com](#)

Date: Monday, April 02, 2001 10:02 AM

I would like to make an argument for disposal-based counting. I am not talking about the current method of disposal-based counting, which in fact uses “hard” disposal numbers but a derived generation rate to calculate a derived diversion rate. I am talking about truly disposal-based: count disposal and nothing else.

The way I see it, AB 939 is supposed to be about three things primarily: 1. conserving natural resources; 2. conserving landfill space, and 3. planning for California’s future. I believe that disposal-based counting is the best method for ensuring that local jurisdictions do all three.

Disposal-based counting would be very simple. We already have the disposal reporting system set-up. Compliance with the AB 939 mandate would be determined by measuring the reporting year disposal amount against the generation amount in the base year. If current disposal is less than fifty percent of base year generation, the jurisdiction complies. Period. No adjustments, no reward for increased retail sales, no inflated diversion rates.

The method would be simple to implement, since we already have the disposal reporting system (DRS) in place. It would ensure that we are actually conserving landfill capacity, since there would not be a mechanism for adjusting upward the allowable disposal rate. It would place the most pressure on growing cities and counties, since there would be a cap on allowed disposal (50% of base year generation), that would not be adjusted with growth factors. This means that rapidly growing cities and counties would have to PLAN AHEAD for growth; essentially they would have to consider the environmental consequences of growth, and translate that into aggressive planning for programs to reduce and recycle wastes. Most jurisdictions, but especially rapidly growing ones, would end up diverting more than 50 percent of their generation. In other words, disposal-based counting would actually ensure that we continually improve our efforts to conserve natural resources as we plan for our future.

Another advantage of this method is that it keep the DRS in place. I believe that the DRS has the potential to provide some of the most useful information to local jurisdictions for program planning and monitoring. Where the DRS actually provides some detail on load type, such as in San Mateo County, it can serve as a basis for targeting growing waste streams and under-performing sectors, especially when coupled with detailed and timely reports on diversion programs run by franchisees and jurisdictions themselves. With some reforms in the DRS, such as requirements for facility operators to comply with the dictates of the system, more State assistance in resolving problems, and a little more detail in what is reported, the DRS will be an even better tool for program planning than it is now, and will be less burdensome for counties and regional agencies.

Any downsides? Growing cities and counties may call foul, saying that they are unduly burdened, and are having to do a disproportionate amount of work to comply with the law. There might also be trouble with inaccurate disposal numbers in base years. To resolve these, jurisdictions could conduct a full base year study (disposal and diversion) as an alternative means of demonstrating compliance. Assuming that the Board’s current policy of scrutinizing base year studies continues, a new base year alternative would not offer an easy fix, though it may be easier for growing jurisdictions to go that route. Once a base year is re-set, there could be a period, say ten years, before it can be re-set again, thus ensuring that the jurisdiction

must continue to plan for growth.

I know the disposal-counting alternative did not get a lot of support in the popularity vote in our first meeting. I hope, however, that you will give it some thought and come to the meeting on Wednesday with a willingness to discuss it further.

Topic: Disposal-Based Counting (2 of 2), Read 8 times

Conf: Alternative Methods

From: Cary Kalscheuer ckalscheuer@ci.azusa.ca.us

Date: Thursday, May 03, 2001 07:43 AM

This creates an unfair playing field for any jurisdiction that grows in employment and population, which means nearly everyone. It would lead to one of two things: (1) an obligation for cities and counties to divert more than 50% of the waste stream; or (2) a need for a new base year every year in order to control for the effect of growth on the waste diversion calculation. This latter consequence is why we use adjustment factors.

I see no advantage of this alternative, except to consultants, and those that want cities and counties to perform miracles. There are other ways to divert more waste, and I suggest that we look at schools and waste that is self hauled. I have written program descriptions for both of these alternatives and hope that they are given more serious consideration by this group.

Alternatives 1-a-1 to 1-a-3 combined as 1-a-3

Prepared by: Liz Citrino

Alternative 1-a-3: Verify program implementation at the jurisdictional level. If all jurisdictions within the county are implementing programs, and all jurisdictions agree, then they may use the countywide diversion rate.

Meets goals/spirit of AB939: This alternative shifts a greater focus towards program implementation, consistent with the spirit of AB939, by continuing to require all jurisdictions to implement selected programs. Verification may occur through the existing OLA annual/biennial review process, or may be replaced by a local task force review process for those jurisdictions that have achieved numerical compliance. It also meets the “goals” of AB939 in the sense of continue to provide a numerical method to measure attainment of the 50% diversion mandate, while improving the accuracy of this measurement.

Reasonable resources required: Potentially reduces both CIWMB and local staff resources needed to track numerical achievement. Potentially reduces local cost if collection routes no longer need to be jurisdictionally separated (particularly beneficial for small, rural jurisdictions). Allows re-direction of staff resources to program implementation.

Falls within purview of Alternatives Group: This represents an alternative that goes beyond correcting disposal reporting system inaccuracies. However, it does effectively address many of the most significant problems with allocation of self-haul.

Ease of implementation, logistically: Implementation would be similar in many ways to the existing process of forming regional agencies, but would remain under the control of local jurisdictions. Approval from CIWMB would only be required to the extent of providing verification of program implementation by the affected jurisdictions. It would allow counties to avoid resolution of the shared penalty issue which impedes regionalizing by establishing the right of counties/jurisdictions to return to individual measurement if consolidation does not result in overall 50% achievement.

Flexibility in implementation: Maximizes the input and control of local jurisdictions over the measurement process, while improving accuracy and increasing program focus. Local entities can leverage performance by benefiting jurisdictions by providing a “numbers” carrot. Actually, similar to “selling” diversion credits on the local level.

Ability to measure progress: This alternative preserves and improves the ability to measure progress, while enhancing the ability to achieve progress and encouraging regional cooperation.

Cost: Implementation of this alternative should result in a net savings at both the local and state level.

Compatibility with existing efforts: The similarity of this alternative to the existing regional agency alternative, as well as the use of the existing OLA review process and the existing disposal reporting and base year waste generation measurement systems, provide a great degree of compatibility with existing efforts.

Political feasibility: This alternative should provide sufficient flexibility and local control without sacrificing accountability, while approving measurement accuracy. This should make everyone happy (??)

Minimum regulatory/statutory changes needed: While I would have to defer to staff on this one, I believe that the needed changes may be able to be accomplished at the regulatory level. Since the program is similar to regional agency formation, regulatory models currently exist which could be adapted for this alternative.

(Improves accuracy of measurement:) Although we didn't include this in our evaluation criteria, I think that was an oversight. This alternative provides significant ability to improve measurement accuracy by using county-level information instead of individual jurisdictions.

Alternative 3-c

Prepared by: Nancy Carr

3-c - original statement: Use other bases of measurement in achieving goals, such as per capita and/or per employee disposal.

Allow jurisdictions to use per-capita residential and per-employee commercial disposal rates to demonstrate achievement of diversion goals. The Board would develop maximum disposal rates allowed, which could be based on statewide averages or specific data for each jurisdiction. To qualify for this, the jurisdiction must present its case for why the current measurement system fails to accurately reflect its diversion achievements, and why this method more accurately measures its diversion.

- Accurate DRS data is critical. Jurisdictions who use this option would need residential and commercial waste tonnages measured separately, which means a more complicated DRS system and more chance for errors.
- Eliminates inaccuracies of the adjustment method, since it is no longer needed.
- Diversion data need not be measured.
- Accurate data for the number of employees employed in the jurisdiction may not be readily available for all jurisdictions.
- May be difficult or controversial for the Board to develop maximum allowable disposal rates.
- May be better, fairer measurement system for some jurisdictions.

Meets goals/spirit of AB939: Doesn't significantly improve efforts to meet the intent of AB 939, except for the fact that it could provide a more accurate assessment of progress for some jurisdictions, and show where program improvements could be made.

Reasonable resources required: May require a more resource-intensive disposal reporting system, but may require less resources than doing a new base year for jurisdictions looking at that option in order to improve the accuracy of their numbers. Could require significant resources to develop appropriate per-capita and per-employee measurements.

Falls within purview of Alternatives Group: Yes – definitely an alternative method of measuring progress.

Ease of implementation, logistically: Would require more detailed data to be collected for disposal reporting. If this idea is only an option which jurisdictions may choose, should it be required that ALL facilities record sector of origin (residential, commercial) of waste, or only those facilities whose jurisdictions request it, and/or only for the jurisdictions which request it? Could be very confusing. On the other hand, could be a simpler measurement system for jurisdictions – no adjustment method.

Flexibility in implementation: If this is brought forward as an alternative way to demonstrate compliance, gives jurisdictions more flexibility in how they measure and show progress.

Ability to measure progress: Could be a very accurate, real measure of progress if the data collection and per capita/per employee rate difficulties can be overcome.

Cost: Could increase costs to disposal facilities if more detailed DRS data is required; would require Board resources to develop appropriate disposal rates.

Compatibility with existing efforts: Compatible with current DRS system, but requires more data to be collected; can be constructed to be compatible with current Annual Report procedures.

Political feasibility: Could be attractive option if it can be shown to be a more accurate, fair way of measuring progress.

Minimum regulatory/statutory changes needed: Would require statutory changes if it is to be made an option the Board MUST consider; or, if proposed as a way to demonstrate “good faith efforts”, may be sufficient to do as regulations or policy.

(Improves accuracy of measurement:) Again, if DRS can be improved and also collect accurate sector data, and appropriate disposal rates developed, accuracy could be improved over the current system.

Alternative 3-g-1

Prepared by: Liz Citrino

Alternative 3-g-1: Re-evaluate suitability of 50% diversion for all jurisdictions, and determine if different levels can be based on waste stream characteristics.

Meets goals/spirit of AB939: This alternative acknowledges the reality of both local circumstances and external circumstances in impacting the ability of jurisdictions to achieve 50% diversion, and correctly concludes that California is too large to be well served by a one-size-fits-all model. If the goal remains to achieve 50% diversion at the state level, then some jurisdictions would be required to exceed 50% in order for others to be allowed to stop short of 50%. If the ultimate goal is determined to be the “maximum feasible diversion”, then the spirit of AB939 may still be well served by this alternative.

Reasonable resources required: Would require significant staff and local resources to determine what the “suitable” level might be. Runs the risk of moving from too broad a brush to too fine a brush. Could result in significant resources spent on trying to justify reductions, unless criteria are very clear cut.

Falls within purview of Alternatives Group: This is clearly an alternative within the scope of this working group.

Ease of implementation, logistically: I would anticipate a lengthy and contentious implementation process at the initial stage of setting the various “appropriate” levels of diversion. Once established, “on-the-ground” implementation would be no different than the existing system. However, the appeals process would also probably be significant.

Flexibility in implementation: Maximizes the responsiveness of the regulatory system to the positive and negative impacts of a variety of circumstances. May be too flexible. Perhaps a system of points could be established, corresponding to such issues as size/distance from markets, preponderance of materials without existing markets, etc., and a total score would be generated which would determine your jurisdiction’s numerical goal level. However, this might change over time, particularly regarding market conditions. Could be an annual process?

Ability to measure progress: The ability to measure progress would not be affected by this alternative, either positively or negatively.

Cost: The process of establishing the criteria for different levels may be time consuming and costly, at the state and local level. Ensuing appeals and legal actions could also be costly. Cost savings to local jurisdictions with reduced diversion requirements could be significant, but difficult to estimate. Increased costs to jurisdictions mandated to divert more than 50% would also be likely.

Compatibility with existing efforts: This is similar to the model currently in effect in the state of Oregon. It may be helpful for staff to research Oregon’s example to determine how/how well it works.

Political feasibility: It is hard to imagine anyone being very happy with this alternative. Anyone who got a reduction would think it should be lower; anyone who did not, or who got an increase, would be equally unhappy.

Minimum regulatory/statutory changes needed: Statutory and regulatory change would be needed. Neither is insurmountable, if political support for the alternative is found. Suggest looking at Oregon’s program.

(Improves accuracy of measurement:) Implementation of this alternative does not affect the accuracy of measurement, either positively or negatively.

Addendum prepared by Bob Horowitz

Waste Diversion Measurement in Oregon (*the short version*)

Like California, Oregon has a statewide goal of reducing disposed solid waste by 50 percent by the year 2000. They will not meet that goal; the 1999 statewide diversion rate was 37 percent and has been level for several years. The Oregon legislature is now considering HB 3744, which would change the goals for individual regions and push the 50 percent goal back to 2009.

Oregon calculates its diversion rate in basically the same way as California, but each jurisdiction must quantify diversion tonnage each year; there is no adjustment method.

Oregon has different waste diversion goals for different areas of the state, which they call waste sheds. In reality, a waste shed is a county. The wastesheds are defined as follows:

- 7% Diversion Wastesheds: Remote parts of the State. No city over 4,000 population.
- 15% Diversion Wastesheds: Rural and/or remote from Portland (market base). Mostly in Eastern Oregon or Coastal Oregon. Only one or two cities with a population over 10,000.
- 25% Diversion Wastesheds: One or two large cities over 25,000 in population. But, still relatively far from markets.
- 30% Diversion Wastesheds: Located in the Willamette Valley, relatively close to Portland. Several cities over 25,000.
- 40% Diversion Wastesheds: The three wastesheds that make up the Portland Metro area are combined to make up one wasteshed called Metro. It is governed by the Metro Regional Government.

Interestingly enough, if each waste shed were to meet its goals, it would still not add up to the state goal of 50 percent. One of the purposes of HB 3744 is to correct that. How the different waste shed goals for different regions—with an onus on more populated and therefore more politically powerful regions—were established in the legislative process is not clear.

Oregon law lays out what does not count for disposal and diversion, and generally does not allow credit for source reduced items which historically have not entered the waste stream, such as certain industrial wastes and discarded vehicles. It also does not allow mixed solid waste burned for energy production to count as diversion.

On the disposal side, the law exempts sewage sludge, ash from waste-to-energy plants and many types of industrial wastes, including rock and asphalt. Imported solid waste is also exempt. Oregon Revised Statutes #459 covers solid waste issues, the portion of it dealing with what counts as diversion may be found at <http://deq.state.or.us/wmc/solwaste/rrwgapndxc.html>

In 1997, the Oregon legislature passed a law allowing waste sheds a 2 percent diversion credit each for up to three specific program areas (total maximum credit of 6 percent). The three program areas fall under the headings of: waste prevention; re-use, and residential composting. To qualify for the credit, the program must contain a public education element and at least two actual programs from a list (found at: <http://www.deq.state.or.us/wmc/solwaste/rrccredit.html>). Out of Oregon's 35 counties (waste sheds), only 11 had applied for the credits as of 1999, and only four were getting the full 6 percent allowed.

Another feature of the 1997 amendments was to allow waste sheds which have achieved their goal to set a higher waste diversion goal. According to DEQ's Mary Sue Gilliland, that rate can be "any goal that they felt was achievable." . To their credit, many Oregon jurisdictions have done this, some have raised their sights as much as 15 or 20 percent. The Portland Metro area has raised its goal to 52 percent. For a listing of all Oregon waste sheds, their mandated goal, their actual rate, and their revised goals, please see <http://www.deq.state.or.us/wmc/solwaste/mrs1999tbl1.html>.

Alternative 6-a-1

Prepared by: Cary Kalscheuer

Adopt new laws to expand responsibility for diverting waste beyond cities and counties; i.e., require schools to divert waste.

General Topic/Issue

In many cities and counties, schools are the largest waste generators. Yet, schools are exempt from using franchised waste haulers which often provide recycling services to a community. Schools are free to contract with any waste hauler or recycling service provider and often choose not to recycle because of added costs.

Solution Considered

Propose laws requiring all schools to meet the same waste diversion requirements of cities and counties, 50% waste diversion. Require all school districts to do studies to determine waste disposal, diversion and characterization, and require program implementation and annual reporting. Alternately, require schools to implement a short menu of programs, document the implementation effort and file a report with the CIWMB.

Issue addressed

Public schools are regulated through State government. Hence, the State is in a position to require schools to do their share in reducing waste disposal. Such a requirement is feasible to comply with. There are several schools which have demonstrated this. One example is Ben Lomond Elementary School in Covina. This school has an extensive recycling program which recovers all organic waste--paper and food.

Meets Criteria/Considerations

Meets goals/spirit of AB939: The spirit of AB 939 was to divert half of all waste disposed. However, AB 939 incorrectly placed responsibility for this on jurisdictions which do not control all of the waste that is disposed. Responsibility therefore needs to be expanded for the goal of AB 939 to be reached.

Reasonable Resources required: Schools would have to develop programs and make determinations about resource allocations; the State may have to allocate more resources for administration of this requirement.

Falls within the purview of the Alternatives Group: Yes.

Ease of implementation, logistically: Adds responsibility for the CIWMB to oversee a new mandate, but implementation activities are consistent with CIWMB's role.

Flexibility in implementation: New mandate can be designed to provide schools with flexibility based on lessons learned from AB 939.

Ability to measure progress: Documentation requirement would provide the CIWMB a mechanism by which to verify implementation or diversion.

Political feasibility: State, not cities or counties, control schools.

Minimum regulatory/statutory changes needed: New laws, regulations and procedures would have to be adopted.

Alternative 6-a-2

Prepared by: Liz Citrino

Alternative 6-a-2: Put responsibility on generators of waste, such as manufacturers (packaging), by implementing advanced disposal fees or other system.

Meets goals/spirit of AB939: This alternative should be viewed as an essential element in the process of maximizing the diversion of waste from landfills and the concurrent efficiency of our use of resources, both of which are intrinsic to the spirit of AB939. In addition, it emphasizes a shared responsibility on the part of all those who benefit from the creation of resources. Just as AB75 expanded the circle to include state agencies as responsible parties in meeting the goals and spirit of AB939, more effort is needed in widening the circle to include businesses and manufacturers. Many jurisdictions that have met and exceeded the goals of AB939 could not have done so without the cooperation of local businesses and manufacturers. In most cases, this is accomplished through a combination of financial incentives and the regulatory carrot and stick approach.

Reasonable resources required: Unless the generators of products and materials are included at the table, the requirement on everyone else's resources is very unreasonable. The larger the group which shares the responsibility, the more equitable the resource requirement for everyone.

Falls within purview of Alternatives Group: If this is not an alternative, then nothing is. You told us to think outside the box...

Ease of implementation, logistically: Existing examples both in this state and in Europe serve as examples to form the basis of pursuing this alternative. Take Back laws and financial incentives for containers, tires, auto batteries and motor oil already exist in California. Existing regulation of CRTs emphasizes the need to expand this program in order to prevent an undue burden on local governments. Court decisions holding paint manufacturers responsible for lead contamination clean up is still another example. We do not need to reinvent the wheel in order to implement this.

Flexibility in implementation: Manufacturers who willingly come to the table and participate in discussions which result in increased recovery of a particular product or material can maximize the flexibility of implementation by playing a role in working cooperatively towards solutions which benefit everyone. Ultimately, consumer trust and loyalty will be increased for companies that take responsibility for their products.

Ability to measure progress: This alternative promises the ability to achieve true long term progress by incorporating product responsibility into our culture. The implementation of this alternative would include monitoring and reporting requirements regarding the effect and success of product stewardship programs, which would be a much better long term indicator of lasting progress than the current disposal measurement system. However, this monitoring and reporting would not replace the existing measurement system for local jurisdictions.

Cost: The cost to businesses quickly translates into the cost to consumers. This must be compared with both the present cost to consumers and local governments to handle materials, and the future costs in potential material shortages and environmental consequences without such programs.

Compatibility with existing efforts: See "Ease of Implementation" for reference to existing efforts.

Political feasibility: The key to political acceptance of product stewardship regulation comes from grass-roots support, just as AB939 was created in response to public demand. (When people lead, the leaders follow).

Minimum regulatory/statutory changes needed: Clearly, the challenge to implementing these programs lies at the legislative level. Current regulations that provide for the implementation of these programs for existing product stewardship materials, will provide the basis for dealing with additional products and materials, as they are added over time.

Alternative 14

Prepared by: Liz Citrino

Alternative 14: Regionalize CIWMB offices and have structure like the State Water Resources Control Board.

Meets goals/spirit of AB939: This alternative should enhance implementation of programs by putting state resources closer to the regulated community. In this way, the “white hat” role of the CIWMB in facilitating diversion could be more effective, as well as the CIWMB role as regulator, through more direct association and contact with the communities served.

Reasonable resources required: Coordination with existing regional CalEPA agencies throughout the state could improve interagency cooperation and decentralize implementation. Evaluation would be needed to determine the potential to share resources in existing regional offices.

Falls within purview of Alternatives Group: Yes. Maybe.

Ease of implementation, logistically: Not particularly high; some board staff might consider moving to regional offices, but significant personnel relocation and new hiring would be required.

Flexibility in implementation: Should increase flexibility for local jurisdictions by providing assistance and regulation closer to the source.

Ability to measure progress: Although this has no effect on numerical accuracy per se, it seems likely that the ability of Board staff and local jurisdictions to resolve accounting difficulties should be enhanced through this alternative.

Cost: Short term cost increase of relocation would be offset by long term decrease for board staff (reduced travel costs and in some cases reduced housing costs) and local representatives, who would not need to travel as far to participate in the process. Additional cost savings if full time Board is replaced by “volunteer” Board.

Compatibility with existing efforts: The similarity of this alternative to the structure of air and water boards provides the best example of compatibility.

Political feasibility: This alternative is likely to be more attractive to local officials, who see the merit of local access, than to state officials, who often seem convinced that Sacramento is the center of the universe.

Minimum regulatory/statutory changes needed: The type of statutory changes that would be required do not relate directly to the implementation and measurement of diversion programs. However, since AB939 included establishing the existing Board structure as well as function, revision to AB939 would be required to implement this program.

(Improves accuracy of measurement:) Only to the extent that closer proximity of staff to jurisdictions could enhance the ability to work together to solve measurement problems.

Alternative 6-a-4

Prepared by: Jaime Lozano

Take “gross polluters” approach – focus on largest individual generators, largest sectors, And most common materials.

Following the 80/20 rule, this approach was followed in the City of Carson during 1995 through 2000. By focusing on “Gross Polluters”, the largest tonnage of waste was scrutinized to identify alternative or avoidance practices to eliminate the tonnage going to landfill. Once this tonnage was source reduced or redirected to new destinations other than landfills, the City’s Disposal Reporting System Reports reflected a major reduction in landfill tonnage. Prior to 1995, the City was out of control at a negative –147%, after focusing on “Gross Polluters”, implementing new waste avoidance programs, waste minimization, employee training, reuse programs, in addition to recycling and composting programs, the City’s diversion, after a New Base Year approval from the CIWMB went to 43% in 1995 to the current 71% in the 1999 reporting year.

Meets goals/spirits of AB 939: Definitely meets the Spirit and Goals of AB 939 to identify generator’s waste streams and work to target specific materials being generated in “Gross” quantities.

Reasonable resources required: Requires significant resources and cooperation. City staff must be prepared to get out from behind their desks and work in the field along with trained process auditors. City staff personnel must carry out the responsibility of Ombudsman, Confidentiality Insurer, Liaison between business community and City Council, etc. Resources will be needed initially from a cooperative of waste haulers, City Council, and Business Community. The direct economic beneficiary of this program will be the business “Gross Polluters” in the net savings that will be accomplished.

Falls within the purview of the Alternative Group: Yes—it helps Jurisdictions implement alternative road map to reaching AB 939 compliance.

Ease of implementation, logistically: Will require commitment. Once commitment is established, would work no differently than building blocks for New Base Year Study.

Flexibility in implementation: Very flexible as it could be adapted to major industries with jurisdiction within jurisdiction that are in fact “Gross Polluters”.

Ability to measure progress: What better way to measure than in total diversion, and of course Total Net Savings!

Cost: Definitely costly, but not any more than preparing a New Base Year, and benefits are readily evident to participating “Gross Polluters”.

Compatibility: Very compatible with ongoing process audit programs. This program would really be a mirror image of SIC (Standard Industry Codes) based hazardous waste reduction programs implemented years ago.

Political feasibility: Could encounter some local opposition at first, but initial results will win over most opponents, especially if cost savings are identified early on.

Regulatory/Statutory changes required: Yes, very minor, this would be a powerful approach.

Improves accuracy of measurement: Would not improve accuracy, rather it improves potential for success by identifying needed programs to reduce, reuse and recycle. Best of all, this program identifies the needed markets.

Alternative 8

Prepared by: Jaime Lozano

CIWMB should provide standard curriculum or training for local government staff (Especially new recycling coordinators) and/or set up a certification program to have Minimum standards for staff responsible for program implementation and other AB 939 and waste management duties.

Currently, the only State originated program, Registered Environmental Assessor (REA) is considered a “nothing” certification by most long time Environmental Professionals. Standardizing required curriculum and providing a certification program, would add credibility and professionalism to this career path. Currently, a real disservice is occurring, whereby non-knowledgeable Jurisdiction and private company staff are acting in the capacity of AB 939 compliance officers.

Meets goals/spirits of AB 939: Absolutely within goals/spirit of AB 939.

Reasonable resources required: Resources involved would be no different than SWANA, or Registered Environmental Professional Organizations who already require a proven standard for their experts.

Falls within the purview of the Alternative Group: Yes—it meets our “mission” of considering alternatives to the way the State determines compliance with AB 939. This critical issue would fall within good faith efforts of having recognized, knowledgeable staff implementing programs towards goals of AB 939.

Ease of implementation, logistically: Most assuredly, very easy to implement, and then to monitor.

Flexibility in implementation: Very flexible for State – should not be flexible as far as recognition of individuals without adequate preparation or background. We need a Quality Standard!

Ability to measure progress: Should be a clear indication of seriousness of program at local, county levels.

Cost: Should be minimal.

Compatibility: Very compatible - in fact should be a minimal standard in considering “Good Faith”.

Political feasibility: Should be a slam-dunk, all professionals aspire to maintain entry qualifications – This program would out line California’s!

Regulatory/Statutory changes required: Yes, definitely minimum statutory changes needed.

Improves accuracy of measurement: This should improve accuracy; it would insure that all statewide coordinators are on the same page. No erroneous assumptions!

Low Priority Group

Alternative 13

Prepared by: Cary Kalscheuer

Allow jurisdictions to self-certify compliance with AB 939 after reaching 50% goal.

General Topic/Issue

Preparation and submittal of Annual Reports to the CIWMB is a time consuming and costly administrative task, and unnecessary if a jurisdiction's waste stream and programs have not changed after it has achieved the 50% goal.

Solution Considered

The CIWMB should offer qualifying jurisdictions an option to certify that they have continued programs begun in prior years, and that their waste stream has not changed measurably. This self-certification of compliance would be done based on findings to this effect, approved by the City Council or Board of Supervisors through a resolution. A copy of the resolution would be forwarded to the CIWMB and the jurisdiction would be required to have adequate documentation on hand to provide evidence that programs have continued.

Issue addressed

This would simplify the compliance process for both the staff of local agencies and the CIWMB. A documentation requirement would provide a mechanism for the CIWMB to audit the local agency's finding of compliance through the self-certification process.

Meets Criteria/Considerations

Meets goals/spirit of AB939: Jurisdictions would be certifying in effect that they have met the goal of AB 939 by continuing programs.

Reasonable Resources required: Reduces unnecessary paperwork freeing up both State staff and local agency staff to work on more important tasks.

Falls within the purview of the Alternatives Group: This alternative does not try to fix the current disposal reporting system or the adjustment method, and therefore is in the purview of the Alternatives Group.

Ease of implementation, logistically: Could easily be implemented by the CIWMB as an alternative for submitting detailed annual reports.

Flexibility in implementation: Allows jurisdictions that have achieved 50% diversion the flexibility of not preparing and filing a lengthy annual report.

Ability to measure progress: Documentation requirement would provide the CIWMB a mechanism by which to verify certification findings.

Political feasibility: If a jurisdiction has achieved the 50% goal, and the CIWMB has approved this achievement, the CIWMB should be in a position to trust local agencies to self-certify continuation of programs. A documentation requirement helps maintain accountability.

Minimum regulatory/statutory changes needed: The CIWMB would have to develop this option and it would require minimal regulatory change.

Alternative 12

Prepared by: Cary Kalscheuer

Allow Local Task Forces to review and approve Annual Reports, requests for Time Extensions and requests for Alternative Diversion Requirements for the jurisdictions within their County or Regional Agency.

General Topic/Issue

Annual Reports are not reviewed in a timely manner by the CIWMB or in a way which exhibits understanding of local conditions and circumstances relevant to the jurisdiction. For jurisdictions which believe they have met the 50% goal, two to four years is too long to find out goal achievement has not been met or adequate programs have been implemented. The delay of Annual Report review results in delay of program adjustments and implementation, and thus postpones activities which reduce waste disposal. Hence, the administration of the core “compliance determination process” is flawed.

Solution Considered

It is proposed herein that the CIWMB adopt regulations that would place the primary responsibility for reviewing and approving Annual Reports on the Local Task Forces, similar to the procedure for the adoption of Countywide Integrated Waste Management Plans (CoIWMPs). Jurisdictions would send their completed Annual Reports to their Local Task Force, who would then review, comment on, and assess the adequacy of the Report. If the Report was found to be unsatisfactory, the Local Task Force, in conjunction with the CIWMB’s Office of Local Assistance (OLA), would work with the jurisdiction to swiftly bring the Report into compliance. If the jurisdiction did not cooperate in bringing the report into compliance, the matter would be referred to the CIWMB for further consideration and possible enforcement action. This alternative contemplates an Annual Review, not biennial review.

Issue addressed

AB 939, as amended, required each County or Regional Agency (Area) to form a Local Task Force to advise local jurisdictions regarding integrated solid waste management issues in that Area. Each Local Task Force was also charged with reviewing the Source Reduction and Recycling Element (SRRE), Household Hazardous Waste Element (HHWE), and Non-Disposal Facility Element (NDFE) for each jurisdiction in that Area, and for formally approving the Countywide Siting Element (CSE) and CoIWMP for that Area. The CoIWMP includes the SRREs, HHWEs, NDFEs, Siting Elements and Summary Plans of every jurisdiction in the Area, and the Local Task Forces are thus familiar with local conditions and local plans. Having these Local Task Forces review the Annual Reports, consider time extension requests, and determine alternative diversion requirements would be appropriate. These Local Task Forces would also significantly augment available resources to get the reports reviewed in a timely manner and make determinations about compliance. Referrals of unsatisfactory reports to the CIWMB for further action would allow the CIWMB to focus on enforcement activities.

Meets Criteria/Considerations

Meets goals/spirit of AB939: Would increase resources to assure compliance with goal/spirit of AB 939.

Reasonable Resources required: As stated above, Local Task Forces are appropriate entities to make determinations regarding adequacy of Annual Reports.

Falls within the purview of the Alternatives Group: Yes.

Ease of implementation, logistically: Would increase local responsibilities but is consistent with past activities of Local Task Forces.

Flexibility in implementation: Should lead to more responsive feedback for local jurisdictions and frees up CIWMB staff to work on programs which could have a statewide impact.

Ability to measure progress: Local Task Forces are in a better position than the State to ascertain information that effectively measures progress.

Political feasibility: Local agencies have been frustrated at the lengthy review process associated with CIWMB review of their Annual Reports and would likely welcome a more responsive review body.

Minimum regulatory/statutory changes needed: §18794.0 of Title 14, California Code of Regulations defines the reporting requirements of Annual Reports but does not specify to whom they must be turned in to or who is required to certify them. This would have be clarified.

Alternative 5-a-1

Prepared by: Connie Donovan

Alternative 5-a-1: Allot jurisdiction disposal as half of estimated generation (50% diversion) and then impose a fine per ton disposed over that limit.

Use adjustment method to adjust base year generation annually, as done currently. Half of generation would be allowable disposal. Total disposal would be reviewed at the end of the year, based on BOE reports.

Meets goals/spirit of AB939: Meets AB939 goal by targeting 50% of generation. Penalties are certainly in the spirit of AB939.

Reasonable resources required: If a jurisdiction has not met the 50% goal, they would have a very direct hammer over their heads. Resources apt to be required to ensure accuracy of base year generation, deal with origin of waste issues.

Falls within purview of Alternatives Group: This is an alternative measure of compliance – it falls within our purview.

Ease of implementation, logistically: A per ton disposal fee, though levied on the jurisdictions, would probably be passed on to facilities. This would raise issues of competitive advantage between facilities in neighboring jurisdictions. Also, there may be differing issues between privately owned/operated landfills and public facilities. The loss of control of the waste stream which could result from flow to facilities with lower tipping fees would further complicating diversion efforts. Issues relating to origin of waste and surveying would be even more crucial. There would probably be more disputes regarding origin. There would also be an issue of timeliness. Reporting is done August 1 for the prior year. The evaluation would take time, so there would be a significant lag in the penalties. Base year generation accuracy even more important than now – likely to result in the need for re-sets. Impacts of one-time events must be considered.

Flexibility in implementation: Could have tiered fine structure.

Ability to measure progress: Still based on DRS. Problems currently experienced could be magnified.

Cost: Adds level of tracking to state; further burden to locals – all with associated costs. Need for base year re-sets would also add costs.

Compatibility with existing efforts: Same disposal reporting system and adjustment method would be used.

Political feasibility: Likely unpopular at local level; opposition from landfills/MRFs/transfer stations.

Minimum regulatory/statutory changes needed: Require revision to AB939.

(Improves accuracy of measurement:) Doesn't change measurement – still use current disposal-based system and reporting.

5-a-1	Weight	Scale	Score
Meets goals/spirit of AB 939.	10	5	50
Reasonable resources required.	9	3	27
Falls within purview of Alternatives Group.	8	5	40
Ease of implementation logistically.	7	3	21
Flexibility in implementation.	6	3	18
Ability to measure progress.	5	5	25
Cost.	4	2	8
Compatibility with existing efforts.	3	5	15
Political feasibility.	2	2	4
Minimum regulatory/statutory changes needed.	1	3	3
Final Score			211

Alternative 3-g-2
Prepared by Dan Sicular

Draft Statement on Proposed Alternative
Prepared by Dan Sicular, Environmental Science Associates
May 2, 2001

Reference Number:
ALT 3-g-2

Solution Considered:
Measure disposal separately for residential, commercial/industrial, and construction/demolition. Set separate/different goals for each sector and concentrate on the sector(s) that can provide the most diversion.

Working Group Recommendation
Did not receive particularly high ranking in second meeting.

Issue Addressed
This alternative addresses the issue of variable waste streams in different jurisdictions, and provides an approach to allow jurisdictions to tailor their diversion goals to their waste stream. The approach appears to have greater flexibility than the current method of measuring diversion and determining compliance, since it would allow jurisdictions to target their largest or most easily diverted waste streams.

Meets Criteria/Considerations

Meets Goals/Spirit of AB 939: Would appear to encourage jurisdictions to focus on diversion, and encourages conservation of landfill capacity and of natural resources.

Reasonable resources required: System would be more difficult to develop and administer than current system.

Falls within purview of the Alternatives Group: This is an alternative method of determining compliance with the law, and is within the Group's purview.

Ease of implementation: Low score on this point, as system would require more tailored, and therefore less standard, approach to setting and measuring achievement of goals.

Flexibility in implementation: Alternative does allow for flexibility according to waste stream characteristics.

Ability to measure progress: Assuming that logistics could be worked out, system would allow for quantitative measure of progress. May be problems with equity, however.

Cost: Presumably more complex system would entail greater cost to State and local jurisdictions.

Compatibility: Measurement could be based on a modified DRS that provided greater detail on load types, allowing jurisdictions to track disposal of each waste stream segment.

Political feasibility: Greater cost and complexity give the alternative little political feasibility.

Regulatory/Statutory changes required: Would require revision of both statute and regulations.

Improves accuracy of measurement system: System would be subject to same problems and limitations of existing DRS. System would only improve accuracy if existing DRS problems are first solved.

Additional Comments:

There is some question as to what would actually be accomplished with this alternative. The existing system already requires jurisdictions to quantify and characterize their various distinct waste streams in their waste generation and characterization studies, and to address each waste stream in their SRREs. Perhaps the most useful concept that could be gleaned from this alternative is that of improving the detail

provided by the Disposal Reporting System. If the DRS were revamped so that it provided detail on the various waste stream segments (commercial/industrial/institutional, residential, self-haul, C&D, for example), it would provide more valuable information to jurisdictions, who could use the information both to track the success of the diversion programs they have implemented, and also to use as a basis for planning additional programs. Therefore, rather than stand alone as an alternative to the existing system, the core idea of this alternative perhaps best serves as a means for improving the existing DRS.

Alternative 15

Prepared by: Cary Kalscheuer

Adopt new laws to expand responsibility for diverting waste beyond cities and counties; i.e., require disposal facilities to divert waste from self-haulers.

General Topic/Issue

In many cities and counties, waste that is self-hauled makes up a significant portion of the waste stream--on the order to 30 to 40 percent of the waste disposed on an annual basis in some cases. Self-haulers are home owners that clean out their garages and decide to haul the waste directly to the landfill by themselves; self-haulers are also contractors whose main business is not solid waste collection and disposal, but something else like tree trimming; they generate waste as an incident to their primary service, and haul the waste themselves to the landfill. This "self-haul waste" escapes the regulation of cities and counties and cannot be "cost effectively" diverted by local requirements or programs.

Solution Considered

Propose laws requiring disposal facilities to classify this waste upon arrival as "self-haul waste" and to divert 50 percent of the self-haul waste through on-site programs, processing facilities, or transfer the self-haul waste to other facilities where such diversion can be accomplished.

Issue addressed

By segregating self-haul waste at the drop off point, quantifying amounts disposed, and requiring site operator to divert specified amount, this measure assigns responsibility to a party that is in a position to divert the materials disposed.

Meets Criteria/Considerations

Meets goals/spirit of AB939: The spirit of AB 939 was to divert half of all waste disposed. However, it incorrectly placed responsibility for this on jurisdictions which do not control all of the waste that is disposed. Responsibility therefore needs to be expanded for the goal of AB 939 to be reached.

Reasonable Resources required: Disposal facilities would have to develop programs and make determinations about resource allocations.

Falls within the purview of the Alternatives Group: Yes.

Ease of implementation, logistically: Adds responsibility for the CIWMB to oversee a new mandate, but implementation activities are consistent with CIWMB's role.

Flexibility in implementation: New mandate can be designed to provide disposal facilities with flexibility based on lessons learned from AB 939.

Ability to measure progress: Documentation requirement would provide the CIWMB a mechanism by which to verify diversion; this could also be done through modifications to the disposal reporting system.

Political feasibility: Unknown.

Minimum regulatory/statutory changes needed: New laws, regulations and procedures would have to be adopted.

Alternative 6-a-3

Prepared by: Jim Hemminger

Alt 6-a-3 Require residences and businesses to pay the “true cost” of disposal on their garbage bills

This alternative is designed to reduce landfill disposal volumes by requiring that waste generators “pay” the “true cost” of waste disposal directly on the garbage bills.

Meets goals/spirits of AB 939: To the extent that this alternative increases waste diversion and increases public awareness about the need for waste diversion, the alternative meets the intent of AB 939. However, it is contrary to the spirit of AB 939 which emphasizes the importance of having jurisdictions develop waste disposal and diversion programs and financing mechanisms best suited to local needs and conditions. There are no existing restrictions preventing jurisdictions from implementing this alternative if they choose to do so on an individual basis.

Reasonable resources required: Considerable resources would be required, particularly at the local level to try and implement this alternative. Resources would probably be required to address many thorny legal issues that this proposal would create.

Falls within the purview of the Alternative Group: Somewhat. It is not an alternative compliance measure, but rather a mandated implementation program.

Ease of implementation, logistically: Very difficult.

Flexibility in implementation: This alternative seems to be specifically designed to give local jurisdictions limited flexibility in implementing and financing programs.

Ability to measure progress: Would not change existing measurement systems or problems.

Cost: Uncertain who would bear the costs of program implementation—likely garbage customers. Not evident if this alternative would generate sufficient revenue to pay for the costs of waste diversion programs.

Compatibility: Fundamentally incompatible with many existing regulations and policies.

Political feasibility: Non-existent.

Regulatory/Statutory changes required: Yes

Improves accuracy of measurement: Would not necessarily improve accuracy, but may likely lead to more accurate customer-by-customer waste quantification in order to calculate and bill “true costs” on an individual basis.

Priority = Not Recommended

Alternative 3-i

Prepared by: Connie Donovan

Alternative 3-i: Look only at the diversion rate TREND within each jurisdiction. Jurisdictions meeting the requirements would have a positive trend with increasing diversion rate.

Meets goals/spirit of AB939: It could meet the spirit of AB939 in terms of increasing diversion, but trend alone would not necessarily mean that the goal was met and that overall diversion was truly increasing. Would still need current measurement system – with attendant issues/problems. Demographic changes, economic changes, etc. could lead to an apparent changing diversion trend whereas diversion per capita, e.g., might indicate otherwise. Program implementation would still be important to consider. Trend won't always be upward – will reach point where it's static.

Reasonable resources required: Same resources required for measurement and tracking as currently used. Shift in trend for any given year may relate to disposal measurement problem; one-time event; or other relatively transient impact. What would jurisdiction have to do then to show compliance? In that case, this alternative could increase required resources.

Falls within purview of Alternatives Group: Yes, meets our “mission” of considering alternatives to the way the state determines compliance with AB 939.

Ease of implementation, logistically: If continue current measurement process, then it's easy to implement.

Flexibility in implementation: Provides flexibility in terms of level of compliance required. But, is it a fair way to gauge one jurisdiction that hasn't done as much as another against one at a high level that can't achieve much more?

Ability to measure progress: Could be a useful measure, along with program implementation, if other conditions are static over time, but changing conditions could affect measure in ways that it may not be a true indication of progress or lack thereof.

Cost: Cost factor would come for those jurisdictions that did not meet the requirement of increasing diversion trend.

Compatibility with existing efforts: Would relate well to “good faith effort”. Must consider trend in combination with program implementation.

Political feasibility: Opposition from those who favor a firm measure. Less of an objective to shoot for – less incentive to make it. Perhaps even more incentive to move slowly to continue to show trend over longer period of time.

Minimum regulatory/statutory changes needed:

(Improves accuracy of measurement:) This would not improve accuracy. Assuming that the current measurement system would still be used, could still have a measure of diversion rate, but focus on trend for compliance purposes.

3-i	Weight	Scale	Score
Meets goals/spirit of AB 939.	10	2	20
Reasonable resources required.	9	4	36
Falls within purview of Alternatives Group.	8	5	40
Ease of implementation logistically.	7	4	28
Flexibility in implementation.	6	3	18
Ability to measure progress.	5	1	5
Cost.	4	4	16
Compatibility with existing efforts.	3	3	9
Political feasibility.	2	1	2
Minimum regulatory/statutory changes needed.	1	4	4
Final Score			178

Staff notes on 3-i

NOT RECOMMENDED BECAUSE:

- Anomalies and events can affect one year's data and project an inaccurate trend.
- Trend may not fairly reflect efforts – a jurisdiction at or close to 50% may have a gradual trend as it plateaus out, while a jurisdiction that has done little in the past and now implements programs may be far below 50% but show a strong upward trend in its diversion rate or disposal reduction.
- May not be an improvement over the current measurement system – still requires accurate DRS data, and may need equally complicated system to assess compliance.

Alternative 3-d

Prepared by: Connie Donovan

Alternative 3-d: Use waste sorts to see if large amounts of recyclables are still being disposed as a cross check for diversion rates.

Meets goals/spirit of AB939: Definitely meets the spirit of AB939 to evaluate the waste stream and work to target specific materials/generator streams. However, this does not seem to be a direct cross-check for diversion rates. The presence of materials in a waste stream does not mean that the goal is not being met. For example, poor participation in a residential curbside program may be more than offset by a C&D program.

Reasonable resources required: Requires significant resources, depending on the level of accuracy required. Sampling must be statistically significant. Would either require landfill/transfer station disposed refuse sort, or mobile sort of waste containers at generator sites. Expensive to hire consultants and/or require considerable staff time.

Falls within purview of Alternatives Group: Not clear: while this alternative can be related to determination of compliance, it is not a direct link. Iffy.

Ease of implementation, logistically: Not easy – requires sorting plan, appropriate health and safety protections, labor force; materials/supplies; evaluation of data. Seasonality. How often would it need to be repeated? During development of SRRE's, use of comparable data was allowed. Comparable data in this case would mostly defeat the purpose.

Flexibility in implementation: Depends on level of accuracy required and under what circumstances the sorts would be required.

Ability to measure progress: Measure would relate to particular waste stream, e.g., residential, commercial, etc. Would not give actual diversion measure, particularly of entire waste stream.

Cost: Definitely adds cost – could be significant.

Compatibility with existing efforts: This is a tool that could help jurisdictions target new programs (including public education and outreach) and improve existing ones. It does not contribute directly to diversion. Actually pulls resources away from other activities.

Political feasibility: Considerable opposition at local level likely.

Minimum regulatory/statutory changes needed: Minor regulatory change?

(Improves accuracy of measurement:) Gives corollary information to diversion measurement, but it is not an actual measure of diversion.

3-d	Weight	Scale	Score
Meets goals/spirit of AB 939.	10	3	30
Reasonable resources required.	9	1	9
Falls within purview of Alternatives Group.	8	2	16
Ease of implementation logistically.	7	1	7
Flexibility in implementation.	6	2	12
Ability to measure progress.	5	1	5
Cost.	4	1	4
Compatibility with existing efforts.	3	2	6
Political feasibility.	2	3	6
Minimum regulatory/statutory changes needed.	1	5	5
Final Score			100

Staff notes on 3-d:

NOT RECOMMENDED BECAUSE:

- Waste sorts can be very costly and resource intensive, which pulls resources away from program implementation.
- Waste sorts are much more useful as a tool jurisdictions can use to gather information on the waste stream for program planning than as a compliance measurement.
- May be difficult to determine the acceptable level of materials in the waste stream for each jurisdiction, based on local characteristics and programs, and/or develop as a direct cross-check for diversion rates.
- Board can already require jurisdictions to do waste sorts if they fail to meet the diversion goals.

Other comments: since waste sorts are a very useful tool, but are costly, the Board should provide assistance to local jurisdictions. For example, the Board could do studies around the state on a random or targeted basis, or provide funds for jurisdictions to do their own sorts.

Alternative	Page #		Alternative	Page #
2-a	1		1-a-3	21
2-b	3		1-a-4	8
10, 10+	5		2-a	1
1-a-4	8		2-b	3
4-a	9		3-b	17
7-a	15		3-c	23
11	16		3-d	45
3-b	17		3-g-1	25
9	18		3-g-2	39
1-a-3	21		3-i	43
3-c	23		4-a	9
3-g-1	25		5-a-1	37
6-a-1	28		6-a-1	28
6-a-2	30		6-a-2	30
14	32		6-a-3	42
13	33		7-a	15
12	35		9	18
5-a-1	37		10, 10+	5
3-g-2	39		11	16
15	40		12	35
6-a-3	42		13	33
3-i	43		14	32
3-d	45		15	40

Alternatives Working Group Final Recommendations

This table shows the results of the discussion and voting on alternatives at the May 15, 2001 meeting of the Alternatives Working Group. Members voted whether to forward the alternative to the Synthesis Group, and if forwarded, whether it was a high, medium, or low priority. The table lists the alternatives forwarded first, in order of priority, then in reference number order; the alternatives not forwarded are in the second half of the table. Some of the alternatives were amended at the meeting and the amendments were voted on. Each alternative is identified as one more directly related to the measurement system (M) or as “other” (O) in the first column.

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 1-a-4 M	Increase incentives for forming regional agencies and remove disincentives. Staff comments: Incentives could include reducing potential maximum fines (currently are \$10,000/day per jurisdiction); grants or loans specifically for programs in regional agencies; preference to regional agencies for existing Board grants and loans; or reduced diversion requirements.	<u>High Priority</u> Vote 7 – High 3 – Medium 0 - Low	California’s waste system is complex and it is very difficult and costly to accurately measure diversion at the jurisdiction level.	<ol style="list-style-type: none"> 1. Meets the intent of AB 939 by focusing on regional management and measurement of waste reduction and recycling programs and allows for the measurement to be taken by region. 2. This would encourage regional approaches and result in savings in time and cost for program implementation, measurement, and reporting. 3. There are many existing regional authorities demonstrating the feasibility and practicality of the regional approach. 4. No major statutory changes would be needed. 5. A regional measurement and reporting system would improve accuracy by unifying the reporting procedure under one authority for all jurisdictions in the region. 	<p style="text-align: center;">YES</p> 10 – Yes 0 – No 1 - Abstain

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 2-a M	In addition to existing statutory provisions for rural reductions, allow rural jurisdictions to demonstrate AB 939 compliance based on local program implementation and effectiveness instead of data and calculations that may contain errors difficult to resolve or a new base year study.	<u>High Priority</u> Vote 6 – High 3 – Medium 0 - Low	There are inherent difficulties associated with getting accurate waste disposal and diversion rate data from rural counties. Basing compliance on program implementation would reduce or eliminate the need to use limited resources to correct the inaccuracies through new base year studies and documenting diversion.	<ol style="list-style-type: none"> 1. Meets the intent of AB 939 by focusing on effective program implementation and requiring "good faith performance efforts" 2. Waste loadings from rural jurisdictions represent < 5% of State's total waste volume 3. Waste Board staff time and Board time could focus on more significant waste streams 4. Counties would still need to implement DRS 5. May require legislative action. 6. Need to reconsider the definition of rural to address rural cites in non-rural counties. <p>Staff comments: Need to determine how jurisdictions would demonstrate program effectiveness which could mean more counting. Larger jurisdictions may see this as unfair. May be addressed already in "good faith efforts" process.</p>	YES 11 – Yes 0 - No

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 2-b M	The State would produce a menu of potential programs and how they would be evaluated. Each jurisdiction would choose specific programs from the menu based on their demographics and other local issues. This programmatic document would be certified by the state as adequate, with audit and monitoring by state staff. Criteria would include program guidelines, monitoring for effectiveness, and proof of implementation, to be reported each year. This would be considered an alternative to diversion rate measurement, but the DRS system would stay intact.	<u>High Priority</u> Vote 5 – High 1 – Medium 1 - Low	Many jurisdictions currently spend significant resources on documentation of existing diversion rather than program implementation. By shifting the emphasis to development of programs and implementation, millions of dollars in resources each year can be shifted, resulting in higher overall diversion. Also, allows jurisdictions with very difficult measurement problems to move forward toward meeting AB 939 goals despite measurement problems.	<ol style="list-style-type: none"> 1. Essential to develop method of determining program effectiveness/monitoring progress, such as establishing program criteria and/or using waste sorts to check on recyclables in waste stream. 2. Shifts resources from documentation to implementation and monitoring of programs 3. The Board would still need to monitor and enforce program implementation requirements 4. Would remove measurement of numerical diversion rate. 5. Removes pressure to show 50% diversion and puts pressure on implementing effective programs. 6. May require regulatory or legislative changes. 	YES 8 – Yes 3 - No

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 3-a M	Change the definition of solid waste in PRC section 40191(a) to remove uncertainties/inconsistencies with counting, for example special waste.	<u>High Priority</u> Vote 6 – High 4 – Medium 0 – Low		<ol style="list-style-type: none"> 1. Requires changes to the current law defining solid waste. 2. Would eliminate diversion credit for materials that are not defined as waste. 3. Could require increased tracking by waste types or categories. 4. Could require new base years. 5. Could eliminate equity issues when similar materials are counted differently at different facilities. 6. Need additional information to determine impacts on diversion rates. 	YES 10 – Yes 0 – No
ALT 3-b 3-b-1 M	Change measurement system to only consider disposal data, not diversion or generation. Amendment 1 (called 3-b-1): Investigate use of disposal data (not generation) as alternative way to demonstrate compliance.	<u>High Priority</u> Vote 7 – High 2 – Medium 0 – Low	Addresses inaccuracies of base years and the adjustment method by only using disposal data.	<ol style="list-style-type: none"> 1. May simplify and increase accuracy of measurement by using only “real” measurements to assess progress. 2. Accuracy of DRS data even more critical. 3. Simpler system shifts more resources to programs. 4. Current field measurement system doesn’t change – only how the data is used. 5. Need investigation of how factors such as population, employment, etc. relate to waste disposal rather than waste generation. 6. Would require statutory change to establish disposal goals. 7. Could be viable option for jurisdictions for whom present measurement system doesn’t work well. 	YES 8 – Yes 2 – No Abstain – 1

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
<p>ALT 4-a</p> <p>O</p>	<p>Sub-Alternative 4-a-1: Enhance Recycling Market Development Zone Program</p> <p>Sub-Alternative 4-a-2: Mandating minimum recycled content from manufacturers for an expanded list of materials</p> <p>Sub-Alternative 4-a-3: Mandating minimum recycled content from purchasers: expanded list of materials</p> <p>Sub-Alternative 4-a-4: Quantification of Recycled Product Market Development Efforts and Programs Implemented by the State</p> <p>Sub-Alternative 4-a-5: Promote recycling by leveraging funding from various sources (separate from the RMDZ program), such as US EPA, HUD, Dept. of Commerce, private foundations, etc., for example through grants and programs such as California Jobs Through Recycling.</p>	<p>Alt 4-a-1 to 4-a-4 <u>High Priority</u></p> <p><u>Vote</u></p> <p>7 – High 4 – Medium 0 – Low</p> <p>Alt 4-a-5 <u>High Priority</u></p> <p><u>Vote</u></p> <p>8 – High 3 – Medium 0 – Low</p>	<p>“Without markets, programs fall apart.”</p>	<ol style="list-style-type: none"> 1. Meets the intent of AB 939 by not only keeping materials out of the landfill but conserving resources by using those materials in new products and markets. 2. Doesn’t specifically address measurement issues but shifts focus from measurement to efforts that help programs. 3. Moderate to large impact on Board resources could result, if new programs and/or loans and grants are developed. 4. May also require significant Board resources for implementation, compliance monitoring, and enforcement. 5. Requires statutory changes. 6. Could result in increased cost to state and local government agencies for purchase of recycled content materials. 	<p><u>YES</u></p> <p>Forward 4-a-1 to 4 11 – Yes 0 – No</p> <p><u>YES</u></p> <p>Forward 4-a-5 11 – Yes 0 – No</p>

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 6-a-1 O	Adopt new laws to expand responsibility for diverting waste beyond cities and counties; i.e., require schools to work with local government recycling coordinators to divert waste.	<u>High Priority</u> Vote 9 – High 2 – Medium 0 – Low	Jurisdictions typically don't have control over all the waste generated within their borders. More diversion could be achieved by moving responsibility for reducing waste "upstream" on those that may have more control or impact on waste generation.	<ol style="list-style-type: none"> 1. Widens circle of responsibility for meeting the intent of AB 939, which helps jurisdictions meet the goals. 2. Impacts costs and resources to schools to implement new programs; increased cost and resources needed by the Board to monitor schools. 3. Does not address problems of current measurement system; may complicate measurement if schools must also measure goal achievement. 4. Opportunities for solid waste and environmental education could increase if schools must run their own programs. 5. Requires statutory change. 	YES 10 – Yes 1 – No
ALT 6-a-2 O	Put more responsibility on generators of difficult-to-handle waste.	<u>High Priority</u> Vote 6 – High 1 – Medium 1 – Low	Existing law places an unequal burden on local governments, which can not prevent the production of waste by manufacturers without a mechanism for increasing shared responsibility.	<ol style="list-style-type: none"> 1. Enhances both potential conservation of resources and reduction in landfill disposal through expanded financial incentives and disincentives at all levels. 2. Targeted implementation based on existing models will be essential in reaching goals. 3. Shifts focus from counting to implementation. <p>Staff comments: May cause a shift in costs for consumers from government diversion programs to businesses. Requires statutory changes.</p>	YES 8 – Yes 2 – No

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 10-a (was 10) M	Remove the existing 10% diversion limit for non-burn transformation processes such as bioreactors, gasification, hydrolysis, etc.	<u>High Priority</u> <u>Vote</u> 6 – High 1 – Medium 3 - Low	Under existing law, jurisdictions can claim only a portion of transformed waste as diversion. This has created a waste stream that is neither disposed nor diverted. It also serves to discourage development of innovative non-burn technologies that provide a means of waste diversion from landfills.	<ol style="list-style-type: none"> 1. Meets the intent of AB 939 to the extent that it provides credit for diverting waste from landfills. 2. Would eliminate confusion about reporting certain types of unclassified waste stream that are neither diversion nor disposal under existing rules – this becomes an issue for jurisdictions doing new base years. 3. Provides incentives for innovative waste diversion activities for materials that are harder to divert (e.g., food waste). 4. Would require legislative action. <p>Staff comments: Currently outside measured waste stream so there is no 10% limit. May require tracking and regulating of facilities not currently part of measured waste system. Regulating new types of facilities is often controversial. Could be seen as moving transformation up the waste management hierarchy.</p>	<u>YES</u> 7 – Yes 3 – No 1 - Abstain

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 11 O	Remove institutional barriers to diversion programs. Examples: streamline/fast track permitting of diversion activities such as C&D processing; support development and siting of businesses that process gypsum; educate LEAs and Board staff to assist in program/facilities development. CIWMB should look at its own policies as well as other barriers that needlessly inhibit the development of diversion programs.	<u>High Priority</u> <u>Vote</u> 10 – High 0 - Medium 0 - Low	Barriers may exist that inadvertently delay implementation of diversion programs.	<ol style="list-style-type: none"> 1. Does not specifically address measurement problems, but addresses unintended consequences of policies or procedures that delay programs. 2. Could be easily implemented by directing Board departments to address barriers as they are brought to their attention. 3. Small or moderate changes at the state level can have big results at the local level. 4. Would not address local barriers to diversion programs or processing of materials. 5. Regulatory and statutory changes may or may not be required. 	<u>YES</u> 10 – Yes 0 – No 1 - Abstain
ALT 15 O	Adopt new laws to expand responsibility for diverting waste beyond cities and counties; i.e., require disposal facilities to divert waste from self-haulers.	<u>High Priority</u> <u>Vote</u> 5 – High 1 – Medium 1 – Low	In many cities and counties, waste that is self-hauled makes up a significant portion of the waste stream (up to 30 to 40 %). This self-haul waste escapes the regulation of cities and counties and cannot be “cost effectively” diverted by local requirements or programs.	<ol style="list-style-type: none"> 1. Expands responsibility for meeting AB 939 goals beyond local governments to parties in the best position to divert self-haul wastes. 2. Implementing new programs impacts resources and costs of disposal facility operators. 3. Tracking and measuring systems would need to be established and monitored by the Board - could be coupled with DRS. 4. Could result in significant diversion from a perhaps “untapped” waste stream that local governments find difficult to divert. 5. Would require statutory change. 	<u>YES</u> 7 – Yes 4 - No

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 1-a-3 M	Verify program implementation at the jurisdictional level. If all jurisdictions within the county are implementing programs, and all jurisdictions agree to be counted together, then they may use the countywide diversion rate.	<u>Medium Priority</u> <u>Vote</u> 1 – High 6 – Medium 1 – Low	Numbers are more accurate at the countywide level. Disposal reporting and base year inaccuracies within a single county have larger impact on smaller jurisdictions.	<ol style="list-style-type: none"> 1. Shifts focus to implementation, without sacrificing accountability or 50% mandate. 2. Shifts limited resources to implementation. 3. Easy to implement. 4. Provides flexibility and local decision-making. 5. Improves accuracy of measurement. 6. Compatible with existing regional agency alternative. <p>Staff comments: Requires statutory change, unlike regional agencies. No clear enforcement mechanism.</p>	<u>YES</u> 8 – Yes 0 – No 2 - Abstain
ALT 3-b 3-b-2 M	Change measurement system to only consider disposal data, not diversion or generation. Amendment 2 (called 3-b-2): Combine disposal based measurement with ALT 2-b (implementing suite of programs) and show a reduction in disposal every year; jurisdictions can petition for relief in showing yearly decrease in disposal amounts based on significant growth and proposed programs to address the growth.	<u>Medium Priority</u> <u>Vote</u> 2 – High 4 – Medium 0 - Low	Address inaccuracies of base years and the adjustment method by only using disposal data.	<ol style="list-style-type: none"> 1. May simplify and increase accuracy of measurement by using only “real” measurements to assess progress. 2. Accuracy of DRS data even more critical. 3. Simpler system shifts more resources to programs. 4. Current field measurement system doesn’t change – only how the data is used. 5. Need investigation of how factors such as population, employment, etc. relate to waste disposal rather than waste generation. 6. Would require statutory change to establish disposal goals. 7. Could be viable option for jurisdictions for whom present measurement system doesn’t work well. 	<u>YES</u> 6 – Yes 3 – No Abstain – 1

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 6-a-4 O	Further promote the focus on largest individual generators, largest sectors, and most common materials to reduce waste and recycle; include this approach in the menu of programs to be developed in ALT 2-b.	<u>Low Priority</u> <u>Vote</u> 2 – High 2 – Medium 5 - Low	Jurisdictions typically don't have control over all the waste generated within their borders. More diversion could be achieved by moving responsibility for reducing waste "upstream" on those that may have more control or impact on waste generation.	<ol style="list-style-type: none"> 1. Could help jurisdictions improve diversion by identifying areas with less existing diversion and the most potential for improvement. 2. Doesn't address current measurement system problems. 3. Could increase resources needed and costs to local governments and the Board, but may result in resources focused where most needed. 4. CIWMB does have tools to assist with this approach, but could perhaps increase direct assistance. 5. Could require statutory changes if new requirements are put on businesses. 	<u>YES</u> 9 – Yes 0 – No 2 – Abstain
ALT 8 O	CIWMB should provide standard curriculum or training for local government staff (especially new recycling coordinators) and/or set up a certification program to have minimum standards for staff responsible for program implementation and other AB 939 and waste management duties.	<u>Low Priority</u> <u>Recommend</u> <u>Training Only</u> <u>Vote</u> 4 – High 2 – Medium 5 – Low	Problem in AB 939 compliance caused by lack of formal training and education opportunities or requirements for local program coordinators in resource management issues and strategies.	<ol style="list-style-type: none"> 1. Facilitates implementation of AB 939 programs by providing help to those made responsible for AB 939 – local jurisdictions. 2. Moderate resources may be needed at the Board to set up training and certification. 3. Does not directly address measurement issues. 4. Models exist at the state level already. 	YES for Training 9 – Yes 1 – No 1 – Abstain Certification = NO 2 – Yes 7 - No

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 7-a O	Change diversion rate measurement system to provide incentives rather than fines.	<u>Not Forwarded</u>	More diversion might occur by providing incentives rather than focusing on a measurement system and fines for not meeting numerical compliance.	<ol style="list-style-type: none"> 1. May or may not meet the spirit and goals of AB 939 – encourages diversion through program incentives, but may decrease diversion if there are no consequences for not meeting the goal. 2. Does not address current measurement problems, but de-emphasizes measurement. 3. May increase costs to Board and provide more resources to local governments, depending on incentives developed. 4. Would require statutory changes. 	<p align="center"><u>Close Split</u></p> <p>4 – Yes 5 – No</p>
Alt 10-b (was 10+) M	<p>Extend the provisions of Alt 10 to remove the 10% diversion limit for direct burn transformation processes for yard waste and wood waste materials used for power generation.</p> <p>Amend alternative to add post MRF residuals to the list.</p>	<u>Not Forwarded</u>	<p>There are concerns that this extension would "open the door" to allowing "credits" for incineration of other types of waste. However, legislation could limit the "scope" based on material type and apply the allowance only to areas where there are no alternative, economical ways of handling forest debris, except landfilling.</p>	<ol style="list-style-type: none"> 1. Meets the intent of AB 939 to the extent that waste materials are diverted from landfills, but would "elevate" direct burn disposal in the waste hierarchy. 2. Would address statewide energy issues by increasing feedstock materials for under-utilized cogeneration facilities. 3. Forest debris and wood waste are poor feedstock materials for compost operations and there are limited alternative re-use options for these materials. 4. Would require controversial legislative action. <p>Staff comments: May require tracking and regulating of facilities not currently part of measured waste system. Regulating new types of facilities is often controversial. MSW transformation facilities may see lifting limits on all other types of transformation as unfair.</p>	<p align="center"><u>Close Split</u></p> <p>5 – Yes 6 – No</p> <p align="center"><u>NO</u></p> <p>4 – Yes 6 – No</p>

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 3-c M	Use other bases of measurement in achieving goals, such as per capita and/or per employee disposal rates.	<u>Not Forwarded</u>	New methods of measurement, other than 50% diversion in a jurisdiction, might improve measurement accuracy.	<ol style="list-style-type: none"> 1. Accurate DRS data is critical. Would need residential and commercial waste tonnages measured separately, which means a more complicated DRS system and more chance for errors. 2. Eliminates inaccuracies of the adjustment method, since it is no longer needed. 3. Accurate data for the number of employees employed in the jurisdiction may not be readily available for all jurisdictions. 4. May better reflect success of diversion efforts by local governments. 5. May be difficult or controversial for the Board to develop maximum allowable disposal rates. 6. Could be optional data considered by Board along with current measurement method. 	<p style="text-align: center;"><u>NO</u></p> <p>2 – Yes 8 – No</p>

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
<p>ALT 3-d</p> <p>M</p>	<p>Use waste sorts to see if large amounts of recyclables are still being disposed as a cross check for diversion rates.</p>	<p><u>Not Forwarded</u></p>	<p>There is no cross-check on diversion rates, either those developed by new base year studies or those estimated using the adjustment method.</p>	<p>NOT RECOMMENDED BECAUSE:</p> <ul style="list-style-type: none"> • Waste sorts can be very costly and resource intensive, which pulls resources away from program implementation. • Waste sorts are much more useful as a tool jurisdictions can use to gather information on the waste stream for program planning than as a compliance measurement. • May be difficult to determine the acceptable level of materials in the waste stream for each jurisdiction, based on local characteristics and programs, and/or develop as a direct cross-check for diversion rates. • Board can already require jurisdictions to do waste sorts if they fail to meet the diversion goals. <p>Other comments: since waste sorts are a very useful tool, but are costly, the Board should provide assistance to local jurisdictions. For example, the Board could do studies around the state on a random or targeted basis, or provide funds for jurisdictions to do their own sorts.</p>	<p><u>NO</u></p> <p>3 – Yes 5 - No</p>
<p>ALT 3-e-1</p> <p>M</p>	<p>Measure only diversion, not disposal, and develop a standard system to measure diversion.</p>	<p><u>Not Forwarded</u></p>	<p>Focus should be on measurement of diversion not on generation (disposal + diversion) to improve accuracy.</p>	<p>NOT RECOMMENDED BECAUSE: AB 939 was changed to a disposal based system because of the difficulties in measuring diversion – this could result in a more complicated system which still would need DRS data to assess diversion rates.</p>	<p><u>NO</u></p> <p>Unanimous</p>

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 3-e-2 M	Measure only recycling and composting, but allow jurisdictions a source reduction credit.	<u>Not Forwarded</u>	Focus should be on measurement of diversion not on generation (disposal + diversion) to improve accuracy.	NOT RECOMMENDED BECAUSE: AB 939 was changed to a disposal based system because of the difficulties in measuring diversion – this could result in a more complicated system which still would need DRS data to assess diversion rates. Would need to establish standards for source reduction credits.	<u>NO</u> Unanimous
ALT 3-g-1 M	Re-evaluate suitability of 50% diversion for all jurisdictions, and determine if different levels can be based on waste stream characteristics.	<u>Not Forwarded</u>	California is too diverse for a one-size-fits-all solution. Adapting diversion goals to local conditions may facilitate maximizing diversion.	1. Raises issues of equitability and fairness 2. Changes AB939 approach where everyone is expected to meet the same goals. However, existing law recognizes differences. 3. Difficult to implement efficiently and fairly; open to challenge. 4. Shifts focus away from implementation towards justifying reduction in diversion rate. Staff comments: May reduce staff work if different goals are established in law and don't require review of additional paperwork.	<u>NO</u> 1 – Yes 9 – No
ALT 3-g-2 M	Measure disposal separately for residential, commercial/industrial, and construction/demolition. Set separate/different goals for each sector and concentrate on the sector(s) that can provide the most diversion.	<u>Not Forwarded</u>	This alternative addresses the issue of variable waste streams in different jurisdictions, and provides an approach to allow jurisdictions to tailor their diversion goals to their waste stream.	1. Would require development of more complex system of measurement which could shift resources away from program implementation. 2. Recognizes that not all jurisdictions may reach 50% due to nature of waste stream, and provides flexibility. 3. Requires more accurate, more detailed DRS data. 4. Could provide very useful information to help jurisdictions focus on problem areas and/or areas with greatest diversion potential. 5. Requires statutory changes.	<u>NO</u> 3 – Yes 6 - No

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 3-i M	Look only at the diversion rate TREND within each jurisdiction. Jurisdictions meeting the requirements would have a positive trend with an increasing diversion rate.	<u>Not Forwarded</u>		<p>NOT RECOMMENDED BECAUSE:</p> <ul style="list-style-type: none"> Anomalies and events can affect one year's data and project an inaccurate trend. Trend may not fairly reflect efforts – a jurisdiction at or close to 50% may have a gradual trend as it plateaus out, while a jurisdiction that has done little in the past and now implements programs may be far below 50% but show a strong upward trend in its diversion rate or disposal reduction. May not be an improvement over the current measurement system – still requires accurate DRS data, and may need equally complicated system to assess compliance. 	<p><u>NO</u></p> <p>Unanimous</p>
ALT 5-a-1 M	Allot jurisdiction disposal as half of estimated generation (50% diversion) and then impose a fine per ton disposed over that limit.	<u>Not Forwarded</u>	Conserve landfill capacity, one of the goals of the law, and improve measurement accuracy, by focusing on disposal tons or capacity used.	<ol style="list-style-type: none"> Focuses specifically on reducing disposal amounts. Does not change or address current measurement system; changes how fines allotted. May result in less flexibility for how fines assigned. Would require statutory changes. 	<p><u>NO</u></p> <p>1 – Yes 9 - No</p>
ALT 5-a-2 M	Base the 50% goal on reducing landfill capacity used by 50%.	<u>Not Forwarded</u>	Conserve landfill capacity, one of the goals of the law, and improve measurement accuracy, by focusing on disposal tons or capacity used.	<ol style="list-style-type: none"> Focuses specifically on reducing disposal amounts. Simpler measurement system that relies entirely on DRS. May need to establish standard weight to volume conversion factor statewide. Need to establish baseline from which the 50% is measured. If a 1990 base year is used, it may penalize jurisdictions with programs existing at that time. Would require statutory change. 	<p><u>NO</u></p> <p>1 – Yes 8 - No</p>

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 6-a-3 O	Require residences and businesses to pay the “true cost” of disposal on their garbage bills.	<u>Not Forwarded</u>	Jurisdictions typically don’t have control over all the waste generated within their borders. More diversion could be achieved by moving responsibility for reducing waste “upstream” on those that may have more control or impact on waste generation.	<ol style="list-style-type: none"> 1. This may lead to increased waste diversion in some cases, but goes against the intent of AB 939 which was specifically designed to allow jurisdictions, not the State, to plan, finance, and develop effective local programs. 2. Would likely cause many contractual and legal problems with private haulers and others because of existing franchise agreements. 3. Could necessitate new SRREs and could interfere with existing "variable can" rate structures. 4. Would require legislative action. <p>Staff comments: Conflicts with some city charters.</p>	<u>NO</u> 0 – Yes 11 - No
ALT 9 M	Require a second base year to be established. If jurisdictions have already done a new, accurate base year, they have already met this requirement. If jurisdictions are still relying on a 1990 or 1991 base year, they need a new one.	<u>Not Forwarded</u>	Jurisdictions change over time and their waste streams change over time. Focus on improving measurement accuracy by establishing accurate base for the adjustment method.	<ol style="list-style-type: none"> 1. Accuracy of the diversion rate measurement could be greatly improved if based on accurate base year data. 2. New information can help jurisdictions with future planning. 3. New base year studies can be resource intensive and costly; if required of all jurisdictions, joint studies could use economies of scale. 4. Since jurisdictions are now required to maintain 50% diversion over time, they may need more accurate base-year data in the future. 5. May require statutory or regulatory changes. 	<u>NO</u> 2 – Yes 8 – No

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 12 M	Allow Local Task Forces (LTFs) to review and approve Annual Reports, requests for Time Extensions and requests for Alternative Diversion Requirements for the jurisdictions within their County or Regional Agency; also require self certification letter from the jurisdiction to the CIWMB and require public review.	<u>Not Forwarded</u>	There's a disconnect between local governments in implementation and coordination of AB 939 because of requirement to report to the state. Local Task Forces could review and approve Annual Reports, etc. in a more timely manner with more understanding of local circumstances.	<ol style="list-style-type: none"> 1. LTFs would need to augment their local resources to take on these tasks; reduces need for Board resources for these tasks. 2. Could improve local jurisdiction response to low diversion rates because problems might be identified sooner and LTF could provide help quickly because of local understanding. 3. CIWMB would maintain final enforcement. 4. Would require statutory and regulatory changes. <p>Staff comments: SB 2202 (effective 1/1/01) established that the Board complete preliminary review within 120 days of receipt of an Annual Report.</p>	<u>NO</u> 4 – Yes 7 - No
ALT 13 M	Allow jurisdictions to self-certify compliance with AB 939 after they have been determined to be in compliance with requirements for 2000 and beyond.	<u>Not Forwarded</u>	Preparation and submittal of Annual Reports to the CIWMB is a time consuming and costly administrative task, and unnecessary if a jurisdiction's waste stream and programs have not changed after it has achieved the 50% goal.	<ol style="list-style-type: none"> 1. Would simplify compliance process for both local jurisdictions and the Board and allow more resources to shift to program implementation. 2. Doesn't address current measurement system problems. 3. Could be easily implemented. 4. Jurisdiction would need to maintain documentation/evidence of continued achievement of the goal for verification by the Board. 5. Would require statutory change. 6. May require additional resources to prepare biennial reviews with limited information. 	<u>NO</u> 2 – Yes 7 - No

Ref # Meas/Other (M/O)	Solution Considered	Working Group Recommendation for Priority	Issue Addressed	Meets Criteria/Considerations	Forward to Synthesis Group (Yes/No)
ALT 14 O	Regionalize CIWMB offices and have structure like the State Water Resources Control Board. Establish branch office to provide technical assistance for local programs.	<u>Not Forwarded</u> <u>Not Forwarded</u>	CIWMB staff gain increased ability to assist local governments in program implementation, and increase their understanding of local issues. Solving numerical problems is easier with local knowledge.	1. Provides additional resources needed to resolve numerical problems and shift focus to program implementation. 2. Could require changes to statute, if the present Board structure were changed. 3. Significant short-term cost, potential long-term cost savings. Staff comments: Significant administrative costs to Board to maintain regional offices.	<u>NO</u> 0 – Yes 11 - No <u>NO</u> 4 – Yes 6 - No

SUMMARY OF RECOMMENDATIONS FOR ALTERNATIVES GROUP

ALTERNATIVES FORWARDED TO SYNTHESIS GROUP	Meas/Other
HIGH PRIORITY	
ALT 1-a-4: Increase incentives for forming regional agencies and remove disincentives.	M
ALT 2-a: In addition to existing statutory provisions for rural reductions, allow rural jurisdictions to demonstrate AB 939 compliance based on local program implementation and effectiveness instead of data and calculations that may contain errors difficult to resolve or a new base year study.	M
ALT 2-b: The State would produce a menu of potential programs and how they would be evaluated. Each jurisdiction would choose specific programs from the menu based on their demographics and other local issues. This programmatic document would be certified by the state as adequate, with audit and monitoring by state staff. Criteria would include program guidelines, monitoring for effectiveness, and proof of implementation, to be reported each year. This would be considered an alternative to diversion rate measurement, but the DRS system would stay intact.	M
ALT 3-a: Change the definition of solid waste in PRC section 40191(a) to remove uncertainties/inconsistencies with counting, for example special waste.	M
ALT 3-b-1: Investigate use of disposal data (not generation) as alternative way to demonstrate compliance.	M
ALT 4-a: Focus on developing markets for recycled materials to “pull” materials out of the waste stream, rather than focusing on measurement of waste (includes 5 subalternatives).	O
ALT 6-a-1: Adopt new laws to expand responsibility for diverting waste beyond cities and counties; i.e., require schools to work with local government recycling coordinators to divert waste.	O
ALT 6-a-2: Put more responsibility on generators of difficult-to-handle waste.	O
ALT 10-a: Remove the existing 10% diversion limit for non-burn transformation processes such as bioreactors, gasification, hydrolysis, etc.	M
ALT 11: Remove institutional barriers to diversion programs. Examples: streamline/fast track permitting of diversion activities such as C&D processing; support development and siting of businesses that process gypsum; educate LEAs and Board staff to assist in program/facilities development. CIWMB should look at its own policies as well as other barriers that needlessly inhibit the development of diversion programs.	O
ALT 15: Adopt new laws to expand responsibility for diverting waste beyond cities and counties; i.e., require disposal facilities to divert waste from self-haulers.	O

ALTERNATIVES FORWARDED TO SYNTHESIS GROUP	Meas/Other
MEDIUM PRIORITY	
ALT 1-a-3: Verify program implementation at the jurisdictional level. If all jurisdictions within the county are implementing programs, and all jurisdictions agree to be counted together, then they may use the countywide diversion rate.	M
ALT 3-b-2: Combine disposal based measurement with ALT 2-b (implementing suite of programs) and show a reduction in disposal every year; jurisdictions can petition for relief in showing yearly decrease in disposal amounts based on significant growth and proposed programs to address the growth.	M
LOW PRIORITY	
ALT 6-a-4: Further promote the focus on largest individual generators, largest sectors, and most common materials to reduce waste and recycle; include this approach in the menu of programs to be developed in ALT 2-b.	O
ALT 8: CIWMB should provide standard curriculum or training for local government staff (especially new recycling coordinators) and/or set up a certification program to have minimum standards for staff responsible for program implementation and other AB 939 and waste management duties.	O
NOT FORWARDED but close vote (1 vote difference)	
ALT 7-a: Change diversion rate measurement system to provide incentives rather than fines.	O
ALT 10-b: Extend the provisions of Alt 10 to remove the 10% diversion limit for direct burn transformation processes for yard waste and wood waste materials used for power generation; amendment for post-MRF residuals also not forwarded.	M
NOT FORWARDED	
ALT 3-c: Use other bases of measurement in achieving goals, such as per capita and/or per employee disposal rates.	M
ALT 3-d: Use waste sorts to see if large amounts of recyclables are still being disposed as a cross check for diversion rates.	M
ALT 3-e-1: Measure only diversion, not disposal, and develop a standard system to measure diversion.	M
ALT 3-e-2: Measure only recycling and composting, but allow jurisdictions a source reduction credit.	M
ALT 3-g-1: Re-evaluate suitability of 50% diversion for all jurisdictions, and determine if different levels can be based on waste stream characteristics.	M
ALT 3-g-2: Measure disposal separately for residential, commercial/industrial, and construction/demolition. Set separate/different goals for each sector and concentrate on the sector(s) that can provide the most diversion.	M

ALTERNATIVES FORWARDED TO SYNTHESIS GROUP	Meas/Other
ALT 3-i: Look only at the diversion rate TREND within each jurisdiction. Jurisdictions meeting the requirements would have a positive trend with an increasing diversion rate.	M
ALT 5-a-1: Allot jurisdiction disposal as half of estimated generation (50% diversion) and then impose a fine per ton disposed over that limit.	M
ALT 5-a-2: Base the 50% goal on reducing landfill capacity used by 50%.	M
ALT 6-a-3: Increase individual awareness and responsibility for waste by requiring meaningful pay-as-you-throw programs; include true cost of disposal in garbage bills, etc.	O
ALT 9: Require a second base year to be established. If jurisdictions have already done a new, accurate base year, they have already met this requirement. If jurisdictions are still relying on a 1990 or 1991 base year, they need a new one.	M
ALT 12: Allow Local Task Forces to review and approve Annual Reports, requests for Time Extensions and requests for Alternative Diversion Requirements for the jurisdictions within their County or Regional Agency; also require self certification letter from the jurisdiction to the CIWMB and require public review.	M
ALT 13: Allow jurisdictions to self-certify compliance with AB 939 after they have been determined to be in compliance with requirements for 2000 and beyond.	M
ALT 14: Regionalize CIWMB offices and have structure like the State Water Resources Control Board OR establish branch office to provide technical assistance for local programs.	O