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February 9, 2012

TO: Members of the MAG Solid Waste Advisory Committee

FROM: Christine Smith, Phoenix, Chair

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Thursday, February 16, 2012 - 10:00 a.m.
MAG Office, Suite 200 - Saguaro Room
302 North 1st Avenue, Phoenix

A meeting of the MAG Solid Waste Advisory Committee has been scheduled for the time and place noted above. Members of the Solid Waste Advisory Committee may attend the meeting either in person, by videoconference or by telephone conference call. Those attending by videoconference must notify the MAG site three business days prior to the meeting. If you have any questions regarding the meeting, please contact Chair Smith or Julie Hoffman at 602-254-6300.

Please park in the garage underneath the building, bring your ticket, and parking will be validated. For those using transit, Valley Metro/Regional Public Transportation Authority will provide transit tickets for your trip. For those using bicycles, please lock your bicycle in the bike rack in the garage.

In 1996, the Regional Council approved a simple majority quorum for all MAG advisory committees. If the MAG Solid Waste Advisory Committee does not meet the quorum requirement, members who arrived at the meeting will be instructed a legal meeting cannot occur and subsequently be dismissed. Your attendance at the meeting is strongly encouraged. If you are unable to attend the meeting, please make arrangements for a proxy from your entity to represent you.

Pursuant to Title II of the Americans with Disabilities Act (ADA), MAG does not discriminate on the basis of disability in admissions to or participation in its public meetings. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Jason Stephens at the MAG office. Requests should be made as early as possible to allow time to arrange the accommodation.

TENTATIVE AGENDA

COMMITTEE ACTION REQUESTED

1. Call to Order

2. Call to the Audience

An opportunity will be provided to members of the public to address the Solid Waste Advisory Committee on items not scheduled on the agenda that fall under the jurisdiction of MAG, or on items on the agenda for discussion but not for action. Members of the public will be requested not to exceed a three minute time period for their comments. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless the Solid Waste Advisory Committee requests an exception to this limit. Please note that those wishing to comment on action agenda items will be given an opportunity at the time the item is heard.

3. Welcome and Introductions

Members of the Solid Waste Advisory Committee will be given an opportunity to introduce themselves to the Committee.

4. Approval of the January 25, 2005 Meeting Minutes

5. Committee Role and Responsibilities

The Maricopa Association of Governments is the designated Regional Solid Waste Management Planning Agency for the Maricopa County area. The MAG Solid Waste Advisory Committee serves in an advisory capacity to the MAG Management Committee and MAG Regional Council on pertinent regional solid waste issues. The role and responsibilities of the Solid Waste Advisory Committee will be discussed. Please refer to the enclosed material.

2. For information.

3. For information and discussion.

4. Review and approve the January 25, 2005 meeting minutes.

5. For information and discussion.

6. MAG Regional Solid Waste Management Plan

In response to Section 4006 (b) of the Resource Conservation and Recovery Act of 1976, MAG was designated by the Governor as the regional agency responsible for undertaking areawide solid waste management planning. The MAG Regional Solid Waste Management Plan was prepared in accordance with this role. The Plan is designed to provide for systems level regional solid waste management planning. The last update of the Plan was completed in 2005 and it is located on the MAG website at http://www.azmag.gov/Documents/pdf/cms_resource/SWPlan26455.pdf. An overview of the Plan will be provided. Please refer to the enclosed material.

7. Solid Waste Advisory Committee Survey

At the October 12, 2011 MAG Management Committee meeting, interest was expressed in reconvening the MAG Solid Waste Advisory Committee to discuss solid waste issues and best practices. A Committee survey will be discussed as a starting point to assist in stimulating future discussions.

8. Tentative 2012 Meeting Schedule for the MAG Solid Waste Advisory Committee

For your information and convenience, the Tentative 2012 Meeting Schedule for the MAG Solid Waste Advisory Committee is provided. Please refer to the enclosed material.

9. Call for Future Agenda Items

The Chair will invite the Committee members to suggest future agenda items.

6. For information and discussion.

7. For information and discussion.

8. For information and discussion.

9. For information and discussion.

DRAFT MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
SOLID WASTE ADVISORY COMMITTEE MEETING

Tuesday, January 25, 2005
MAG Office Building
Phoenix, Arizona

MEMBERS ATTENDING

Bruce Henning, Phoenix, Chair
Avondale: Cindy Blackmore
#Chandler: Shereen Sepulveda
*El Mirage: Lucky Roberts
#Gila River Indian Community:
Candice Bell
Gilbert: Bill Hancock
#Glendale: Norm Gumenik
#Goodyear: John Acosta
*Litchfield Park: Luke Gutierrez
Mesa: Will Black
Peoria: Jesse Duarte
Paradise Valley: Andrew Cooper
Salt River Pima Maricopa Indian
Community: Randal Watkins
for B. Bobby Ramirez
Scottsdale: James Livingston

*Surprise: Janet Ramsay
#Tempe: Ron Lipinsky for Oliver Ncube
Tolleson: Jason Earp for Mark Berrelez
*Wickenburg: Harry Parsi
*Maricopa County: Ash Madhok
*Arizona Public Service: Martin Eroh for
Barbara Lockwood
*Salt River Project: Dan Casiraro
Solid Waste Association of North America:
Mark Powell
*Valley Forward Association: Don Cassano
*Arizona Clean and Beautiful:
Leandra Lewis
#Arizona Chamber of Commerce:
David Wallis

*Those members neither present nor represented by proxy.
#Attended by telephone conference call.

OTHERS PRESENT

#Town of Queen Creek: Mark Young
City of Mesa: Craig Smith

Maricopa Association of Governments:
Julie Hoffman
Maricopa Association of Governments:
Brenda Day

1. Call to Order

A meeting of the MAG Solid Waste Advisory Committee was conducted on Tuesday, January 25, 2005 at 10:00 a.m. Bruce Henning, Chair, City of Phoenix, called the meeting to order.

2. Agenda Announcements

Chair Henning provided an opportunity for members to share announcements with the group. No announcements were provided.

3. Call to the Audience

Chair Henning noted that no members of the public were present for a call to the audience and no public requests to address the Committee were received.

4. Approval of the January 11, 2005 Meeting Minutes

The Committee reviewed the draft minutes from the January 11, 2005 meeting. James Livingston, City of Scottsdale, moved and Bill Hancock, Town of Gilbert, seconded and it was unanimously carried to approve the minutes.

6. Draft Revision of the MAG Regional Solid Waste Management Plan

This item was taken out of order since the item five speaker was not yet present. Brenda Day, MAG staff, indicated that, in July 2004, the Solid Waste Advisory Committee and MAG Management Committee had reviewed the Draft Revision of the MAG Regional Solid Waste Management Plan and comments received were incorporated. On November 3, 2004, the Committee authorized that a public hearing on the draft plan be conducted. The Committee conducted the public hearing on January 11, 1005, and a copy of the hearing transcript was distributed to the Committee. No public comments on the draft plan were received.

Ms. Day indicated that the Committee is requested to recommend approval of the draft plan. If plan approval is recommended, the MAG Management Committee is anticipated to consider the recommendation and possibly concur on February 9, 2005. It is anticipated that the MAG Regional Council may take official action to approve the plan on February 23, 2005. A copy of the Draft Resolution to Adopt the MAG Regional Solid Waste Management Plan was distributed to the Committee. The final plan would be transmitted to the Arizona Department of Environmental Quality (ADEQ) and the U.S. Environmental Protection Agency.

Chair Henning inquired when the next plan update would occur and indicated that too much time had passed between the 1993 plan and the current major revision.

Ms. Day indicated that the MAG member agencies developed a continual plan evaluation process which is identified in the plan that includes annual consideration of the plan by the Solid Waste Advisory Committee to determine whether an update is needed. She indicated that, prior to the current major plan revision, updates to the tables containing information on solid waste facilities, plans and programs had been conducted.

Mr. Livingston moved and Will Black, City of Mesa, seconded and it was unanimously carried through a roll call vote by the Committee to recommend approval of the Draft Revision of the MAG Regional Solid Waste Management Plan.

5. ADEQ Update on Solid Waste Management Legislation

Chair Henning indicated that the item five speaker was now present. Jim Buster, ADEQ Legislative Consultant, provided an update on solid waste management legislation. He indicated that ADEQ would be busy this session since the Department is criticized during the Sunset Review. ADEQ

wishes to resolve any issues and be in good standing at the Legislature. ADEQ has been challenged by budget cuts during three of the last four sessions. ADEQ anticipated that Senator Allen would be the Environmental Committee Chair and sponsor environmental bills in the House this session. However, Senator Allen did not become a Chair or member of the Environmental Committee, and both Environmental Committee Chairs are new to the Committee.

Mr. Buster indicated that he would address three House Bills which each have correlating Senate Bills. House Bill 2358 is an omnibus solid waste program reform bill intended for general clarification of definitions and consensus language corrections from a broad group of stakeholders. More stakeholder meetings are planned, beginning this Thursday.

House Bill 2359 is doer bill intended to increase the landfill tipping fee by 15 cents per ton. ADEQ proposed a doer bill for a 15 cent per ton fee increase last year which would have increased the average homeowner's cost by 3 cents per month. However, the bill failed due to late opposition by the County Board of Supervisors. Upon failure of the bill, a portion of the existing tipping fees were diverted from the Recycling Fund and used for ADEQ inspection & compliance operations, although this was not the ADEQ Director's preferred option.

Mr. Buster indicated that ADEQ needs more funding for solid waste facility inspections and compliance. There are 19 landfills in Arizona, and ADEQ is concerned that some may be Superfund sites waiting to happen. Currently, approximately \$15 million from the Arizona General Fund and \$160 million to \$170 million in Federal funding goes to ADEQ Solid Waste Programs. There has been a 39 percent cut in General Funds over the last four years. The Federal funding is tied to specific programs and cannot be shifted to other programs to relieve State budget cuts.

Mr. Buster indicated that House Bill 2360 proposes to lift the penalty cap for solid waste enforcement violations. Currently, solid waste violations are limited by a \$1,000 per day cap and a cumulative cap of \$15,000. Other divisions generally do not have a cumulative penalty cap. The Department wishes to lift the cumulative cap due to concern that it may encourage bad actors to continue to violate because they know the penalty will top out at \$15,000. Consensus has not been reached on what defines a bad actor. The bills are sponsored by Representative Barnes and Senator Allen in the House. He indicated that ADEQ had a good meeting with Senator Flake and hopes to work through the issues.

Andrew Cooper, Town of Paradise Valley, inquired why the County Board of Supervisors opposed the bill to increase tipping fees during the previous session.

Mr. Buster indicated that he had previously been a member of the County Board of Supervisors. He indicated that the Board was concerned that they would have to absorb the costs because their constituents would not want to pay the fee increase, and the Board was reluctant to give the regulator more money for facility inspections. He indicated that ADEQ wants to be proactive and help landfills comply with regulations and monitoring requirements to prevent more Superfund sites.

Mr. Cooper inquired how much revenue would be generated with a 15 cent per ton increase in the tipping fee.

Mr. Buster indicated that, based on estimates prepared for Supervisor Andrew Kunasek last session, approximately \$1.2 million would be generated statewide, with about \$500,000 to \$600,000 of the

total in Maricopa County.

Mr. Black inquired whether successful passing of the bill to increase tipping fees would result in the termination of funneling of the Recycling Fund.

Mr. Buster indicated that ADEQ is not proposing to funnel from the Recycling Fund again this year, and the ADEQ Director is dead set against taking from the Recycling Fund. He indicated that last year's revenue diversion from the Recycling Fund is set to go away after one year.

Shereen Sepulveda, City of Chandler, inquired what the Recycling Fund monies were used for this year.

Mr. Buster indicated that the Recycling Fund monies passed through to municipalities and Counties for public education on recycling and funded overhead for the ADEQ recycling program.

Ms. Sepulveda indicated that there is concern that when sales tax is given away and used for a different purpose for one year, it is hard to get it back.

Mr. Buster indicated that, at the Legislature, the Recycling Fund revenue diversion for solid waste facility inspections and compliance was designed to end after one year.

Chair Henning inquired how soon ADEQ would request another tipping fee increase if the 15 cent per ton tipping fee increase bill were passed to generate \$1.2 million.

Mr. Buster indicated that ADEQ needs to fund the program at an adequate level. The Department does not want to ask for another increase soon after obtaining the proposed 15 percent increase, although such items are always subject to legislative appropriation, even with comfort language in the bill. He indicated that a concern regarding the possibility of future ADEQ requests for increased fees should not prevent the passing of the current proposed fee increase bill. The best solution is to go forward and ask the Legislature for more funding now. He indicated that it appears that most of the funding is going toward the Arizona Department of Water Resources this year.

David Wallis, Arizona Department of Commerce, indicated that the Counties have concerns regarding the timing of passing the bill with a 15 cent per ton fee increase. He indicated that the bill contains a proposal for cities to develop an ordinance to pass the fee increase onto the citizens, but it is not clear how Counties would deal with the increase. He inquired whether the bill would become effective immediately upon signing.

Mr. Buster indicated that statutory requirements would be in effect the first of the next Fiscal Year. He indicated that ADEQ did not propose a fee increase through rules, because rules take much longer.

Mr. Wallis indicated that it appears that the bill would become effective when signed. He inquired how many full time employee positions ADEQ would fund if the 15 cent per ton fee increase bill were passed, and whether all positions would be for landfill inspections and compliance.

Mr. Buster indicated that most of the increased funding would go toward compliance. At the end of

the Fiscal Year, the diverted Recycling Funds go away and the full time employees will only be able to do half the inspections that they should. He indicated that the ADEQ Director wishes to be proactive and the Department is concerned that landfills should be checked in a more timely fashion, which is difficult with limited staff.

Mr. Black inquired what would happen if the bill dies and ADEQ does not get the 15 cent per ton tipping fee increase.

Mr. Buster indicated that ADEQ would likely lose the couple of full time employee positions that were hired with the diverted Recycling Funds. The ADEQ solid waste inspection and compliance staff has decreased from 49 full time employees to about 20. He indicated that, unlike air quality and water quality divisions, the solid waste division is dependent on the General Fund.

Mark Powell, Solid Waste Association of North America, inquired who gets the increased penalty monies if the cumulative penalty cap is lifted.

Mr. Buster indicated that the penalty monies go directly to the General Fund and ADEQ is prohibited from taking those monies. He indicated that ADEQ has never had a motive to enact penalties just for the purpose of generating revenue for the Department.

Mr. Cooper inquired what percent of the solid waste budget is subsidized by the General Fund.

Mr. Buster indicated that he is not sure of the exact percent, although he knows it is a large portion of the overall budget. He indicated that he could find out and report back to Mr. Cooper.

Chair Henning thanked the participants for attending and called for adjournment of the meeting.

MAG COMMITTEE STRUCTURE

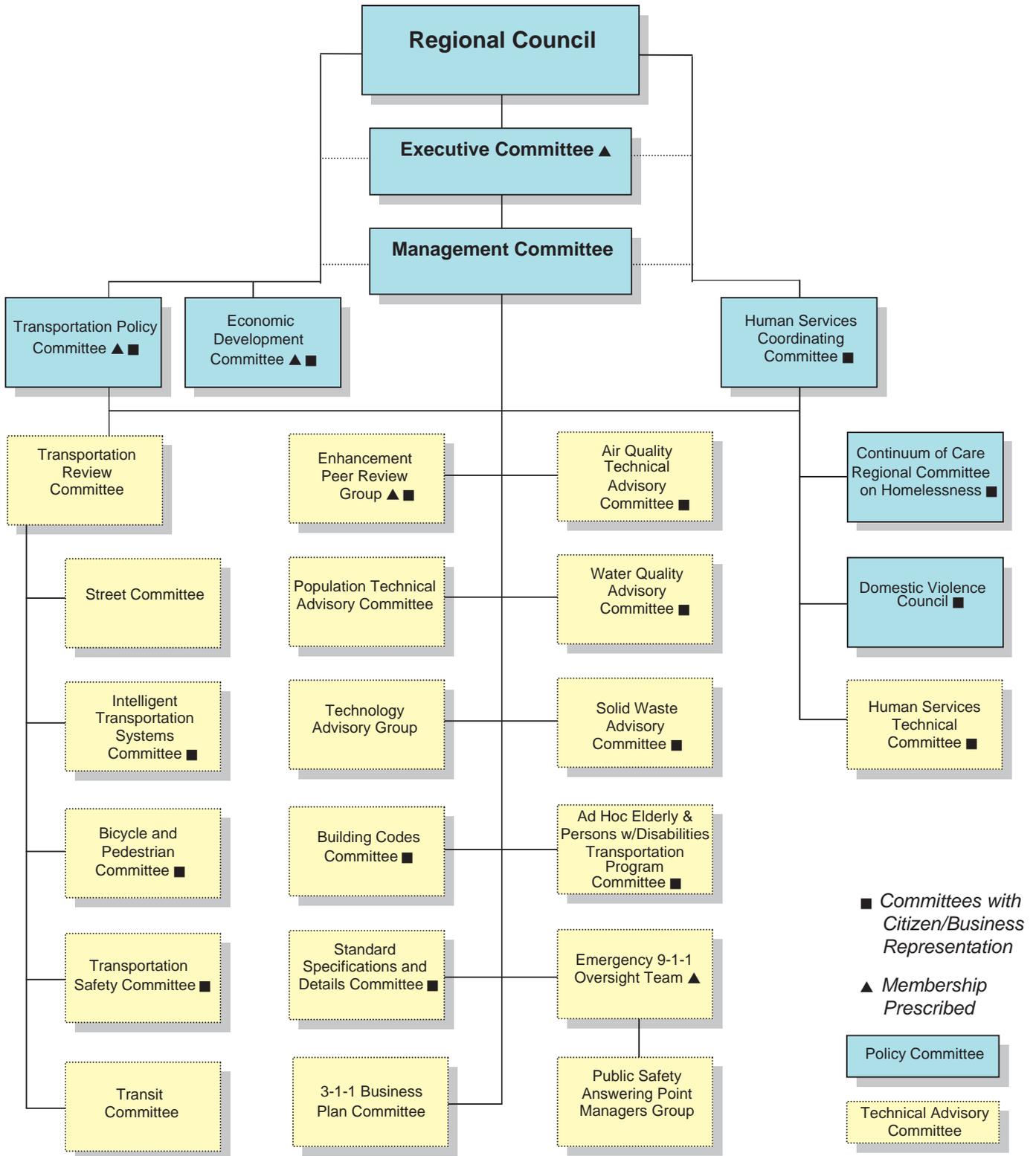


Figure 7: MAG Committee Structure

REGIONAL SOLID WASTE MANAGEMENT PLAN UPDATE

MARICOPA ASSOCIATION OF GOVERNMENTS

February 2005

Maricopa Association of Governments
302 North First Avenue Suite 300
Phoenix Arizona 85003
Web site: www.mag.maricopa.gov

A Voluntary Association of Local Governments in Maricopa County

City of Apache Junction ▲ City of Avondale ▲ Town of Buckeye ▲ Town of Carefree ▲ Town of Cave Creek ▲ City of Chandler ▲ City of El Mirage ▲ Town of Fountain Hills ▲ Town of Gila Bend ▲ Gila River Indian Community ▲ Town of Gilbert ▲ City of Glendale ▲ City of Goodyear ▲ Town of Guadalupe ▲ City of Litchfield Park ▲ Maricopa County ▲ City of Mesa ▲ Town of Paradise Valley ▲ City of Peoria ▲ City of Phoenix ▲ Town of Queen Creek ▲ Salt River Pima Maricopa Indian Community ▲ City of Scottsdale ▲ City of Surprise ▲ City of Tempe ▲ City of Tolleson ▲ Town of Wickenburg ▲ Town of Youngtown ▲ Arizona Department of Transportation

EXECUTIVE SUMMARY

The members of the Maricopa Association of Governments (MAG) have voluntarily come together to create a regional solid waste management plan to guide the future development of programs and facilities in the MAG region. This regional planning function was authorized by the federal Resource Conservation and Recovery Act of 1976. Pursuant to this act, the Maricopa Association of Governments was designated in 1979 by the Governor as the regional solid waste planning agency for the MAG region. This document is a comprehensive revision of the December 15, 1993 MAG Regional Solid Waste Management Plan.

Generally, the plan, which constitutes a regional plan developed under the State of Arizona Solid Waste Plan, contains:

- Historical background.
- Goals.
- Description of the regional waste stream.
- Evaluation of waste problems.
- Review of financing options.
- Description of current solid waste programs and facilities.
- Identification of future needs and strategies for integrated solid waste management.
- New and innovative solid waste facility technologies.

MAJOR CHANGES SINCE THE 1993 MAG PLAN

Numerous changes have occurred since the 1993 MAG Plan was prepared, including:

- Major population growth in the metropolitan Phoenix area.
- Adoption of new State and Federal regulations affecting solid waste management systems, planning and programs including medical waste, incineration, waste tires, used oil, lead acid batteries, nonhazardous liquid waste, voluntary remediation, brownfields cleanup and redevelopment and special waste.
- A Maricopa County shift away from the proposed regional role as landfill developer and lead agency for solid waste programs. An alternate trend evolved in which the private sector companies developed landfills and cities and towns developed their own individual solid waste programs. The County provides for waste transfer for the unincorporated areas and waste tire recycling services for all areas of the County, and protects public health under the Maricopa County Health Code.
- Private sector development of regional landfills along the urbanized fringe to service multiple municipalities rather than landfill development by Maricopa County as anticipated. In addition to private regional landfills, several publicly owned landfills

provide service to a particular city or town. It is anticipated that this trend will continue.

- An increase in the number and complexity of integrated waste management programs that divert materials from the landfill including programs for waste reduction, recycling, backyard composting, green waste mulching, white goods, and household hazardous waste.
- A limited movement toward mulching and backyard residential composting to divert materials from the landfill. Large scale municipal composting was originally envisioned to divert waste from landfills, but several municipalities found it not to be economical due to high production costs and poor or no market for the mulch/compost. Some large scale composting operations are still active in the region.
- A shift to private sector ownership and data tracking of nonhazardous liquid waste disposal sites. The October 9, 1993 U.S. Environmental Protection Agency prohibition of liquid waste co-disposal in solid waste landfills led to the end of County and municipal liquid waste disposal site ownership and comprehensive data tracking through a manifest record system.
- A discontinuation of medical waste incineration, primarily due to enactment of more stringent EPA air quality regulations regarding emissions from incineration facilities. Medical waste in Maricopa County is treated through alternative technologies, such as steam sterilization.
- A goal shift from evaluating waste combustion with energy recovery to evaluating landfill gas to energy. Waste combustion can impact air quality since it involves burning solid waste to create heat and converting it to electricity. Due to the EPA designation of Maricopa County as a nonattainment area for certain air quality constituents, landfill gas to energy is more desirable. Rather than allowing landfill gas to escape into the air, the gas is captured and converted to energy.

HISTORICAL BACKGROUND

The plan development process was formally initiated in 1990 with a regional waste stream study. The waste stream study was followed by an assessment of local and regional waste management needs completed in 1991. Subsequently, the MAG Regional Council established a scope of work for producing the MAG Regional Solid Waste Management Plan in July 1991. Following this action, the planning process was undertaken by the MAG Solid Waste Coordinating Committee, the MAG Solid Waste Technical Advisory Committee and two MAG solid waste working groups. These groups, respectively, were made up of elected officials representing MAG member agencies, solid waste management professionals representing MAG member agencies, and individuals for the public and

private sectors with technical expertise in solid waste management.

DEVELOPMENT OF CURRENT PLAN UPDATE

The MAG Solid Waste Advisory Technical Committee has been renamed the MAG Solid Waste Advisory Committee, and the MAG Solid Waste Coordinating Committee no longer exists. The MAG Solid Waste Advisory Committee, comprised of representatives from local government agencies, economic and environmental interests, and private citizens, provides technical expertise and makes recommendations on solid waste issues and plan updates to the MAG Management Committee. The MAG Management Committee, composed of the chief administrator for each member agency, makes recommendations to the MAG Regional Council. The Plan revision development process culminates with approval of the Plan by the MAG Regional Council, the official decision making body of MAG. Following local review and adoption, the Plan will be transmitted to the Arizona Department of Environmental Quality (ADEQ) and the U.S. Environmental Protection Agency (EPA).

For the current plan update, the MAG Solid Waste Advisory Committee reviewed and commented on critical points in plan development, including the Scope of Work and the Survey of MAG Member Agencies. In January 2003, a major survey was sent to all MAG cities and towns, Maricopa County, and Indian Communities. Through the survey and follow up interviews, MAG member agencies provided input on key elements of the plan. Private solid waste service providers were also requested to provide information. At the request of member agencies, new sections were added to the plan to describe new and innovative technologies and brownfields cleanup and redevelopment programs.

Jurisdictional review was an important component of plan development and each MAG member agency directly reviewed and indicated their preferences regarding plan elements prior to MAG Regional Council action. Public review of the plan was conducted through public meetings, public notice, and a public hearing conducted in accordance with federal level requirements.

IMPLEMENTATION OF THE PLAN

Various aspects of the plan are implemented by the cities, towns, Maricopa County, Maricopa Association of Governments, the State of Arizona, and the private sector. An annual plan review process will include consideration of changes in the solid waste programs and facilities in the region, the effects of new legislation, rules and best management practices, and new or innovative technologies.

REGIONAL SOLID WASTE GOALS

The overall goal of the Plan is the prevention of adverse effects on public health and environment resulting from improper solid waste collection, processing or disposal, and the

encouragement of methods for cost efficient recovery, treatment and disposal. There has been a trend in the region, by both public and private sectors, toward development of highly capitalized solid waste facilities serving regional constituencies.

In development of the initial MAG Plan, the MAG Solid Waste Committees evaluated regional waste problems and management options and derived goals for each integrated waste management component. For the current plan update, MAG member agencies were requested to indicate whether these goals are still appropriate and identify any new regional goals.

Arizona State Law requires each county, city or town to provide or contract for public facilities for the safe and sanitary disposal of solid waste generated within its jurisdiction. Local agencies in the region are also required to provide residents the opportunity to engage in recycling and waste reduction. The State of Arizona has not mandated numeric waste stream goals but State policy recommends waste minimization through source reduction, recycling and reuse.

The regional goal for integrated waste management is based on State and Federal level policy. The regional goal for waste reduction and recycling is to continue current practices with local agencies developing achievement targets consistent with local programs and conditions, and to encourage public education and market development for recycled items.

The regional goal for landfilling in the region is to proceed with continuing operations at several existing regional or sub-regional landfills and new development of at least two planned landfills. At least one landfill is planned in nearby Pinal County. Transfer stations associated with regional landfills could be developed on the basis of local or sub-regional needs. Operation will continue at multiple existing transfer stations and six new transfer stations/combined materials recovery transfer facilities are anticipated in the planning period.

DESCRIPTION OF THE REGIONAL WASTE STREAM

In the MAG 1991 Regional Waste Stream Study, six classes of nonhazardous wastes were identified as part of the regional solid waste stream. These classes are: residential waste, commercial and industrial waste, liquid and semisolid waste, construction waste, medical waste, and landscape waste. Two subclasses have been established under the residential waste class: household hazardous waste and white goods waste.

For the most part, residential household waste from single family structures is collected by municipal public works departments and disposed of in public or private landfills. Wastes from multifamily complexes is typically collected by private haulers as part of their commercial waste collection service, although there are some exceptions. The amount of residential household waste generated in a municipality is primarily driven by its population size and secondarily influenced by population density, income and level of urbanization.

In Maricopa County, for the period of 1989 to 2002, the estimated average residential waste generation rate decreased from 2.5 pounds per capita per day to approximately 2.36 pounds per capita per day. These rates were based on the amount of residential waste generated as reported by jurisdictions and population levels. At the national level, efforts to reduce waste generation increased through the 1990's as the nation realized the value of its financial and material resources, according to the U.S. EPA.

The nation made steady progress in waste prevention between 1990 and 2000 based on economic and waste data in the *U.S. EPA Municipal Solid Waste in the United States: 2000 Facts and Figures Executive Summary*. Yard trimmings made up almost half of the total national waste prevented in year 2000. EPA attributes the waste prevention achievements to bans on landfilling of yard trimmings, successful composting campaigns, the use of mulching lawn mowers, and reductions in containers and packaging.

In Maricopa County, the estimated generation rate for commercial and industrial waste is based on the amount of waste generated as reported by jurisdictions and the employment level. In 2002, the Maricopa County average commercial waste generation rate was estimated at 2.02 pounds per employee per day. This rate varied significantly among jurisdictions due to the differences in their commercial and industrial base.

For each jurisdiction, the estimated amount of residential and commercial/industrial waste generated in year 2002 is shown in Table 4.1. These estimates were derived based on data reported by jurisdictions. In 2002, approximately 1,996,176 tons of residential and commercial/industrial waste were generated within Maricopa County. Of this total, approximately 71 percent was generated by residential sources and 29 percent was generated by commercial/industrial sources.

Nonhazardous liquid waste (NHLW) includes waste from septic tanks, chemical toilets, food processing operations, water softening processes, cooling towers, restaurant grease traps, and car wash sump sludges. Since this waste class includes many different sources, estimations of quantities are best determined by the amount disposed at privately owned sites and wastewater treatment plants. The amount of nonhazardous liquid waste generated in Maricopa County has increased from about 23.1 million gallons per year in 1991 to 44.7 million gallons per year in 2002. Nonhazardous liquid waste disposal options in Maricopa County include five privately owned sites and two publicly owned wastewater treatment plants.

Construction debris is generated as a byproduct of construction, demolition, or maintenance of residential, commercial, industrial and infrastructure. Approximately 923,208 tons of construction debris was disposed in Maricopa County between March 2002 to March 2003, according to ADEQ waste disposal tipping fee data. There are five construction and demolition debris landfills in Maricopa County. This waste type is also accepted at some solid waste landfills, such as Butterfield Station Landfill.

Medical waste is generated by hospital sources and nonhospital sources such as physicians and dentists. About 10,337 tons of medical waste was generated in Maricopa County in 1989. In year 2002, this total increased to 16,683 tons, based on data from the Arizona Department of Health Services and the U.S. Census Bureau. There are two medical waste transfer stations in Maricopa County and one medical waste treatment facility which uses autoclaving as an alternative to incineration, according to ADEQ.

Landscape waste is organic waste material produced in the maintenance of home and business lawns, gardens, parks and open spaces. In year 1990, about 413,000 tons of landscape waste was generated in Maricopa County. In year 2002, about 623,593 tons of landscape waste was generated by five municipalities in Maricopa County. This total was estimated based on yard trimmings data reported by the Cities of Chandler, Glendale, Mesa, Phoenix and Scottsdale. These municipalities have developed green waste collection programs and frequently encourage backyard composting at the residential level.

Approximately 296,130 tons of recyclable materials were collected within seven cities and towns in year 2002 as reported by Carefree, Chandler, Gilbert, Glendale, Mesa, Phoenix, and Scottsdale. The newspaper category made up the largest portion of the total collected on a percent by weight perspective. This category was followed by yard trimmings, tires, cardboard, paper, plastic and glass. The remaining categories, including phone books, steel cans, aluminum cans, steel/iron scrap, nonferrous scrap, woodwaste, pulp substitutes, used oil and textiles, comprised a minimal part of the total collected.

In regard to household hazardous waste generation, data reported by the City of Phoenix Batteries, Oil, Paint and Antifreeze (BOPA) Collection Program was used for the current Plan. The latex based paint category made up the largest category of the total on a percent by weight basis. The oil based paint category was the second largest, followed by recycled oil. Electronic waste, tires, antifreeze, white goods, and bulk pack were also collected.

SOLID WASTE MANAGEMENT FACILITIES AND PROGRAMS

The Plan describes existing and planned solid waste facilities and programs by jurisdiction. The description was compiled using information reported by MAG member agencies and private solid waste service providers. A matrix detailing the member agencies' solid waste facilities, programs, services and studies (collectively called plans) is shown in Table ES-1. Table ES-2 provides a list of private and public solid waste management facilities and facility information. Figure ES-1 provides a map depicting the locations of existing and planned solid waste facilities in Maricopa County.

Landfilling is anticipated to continue as the primary means of solid waste management in the MAG region. In Maricopa County, it is anticipated that there will be adequate overall landfill and transfer station capacity to meet the solid waste management needs through the current twenty year planning period and beyond, according to the *Draft March 2003*

MAG Regional Growing Smarter Implementation Solid Waste Report (Appendix E). The draft study was one of a series investigating the relationship between transportation and community systems preservation under the Transportation and Community Systems Preservation Pilot Program. In February 2003, the MAG Solid Waste Advisory Committee reviewed the study and comments received were incorporated.

The study compared the amount of landfill and transfer station capacity required to the amount of capacity available in Maricopa County through year 2050. Generally, the study approximated that there would be adequate overall landfill and transfer station capacity through 2050, although future landfill capacity may not be evenly distributed from a geographic perspective, and shifting to alternative landfills may result in a need for more transfer stations.

**TABLE ES-1
MEMBER AGENCY SOLID WASTE MANAGEMENT PLAN**

| ENTITIES | | COMPONENTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|-----------------|----------|---------|----------|------------|----------|-----------|----------------|-----------|------|---------|----------|----------|-----------|-----------------|-----------------|------|-----------------|--------|---------|-------------|--------|------------|----------|-------|----------|------------|-----------|--|
| | | APACHE JUNCTION | AVONDALE | BUCKEYE | CAREFREE | CAVE CREEK | CHANDLER | EL MIRAGE | FOUNTAIN HILLS | GILA BEND | GRIC | GILBERT | GLENDALE | GOODYEAR | GUADALUPE | LITCHFIELD PARK | MARICOPA COUNTY | MESA | PARADISE VALLEY | PEORIA | PHOENIX | QUEEN CREEK | SRPMIC | SCOTTSDALE | SURPRISE | TEMPE | TOLLESON | WICKENBURG | YOUNGTOWN | |
| SOURCE REDUCTION | Goals | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Studies | | | | | | | | | | | | E | | | | | E | | | E | | | E | | | | | | |
| | Programs | | | | | | E | | | | | | E | | | | | E | | | E | | | | P | | | | | |
| | • Waste reduction education | | | | | | E | | | | | E | E | E | | | | E | | | E | | E | E | P | E | | | | |
| | • Other | | | | | | | | | | | | | E | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RECYCLING | Goals | | | | | | | | | | | | | | | | | E | | | E | | E | E | E | E | | | | |
| | Studies | | | | | | E | | | | | E | E | | | | | E | | | E | | E | E | E | E | E | | | |
| | Programs | | E | C | E | E | E | | | | | E | E | E | | C | | E | | E | E | C | E | E | P | E | | | | |
| | • Buyback center | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | • Curbside recycling | | E | | E | E | E | | E | | | E | E | C | | | | E | E | C | E | | C | E | P | E | C | | C | |
| | • Drop-off recycling | E | | C | E | E | E | C | | E | | E | E | E | E | E | | E | | E | E | | E | E | P | E | C | | E | |
| | • Education | | E | | E | E | E | | | E | | E | E | E | E | E | | E | | | E | | C | E | P | E | P | | P | |
| | • Landscape waste composting | | | | C | | | | | C | | | | | | | | E | | | | | E | | P | | | | | |
| | • Landscape waste mulching | | | | C | | | E | | C | | | | | | | | E | | C | E | | E | E | P | | | | | |
| | Facilities | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | • Combined materials recovery transfer facility | | | | | | | | | | | | | | | | | | | | | E | | | | | | | | |
| • Materials recovery facility | | | | | | | | | | | | E | | | | | | | | | E | | E | | | | | | | |
| WASTE ENERGY GAS | Goals | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Studies | | | | | | | | | | | | | | | | | | | | | E | | | | | | | | |
| | Waste-to-Energy facility | | | | | | | | | | | | | | | | | | | | | C | | E | | | | | | |
| | Landfill gas to Energy facility | | | | | | | | | | | | | C | | | | | | | | C | | E | | | | | | |
| LANDFILLING | Goals | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Studies (for landfills or transfer stations) | | | | | | E | | | | | | | | | | | | | | | E | | E | | | | E | | |
| | Facilities | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | • Landfill | E | | | | | E | | | | | E | | | | | C | | | | E | E | E | | | | | | | |
| | • Transfer station | | E | | | E | E | | | | E | | | C | | | E | | | | E | | | E | | | | E | | |
| OTHER | • Permanent household hazardous waste collect ctr | | | | | | P | | | | | P | | | | | | | | | | | | | | | E | | | |
| | • Sludge waste study | | | | | | E | | | | | | | | | | E | E | | | E | | | E | E | E | | E | | |
| | • Liquid waste study | | | | | | | | | | | | | | | | | E | | | E | | | E | E | E | | | | |
| | • Household hazardous waste collection | E | C | | E | E | E | P | | E | E | E | E | E | | E | | E | | E | E | | C | E | P | E | | | P | |
| | • Brownfields cleanup & redevelopment activity | | E | | | | E | | | | | | | | | | E | | | | E | | | | | | E | | | |

Source: MAG Solid Waste Information Collection Survey 2003, MAG Member Agency Interviews and Web sites and publications 2003.

**TABLE ES-2
MAG SOLID WASTE MANAGEMENT FACILITIES SUMMARY
2002**

| OPERATING SOLID WASTE LANDFILLS | | | | | | |
|--|---|-----------------|-----------------------------|--|---|---|
| LANDFILL NAME | REMAINING CAPACITY (Million Cubic Yards) | REMAINING YEARS | ANTICIPATED YEAR OF CLOSURE | OWNER | LOCATION | OTHER COMPONENTS |
| Apache Junction | | 10 | 2012 | Allied Waste Industries, Inc. | Tomahawk & Baseline. 4050 Tomahawk Road Apache Junction, Arizona | |
| Butterfield Station | | 108 | 2110 | Waste Management, Inc. | One mile north of 238 on 99th Ave. 40404 South 99 th Avenue Mobile, Arizona 85239 | Generally accepts MSW, C & D debris, special wastes, non-hazardous de-watered sludges, green waste, NHLW. |
| Chandler | 13,888 (250,000 tons) Assuming 1,800 lbs = 1 ton | 2.5 | June 2005 | City of Chandler | Northwest corner of Ocotillo Road & McQueen Road. 3200 South McQueen Road Chandler, Arizona | Life Cycle. Current last cell is Subtitle D. |
| Glendale | 39 | 43 | 2046 | City of Glendale | 115 th Ave & Glendale Ave (½ mile east of Agua Fria River). 11480 West Glendale Avenue Glendale, Arizona | Landscape waste grinding was discontinued July 2002. |
| Northwest Regional | 85 | 99 | 2102 | Waste Management Inc. | Deer Valley Road & 195 th Avenue. 19401 West Deer Valley Road Surprise, Arizona 85387 | Waste tire collection center. |
| Queen Creek | | 2 | 2003-2005 | Allied Waste Industries, Inc. | ½ mile south of Chandler Heights Road on Hawes Road. | Local concerns; availability of new Southeast regional facility. Planned site for composting of NHLW. Potential consideration of expansion. |
| Salt River Landfill | | 12 | 2015 | Salt River Pima Maricopa Indian Community (SRPMIC) | SR 87 & Gilbert Road. 13602 East Beeline Highway Scottsdale, Arizona | Life Cycle. Green waste mulching and composting, white goods program. |

**TABLE ES-2
MAG SOLID WASTE MANAGEMENT FACILITIES SUMMARY
2002**

| LANDFILL NAME | REMAINING CAPACITY (Million Cubic Yards) | REMAINING YEARS | ANTICIPATED YEAR OF CLOSURE | OWNER | LOCATION | OTHER COMPONENTS |
|--------------------|---|-----------------|-----------------------------|-------------------------------|---|------------------|
| Skunk Creek | 1 million cubic yards as of September 2004. | 1.5 | January 2006 | City of Phoenix | 1/4 mile west of I-17 on Happy Valley Road. 3165 West Happy Valley Road Phoenix, Arizona | |
| Southwest Regional | 26 | 48 | 2051 | Allied Waste Industries, Inc. | 8 miles south of Buckeye, east of State Highway 85. 24427 South Highway 85 Buckeye, Arizona 85326 | |

| PLANNED SOLID WASTE LANDFILLS | | | | | | |
|--------------------------------------|--------------------------|----------------------|--------------------------|--|---|------------------------------------|
| LANDFILL NAME | PLANNED CAPACITY (YEARS) | PLANNED SIZE (ACRES) | EXPECTED YEAR OF OPENING | OWNER | LOCATION | ADDITIONAL COMPONENTS (Conceptual) |
| SR 85 | Approx. 50 | 2,652 | 2006 | City of Phoenix | West of Southern Route (SR) 85 & south of Patterson Road. | |
| Southpoint Environmental | | | | Southpoint Environmental Services | In Maricopa County, approx. 200 feet from Pinal County line, north side of SR 238. Mobile, Arizona | |
| Cactus Waste | | | Under construction 2004 | Capital Environmental Resources, Inc./Waste Services, Inc. | 22841 E Deepwell Road Florence, Arizona (In Pinal County) | |

**TABLE ES-2
MAG SOLID WASTE MANAGEMENT FACILITIES SUMMARY
2002**

| CLOSED SOLID WASTE LANDFILLS | | | | |
|---|-----------------|--------------------|---|---|
| LANDFILL NAME | YEAR OF CLOSURE | OWNER | LOCATION | REMARKS ON CLOSURE |
| Cave Creek | 1999 | Maricopa County | 3 miles west of Cave Creek Road, south side of Carefree Highway. | Life Cycle. Transfer station constructed. |
| Gila Bend | 1997 | Maricopa County | 50252 South Old US 80. | RCRA regulations. Closed. |
| Gila River Indian Community (GRIC) District 6 | 1995 | GRIC | Between 51 st Avenue & the Gila River. | Life Cycle. Closed. |
| Hassayampa | 1997 | Maricopa County | Salome Highway & Ward Road/ Baseline Road. | RCRA regulations. Closed. |
| New River | 1997 | Maricopa County | 3½ miles west of I-17 on New River Road. | Closed. Transfer station constructed. |
| Sacaton | N/A | GRIC | South of the City limits of Chandler & East of I-10 in Pinal County. | Life Cycle. Closed, transfer station constructed. |
| Tri-City | N/A | SRPMIC | 11630 East Beeline Highway. Scottsdale, Arizona 85256 South side of State Highway 87 | Closed. Gas to energy conducted at capped landfill. |
| 27 th Avenue | 1995 | City of Phoenix | 27 th Avenue & Lower Buckeye Road. 3060 South 27 th Avenue Phoenix, Arizona | Closed. City developing end use master plan for Center for Environmental Learning and Enterprise. |
| Wickenburg | 1997 | Town of Wickenburg | NE quarter, Section 7, township 7N, range 5W. | Closed October 1, 1997. |

**TABLE ES-2
MAG SOLID WASTE MANAGEMENT FACILITIES SUMMARY
2002**

| INACTIVE LANDFILLS | | | | |
|---------------------------|----------------------|-----------------------|---|--|
| LANDFILL NAME | YEAR BECAME INACTIVE | OWNER | LOCATION | REMARKS ON INACTIVITY |
| Sierra Estrella | Unknown | Waste Management Inc. | 22087 N Ralston Road Maricopa, Arizona (In Pinal County) | Reportedly still a permitted facility. |

| EXISTING TRANSFER FACILITIES | | | | |
|-------------------------------------|------------------------|-----------------------|---|--|
| TRANSFER FACILITY NAME | OWNER/OPERATOR | LANDFILL FOR DISPOSAL | TYPES OF WASTE ACCEPTED | TRANSFER STATION LOCATION |
| Aguila | Maricopa County | Northwest Regional | Residential | 3 miles west of Aguila on State Highway 60. 48848 North 531 st Avenue Aguila, Arizona 85320 |
| Avondale | City of Avondale | Glendale | Residential | South of Lower Buckeye Road & 4 th Street, adjacent to old treatment plant site. 395 East Lower Buckeye Road Avondale, Arizona 85323 |
| Chandler | City of Chandler | | (Mini facility)- Accepts approximately 20 percent of Chandler residential waste. | McQueen & Queen Creek Roads 3200 McQueen Road Gilbert , Arizona |
| Cave Creek | Maricopa County | Northwest Regional | Residential | 8.3 miles east of I-17 on S Side State Highway 74. 3955 East Carefree Highway Carefree, Arizona 85331 |
| Deer Valley | Waste Management, Inc. | Northwest Regional | Generally accepts: MSW, C & D debris, site cleanup, paper products, landscape trimmings, commercial hauling. | ½ mile north of Deer Valley Road, just east of I-17. 2120 West Adobe Drive Deer Valley, Arizona 85027 |
| Lone Butte | Waste Management, Inc. | Butterfield Station | Generally accepts: C & D debris, site cleanup, paper products, landscape trimmings. | On Kyrene, south of Chandler Boulevard. 1000 South Kyrene Road Chandler, Arizona 85226 |
| Morristown | Maricopa County | Northwest Regional | Residential | North of 60-89-93 by Morristown Overpass 40135 North Highway 60 Morristown, Arizona 85342 |

TABLE ES-2
MAG SOLID WASTE MANAGEMENT FACILITIES SUMMARY
2002

| TRANSFER FACILITY NAME | OWNER/OPERATOR | LANDFILL FOR DISPOSAL | TYPES OF WASTE ACCEPTED | TRANSFER STATION LOCATION |
|------------------------|-------------------------------|-----------------------|---|---|
| New River | Maricopa County | Northwest Regional | Not available. | 3 ½ miles west of I-17 on New River Road. 41835 North Lake Pleasant Road New River, Arizona |
| Paradise | Allied Waste Industries, Inc. | Not available. | Not available. | South of Lower Buckeye Road, east of 51 st Avenue. 4845 West Lower Buckeye Road Phoenix, Arizona 85043 |
| Rainbow Valley | Maricopa County | Southwest Regional | Residential | 3 miles south of Ray Road on Rainbow Valley Road. 17795 South Rainbow Valley Road Goodyear, Arizona 85338 |
| Sacaton | GRIC | Butterfield | Residential | 2 miles south of Casa Blanca Road (BIA#1) on Casa Grande Highway (BIA#7). South of Chandler city limits & east of I-10 in Pinal County |
| Scottsdale | City of Scottsdale | SRPMIC | Residential, Commercial & Recyclables. | West of Pima on Union Hills. 8417 East Union Hills Scottsdale, Arizona 85255 |
| Skunk Creek | City of Phoenix | Transferred to MRF | City of Phoenix residential commingled recyclables. | 1/4 mile west of I-17 on Happy Valley Road. 3165 West Happy Valley Road Phoenix, Arizona |
| Sky Harbor | Waste Management, Inc. | Not available. | Generally accepts: Municipal, commercial haulers, general public. | North of University Drive, east of 40 th Street. 2425 South 40 th Street Phoenix, Arizona 85034 |

**TABLE ES-2
MAG SOLID WASTE MANAGEMENT FACILITIES SUMMARY
2002**

| TRANSFER FACILITY NAME | OWNER/OPERATOR | LANDFILL FOR DISPOSAL | TYPES OF WASTE ACCEPTED | TRANSFER STATION LOCATION |
|--|--|---|--|--|
| Wickenburg | Maricopa County | Northwest Regional | Residential | NE quarter, section 7, township 7N, range 5W. 3305 Sabine Brown Road Wickenburg, Arizona 85390 |
| PLANNED TRANSFER FACILITIES | | | | |
| TRANSFER FACILITY NAME | OWNER/OPERATOR | LANDFILL FOR DISPOSAL | TYPES OF WASTE ACCEPTED | TRANSFER STATION LOCATION |
| Cactus Waste | Capital Environmental Resources, Inc. (formerly owned by Cactus Waste Systems) | Planned landfill in Pinal County, near Picacho Peak area. | | Pecos Road & Mountain Road (on Mesa side of Meridian Line). |
| East Valley | Waste Management Inc. | Butterfield | Planned design capacity 12,000 tons per day, planned to open 2004. | 80 th Street & Warner Road. |
| Gila River Indian Community District 6 | GRIC | Butterfield | Residential | On Riggs Road, approx. 3 miles east of 51 st Avenue. |
| West Valley | Waste Management Inc. | Northwest Regional | Planned design capacity 12,000 tons per day, planned to open 2004. | Perryville & McDowell Roads. |
| Name undetermined (East Valley) | Undetermined | | | Elliott & 88 th Street (Hawes). |
| CLOSED TRANSFER FACILITIES | | | | |
| TRANSFER FACILITY NAME | OWNER/OPERATOR | LANDFILL FOR DISPOSAL | TYPES OF WASTE ACCEPTED | TRANSFER STATION LOCATION |
| Glendale | City of Glendale | Glendale | Residential | 6210 W Myrtle Glendale, Arizona. |

**TABLE ES-2
MAG SOLID WASTE MANAGEMENT FACILITIES SUMMARY
2002**

| RECYCLING/MATERIALS RECOVERY FACILITIES (MRFs) | | | | | | |
|---|---------------|------------------------|-------------------------------|---|-----------------------------|--|
| FACILITY NAME | STATUS | OWNER/OPERATOR | AREAS SERVED | MATERIAL RECOVERY CAPACITY | LANDFILL FOR REJECTS | MRF LOCATION |
| Abitibi (f.k.a. Valley Recycling) | Operating | Abitibi | Chandler, Mesa, Gilbert | 8,580 Tons per Year. (33 tons per day x 5 days per week) | Salt River | Ray Road & Chandler Blvd. |
| Glendale | Operating | City of Glendale | Glendale | 65,000 Tons per Year. (250 Tons per day x 5 days per week) | Glendale | 6210 West Myrtle Glendale, Arizona |
| 19 th Street & University (f.k.a. Hudson Baylor) | Operating | Hudson Baylor | Phoenix (south), Scottsdale | 78,000 Tons per Year. (300 Tons per day x 5 days per week) | Skunk Creek | 19 th Street & University. 1919 E University Drive Phoenix, Arizona |
| Salt River MRF | Operating | SRPMIC | Mesa, Scottsdale, SRPMIC | 74,880 Tons per Year. (288 Tons per day x 5 days per week) | Salt River | 13602 East Beeline Hwy Scottsdale, Arizona 85256 |
| Western Organics-27 th Avenue | Operating | Western Organics | Phoenix | 17,420 Tons per Year. (67 Tons per day x 5 days per week) | Skunk Creek | 2807 South 27 th Avenue Phoenix, Arizona 85009 |
| Recycle America Phoenix I | Operating | Waste Management, Inc. | Tempe, Fountain Hills, Tucson | Not available. | Butterfield Station | 3115 East Madison Phoenix, Arizona 85034 |
| Recycle America Phoenix II | Operating | Waste Management, Inc. | Not available. | 250 Tons per day x??= ?? | Butterfield Station | 3060 South 7 th Avenue Phoenix, Arizona 85041 |
| PLANNED MATERIALS RECOVERY FACILITIES (MRFS) | | | | | | |
| N/A | | | | | | |

**TABLE ES-2
MAG SOLID WASTE MANAGEMENT FACILITIES SUMMARY
2002**

| COMBINED MATERIALS RECOVERY FACILITIES/TRANSFER FACILITIES | | | | | | | |
|---|-----------|-----------------|-----------------|--------------------------------------|------------------------|--|--|
| FACILITY NAME | STATUS | OWNER/OPERATOR | AREAS SERVED | (TONS/DAY) CAPACITIES TRANSFER | (TONS/DAY) RECOVERY | LANDFILL FOR DISPOSAL | FACILITY LOCATION |
| 27 TH Avenue Transfer Station/MRF | Operating | City of Phoenix | Phoenix (south) | 4,500 | 320 Residential. | Skunk Creek (will switch to SR85 when open). | 27 th Avenue & Lower Buckeye Road. |

| PLANNED COMBINED MATERIALS RECOVERY FACILITIES/TRANSFER FACILITIES | | | | | | | |
|---|-----------------|-----------------|-----------------------------|--------------------------------------|------------------------|--------------------------|--|
| FACILITY NAME | STATUS | OWNER/OPERATOR | AREAS SERVED | (TONS/DAY) CAPACITIES TRANSFER | (TONS/DAY) RECOVERY | LANDFILL FOR DISPOSAL | FACILITY LOCATION |
| North Gateway Transfer/ Recycling Station | Planned 2006 | City of Phoenix | North portion of Phoenix | 4,000 | 320 | SR85 | 3 miles north of Happy Valley Road, east of I-17. |

| RUBBISH/CONSTRUCTION & DEMOLITION DEBRIS LANDFILLS | | | | |
|--|----------------|-----------------------|--------------------|---|
| LANDFILL/OWNER NAME | SIZE (ACRES) | REMAINING CAPACITY | REMAINING YEARS | LOCATION |
| Bradley 40 th Street/Bradley Corporation | Not available. | Not available. | Not available. | North Side of Magnolia Street, 1/4 mile east of 40 th Street. 4346 East Magnolia |
| CalMat/Vulcan | Not available. | Not available. | Not available. | 11923 W Indian School Rd. |
| Deer Valley Landfill (f/k/a Knuoechel Brothers)/Waste Management, Inc. | Not available. | Not available. | Not available. | 24802 N 14 th Street, at 14 th Street and Alameda. |
| Glenn Weinberger Rainbow Valley/Weinberger | Not available. | Not available. | Not available. | 3410 S 39 th Avenue (39 th Avenue & Lower Buckeye Road). |
| Lone Cactus (f/k/a Arizona Crushers) Current owner. Waste Management, Inc. | Not available. | Not available. | Not available. | Northwest corner of 7 th Street & Beardsley Road. 21402 N 7 th Street Phoenix, Arizona 85024 |

**TABLE ES-2
MAG SOLID WASTE MANAGEMENT FACILITIES SUMMARY
2002**

| COMPOSTING FACILITIES | | | |
|---|----------------|---|--|
| FACILITY NAME | OWNER/OPERATOR | MATERIALS ACCEPTED | LOCATION |
| Western Organics | Private | Green wastes, biosolids, agricultural wastes, solid wastes. | 2807 S 27 th Avenue, Phoenix. |
| Urban Forest Products | Private | Green wastes, wood wastes, agricultural wastes. | 3330 W Broadway Road, Phoenix. |
| Salt River Landfill Mulching/Composting | SRPMIC | Green wastes. | SR 87 & Gilbert Road. Scottsdale, Arizona |

| PLANNED MUNICIPAL SOLID WASTE COMPOSTING FACILITIES | | | |
|--|----------------|--------------------|----------|
| FACILITY NAME | OWNER/OPERATOR | MATERIALS ACCEPTED | LOCATION |
| N/A | | | |

| COMMERCIAL MEDICAL WASTE TREATMENT FACILITIES | | | |
|--|------------------|---|--|
| FACILITY NAME | OWNER/OPERATOR | MATERIALS ACCEPTED | LOCATION |
| Stericycle | Stericycle, Inc. | Generally treats waste from hospitals, medical and dental offices, mortuaries, and research institutes. Stopped incinerating in November 2002. Currently uses autoclaving technology. | Gila River Indian Community on northern edge of Reservation in Lone Butte Business Park. |

| COMMERCIAL MEDICAL WASTE TRANSFER STATIONS | | | |
|---|-----------------|--------------------|---|
| FACILITY NAME | OWNER/OPERATOR | MATERIALS ACCEPTED | LOCATION |
| Envirosolve | Envirosolve LLC | Not available. | 2844 West Broadway Road Phoenix, Arizona 85041 |
| Milum Textile Services | Milum | Not available. | 2600 South 7 th Avenue Phoenix, Arizona 85007 |

**TABLE ES-2
MAG SOLID WASTE MANAGEMENT FACILITIES SUMMARY
2002**

| OPERATING PERMANENT HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITIES | | | | |
|--|----------------|------------------|---|--|
| FACILITY NAME | OWNER/OPERATOR | SERVICE AREA | MATERIALS ACCEPTED | LOCATION |
| Tempe Household Hazardous Products Collection Center | City of Tempe | Tempe, Guadalupe | Generally accepts household and automotive waste. | 1320 East University Drive Tempe, Arizona |

| PLANNED PERMANENT HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITIES | | | | |
|--|------------------|--------------|---|---|
| FACILITY NAME | OWNER/OPERATOR | SERVICE AREA | MATERIALS ACCEPTED | LOCATION |
| Chandler Hazardous Household Waste Collection Center | City of Chandler | Chandler | Plans to generally accept household and automotive waste. | Not available. |
| Gilbert Household Hazardous Waste Collection Center | Town of Gilbert | Gilbert | Plans to generally accept household and automotive waste. | Gilbert South Area Service Center NW corner of Queen Creek & Greenfield Rd. |

| WASTE TIRE COLLECTION SITES | | | |
|---|---|----------------------|---|
| FACILITY NAME | OWNER/OPERATOR | SERVICE AREA | LOCATION |
| Queen Creek Waste Tire Collection Site | Maricopa County Solid Waste Department | Not available. | Entrance of Riggs Road, 1/4 mile west of Ellsworth Road. 26402 South Hawes Road |
| Defense Reutilization and Marketing Office at LAFB | Defense Reutilization & Marketing Office. | Luke Air Force Base. | North of Glendale Avenue, 2 miles east of Luke Air Force Base. 7011 North El Mirage Road Glendale, Arizona 85307 |
| City of Chandler Waste Tire Collection Site | City of Chandler Solid Waste Management. | Chandler | 3200 South McQueen Road Chandler, Arizona |
| City of Glendale Waste Tire Collection Site | City of Glendale Municipal Solid Waste. | Glendale | 11480 West Glendale Avenue Glendale, Arizona 85307 |
| 27 th Avenue Waste Tire Collection Site | City of Phoenix Department of Public Works. | Phoenix | South of Buckeye Road. 3060 South 27 th Avenue Phoenix, Arizona 85009 |

TABLE ES-2
MAG SOLID WASTE MANAGEMENT FACILITIES SUMMARY
2002

| FACILITY NAME | OWNER/OPERATOR | SERVICE AREA | LOCATION |
|---|---|----------------|---|
| Skunk Creek Waste Tire Collection Site | City of Phoenix Department of Public Works. | Phoenix | One half mile west of I-17. 3165 West Happy Valley Road Phoenix, Arizona 85027 |
| EnviroTech Industries International Waste Tire Collection Site | EnviroTech Industries International LLC. | Not available. | 6.5 miles west of Mobile, Arizona on SR 283 (Maricopa Gila Bend Road). |
| USMX, Inc. Waste Tire Collection Site | USMX, Inc. | Not available. | 1/4 mile east of 35 th Ave, on Broadway Road. 3106 West Broadway Road Phoenix, Arizona 85041 |
| Recovery Technologies of Arizona, Inc. - Buckeye Waste Tire Collection Site | Recovery Technologies Group. | Not available. | ½ mile west of Oglesby Road (SR 85) on Baseline Road. |
| All Mighty Metals Processing Waste Tire Collection Site | All Mighty Metals Processing. | Not available. | East of 35 th Avenue, on Broadway Road. 3408 West Broadway Road Phoenix, Arizona 85041 |
| Weinberger Rainbow Valley Waste Tire Collection Site | GMW Enterprises, Inc. | Not available. | On SR 283 (Maricopa Gila Bend Road). 39500 South 99 th Avenue Mobile, Arizona |
| Pep Boys #747 Waste Tire Collection Site | Ronald Knopf | Phoenix | Northwest corner of 35 th Ave & Cactus Rd. 3528 West Cactus Road Phoenix, Arizona 85029 |
| Pep Boys #779 Waste Tire Collection Site | Davis Marentes | Glendale | Southwest corner of 63 ^d Ave & Bell Road. 6311 West Bell Road Glendale, Arizona 85308 |

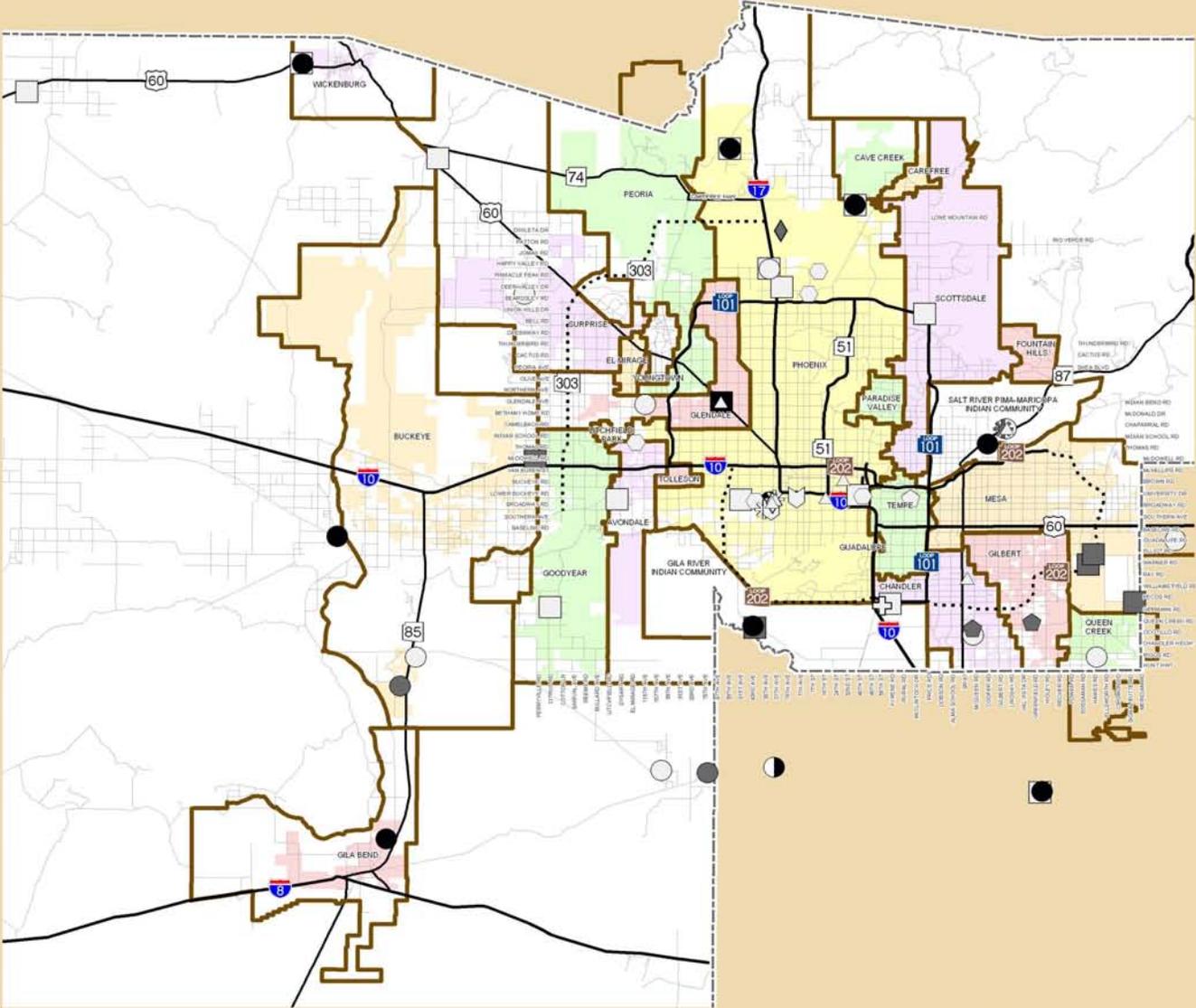
Sources: 1991 MAG Regional Waste Stream Study; MAG Solid Waste Information Collection Efforts: 1998, March 2001 and January 2003; MAG Member Agency Interviews and Web sites; ADEQ Directory of Arizona's Waste Tire Collection Sites January 2003; ADEQ Directory of Arizona Bichazardous Medical Waste Handlers.

Solid Waste Management Plan

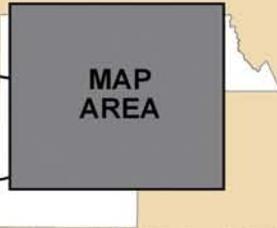
Fig. ES-1



Solid Waste Management Facilities



- | | |
|--|--|
| Landfill | Rubbish/ Construction & Demolition Debris Landfill |
| ○ Open | ○ Open |
| ● Planned | |
| ● Closed | |
| ◐ Inactive | |
| Transfer Station | Permanent Household Hazardous Waste Collection Facility |
| □ Open | □ Open |
| ■ Planned | ■ Planned |
| ■ Closed | |
| Materials Recovery Facility | Composting Facility |
| △ Open | ⊙ Open |
| | ⊙ Planned |
| Combined Transfer Station & Materials Recovery Facility | Medical Waste |
| ◇ Open | ⊕ Open Treatment Facility |
| ◇ Planned | ⊕ Open Transfer Station |
| | |
| | Other Features |
| | ▭ Municipal Planning Area |
| | - - - County Boundary |
| | — Existing Freeway |
| | ⋯ Planned Freeway |
| | — Other Roads |



Source: Maricopa Association of Governments

While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.



Three privately owned regional landfills, each servicing several municipalities in the region, are anticipated to remain open well beyond the current twenty year planning period. The Northwest Regional Landfill, which services Aguila, El Mirage, Morristown, Peoria, Surprise, Sun City, Wickenburg, and Youngtown, will remain open until year 2102, and surrounding vacant land is available for expansion. Butterfield Station Landfill, which services Carefree, Cave Creek, Chandler, Gila River Indian Community and Tempe, will remain open until year 2110. Southwest Regional Landfill, which services Avondale, Buckeye, Gila Bend, Goodyear and Litchfield Park, is scheduled to remain open until year 2051. The City of Glendale Landfill, which services Glendale, is anticipated to remain open until year 2046. The Skunk Creek Landfill, which services Phoenix, is anticipated to remain open until January 2006.

The new City of Phoenix Southern Route (SR) 85 Landfill is anticipated to open in year 2006 with a capacity of over 50 years. A private company has proposed a new landfill in the southern portion of Maricopa County. Four new transfer stations are planned within Maricopa County including the Waste Management West Valley, Waste Management East Valley, Cactus Waste, and a proposed unnamed east valley facility. In addition, the City of Phoenix North Gateway Combined Materials Recovery Transfer Facility is planned to open in 2006, the same year as the anticipated Phoenix Skunk Creek Landfill closure and Phoenix SR 85 Landfill opening.

The SRPMIC Salt River Landfill, which services Gilbert, Mesa and Scottsdale, will remain open until year 2015 and SRPMIC is considering potential transfer station options upon closure. The Apache Junction Landfill, which services within both Maricopa and Pinal Counties, is anticipated to close in 2012. The Queen Creek Landfill, which services Queen Creek, will close in 2005 and a possible replacement landfill in Maricopa or Pinal County is being considered.

There are several existing transfer stations in the region which generally service within the jurisdiction for which they are named. For recyclable materials sorting, there are several material recovery facilities and combined materials recovery transfer facilities in Maricopa County. In regard to household hazardous waste (HHW), there is one permanent collection facility owned by the City of Tempe which accepts HHW from Tempe and Guadalupe residents. The City of Chandler plans to open a permanent facility in 2004 for its residents, and the Town of Gilbert plans to open a permanent facility for its residents in 2006. In several other cities, household hazardous waste disposal opportunities are provided through municipal HHW collection events.

Various waste collection programs have been implemented by local agencies to provide residents with solid waste collection and disposal in a manner that prevents public health hazards or nuisances. Agencies use municipal or private collection services as appropriate for local conditions. Recycling collection programs are implemented by individual agencies, each in a way that is responsive to local needs and conditions.

Since the 1993 MAG Plan, the region has seen an increase in both the quantity and

complexity of local recycling collection programs. The number of municipalities with a curbside recycling collection program in the MAG region has increased from three in 1993 to twelve in 2002. In addition, five other municipalities are planning or considering a curbside recycling collection program.

In 1993, nine jurisdictions had a drop off recycling program, and today this number has increased to seventeen. Another four municipalities are planning or considering a drop off recycling program. Recycling programs in the region range from well developed curbside collection programs that include drop off locations and public education to once per year drop off collection events. Joint efforts and partnerships among cities were a key component in establishing recycling programs and public education programs.

During the last several years, the number of municipal white goods (large appliance) collection programs in the region has increased. In order to help divert items such as large appliances and electronics from the waste stream, nine municipalities in the region offer curbside collection and drop off opportunities for residential white goods. Four others provide annual white goods drop off opportunities.

The opportunities for diverting green waste from the landfill waste stream has also become more common. In 1993, one city had a landscape mulching program, and this number has increased to six jurisdictions with residential curbside green waste collection programs in 2002.

Since 1993, the number and sophistication level of municipal household hazardous waste collection programs has greatly increased. In 1993, five jurisdictions participated together to conduct one annual household hazardous waste collection event. Since that time, each of these municipalities have developed their own program and increased the frequency of collection events. Fifteen jurisdictions now have a household hazardous waste collection program. Of these, seven offer multiple collection events throughout the year, and eight offer a once per year collection event. Five other municipalities are planning or considering a program.

EVALUATION OF WASTE PROBLEMS AND SELECTED STRATEGIES

During the MAG Plan development process, MAG member agencies identified illegally dumped wastes, electronic wastes, and white goods containing regulated substances as problem wastes or wastes that present special management challenges. Technically and economically feasible strategies for problem wastes were evaluated and selected using criteria in Table 8.1. In the MAG region, local governments or private sector providers develop and implement solid waste management programs based on evaluation of local conditions.

Illegal dumping is considered a persistent problem waste due to lacking funds for cleanup and monitoring, lacking authority to cite illegal dumpers, and hurdles in prosecuting illegal dumpers. Several cities and towns have ordinances or codes prohibiting illegal dumping. Selected management strategies for this waste type include developing ordinances that strengthen agency powers, developing public education programs, developing volunteer watch programs for target areas, and supporting legislation to grant citation authority to city and County staff.

In 1993, the illegal placement of hazardous or restricted wastes (such as antifreeze, used oil, and batteries), into commercial waste collection bins was considered a problem. Today, there are more household hazardous waste collection programs with more disposal opportunities for these waste types. Other selected management strategies include placing locks or signs on commercial collection bins.

Electronic wastes are a newly emerging waste problem due to their hazardous components such as lead, chromium, cadmium and mercury. According to EPA, this waste type will be the fastest growing portion of America's trash due to millions of computers becoming obsolete in the next few years. The EPA encourages reuse of electronic items and recycling of valuable materials they contain such as steel, glass, plastic and precious metals. In the MAG region, selected e-waste recycling strategies include investigating restrictions on certain products or materials, encouraging business and industry to develop voluntary source reduction and recycling plans, investigation of variable fee structures and product taxes, and developing public education programs.

White goods present a challenge when the appliances contain regulated substances, such as Chlorofluorocarbons or refrigerants. Federal regulations require refrigerant removal from appliances prior to disposal/recycling and prohibit appliance disposal in a way that permits the regulated substance to enter the environment. Seven municipalities in the region have white goods/appliance curbside collection and drop off programs. The regulated substance is properly removed from appliances and recyclable materials are then taken to a scrap metal dealer. Residents pay a minimal fee to help recover regulated substance reclamation costs. Some cities request that residents have regulated substances removed prior to collection. For the future, six jurisdictions are planning or considering a white goods collection program.

TENTATIVE MEETING SCHEDULE FOR THE
MAG SOLID WASTE ADVISORY COMMITTEE

FEBRUARY - OCTOBER 2012

Saguaro Conference Room

Thursday, February 16, 2012 - 10:00 a.m.

Thursday, April 19, 2012 - 10:00 a.m.

Thursday, June 21, 2012 - 10:00 a.m.

Thursday, August 16, 2012 - 10:00 a.m. **IF NECESSARY**

Thursday, October 18, 2012 - 10:00 a.m.