

online guidance and training on ways governments can “green” their services and products.

ASTM, an independent consensus based standard-setting organization, has issued procedures for developing a green cleaning program. The "Standard Guide for Stewardship for the Cleaning of Commercial and Institutional Buildings" (ASTM E-1971) was issued in 1998 to help owners and operators of commercial and institutional buildings adopt green cleaning and housekeeping practices. The standard provides recommendations for developing a stewardship plan; provides guidance on evaluating cleaning processes and selecting, using, storing, and disposing of products; and discusses equipment, training, and communications activities for a green cleaning program. According to ASTM, following the principles set forth in this guide can lead to greater tenant/occupant satisfaction, reduced operational costs, and greater productivity of occupants and cleaning personnel.

The States of Massachusetts and Minnesota, the City of Santa Monica (CA), King County (WA), and other governmental agencies joined together to use common purchasing criteria for buying environmentally preferable products. By using standard criteria, the governmental agencies can benefit from the research of the others—if an item is approved by one entity, it can automatically be approved by another. The consensus process led to the adoption of the *Green Seal Standard for Industrial and Institutional Cleaners (GS-37)* as the basis for the specifications.

Green Seal is an independent, nonprofit organization dedicated to protecting the environment by promoting the manufacture and sale of environmentally responsible consumer products. It has developed a consensus-based standard for industrial and institutional cleaners. Green Seal standards set forth a list of product requirements that are based on an assessment of the environmental impacts of product manufacture, use, and disposal and reflect information and advice obtained from industry, trade associations, users, government officials, environmental and other public interest organizations, and others with relevant expertise.

Santa Monica Example

Supporting its desire to become a sustainable city, in 1994 Santa Monica hired consultants to help formulate its procurement policies. Santa Monica replaced traditional cleaning products with safe alternatives in 15 of 17 categories and consequently reduced spending by five percent. The City also switched to an Integrated Pest Management approach for its landscaped municipal facilities, saving 30 percent of its budget while reducing human exposure to toxics.

The City of Santa Monica asked City custodians to evaluate the effectiveness of less-toxic or nontoxic cleaning products. Bids from product vendors must now include environmental and health specifications as well as performance and cost criteria. This process led to the establishment of a set of pass/fail standards for 18 different cleaning products.

UNITED NATIONS 2005 URBAN ENVIRONMENTAL ACCORDS

ACTION 6 - CONSUMER WASTE

Action: Implement "user-friendly" recycling and composting programs, with the goal of reducing by 20% per capita solid waste disposal to landfill and incineration by 2012.

Status: Achieved—User Friendly Recycling and Composting Programs
Achieved—20% Per Capita Solid Waste Reduction

Comments:

The City has many successful "user-friendly" recycling and composting programs in place which have increased the diversion rate to 62% (pending review and approval of the 2004 Annual Report Diversion Rate submitted to the CIWMB), an 8% increase from 2003 and an almost 15% increase from 2000. For recommendations to further reduce the City's per capita solid waste disposal, see Action Item 4, Zero Waste to Landfills.

Pay-As-You-Throw Program

The City of Pasadena introduced the "user-friendly" Pay-As-You-Throw Program in 2000. Trash containers ranging from 100, 60, and 32 gallons are available to residents with the smaller containers costing less and thus encouraging recycling. Free yard waste and commingled recycling containers are also provided as part of the service. The bins are distributed to all single-family residents (up to four dwelling units/parcel), approximately 27,000 households, free of charge. The participation rate is not known, but since there is no additional charge to recycle and there is a fee based on the amount of trash deposited, it may be 90% or higher.

Outreach to residents about the Pay-As-You-Throw program continues through the City's newsletters and interaction with residents at local block parties, city sponsored picnics and special events, and on the City's web site.

Curbside Recycling

In 2004 the City initiated a curbside recycling waste, refuse and yard waste program for single family residents. To facilitate the collection of "green waste" single family residents (27,000 households of 4 or fewer units/parcel - 20% of the population) are provided with 100 gallon yard waste containers at no additional charge. All City-hauled green waste is used as daily cover for landfills. The City inspects green waste containers to ensure they are used for their intended purpose.

The City offers bulky item pick-up to single family residences. Two annual pick-ups are offered at no charge. The City recycles fleet tires, tires picked up by the bulky item curbside program, and tires abandoned on the roadside.

Buy-Back Vendors

For ease of recycling beverage containers, eleven independently operated Buy-Back centers are provided in the City. Materials collected at these sites are recycled.

Composting

Backyard composting has been encouraged since 1987 and the backyard composting program was expanded in 1992. Composting workshops sponsored through LA County Public Works and the City of Pasadena are regularly held in the City. The City presented 36 composting workshops in 2004 including two bi-annual large scale compost bin sales at the Victory Park Farmers' Market. The City runs informational advertisements in the local paper on composting and mulching. Composting information is available at most community events and is especially emphasized at school presentations. City tree trimmings are shredded and used as mulch in parkways, medians and parks. Mulch is also donated to groups such as local schools or organizations that request it for community or school gardens and beautification projects.

The Department of Water and Power hosts water-wise landscaping classes. Backyard composting has been incorporated as part of the series and residents who attend three classes receive a free compost bin. Other compost workshops for neighborhood associations are held on a request basis. Compost bins are available year-round at cost to residents, or are free to those who attend Water and Power water-wise landscaping classes. In 2004, 160 compost bins were sold.

For the past 5 years the Department of Public Works and the Department of Water and Power have hosted Greening the Earth Day. Over 40 environmental organizations exhibit information and resources on environmental conservation. Workshops are held on composting as well as water-wise gardening.

Franchise Haulers

There are currently 37 licensed franchise haulers serving the waste and recycling needs of the business community including multi-family residential (more than four units). In 2001 the City began surveys of its commercial accounts to determine levels of recycling and to promote recycling and source reduction if none was in place. The non-exclusive franchise haulers were each responsible to survey their customers to determine the level of recycling and source reduction and to promote recycling and source reduction if none was in place. By December 31, 2000 all commercial haulers were required to have a recycling plan in place to achieve 50 % diversion. This program continued into 2002, with ordinance changes adopted on November 4, 2002 restructuring the program to mandate 50 % diversion and extended reporting, education and outreach. The City retained a consultant to assist with surveys of its own accounts. Liquidated damages are being collected monthly from franchise haulers not meeting the required 50% diversion. These funds are slated for outreach materials and workshops for commercial and multifamily customers.

The City has increased its interaction with the franchise haulers to encourage greater recycling and recycling outreach, including two workshops in 2004. The franchise manager works one-on-one to assist haulers in meeting the diversion requirements, including identifying third party diversion.

Outreach and Awards

In 2004-2005 outreach to the business community continued with free workshops and waste surveys offered to businesses throughout the City. In addition, the 2004/2005 Outstanding Recycler Awards honored businesses practicing waste reduction and included a forum presented at the 2004 Tenderland Festival where business leaders had the opportunity to learn about waste reduction practices and share information on existing programs in the business community.

To encourage the exchange of materials as an aspect of recycling, the City of Pasadena provides literature from both the State of California and the County of Los Angeles Material Exchange Programs to local residents and businesses. The City's outreach recycle and reuse booth is manned by City employees at many citywide functions such as the Arroyo Seco Fest, the Mayor's community picnic, neighborhood and ethnic block parties and cleanup events. Calmax and LACoMax are also promoted to telephone callers seeking recycling or donation opportunities. Restaurants are contacted to provide them with information on recycling in general and opportunities to donate surplus food to local charities or food banks.

The City continues to promote CALMAX and LACoMax, especially in conjunction with its bulky waste pickup program, suggesting to callers that items that may not be accepted by charitable organizations might find a home via one of the material exchange programs.

Rose Bowl Recycling

In 2002 the City began beverage container recycling at the Rose Bowl Championship Series football game (attendance 93,871) resulting in 3.52 tons of beverage containers and 200 pounds of cardboard recycled. In 2005 over 10,000 lbs of beverage containers were recycled at the Bowl Championship Series game – a one day sports event. The beverage container program is ongoing and in cooperation with the Department of Conservation and Los Angeles Conservation Corps. Cardboard is also collected separately at the Rose Bowl.

E-Waste

The City promotes household hazardous waste (HHW) Roundups for e-waste disposition. The HHW Round-ups are publicized through the City's bimonthly newsletter, news release in local papers and through the Neighborhood Connections newsletter with a distribution to 95 neighborhood associations, and citywide email. Flyers were distributed to all public counters, certified auto centers, at markets and drug stores and distributed at public events prior to the roundup. The City has contracted with ARC Recycling to process e-waste that has been abandoned on the public right-of-way.

Construction and Demolition Debris Ordinance

The City of Pasadena adopted a Construction and Demolition Debris ordinance on November 4, 2002 (Chapter 8.62 of the Pasadena Municipal Code) which requires 50% minimum diversion of construction and demolition projects that meet certain thresholds. C&D reporting was included as a line item for Franchise Haulers to report on their monthly reports. The security deposit required of applicants to ensure compliance with C&D reporting has increased the quality and quantity of reports received. All C&D reports are reviewed carefully and the recycling coordinator works one-on-one with applicants to ensure that reporting requirements are met. Various brochures and handouts are available to assist applicants in complying with and understanding the C&D reporting requirements.

UNITED NATIONS 2005 URBAN ENVIRONMENTAL ACCORDS

ACTION 7 - GREEN BUILDING

Action: Adopt a policy that mandates a green building rating system standard that applies to all new municipal buildings.

Status: Achieved - Recommendations

Comments:

On April 15, 2006 Pasadena Municipal Code Chapter 14.90 - Green Building Practices Ordinance went into effect. This ordinance requires municipal buildings of 5,000 square feet or more of new construction to achieve the US Green Building Council Leadership in Energy and Environmental Design (LEED) green rating system "Certified" level at a minimum.

LEED is a nationally recognized rating system for assessing a building's 'greenness' and is used by federal agencies, states across the nation, local jurisdictions, agencies, and the international community.

The City, in adopting the Green Building Practices Ordinance, also required private sector buildings to comply with the intent of LEED. Non-residential buildings of 25,000 square feet or more of new construction, tenant improvements of 25,000 square feet or more and requiring a building permit, and multi-family and mixed use projects of four stories or more must adhere to the LEED green building rating system.

Recommendations:

1. Green Building – Evaluate the success of the Green Building Practices Ordinance and consider lowering the thresholds and creating standards for residential projects.
2. Clean Green – Develop and implement requirements for the cleaning, maintenance and operations of municipal buildings to further advance sustainability and eliminate the use of toxics. Include the training of maintenance staff. (See Actions 5 & 16.)
3. Green Specs – Expand upon the Green Building Practices Ordinance by adopting green specifications for city remodeling projects (e.g., carpet, sealants, adhesives, paint, flooring, and office furnishings). The specifications would require certain materials and products to exhibit characteristics of green such as complying with the Certified Rug Institute Green Label program. This can be incorporated into the "Buy Green" program described in Action 5.

UNITED NATIONS 2005 URBAN ENVIRONMENTAL ACCORDS

ACTION 8 - URBAN PLANNING

Action: Adopt urban planning principles and practices that advance higher density, mixed use, walkable, bikeable, and disabled-accessible neighborhoods which coordinate land use and transportation with open space systems for recreation and ecological restoration.

Status: Achieved - Recommendations

Comments:

This action item includes multiple objectives which are addressed through various plans adopted or being developed by the City. Density and mixed use is addressed in the General Plan Land Use Element, specific plans, and the Zoning Code (PMC Title 17). The creation and protection of walkable, bikable, and accessible neighborhoods is addressed in these documents as well as in the Mobility Element of the General Plan, the draft Pedestrian Plan, and the Bicycle Master Plan. Coordination of land use, transportation, and open space touches many aspects of the City's planning efforts and general practices. Ecological restoration is addressed under Action 12.

Recommendations:

1. General Plan – Ensure the action intent is acknowledged in future updates to the Land Use and Mobility Elements of the General Plan, and the Central District Specific Plan and other specific plans.
2. Project Review – Continue to review new developments through the discretionary review process to ensure that they enhance the pedestrian and transit environment in the Central District and in other specific plan areas.
3. Document Review – Ensure that the new or amended planning documents (e.g., Green Space and Recreation Element, Pedestrian Plan, & Parks and Recreation Master Plan) contain objectives, policies and implementation measures that support the coordination of land use and transportation with open space systems for recreation and ecological reconstruction, and disabled access and use.
4. Transportation Funding – Continue to seek local, state and federal funding sources that provide funds for multi-modal transportation that better connect the community to the City's open space systems.
5. Accessible Design – Support the installation of truncated domes (bumpy pavement) and Accessible Pedestrian Signals (APS) with audio and tactile capabilities at crosswalks throughout the City.

Background:

Since adopting the General Plan Land Use and Mobility Elements in 1994, Pasadena has embraced the concepts of high-density, mixed use, walkable, bikeable, and disabled-accessible neighborhoods. The following objectives and policies support the concepts of the action item.

1994 Land Use Element

Objective 1 - TARGETED DEVELOPMENT: Direct higher density development away from Pasadena's residential neighborhoods and into targeted areas, creating an exciting urban core with diverse economic, housing, cultural and entertainment opportunities.

Policy 1.3 – Transit-Oriented and Pedestrian-Oriented Development: Within targeted development areas, cluster development near light rail stations and along major transportation corridors thereby creating transit oriented development "nodes" and encouraging pedestrian access.

Policy 1.4 – Mixed-use: Authorize and encourage Mixed Use development in targeted areas, including in-town housing, live-work spaces, and in-town commercial uses.

Policy 10.2 – Transit Oriented Development: Within targeted development areas, cluster development near light rail stations and along major transportation corridors to maximize transit use by local businesses and employees.

Policy 14.2 – Accessible Services: Promote the accessible location of public and private community services facilities, including accessibility to transportation and the location of housing, such as senior housing, near services.

Objective 21 – CIRCULATION: Make Pasadena a city where there are effective and convenient alternatives to using cars.

Policy 21.1 – Transit-Oriented and Pedestrian-Oriented Development: Within targeted development areas, cluster development near light rail stations and along major corridors served by transportation thereby creating transit-oriented development "nodes" and encouraging pedestrian access.

Policy 22.1 – Urban Design: urban design programs shall encourage pedestrian-oriented development, including encouragement of pedestrian circulation among parcels, uses, transit stops, and public or publicly

accessed spaces; requiring human scale; encouraging varied and articulated facades; requiring regular visual (as in the use of first floor windows with clear glass) and physical access for pedestrians; requiring that ground floor residential and commercial entries face and engage the street; and encouraging pedestrian-oriented streetscapes amenities.

2004 Mobility Element

Objective 23 – MOBILITY ELEMENT: The Mobility Element shall support the development of transit-oriented and pedestrian-oriented developments.

Policy 1.2 – Allow mixed-use zoning that includes housing and commercial uses to encourage living and working in the same area and to achieve a reduction of trips.

Policy 1.7 – Focus development densities for residential and nonresidential land uses around the six Gold Line Light Rail stations within City boundaries.

Policy 1.17 – Develop parking guidelines for new developments located in proximity to transit that establish capped parking requirements to reflect proximity to transit and encourage its use.

Policy 2.7 – Promote improvements for pedestrians to support vibrant and active streets and major places of activity.

Policy 2.8 – Develop and maintain a comprehensive and integrated system of bikeways and increase bicycle racks at major destinations to promote bicycle riding for commuting and recreation.

Policy 2.10 – Develop zoning guidelines to promote and foster establishment of Transit Oriented Districts adjacent to light-rail stations to encourage living and working within the same community area.

Policy 4.16 – Recognize and accommodate the distinct needs of the users of multimodal corridors as well as the particular needs of major destinations.

4.1.2.3 Pedestrian Facilities – The City has developed walkway areas in specific locales. Enhancement of pedestrian facilities will improve public safety and can also encourage the use of other non-auto modes of transportation. Enhancements include sidewalks, paths, trails, pedestrian bridges, crosswalks, and pedestrian signals with crosswalk signalization intersections to accommodate pedestrians. Special attention is given to the needs of disabled citizens, senior citizens, and children.

2000 Pasadena Bicycle Master Plan

The Pasadena Bicycle Master Plan serves as a guideline for promoting bicycling as a viable transportation mode. In the plan, one of the criteria for creating a bikeway network is to connect it to recreational destinations such as the Rose Bowl and parks.

2006 Pedestrian Plan

The draft Pasadena Pedestrian Plan is a master plan for promoting a walkable and pedestrian-friendly environment that draws upon policies and strategies contained in more than 20 adopted City plans and guidelines. The draft plan identifies current and future pedestrian-related capital improvements totaling nearly \$91 million. The plan is tentatively scheduled for City Council review in late 2006.

2004 Central District Specific Plan

The Central District is a vibrant mix of shops, restaurants, offices, and residences and provides standards for future mixed-use developments, work-live projects, commercial, and multi-family residential development to enhance the downtown. The plan encourages transit-oriented development around the Gold Line light rail stations, supports pedestrians and bicycles, and directs auto traffic away from adjacent residential neighborhoods.

Over 5,000 new housing units are anticipated in the Central District, all of which will be within easy walking distance to transit and over half will be in mixed-use developments.

Other Specific Plans

Six other specific plans have been prepared for areas that are adjacent to Gold Line light rail stations and areas with significant pedestrian activity. These plans also encourage transit-oriented and mixed-use development and facilitate walking and bicycling.

Arroyo Seco Master Plans

The Arroyo Seco Master Plans establish policies and projects that support multi-modal recreational transportation connections to neighborhoods, and to local and regional recreation opportunities such as the Angeles National Forest and the Santa Monica Mountains Rim of the Valley Trail system. The master plans is a collective term for the 1) 2003 Design Guidelines for the Arroyo Seco, 2) 2003 Hahamongna Watershed Park Master Plan, 3) 2003 Lower Arroyo Master Plan, and 4) 2005 Central Arroyo Master Plans. Taken together, these documents provide detailed implementation schedules for the preservation and enhancements throughout the Arroyo.

Green Space and Recreation Element

The Green Space and Recreation Element is the City's guiding policy document for the preservation of existing green space as well as the future stewardship of both passive and active recreation areas. A draft version of the Green Space and Recreation Element is being reviewed by staff with a final version tentatively scheduled for City

Council review in fall 2006. Provisions for preserving and managing natural resources are key components of this document.

Recreation and Parks Master Plan

The City's Recreation and Parks Master Plan provides a guide for the creative, orderly development and management of recreation facilities and programs for the City. As a built out city, Pasadena faces a number of challenges in providing open space and related facilities. The plan will include information derived from two studies - the Sensitive Land Study and Pocket Parks Study - which analyzed vacant parcels as possible additions as open space. A draft version of the document is being reviewed by staff with a final version tentatively scheduled for City Council review in fall 2006.

Disabled Accessibility

Signed into law on July 26, 1990, the Americans with Disabilities Act (ADA) is a wide-ranging federal legislation intended to improve accessibility of people with disabilities. All new construction and modifications must be accessible to individuals with disabilities. For existing facilities, barriers to services must be removed if readily achievable. Public accommodations include facilities such as restaurants, hotels, grocery stores, retail stores as well as privately owned transportation systems. The City has complied with this mandate by removing barriers such as curbs at sidewalk intersections and installing handicap ramps and signalization devices.

The City, with input from the Accessibility and Disability Commission, has initiated two pilot programs to improve movement and access for the disabled. These include installing truncated domes (bumpy pavement) at sidewalk intersections and adding Accessible Pedestrian Signals (APS) with audio and tactile capabilities at crosswalks. These pilot programs are in advance of any federal mandate.

UNITED NATIONS 2005 URBAN ENVIRONMENTAL ACCORDS

ACTION 9 – GREEN JOBS

Action: Adopt a policy or implement a program that creates environmentally beneficial jobs in slums and/or low-income neighborhoods.

Status: Achieved – Further recommendations

Comments:

The City of Pasadena's neighborhoods cannot be characterized as "slums." However, the City does have low-income neighborhoods and a constituency that would benefit from job training. The UEA does not define environmentally beneficial jobs, therefore some allowance has been taken to interpret this action item. It is assumed that environmentally beneficial jobs include those that involve the removal of environmental hazards (e.g., removal of lead based paint, asbestos, electronic waste). Furthermore, it is assumed that an individual seeking an environmentally beneficial job should have opportunities for environmental education and training.

Recommendations:

1. Install Green – Continue the MASH and Water & Power pilot program to install water and energy conserving fixtures for approved applicants as funding permits.
2. Green Waste – Involve MASH and/or community based organizations to assist with the electronic waste (E-waste) pilot program and restaurant compost pilot program (see Action 5 for details).
3. Environmental Education – Continue partnering with community organizations such as Outward Bound Adventures, Armory Center for the Arts and the Pasadena Unified School District to develop an outdoor environmental education and vocational model program at the City's local parks and open spaces. Continue supporting Greening the Earth Day.

Background:

MASH Program

The City, through the Community Development Block Grant (CDBG) program, has a well established and successful Maintenance Assistance Services to Homeowners (MASH) training program for low-income individuals. The MASH Program provides housing rehabilitation and related services to the needy in Northwest Pasadena. The MASH Program, in addition to mitigating blight, also serves as a job training mechanism for up to 70 low-income and at-risk individuals. These individuals are provided opportunities to acquire job skills, and are provided training in various City Departments.

Former MASH trainees are invaluable employees of the Planning and Development Department and work on Neighborhood Revitalization programs in areas of the City exhibiting blight.

Individuals applying for the MASH program predominately reside in the low-income areas of Northwest Pasadena. Specific program activities include exterior surface preparation and painting, lead paint stabilization, yard clean-up, minor repairs of code violations, and rehabilitation of wheelchair ramps, stairs, windows and doors.

Install Green

Early in 2006, the MASH and Water and Power staff created a pilot "Install Green" program to provide and install energy efficient products for homeowners approved for MASH services. Products for installation include low-flow shower heads, energy efficient lighting, low-VOC (volatile organic compounds) paint, specialized screening for windows as well as window film, attic insulation, and shade trees. The supplies for this work are provided by Water and Power and the work is conducted by MASH trainees.

Environmental Education

In order to foster environmental stewardship through the education of area youth, the City has partnered with local nonprofit organizations. For example, the Water and Power Department teamed up with the local branch of the Outward Bound Adventures (OBA) organization to survey Northwest area residents on their energy consumption habits for use in developing an energy conservation plan directed to their needs. OBA is a non-profit organization headquartered in Northwest Pasadena that promotes positive self-development, environmental responsibility, and outdoor career exposure for at-risk and urban youth through meaningful nature-based educational opportunities.

In collaboration with the City of Pasadena Water and Power Department, the Armory Center for the Arts provides on-going educational opportunities through the Children Investigate the Environment Program. This program presents fourth grade students with arts experiences in a natural environment while integrating science concepts. Through a series of field trips, students explore a local natural site and respond to it with drawing, painting, sculpture, installation and expressive writing. These developed skills are easily transferable to an environmentally beneficial job, although one can argue that a student's job is to learn and therefore they are already employing these skills "on-the-job."

Green Building and First Source Hiring

With the adoption of the Green Building Practices Ordinance (PMC 14.90), new buildings must incorporate environmental building techniques, materials, operations and maintenances practices. To encourage the hiring of local residents, the City's First Source Hiring Ordinance (PMC 14.80) offers employers construction tax rebates when they hire local residents in the building trades. These two ordinances complement each other and help to create environmentally beneficial job opportunities.

UNITED NATIONS 2005 URBAN ENVIRONMENTAL ACCORDS

ACTION 10 - PARKS

Action: Ensure that there is an accessible public park or recreational open space within half-a-kilometer (1,640 feet – 1/3 mile) of every city resident by 2015.

Status: Unknown

Comments:

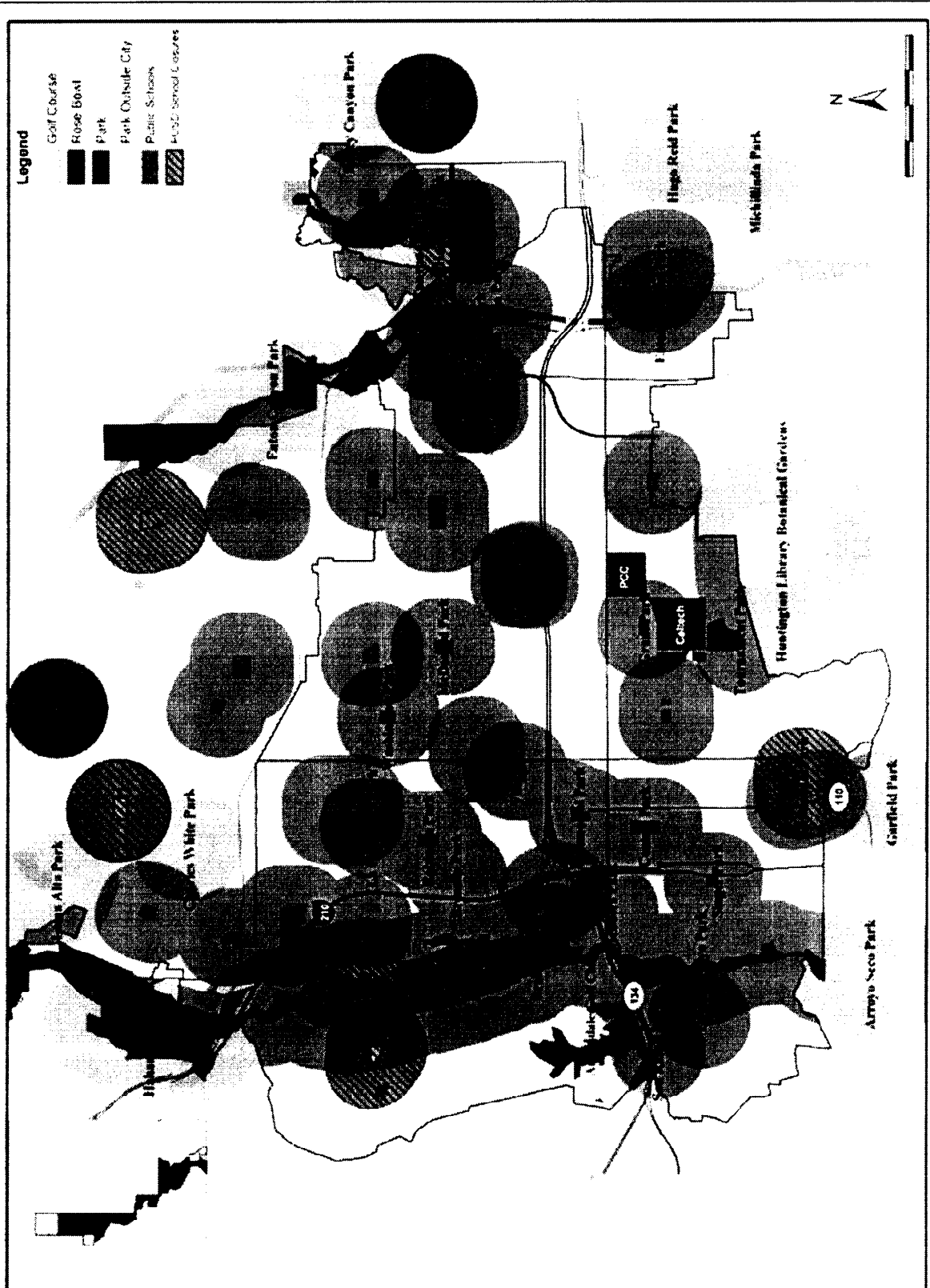
The City is in the process of reviewing a draft of the *Recreation and Parks Master Plan* and the *Green Space and Recreation Element* of the General Plan. These planning documents include specific policies on addressing open space needs and recreational uses within a reasonable walking distance for all residents. The Parks and Natural Resources Division is in the process of developing a plan for an additional 30 acres of land adjacent to Hahamongna Watershed Park. This land had previously been owned by the Metropolitan Water District of Southern California.

The attached map identifies existing public parks, recreational open space, and public schools with ½ kilometer radius drawn around each site. As a primarily built-out city, Pasadena does not have the opportunity to purchase vast tracts of land for development of parks in areas where voids exist as depicted on the attached map, therefore there is a degree of uncertainty in achieving this because of the specific distance requirement. Furthermore, ½ mile radius is the standard distance used in the *Green Space and Recreation Element*.

Recommendations:

1. Green Space Planning – Ensure the goal of the action item is acknowledged in the *Recreation and Parks Master Plan* and *Green Space and Recreation Element* of the General Plan with the understanding ½ mile radius is the preferred standard.

1/2 Kilometer Service Areas Around Pasadena Parks and Schools



1/2 Mile Service Areas Around Pasadena Parks and Schools



UNITED NATIONS 2005 URBAN ENVIRONMENTAL ACCORDS

ACTION 11 - TREES

Action: Conduct an inventory of existing canopy coverage in the city; and, then establish a goal based on ecological and community considerations to plant and maintain canopy coverage in not less than fifty percent of all available sidewalk planting sites.

Status: Likely – Tree canopy inventory
Achieved – Plant & maintain tree canopy in 50% of sidewalk sites

Comments:

Achievement of this action requires the City to update the existing tree inventory system to include the capacity to calculate tree canopy coverage. This update would identify the relationship between canopy coverage and sidewalk planting sites. The tree canopy coverage information on City trees can be extrapolated from the existing public tree inventory using new computer software at a minimal cost.

The City currently maintains 62,000 street tree sites; approximately 2,500 (4%) of those sites are vacant. The remaining street tree vacancies will be planted within the next five to ten years as a part of a five-year plan already in place. These efforts satisfy and exceed the second part of this action.

Recommendations:

1. Tree Canopy Survey – Convert existing tree inventory data to tree canopy coverage for trees in the public right-of-way using new computer software.

Background:

Every year, deforestation constitutes 20-25% of all carbon dioxide emissions.³ Planting and maintaining trees in the public right-of-way helps to mitigate these global impacts. Tree canopy coverage data for trees in the public right-of-way provides a holistic assessment of the benefits provided by city trees. The data would serve as an assessment of the City's current tree canopy coverage and enable staff to effectively plan tree enhancement measures. The canopy coverage analysis will provide information on water runoff, air quality, energy savings, and provide an appraised value of the City's urban forest.

³ Nature Conservancy Volume 25 Number 2, Summer 2006.

The benefits of the urban tree canopy are multiple and include providing shade, the production of oxygen, the reduction of carbon dioxide, and protection from storm water runoff. In addition, the aesthetic value of trees gracing the City's neighborhoods increases property values. These tangible benefits will be validated and translated into numbers with the implementation of this data. Furthermore, tree canopy data would allow for a clear understanding on how to better mitigate individual tree removals on public property. (See Action 18 - Clean Air).