

### **GREEN TASK FORCE MISSION AND GOALS**

The function of the Green Task Force was to examine, as thoroughly as possible, the myriad environmental concerns that are pertinent to the City of Downey, including the relationship between the City's practices and the broader community. The challenge was to break down the vast field of potential focus areas into manageable categories of interest and investigation. Together, Task Force members decided that the mission of the Green Task Force was to educate and inform the City in order to foster greater environmental awareness and ensure sustainable practices continue to be implemented throughout the City.

To achieve their mission, the Task Force members set four ambitious goals that would guide them throughout the year:

- Improve public and business community knowledge of environmental topics and how their participation helps everyone
- Encourage practices to protect the environment, our City, and public health
- Address community environmental concerns and potential solutions and advise the City Council on possible courses of action
- Focus on immediate and long-term solutions for conservation, sustainability and education



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### **CREATION OF THE GREEN TASK FORCE**

Environmental responsibility, sustainability education, and the formation of a Green Task Force were three of several transformative goals set forth by Mayor Mario A. Guerra as he was sworn in for his mayoral term on December 2, 2008. Commissioning a Green Task Force on March 10, 2009, the Mayor and City Council of the City of Downey charged Task Force members with performing a high-level review of City policies, procedures, and practices related to the United Nations Urban Environmental Accords. The Task Force was asked to use this examination as a basis for formulating a sustainable operating philosophy for the City of Downey. The Green Task Force would have seven appointed members, comprised of two City Council members and five members of the public. Additional technical advisors and representatives would participate and attend meetings to assist in the performance of the Task Force's work. The Green Task Force was given one year to complete its duties and would announce recommendations for the City of Downey following the fortieth anniversary of Earth Day in 2010.

### **Green Task Force Meetings**

Green Task Force members met the first Tuesday of each month to study various aspects of sustainability, including environmentally responsible building practices, energy efficiency, water conservation, public education, long-term municipal plan-



ning, and local, state and federal legislation. Over the past year, several guest speakers made presentations to the Green Task Force, including: Ms. Anna Valcarcel, Conservation Biologist and DUSD substitute teacher; Dave Schwade, Efficient Lighting and Electric; Dave Stevens, Southern California Gas Company; Sylvia Southerland, Southern California Edison; and Steve Factor of Solar City. Additional presentation topics included the City of Downey Building Code, City of Downey recycling and reuse practices and Coca-Cola's Water Conservation and Earth Day celebrations.

Task Force members made educational presentations and gave sustainability lectures at various City functions throughout the year. Members also conducted two field trips in the course of their work, visiting the Southern California Gas Company's Energy Resource Center in the City of Downey to learn about solar technology uses and touring the native landscaped garden at the Columbia Memorial Space Center.

# **GREEN TASK FORCE MEMBERS**



April 2010

### **Green Task Force Leadership:**

Chairperson—Council Member Dn. Mario A. Guerra Vice Chairperson—Mayor Pro Tem Luis Marquez

### **Community Representatives:**

Bob Ciatti—Downey resident and owner of Efficient Lighting & Electric Lars Clutterham—Downey resident and environmentalist Janet Molinaro—Downey resident and Emergency Preparedness Committee Member Robert Rubio—Downey resident & CPO of the Rio Hondo Boys and Girls Club Nancy Swenson—Downey resident and DUSD School Board Member

#### **Industry, School District and Utility Representatives:**

Tom Davidson—Coca-Cola Bottling Co. of Southern California Calvin Davis—Downey Unified School District
Julia Emerson—Southern California Gas Company
Mike Finn—Coca-Cola Bottling Co. of Southern California
Sally Flowers—Central Basin Municipal Water District
Bill Kalpakoff—CalMet Services, Inc.
Jonathan Leonard—Coca-Cola Bottling Co. of Southern California
Robert Phillips—Coca-Cola Bottling Co. of Southern California
Dan Pruitt—Coca-Cola Bottling Co. of Southern California
Sylvia Southerland—Southern California Edison Company
Anna Valcarcel—Environmentalist and Teacher

#### City of Downey Staff:

Desi Alvarez—Deputy City Manager Shirley Conte—Secretary to the City Council Shannon DeLong—Analyst

# **SUBCOMMITTEES**

Given the complexity of the Green Task Force's work and the one-year time period established to complete the goals, the decision was made to form subcommittees that would address separate, complex environmental issues. Consequently, two subcommittees were formed to explore and pursue critical objectives.

### **Subcommittee Objectives**

#### Education Subcommittee

Provide recommendations to the Green Task Force membership with regard to outreach strategies, public education, school-based initiatives, and methods for fostering general environmental awareness.

#### Sustainability Subcommittee

Provide recommendations to the Green Task Force membership with regard to resource conservation, with special focus on water stewardship, energy conservation, and recycling.

### **Subcommittee Members**

<u>Education Committee</u>: Lars Clutterham (Chairman), Tom Davidson, Julia Emerson, Jonathan Leonard, Janet Molinaro, Robert Rubio, and Nancy Swenson

<u>Sustainability Committee:</u> Bob Ciatti (Chairman), Calvin Davis, Michael Finn, Sally Flowers, Bill Kalpakoff, Robert Phillips, Dan Pruitt, and Sylvia Southerland

#### **Subcommittee Recommendations**

Each subcommittee prepared a list of recommendations throughout the year, some of which were brought forth to the Green Task Force and then to the City Council for immediate implementation. The accomplishments and recommendations included in this report represent those submitted by each subcommittee and those developed by the larger Task Force. The Green Task Force established multiple, long-term strategic goals to be accomplished as the Green Task Force moves forward.

### LEGISLATIVE REVIEW

The Green Task Force examined legislative initiatives and local ordinances to determine both the responsibilities of the City of Downey and how the City's existing policies compare to new legislation. The presentations given at the Green Task Force meetings included Downey's responsibilities under Assembly Bill 32 and Senate Bill 375 as well as the State's Model Water Conservation Ordinance.

### Assembly Bill 32 and Senate Bill 375

Assembly Bill 32 is the California Global Warming Solutions Act, adopted in 2006. Senate Bill 375 is one of the implementation portions of AB 32. Though passed separately, AB 32 and SB 375 both address climate change and state and local responsibilities with regard to reducing greenhouse gas (GHG) emissions and preventing the future accumulation of climate-changing gases. AB 32 requires a reduction of GHGs to 1990 levels by the year 2020, and to 80% below 1990 levels by the year 2050. The California Air Resources Board (CARB) is charged with ensuring compliance with AB 32.

SB 375 concerns GHG emissions generated by cars and light trucks, and its provisions directly affect community planning. The Southern California Association of Governments (SCAG) is the regional planning agency for ensuring SB 375 implementation and is coordinating with sub-regional groups including the Gateway Cities Council of Governments. As a member of Gateway Cities, the City of Downey is helping to achieve SB 375 emissions reductions goals by participating in regional planning efforts. Ultimately, compliance may be accomplished through the promotion of "green" building codes, land use provisions, energy efficiency specifications, planned reductions in energy use, and/or the provision of incentives for solar water heating and solar roof installations.



#### **State Model Landscape Water Conservation Ordinance**

The Green Task Force examined the City of Downey's existing Water Conservation Regulations and Restrictions (Chapter 3.5 of Article VII in the Downey Municipal Code; see Appendix B) and compared it to the new model land-scape ordinance required by the Water Conservation in Landscaping Act of 2006 (Assembly Bill 1881). Adoption of the model ordinance, or one at least as effective as the model ordinance, is required by the California State Legislature. The Metropolitan Water District is assisting by requiring agencies to comply with the ordinance in order to qualify for grant funding. The Task Force found that the City's existing ordinance is at least as effective as the State's Model Ordinance, and in some cases the City's requirements are more stringent than those of the State.

### **ACCOMPLISHMENTS**

Throughout the 2009-2010 inaugural year of the Green Task Force, members met regularly to discuss community issues and initiatives related to the seven key impact areas of the United Nations Urban Environmental Accords. These important considerations are: energy, waste reduction, urban design, urban nature, transportation, environmental health, and water. As a group, Task Force members discussed the impact of pending legislation, public utility conservation programs, and nonprofit and community organization initiatives.

While the fundamental goal of the Task Force was to formulate recommendations that would ensure the City of Downey's sustainable operations into the future, the Task Force members also undertook projects that would make an immediate difference. As part of their quarterly reports to the City Council, Green Task Force members also made recommendations that were immediately implemented, including:

- · Installation of recycling trash containers in City Hall
- Reduction of solar installation permit fees to incentivize installation
- Institution of a "Day without A Bag" (third Thursday of December)
- Implementation of a pilot education program in the Downey Unified School District
- Authorization and sponsorship of, and participation in, a conservation gardening workshop
- Development of a Downey Green Page on the City's website
- Participation in a high efficiency toilet retrofit program for multifamily buildings



# Recycling Awareness

At the recommendation of the Green Task Force, the City of Downey Public Works Department invested in tri-bin recycling stations for City Hall and the Barbara J. Riley Community and Senior Center. Installed in March 2010, these popular bins are a visible demonstration of the City of Downey's commitment to recycling and sustainability. An overview of the City's numerous recycling efforts is provided in Appendix C.

### City of Downey Pollution Prevention and Recycling Programs

### Beverage Container Recycling and Litter Reduction

Each year, the City of Downey receives grants that enable the City to promote recycling. These funds have been used to purchase picnic tables, benches and playground equipment at local parks as well as dugout benches and bleachers at the new Discovery Sports Complex, all made from recycled materials.



#### Commercial Recycling Program

Recycling bins are provided to businesses at no charge, and all recycle-rich loads of waste are sorted for recycling at Paramount Resource Recycling.

### Construction & Demolition Waste Management Program

The City of Downey adopted the Construction & Demolition Waste Management Ordinance in 2009, which requires that any construction, remodeling or demolition project meeting certain requirements must have a waste management plan approved by the City. This program diverts 75-200 tons of construction debris every month.

#### Pollution Prevention

Free curbside services are available for the pickup of large, bulky items, electronic disposal, and Christmas tree recycling. The City also participates in the Los Angeles County Household Hazardous Waste and E-Waste Collection events. Used Tire Collection Events, and Used Oil Collection Events.

#### Residential Recycling Program

Downey residents use three bins for the at-home sorting of waste - blue for recycling, green for landscaping waste, and gray for non-recyclable trash. Of all the material discarded by Downey residents in 2009, 84% was diverted from landfills: 26% was recycled and 58% was diverted for mulch or other landscape uses.

### Special Annual Events

"Environmental Fair" at Kids Day Landscape & Backyard Composting Workshops CalMet Mulch Give-Away Southern California Gas Company Municipal Green Building Conference



# **Solar Panel Installation Fees**

In May, 2009, the Sierra Club conducted a survey of the permit fees charged by more than 250 local municipalities for photovoltaic installations. The report, "Solar Electric Permit Fees in Southern California," revealed that the City of Downey ranked as the 16th-costliest municipality for solar permit fees, with an average cost of \$1,164 per installation. Following the publication of the survey, Green Task Force members agreed the City should encourage solar energy use and lower associated fees and urged the consideration of stronger incentives in the future.

Subsequently, on August 11, 2009, the Downey City Council held a public hearing regarding proposed changes to the building fees for photovoltaic cells, where it was determined that the opportunity to increase the supply of local, sustainable energy by encouraging the installation of solar energy systems would assist in offsetting the fee reductions.

On August 24, 2009, the Downey City Council approved a significant reduction in the costs for residential and commercial building permits for photovoltaic installations. The average cost of residential solar energy permits for single-family homes was reduced to a flat fee of \$200. Fees for larger, more complicated developments were reduced to just 10% of the standard permit fees. Overall, the Council reduced solar panel installation fees by 90%, making Downey's fees among the lowest 22% of municipalities in Los Angeles County.

### Key facts from the Sierra Club Report Solar Electric Permit Fees in Southern California

- California receives more sunshine hours than any state besides Arizona. As such, this state has a tremendous, unrealized potential for solar energy.
- PV [photo voltaic] electricity reduces our reliance on polluting energy sources such as natural gas.
- PV generates its maximum output during the day, and can help meet peak demand.
- PV could provide a local source of electricity to help protect a community in time of earthquake or other emergency, when distant transmission lines and power plants might not be operating.
- Once a PV system is installed, it takes advantage of the free energy of the sun, requires minimal maintenance, and can last at least 35 years.

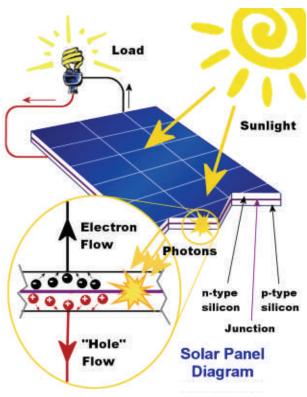


Image courtesy: Online Solar Inc., www.mrsolar.com

# A Day Without a Plastic Bag

Each and every year, some six billion single-use plastic bags (which on a per capita



basis exceed 600 bags per person)<sup>1</sup> are used in the County of Los Angeles. Only 5 percent of singleuse plastic bags are recycled, while the majority of plastic bags end up as litter that pollutes open spaces and waterways or ends up in landfills. The recycling of plastic bags is not costeffective because of a lack of suitable markets and the tendency of the bags to interfere with and jam the machinery used to separate recyclable materials.

Because of the environmental problems caused by singe-use plastic bags, and in keeping with the Green Task Force's goal to promote the reuse of materials and reduction of waste, the Task Force brought forth a resolution to the Downey City Council

proclaiming the third Thursday of December as "A Day Without A Bag" Day. Then Mayor Dn. Mario A. Guerra signed the first inaugural proclamation in early December, 2009. This proclamation and subsequent observance of "A Day Without a Plastic Bag" was just one part of the Green Task Force's public outreach and education program. The Task Force also worked with the Downey Unified School District to develop an educational pilot program regarding the adverse environmental impacts of using disposable bags, whether paper or plastic. Task Force Member Lars Clutterham and



his wife, Kathy, generously donated 2,400 reusable bags as part of the outreach and education program.

<sup>&</sup>lt;sup>1</sup>According to Los Angeles County's Voluntary Single Use Bag Reduction & Recycling Program, http://dpw.lacounty.gov/epd/PlasticBags/Resources.cfm, accessed 5/11/10.

# School-Based Education Program - Reusable Bags

The Education Subcommittee of the Green Task Force worked with local businesses, the Superintendent of the Downey Unified School District, and principals and teachers to develop a pilot education program that would encourage sustainability and promote the use of reusable bags instead of single-use plastic bags. On October 27, 2009, the City Council endorsed and agreed to support this pilot program.

Spearheaded by Green Task Force members Lars Clutterham and Nancy Swenson, the first Reusable Bag Project was implemented at Gallatin Elementary School with coordination by Principal Dr. Rani Maline-Bertsch, teacher Ms. Cheyenne Swenson, and conservation biologist and substitute teacher Ms. Anna Valcarcel. A three-level outreach program was developed that included:

- 1. Grade-level instruction at student assemblies
- 2. Single-use bag redemption program
- 3. Reusable bag decorating contest



For the pilot project, a curriculum was developed by Ms. Valcarcel that addressed the source, use, and disposal of single-use plastic bags and discussed the phenomenon of the "Great Pacific Garbage Patch." With the "Character Counts" program as a basis, students learned about the importance of making their own environmentally responsible decisions.

Students were then invited to participate in a voluntary single-use plastic bag redemption program. For every ten bags a student brought in to recycle, he or she was awarded with a reusable grocery bag. The Gallatin Elementary School Student Council assisted with the collection of approximately 12,000 single-use plastic bags, all of which were delivered to Cal-Met for recycling by Task Force Member Nancy Swenson.



# School-Based Education Program - Student Contest



The final component in the Education Program was a reusable bag decorating contest. At an all-school assembly on Thursday, April 22, the fortieth anniversary of Earth Day, Gallatin Elementary School Principal Dr. Bertsch presented awards to the winning students in each grade level. Green Task Force Member Lars Clutterham and Council Member Guerra thanked all of the students for serving as a shining example of environmental awareness and presented each winner with a certificate from the City of Downey.



#### Contest Winners

Kindergarten: Daniel Angulo 1st Grade: Ivanna Duenas 2nd Grade: Ruben Garcia 3rd Grade: Ximena Ramos

Zulia Solis

4th Grade: Angelo Lugo 5th Grade: Barbara Astudillo

Nicole Martinez



#### Panel Judges:

Jennifer Boose—DUSD Assistant to the Superintendent/Board of Education Lars Clutterham—Green Task Force Member Dn. Mario A. Guerra—Councilmember and Green Task Force Chair Barbara Samperi—President, DUSD Board of Education Nancy Swenson—DUSD Board of Education & Green Task Force Member

# **Green Landscaping Workshop**

At the beginning of their tenure, the Green Task Force's Sustainability Subcommittee members were informed that the Central Basin Municipal Water District's "Gardening"



with Blue" workshop, originally scheduled for August 13, 2009, was cancelled due to budget constraints. In response, the Green Task Force recommended and the City Council authorized a rescheduled "Gardening with Blue" class to be funded by Central Basin Municipal Water District and Efficient Lighting & Electric. This class was held on September 23, 2009 with more than 25 Downey residents in attendance.

### Workshop Agenda/Topics:

The workshop focused on the use of California native plants and other droughtresistant plant varieties that thrive in Southern California's Mediterranean climate.

Many of these plants bloom year-round, putting an end to the need to replant annuals at the beginning of each new season. They also use less water, require less fertilizer and reduce yard work to once-a-month trimming instead of once-a-week mowing. The basics of garden design for homeowners were covered as well as the benefits of using California friendly plants, the basics of sprinkler systems, and optimal irrigation scheduling.



# **Downey "Green" Website**

Just as the Green Task Force was embarking upon its work, the Downey City website underwent a complete redesign, providing the perfect opportunity to enhance the Task Force's public awareness and education campaign. With the City Council's approval, the Task Force provided links and information to make Downey residents aware of how their actions affect the environment and to increase participation in area conservation incentive programs.

### The Downey Green Page includes:

- Links to other sites featuring sustainability practices and information
- Links to sites that offer no-cost and low-cost energy-saving devices and rebates
- Notice of environmentally-related activities in or near the City of Downey
- A comment page available for citizens to add their own green ideas





# **RECOMMENDATIONS**

The Green Task Force's year-long overview of sustainable practices in the City of Downey led to several initiatives and outreach campaigns that allowed the Task Force to tackle areas of immediate concern and to yield immediate results. The Task Force members also learned about progressive City initiatives such as the "Green Streets" program, the Integrated Waste program, and the streamlining of the building permits process for green buildings. Their discussions also generated a long list of actions that could be undertaken by the City in the future to ensure that Downey remains a sustainable urban center.

Ultimately, the Task Force condensed their action list into thirteen broad recommendations for implementation in both the short and long term. These recommendations are summarized below in priority order and are classified according to the focus areas set forth by the United Nations Urban Environmental Accords.

#### **Short-term Targets**

- 1. The Green Task Force recommends that the City Council re-commission a permanent Green Task Force, to be comprised of two volunteer members appointed by each member of the City Council in cooperation with the City Manager's Office. While continuing to implement the Task Force's mission and goals, members also would be responsible for maintaining the portion of the City's website pertaining to "Green" information, including information on current promotions, programs, rebates, and other topics of interest. Focus Area: Environmental Health
- 2. Designate Earth Day, A Day Without A Bag, Downey Street Faire, Downey Kids' Day and similar occasions as opportunities to celebrate sustainable living and educate the community about environmental issues. Activities at these City events include: dissemination of sustainability literature and other engaging activities such as the creation and hosting of City-wide competitions for reusable bag design, student recycling competitions, and student production of Public Service Announcements. Focus Area: Environmental Health
- 3. Publicize, reinforce, and enhance water conservation and energy efficiency programs including municipal programs (irrigation with reclaimed water, standards for rainwater capture and reuse, and grey water standards and reuse policies) and residential distribution programs (including high efficiency toilet and low-flow showerhead distributions and agency partners that provide lighting retrofit rebates). Focus Areas: Energy and Water
- 4. Install recycling containers in public parks and municipal public areas. *Focus Area: Waste Reduction*
- 5. Promote business sustainability through the creation and distribution of sustainable business practices kits to Downey business license applicants; development of a program to incentivize, recognize, and promote business recycling;

- the distribution of conservation tips in City mailers; and the institution of a "green" recognition program for businesses and organizations to recognize exemplary sustainable practices. *Focus Area: Environmental Health*
- 6. Enhance sustainable building opportunities through code updates and review municipal fees associated with sustainable construction and retrofit programs to identify possible incentives to increase implementation of sustainable practices including, for example, building permits for sustainable building design. Develop a recognition program similar to Keep Downey Beautiful's Annual Beautification Awards. Focus Area: Urban Design
- 7. Establish a Citywide policy to refrain from using expanded polystyrene ("Styrofoam") at City functions or in the conduct of City business. *Focus Area: Waste Reduction*
- 8. Publicize and expand the "Green Streets" program, including practices such as water runoff reduction, streetscape improvements, tree planting and aesthetic enhancements. *Focus Area: Urban Nature*
- 9. Provide links to sustainable and green-oriented organizations from the City's website and consider joining "Green City" organizations such as ICLEI, Smart Cities or Green Cities California. *Focus Area: Environmental Health*

### **Long-Term Targets:**

- Establish an ongoing strategy for implementing drought-tolerant landscaping practices on both private and City property. Focus Areas: Water and Urban Nature
- 2. Establish a City policy for replacement of City vehicles with electric, hybrid, CNG or other low-emission vehicles and development of appropriate charging stations throughout the community. *Focus Areas: Transportation and Energy*
- 3. Establish a long-term plan to promote low-emission mass transit in conjunction with the City's Specific Plan for Downtown Development and expand throughout the City as the program evolves. *Focus Area: Transportation*
- 4. Establish a City policy for retrofitting municipal and industrial buildings with photovoltaic panels. *Focus Area: Energy, Environmental Health, and Water*

# **CONCLUSION**

The Downey Green Task Force worked diligently throughout its 2009-2010 term. Its successes included:

- Assistance in the development of a Downey Green page on the City's Website
- Presentation of a declaration adopted by the City Council for "A Day Without a Bag." With the Downey Unified School District, members developed and implemented a multi-tiered education program to promote the use of reusable grocery bags. Hundreds of children succeeded in collecting 12,000 plastic bags for recycling. Contest winners were honored for recycling and for outstanding reusable bag decorations.
- Sponsorship and participation in a public workshop on conservation gardening, in cooperation with the Central Basin Municipal Water District
- Recommendation that the city install recycling bins at key city facilities. The new bins have proved popular
- Solar panel fee reductions and Task Force influence on permit incentives for sustainable building practices
- Development of this report, with a dozen more recommendations to the City Council that have long-term and short-term implications for conservation, sustainability and education

The final recommendation of the Green Task Force to the Downey City Council is to reinvent this temporary one-year group as a permanent, standing advisory committee to the city. While much has been accomplished, much is yet to be done. The Downey Green Task Force members have been proud to volunteer their efforts to help make Downey a better-educated and more environmentally-sensitive city.



### Appendix A

# MOVING FORWARD SUSTAINABLY

The United Nations Urban Environmental Accords were signed by mayors from around the globe on June 5, 2005. Since then, hundreds more mayors have signed on and agreed to provide leadership to develop sustainable urban centers based on culturally and economically appropriate local actions.

Recognizing the environmental challenges created by the continued global urbanization that results in the migration of one million people to cities each week, the Urban Environmental Accords set forth seven focus areas to guide cities in safeguarding the human right to a clean, healthy, and safe environment. These seven focus areas are:

**Energy**: Renewable energy, energy efficiency, and climate change

Waste Reduction: Zero waste, manufacturer responsibility, consumer responsibility

**Urban Design:** Green building, urban planning

Urban Nature: Parks, habitat restoration, wildlife

**Transportation**: Public transportation, clean vehicles, reducing congestion

**Environmental Health**: Toxics reduction, healthy food systems, clean air

Water: Water access & efficiency, source water

conservation, wastewater reduction



Using the Urban Environmental Accords as a model, City Staff have conducted a study of current City operations, policies, and procedures. What follows is a matrix of the study results that outlines the key areas impacted by actions and programs in the City of Downey. This Green Report and the focus areas should inform forthcoming City programs and policies, advancing Downey's enduring motto:

### Future Unlimited

# APPENDIX A CITY OF DOWNEY ENVIRONMENTAL INITIATIVES AND PROGRAMS

Action/Program	Key Impact Areas						
	Energy	Waste Reduction	Urban Design	Urban Nature	Transportation	Environmental Health	Water
Energy-Saving Programs							
Conversion of light fixtures from T-12 to efficient T-8 lights	Х	Х					
Conversion to 23W compact fluorescent light bulbs from incandescent in Council Chamber and Library Cormack Room	Х	Х					
Efficiency upgrade of City Hall HVAC system, including economizer and zone controllers	Х						
Downey LINK buses are now propane-fueled	Х					Х	
Downey LINK student and senior discounts					Х	Х	
Dial-A-Ride buses converting to cleaner unleaded gasoline (from conventional diesel)	Х					Х	
Traffic lights upgraded from incandescent to LED signals (red and green) from 2001-2003	Х						
Crosswalk signals upgraded from incandescent to LED signals	Х						
7% of streetlamps are more-efficient metal halide lamps (as opposed to high-pressure sodium)	Х						
City-funded school-based <i>LivingWise</i> energy and water conservation education program	Х					Х	Х
60% of the appliances at City facilities are energy efficient (percentage is artificially low due to dearth of records on recently-purchased products)	Х						
City employees required to shut down computers each night; 100% compliance = 1,460 kWh saved each year	Х						
LED decorative lighting at the new Columbia Space Center	X						

	Impact A	reas	_				
Action/Program	Energy	Waste Reduction	Urban Design	Urban Nature	Transportation	Environmental Health	Water
Waste Reduction Programs							
Beverage Container Recycling Grant Program to promote the use of recycled materials products		Х					
CIWMB diversion rate of 51%		Х					
Public outreach on waste diversion through City website, quarterly		Х					
newsletter, special community events and bill inserts							
KDB averages 20 cleanups and 5 tons of trash collected annually		X				X	
Christmas tree recycling program		X					
Annual Used Oil Recycling Calendar Contest		X		.,		X	
Street Tree Master Plan including 15,545 trees in the City		Х		X			
Annual Arbor Day tree planning				X		Х	
Recycle toner cartridges		Х					
Use recycled paper		X					
Office Depot reminder to buy green online		Х					
Maintenance yard recycles green waste, scrap metal, used motor oil, and used tires.		X				Х	
Maintenance yard also evacuates gas and liquid contents of used aerosol containers so metal cans are recycled instead of disposed as hazardous waste		Х				Х	
Required curb-side residential waste sorting		Х					
Construction and demolition debris ordinance has diverted over 150 tons of debris from landfills in the first two months. It requires contractors and homeowners to divert 90% of project waste		Х					
7% of City-purchased products (including furniture) in 2007 were recycled products		Х					

	Key Impact Areas							
Action/Program	Energy	Waste Reduction	Urban Design	Urban Nature	Transportation	Environmental Health	Water	
Urban Design								
Phoenix Award for Brownsfield Redevelopment of NASA site			Х			Х		
Master planning for mixed-use developments at the Rancho Los Amigos South Campus and the NASA site			Х		Х	X		
Park and Ride and Metro access at Green Line Station on Lakewood Blvd.					Х	Х		
Grant Applications for Multi-Modal Transit Studies (examining infrastructure solutions to promote alternative transit)	Х		Х		Х	Х		
Update of Master Plan to include mixed use developments in Downtown Downey			Х		Х	Х		

	Key Impact Areas							
Action/Program	Energy	Waste Reduction	Urban Design	Urban Nature	Transportation	Environmental Health	Water	
Urban Nature								
Tree City USA				Х				
Development of first new park in 40 years			Х	Х		Х		
118.5 Acres of parks			X	Х		Х		
"Green Streets" program (adding native landscaping and trees								
along parkways and medians as part of road reconstruction			X	X		X		
projects)								
Development of a Park Master Plan and participation in regional Open Space Master Plans			Х	Х		Х		
Pursuit of grant opportunities for development of additional open space and redevelopment of existing parks			Х	Х		Х	Х	

	Key Impact Areas							
Action/Program	Energy	Waste Reduction	Urban Design	Urban Nature	Transportation	Environmental Health	Water	
Transportation								
Rideshare Incentive Program for Employees	Х				Х	X		
203, or 24% of City employees, participate in the rideshare					Х			
and alternative commuting program								
Modified work schedules for City employees (4-10 and 9-80)	X				X	X		
Reconstruction of streets and roadways to include pedestrian-friendly elements (lighting, street furniture, and	Х		Х	Х	Х	Х		
landscaped parkways) that promote alternatives to driving								
Installation of raised medians that channelize traffic flow and reduce congestion and traffic accidents	Х		Х		Х	X		

	Key Impact Areas								
Action/Program	Energy	Waste Reduction	Urban Design	Urban Nature	Transportation	Environmental Health	Water		
Water	•		•		•		•		
From 2001-2008, 189 rebates for water-efficient clothes washers were received by Downey residents							Х		
Rainwater capture systems required for residential remodels >400ft <sup>2</sup>							Х		
Annual low-water landscape workshops for residents				Х			Х		
City low-water landscape projects in lieu of conventional turf installation				Х			Х		
From 2004-2007, 349 high efficiency toilets (HET) were distributed to Downey residents.							Х		
From 2001-2008, 148 HET rebates were distributed to single and multi family residents in Downey							Х		
Conserved 738.3 acre feet (241 million gallons) of potable water from last year by using reclaimed water instead of fresh water.			Х				Х		
45 sites around the City use reclaimed water; 9 additional sites will begin using reclaimed water in the next year.			Х				Х		
61% of the toilets at City facilities are water-efficient fixtures							Х		
62% of the urinals at City facilities are water-efficient or waterless							Х		
92% of the faucets and showerheads at City facilities are low-flow fixtures							Х		
Per Capita Water Use 120 gallons (not counting Coca Cola)							Х		
The new Discovery Park includes an underground infiltration basin with 8 acre-feet of retention and detention capacity			Х	Х		Х	Х		
Implementation of "bio swales" along new roads and parkways to promote infiltration of storm water			Х	Х			Х		

	Key Impact Areas						
Action/Program	Energy	Waste Reduction	Urban Design	Urban Nature	Transportation	Environmental Health	Water
Environmental Health							
Stormwater pollution prevention plans required for commercial developments over 5000 ft <sup>2</sup>						Х	X
Aggressive development planning program to reduce the current and future discharge volume and mass emission of pollutants to local receiving waters						Х	Х
In February 2003, the Downey City Council granted staff the legal authority to prohibit non-stormwater discharges to the storm drain system						Х	Х
Since 2001, Keep Downey Beautiful has implemented an after school educational and community outreach program emphasizing environment protection and storm water pollution prevention, annually reaching over 600 elementary and middle school youths		Х				Х	Х
The Rio Hondo Event Center and Golf Course redirects parking lot pollutants to landscaped swales ("bio swales", an infiltration system and the golf course water hazards, preventing pollution of the Rio Hondo River			Х	Х		Х	Х
Pesticides and fertilizers are not applied when rain is anticipated and mulches are stored outdoors in an unpaved area that encourages infiltration.						X	Х
Use of wavelength-specific light inhibitors instead of aquatic herbicides to control aquatic vegetation in ornamental City ponds						Х	Х
Street gutters are vacuum swept on a weekly basis to prevent sewer and stormwater pollution						Х	Х

### Appendix B

### **Downey Municipal Code**

ARTICLE VII - STREETS AND PUBLIC WORKS

### Chapter 3.5 – WATER CONSERVATION REGULATIONS AND RESTRICTIONS

### **SECTION 7350. USE RESTRICTIONS.**

Customers shall comply with the following restrictions concerning the use of water:

- (a) With respect to irrigation practices:
  - (1) Except as provided below, lawn watering and landscape irrigation with potable water is permitted only between the hours of 4:00 p.m. and 10:00 a.m. on designated irrigation days. Golf courses, parks, school grounds, and recreational fiends may be irrigated with potable water on any day, and golf course greens and tees may be irrigated at other times when a plan approved by the Director of Public Works is on file with the City. Agricultural users, commercial nurseries/landscape contractors, and irrigators of propagation beds may continue to irrigate with potable water as management practices dictate, but are required to curtail all nonessential water uses.
  - (2) Irrigation with reclaimed water is permitted on any day.
  - (3) Watering is permitted at any time if a hand-held hose equipped with a positive shut-off nozzle is used; a hand-held faucet-filled bucket of five gallons or less is used, or a drip irrigation system is used.
  - (4) A "designated irrigation day" is determined by the last digit of the street address. Properties with addresses ending in an even number may irrigate on even numbered days of the month and addresses in an odd number may irrigate on odd numbered days of the month. Where the cost of reprogramming automatic irrigation systems is determined by the Director of Public Works to be prohibitive or unfeasible, as with businesses that are not normally open on weekends, such customers may be permitted to irrigate on Mondays, Wednesdays, and Fridays.
- (b) With respect to exterior washing practices:
  - (1) Washing of buildings, facilities, equipment, autos, trucks, trailers, boats, airplanes, and other type of mobile equipment is prohibited except where a hand-held hose equipped with a positive shut-off nozzle for quick rinses is used. Whenever possible, such as when washing vehicles, a bucket wash is encouraged.
  - (2) Washing is permitted at any time on the immediate premises of a commercial car wash.
  - (3) Washings are exempted from these regulations where the health, safety, and welfare of the public is contingent upon frequent vehicle or other facility or equipment cleaning, such as garbage trucks and vehicles used to transport food and perishables.
  - (4) Water shall not be used to wash down sidewalks, driveways, parking areas, patios or other paved areas except to alleviate immediate fire, sanitation or health hazards.

- (5) Water shall not be allowed to run off landscape areas into adjoining streets, sidewalks, or other paved areas due to incorrectly directed or maintained sprinklers or excessive watering.
- (c) With respect to ornamental or recreational uses:
  - (1) Filling and refilling swimming pools and spas is discouraged, but should be permitted only between the hours of 6:00 p.m. and 6:00 a.m..
  - (2) Filling and refilling of ponds, fountains, and artificial lakes is discouraged, and the recycling of water in ponds, fountains, and artificial lakes should be encouraged.
- (d) With respect to other uses:
  - (1) Water from fire hydrants shall be used only for fire fighting and public health, safety and welfare activities.
  - (2) Flushing of water mains will not be permitted except as necessary to protect the public health.
  - (3) Restaurants shall not serve water to their customers unless specifically requested.
- (e) Leaks must be repaired as soon as discovered and shall not be allowed to continue for more than 48 hours. (Added by Ord. 925, adopted 2-26-91)

#### **SECTION 7353. ADMINISTRATIVE REVIEW.**

- (a) The City recognizes that the enforcement of this ordinance will impose inconvenience upon the public and desires that hardships shall be mitigated whenever feasible. Water customers shall be afforded the opportunity to contest findings, correct errors, and alleviate unusual and extraordinary hardship. The administrative review process set forth in this section is adopted to further these goals.
- (b) The Director of Public Works may grant relief to customers to reflect changes in circumstances which have occurred subsequent to the base period. No relief shall be granted unless the customer demonstrates maximum practical water reduction. The Water Board shall review appeals from the decision of the Director of Public Works as soon as practical, but in no event later than thirty-five (35) days after the customer files a written request for administrative review. (Added by Ord. 925, adopted 2-26-91)

#### **SECTION 7356. REPORTS AND RECOMMENDATIONS.**

The Director of Public Works shall report on compliance with this ordinance in light of future water supply conditions. The Director of Public Works shall also report on the experience of the administration of the ordinance. The reports shall be submitted to the Water Board monthly, commencing March 1991. (Added by Ord. 925, adopted 2-26-91)

#### **SECTION 7358. WATER CONSERVATION.**

(a) Applicability. This section of the Code is intended to encourage all residential developers, where more than four (4) living units are to be built or substantially renovated, and all commercial/industrial developers to design their projects to maximize water conservation within their projects.

### (b) Definitions:

- (1) Hydrazone: A portion of a landscaped area having plants with similar water needs, that are served by a sprinkler valve or set of sprinkler valves, with the same watering schedules.
- (2) Infiltration Rate: The rate of water entry into the soil expressed as a measure of the depth of water units over time (inches per hour).
- (3) Overspray: The water which is delivered beyond the landscape areas wetting non-landscaped areas or hydrazones not intended to be watered by the irrigation system being utilized.
- (4) Recycled Water: Reclaimed or treated water, sewage effluent water which has been rendered suitable for nonpotable use for landscape irrigation or industrial uses. Such water is not for human consumption.
- (5) Run Off: Water which is not absorbed by the soil or landscape to which it is applied and flows from the area.
- (6) Turf: A surface layer of earth containing mowed grass and its roots.
- (c) Private property landscaping must be designed to fully comply with the City's landscaping provisions as listed in the Downey Municipal Code. Where possible, such landscaping/irrigation systems shall also be designed to encourage water conservation. Conservation measures should include, but not necessarily be limited to, the following:
  - (1) Limiting turf areas on project sites subject to City review and approval.
  - (2) Designing all irrigation systems and submitting documentation which will ensure that proper water infiltration will occur based on soil and grading conditions.
  - (3) Designing all irrigation systems and submitting documentation which will ensure they will supply needed quantities of water only and that these systems are fine tuned to avoid use of unneeded water as well as avoiding overspray and run off.
  - (4) Where appropriate, provide planters which incorporate drought tolerant ground covers, shrubs and trees.
  - (5) Where appropriate, developers should plant fast growing, broad head trees (which shall be 24" box size trees or greater at the time of their planting) in order to provide shading and to reduce evaporation.
  - (6) Where appropriate, plantings should be grouped into hydrazones to maximize irrigation system's efficiency.
- (d) The City's Design Review Board may develop a list of drought tolerant trees, shrubs and ground covers that can be used as a guide for developers when they design their landscape/irrigation plans. This plant list may be expanded or contracted as needed by the City. (Added by Ord. 954, adopted 11-24-92)

### Appendix C

### **CITY OF DOWNEY RECYCLING PRACTICES**

- Residential Recycling Program provides separate containers to residents for recycling (blue) and yard waste (green)
- City purchases recycled paper for all printers and photocopier machines
- City recycles all laser jet ink cartridges
- City partners with 14 State-certified collection centers to advertise used motor oil and oil filter recycling locations
- City Construction and Demolition Ordinance diverted 302 tons of construction and demolition debris from landfills during the first 2 months of the program
- City saves 800 acre-feet of potable water per year by using recycled water to irrigate Rio Hondo Golf Course, most City parks, DUSD schools, roadway medians and parkways, and many privately-owned commercial properties
- City assisted the Downey Unified School District with the implementation of a comprehensive recycling program
- Recycling containers furnished to schools and for City events to promote the recycling of beverage containers
- Picnic tables, park benches, dugout benches and bleachers are made from recycled beverage containers
- Commercial trash diversion program sends recycle-rich commercial trash loads to the Downey Area Recycling and Transfer (DART) facility, keeping recyclable material out of landfills
- Large logs (over 4" diameter) from City tree removal operations are hauled away by a vendor that reduces them to wood mulch for landscaping activities
- City Maintenance Yard recycles green waste, used motor oil and oil filters, used tires, scrap metal and supply containers (using a special machine to pierce and evacuate the propellant from used aerosol cans allowing the cans to be recycled)
- Fleet Maintenance operation uses re-refined used motor oil instead of virgin product in all City vehicles
- Asphalt recycling is required for all street improvement projects

- Street Paving Projects use rubberized asphalt pavement containing pulverized recycled tires
- Recycling of beverage containers and used motor oil promoted through the distribution of promotional items and literature at City events
- Quarterly events held for oil filter exchange and used motor oil collection
- Annual "Environmental Fair" at KidsDay promotes recycling and eco-friendly activities
- Annual free mulch give-away to City residents to reduce water use and promote yard waste recycling
- Annual City Christmas tree collection diverts trees from landfills and provides mulch