

SUSTAINABILITY ACTION PLAN



7/14/2009

DRAFT FRAMEWORK

Sustainability Action Plan

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INTRODUCTION

According to the United Nations, the world's population is over 6 billion people, and this number continues to grow at rates that were unprecedented before the 20th century. The economic activity to support all those here now, and the additional 3 billion people expected by the year 2050, places a great demand for energy and resources, along with associated environmental impacts which can negatively affect our community and quality of life. There is a growing awareness for the need to live and work in more resource-efficient and environmentally conscious ways to ensure a better future for ourselves and future generations.

What is Sustainability and Why Pursue It?

Living, and conducting business, in a way that considers natural resources and environmental impacts is referred to as "sustainability." The most common definition comes from a United Nations report, which states that "sustainability meets the needs of the present without compromising the ability of future generations to meet their own needs." In other words, a sustainable society is one in which consumption of resources doesn't exceed nature's ability to replenish those resources. For the City of San Clemente, this would mean implementing sustainable policies and practices for its own operations and areas of jurisdiction to ensure that the City can meet its current needs without compromising the ability of future generations to do the same.

While resource demands and environmental issues are linked on local, national and even global scales, communities and governments are increasingly taking steps to start addressing some of these challenges locally. Since the City of San Clemente is a significant landowner, employer, building manager, fleet operator, utility owner and operator, and consumer of goods and services, it has the opportunity to affect meaningful improvements in use of resources and environmental impacts. Just some benefits of adopting sustainable practices include improving community livability (via improvements in air and water quality, reduction in harmful emissions and traffic congestion, other pollution reduction methods, etc.), conserving resources (e.g. using less electricity, fuel and water), and saving money by implementing conservation measures and efficient technologies.

Purpose and Scope

As awareness of sustainability issues increases, an increasing number of local governments are pursuing efforts to achieve sustainability. This typically begins with a stated commitment to pursue a sustainable strategy or plan, followed by a collaborative, public process to develop an action plan. Efforts can include a variety of approaches, from developing policies to implementing technological retrofits. The purpose of the

City's effort is to develop a plan for coordinated, city-wide implementation of sustainable practices and technologies.

The Sustainability Action Plan is being developed to initially address environmental sustainability in the following six main focus areas:

- Resource Conservation – Decrease consumption of non-renewable, non-recycled materials and pursue and encourage use of renewable resources (e.g. solar power, recycled water, etc.). This focus area is further targeted toward solid waste reduction, water use, and energy use.
- Environmental and Public Health – Minimize levels of pollutants entering the air, soil, and water from everyday business and residential practices.
- Urban Nature – Develop and maintain a parks and open space system that supports natural local habitat, and provides both passive and active recreation opportunities.
- Urban Design – Establish “green” land use and building standards for public and private development, redevelopment and retrofit projects.
- Transportation – Encourage and pursue alternative forms of transportation (including pedestrian, bicycle, mass-transit, and fuel-efficient/alternative fuel vehicles).
- Community Education and Civic Participation/Public Involvement – Develop education and outreach programs that are easily accessed by community members, and encourage collaboration and dialogue between City officials, staff, businesses, community groups, and individual residents. Descriptions of educational efforts are integrated within the other main focus areas noted above.

This “interim” document is intended to establish a framework for organizing different programs and activities that should be pursued to increase sustainability in the City of San Clemente. This draft framework presents initial recommendations by the Sustainability Action Plan Task Force on specific measures, commitments and implementations timelines. With City Council direction, the Task Force will continue to develop and refine this framework, and then prepare a formal action plan for City Council consideration.

Framework Development Process

During the January 30, 2008 meeting on the Vital Few Priorities, the City Council made a commitment to pursue improved environmental sustainability of the City's policies, operations, and projects. Staff was directed to start developing a Sustainability Action Plan as discussed above. The initial goal was to develop this framework document, followed by a formal action plan to be adopted in Fiscal year 2010. To meet these goals, City staff and members of San Clemente Green (a local non-profit dedicated to promoting a better community through implementation of sustainable practices) formed a Sustainability Action Plan Task Force to research and discuss each of the major focus areas noted above, and then develop recommended actions and implementation goals. The task force convened in September 2008 and has been meeting on the second Wednesday of each month from 6-7pm at the City's Community Development

Office (910 Calle Negocio). The public is also welcome to attend the task force meetings. The City Council appointed Council member Joe Anderson to participate in and represent the City Council on the task force.

Each month the task force focuses on a specific topic and research is presented to outline ideas that should be considered in crafting the specific potential environmental sustainability initiatives. After each meeting, designated members of the task force continue to research and refine information on the specific topic discussed, while other members prepare for the next topic to be addressed. With all of the focus areas preliminarily addressed, the task force has prepared this framework document to present initial recommendations for the content of a formal Sustainability Action Plan.

EXISTING PRACTICES AND OPPORTUNITIES ASSESSMENT

City “Green Team”

City staff has formed a “Green Team” which includes a staff representative from affected City departments. The Green Team members serve as the primary sustainability contacts for key City departments, and collectively will be responsible for helping to develop, coordinate and implement sustainability initiatives, as well as for reporting on each department’s progress toward meeting the sustainability goals and targets identified in the City’s approved Sustainability Action Plan. The Green Team includes:

- Beaches, Parks and Recreation Department
 - Golf: Gus Nelson
 - Maintenance, Mark Chavez
 - Park Development: Tim Shaw
- Public Works Department
 - Fleet Services: Mark Murphy
 - Maintenance: Dave Dendel
 - Engineering: Tom Bonigut
 - Utilities: Nathan Adams
 - Environmental Services: Mary Vondrak (Water Quality) and Danna McIntosh (Recycling)
- Community Development Department
 - Planning: Chris Wright
 - Building: Mike Jorgensen
- Finance: Tom Rendina
- Animal Services (CASA): Rick Gilliland

A “Sustainability Coordinator” will be charged with coordinating implementation of the Sustainable Action Plan and the efforts of the Green Team. Tom Bonigut, Assistant City Engineer, will serve as the Sustainability Coordinator.

Existing Practices and Future Opportunities

Even before the desire to develop a comprehensive Sustainability Action Plan, the City has been implementing practices that could be considered sustainable. The following list summarizes key sustainable practices that are already being implemented as part of the City’s standard business operations. To help plan for future efforts, the Green Team will use the list of existing practices as a foundation from which to identify additional opportunities. To provide a concise Draft Framework document, the following list summarizes only some of the current sustainable practices. A complete list will be provided in the Final Sustainability Action Plan.

Solid Waste / Recycling

- Waste reduction and recycling program in all city offices and facilities
- Require all events held in City facilities and/or City property to provide recycling at the event
- Construction and Demolition Waste Recycling Program (50% diversion requirement)
- Residential Electronic, Universal and HHW waste collection programs
- Recycling education programs and materials to all San Clemente schools, residents and businesses
- Use of rubberized asphalt and recycled aggregate for City street projects
- Use of recycled plastic for all city park playground equipment
- Use of rubberized surfacing at all city park playgrounds area

Water Use

- Recycled water generation and planned expansion
- Water conservation education and rebate programs
- Tiered water rate structure to encourage conservation
- Recently updated water conservation ordinance
- Water distribution system leak detection program
- Local water supply development (recycled water, new wells, regional desalination project) to reduce dependence on imported water

Energy Use

- Energy efficiency audits of high energy use City facilities (in progress)
- Demand Response Program audit of City facilities (in progress)
- Energy Efficiency and Conservation Block Grant (EECBG) proposal (in progress)
- Energy efficiency at City facilities:
 - Replacement of incandescent lighting with fluorescent lighting
 - Replacement of old HVAC systems with new energy-efficient equipment
 - Replacement of water heaters with new energy-efficient models
 - Use of Energy Star appliances or equipment
 - Installation of new lighting control switches or occupancy sensors
 - Thermostats controlled to shut off at night and on the weekends
 - Variable Speed Drive motors in many sewer/water pump stations
- Energy Efficiency Policy for City employees, such as turning lights and computers off
- Installation of light-emitting diode (LED) traffic signal light bulbs and pedestrian crossing signals
- Installation of solar-powered street radar signs

Environmental and Public Health

- Policy / program for award of City grant funds for local environmental projects (in development)
- Water treatment plant processes to reduce chemical use (e.g. UV treatment)

- Pre-Treatment inspections for fats, oils, and greases – sewer spill prevention
- Sewer and Storm-Drain line inspections to prevent spills
- Existing Environmentally Preferable Procurement Policy (City Policy No. 201-2-6)
- Clean Ocean Program (Water Quality):
 - Compliance with State stormwater/urban runoff requirements
 - Street sweeping
 - Runoff treatment
 - Site inspections: municipal, commercial, industrial and construction sites
 - Pollution reporting hotline (949-366-1553), investigation, and spill response
 - Water quality code enforcement
 - Public education and outreach
 - Water quality monitoring

Urban Nature

- Integrated Pest Management (IPM) program to reduce use of chemicals in Golf and Parks maintenance
- Sand replenishment policy and opportunistic sand replenishment program
- Long-term sand replenishment project (study in progress)
- Planned expansion of City park and trail system

Urban Design

- LEED Silver Certification for planned Civic Center Renovation
- Incorporation of sustainable/green building design features in City projects:
 - La Pata/Vista Hermosa Sports Park
 - Fire Station/Senior Center
- Enforcement and compliance with State Energy Code
- Green Project Fee Waiver – no permit fees for solar electric and solar water heating system projects

Transportation

- Use biodiesel (B20) on all diesel-powered City vehicles and equipment
- Some alternative fuel City vehicles (propane, hybrid)
- Fleet Maintenance
 - Recycling of oils, coolant, tires, batteries, plastic
 - Use of water-based parts and brake cleaners
- Implementation of traffic signal synchronization or optimization system
- Programs to repair existing sidewalks and install new sidewalks
- Traffic Task Force to address “hot spots” and reduce congestion

PROPOSED SUSTAINABILITY RECOMMENDATIONS

Proposed environmental sustainability actions that the City should consider pursuing have been organized into the major focus areas previously discussed. These proposed actions are presented as summary tables on the following pages, each of which includes the following information:

- Goal: A concise description of the City’s objectives for a particular focus area.
- Indicator: A measure of progress toward an identified goal.
- Target: A measurable quantity to define success for a specific indicator.
- Action: The action or program needed to meet the indicator target.
- Responsible Party: Listing of the key parties that will be responsible for implementing the identified actions.

The tables also include “rankings,” on a 1- to 5-point scale, to help gauge the feasibility, cost and benefit of potential actions as follows:

- Feasibility: how difficult or time consuming would the activity be to implement.
 - 1 is easiest to implement, 5 is hardest
- Cost: cost to the implement the activity.
 - 1 is inexpensive, 5 is costly
- Benefit: anticipated benefit that would be received from implementing the activity.
 - 1 is small benefit, 5 is large benefit

The rankings are qualitative and not based on any detailed cost estimates. The rankings represent the collective judgment of the Task Force, and are intended only to provide a general sense of the feasibility, cost and benefit of the recommended potential actions.

Resource Conservation – Solid Waste Reduction/Recycling

Goals

- Reduce consumption of non-renewable materials.
- Reduce waste generation.
- Provide education to encourage and increase recycling.

Indicator	Target	Action	Responsible Party	Feasibility	Cost	Benefit
<ul style="list-style-type: none"> • Total amount of waste generated in City • Amount of waste diverted from landfill 	<ul style="list-style-type: none"> • 10% total waste reduction by 2014 (compared to 2000 baseline) • 75% landfill diversion by 2014 	Increase Construction and Demolition diversion to 75% starting 2011 – update solid waste ordinance.	<ul style="list-style-type: none"> • City 	2	2	4
		Expand mandatory recycling to commercial customers starting 2011 – develop ordinance (likely requires rate increase and Prop. 218 notice)	<ul style="list-style-type: none"> • City • Franchise waste hauler 	2	2/3	5
		Implement food waste collection/diversion program after pilot project finishes in 2011 (likely requires rate increase and Prop. 218 notice)	<ul style="list-style-type: none"> • City • Franchise waste hauler 	4	3	4
		<p>Increase awareness, education and community outreach opportunities for waste reduction, recycling and composting options.</p> <p>City to encourage preservation, restoration and adaptive re-use of historic structures as a means to reduce consumption and waste while preserving culture and investments from past generations.</p>	<ul style="list-style-type: none"> • City • Franchise waste hauler • SC Green 	1	1	3

Resource Conservation – Water Use

Goals

- Reduce per capita consumption of water through implementation of water conservation programs and educational outreach.
- Reduce reliance on imported water.

Indicator	Target	Action	Responsible Party	Feasibility	Cost	Benefit
Reduction in potable water used in the City's service area.	20% per capita by 2020 (compared to 1995-2005 composite baseline of 180 gpcd for DWR Hydrologic Region 4).	Implement and enforce the City's water conservation ordinance, which was updated in 2009.	City	2	2	4
		Complete water efficiency audits and retrofits of all City facilities.	City	1	2	4
		Continue with conservation-based tiered water rate structure.	City	2	1	4
		Increase awareness, education and community outreach opportunities for water conservation options.	<ul style="list-style-type: none"> • City • SC Green 	1	1	3
Percent local vs. imported water sources.	15% by the end of FY2010, and 25% by FY2016.	Complete recycled water system expansion (currently under design).	City	2	4	4
Amount of recycled water generation capacity.	Double existing generation and transmission capacity by FY2016.					

Resource Conservation – Energy Use

Goals

- Reduce energy use by educating and promoting civic participation in energy efficiency and conservation.
- Reduce the use of non-renewable energy sources and increase renewable generation within the City.

Indicator	Target	Action	Responsible Party	Feasibility	Cost	Benefit
Reduction in energy use by City	20% by 2015 (compared to baseline)	<ul style="list-style-type: none"> • Determine Baseline for city facilities and track performance using Energy Star Portfolio Manager. • Perform Energy Efficiency and Demand Response audits. • Consider potential for LEED Operations and Maintenance certification for appropriate City facilities • Update General Plan Energy Conservation Element. 	<ul style="list-style-type: none"> • City • SDG&E 	1	1/2	4
Increase in % renewable energy generation	Upward trend	<ul style="list-style-type: none"> • Create an AB811 financing program in City. • Research opportunities for PPAs and Sustainable Communities Program (SDG&E) for renewable power on City Facilities. • Pursue grant or other funding to implement a solar photovoltaic energy system on at least one City facility by end of 2010. 	<ul style="list-style-type: none"> • City • SDG&E 	2/3	3	3/4
Increase community awareness and knowledge of energy conservation	Measurable increase in participation in energy saving practices and programs	<ul style="list-style-type: none"> • Continue to promote and educate residents on benefits energy efficiency and solar power generation. • Promote utility sponsored programs and trainings to city staff, local businesses and residents. • Approach SDG&E about forming a local government partnership to tap additional resources. • Promote Energy Education in school programs (i.e. PEAK) 	<ul style="list-style-type: none"> • City • SDG&E • SC Green 	1	2	3

Environmental and Public Health

Goals

- Protect and enhance environmental and public health by reducing or eliminating the use of hazardous and toxic materials, minimizing pollutants entering the air, soil, and water.
- Educate and encourage public involvement to reduce and eliminate the use of and ingestion of hazardous and toxic materials.

Indicator	Target	Action	Responsible Party	Feasibility	Cost	Benefit
Total amount of citywide greenhouse gas emissions.	At least 25% below 1990 levels by 2020 for City operations, and meet AB32 goals for citywide (i.e. meet 1990 levels by 2020)	<ul style="list-style-type: none"> • Prepare a citywide greenhouse gas (GHG) emission inventory and develop a baseline in FY2010. • Develop and implement a Climate Action Plan by end of FY2010. 	City	1	2	4
Amount of toxic chemicals used by City.	Downward trend.	Update and implement a more stringent Environmentally Preferred Purchasing Policy (EPP) by end of 2010.	City	1	2	5
# days City beaches are posted with health warnings or closed.	Downward trend.	<ul style="list-style-type: none"> • Continue to implement Clean Ocean program. • Start Bacteria Source Identification Study by 2011 and implement control measures. 	City	1	2/3	4
Compliance with NPDES stormwater permit.	No violations from Regional Board.					
Promote public health by encouraging locally grown organic foods.	Upward trend.	<ul style="list-style-type: none"> • Provide education to introduce and promote organic gardening. • Encourage pursuit of local community organic gardens through education and local grant policy/program. 	<ul style="list-style-type: none"> • City • SC Green • SC Garden Club 	3	2	5

Urban Nature

Goals

- Develop and maintain a parks and open space system that supports natural local habitat, and provides both passive and active recreation opportunities.
- Educate and promote public involvement to enjoy recreation, nature, and support natural local habitat preservation and enhancement.

Indicator	Target	Action	Responsible Party	Feasibility	Cost	Benefit
Ensure accessible public park or recreational open spaces.	Provide public access of green spaces within a 10 minute walk by 2015.	<ul style="list-style-type: none"> • Look for opportunities to create small neighborhood green/open spaces. • Expand/interconnect trail system. 	City	3	2/3	5
Create an urban forest and tree preservation program.	Tree canopy of not less than 50% of available sidewalk planting sites.	<ul style="list-style-type: none"> • Update City tree inventory (including location, height, girth, and canopy spread). • Pursue a tree preservation ordinance. 	City	3	2	5
<ul style="list-style-type: none"> • Protect areas with native wildlife and connectivity of natural systems. • Protect critical habitat corridors and key habitat characteristics. 	Upward trend.	<ul style="list-style-type: none"> • Identify appropriate General Plan elements (including identifying critical canyon, wetland, & coastal habitat corridors). • Plant only native and/or drought tolerant varieties on all City properties. • Educate public on native/drought tolerant plant benefits, and encourage replanting projects. • Restore critical habitat corridors by removing invasive species and replanting native trees and plants. • Create signage on Coastal Trail and Vista Hermosa Park for educational outreach about critical habitats and native plant/animal species. 	<ul style="list-style-type: none"> • City • SC Green • SC Garden Club • Other agencies and environmental groups 	3	2	5

Urban Design

Goal

- Reduce or eliminate the environmental impacts of buildings by implementing resource-efficient structures.

Indicator	Target	Action	Responsible Party	Feasibility	Cost	Benefit
New or major rehabilitations of City facilities that can be considered sustainable.	Upward trend	<ul style="list-style-type: none"> • Include green building design elements in all new and significant rehabilitations of City building and facility projects by implementing these features to the extent feasible on an ongoing basis (“standard practice”). • Evaluate issues of third-party certification (e.g. LEED). 	City	2	3	4
Number of private development projects exceeding State Green Building or Energy Code requirements	Upward trend	<ul style="list-style-type: none"> • Develop an incentive program/policy to encourage incorporation of green building features/design (beyond existing code requirements) in private development projects, with emphasis toward existing building stock. • Waive building permit fees, and provide expedited plan check services, for all projects that <u>exceed</u> State Green Building or Energy Code requirements. 	City	1	2	4
		Provide informational resources on code requirements, green building resources and workshops; and utility rebates and incentives for energy efficiency improvements	<ul style="list-style-type: none"> • City • SC Green 	1	1	3
		Evaluate existing housing rehabilitation loan program (HUD program) to include/emphasize green building features.	City	1	2/3	4
<p>Future items for consideration:</p> <ul style="list-style-type: none"> • Adopt mandatory State green building standards for commercial buildings. • Update City Specifications, Codes and Standards to reflect sustainable practices. • Develop/enforce City Green Building Guidelines for use in all major renovations and construction within City, and train City staff to implement. • Develop grants/funding or provide education and access to grants/funding for underprivileged residents for Green Building efforts. 						

Transportation

Goals:

- Educate and promote public involvement to reduce automobile dependency in favor of alternative, sustainable modes of transportation.
- Minimize and, where possible, eliminate motor vehicle pollution and congestion.

Indicator	Target	Action	Responsible Party	Feasibility	Cost	Benefit
Develop plan for better integration of I-5 and local street system.	Implement 2030 projects within City boundary.	Continue coordination with Caltrans, OCTA and other agencies regarding the long term strategic plan.	City & other agencies	3	2	3
Continue support of Caltrans RR double tracking / undergrounding in I-5 corridor (per Caltrans business plan)—includes commuter link in Pico valley area	Relocate existing coastal tracks to I-5 corridor route.	<ul style="list-style-type: none"> • Continue City’s stated position in support of this plan. • Incorporate into GP as appropriate. 	City	1	1	5
Bike enhancements: <ul style="list-style-type: none"> • Work to become a bike friendly community (League of American Bicyclists). • Add more bike racks in strategic public locations, including potential covered parking. • Improve route marking and way finding signage. • Increase bike lanes & paths (% of total city miles streets with bike lanes, and total miles of bike paths). 	<ul style="list-style-type: none"> • Develop a new policy/plan • Upward trend • Greater # of signs • Upward trend 	<ul style="list-style-type: none"> • Evaluate requirements and opportunities for this designation. • Conduct study to identify potential locations & costs • Review existing signage on key designated bike routes for potential improvements • Update Bicycle Master Plan in GP Update • Increase public education & awareness efforts. 	<ul style="list-style-type: none"> • City • City • City/public • City 	4	3/4	3
				2	2	3
				2	2	3
				3	3	3

Indicator	Target	Action	Responsible Party	Feasibility	Cost	Benefit
<ul style="list-style-type: none"> Evaluate strategies to reduce % of commute trips by single occupancy vehicles Explore an intra-city transit plan to move people, e.g. trolley, green taxi, scooter rentals, etc. 	<ul style="list-style-type: none"> Downward trend Develop plan 	<ul style="list-style-type: none"> Update Growth Management element of General Plan Complete planning study Continue OCTA coordination to maintain existing bus routes 	<ul style="list-style-type: none"> City City/other agencies 	1	2	2/3
<p>Alternative fuel & vehicle:</p> <ul style="list-style-type: none"> Provide plug-in posts for electric vehicles. Develop an alternative fuel station (for city and public). Future fleet vehicles should be alternative fuel. Conduct a pilot project at the water treatment plant to convert algae to biofuel. 	<ul style="list-style-type: none"> Increased # Implement by FY15 Implement new policy starting FY11 Conduct study in FY11 	<ul style="list-style-type: none"> Install charging stations Identify location, design, permit and construct Develop policy and include in budget Investigate opportunity: develop scope and include in budget 	<ul style="list-style-type: none"> City/SDG&E City or private partner City City 	4 3 2 1	4 5 4 2	2 4 3/4 2
<ul style="list-style-type: none"> Continue existing program for pedestrian opportunities by installing sidewalks where they are currently missing 	<ul style="list-style-type: none"> Upward trend 	<ul style="list-style-type: none"> Continue to implement CDBG sidewalk program Continue to implement permit requirements for new sidewalk construction—complete policy 	City	1	2	5

APPENDICES

The final plan will include several appendices to provide additional details such as:

- Acronyms/glossary
- Task Force meeting notes and supporting materials
- Expanded list of sustainable practices already employed by the City

To provide a concise Draft Framework document for the City Council's high-level review, these items have not been included in this document. These items and other additional supporting information deemed relevant by the Task Force will be included in the Final Sustainability Action Plan.