



City of Lake Oswego Sustainability Plan

November 21, 2007

A sustainable Lake Oswego is a community that meets the vital human needs of the present without compromising our ability to meet future needs. This requires consideration of both long-term and short-term effects on ecological, economic, and community systems. Operating sustainably means that we are leaving a legacy for the community of Lake Oswego and the planet.

*From Lake Oswego Sustainable City
Vision and Guiding Principles*

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Appendices (included in separate document):

Appendix A - City of Lake Oswego Resource Flow Map, November 2006/February 2007

Appendix B - SCORE Report, January 2007

Appendix C - Policy Guide on Planning for Sustainability, American Planning Association, April 2000

Appendix D - The Natural Step Framework Guidebook, 2000

Appendix E - U.S. Mayor's Climate Protection Agreement, June 2005

Appendix F - ICLEI Cities for Climate Protection Campaign Resolution, July 2007

Appendix G - City of Lake Oswego Water Management and Conservation Plan, Final Draft, June 2007

Appendix H - Glossary of Terms and Abbreviations

For additional resources and information regarding City projects, links to background information on sustainability, and resources for businesses and households, visit the City of Lake Oswego Sustainability web site:

www.ci.oswego.or.us/plan/Sustainability/Sustainability_homepage.htm

Executive Summary

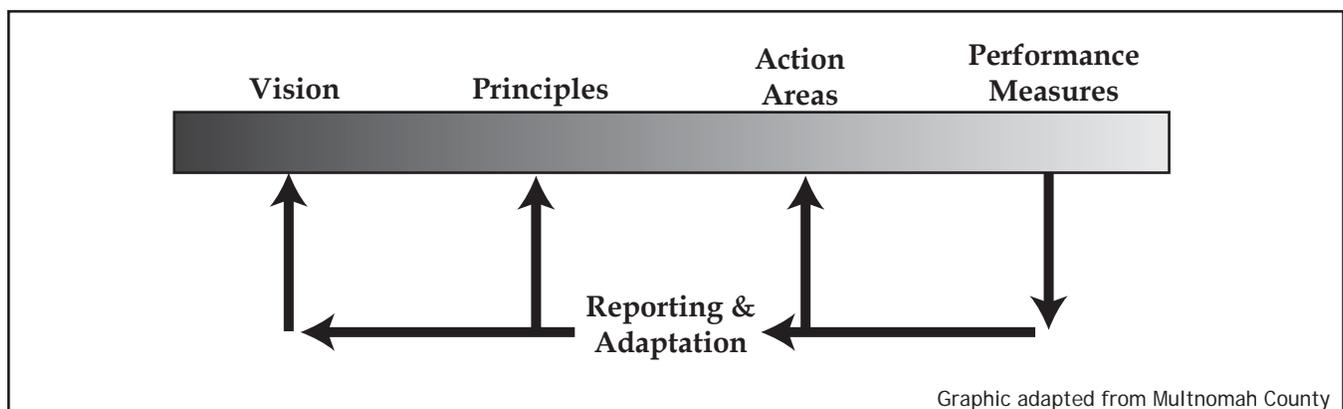
Lake Oswego's City Council has adopted sustainability goals each year since 2002. While progress has been made toward meeting those goals, there has not been an organized program to improve the sustainability of City government. In September 2006, the City Council authorized the formation of the City Sustainability Steering Committee. The Steering Committee, comprised of staff people from various City departments, was charged with evaluating the current level of City sustainability policies, programs, and practices and making recommendations to keep the City moving forward in its efforts to operate in a more sustainable way.

The City of Lake Oswego Sustainability Plan is founded on ten Guiding Principles that provide the basis from which effective and sustainable decisions can be made. The Sustainable City Vision and Guiding Principles are intended to guide all City sustainability efforts by providing a common understanding of sustainability and a vision for the future. The Vision and Guiding Principles also help to ensure that wise business decisions are made regarding the investment of public funds while promoting the conservation and efficient use of energy, water, native habitats, and other natural resources, and considering the social and community implications of actions. It is hoped that improved processes will result in efficiencies that save time and money, enhance and restore the natural environment, and contribute to a healthy and vibrant workplace and community where all can thrive.

Action area teams, comprised of Steering Committee members and additional key staff, crafted the main components of this Plan – the Sustainability Action Areas. This section of the Plan includes recommendations for projects, sets goals and milestones, and establishes performance measures to track progress in four actions areas:

- Energy and transportation
- Water conservation
- Procurement – purchasing and contracting
- Waste reduction and recycling

The Plan concludes with recommendations for subsequent action areas in the coming year, the on-going role of the Steering Committee, and regular reporting to the City Council on progress. This Plan is intended to be a living document that guides the City's work, with periodic updates to show progress, allow for milestones to be refined, and for updates as needed, as illustrated in the graphic below.



Context for Planning for Sustainability

The City of Lake Oswego recognizes that local government plays a vital role in fostering sustainability and is committed to adopting, implementing, and maintaining sustainable practices.

The City is part of a worldwide movement to create a more sustainable future. Key global mileposts include the creation of the World Commission of Environment and Development (the Brundtland Commission), the Rio de Janeiro Earth Summit of the United Nations, the U.S. President’s Council report on Sustainable Development, the World Summit on Sustainable Development, and establishment of the United Nations Division on Sustainable Development.

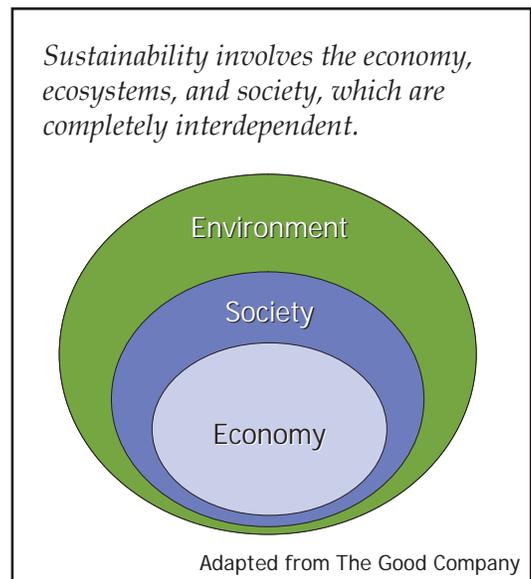
Closer to home, the State of Oregon, several Oregon cities and counties, business leaders, and non-profits are advancing sustainability, with the concept gaining widespread support among many sectors. Here in Lake Oswego, the City Council has included sustainability in its adopted goals since 2002.

Due to the multifaceted nature of sustainability, the City’s sustainability planning efforts dovetail with several current or upcoming City projects, some of which are noted in this Plan. As the City moves forward with future planning projects, such as the Quality of Life Indicators program, neighborhood plan development, and future updates to the Comprehensive Plan, efforts will be made to integrate sustainability in a meaningful way.

Background

People around the world have come to realize that humans cannot continue to use natural resources faster than they can regenerate. Doing so contributes to pollution and environmental degradation, social inequity and poverty, and a decline in human health and quality of life. This is true on the local level, just as it is true on the broader scale. Sustainability includes a program of actions for local and global reform to develop, test, and disseminate ways to change how development occurs and how services are delivered so that ecosystems, community systems (cities, neighborhoods, and families), and economic systems that contribute to our quality of life are not lost.

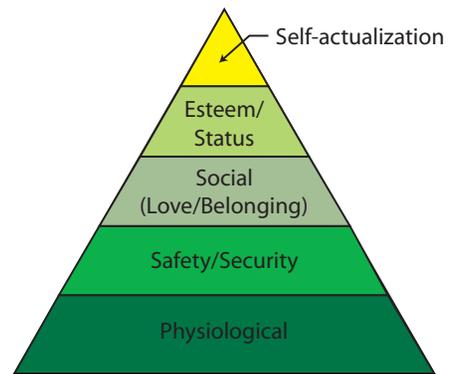
Local governments are major players in the sustainability movement. Cities build and maintain infrastructure; set policies, standards, and regulations; and manage programs to meet the needs of the community. Local governments provide a myriad of services to their communities, including public safety, fiscal management, environmental management (e.g., water, waste management, land use planning, natural resource protection), asset management (e.g., transportation infrastructure and facilities), and recreational, cultural, and



social programs, among others. Sustainability requires that local governments ensure that municipal services can be sustained and equitably distributed today and for future generations. Achieving this objective requires a strategic approach that equally factors long-term ecological, economic, and community concerns into the planning, development, and provision of municipal services.

Sustainability is a journey rather than a destination. A sustainable city is one that protects and enhances the immediate and long-term well-being of the community and its citizens, while providing the highest quality of life possible. Sustainability requires systems-based decision-making that takes into account economic, ecological, and social impacts as a whole. The City of Lake Oswego recognizes that local government plays a vital role in fostering sustainability and is committed to adopting, implementing, and maintaining sustainable practices.

Maslow's Hierarchy of Needs: Basic human needs must be met before individuals can strive to meet higher needs.



Sustainable City Vision and Guiding Principles

To set a context for developing and implementing a more coordinated approach to becoming a sustainable Lake Oswego, the Sustainability Steering committee recommends that the following vision and sustainability principles guide the work of City elected officials, advisory board and commission members, and staff.

Vision of a Sustainable Lake Oswego

A sustainable Lake Oswego is a community that meets the vital human needs of the present without compromising our ability to meet future needs. This requires consideration of both long-term and short-term effects on ecological, economic, and community systems. Operating sustainably means that we are leaving a legacy for the community of Lake Oswego and the planet.

A sustainable Lake Oswego is a place recognized nationally as a model of livability—a unified city with a vital downtown, a strong sense of neighborhoods, and a harmonious relationship with the natural environment. The lives of everyone who lives, works, and conducts business in Lake Oswego are enriched by a wide range of choices in transportation, housing, recreation, and culture. Our infrastructure is sound, our finances stable, and our citizens and employees healthy and engaged.

Sustainable City Principles

1. Create a future where the community, commerce, and ecosystems thrive together in harmony.
2. Ensure a healthy and vibrant community by valuing cultural, economic, and ecological diversity and providing a safe, healthy, and viable setting for human interaction, education, employment, recreation, housing, commerce, and cultural development.
3. Consider long-term impacts and use integrated decision-making to take into account economic, ecological, and social impacts as a whole, with the understanding that economic health, environmental quality, and social equity are interdependent.
4. Protect and restore air, water, and land to preserve biological diversity, environmental health, and a natural resource base for future generations. Support policies and programs that ensure efficient use of, and reduced demand for, natural resources, while taking necessary precautions to prevent toxic pollution and waste and protect human health through proactive measures (e.g., the precautionary principle). Act locally to reduce adverse global impacts of rapid population growth and consumption, such as global warming and ozone depletion.
5. Make procurement decisions (e.g., purchasing and contracting) that minimize negative environmental and social impacts, maximize long-term value, and contribute to local and regional economic health. This includes supporting local businesses that promote sustainability.
6. Ensure that ecosystem impacts and the costs of protecting the environment do not unfairly burden any one geographic or socioeconomic sector of Lake Oswego.
7. Use community resources efficiently by recognizing the interconnections between livability, growth management, land use, transportation, energy, water, affordable housing, air quality, economic development, and the natural environment. Adopt a holistic long term view of our investments that includes social and environmental costs.
8. Operate in a fiscally responsible manner by selecting the most cost-effective programs and policies to meet community priorities. Use full cost accounting, a complete analysis of the associated costs and benefits including environmental and social costs and benefits.
9. Develop cross-sector partnerships necessary to achieve City sustainability goals. Partnerships among local, regional, and state government, businesses, residents, and all community stakeholders are necessary to achieve a sustainable community. A sustainable Lake Oswego contributes to regional, state, national, and global sustainability.
10. Build community awareness, responsibility, involvement, and education as key elements of successful policies, programs, and projects.

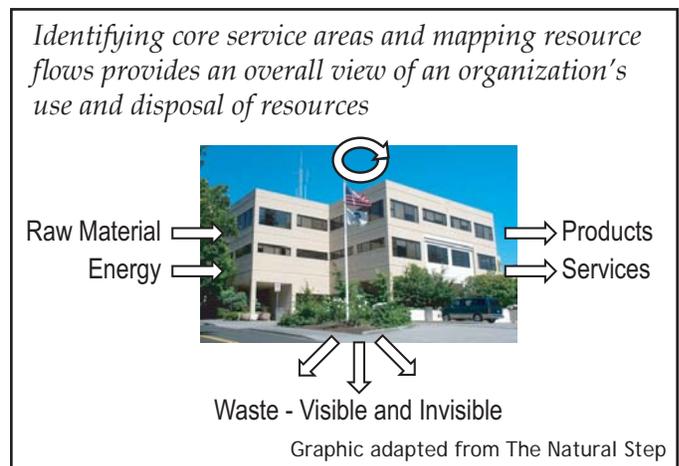
Sustainability Action Areas

The Steering Committee was responsible for establishing sustainability goals, determining how to achieve these goals, and identifying the necessary actions to make progress towards the goals. To accomplish this the Steering Committee had to answer the following questions:

1. How sustainable are we now?
2. How sustainable do we want to be in the future?
3. How do we get there?
4. How do we measure progress?

Current State

To gain a better understanding of the current level of sustainability within City operations, the Steering Committee mapped the flow of resources coming into and going out of the City (see Appendix A, City of Lake Oswego Resource Flow Map) and conducted an assessment using a tool called SCORE (Sustainability Competency & Opportunity Rating & Evaluation, AXIS Performance Advisors and Zero Waste Alliance/ International Sustainable Development Foundation). SCORE helped to assess the City's core functional areas and identify areas for improvement. A report summarizing the results of the SCORE assessment is included in Appendix B.



Based on the results of the SCORE assessment, which summarized assets to build on as well as areas for improvement, an understanding of the opportunities and threats facing the City, and in coordination with other City efforts underway, the Steering Committee chose four action areas to focus initial planning efforts:

- Energy and transportation
- Water conservation
- Procurement (purchasing and contracting)
- Waste reduction and recycling

Future State

For a better understanding of what actions might be taken to ensure a sustainable future, the Steering Committee used a framework in the development of sustainable end points, goals, milestones, and performance measures for each of the action areas. Consideration of four objectives, adapted by the American Planning Association (See Appendix C, Policy Guide on Planning for Sustainability) from the Natural Step (see Appendix D, The Natural Step Guidebook), provides a systematic, integrated approach for understanding ecological, economic, and social impacts.

The sustainability framework objectives include:

1. Reduce dependence upon fossil fuels, extracted underground metals and minerals.

Reason: Increased depletion and degradation of finite natural resources from inside the Earth and associated increases of such substances in natural systems will eventually cause concentrations to reach limits - as yet unknown - at which irreversible changes for human health and the environment will occur and life as we know it may not be possible.

2. Reduce dependence on chemicals and other manufactured substances that can accumulate in Nature.

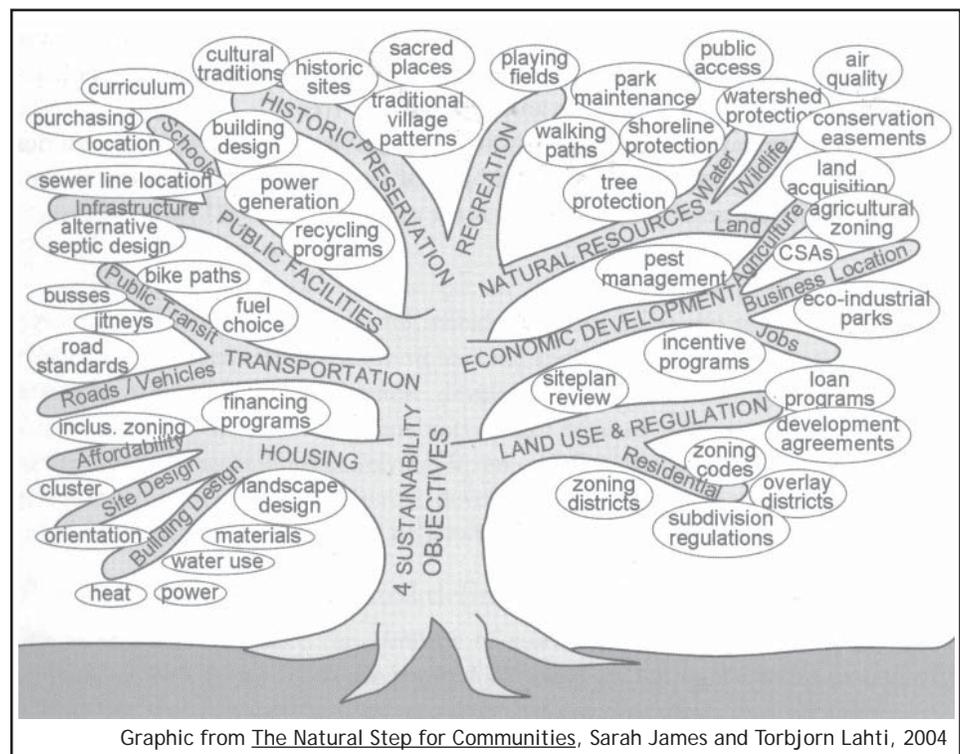
Reason: Unchecked increases of such substances in natural systems will eventually cause concentrations to reach limits - as yet unknown - at which irreversible changes for human health and the environment will occur and life as we know it may not be possible.

3. Reduce dependence on activities that harm life-sustaining ecosystems.

Reason: The health and prosperity of humans, communities, and the Earth depend upon the capacity of Nature and its ecosystems to reconcentrate and restructure wastes into new resources.

4. Meet the hierarchy of present and future human needs fairly and efficiently.

Reason: Fair and efficient use of resources in meeting human needs is necessary to achieve social stability and achieve cooperation for achieving the goals of the first three objectives.



Sustainability principles and objectives can guide planning and decision-making for complex systems, such as city government and the community it serves

Graphic from *The Natural Step for Communities*, Sarah James and Torbjorn Lahti, 2004

Action Areas Teams

Teams were formed for each of the identified action areas, including members of the Steering Committee and additional key staff, to develop goals, milestones, including targets and projects, and performance measures, summarized in detail below. Setting goals and targets helps to focus attention, determine priorities, manage resources and ensure that the activities of numerous people and units work in the same direction.

A variety of analytic tools and strategies are used to assist with making decisions and prioritizing projects. Additional action areas for future teams, including employee involvement and education, water management – surface water and sanitary sewer, and pollution prevention/toxics reduction, were also identified by the Steering Committee with the understanding that while all areas are important, it is not possible to address all of the areas simultaneously.

For each of the Action Areas, the Teams identified the following:

- *Sustainable End Points* or *Goals* that illustrate what sustainability might look like for City operations. These represent the specific issues or topics the City will focus on to achieve the vision.
- The *Current State* of operations within each area, summarized to recognize and categorize what the City has already accomplished as well highlight areas where future work is needed.
- *Milestones*, including *Targets and Projects*, which are explicit actions identified as necessary steps to take on the path toward meeting the goals. Both short-term projects, to be completed by the end of 2008, and longer-term projects and targets, to be completed or reached by 2012, are included.
- *Performance Measures*, or metrics, that identify data to be collected and monitored to track progress toward meeting the established milestones. In some cases where it was not possible to establish a target due to lack of information, a project was identified to gather more information in order to establish a target at a later date.

As the Teams move forward with implementing identified projects, detailed plans are being developed to establish timelines and identify specific tasks and responsible staff. The Teams will continue to meet to report findings and review targets and progress towards goals. Identifying staff who are responsible for tracking and reporting metrics identified in performance measures is a key component to ensure systematic progress towards the goals.

A management system provides many benefits at all stages of implementing sustainability, from supporting individual projects and providing elements to manage the overall process, to integrating the process into core business systems.



Graphic from Dorothy Atwood



Energy and Transportation

The Energy and Transportation Action Area Team's primary task is to examine and inventory the City's energy consumption and look for opportunities to minimize use and reduce the City's carbon footprint. The Team identified measures to increase energy and fuel efficiency, reduce emissions of greenhouse gases (GHG) and criterion air pollutants, and increase use of renewable energy within City operations.

Sustainable End Points/Goals – By 2027...

- Zero net increase of carbon and other greenhouse gas emissions (GHG) (climate neutral)
- Energy sources are 100% renewable

Milestones (Targets) – By 2012...

- Reduce greenhouse gas (GHG) emissions to 7% below 2000 levels, in keeping with the US Mayors' Climate Protection Agreement (see Appendix E)
- Decrease overall energy consumption by 10% from 2006 levels, in keeping with the national Energy Star challenge
- 100% of energy used is from renewable sources (on-site and from electric utility)
- 50% of City fleet is fueled by alternative fuels / technology
- Increase overall vehicle miles per gallon (MPG) by 10% across entire fleet
- New construction and major remodels of City-owned facilities meet or obtain Leadership in Energy and Environmental Design (LEED) Gold certification
- Increase the number of City employees commuting by alternative commute options (non-single occupancy vehicle modes) by 50%

Current State:

- Signed Mayor's Climate Protection Agreement and joined Cities for Climate Protection Campaign (see Appendix F); received software and tools to conduct greenhouse gas emissions and criterion air pollutants inventory; data collection for City operations inventory is in progress.
- Water Treatment Plant purchases renewable, "Clean Wind" electricity from PGE equal to about half of the annual power that is required to run the Plant, and has made equipment and lighting upgrades and operational changes to improve efficiency.
- High-efficiency pumps are specified when sewer lift station pumps are replaced
- New water pump stations have high efficiency pumps and motors to meet future capacity in a more energy efficient manner
- Traffic signal bulbs have been replaced with energy conserving light emitting diode (LED) bulbs (red and green)
- Lighting standards ordinance has been drafted
- Heating and air conditioning controls for the City Hall building have been upgraded to operate more efficiently
- City fleet includes eight (8) hybrid gas/ electric vehicles
- City fleet diesel vehicles and equipment are fueled with 5% biodiesel (B5), including Lake Oswego School District/ Laidlaw bus fleet



Energy and Transportation

Current State (continued):

- Some employees commuting by alternative options (e.g. TriMet, vanpool, carpool, bike, etc.); no centralized tracking system. Employee Commute Options (ECO) survey data for City Hall available from 2006 to 2002.
- City provides employee transit benefit equivalent to 100% of monthly bus pass.
- City sponsors an employee vanpool program which has one route; contract with Flexcar as vanpool provider includes daytime use of carsharing vehicle by City staff
- City participates in annual Carefree Commuter Challenge and Bike Commute Challenge
- Some automated City functions, e.g. electronic pay stubs, electronic billing, on-line applications, etc.
- Waste reduction and recycling efforts in place (see Waste Reduction section below for details)

Milestones (Proposed Actions) – By 2008...

- Inventory greenhouse gas (GHG) and criterion air pollutants emissions from City operations and develop emissions reduction action plan
- Evaluate costs of switching additional City facilities to PGE Clean Wind power, and develop proposal
- Switch from B5 (5% biodiesel) to B20 (20% biodiesel) for all vehicles and stationary equipment for summertime use (continue to use petrodiesel for generators); coordinate with Laidlaw/Lake Oswego School District. Identify older vehicles and establish off-site fueling location. Spot test B50 (50% biodiesel) with select vehicles for summer-time use.
- Conduct a fleet needs assessment and develop a green fleets plan to increase vehicle MPG, reduce GHG and criterion air pollution emissions, improve overall maintenance efficiency and vehicle longevity, and establish systematic roll-down. Consider anti-idling issues and diesel equipment/vehicle retrofits.
- Develop green building policy and adopt LEED as the standard for new City buildings (Gold) and major remodels (Silver)
- Develop formal policy requiring deconstruction and construction debris recycling for City building projects
- Identify needed building upgrades and associated costs to support alternate commute options, e.g. showers and covered, secure bike racks
- Set up a system for better tracking employee transit benefit usage
- Expand next Employee Commute Options survey to include all City employees or conduct an independent web-based survey to determine current commuting patterns
- Adopt policy on compressed work week and flexible schedules to minimize employee commuting, encourage use of transportation options (e.g. transit, carpooling, biking, walking), and allow shifts that minimize on-peak travel, where feasible
- Conduct carsharing feasibility study in downtown Lake Oswego
- Identify energy efficiency standards for equipment, appliances, and vehicles and include in environmentally preferable purchasing policy (EPP) (coordinate with Procurement Team)



Energy and Transportation

Milestones (Proposed Actions) – By 2008... (continued)

- Adopt new lighting standards; consider policy regarding street light decommissioning
- Develop a preferred list of appropriate tree and landscaping species based on drought tolerance, appearance, solar friendliness (as appropriate), carbon dioxide (CO₂) uptake, and other site specific factors for street trees (in coordination with Urban and Community Forestry program)
- Rename Community Development to become “Department of Sustainable Community Development”
- Continue to automate City functions, e.g. e-time, electronic paychecks, electronic billing, on-line applications, digital recording of meetings, electronic packet distribution, etc., and look for additional opportunities, e.g. electronic distribution of HelloLO

Milestones (Proposed Actions) – By 2012...

- Identify & budget for one (1) building efficiency project per budget cycle. Include evaluation of opportunities to achieve LEED for Existing Buildings and associated costs.
- Establish green building program (policy, incentives, outreach, recognition) for commercial and residential development, and identify staff to support program
- Adopt community-wide construction debris recycling ordinance and engage stakeholders to evaluate feasibility of requiring deconstruction for building projects within the City limits
- Revise Solar Access codes to be more user-friendly and efficient; include public conversation about inherent conflicts between tree protection and solar access protection (as part of green building program)
- Promote the use of eco-roofs for run-off management, energy efficiency, and appearance; modify Code to allow anywhere in the community (as part of green building program)
- Modify development standards to allow for vertical landscaping (as part of green building program)
- Coordinate with Urban and Community Forestry program to promote stewardship and education, an increased forest canopy, forest health and diversity, maintenance and care, policy updates, and identification of funding sources, including ongoing staffing
- Explore opportunities for carbon offset market potential for protected urban forests (in coordination with Urban and Community Forestry Program)
- Work with community stakeholders to develop anti-idling and vehicle retrofit policy for diesel vehicles operating within City limits, as appropriate, including use of biodiesel
- Work with regional stakeholders to understand regional food systems and impacts on food security for local residents (e.g. access to a wide variety of nutritious, affordable food, grown locally and sustainably; land use planning issues; and local food purchasing plans). Coordinate with on-going efforts, such as the Portland Multnomah Food Policy Council
- On an annual basis, review progress toward goals, refine milestones, and develop or update action area work plans, as needed



Energy and Transportation

Performance Measures:

- Annual facility and infrastructure energy use:
 - Total citywide use - buildings, facilities, and operations
 - Report by facility, account number, & department;
 - Quantify “renewable” energy use
- Annual fleet use:
 - Vehicle miles traveled (VMT) or vehicle hours operated, as appropriate
 - Gallons of fuel used
 - Type of fuel
 - Vehicle type and fuel efficiency (MPG) ratings, and
 - Cost (operation and maintenance)
- Annual Employee commuting data
- Annual waste tonnage to landfill (converted to GHG equivalents)
- City building projects (new construction and major remodels) that meet or obtain LEED Gold/Silver certification, as appropriate



Water Conservation

The Water Conservation Action Area Team’s primary task is to identify and implement water conservation measures both within City operations and the greater community. Due to the timely issues facing the City and community related to water management and conservation, this Team’s focus includes looking at City operations as well as planning for the community at large. The Team’s efforts are closely integrated with the recommendations outlined in the City of Lake Oswego Water Management and Conservation Plan (see Appendix G).

Sustainable End Points/Goals – By 2027...

- A sustainable water supply for City operations and to meet community demand using best conservation practices, with annual average consumption flattening
- Zero loss of biodiversity and productive natural systems and habitat for forests and riparian areas

Milestones (Targets) – By 2012...

- Internally, reduce overall annual water use - peak season average daily use by 10% over 5 years (reduce demand 2% per year) for all City facilities and City irrigation accounts
- Reduce community-wide peak season 3-day demand by 5% over 5 years (reduce demand 1% per year; .8 million gallons/day)

Current State:

- Participate in Regional Water Providers Consortium and related education and conservation opportunities (e.g. water conservation kits; education and outreach opportunities)
- Work actively with Lake Oswego School District to increase outreach and education opportunities in schools



Water Conservation

Current State (continued):

- Provide water conservation information through a variety of means (e.g. written information in Hello LO and on City web site, sponsorship of Where's Rosie performances, outreach at events, etc.).
- Install water-efficient irrigation systems for parklands and turf areas, and landscape and City beautification sites, when possible, and use practices, such as retrofits, to improve irrigation efficiency of older systems. For example, 10th Street green street project will use water-conserving irrigation system.
- Use turf area maintenance practices to reduce irrigation needs, e.g. wetting agents
- Assess City park turf area water use and collect baseline data to plan for efficiency upgrades, e.g. evapotranspiration (ET) weather stations. Inventory irrigation meter locations and condition.
- All water customers are metered. Annually, water meters are tested system-wide and replaced or repaired as necessary, with approximately 400 to 500 meters (1.5 inch and smaller) replaced and 50% of meters 2-inches and larger tested annually, and repaired or replaced as necessary.
- Conduct leak detection and repair of mainline pipe system. Identify and repair/replace residential and commercial lines and meters through coordinated efforts of utility billing department and maintenance services.
- Assessing City Hall and the West End Building to determine potential water savings by replacing plumbing fixtures with more water efficient models, and associated costs
- New water pump stations have high efficiency pumps and motors to meet future capacity in a more energy efficient manner
- Review utility billing system to ensure compatibility with other City systems

Milestones (Proposed Actions) – By 2008...

- Begin implementing Water Management and Conservation Plan in coordination with new water conservation staff, including water rate structure review
- Inventory number and types of plumbing fixtures in all City facilities; review data on water use
- Identify and prioritize water conservation measures and costs, including plumbing retrofits and weather stations for ET systems, and opportunities to maximize use of non-potable water. Use summer 2007 baseline irrigation data, meter inventory, and facility inventory information.
- Continue to identify system leaks, conduct audits, and make repairs
- Continue annual testing and repair or replacement of 2-inch and larger meters
- Coordinate with Lake Oswego School District to implement meter installation to better track usage and identify and implement conservation measures
- Use water billings as an opportunity to educate and inform users about conservation, e.g. graph of consumption, bill stuffers, online access to consumption information, etc. Begin using new water bills (continue bi-monthly billing).
- Develop protocol/system for reporting on water use and conservation activities throughout the City. Include reservoir hourly demand by pressure zone data.



Water Conservation

Milestones (Proposed Actions) – By 2012...

- Identify and implement water conservation programs and financial incentives, e.g. water audits, water efficient appliance rebates, information about drought tolerant plants and natural gardening/landscaping techniques, for residents and businesses (in coordination with Water Management and Conservation Plan). Develop waterwise demonstration garden to test and highlight drought tolerant landscaping plants.
- Increase the number of meters replaced annually to achieve a 25-year replacement cycle. Consider phasing in meter replacement to allow automated meter reading
- Update policy and codes to encourage water conservation and allow maximum use/reuse of non-potable water, e.g. rainwater harvesting, grey water for irrigation and toilet flushing (as part of green building program)
- Coordinate with Urban and Community Forestry program to promote stewardship and education, an increased forest canopy, forest health and diversity, maintenance and care, policy updates, and identification of funding sources, including ongoing staffing
- On an annual basis, review progress toward goals, refine milestones, and develop or update action area work plans, as needed

Performance Measures:

- Annual average water consumption, including peak season daily use:
 - City facilities and irrigation
 - Community-wide use
 - Track consumption by user class
- Number of interior plumbing fixtures replaced with water-efficient models on an annual basis (include facility, type of retrofit, and estimated water savings)
- Number of meters replaced annually (include size and location and estimated water savings)
- Number of turf area and City beautification irrigation system zones upgraded or retrofitted on an annual basis (include location, type of retrofit, and estimated water savings).
- Number of water audits conducted annually
- Annual number and type of education and outreach activities



Procurement – Purchasing and Contracting

The Procurement Action Area Team's primary task is to develop an environmentally preferable purchasing policy (EPP) to guide purchasing and contracting decisions and identify tools to simplify purchasing and contracting processes and track purchases.

Procurement – Purchasing and Contracting

Sustainable End Points/Goals – By 2027...

- Zero harm to the ecosphere - habitat, atmosphere, water
- Products purchased are made from 100% recycled materials or come from certified sustainable sources, are designed for ease of reuse / vendor take-back / recycling, and come from local vendors and manufacturers who provide living wage jobs and good working conditions (e.g. no sweatshops)
- Only non-toxic chemicals and materials are purchased and/or used by the City and its contractors
- Products and materials that provide a net restorative value are prioritized
- Zero waste disposed from City operations, facilities, and events

Milestones (Targets) – By 2012...

- Increase the value of products and contracts purchased that meet environmentally preferable purchasing policy, as a percentage of total materials and services purchased
- See Waste Reduction and Recycling section for related targets

Current State:

- Green Seal cleaning products used in all City facilities; primarily purchased through Coastwide Labs, a local vendor
- Low- or no-VOC (non-toxic) paints are used and are purchased from Miller Paint, a local company
- Vacuums, leaf blowers, recycling bins, etc. purchased from and repaired by Coastwide Labs, a local vendor
- Some bathroom paper products have recycled content; strive for highest post-consumer waste (PCW) recycled content within price differential.
- Most office supplies purchased through Office Max using p-card (decentralized), on State contract. Toner and printer/copier paper make up bulk of office supply expenditures.
- Printer and photocopier stock paper meets EPA 30% minimum post-consumer waste (PCW) recycled content standard.
- Print HelloLO, monthly City newsletter, on 100% post-consumer waste (PCW) recycled content paper.
- Recycle used toner cartridges through Toner Inx, a school fundraiser (collect through City mail system)
- Have an informal reuse program for office furniture. Staff often purchase furniture with sustainability in mind, but there is no formal policy or uniformity
- Purchase Energy Star compliant computers, peripherals, and appliances
- Fleet purchasing decisions are decentralized; some departments have purchased hybrid gas/electric vehicles (currently 8 in City fleet)



Procurement – Purchasing and Contracting

Current State (continued):

- For infrastructure materials purchased / specified through Maintenance and Engineering, some staff consider sustainability / environmental impacts; vendors are not so aware
- Streetlights owned by PGE; traffic signals owned by City - have replaced red and green bulbs with light-emitting diode (LED) bulbs
- Police uniforms sent to dry cleaner- unsure if environmentally-friendly processes used
- Meals for special meetings often provided by local caterers / restaurants; encourage service to be “family-style” to reduce packaging

Milestones (Proposed Actions) – By 2008...

- Evaluate feasibility of modifying financial systems to track environmentally preferable purchasing to better determine how and what can be measured
- Develop and implement an environmentally preferable purchasing (EPP) policy with consideration of 10% price differential and staffing. Explore potential budget issues and possible development of “green” fund for larger EPP purchases. Develop screening process for paper - janitorial, vehicles (light duty - sedans and pickups), and engineering consultants. Include discussion of vendor shipping and packaging.
- Develop purchasing and contracting tools to ensure EPP success, e.g. guidelines and resources about where and what to buy/not to buy, purchasing checklists, and process for public contracting to allow “green” quotes
- Consider prohibiting City purchase of beverages in plastic bottles and food packaged in Styrofoam for meetings

Milestones (Proposed Actions) – By 2012...

- On an annual basis, review progress toward goals, refine milestones, and develop or update action area work plans, as needed

Performance Measures:

- Annual dollar value of goods and services purchased that meet environmentally preferable purchasing policy, tracked as a percentage of total materials and services purchased.



Waste Reduction and Recycling

The Waste Reduction and Recycling Action Area Team's primary task is to identify and implement measures to reduce waste and increase recycling within City operations.

Sustainable End Points/Goals – By 2027...

- Zero harm to the ecosphere - habitat, atmosphere, water
- Zero waste disposed from City operations, facilities, and events
- Products purchased are made from 100% recycled materials, are designed for ease of reuse / vendor take-back / recycling, and come from local vendors and manufacturers who provide living wage jobs and good working conditions (e.g. no sweatshops)

Milestones (Targets) – By 2012...

- For City operations, decrease overall solid waste stream by 25% by weight by 2012
- Meet the State adopted Portland metro area recycling recovery rate of 64% by 2009 by increasing the City's recycling recovery rate. (Recycling Recovery Rate: the percentage of discards that are recycled, as compared to overall amount of waste generated)

Current State:

- Work with local hauler and Clackamas County staff to provide recycling containers and up-to-date information for all City facilities, including conducting waste audits
- Worm composter in use at the Adult Community Center for food waste
- Collect items that cannot be recycled at the curbside to take to specialty recycling facilities, e.g. fluorescent light bulbs, batteries, Styrofoam, media cases, etc., or donate for reuse, e.g. electronic media.
- Recycle cleaning solvents, oil, antifreeze, and oil filters as part of overall vehicle and equipment maintenance practices that eliminate potential discharge of hazardous or toxic materials into the environment
- Recycle used toner; collect from various City facilities by mailroom staff and donated for fundraiser for local school.
- Collect and reuse large boxes - "box corner" at City Hall
- Printer and photocopier stock paper meets EPA 30% minimum post-consumer waste (PCW) recycled content standard. Moving to printing of HelloLO on 100% PCW recycled content paper.
- Printing - default printer driver is one-sided; currently testing two-sided default setting on one group printer (individual users can set default to two-sided)
- Evaluating specialty software (GreenPrint) intended to reduce printing of extra sheets of paper
- Computers, other office equipment, and office furniture are reused within the City until they can no longer be used, then sell or donate. Sale of outdated computers and peripherals through eBay earned \$45,000 over the past 4½ years. More the 90% of computers have been reused in this way, with 75% purchased by employees and Lake Oswego citizens.
- Bottled water is not for sale at the Farmer's Market, provide water stations instead



Waste Reduction and Recycling

Current State (continued):

- Reusable shopping bags are for sale at the Farmers' Market and the Library, and reusable water bottles also for sale at the Farmers' Market
- Many City functions are automated or electronic, e.g. e-time, electronic paychecks, electronic billing, on-line applications, digital recording of meetings, electronic packet distribution, etc.
- Deconstruction of two homes on properties purchased by the City for open space/parks took place
- Meals for special meetings are often provided by local caterers/restaurants; encourage service to be "family-style" to reduce packaging

Milestones (Proposed Actions) – By 2008...

- Collect baseline information and establish systems to monitor what types of materials and quantities are recycled and landfilled to determine current recovery rate and set future targets:
 - Establish schedule for waste audit of City facilities
 - Determine numbers and sizes of containers at City facilities and frequency and cost to dump
 - Track what goes into the compactor and to Maintenance and where it comes from
 - Collect data on recycling not collected by hauler
- Formalize recycling program and systems for tracking items that are not collected by hauler, e.g. fluorescent light bulbs, batteries, Styrofoam, etc.
- Set up system for sharing information about availability of used office furnishings and equipment for reuse at the City
- Work with partners to evaluate opportunities to increase recycling rates and reduce waste going to landfills, with focus on special events, parks, ballfields, etc. When specifying outdoor recycling containers consider ease of use (by user and maintenance staff) and placement
- Create position (existing or new staff/ intern) to expand City waste reduction and recycling program; consider hauler franchise fee for potential funding stream, if necessary.
- Continue to automate City functions, e.g. e-time, electronic paychecks, electronic billing, on-line applications, digital recording of meetings, electronic packet distribution, etc., and look for additional opportunities, e.g. electronic distribution of HelloLO
- Evaluate feasibility of implementing an employee recycling benefit, e.g. battery and compact fluorescent light bulb (CFL) recycling
- Look at City facilities for opportunities to install dishwashers and provide durable dinnerware in break rooms, e.g. cutlery, plates, cups, etc.
- Plan for and hold future employee events in facility that allows for use of durable dinnerware, e.g. holiday employee luncheon at ACC
- Consider prohibiting City purchase of beverages in plastic bottles and food packaged in Styrofoam for meetings
- Develop formal policy requiring deconstruction and construction debris recycling for City building projects
- Conduct employee education and outreach on waste reduction and recycling. Consider staff training through Master Recycler Program.



Waste Reduction and Recycling

Milestones (Proposed Actions) – By 2012...

- Explore and evaluate opportunities and partnerships for south metro area composting operations for vegetative matter (leaves, tree trimmings) and organics (food waste) and infrastructure materials recycling, e.g. rock and asphalt. Identify opportunities for reuse of Water Treatment Plant lagoon sludge and waste water treatment biosolids
- Engage stakeholders in discussion on city-wide program (e.g. outreach, incentives, etc.) to eliminate use of Styrofoam take-out packaging, non-durable dinnerware, and plastic shopping bags
- Work with stakeholders to assure that adequate locations for recycling continue to remain accessible to the community as redevelopment occurs in the City, e.g. in the Foothills area
- Adopt community-wide construction debris recycling ordinance and engage stakeholders to evaluate feasibility of requiring deconstruction for building projects within the City limits
- Consider Code updates to require design review for garbage enclosures to ensure adequate space for recycling containers and ease of access for hauler trucks
- On an annual basis, review progress toward goals, refine milestones, and develop or update action area work plans, as needed

Performance Measures:

- Overall waste generated annually, including waste tonnage to landfill and materials diverted from landfill by type and weight:
 - Commingled paper & containers
 - Shredded paper
 - Metals
 - Plastics
 - Landscape waste
 - Food waste
 - Rock, gravel, steel, etc.
 - Electronics - resale, vendor take back
 - E-waste
 - Fluorescent lamp tubes
 - Batteries
 - Toner cartridges
 - Furniture - resale or recycling
 - Wood waste
 - Block foam
 - Other items, as identified
- Sheets of paper purchased per staff full-time equivalent (FTE), as a measure of effectiveness of waste reduction activities

Additional Action Areas

Several additional action areas, including employee involvement and education, water management – stormwater and sanitary sewer, and pollution prevention/toxics reduction, were identified by the Steering Committee for focused attention upon Plan adoption or starting in 2008. For each of these action areas, sustainable end points, or goals, as well as some milestones were developed. These end points and milestones will serve to provide direction for future action area teams, with the understanding that the team members may modify or update, as appropriate.



Employee Involvement and Education

The Steering Committee discussed opportunities for employee involvement, education, and outreach and recommends the formation of an action area team upon Plan adoption to assist with the development and implementation of an employee involvement and education strategy.

Sustainable End Points/Goals – By 2027...

- All City staff understand the City's commitment to sustainable practices and have equal access to information, tools, training, professional development opportunities, and other resources needed to accomplish job duties in keeping with City sustainability principles and for overall professional growth
- The City delivers high-quality services at a reasonable cost to citizens by providing a healthy, safe, supportive, and happy workplace that in turn lowers employee turnover and absenteeism and reduces associated costs
- The City provides a workplace where diversity, innovation, and efficiency are respected and encouraged

Milestones (Targets) – By 2012...

- To be developed by Action Area Team

Current State:

- City sustainability web site provides a "one stop" resource for information on City projects and information related to sustainability
- Periodic articles in the Hello LO and LODown Weekly News cover sustainability topics
- Make presentations about City sustainability efforts at various events and conferences; recent presentations were for the Oregon Natural Step Network and at the City's Celebrating Community event
- Encourage employee participation in commute option challenges, e.g. Carefree Commuter Challenge and Bike Commute Challenge. Have hosted commute options workshops, e.g. Flexcar membership orientation and bicycle commuting basics.
- Hold lunch time brown bag sessions on sustainability topics, including a presentation on global warming by Jean Bauman, a local resident trained by Al Gore



Employee Involvement and Education

Current State (continued):

- Staff participated in the NW Earth Institute's Global Warming and Choices for Sustainable Living discussion courses
- Meet with other local government staff to network and share information
- Participate in the Regional Partners for Economic Development sustainable business planning efforts as well as the Clackamas County Coordinating Committee's (C4) sustainability sub-committee
- Attend workshops and professional development opportunities
- Worked with the Lake Oswego Chamber of Commerce and Clackamas County to develop a video and plan a business breakfast to highlight and recognize businesses in the community who have adopted sustainable practices

Milestones (Proposed Actions) – By 2008...

- Develop and implement employee education and outreach strategy to inform and excite City staff about Sustainability Plan and how they can contribute; include all staff meeting/open house and presentations at regularly scheduled staff meetings, city-wide emails, contests, recognition, etc.
- Form action area team to establish goals and milestones (including targets and proposed actions) for employee outreach and education efforts (e.g. number of brown bags, number of employees participating in programs, etc.), to assist with development and implementation of employee education and outreach strategy, to develop sustainability orientation for new hires, and to evaluate opportunities to integrate sustainability criteria and performance measures into job descriptions and annual performance reviews
- Identify funding and purchase City reusable cup or water bottle for employees as part of employee awareness campaign

Milestones (Proposed Actions) – By 2012... and Performance Measures:

- To be developed by Action Area Team



Water Management – Stormwater and Sanitary Sewer

An Action Area Team will be formed in 2008 to evaluate current practices, identify opportunities, and develop an action plan. Additionally, the Team could review and assist with implementation of Clean Streams Plan and the development of Sewer Collection Master Plan.

Sustainable End Points/Goals – By 2027...

- Zero loss of biodiversity and productive natural systems and habitat for forests and riparian areas
- Only non-toxic chemicals and materials are purchased and/or used by the City and its contractors
- All stormwater diverted from system through use of performance standards and on-site stormwater solutions

Milestones (Targets) – By 2012...

- To be developed by Action Area Team

Current State:

- City Code, policies, and programs regulate surface water and sanitary sewer management. City works actively to improve water quality through enforcement of pollution and erosion control regulations, monitoring sediment and pollutants, and educating the public.
- 10th Street greenstreet demonstration project is under construction, and Ladd Street greenstreet is in the design phase
- Manually remove invasive species from natural areas and parks using volunteers; program is coordinated through the City's Natural Area program.

Milestones (Proposed Actions) – By 2008...

- Form Action Area Team and identify tasks. May include:
 - Review and implement measures identified in Clean Streams Plan
 - Establish timeline for preparation of new Sewer Collection Master Plan

Milestones (Proposed Actions) – By 2012...

- To be developed by Action Area Team. May include goals and milestones for quantity and quality of run-off (in conjunction with Clean Streams Plan)
- Promote the use of performance standards and pre-designed systems (retention/detention) to streamline process for small development projects
- Propose stricter standards for septic systems in City planning area and encourage development of public sewer
- Increase enforcement efforts and encourage proper decommissioning of dysfunctional septic systems and repair of faulty sewer laterals that contribute to inflow/infiltration

Performance Measures:

- To be developed by Action Area Team



Pollution Prevention / Toxics Reduction

An Action Area Team will be formed in 2008 team to evaluate current practices, identify opportunities, and develop an action plan to minimize and eliminate use of toxic substances of concern in City operations.

Sustainable End Points/Goals – By 2027...

- Zero discharge of persistent bio-accumulative toxins (PBTs)
- Zero emissions of toxic materials to air, soil or water
- Only non-toxic chemicals and materials are purchased and/or used by the City and its contractors
- Zero waste disposed from City operations, facilities, and events

Milestones (Targets) – By 2012...

- To be developed by Action Area Team

Current State:

- Protection of fish and wildlife habitat, open space, stream corridors, wetlands, and tree groves within the City addressed by City Code
- Vehicle and equipment maintenance practices eliminate the potential discharge of hazardous or toxic materials into the environment
- Use Parks maintenance practices that lessen the need for toxic pesticides, fertilizers, and herbicides; use these maintenance practices at City buildings and City beautification projects, where feasible
- At the Golf Course, additional maintenance practices in place to protect habitat and reduce impacts
- Streets and roadways maintenance practices help keep pollutants from entering waterways
- There is no comprehensive inventory of toxics use / storage. Individual facilities follow environmental and fire safety tracking procedures for hazardous materials, as required
- Use Green Seal cleaning products for interior building maintenance
- Use no/low-VOC interior paints in many facilities
- Electronic waste, such as computers, cell phones, sold or donated for reuse

Milestones (Proposed Actions) – By 2008...

- Form Action Area Team and identify tasks. May include toxics inventory
- Evaluate membership for City fleet maintenance facility in the Eco-Logical Business Program's Automotive Services Program, a joint recognition and certification program of regional pollution prevention agencies

Milestones (Proposed Actions) – By 2012... and Performance Measures:

- To be developed by Action Area Team. May include goals, milestones, and performance measures for minimizing and eliminating use of toxic substances of concern in City operations by following the precautionary principle

Next Steps

Steering Committee

To provide an on-going, systematic approach for moving the City towards achieving the vision of a sustainability city, it is recommended that the Steering Committee continue to meet on a quarterly basis. To ensure that identified milestones are accomplished, it is recommended that additional staff from Human Resources, Parks and Recreation, and Information Technology be appointed to the Steering Committee. Additionally, the Steering Committee will take a closer look at existing City long-term strategic planning processes, such as the development of the budget and capital improvement plan updates, to identify opportunities to incorporate sustainability across core City functions.

The Action Area Teams will continue to meet on a monthly basis to continue with the current momentum, then less frequently as projects progress. New teams identified in the Plan will be convened in the coming year and will develop action area plans. Teams will continue to monitor and report on progress, and identify new milestones, as appropriate. The Teams will report progress to the Steering Committee at the quarterly meetings.

The Steering Committee recommends that an updated City Sustainability Action Area report be presented to the City Council on an annual basis for review and direction. The report will also be posted on the City sustainability web site and shared with community members and other interested stakeholders.

Community Sustainability

Several 2012 milestones identified in the Plan go beyond City operations. Steering Committee members felt it was important to identify these proposed actions in the Plan to ensure that they are addressed in any future planning efforts that extend to the community at-large. These milestones focus on areas where the City has regulatory or other influence. Additionally, it is hoped that the City will continue to work with regional partners to provide and expand outreach and support to local businesses to assist with their sustainability efforts.