City of Loveland

Community Sustainability Plan

Version 2012-01

http://www.cityofloveland.org/sustainability

City of Loveland

DRAFT August 2012

2012

Dear Community Members:

WELCOME FROM MAYOR AND COUNCIL

Executive Summary

The Civic Center Complex represents the city's crowning sustainability achievement, reutilization of a dying school building into a vibrant community center and workplace.

City of Loveland

Executive Summary

Overview

The City of Loveland has long been a leader in defining and building a livable community. The city's commitment to the arts, leisure activities, transportation, community planning, and efficient utilities is a testament to that leadership. In 2008, the City of Loveland began a staff initiated effort to define and establish sustainability efforts for our dynamic, fast-growing city. This document reflects the work of that effort and identifies what steps the city has already taken to guide and improve sustainability in the Loveland community.

Defining Sustainability

The City of Loveland has defined ***Sustainability*** as "Efforts at reducing the impact community and business operations have on the environment, this includes life-cycle planning, preservation and resource conservation efforts, and policies that support a long term vision for the community and citizens."

The Method and Goals

In defining sustainability, there are a variety of viewpoints on what that means to a community and city organization, the city has chosen to break the goals into three distinct categories – City of Loveland business organization impacts (Scope 1), community wide impacts (Scope 2), and regional collaboration efforts (Scope 3).

The plan focus is about defining smart business initiatives and community policies targeting the continued preservation, enhancement, and economic development of Loveland. The plan's objectives will facilitate decision making to support good return on investment, community engagement, and attracting jobs to the region.

Other communities and businesses have pegged plans to the "triple bottom line" method of measurement. Triple bottom line includes: *Economic, Social and Environmental categories*. Communities that use this methodology use "all three legs of the stool" to assess actions rather than making decisions solely on the basis of the economic bottom line. It is important to remember, regardless of measurement methodology, that sustainability programs can generate revenue, savings, and positive impacts to both the balance sheet and non-balance sheet components of the business model.

The plan does not seek to argue for or against climate change or global warming, but to support local government direction on issues important to our community. There are references to activities involving the measurement of greenhouse gas emissions (GHG), as many state and federal programs require or request this type of measurement reporting for the acceptance of grants.

Plan Format

The Community Sustainability Plan Draft seeks to provide a high-level document to clarify the city's position and role in the goals of creating a sustainable community. This Draft Plan is a first step in beginning the community discussion necessary to identify, clarify, and provide definition to the goals and action plans for the community and governmental organization. This draft will not include a section to outline specific action plans and budgets; those action plans will be developed by departments, after community discussion and input. Once the action plans are developed, they will be added as a separate section of the Community Sustainability Plan.

The plan is broken into nine (9) key areas:

1. Executive Summary
2. Background
3. Guiding Principles
4. Current Efforts
5. Measurement and Report
6. Community Participation Process
7. How Does Loveland Compare
8. Broad Strategic Goals for Organizational and Community Action
9. Glossary

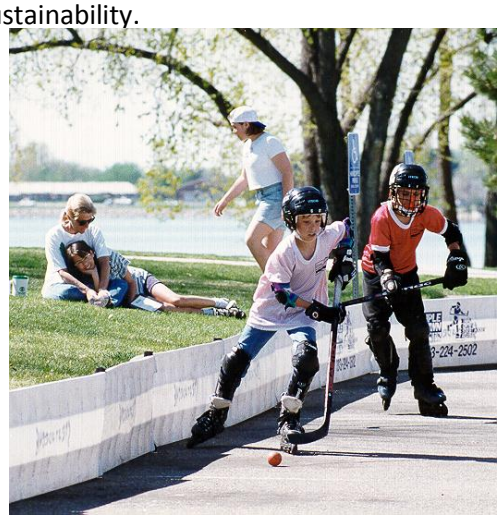
Guiding Principles

To assist the City of Loveland and community leaders in working to support and drive a sustainable Loveland, eight Guiding Principles have been developed.

1. The concept of sustainability is interwoven into City policy; programs and projects will consider sustainability in addition to other project factors
2. Balancing the needs of economic vitality, environmental health, and the community fabric is essential to long term community sustainability. Community resiliency for emergency management is an essential component of sustainability
3. Public participation and community awareness are essential to building a sustainable city
4. Sustainability priorities will be developed through a process of community input, led by City Council, with an emphasis on economically viable programs and policies
5. Partnerships among government, business, non-profits, and the community-at-large are essential to achievement of community goals
6. The City of Loveland government organization, in our business operations, will strive to lead by example in sustainable business practices
7. Protecting, preserving, and restoring the community and regions natural environment is a priority for the City of Loveland
8. The City of Loveland recognizes its role as a community, regional, and national partner in making sustainable decisions.

Goals, Measurement, and Community Participation

The City of Loveland further enunciated these into seven specific goal areas, with parallels to the comprehensive plan, that can be defined for measurement in tackling sustainability.

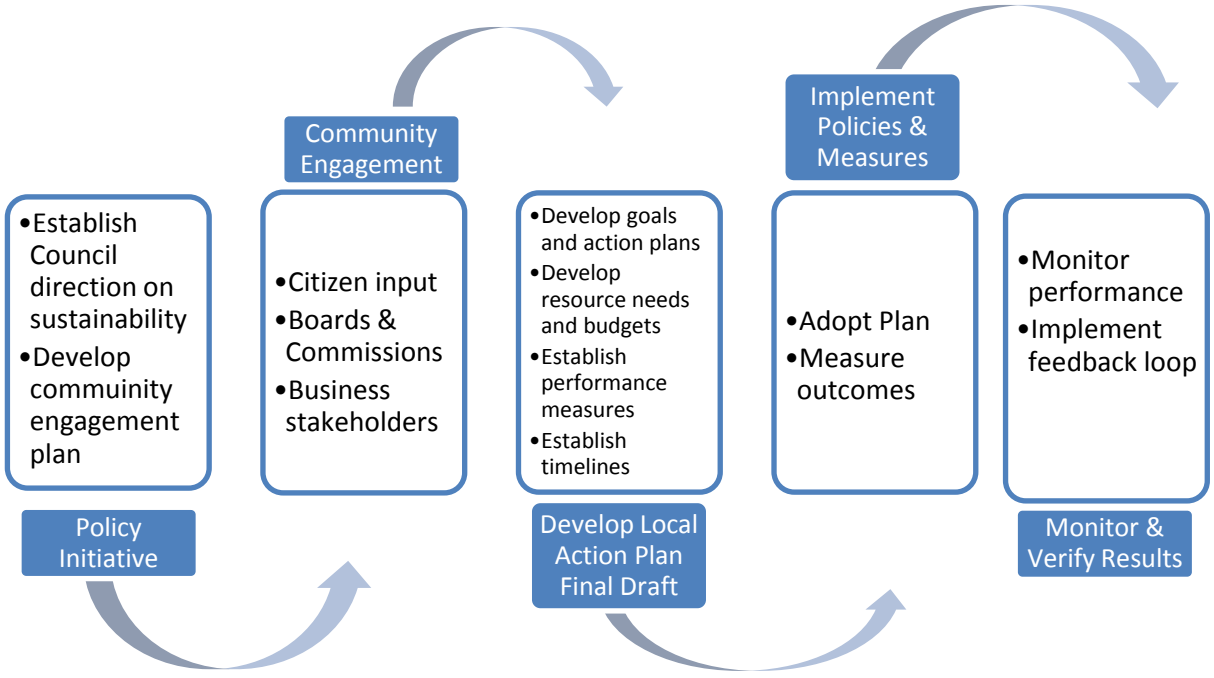


1. Resource Conservation
2. Transportation
3. Environmental, Open Space, and Community Health
4. Economic Development
5. Land Use and the Built Environment
6. Buildings and Energy
7. Community Education and Civic Participation

The plan also defines the following critical performance factors:

- Current Efforts
- Measurement and Reporting
- Near, Mid, and Long Term Goal Statements
- Public Involvement

Process Map

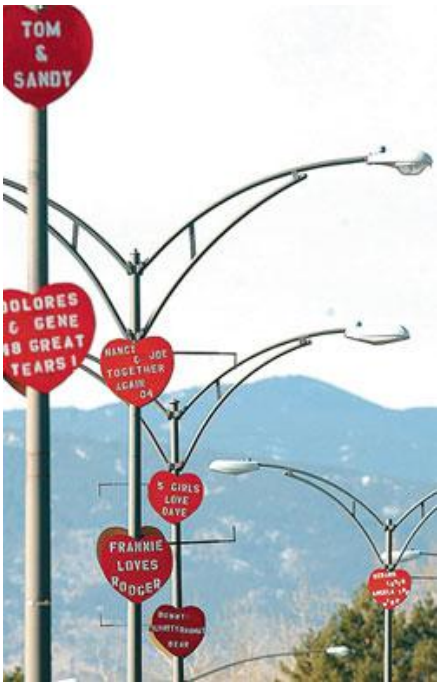


Community Participation

The City will undertake a triple-pronged approach to addressing sustainability, priority one will be taking business steps to move the city organization to more sustainable practices (Scope 1). Priority 2 will be a larger community discussion on sustainability and how it relates to governmental policy, community action, and funding. The third effort will follow the community discussion, and will integrate the community goals on sustainability into the existing City of Loveland Plan structure, interweaving the consideration of sustainability into key community planning documents. The Comprehensive Master Plan is currently slated for a mid-term update then a full update by 2015. Other key city documents include the Transportation Master Plan, Parks and Recreation Master Plan, Open Space Plan, Title 18, Water Master Plan, Power Master Plan, and other key community planning documents. (Scope 2)

The timeline for this effort is not defined at this time and is dependent on resources available to support such an effort.

If you are interested in becoming more involved in the City of Loveland's sustainability efforts or have comments related to this report, please feel free to contact Keith Reester, Public Works Director at 970-962-2520 or reestk@ci.loveland.co.us.



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Sustainability in Loveland

City of Loveland

Sustainability in Loveland

Background

In 2008 and 2009 City of Loveland staff initiated an effort to gather all the organization's work at creating a sustainable organization and community. City staff began the task of developing an inventory of all activities, policies, and processes that support moving to a more sustainable business operation. This task compiled a significant snapshot of the city's efforts. However, this project did not include a citywide assessment of all sustainability efforts in the community; there is no analysis of the impacts of city policies, notably in development, transportation, and utilities on community sustainability as a whole. In addition, the plan does not address current assets owned by the city, but sustainable business practices that will allow for careful planning of resources and needs for these activities. (The inventory compiled in 2008/9 is contained in Appendix 2).

During this period, the city moved to explore the question of sustainability through professional organizations of which the city is a member, such as the American Planning Association, American Public Works Association, American Water Works Association, Platte River Power Authority and others. Additionally, staff sought to investigate what other cities throughout the nation are doing in this area, extensively researching plans throughout the country and Colorado.

The City of Loveland has not officially adopted a sustainability policy or set of goals; in 2011 City Council and staff will engage in a community dialogue on the topic of sustainability and what it means for the City of Loveland and our partners.

DRAFT Guiding Principles

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DRAFT Guiding Principles

To assist the City of Loveland and community leaders in working to support and drive a sustainable Loveland, eight Guiding Principles have been developed.

1. **The concept of sustainability is interwoven into City policy; programs and projects will consider sustainability in addition to other project factors.**

   When building City policy and projects, staff will utilize a Sustainability Action Matrix (SAM) to review the sustainability impacts and consider those factors in selecting final direction. The City's adopted goals for sustainability will integrate into key community planning documents such as the Comprehensive Master Plan, Transportation Master Plan, Parks and Recreation Master Plan, Open Space Plan, Title 18, Water Master Plan, Power Master Plan, and others. *(A draft SAM example from the American Public Works Association is attached in Appendix 1).*

2. **Balancing the needs of economic vitality, environmental health, and the community fabric is essential to long term community sustainability**

   In order for our community to invest in sustainability and environmental health, the standard of living for our citizens and businesses must be high. Investment in economic vitality is critical to the outcomes of building a sustainable community.

3. **Public participation and community awareness are essential to building a sustainable City**

   The role of the community is implicit in building toward the future we expect, public participation is essential to developing sound, broad-based community initiatives.

4. **Sustainability priorities will be developed through a process of community input, led by City Council, with an emphasis on economically viable programs and policies.**

   Community engagement and leadership will drive developing a balance between investments in sustainability and other community needs. Programs and projects that are economically viable and have significant return on investment, and cost saving features will rise to a higher level of community support.

5. **Partnerships among government, business, non-profits, and the community-at-large are essential to achievement of community goals**

   Livable and sustainable communities are built through collaboration and leadership in all sectors of the city. Support of continued development of the "Green Economy" is elemental to economic development in the region. Government will be a facilitator in engaging various community sectors and building a common vision for sustainable action. The City of Loveland historically has tackled community changes through "the carrot" methodology versus "the stick," City policy on sustainability will continue to support this approach.

6. **The City of Loveland government organization, in our business operations, will strive to lead by example in sustainable business practices**

   The City of Loveland as a business will engage in sustainable purchasing practices, waste reduction and efficiency strategies, and project planning when it is economically viable to consider such actions.

7. **Protecting, preserving, and restoring the community and regions natural environment is a priority for the City of Loveland**

   The City of Loveland will continue to engage in local and regional partnerships to enhance preservation and restoration efforts of our natural environments.

8. **The City of Loveland recognizes its role as a community, regional, and national partner in making sustainable decisions.**

   City efforts will seek to engage with other partners in shaping sustainable decisions throughout the region and nation.

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Measurement and Reporting

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Measurement and Reporting

Beginning in 2012 the City of Loveland will establish performance measures, both quantitative and qualitative, assessing the impacts of the community sustainability plan. The City has established seven goal areas, based on the Guiding Principles, to measure sustainable performance. These goals also align in general terms with the components of the City's Comprehensive Master Plan.

Goals

1. Resource Conservation
2. Transportation
3. Environmental, Open Space, and Community Health
4. Economic Development
5. Land Use and the Built Environment
6. Buildings and Energy
7. Community Education and Civic Participation

In each of these goal areas, the plan identifies the City's role:

- Lead – The City takes the primary role in making this happen in the community
- Partner – The City co-leads through resources and funding this strategic goal
- Facilitate – The City serves as a facilitator to bring together key stakeholders but does not fund the project/program efforts
- Support – The City supports the efforts in this area but does not fund them
- Observe – The City plays the role of only observer in this goal area

Future Goal Development and Work Plan

In 2012, through community dialogue, the City will more fully define the details of the measurement in each category and create a basis for ongoing review and update of community targets.

The Community Engagement Process

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The Community Discussion Process

Community dialogue is essential to creating sound policy. In order to more fully develop a Community Sustainability Plan, and the ensuing action plans and policies associated with an adopted plan, the City will seek community input into the Draft Community Sustainability Plan. The process will likely include:

1. Council study and discussion
    a. Goal: Establish key concepts and leadership support for further community discussion and action. Development of a clear vision for leading community input resulting in a final plan adoption.
2. Staff refinement of working documents and finalization of community engagement plan
    a. Goal:
        i. Develop additional draft documents and information found to be key priorities of City Council
        ii. Create a roadmap, timeline, and resource plan for community engagement
3. Review with Council the resource needs, timeline and issues related to moving forward with the community engagement element of the plan, determining if resources are available to deliver the proposed roadmap to final plan development.
4. Community engagement effort (example plan only)
    a. Goal: Seek input on sustainability policy, direction, and community support
    b. Roadmap
        i. Staff facilitated community meetings targeted at key community stakeholder groups
            1. Number: 2-3 meetings
                a. Business
                b. Environmental interests
                c. Human service interests/faith based groups
                d. Utility users – large commercial, non-commercial
                e. Regional entities and customers
        ii. General community interest meetings
            1. Number: 2 meetings
5. Staff review of community input and development of key findings for report back to City Council
6. City Council study and discussion
    a. Goal: Review key findings from community engagement with the result being refinement of recommendations to be integrated into the Final Community Sustainability Action Plan
    b. Definition of resource needs and schedules to adopt and support plan implementation
    c. Ascertain if the plan moves forward based prioritization of available funding and resources
    d. Review with City Council the impacts of some goals – for example increased reliance on alternative energy sources or substantial reductions in GHG emissions have the potential for rate increases to customers.
7. City Council Review and Adoption of Plan
8. Establishment of process for ongoing community involved over the lifespan of the plan.

Participation in Professional Organizations

The City of Loveland will continue to engage widely in professional organizations that have established working sections on the issues of sustainability. These organizations include:

- American Planning Association
- American Public Works Association
- American Public Power Association
- American Society of Civil Engineers
- American Water Works Association
- Center for ReSource Conservation
- Colorado Clean Energy Cluster
- Colorado Association of Municipal Utilities
- Colorado Governor's Energy Office
- Colorado Department of Transportation
- Colorado Municipal League
- Colorado Water Wise
- Federal Highway Administration
- International Facilities Management Association
- Institute of Transportation Engineers
- International City/County Managers Association
- National League of Cities
- Platte River Power Authority
- Recharge Colorado
- Rocky Mountain Innosphere
- United States Council of Mayors
- United States Department of Energy

The Next Steps Process

Integrate key principles in the Community Sustainability Plan into existing community plans when they are scheduled for updates:

Comprehensive Master Plan – 2011/15

Title 18 Initiative – 2011/12

Transportation Master Plan – 2011/12

Parks and Recreation Master Plan – 2014

Open Lands Master Plan -2014

Raw Water Master Plan - 2012

Power Master Plan – 2015

Water Conservation Plan – 2013

Bike and Pedestrian Master Plan – 2010/2011

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How Does Loveland Compare

City of Loveland

How Does Loveland Compare

City of Loveland staff have reviewed actions taken both in Colorado and across the Rocky Mountain West on the topic of sustainability, so how does Loveland compare? For comparison, the table below shows similar communities and how they fare on key sustainability indicators. Please note this is only a snapshot and there are hundreds of communities in the United States that could be considered comparable.

City	Pop.	Set Sustainability Goals	Develop a Sustainability Plan	Conduct Sustainability Assessment	Implement the Plan	Monitor Evaluate Progress
Loveland, CO	67,000	D	D			
Carbondale, CO	6,600	X	X			
Aspen, CO	6,700			X		
Golden, CO	17,800	D	D			
Flagstaff, AZ	53,000	D		D		
Santa Fe, NM	62,200	X	X	X		
4Core * (CO)	70,800	X	X	X		
Longmont, CO	86,100	X	X	X	X	X
Greeley, CO	93,700	D	D			
Boulder, CO	100,400	X	X	X	X	X
Pueblo, CO	106,800	X				
Arvada, CO	107,700	D		D		
Westminster, CO	109,300	D				
Fort Collins, CO	136,400	X	X	X	X	X
Albuquerque, NM	522,000	X		X		
Denver, CO	611,500	X	X	X	X	X
X – Completed/D – In development						
*4 Corners Region: La Plata County, Durango, Ignacio, Bayfield						

THE COMPARISON IS BASED ON FIVE MILESTONES FOR SUSTAINABILITY

(DRAWN FROM SEVERAL ORGANIZATIONAL PLANS)

STAGE ONE: SET SUSTAINABILITY GOALS

The sustainability goals define the overarching objectives and scope of the sustainability plan. The type and number of goals can vary by jurisdiction, but likely will include an emissions reduction target along with other goals addressing issues such as workforce housing, natural resources conservation, and/or public transportation.

Stage Two: Develop a sustainability plan

The local government develops a sustainability plan, ideally with robust public input from stakeholders. The plan details the policies and measures that the local government will take to improve local sustainability and achieve the goals defined in the community and region. Most plans include a timeline, a description of financing mechanisms, and an assignment of responsibility to departments, the community, and stakeholders. This step should involve a public participation component to solicit ideas from the public and to receive feedback on measures being considered for inclusion in the plan.

Stage Three: Conduct a sustainability assessment

To begin the assessment process, a local government needs to first research and assess environmental, economic, and social equity challenges within the jurisdiction, and the programs in place to address these issues. The sustainability assessment typically includes a greenhouse gas emissions inventory and forecast for local government operations and the community as a whole and takes into account other key sustainability indicators.

Stage Four: Implement the sustainability plan

The local government implements the policies and measures in the sustainability plan.

Stage Five: Monitor and evaluate progress

Monitoring and verifying implementation progress is an ongoing process. Achieving this step involves annually reporting on implementation progress and monitoring the overall sustainability of the jurisdiction using the sustainability indicators identified.

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Current Efforts

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Current Efforts

2010 City of Loveland Sustainability Success

Resource Conservation

Solid Waste: In 2009, the city began the move to automated solid waste collection and single-stream recycling collection. The city has realized initial savings of 5% in fuel costs and reduced emissions for solid waste and recycling collection efforts. The current landfill diversion rate is 53%.

Water Usage: The city recently invested $800,000 in upgrades to the Water Treatment Plant. Filter plant #3 now includes an air scour backwash system, saving approximately 6,205,000 gallons per year. Filter plant #2 will be upgraded in the next 5 years. The water division has an active leak detection program with a 2010 goal of checking 50,000 linear feet of pipe. The water division also tests 300 to 400 meters annually for low, medium and high flows. The city maintains three xeriscape demonstration gardens that educate the community on water efficient landscaping.

Power Conservation: The Power Division purchased two generators that were installed at the Wastewater Treatment Plant and the Water Treatment Plant to help us reduce the peak demand in the summer months. The Power Division has been installing LED and induction streetlights in the downtown area as well as in the east part of town to solicit citizen's feedback on the light output as well as educating the public on the benefits and costs.

Purchasing: The City of Loveland utilizes a sustainable custodial services contractor and is moving swiftly to provide city buildings with environmentally friendly cleaning products; the city also purchases high-recycled content paper products and provides every city facility extensive office recycling opportunities.

Transportation

Catch the Bus: 2009 saw the expansion of local bus service in the downtown corridor, seeing ridership jump from zero to 19 passengers an hour. The city also received $776,000 in ARRA Federal Stimulus funds to purchase buses to support expansion of the regional Fox Trot bus route in June 2010. This first north-south regional route provides riders a connection from RTD in Longmont, through Berthoud, Loveland, and ending in Fort Collins. The new regional route is a partnership among seven regional governments. The buses on this route operate as alternative fuel, hybrid vehicles. Total ridership is averaging over 17 riders per hour and carrying over 154,100 passengers in the first 12 months.

Pedestrian Friendly: Through the work of City Council, city staff, and the Loveland Downtown Team, a downtown Strategic Master Plan for both business and streetscaping was completed. The new plan identifies a framework to reignite historic downtown Loveland and lay a foundation for Living Streets that enhance and support pedestrian, bicycle, and alternative travel.

Roll with It: Bike to work day was the biggest in years and laid the foundation for the 2010 and 2011 development of a new community-wide Bicycle and Pedestrian Master Plan. In 2010, the city was named "Honorable Mention" as a bike friendly community.

T-n-T: The city collaborated with Thompson R-2J School District to rollout an improved and growing Safe Routes to Schools program. The goals included upgraded pedestrian and bike friendly improvements around schools, and programs to encourage walking and biking for students. The hallmark of the program T-n-T Tuesdays (Tennies and Tires) was able to document a 70% increase in biking and walking to school and over 12,700 reduced vehicle trips at several elementary schools in the District.

Turn off the Engine: In 2010, City of Loveland began a fleet-wide anti-idling education program in partnership with Fort Collins, Larimer County, and Poudre Schools. The goal is to improve both winter and summer air quality and improve fleet gas mileage.

Reduce the Footprint: Between 2000 and 2010, the City of Loveland fleet has reduced greenhouse gas emissions (GHG) by an average of 10.52% per vehicle.

Environmental, Open Space, and Community Health

A Place in the Sun: The City of Loveland communities is blessed with 7,000 acres of parks and open space land, and is a partner with other regional communities that support continued investment in preservation of open space through a dedicated sales tax, appropriate development fees, and leading recipient of Great Outdoors Colorado grants.

Household Recycling Opportunities: In 2009 and 2010, the city expanded the potential materials that can be recycled at the Recycling Drop-Off Center, adding electronic waste recycling and expanding glass drop locations throughout the city.

Living Well: The City partnered with Live Well Colorado and CanDo Larimer County to identify opportunities to support community programs and establish stakeholder groups across the community to support sustainable living initiatives including walkability planning, community wellness programs, and obesity fighting efforts.

Locally Grown…Locally Bought: The city supported continued expansion of the North Loveland Farmers' Market and facilitated development of a second Farmers' Market in downtown Loveland.

Recreation and Leisure: City Parks and Recreation efforts sought to expand recreation opportunities and education on the topics of youth and adult obesity, as well as senior wellness.

Economic Development

Hybrid Solutions: The city provided economic development incentives and business support to Lightning Hybrids, a locally developed Loveland company at the leading edge of developing alternative fuel hybrid

solutions for vehicles. In 2010, the City received a $103,000 Federal Transit Administration grant to pursue the application of Lightning Hybrid Technology on a transit bus platform.

Supporting Eco-Friendly Business Solutions: The City of Loveland has invested in "Green Collar Jobs" including $100,000 in supporting job creation with Lightning Hybrids and $50,000 to support KL&A Structural Engineers LEED certification project for their building retrofit in downtown Loveland.

Business Investment in Transit: The COLT transit system offers local organizations, both public and private, the opportunity to purchase discounted bus passes through the *Business Investment Pass Program*. Three major community employers have joined the program.

Turn on the Tap: Loveland Water and Power's Key Accounts Program worked with over 50 companies in 2009 to improve water and energy resource use, supported rate plans that enhance a company's strategy to improve competitiveness while building a sustainable resource foundation.

Supporting Climate Change Planning for Power: The City of Loveland, as a partner in Platte River Power Authority, supported the adoption of PRPA's Climate 2020 Plan that outlines joint efforts to reduce greenhouse gas emissions 20% by 2020; this effort also supports the Colorado Governor's Plan for Climate Change. Platte River Power Authority with support of the City of Loveland and the other three municipal utilities recently adopted a five year Integrated Resource Plan. The Integrated Resource Plan focuses primarily on the five year planning period from 2012 to 2016, though it also includes consideration of long term planning issues. The 2012 Integrated Resource Plan provides information associated with resource acquisitions to meet customers' future electrical energy needs, including capacity and energy supply resources, renewable energy and demand side management.

Business Tune – Up Program: The City of Loveland collaborated with Platte River Power Authority and our neighboring cities (Fort Collins, Estes Park and Longmont) to create energy efficiency improvement opportunities for businesses with aging buildings. This program provides pre-screened contractors to audit the sites chosen, develops a plan for capturing low cost- no cost solutions to efficiency deficits, and provides rebate opportunities and labor to insure implementation of the efficiency plans.

Efficiency Expre$$: The City of Loveland was awarded, in partnership with several local entities including Fort Collins Utilities and Platte River Power Authority, a $100,000 grant from the Governor's Energy Office to implement a Commercial Energy Program that would target approximately 60 businesses in our region. The program provides outreach, free assessments and implementation support for energy efficiency opportunities. To maximize implementation, customers are offered a free building tune-up as well as support throughout their projects to completion.

Lighten UP: Lighting is often one of the biggest electric uses in businesses. Lighten UP helps businesses lower their electric bills by providing incentives for lighting upgrades with a comprehensive package of rebates.

Northern Colorado ENERGY STAR® Homes: Supporting ENERGY STAR® qualified homes in Northern Colorado to transform the regional home market to high-performance construction, using an educational, market-based approach targeting consumers, builders, trade allies and other stakeholders.

Energy Education Assistance Program: Supporting local schools by providing funding for programs and projects focusing on the importance of using energy wisely and renewable energy.

Electric Efficiency Program for New Construction, Renovations and Existing Buildings: Cash incentives are available for buildings project in the community by providing funding to help businesses conserve energy and reduce costs when making commercial buildings improvements or upgrades. Incentives are provided on a pre-determined list of electricity-saving and customer measures.

Residential Energy Efficiency Program Portfolio: Creating a portfolio of residential energy programs fostering Loveland as the preferred choice community that is necessary to attract innovative employees while also helping to keep energy dollars in the local economy and creating jobs.

Land Use and the Built Environment

Plan and Plan Again: The City Council established a citizen and staff partnership committee to develop recommended changes to the City's Title 18 Code provisions for land use and development. The committee is reviewing a host of issues including efforts to support sustainability in development.

Mix It Up: Studies throughout the United States support the proposition that higher density development accompanied by mixed uses, allowing people to live and work in the same vicinity increase both community and personal health and well-being, and promote sustainable living by reducing resource consumption and environmental impacts. In 2009, the City saw the approval of several mixed-use community developments resulting in more sustainable community attributes.

Designing Community: As a supplement to the Comprehensive Master Plan and Transportation Master Plan, the city is leading the effort to create a community design element to enhance specific corridors, increase bicycle and pedestrian safety and usability, and develop livable, connected, neighborhoods.

Buildings and Energy

Sustainable Buildings: The city was awarded $606,400 in Energy Conservation Stimulus grants (EECDBG). The award will utilize $400,000 to support LEED certification improvements in the Library expansion project, while $51,000 is being tapped to retrofit light fixtures at city parking lots with LED fixtures, increases energy efficiency and reducing maintenance costs.

Supporting Affordable Housing: The Loveland City Council again approved multiple fee waivers for affordable housing projects, including Habitat for Humanity and other projects for senior living.

Supporting Workforce Housing: Through the annual Community Development Block Grant Program (CDBG), fee waiver programs and Council investment, the City awarded $2,100,000 to community non-profits and developers supporting investments in workforce housing in the last 10 years.

Sustainability in Affordable Housing: The City of Loveland secured grant funds from the Colorado Governor's Office of Energy to support a project by the Loveland Housing Authority to complete energy and

sustainability assessments on all their properties. The project resulted in a plan to upgrade existing Housing Authority facilities to outstanding energy and water efficiency, and provided a springboard into securing grant funds for future sustainability projects.

More Light for Less: Since 2004, the city continues an ongoing program of retrofitting for lighting fixtures at the City's facilities creating energy savings of nearly 20%. Over one-third of the city facility square footage has been retrofit through the program to date.

Leading the Way: The city's Service Center provides a working template for making improvements and saving energy and water, installation of ENERGY STAR® appliances, shut off timers, occupancy sensors, VendMisers and water aerators. The City of Loveland Power Division invested $51,244 on a lighting retrofit to the Service Center and Warehouse and will reduce energy consumption by 20,000 kwh/year.

Community Education and Civic Participation

Building Community through Boards: The City of Loveland hosts 28 boards and commissions, in 2009 several of these looked at community related sustainability issues including affordable housing, senior issues, transportation, land use, historic preservation, utilities, and community resources.

Waterway Whisked Clean: The city collaborated with other community organization and saw over 300 volunteers commit time and resources to supporting community waterway clean-ups, while over 50 participated in litter programs along roadways.

Dig into Trees: The City's Parks and Recreation Department again was the community leader in supporting Arbor Day tree planting efforts, as well community tree plantings at other seasonal opportunities.

Forming the Future: The Public Works Department, with support from Water & Power, hosted over 2,100 students and adults at the annual Public Works Day education event, learning about sustainable and operational practices in our community.

Children's Water Festival: The city collaborates with Thompson School District and Northern Colorado Water Conservancy District on the annual festival. Approximately 900 5th grade students learn about Loveland's water sources, conservation, and water quality that integrate with their earth science curriculum.

Renting a Watt Reader from the Library: Providing Watt Readers, devices that can monitor the electric use of electronics and appliances, at the Loveland Library. Included with the Watt Reader is a residential Energy Guide and rate calculation information giving customers the tools to better understand their energy use.

Home Energy Reports: Using informative billing to educate Loveland Water and Power electric customers on how much energy is used in their home and similar homes while providing information on where and how energy can be saved.

Home Energy Audit Program: Loveland Water and Power offers a comprehensive home energy audit, including direct installation of energy and water saving products, participating contractors list, project implementation assistance and rebates for select measures. Community member can better understand home their home uses energy and water while finding out prioerties for making improvements.

Irrigation Audits: The city collaborates with the Center for ReSource Conservation to offer residential customers free sprinkler inspections. The inspections are designed to optimize sprinkler operations and be efficient with outdoor use.

Xeriscape Education: Loveland Water and Power continues to support water efficient landscaping through xeriscape and the seven principles of xeriscaping. The city maintains three xeriscape demonstration gardens and collaborates with the Center for ReSource Conservation to offer discounted xeriscape gardens at discounted prices.

Building Community and City of Loveland Business Goals

City of Loveland

Building Community and City of Loveland Business Goals

In an effort to enhance discussion and provide a platform for community policies and plans around sustainability efforts, the City of Loveland has developed a series of potential goals in each of the key measurement areas. The draft goals were developed based on past community planning efforts such as the Comprehensive Master Plan and reviewing sustainability plans of like size communities in the United States. These goals are a starting point to develop broad overarching goals that will then create a platform to drill down into specific action plans, schedules, and funding and resource plans.

The process for goal development and implementation is:

1. Review draft goals, to be further refined, to reflect target implementation strategies of the plan
2. Goals will be developed to provide measureable benchmarks to assess the success of the plan
3. Development of cost alternatives for each goal and balancing those costs for return on investment
4. Detailed action plans will be developed for each goal
5. Goal progress will be reported annually to City Council and the community.

Table A outlines the basis for the numeric goal statements

Resource Conservation

Loveland is committed to reducing the impacts our community has on the environment through a commitment to conserving resources as a primary step.

Sub-Goal

Develop City of Loveland operational sustainability

Plan Component	Action Task	Role	Deliverable Date	Resource Costs
City of Loveland Business Organization	Develop and establish mitigation measures in the City's Community Sustainability Plan to reduce the City's operational greenhouse gas emissions	Lead	June 2012	
	Establish City organizational support to address sustainability issues	Lead	January 2012	
	Review purchasing standards to support and encourage sustainable purchasing practices	Lead	June 2012	
	Continue to invest in utility programs that promote sustainability across public facilities	Lead	Ongoing	
Community				
Regional/National Partnerships	Establish the role of the City of Loveland in meeting PRPA's GHG emissions reductions goals by 2020 required in the adopted Climate Action Plan	Partner	June 2012	
	Review sustainability action planning in with regional jurisdictions to seek efforts at multi-agency programming and leveraging of resources	Partner	2013	

Sub-Goal

Continue enhancement of community plans for water and power conservation

Plan Component	Action Task	Role	Deliverable Date	Resource Costs
City of Loveland Business Organization	Perform audits on new and existing commercial buildings in the Loveland Community.	Partner	On going	
Community	Continue to provide incentives to purchase LEDs at local retailers in Loveland.	Partner	On going	
	Continue to provide watt readers at the Loveland Library	Lead	Ongoing	
	Continue to provide customers with digital cycling units to their	Lead	On going	

	air conditioners through our Partnering with Power program.			
	Offer energy audits for low income residents in the Loveland community through Larimer County Youth Conservation Corps	Partner	2012	
	Offer whole house audit for residents that would pay for a portion of the audit and give them guidance to help make energy efficient choices.	Lead	2012	
	Offer residents an incentive to get rid of their secondary refrigerator or freezer.	Lead	2011	
	Use informative billing to educate customers on how much energy they are using and how to save more energy through education.	Lead	2011	
	Offer education on energy efficiency in Loveland's schools.	Lead	2011	
	Support building ENERGY STAR® rated homes through Northern Colorado ENERGY STAR® Homes	Partner	On going	
	Offer irrigation audits to residential customers	Partner	2011	
	Install a Garden-In-A-Box demonstration garden to show case water efficient landscaping.	Lead	2011-2012	
	Provide incentives for lighting and equipment upgrades in commercial buildings.	Partner	On going	
	Provide building tune-ups for building retro commissioning.	Partner	On going	
	Continue to provide existing customers on the energy efficiency program automatic load profiling services through online consumption data services.	Lead	On going	
	Continue providing customers with the opportunity to purchase renewable energy (wind credits) through the GreenSwitch program.	Lead	On going	
	Update City of Loveland Water Conservation Plan	Lead	2011-2012	

	Capture goals of energy efficiency and renewable energy programs in an Energy Policy.	Lead	2013	
	Update filters at the city'swater treatment plant to air scour system, saving on the amount of water used to backwash the filters.	Lead	2017	
	Continue leak detection and meter testing programs	Lead	On going	
Regional/National Partnerships	Continue to work with American Public Power Association monitoring and supporting federal legislation that is appropriate for public power utilities and participating in their Energy Efficiency Resource Central.	Partner	On going	
	Continue to work with Colorado Associations of Municipal Utilities monitoring and supporting Colorado legislation that is appropriate for public power utilities.	Partner	On going	
	Continue to serve on Recharge Colorado, a water and energy nexus, efficiency and conservation nonprofit organization to support utilities throughout Colorado to work together and help the state reach its goals.	Partner	On going	
	Continue to work with the Governor's Energy Office (GEO) in Denver to encourage our customers to take advantage of rebates and incentives through the GEO.	Partner	On going	
	Review and update the Integrated Resource Plan through Platte River Power Authority.	Partner	End of 2010	
	Continue to coordinate the integration of DSM into the System Load Forecast as outlined in the outlined in the Integrated Resource Plan through Platte River Power Authority.	Partner	Ongoing	
	Continue working with Northern Colorado Water Conservancy District on education opportunities in the community.	Partner	Ongoing	
	Continue working with Center for ReSource Conservation on conservation programs.	Partner	Ongoing	

Sub-Goal **Reduce greenhouse gas emissions by 10% by 2020**				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization	Establish the 2010 GHG emissions baseline for Loveland operations	Lead	June 2012	
	Reduce Emissions by 10% from 2010 baseline	Lead	Goal: 2020	
	Achieve 60% land filled waste diversion for city-operated waste hauling by 2020.	Lead	Goal: 2020	
	Set a performance standard that 30% of all city fleet autos and pick-up trucks will be reduced fossil fuel reliant by 2020 (Current level is 22.8% including E-85 and hybrid)	Lead	Goal: 2020	
Community	Utilizing the 2009 City of Loveland land use boundaries establish and estimated 1990 GHG emissions baseline for the jurisdiction	Lead	2015	
Regional/National Partnerships				

Transportation

While transportation is essential to the economic vitality of both the community and individuals, impacts created by transportation are far reaching and contribute significantly to sustainability. The City's transportation planning must embrace multi-modal solutions, regional mobility, and efforts to reduce vehicle miles traveled.

Sub-Goal **Establish parameters for "Living Streets" in the City's Transportation Master Plan**				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization	Support continuing education for staff on the technical development needs of "Living Streets"	Lead	Ongoing	
	Review strategies for utilization of the American Public Works Association and American Society of Civil Engineers Infrastructure Sustainability Index	Lead	2012	
Community	In the 2040 Transportation Master Plan Update, being	Lead	June 2012	

	developed in 2011/12, incorporate "Living Streets" components in some corridors			
	Review existing areas for potential retrofits to enhance multi-modal usage, incorporate traffic calming, and promote walkability	Lead	2011	
	More fully enhance opportunities for multi-modal transportation and develop 10-year strategic plan	Lead	2012	
	Complete a newly defined bicycle and pedestrian standard in the Bicycle/Pedestrian Plan	Lead	January 2012	
	Review and prioritize pedestrian system gaps throughout the City's infrastructure, as well as review accessibility concerns	Lead	Complete	
	Support a review of Title 18 Development components related to livable streets in new and infill development	Lead	2012	
	Establish role of Parks & Recreation Master Plan components in supporting livable street concepts	Lead	2015	
Regional/National Partnerships	Support regional planning efforts incorporating multi-modal solutions in transportation planning	Facilitate	Continuous	
Sub-Goal **Grow transit opportunities both locally and regionally**				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization	Support employee programs promoting transit ridership, bicycling, and pedestrian commuting	Lead	Ongoing	
Community	Establish funding milestones based on ridership growth for local system expansion	Lead and Facilitate	2013	
Regional/National Partnerships	Take leading role in a regional discussion group to explore moving to a fully funded and operational regional transit model	Facilitate	2011	
	Establish City policy priorities related to regionally initiated multi-model solutions, specifically regional rail and/or bus rapid transit (BRT)	Lead	2012	

Environmental, Open Space, and Community Health

Loveland recognizes the need to create more livable communities through the Comprehensive Master Plan; the City of Loveland is committed to actively promoting sustainable and healthy living for all residents

Sub-Goal

Promote community-wide programming for healthy living and education

Plan Component	Action Task	Role	Deliverable Date	Resource Costs
City of Loveland Business Organization	Support City employee wellness programming	Lead	Ongoing	
Community	Invigorate Loveland's partnership with organizations such as CanDo Larimer County and Live Well Colorado, and other local entities, with community-wide healthy living partnerships	Facilitate	Ongoing	
	Seek to partner with Thompson R2-J schools to collaborate on community initiatives supporting healthy communities	Partner	2013	
Regional/National Partnerships	Continue working with the Big Thompson Watershed Forum to educate community on water quality and enhancing the Big Thompson River	Partner	Ongoing	

Sub-Goal

Support business initiatives that increase community access to locally grown food

Plan Component	Action Task	Role	Deliverable Date	Resource Costs
City of Loveland Business Organization				
Community	Support the maintenance of existing farmers markets, while looking for opportunities to further add markets, locations, and hours	Facilitate	Ongoing	
	Seek opportunities to support community gardens and revitalize existing vacant or underutilized land to community gardens	Facilitate	2013	
Regional/National Partnerships				

Sub-Goal **Develop additional open space opportunities that allow public access but reduce environmental impacts**				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization	Establish a leadership role in maintaining buildings, parks, grounds, and right-of-way in methodologies that reduce environmental impacts and enhance resource conservation	Lead	2012	
Community	Develop an enhanced concept of "passive park" spaces in the community through scheduled updates of the Parks & Recreation Master Plan	Lead	2014	
	Continue to develop community parks and open space with a goal of reducing environmental impacts	Lead	2014	
Regional/National Partnerships	Continue to sustain and enhance the Big Thompson River Corridor and its tributaries	Partner Facilitate	2014	
	Partner to develop regional trail and park networks	Partner Facilitate	2014	
Sub-Goal **Partner with local non-profits and business to enhance community health**				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization				
Community	Support local businesses through economic development efforts aimed at promoting businesses sustaining community health	Facilitate	2012	
	Seek to facilitate community efforts at developing livable, healthy communities	Facilitate	2012	
Regional/National Partnerships				

Economic Development

Economic vitality is essential to establishing sustainable communities and business practices; the City will not sacrifice economic success for sustainability but will seek to balance the needs of building a sustainable community with creating primary jobs for our citizens

Sub-Goal

Sustain efforts at enhancing local businesses

Plan Component	Action Task	Role	Deliverable Date	Resource Costs
City of Loveland Business Organization	Create additional economic development programs aimed at sustaining local business	Lead and Facilitate	June 2012	
	Partner with local businesses on renewable energy projects that fiscally make sense to incorporate into the system			
	Provide incentives to locally based business enterprises	Lead and Facilitate	June 2012	
Community	Support local business development efforts including the Chamber of Commerce and Loveland Small Business Development Center	Facilitate	Ongoing	
Regional/National Partnerships	Support regional business development efforts through the Northern Colorado Economic Development Council (NCEDC)	Facilitate	Ongoing	

Sub-Goal

Guide efforts that support "green collar" jobs

Plan Component	Action Task	Role	Deliverable Date	Resource Costs
City of Loveland Business Organization				
Community	Partner with the State of Colorado and business groups to market and develop green industry jobs in the community and region	Facilitate	2013	
	Provide support to businesses shifting to more sustainable operations platforms	Facilitate	2013	
Regional/National Partnerships				

Sub-Goal **Seek to develop specialized funding opportunities for green economy jobs**				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization	Provide incentives to companies developing green, primary jobs	Lead Partner Facilitate	2013	
	Define the City's role in supporting "Clean Energy" and sustainable business practices at the ACE site, in partnership with CAMT, United Properties, and tenants	Lead Partner Facilitate	2012	
Community				
Regional/National Partnerships	Align local, state, and national financial resources to support green, economically viable jobs	Lead Partner Facilitate	2012	

Land Use and the Built Environment

Preservation, expansion, and revitalization of our community resources and open spaces are essential to a healthy livable community. The City of Loveland seeks to extend open space opportunities for our citizens, and to support land use practices that embrace sustainable building.

Sub-Goal **Align land use plans and designations to support sustainable land use**				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization	Invest in employee development programs that enhance skills and knowledge in the areas of sustainable development and land use	Lead	Ongoing	
Community	Develop specific Title 18 standards supporting sustainable development practices	Lead	2013	
	Complete a community design element that embraces sustainable principles	Lead	2013	
	Align Comprehensive Plan goals with City's Sustainability Plan	Lead	2012	
	Continue development of the City's Stormwater Master Plan,	Lead	Ongoing	

	assuring water quality and flood plain protection			
Regional/National Partnerships	Invest in regional land use planning activities to support sustainable growth	Partner Facilitate	2012	
	Invest in regional transportation planning activities to support sustainable growth	Partner Facilitate	Ongoing	
Sub-Goal **Develop efforts to guide sustainable preservation of the community's historical assets**				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization	Continue to invest in the establishment of flexible space options for all City facilities enhancing the ability to adapt existing space versus creating new space for City uses	Lead	Ongoing	
Community	Extend plans for preservation of historic structures, not limited to preservation efforts, but reinvestment to return them to commercial stock	Facilitate	2012	
	Seek to enhance and revitalize downtown Loveland and the older housing stock native to the area to create sustainable land use plans	Facilitate	Ongoing	
Regional/National Partnerships	Preservation of the community and region's agricultural and industrial heritage	Facilitate	2012	

Buildings & Energy

Buildings and energy production contribute the majority of green house gases in the United States. The City of Loveland is committed to making wise resource choices that balance green house gas emissions and costs to our community.
The City also supports building efforts aimed at LEED certification

Sub-Goal

Seek to establish sustainability plans for all City facilities

Plan Component	Action Task	Role	Deliverable Date	Resource Costs
City of Loveland Business Organization	Reduce water and energy usage at all City facilities 20% by 2020 based on 2000 baseline	Lead	2020	
	Pursue LEED certification or equivalent performance standards on all new and retrofit City building projects	Lead	Begin 2012	
	Reduce City facility GHG emissions by 10% by 2020	Lead	Ongoing	
Community				
Regional/National Partnerships				

Sub-Goal

Encourage sustainable building practices throughout the community

Plan Component	Action Task	Role	Deliverable Date	Resource Costs
City of Loveland Business Organization	Require 50% recycling of construction and demolition waste on City of Loveland building projects	Lead	Begin 2012	
Community	Offer standards in Title 18 to encourage sustainable building practices	Lead	2013	
	Support city-wide construction and demolition debris recycling on all commercial building projects	Facilitate	2013	
	Facilitate a community network of non-profits supporting sustainable practices	Facilitate	2013	
	Consider "fee-bate" (rebates on fees after performance) opportunities for LEED certified building projects	Lead	2013	
Regional/National Partnerships	Work with other regional entities to develop standardized sustainable building codes throughout the region	Facilitate	2015	

Sub-Goal Enhance energy conservation opportunities for citizens and businesses				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization	Support organizational initiatives aimed at promoting energy conservation	Lead	Fall 2011	
Community	Offer citizens and businesses incentives to invest in energy conservation improvement programs for single and multi-family residential	Facilitate	2013	
	Work with the Top 50 community energy users to reduce GHG emissions by 10% by 2020	Facilitate	Goal: 2020	
Regional/National Partnerships	Support Platte River Power Authority's initiatives at energy conservation and renewable energy programs	Support	2012	

Community Education and Civic Participation

Community based direction and support is essential to any initiative aimed at improving the Loveland community and region. The Sustainability Action Plan establishes a framework for community participation and seeks to generate broad based support for the Plan

Sub-Goal City engagement in building a sustainable community fabric				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization	The City actively participates as a supporter in efforts to create sustainability in the community	Support	2012	
Community	Identify community stakeholders and facilitate exchange between them for sustainable thinking	Facilitate	2012	
	Develop community roundtables of like industries to foster sustainable business practices	Support	2012	
	Incorporate an open house at Loveland Water and Power's Service Center on a yearly basis to educate and market programs	Lead	2013	
	Engage community HOA leaders in supporting sustainability efforts within their neighborhoods	Facilitate	2012	
Regional/National	Participate in regional roundtables to foster sustainable business	Support	2012	

Partnerships	practices			
Sub-Goal **Support for greening community events**				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization	Seek to host City of Loveland events pursuing “zero waste”	Lead	2012	
Community	Facilitate efforts with community event organizers to develop "zero waste" events	Facilitate	2012	
	Support Northern Colorado’s efforts on facilitating the Net Zero Cities conference	Support	2012	
	Work with local waste and recycling providers to support "zero waste" events	Facilitate	2012	
Regional/National Partnerships				
Sub-Goal **The City will engage regionally on the issues of sustainability**				
Plan Component	**Action Task**	**Role**	**Deliverable Date**	**Resource Costs**
City of Loveland Business Organization	Support City staff engagement in professional organizations that assist in developing sustainable business practices	Lead	On going	
Community				
Regional/National Partnerships	Partner with state and national groups supporting sustainable practices that benefit the community	Support	On going	
	Continue to support Key Accounts efforts and participate in their sustainability fairs	Support	On going	
	Seek to partner with like cities in the region on sustainability efforts	Partner	2012	

Public Involvement

If you are interested in being more involved in the issues of sustainability in the Loveland Community several opportunities exist. You may contact Keith Reester, Public Works Director at 970-962-2520 or keith.reester@cityofloveland.org.

Glossary

- ***Community Design Element:*** The Community Design Element establishes goals and policies to enhance the livability of the City, and encourage and protect investment in the City by ensuring the highest level of quality in the design and re-design of the City's physical form.
- ***Comprehensive Plan***: The City of Loveland's Comprehensive Master Plan has 2 components, a general plan and land use plan; additionally several sub-plans exist supporting the Comprehensive Master Plan. The Master Plan guides community planning and land use for development and redevelopment, the timeline for the plan is 10 years, with visioning extending to 25 years.
- ***Fee-bate*****:** To offer a rebate to a builder, developer, or non-profit after performance has been completed, as opposed to ***fee waivers*** at the commencement of a project
- ***Green Economy/Green Collar Jobs***: The Green Economy is an emerging marketplace that seeks to optimize the synergy among three sets of values: social, environmental and financial. This is most commonly referred to as the "triple bottom line."
- ***Green House Gas Emissions (GHG):*** Greenhouse gases are gases in the atmosphere that absorb and emit radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect that warms the earth for habitation. The main greenhouse gases in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.
- ***Goal:*** A target set by the City of Loveland in achieving sustainability. Goals may be adjusted from time to time to reflect community values, the community's financial situation, and other priorities.
- ***Guiding Principle***: An overarching tenet that allows detailed goals to be developed, a guiding principle provides visionary direction to a plan.
- ***Living Streets***: The concept of using streets for functions other than and in addition to vehicle traffic
- ***Passive Park Space:*** A Passive Park is a natural area designed for low-impact recreation and educational opportunities. Other park forms include *"Active"* and "*Mixed Use*."
- ***Sustainability:*** Efforts at reducing the impacts community and business operations have on the environment, this includes life-cycle planning, preservation and resource conservation efforts, and policies that support long term visioning for the community and citizens.

- ***Transit:*** Transportation options provided by public or private entities that offer mobility solutions that do not involve cars, most typically associated with buses and trains.
- ***Transportation Master Plan***: The City has developed a Transportation Master Plan that envisions the necessary transportation network when the City reaches its ultimate size at some future date. The plan provides a basis for developing capital plans to support infrastructure maintenance and growth.

Table A

Key Numerical Goal Basis

Goal	Basis	Section
60% waste diversion rate	Current City rate is 53% of all waste is directed to recycling outlets versus the landfill	Resource Conservation
30% of city fleet will be reduced fossil fuel reliant	Public and private fleets are taking steps to utilize less gasoline/diesel vehicles; to save fuel, time, and reduce vehicle miles traveled (VMT). ICMA national survey average 9.2%, City of Loveland is currently 22.8% including E-85 and hybrid. Although the impacted is limited due to E-85 accessibility in Loveland.	Resource Conservation
10% reduction in GHG emissions for City operations	10% already achieved in Fleet, PRPA goal is 20%, State of Colorado policy goal is 20% by 2020.	Resource Conservation
20% reduction in water and energy usage at City facilities by 2020 based on 2000 baseline	Good business and cost savings practice	Buildings & Energy
Require 50% recycling of C&D waste at City construction projects	Good business and cost savings practice, saves owned landfill space	Buildings & Energy
Work with Top 50 energy customers to reduce GHG emissions	Supports State of Colorado and PRPA goals	Buildings & Energy

Appendix 1

Framework for Healthy Communities Tool

Framework for Sustainable Communities

Action

	Ecology	Economy	Empowerment	Efficiency	Health
	How does it influence the Natural Environment?	*How does it directly influence the local economy and at what short and long term costs?*	*How does it influence relationships, effective government, and social justice?*	*How does it influence the delivery of infrastructure we provide?*	*How does it influence the well-being of people?*
Strengths					
Weaknesses					
Opportunities					
Threats					

Solution

APWA CENTER FOR SUSTAINABILITY
http://www.apwa.net/centerforsustainability

Appendix 2

2009 City Inventory of Sustainable Practices

City of Loveland Environmental Impact Inventory
May-08

Please inventory the key items each division in your organization is doing.
Instructions: Please use classification letters, it will allowus to sort more easily after combining all the spreadsheets
**Transferable: Is the practice transferable to other parts of the organization?*

Areas for Classification:
(W) Waste Reduction
(E) Use Efficiencies
(C) Recycling
(P) Policies Reducing Impacts

City of Loveland

Department	Division	Classification		Activity/Practice	Measurable Impact (If Known)	Transferable*
Fire		W	Chemical Products	Chemical purchases are minimal		
Fire		E	Chemical Products	Gas that is aging is used before newer gas for small power equipment		
Fire		W	Chemical Products	Fire no longer does oil changes on Fire Apparatus, no longer needs to dispose of used oil		
Parks and Rec	Parks	W	Chemical Products	Purchase "green products" (brake cleaner, spray lubricants, etc.) for use in Park Shop	Eliminates harmful emissions and product disposal	Y
Parks and Rec	Parks	E?	Chemical Products	Purchase and use slow release organic fertilizers	Slows turf growth which reduces mowing, vacuuming, fuel consumption and labor. Also minimizes nitrate contamination of ponds and waterways.	Y
Parks and Rec	Parks	W	Chemical Products	Purchased water-based parts washer for Park Shop	Eliminates disposal of harmful solvents	Y
Parks and Rec	Parks	E?	Chemical Products	Spot spraying versus broadcast spraying of noxious weeds	Reduces introduction of harmful chemicals	Y
Parks and Rec	Rec	P	Chemical Products	Contractual cleaner Porter Industries recently received an industry "Green" Award for recycling and use of environmentally-friendly products		Y
Parks and Rec	Rec	E	Chemical Products	Use of gas chlorine as main oxidizer on Chilson and Winona Pools	Gas chlorine is 30% less costly than other forms of chlorine - also saves on the life of HVAC and pool equipment as it is less corrosive.	Y
Parks and Rec	Rec	E	Chemical Products	Use of Ozone as supplemental oxidizer on Chilson main pool and one spa	Ozone is more reactive to some water borne bacteria like cryptosporidium, and cuts the amount of chlorine used on a daily basis by about 15%	Y
Public Works	Facilities Management	E	Chemical Products	Bioscrub on Lagoon cleaning - env. Friendly product		Y
Public Works	Facilities Management	P	Chemical Products	Floor mat supplier uses environmentally safe washing products		Y
Public Works	Facilities Management	E	Chemical Products	Housekeeping vendor uses all green cleaning methods		Y
Public Works	Solid Waste	W	Chemical Products	A benign cleaning product is used, ZEP Z-Green, for cart washing		
Public Works	Solid Waste	W	Chemical Products	Chemical purchases are minimal		
Public Works	Traffic	P	Chemical Products	Use Latex paint for striping roadways	No hazardous material on roadways which equals over 8,000 gallons/year	N
Public Works	VM	W	Chemical Products	Reduced purchase of aerosol chemical products by 70%	576 less aerosol 12oz. cans per year. Using bulk chemical with compressed air as propellent.	
Public Works	VM	W	Chemical Products	Elimination of (4) stoddard petroleum solvent tanks	Purchasde an aqueous (high alkaline) pressurized parts washer. Petroleum parts washers would generate approx. 640 gallons of hazardous waste per year. The aqueous parts washer waste is only 40#'s/yr. (approx 4,440 # less hazardous waste)	
Public Works		w	Chemical Products	Small oil spills are cleaned with degreaser sollution and mop	VM used to purchase approx. 3 tons of oil-dry per year. Since moving to this practice, VM now purchases only 600#'s/yr (5,400 # reduction)	
Water and Power	Water Utilities	P	Chemical Products	Inventory chemicals used in the various work groups and properly dispose of chemicals that are no longer needed. Also substitute chemicals that have a more environmentally friendly alternate for those in the past that have been more hazardous to use.		
Water and Power	Water Utilities	W	Chemical Products	Technical Services is evaluating the replacement of their parts washer with Landa hot water solution parts washer. This unit costs about $10,000 with the oil skimmer and would eliminate our parts washer, that requires us to use Stoddard solvent which requires special disposal. The steam washer water and solution is environmentally friendly and can be flushed into the sewer system.		
Finance	Risk Management	P	Education	Established city-wide environmental compliance AR.	Y	
Finance	Risk Management	W,E,C,P	Education	One FTE within Risk Management assists city employees with environmental compliance	Pollution Reduction, Waste Reduction	Y

Department	Division	Classification		Activity/Practice	Measurable Impact (If Known)	Transferable*
Cultural Services	Museum	W	Electronic files/docs	Email to distribution lists rather than send hard copies		
Development Services	Current Planning	P,W	Electronic files/docs	All CRT packets are scanned, saved as a PDF, and sent out via e-mail.		Y
Development Services	Current Planning	P,W	Electronic files/docs	Our Office is training the applicant to submit only one copy of their submittal. We then let them know if we need more.	We don't get more copies than we need, because we end up throwing those in recycling and not using them.	Y
Development Services	Current Planning	W,P	Electronic files/docs	The amount of packets printed for the Planning Commission meetings has been cut in half. The packet is sent as a PDF to staff members via email to view electronically. The PDF is also posted on the web for the general public to view electronically.	Have reduced number of packets printed by ~50%. 90 packets used to be printed each month, now only 46 packets are printed each month.	Y
Finance	Revenue Division	E	Electronic files/docs	Updated website to have forms and applications to reduce our printing		Y
Finance	Revenue Division	E	Electronic files/docs	Use email for forms, applications and audit worksheets as opposed to printing these.		Y
Finance	Risk Management	W	Electronic files/docs	Safety Training videos are sent thru mail to departments. This saves people from driving to pick up the videos	Y	
Finance	Risk Management	W,E	Electronic files/docs	Saving, sending, and viewing files (i.e., meeting notices, meeting minutes, safety topics, environmental reports) as electronic documents rather than printing reduces paper waste.	Y	
Finance	Risk Management	W	Electronic files/docs	Web based Training for Safety Topics to save people from driving to training in Denver, Fort Collins, etc. This also reduces the amount of handouts typically given at training seminars	Y	
Finance	Utility Billing	W	Electronic files/docs	We e-mail other departments when have items in the office that we no longer use	This reduces the amount of trash discarded.	
Fire		E	Electronic files/docs	Increased the use of e-mail and voice mail versus memos (minutes, all-dept notices, etc.)		
Fire		E	Electronic files/docs	Teleconferencing whenever possible and appropriate		
Human Resources	HR		Electronic files/docs	Email flyers instead of printing and distributing		
Human Resources	HR	W	Electronic files/docs	HR forms/documents available online-removed forms bins		
Human Resources	HR		Electronic files/docs	Shared documents instead of printing and distributing		
Human Resources	HR	W	Electronic files/docs	Some benefits presentations on Power Point with no paper copies		
Library		E	Electronic files/docs	Many functions such as renewing items can be done through the Web catalog so customers do not always have to drive to library		Y
Library		E	Electronic files/docs	Send hold and overdue notices via email to customers who give us email addresses to reduce paper mailed notices		N
Parks and Rec	Admin/Recreation	E	Electronic files/docs	Recreation registrations can be made by phone or internet	Have reduced number of trips to City offices to register for classes by 50%, reducing use of gasoline, etc.	
Parks and Rec	Administration	W	Electronic files/docs	Meeting agendas and information are emailed to members		Y
Parks and Rec	All	E	Electronic files/docs	Dept publications are all available on-line	Have reduced the number of publications printed by 50% over the last 5 years since all information is accessible on-line	Y
Parks and Rec	All	E	Electronic files/docs	Electronic storage of documents to reduce paper & better utilize space		Y
Police	Administration	C	Electronic files/docs	Scan electronically rather than interoffice hard copies		Y
Police	Administration	W, E	Electronic files/docs	Scan most items and send electronically rather than send hard copies interoffice		Y
Public Works	Facilities Management	W	Electronic files/docs	Scan all invoices - paperless process for FM purchasing		Y
Public Works	Facilities Management	W	Electronic files/docs	Use .pdf format for CAD dwgs - avoid paper for office planning		Y
Public Works	Stormwater Eng.	W	Electronic files/docs	29th & Monroe Stormwater Improvement project - 100% paperless and electronic with a project specific ftp site. Specifications, submittals, approvals, schedules, compaction test results, etc. are all posted on the ftp site for all involved parties to see and download.	saves paper, postage, and time.	Y

Department	Division	Classification		Activity/Practice	Measurable Impact (If Known)	Transferable*
	Stormwater Eng.	E	Electronic files/docs	CIP construction files all posted on a project specific ftp site.		Y
Public Works	Stormwater Eng.	E	Electronic files/docs	Some CIP files kept electronically instead of hard copy.		Y
Public Works	Stormwater Eng.	W	Electronic files/docs	Some Inspection Reports and ESCIL reports sent via e-mail.		Y
Public Works	Stormwater Eng.	E	Electronic files/docs	Stormwater maps made available from GIS as pdf files.		Y
Public Works	Traffic	E	Electronic files/docs	ITS program:VMS signs, 1610 Radio, Road Report to Media/TV Cameras, CoTrip.ORG	Not measured	N
Public Works	VM	E	Electronic files/docs	Migration to paperless VM workorder system	We have currently reduced VM workorder process from 5 pieces of paper to 2 pieces of paper. With an annual job total of 15,000 workorders, this is a paper reduction of 60%.	
Water and Power	Customer Relations	W	Electronic files/docs	We are training customers to receive reports and energy information via email rather than actual hard copy.		
Water and Power	Finance	E	Electronic files/docs	Download large financial reports on a shared drive rather than produce several documents and disperse them.		
Water and Power	Power	W	Electronic files/docs	Central Filing - Instead of having everyone have copies of the same documents, we are using one location for everyone's use.		Y
Water and Power	Power	W	Electronic files/docs	Communications Board - One location of information for the whole division and especially helpful for those that don't have email and we don't have to produce multiple copies.		Y
Water and Power	Power	W	Electronic files/docs	Dispatch has started the transaction from paper work tickets, streetlight work tickets, service requests and PWP tickets to Cityworks.		Y
Water and Power	Power	W	Electronic files/docs	Field Engineers have been taught to use maps and as builts online to look up information.		Y
Water and Power	Power	W	Electronic files/docs	Metering Department has made two of their work tickets available online so W&P and UB can share data. We are scanning all related material for future reference.		Y
Water and Power	Power	W	Electronic files/docs	Metering Department has started to scan all one line maps for future reference.		Y
Water and Power	Water Utilities	W	Electronic files/docs	A Water Division study group is looking at document management. A scanner and software have been purchased to reduce the amount of paper used and stored.		
Water and Power	Water Utilities	W	Electronic files/docs	All City packets (city council, LUC, etc.) electronic instead of paper.		
Water and Power	Water Utilities	W	Electronic files/docs	The next version of the Water Division Safety Manual will be accessible via the intranet.		
Cultural Services	Museum	W	Power	Motion sensor in Foote Gallery for lights		
Cultural Services	Museum	W	Power	Turn on lights to exhibits just prior to opening rather than when staff arrives.		
Cultural Services	Rialto	W	Power	Lights off in theatre at all times unless performers or staff present		
Cultural Services	Rialto	W	Power	Two work lights installed on-stage to avoid use of theatrical lighting		
Development Services	Current Planning	E	Power	Some employees prefer natural lighting in their cubicle to overhead lighting, and have turned the overhead lights off		Y
Finance	Revenue Division	E	Power	Turn of lights when we leave work		Y
Finance	Risk Management	W,E	Power	Computers sleep after (so many) minutes of inactivity.	Y	
Finance	Utility Billing	E	Power	We sell thrifty lights	This saves energy.	
Fire		W	Power	Lights are shut off in unused or low use areas		
Fire		W	Power	Fire crews cook meals together instead of cooking independently		
Fire		W	Power	BBQ at Station 6 has timer on gas line to prevent waste if accidentally left on		
Human Resources	HR	E	Power	Turn lights off when not in the office		
Human Resources	HR	E	Power	Turn off one light under shelf over desk and open curtain		

Department	Division	Classification		Activity/Practice	Measurable Impact (If Known)	Transferable*
IT		E	Power	PCs rolled out w/ power saving settings turn on (eg Monitors off after 20 minutes)		N (should be city wide already)
IT		E	Power	re-oriented the servers in the server room in 2007 to create a cold isle and a hot isle, and work in conjunction with the AC unit in the room	Not sure, suggested contacting John Curnes	Y
Parks and Rec	Rec	E	Power	Changed light bulbs in racquetball courts to more efficient/less wattage bulbs	Improved lighting at fewer watts	Y
Parks and Rec	Rec	W	Power	Installed electric hand dryers to reduce and eliminate the use of paper towels at Chilson Center, Winona Pool, and other locations		Y
Parks and Rec	Rec	E	Power	Through FM, installed new hot water heater and new pool water heater at Winona Pool	Not yet known, but will track in comparison with 2007	Y
Parks and Rec	Rec	E	Power	Use of skylights for indirect light at Chilson Center and Winona Swimming Pool		Y
Police	Records	E	Power	Keep lights off in rooms not in use		Y
Public Works	Facilities Management	E	Power	Install 90+ efficient rooftop HVAC units		Y
Public Works	Facilities Management	E	Power	Integrate daylight into lighting plans - skylights, more windows		Y
Public Works	Facilities Management	W	Power	Replaced pool area doors at Chilson with high perf. Doors		Y
Public Works	Facilities Management	E	Power	Standardized on duralast roofs - white material reflects heat		Y
Public Works	Facilities Management	E	Power	Encourage windows that open during remodels - fresh air		Y
Public Works	Facilities Management	E	Power	Motion sensors and zoning for lighting design		Y
Public Works	Facilities Management	E	Power	New lights in Chilson racquetball - more efficient, less watts		Y
Public Works	Facilities Management	W	Power	Removed all radioactive exit lights - replaced with photolum		Y
Public Works	Facilities Management	E	Power	Retrofit lighting from T-12 to T-8 lamps & ballasts		Y
Public Works	Facilities Management	W	Power	Task lighting in UB remodel uses less wattage		Y
Public Works	Facilities Management	W	Power	Use air curtain at key facilities, entrances		Y
Public Works	Facilities Management	P	Power	Use only green-tipped, environmentally friendly light bulbs		Y
Public Works	Solid Waste	P	Power	All electricity consumed for recycling center purchased through wind power program	Actual kW hours can be determined fairly easily	
Public Works	Stormwater Eng.	P	Power	All lights in office building turned off at end of each work day.		Y
Water and Power	Customer Relations	W	Power	Erick does not use his overhead lighting in his office. He uses a high efficiency lamp to light his workspace.		
Water and Power	Customer Relations	W	Power	The overhead lights are regulated by a motion detector. If we are all still, after a certain amount of time, the lights will go into auxiliary mode.		
Water and Power	Customer Relations	E	Power	We don't use any desk lighting. We use the overhead lighting and natural lighting from the windows.		
Water and Power	Power	E	Power	Continued offering our PWP program for Loveland residence.		N
Water and Power	Power	E	Power	Partnered with the Wastewater Treatment Plant and the Water Treatment Plant to reduce peak power in the summer by helping them purchase and install generators at both plants.		N
Water and Power	Water and Power	W/E	Power	Retro fit lightening. Motion lightening in the bathrooms and hallway. Purchased scanner/copier to scan more documents. Made LUC items and agenda online for viewing purposes rather than making multiple copies.		
Water and Power	Water Utilities	C	Power	During the process to stabilize the biosolids, methane is created. In 2007, 27,897,716 cu. ft. of methane were produced. 17,848,852 cu. ft. or 47% of this methane production was used to heat the digesters to reach the proper temperatures for digestion. In our present process, natural gas would have been used if this methane was not used.		
Water and Power	Water Utilities	E	Power	Installation of motion-detecting switches in our facilities so lights in breakrooms, lunchrooms, bathrooms, etc., automatically turn on when someone enters the room and turns off when not used.		
Water and Power	Water Utilities	E	Power	We are replacing old low efficiency pumps, motors, and other equipment with new energy efficient equipment in our current construction. We are also installing a 1000 kVa generator to assist with the power shaving program of the Power Division.		

Department	Division	Classification		Activity/Practice	Measurable Impact (If Known)	Transferable*
Water and Power	Water Utilities	E	Power	When undertaking capital projects we evaluate and select premium efficiency motors in our pump stations, blowers, treatment plants, etc. This provides a huge energy savings, as the power used in these facilities is very large.		
Development Services	Current Planning	W	Printing	Our office takes advantage of double-sided printing when able		Y
Finance	AP	w	Printing	Print double sided when possible		
Finance	Risk Management	W,E	Printing	2-Sided copying whenever possible	Y	
Finance	Risk Management	W,E	Printing	Font reduction (to fit more onto the same space)	Y	
Human Resources	HR	W	Printing	Print double sided whenever possible		
Human Resources	HR	C	Printing	Use paper in recycling bin for test copies or test prints		
Parks and Rec	All	E	Printing	Double-sided printing is utilized when possible		Yes
Parks and Rec	All	C	Printing	Recyled paper is utilized when possible for copy machine and printers		Y
Police	Administration	P	Printing	Directives manual given to new employees only. Printed double sided. Directives on LPD web site now for employees to review.		
Public Works	Stormwater Eng.	W	Printing	Documents for meetings double sided when photocopied.		Y
Water and Power	Customer Relations	C	Printing	Printing documents on both sides of paper and reuse copies that will not be viewed by clients or the general public.		
Water and Power	Finance	W	Printing	We set the printers so that no blank sheets are wasted in printing documents.		
Admin Srvcs	Internal Audit	C W	Recycling	I recycle all paper & plastic goods, I do double sided printing as much as possible and I do not print unnecessary paperwork.	n/a	N
Cultural Services	Museum	W	Recycling	Recycle art materials in child and adult classes		
Cultural Services	Museum	W	Recycling	Reuse of water bottles - staff		
Cultural Services	Museum	W	Recycling	Use of scrap paper in Valentine's exhibit for stamping		
Development Services	Current Planning	C,W	Recycling	Our office has located paper recycling bins strategically throughout the office. Employees recycle all paper garbage		Y
Development Services	Current Planning	W	Recycling	When drinking coffee or tea, everyone in the office drinks from a ceramic mug, rather than using the paper cups provided in the break room		Y
Development Services	Current Planning	W	Recycling	When drinking water, everyone drinks from a reuseable cup, and rarely ever drinks bottled water		Y
Finance	AP	c	Recycling	Recycle paper/bottles/cans		
Finance	AP	w	Recycling	use washable cup/plate/utensils		
Finance	Revenue Division	C	Recycling	Division recycles all bottles, cans and non confidential papers		Y
Finance	Risk Management	W,C	Recycling	All Risk Management employees recycle paper and other recyclable items.	Y	
Finance	Risk Management	W	Recycling	Risk Employees use interoffice envelopes as opposed to one-use envelopes.	Y	
Finance	Risk Management	W,C	Recycling	Risk Management manages the city small battery recycling program. Batteries are recycled instead of being landfilled as hazardous waste.	In 2007, over 330 pounds of batteries were recycled.	Y
Finance	Risk Management	W,C	Recycling	Risk Management printer cartridges are recycled (with assistance from the warehouse).	Y	
Finance	Risk Management		Recycling	Risk Management uses recycled paper and other recycled products when necessary.	Y	
Finance	Utility Billing	C	Recycling	Our department uses a shredder	Adding to recycling	
Finance	Utility Billing	W	Recycling	We cut discarded paper into smaller pieces to use as scratch paper in our office.	This reduces the amount of recycling that is picked up.	
Finance	Utility Billing	C	Recycling	We order recycled items whenever possible	This saves trees and helps the environment	
Finance	Utility Billing	C	Recycling	We sell wheel kits	This encourages the elderly who can not lift the recycle bins to participate in the recycle program.	
Finance	Warehouse	C	Recycling	Recycle cans and bottles	Probably 1 tote per month	Y
Finance	Warehouse	C	Recycling	Recycle cardboard boxes	Quantity varies by what we receive at the warehouse	Y

Department	Division	Classification		Activity/Practice	Measurable Impact (If Known)	Transferable*
Finance	Warehouse	C	Recycling	Recycle Printer Paper	Probably get 1 recycle tote every 2 months	Y
Finance	Warehouse	C	Recycling	We take wood scraps, pallets, and wood reels to recycle center	Varies, but some months it is a lot	Y
Fire		C	Recycling	Recycle paper and plastic products		
Fire		R	Recycling	Scrap metal recycled for new projects		
Fire		W	Recycling	Scrap wood taken to Fire training area for training burns instead of purchasing wood		
Fire		R	Recycling	Battery recycling in all stations		
Fire		R	Recycling	Printer toner cartridges recycled		
Fire		R	Recycling	Florescent tubes recycled		
Fire		E	Recycling	Recessed lights have CFL bulbs		
Fire		W	Recycling	Use of floor mats in areas of high traffic and at entry ways to extend carpet life		
IT		W	Recycling	Old PCs are donated to non-profits to extend life & keep out of the e-waste as long as possible		N (should be city wide already)
Library		C	Recycling	Discarded books given to Friends group for used book sale and discarded magazines and paperbacks are recycled		N
Library		C	Recycling	Often use recycled materials for kids' crafts projects		Y
Library		E	Recycling	Repurpose old City staff PCs for public to use in tech lab		N
Library			Recycling	Reuse padded envelopes when sending items via interlibrary courier		y
Library		C	Recycling	Swap area for customers to bring in magazines that others can take and reuse		Y
Library		C	Recycling	Use washable dishes and silverware in staff breakroom		C
Library		C	Recycling	Recycle bins in both staff and public areas with signs on trash cans to use recycle bins instead if appropriate		Y
Parks and Rec	Administration	W	Recycling	Kitchen area has washable cups, plates & utensils		Y
Parks and Rec	All	C	Recycling	Paper is recycled and used for note pads		Y
Parks and Rec	All	C	Recycling	Printer/toner cartridges are recycled when possible		
Parks and Rec	All	C	Recycling	Recycle non-rechargeable batteries (camera, AA, AAA, etc.) through Risk Mgmt.'s battery recycling program	Reduces landfill waste by recycling	Y
Parks and Rec	All	C	Recycling	Recycling bins are available for paper, cardboard, plastics, newspapers and aluminum		Y
Parks and Rec	All	E	Recycling	Use of recharable batteries for cameras, videos, etc.		Y
Parks and Rec	Golf	W	Recycling	Mulch all grass clippings back into soil		Y
Parks and Rec	Golf	C	Recycling	Recycle golf balls from course ponds for reuse by other courses	35,000 golf balls per year	N
Parks and Rec	Golf	C	Recycling	Recycle oils, antifreezes, etc		Y
Parks and Rec	Parks	C	Recycling	All collectable grass clippings go to the COL recycling center	1,200 +/- c.yds./year are recycled into compost - reduces landfill waste	Y
Parks and Rec	Parks	W	Recycling	BMPs for waste reduction in demolition and construction at Fairgrounds Park. Recycled concrete and asphalt for road base for new parking lots. Waste management bins on site during construction for waste and recycled materials separation.	Implement waste reduction system per LEEDS standards where appropriate for all recyclable materials. Ability to measure landfill reductions of concrete, steel, wood and plastics.	Y
Parks and Rec	Parks	C	Recycling	Christmas tree recycling	500 +/- c.yds./year are chipped into mulch for park landscape beds - reduces landfill waste	Y
Parks and Rec	Parks	C	Recycling	Collect and recycle engine oil at maintenance shops	250 Gallons per Year - reduces landfill contamination	Y
Parks and Rec	Parks	C & W	Recycling	Collect and recycle equipment batteries and scrap metal at the Park Shop	Reduces landfill waste and toxic material disposal - trade scrap metal for new dimensional steel (cost savings)	Y
Parks and Rec	Parks	C	Recycling	Recycle brass, copper and steel pipe/fittings/valves	1 ton +/- per year - also reduces landfill waste - generates minimal revenue	Y
Parks and Rec	Parks	W	Recycling	Recycle burlap tree bags by giving to local bee keepers for smoking hives	50 bags +/- per year - reduces landfill waste	Y
Parks and Rec	Parks	C	Recycling	Recycle plastic parts of irrigation rotor heads at the City recycling center	75% reduction of this type of waste going to the landfill	Y
Parks and Rec	Parks	W	Recycling	Recycle wire tree baskets at the City recycling center	50 baskets +/- per year - reduces landfill waste	Y

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Parks and Rec	Parks	W	Recycling	Return plastic planting containers and wooden pallets to nurseries and sod farms (return during next delivery to save fuel)	90% reduction of this type of waste going to the landfill	Y
Parks and Rec	Parks	C	Recycling	Tree trimmings/branch recycling	1,000 +/- c.yds./year are recycled into mulch for park landscape beds - reduces landfill waste	Y
Parks and Rec	Rec	E	Recycling	Collect periodicals monthly and distribute to other Sr. Housing		Y
Parks and Rec	Rec	C	Recycling	Recycle used equipment when possible	Most recently recycled plastic pool lane lines	Y
Parks and Rec	Rec	C	Recycling	Recycling receptacles available at Chilson Center (for public)		Y
Police	Admin/Patrol	R	Recycling	Battery disposal / recycling		
Police	Admin/Patrol	R	Recycling	Boxes, paper, et.		
Police	Investigations	C	Recycling	Recycle plastic and paper		Y
Police	Records	C, W	Recycling	Every six weeks APEX takes six 64 gallong containers for recycling		Y
Police	Records	C	Recycling	Recycle paper, plastics, cardboard & aluminum		Y
Police	Records	C	Recycling	Recycle printer cartridges		Y
Police	Records	C	Recycling	Reuse paperclips by rerouting from Records back to Patrol		Y
Police	Records	W, E	Recycling	Use dishes that can be washed and not plastic or paper		Y
Police	Records	W, E	Recycling	Wash & reuse plastic silverware or use metal flatware		
Police	Records	C	Recycling	Year end recycle 16 - 20 boxes of paper that does not end up in landfill		Y
Public Works	Facilities Management	W	Recycling	Floor mat rotation extends product life cycle		Y
Public Works	Facilities Management	W	Recycling	Have re-fabric'ed existing office partitions vs. buying new		Y
Public Works	Facilities Management	W	Recycling	Primary office furniture purchased has 50-year life cycle		Y
Public Works	Facilities Management	W	Recycling	Purchase office chairs with recycled polyester fabric		Y
Public Works	Facilities Management	W	Recycling	Relaminate table tops vs. replace tables		Y
Public Works	Facilities Management	W	Recycling	More aggressive maintenance - extend equip life cycle		Y
Public Works	Facilities Management	W	Recycling	Standardized on carpet tile for longer product life cycle		Y
Public Works	Facilities Management	E	Recycling	Load shedding at Parks Shop, Serv Cntr, Library, FAB, et al		Y
Public Works	Solid Waste	C	Recycling	Employees recycle desk-side		
Public Works	Solid Waste	P	Recycling	Illegally-dumped hazardous wastes hauled to Larimer County HHW facility for proper handling/disposal		
Public Works	Solid Waste	C	Recycling	Recycling and yard debris composting by Loveland households	Actual volume for 2007: 21,657 tons recycled/composted; 19,032 tons landfilled	
Public Works	Solid Waste	C	Recycling	Recycling services offered to all City facilities (participation varies by department/division)	Tons of recyclables collected can be estimated, but the actual amount is not readily available since this material is mixed in with that from residential sources	Y
Public Works	Solid Waste	W	Recycling	Washable/reusable rag service for equipment care	Approximately 150 rags reused per month	
Public Works	Solid Waste	W	Recycling	Waste reduction that results from volume-based "PAYT" trash rates.	Information from one consultant indicates that a small percentage of landfill diversion that we presently do not measure or account for can be attributed to residential waste reduction practices	
Public Works	Stormwater Eng.	W & C	Recycling	Using a charger for AA batteries.		Y
Public Works	Stormwater Eng.	W	Recycling	Using less kitchen paper products and more washable dishes.		Y
Public Works	Traffic	W	Recycling	Recycle used sign post stubs (bases) by cleaning out dirt with Division invention	Save purchase of 50-100 sign post stubs per year and keeps that number out of the landfills	N
Public Works	VM	C	Recycling	Junk tires recycled through Solid Waste Recycling Center	Approx. 600 light duty tires are recycled through Solid Waste, to Tire Mountain Shreading and used as backfill for septic leach fields. (Used to go to Larimer County Land Fill.)	
Public Works	VM	W	Recycling	Recaping of truck tires as many times as safe	Industry std. is to discard a heavy duty tire after 2 recaps. We let our tire recapper evaluate the safety of each used casing and recap as many times as safe. Avg. recaps per casing can be 10-15. reduced our waste tires by 330 heavy duty tires/yr. (3 tire/cubic yrd.)	
Public Works	VM	W	Recycling	Crush and Recycle all used oil filters	Approx. 5,000 used oil and fuel filters are replaced each year. By crushing then recycling this waste, we divert approximately 5 tons/yr. of salvageable steel and 312 gallons/yr. of used motor oil from the Larimer County Land Fill.	

Department	Division	Classification		Activity/Practice	Measurable Impact (If Known)	Transferable*
Public Works	VM	W	Recycling	Employee education on recycleables	Because of recycling indifference among VM employes we requested recycling education from Solid Waste. After the training, recycle containers were set up at each workbench and 3 large item karts in various places in the shop. Approx. 3 tons of recyclable solid waste/yr. is now diverted from the landfill.	
Water and Power	Power	C	Recycling	Recycling bins at all desks with a better policy on what we can recycle.		Y
Water and Power	Water Utilities	C	Recycling	All used pipe, valves, and other applicable equipment is reused or sent out to salvage.		
Water and Power	Water Utilities	C	Recycling	Participate in the City's co-mingled recyclables program, the battery pickup program, and the ink and toner recycle program.		
Water and Power	Water Utilities	C	Recycling	The locators recycle the batteries from locating equipment and locate paint cans.		
Water and Power	Water Utilities	C	Recycling	Use copper and brass is recycled.		
Water and Power	Water Utilities	C	Recycling	WWTP has practiced "beneficial reuse" of all solids collected, created, and treated in our plant with the exception of grit for many decades. After processing, the solids are referred to as "biosolids" and are applied to agricultural land as a soil conditioner and fertilizer. We produced 19,583,300 gallons or 1,002 tons of biosolids in 2007 which was applied to agricultural land by our contracted hauler.		
Cultural Services	Rialto	W	Transportation/travel	Two staff members cycle to work from Ft. Collins: Scott Dunn and Dave Brull		
Cultural Services	Rialto	W	Transportation/travel	Walk over to other City buildings		
Development Services	Current Planning	W,E	Transportation/travel	Every Wednesday morning, planners walk four blocks to another city building where their weekly meeting is held		Y
Development Services	Current Planning	W,E	Transportation/travel	Our Planning Technicians plan out a specific route when going out on their inspections to create a loop and minimize backtracking	Preserves fuel, cuts down on vehicle emissions	Y
Development Services	Current Planning	E	Transportation/travel	Some employees telecommute 2-3 times each month		Y
Development Services	Current Planning	E	Transportation/travel	The majority of employees bring lunch from home everday		Y
Development Services	Current Planning	E	Transportation/travel	Three of our employees carpool from Ft. Collins to work whenever possible		Y
Finance	Risk Management	W,E,C	Transportation/travel	Each employee within Risk brings lunch from home approximately 90% of the time. This practice helps save on gas from trips to restaurants, and it also helps cut down on waste since recyclable lunch containers are used when possible.	Y	
Finance	Risk Management	W	Transportation/travel	Employees telecommute or work 9/80 schedule. This practice cuts down on vehicle emissions.	Y	
Finance	Risk Management	W	Transportation/travel	Risk Management employees carpool to meetings when possible.	Y	
Finance	Risk Management		Transportation/travel	Teleconferencing for meetings with Pinnacle and Flood and Peterson saves from driving 50 miles one way for a one-hour meeting.	Y	
Finance	Risk Management	W	Transportation/travel	Walk to downtown farmer's market during lunch when possible. (The average miles for food to fork is 1500. Consequently, buying local helps save on gas use by cutting back on the average miles fro food to fork.)	Y	
Finance	Risk Management	W	Transportation/travel	Weather permitting, Risk Management employees attempt to walk to a nearby meeting.		
Finance	Risk Management	W	Transportation/travel	Risk Management offers in-house environmental training 4-6 times per year. This eliminates the need for employees to travel to Denver, etc. To receive required training. This also educates employees so that the departments and city overall achieve a higher level of environmental compliance.	In 2007, over 230 employees attended in-house training.	Y
Finance	Warehouse	E	Transportation/travel	Deliveries are scheduled, not random or singular	Reduce gas used to deliver suppies/ trash bags	N
Fire		W	Transportation/travel	Several employees ride bicycles or run to work		
Fire		E	Transportation/travel	FAB personnel walk to other city buildings		

Department	Division	Classification		Activity/Practice	Measurable Impact (If Known)	Transferable*
Fire		P	Transportation/travel	Use of smaller cars and trucks for running errands instead of driving large Fire apparatus		
Fire		E	Transportation/travel	Hybrid vehicle replaced a gas-only powered vehicle		
Fire		E	Transportation/travel	FAB elevator only used when needed, most people take stairs		
Parks and Rec	Golf	P	Transportation/travel	All rental carts are electric	144 carts	N
Parks and Rec	Golf	P	Transportation/travel	When feasible, replace gas powered utility vehicles with electric powered vehicles	3 carts	Y
Parks and Rec	Parks	P	Transportation/travel	Developed and implemented a vehicle rotation program in 2007	Extends life of vehicle - achieves "highest and best" use - lowers cost/mile driven	Y
Parks and Rec	Parks	P	Transportation/travel	Implemented fuel conservation program in 2006. Annual fuel conservation goals for Crew Supervisors	Crew Supervisor's annual performance is evaluated on achieving established goals	Y
Parks and Rec	Parks	P	Transportation/travel	Replace gasoline powered vehicles/equipment w/electric powered units where feasible	Two electric utility vehicles (carts) at LSP - fuel conservation	Y
Police	Investigations	E	Transportation/travel	Increased efforts to double up on trips to DA's office and other business related issues		Y
Public Works	Solid Waste	E	Transportation/travel	One employee rides bicycle to work the majority of days March-November		
Public Works	Stormwater Eng.	W	Transportation/travel	To save fuel, some staff work at home 2-4 times per month.		Y
Public Works	Streets/Traffic	W	Transportation/travel	Use of RWIS Technology for storm fighting	Saves chemical applications, diesel fuel, etc.	Y
Public Works	Traffic	E	Transportation/travel	Signal Timing Reviews- Corridor Optimizations	Fuel savings to be calculated such as the 1st Street Corridor.	N
Water and Power	Customer Relations	E	Transportation/travel	We carpool on assignments or lunch trips to Chilson to save on gas.		
Water and Power	Power	E	Transportation/travel	Reduce drive time for crews. Planning ahead and doing work in the same area and accomplishing multiple work tickets.		Y
Water and Power	Water Utilities	E	Transportation/travel	Determine if it would be possible to have W & P bikes for making short tips (i.e. to lunch, post office, downtown, etc.)		
Water and Power	Water Utilities	E	Transportation/travel	Education / encouragement for folks to carpool, walk, bike to work.		
Water and Power	Water Utilities	E	Transportation/travel	Evaluate ways to get better use of our pool vehicles, so that more employees would not feel obliged to bring a vehicle for travel, and would feel free to carpool, ride their bikes, use the bus, or walk to work.		
Water and Power	Water Utilities	E	Transportation/travel	If Joe's truck gets replaced in 2009 we will be getting a lighter duty truck which should get better fuel economy.		
Water and Power	Water Utilities	E	Transportation/travel	The locators have divided the City into sections so locators can stay in one area and not have to drive all over town.		
Water and Power	Water Utilities	E	Transportation/travel	The Water Division is evaluating our motor vehicle fleet needs and selecting smaller vehicles or a hybrid. Fewer SUV's and pickups as fleet vehicles, more small cars.		
Water and Power	Water Utilities	E	Transportation/travel	We are getting a hybrid vehicle as a replacement for Mike Haag's vehicle this year.		
Water and Power	Water Utilities	E	Transportation/travel	We have a laptop computer for Ross to use which should help reduce printing costs of a new map book (paper, ink, electricity) every quarter, and also reduce the amount of times it is necessary to come back to the shop to look at plans. Staff has budgeted to get laptops for the other locators in 2009.		
Water and Power	Water Utilities	P	Transportation/travel	We try to save fuel by planning and organizing tasks so multiple trips are not needed when one trip would suffice with proper planning. We continue to monitor driving needs and combine trips and needs where possible.		
Water and Power	Water Utilities	E	Transportation/travel	Work orders are assigned to minimize vehicle travel thus saving fuel.		
Finance	Utility Billing	E	Water	We give away dye tablets to be used to check toilet leaks	This is a way of saving water	
Finance	Utility Billing	E	Water	We sell fat trappers	This improves the efficency of our sewer system	
Fire		W	Water	Use of mugs, glasses, and dishware instead of paper & plastics		

Department	Division	Classification		Activity/Practice	Measurable Impact (If Known)	Transferable*
Fire		W	Water	Bottle water use limited to emergency scene rehab only, not used in stations or day-to-day		
Fire		W	Water	Dishwashers only run when full		
Fire		W	Water	Laundry machines only run when full		
Fire		W	Water	Bunker washers are run full when possible		
Fire		W	Water	Use of washable rags instead of paper towels		
Fire		W	Water	Water used to wash fire apparatus is captured and returned to the sanitary sewer		
Fire		R	Water	Fire Training area recycles water in pump test pit		
Fire		R	Water	Fire Training area recycles some water captured by retaining pond, acts as bio-filter		
Parks and Rec	Golf	P	Water	Allow golf courses to serve as filters for stormwater runoff from developments and streets through turfgrass mat, soil profile, and storage lakes on the courses.		N
Parks and Rec	Golf	E	Water	Increasing current irrigation system efficiency at Mariana Butte by evaluating need for change in head spacing and replacement of nozzles; working with mfg. to maximize system use and readings for our altitude	5 - 17 % increased efficiency	Y
Parks and Rec	Golf	E	Water	Installed new irrigation system at The Olde Course that increased irrigation efficiency	20% increased efficiency	Y
Parks and Rec	Golf	P	Water	Loveland's golf courses customarily use less water than normal E.T. rate for species of turfgrass as monitored by Northern Colorado Water Conservancy District offices	10 - 20 % increased efficiency	Y
Parks and Rec	Golf	C	Water	Recycle equipment wash water at Mariana Butte maintenance facility		
Parks and Rec	Parks	P	Water	Implement xeriscape, dryland grass or native planting areas in parks and along trails - Xeriscape Garden, Eagleview, LSP and Fairgrounds Parks	Reduction of chemicals, fertilizers, and gasoline in "no mow" areas. Drip irrigation in xeric landscapes - water reduction measured by meter or pumping capacity.	Y
Parks and Rec	Parks	E	Water	Installed waterless urinals in select Park restrooms	Reduces water consumption and waste at select sites	Y
Parks and Rec	Parks	P	Water	Park Design - Implemented BMP's for storm water management in parking areas and around facilities; i.e., less curbs and gutters, more swales and wetlands for water cleaning (LSP & FP)	Cost reductions for concrete - measureable in LF or SF calculations	Y
Parks and Rec	Parks	E	Water	Parks irrigation central control with rain delay	20% average annual savings in water consumption	Y
Parks and Rec	Parks/Golf	E	Water	Raw irrigation is utilized for 95 percent of turf water		Y
Parks and Rec	Rec	W	Water	Automatic shower valves with flow restrictors at Chilson Center and Winona Swimming Pool		Y
Parks and Rec	Rec	E	Water	Automatic temperature controls on shower water, pool water, and spa water resulting in utility savings	Difficult to track due to varying nature of use, but in comparison with those facilities that do not have this ability, utility costs are much less	Y
Parks and Rec	Rec	E	Water	Installation of automatic chemical control systems for all aquatics facilities resulting in controlled output eliminating overuse and waste		Y
Water and Power	Water Utilities	E	Water	Continue to develop policies that encourage the use of Xeriscape.		
Water and Power	Water Utilities	E	Water	Suggestion – all City facilities fill their water jugs like we do using tap water. This would save fuel costs to produce that water and transport it. Our water doesn't require electricity to pump it into town because we're fed by gravity. Our water tastes better and we can show that we believe in our own product.		Y