



Sustainability Action Plan:
Addressing Climate Mitigation, Climate Adaptation,
And Energy Security

Mayor's Task Force on Sustainability
March 2009

www.greenspokane.org

Table of Contents

<u>LETTER FROM THE MAYOR</u>	<u>3</u>
<u>1.0 ACKNOWLEDGEMENTS</u>	<u>4</u>
<u>2.0 INTRODUCTION</u>	<u>6</u>
<u>3.0 SUMMARY OF ACTION PLAN</u>	<u>9</u>
<u>4.0 ACTION PLAN – STRATEGY RECOMMENDATIONS</u>	<u>10</u>
4.1.1 STRATEGY 1: IMPROVE CONTINUOUSLY	12
4.1.2 STRATEGY 2: EMPHASIZE RENEWABLE ENERGY	13
4.1.3 STRATEGY 3: PROMOTE CLEAN MOBILITY	13
4.1.4 STRATEGY 4: ENABLE OPTIMAL LAND USE	14
4.1.5 STRATEGY 5: CONSERVE WATER EVERYWHERE	15
4.1.6 STRATEGY 6: MAXIMIZE ENERGY EFFICIENCY	16
4.1.7 STRATEGY 7: OPTIMIZE OPERATING PRACTICES	17
4.1.8 STRATEGY 8: PREPARE THROUGH PLANNING	18
<u>5.0 NEXT STEPS</u>	<u>20</u>
<u>6.0 GLOSSARY OF TERMS</u>	<u>21</u>

Background, Process, & Deliberation (bound separately)

<u>7.0 PROJECT BACKGROUND</u>	<u>3</u>
<u>7.1 ORIGIN OF THE INITIATIVE</u>	<u>3</u>
<u>7.2 PLANNING MODEL</u>	<u>5</u>
<u>7.3 DISCOVERY</u>	<u>7</u>
<u>7.4 DISCOVERY SUMMARY</u>	<u>19</u>
<u>7.5 FRAMEWORK FOR WORK GROUP OUTCOMES</u>	<u>20</u>
<u>7.6 DELIBERATION</u>	<u>22</u>
<u>7.7 SUMMARY</u>	<u>26</u>
<u>APPENDIX B: ADDITIONAL INPUTS</u>	<u>28</u>

List of Tables

List of Figures



City of Spokane

March 13, 2009

Dear Citizens of the City of Spokane:

I would like to take this opportunity to publicly thank the members of the Mayor's Sustainability Task Force—along with the subcommittee members, citizens and City staff—who participated in the development of this Sustainability Action Plan.

This plan clearly lays out guiding principles for the City to follow as we continue on our journey to greater sustainability. Just as following strict fiscal principles has helped the City weather the current economic storm, adhering to these sustainability principles will help us avoid problems in the future.

The path that has been paved makes economic sense with the added benefit of providing a better environment for future generations. I commit to you, the citizens of Spokane, that I *will* move the City onto the path provided.

Ultimately, of course, the City can't achieve the results we are looking for on our own. All of us will have to work together to make Spokane sustainable and more resilient. I appreciate all the work that already has been done, and I look forward to engaging our community on this topic as we work to make a stronger and healthier Spokane.

Sincerely,

Mary B. Verner
Mayor, City of Spokane

“Spokane – Near Nature, Near Perfect”

808 W. Spokane Falls Blvd., Spokane, Washington 99201-3335
Phone: (509) 625-6250
mverner@spokanecity.org

1.0 Acknowledgements

1.01 Mayor's Task Force on Sustainability

The members of the Mayor's Task Force on Sustainability extend a note of personal appreciation to the individuals, companies, institutions, agencies, and especially the employers involved. Their support made each individual's participation in this important community initiative possible. This initiative included dozens of meetings and many individual hours invested by the Task Force, meeting four hours every three weeks since April 2008. Such community participation shows that Spokane is a valued home, well worth the time and energy invested to ensure its future as a livable city.

Task Force Members

- Roger Woodworth, Task Force Chair, Vice President of Sustainable Energy Solutions, Avista
- Mary Carr, Dean of Instructional Services, Spokane Community College
- Larry Luton, Public Administration Program Director, Eastern Washington University
- Susan Meyer, Chief Executive Officer, Spokane Transit Authority
- Katherine Rowden, Engineer, CH2M Hill
- Bob Scarfo, Interdisciplinary Design Institute, Washington State University/Spokane
- Juliet Sinisterra, Services Director, Community-Minded Enterprises
- Jim Wavada, Environmental Planner, Washington State Department of Ecology
- Gerald Winkler, President, Integrus Architecture
- Mike Petersen, Executive Director, The Lands Council
- Sara Orrange, Government Affairs Director, Spokane Association of Realtors® and Spokane Home Builders Association.
- Terry Lawhead, Spokane Regional Services Manager, Washington State Department of Community Trade and Economic Development (CTED)
- Denny Dellwo, Eastern Washington Growth Management Hearings Board (former member)

1.02 Work Groups

The Task Force would also like to recognize the citizens who volunteered to participate in the Task Force's Work Groups. Those Work Groups included: Procurement; Transportation & Mobility; Water; and Built & Unbuilt Environment. All involved are particularly grateful to the Work Group Co-Leads who organized the citizen participation at the Work Group level. With scarce resources, these individuals guided interested citizens through a complex, and sometimes difficult, process of researching, brainstorming, discussing and prioritizing concepts. Work Groups met for at least two hours every other week for four months. Each Work Group delivered a final report to the Task Force.

Work Group Co-Leads

- Jim Wavada and Geoff Glenn, Procurement
- Sam Mace and Latisha Hill, Transportation & Mobility
- Brian Walker and Doug Busko, Water
- Kitty Klitzke, Kelly Lerner and Allison Kingfisher, Built & Unbuilt Environment

1.03 Outreach Partners

The outreach partners played a key role in helping the City broadcast its message to the entire community. Through the partners' networks and resources, they helped spread the *buzz* of sustainability, helping City staff and Task Force members to engage more than 100 active participants. This process generated more than 800 individual contributions from the public. Additional meetings were hosted by Outreach Partners including on-going discussions with other organizations and associations.

Outreach Partners

- Greater Spokane Incorporated
- The Lands Council
- Futurewise
- NW Climate Change Center
- Spokane Regional Health District
- YMCA
- Spokane County Conservation District
- The Faith & Environment Network
- Downtown Spokane Partnership

1.04 Sounding Board

The Task Force was also aided by a special Sounding Board. The Board consisted of City elected officials and staff and other leaders throughout the community. Their charge was to keep the Task Force focused on real issues and practical solutions that can be successfully introduced into the City's operations, services, programs, and policies. The Sounding Board applied a feasibility filter to all Task Force recommendations.

Sounding Board Members:

- Mary Verner, Mayor of Spokane
- Al French, Council Member, City of Spokane
- Michael Allen, Council Member, City of Spokane
- Nancy McLaughlin, Council Member, City of Spokane
- Gavin Cooley, CFO, City of Spokane
- Theresa Sanders, Division Director of Planning, Community & Economic Development, City of Spokane
- Dave Mandyke, Division Director of Public Works & Utilities, City of Spokane
- Gary Mallon, Technology Industry Manager, Greater Spokane Incorporated, Representing Rich Hadley, CEO for Greater Spokane Incorporated
- Sue Bradley, Neighborhood Business Centers
- Jim Hanley, Neighborhood Business Centers
- Ted Henry, Community Assembly
- Gene Klozar, Community Assembly
- Peggy Johnson, Community Assembly

- Bill Bancroft, Vice President, Corporate Property Services Director, Sterling Savings Bank
- Mike Cetrone, Strategic Sourcing Manager, Sterling Savings Bank
- Dale Soden, Vice President for Planning & Professor of History, Whitworth University
- Dr. Dennis Horn, Dean of Engineering & Computer Science, Gonzaga University
- Rhys Roth, Director of Strategic Innovation, Climate Solutions
- Taylor Weech, Youth Development Project Associate, Community-Minded Enterprises

1.05 City Staff

The strength of this Sustainability Action Plan also reflects the effort of the City staff who embraced the year-long project. City staff contributed as Work Group participants, symposium attendees, and Green Team participants. The particular individuals listed below guided the City's effort to assess its current practices in relation to draft Task Force recommendations. City staff synthesized and documented the many concurrent efforts involved in developing the Task Force recommendations. The contributions of these City staff members enabled the Task Force to complete its recommendations this past year:

- Susanne Croft, 2008 Sustainability Coordinator
- Lloyd Brewer, Environmental Programs Manager
- Brandon Betty, Project Planner
- Deborah Bisenius, Environmental Analyst
- Gerry Gemmill, Deputy Division Director, Public Works & Utilities

2.0 Introduction

“Spokane: A city near nature, unequalled for living, working, learning, and leisure”¹ ... *for the long haul.*

The City of Spokane's mission is “To deliver efficient and effective services that facilitate economic opportunity and enhance quality of life.” To this end, one of the critical roles of City's government is to secure the vibrancy of our community into the future. Doing so requires awareness of the challenges and opportunities that can either hinder service effectiveness or strengthen economic vitality.

With Mayor Dennis Hession's and City Council's support Spokane's Environmental Programs office began the greenhouse gas (GHG) inventory process in earnest in 2007. On February 7, 2007, Mayor Hession became the 104th Mayor to endorse the U.S. Mayors' Climate Protection Agreement. And, on February 19, 2007, the City Council unanimously passed Resolution 07-09, the Quality of Life Initiative. Subsequently, the Planning Services Department began the City's first Green Building Initiative, which became the foundation for developing a strategic action plan for sustainable practices, incentives, policies and regulations across all City programs and activities. In late 2007, the City was awarded a \$75,000 grant from Washington State Department of Community Trade and Economic Development (CTED) to develop such a Sustainability Action Plan.

¹ City of Spokane Strategic Plan Update, 2007 <http://www.spokanecity.org/government/strategicplan/summary/>

Mayor Mary Verner continued this focus on sustainability as a framework to secure Spokane's future vitality. She created her Sustainability Initiative almost immediately after assuming the office of Mayor.

The CTED grant enabled the City to assess its operations in terms GHG emissions and preparedness to deal with any unavoidable consequences of climate change. The grant also called for the City to plan for a time in the near future when petroleum-based fuels will be prohibitively expensive and sometimes unavailable.

Sustainability is comprised of the concepts of economy, the environment and social networks (community). Since the Mayor's Sustainability Initiative uses these three concepts as its philosophical underpinnings, the City was poised to respond to CTED's challenge.

A thirteen-member Task Force was recruited from all parts of the Spokane community to meet the CTED challenge by developing a Sustainability Action Plan. Simultaneously the public was invited to participate in any of four workgroups established by the Task Force. Several other citizens groups also assisted the Task Force in developing ideas & recommendations for consideration. Participants were encouraged to recognize the synergy between the work of the Task Force on the challenges of climate change and petroleum fuel availability (commonly called "peak oil.") and the City's Comprehensive Land Use Plan.

2.1 The central role of planning

"Planning is a part of everyone's life. We make plans for our careers, vacations, families, and housing. Planning is how we increase the likelihood that these things will occur in ways we desire. Without plans, we face never-ending uncertainty about future events. Consequently, we end up reacting to one situation after another. For similar reasons, communities make plans. In large urban areas where the landscape is highly complex and constantly changing, community plans shape the future in desirable ways. The city is a place where people have many varied needs, a place where citizens live, work, shop, and play. It is, therefore, a place where material goods, police and fire protection, sewers, water, transportation, recreation, and many other services must be provided."²

The Task Force believes that its recommendations are a powerful planning tool to ensure that City government can continue to provide those services we have come to expect of a city that presents itself to the world as "near nature, near perfect. The Task Force has faith that City government will use this report as a navigation aid to a secure and sustainable vibrancy many generations into Spokane's future.

To learn more about addressing the challenges of climate change and peak oil, Mayor Verner and City staff identified similar planning models from leading cities both large and small. Seattle; Portland; Vancouver, B.C.; and Denver are some of Spokane's larger neighbors, all of whom are addressing sustainability issues.

However, it is not just the larger cities taking action: Burlington, VT; Sebastopol, CA; Boulder, CO; and Shoreline, WA are a few among many smaller cities that are working to address climate and energy issues. The global trend is clear: Regardless of geography, demographics, or politics, municipalities are questioning basic assumptions and taking initiative to improve how their communities function over the long haul.

Spokane's approach to sustainability planning is uniquely ahead of the curve. Previously, some cities have studied climate, while others have examined energy security. Spokane's

² City of Spokane Comprehensive Plan, 2001 <http://www.spokaneplanning.org/documents/BEGIN.pdf>

Sustainability Task Force addressed climate change and oil dependency simultaneously. We're not aware of any city that has previously done this.

Spokane's Action Plan shows how planning for all three of these challenges can help government address economic vitality, environmental integrity and community resilience in ways that turn these challenges into opportunities for our community. The Task Force set to work quickly with the following goals for inclusion in a sustainability plan for Spokane's future:

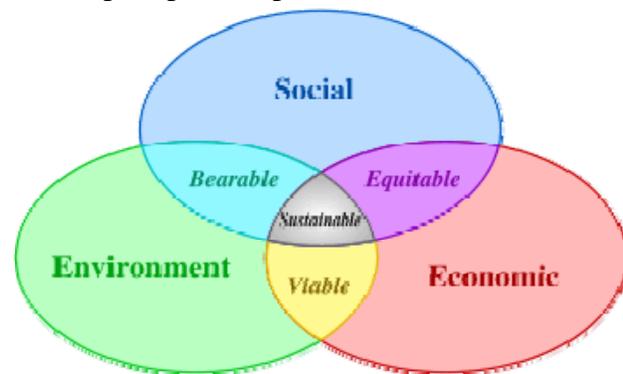
1. Climate Mitigation
2. Climate Adaptation
3. Energy Security

Over the course of one year, our Task Force worked its way through the sequential phases of the project: discovery, risk assessment, deliberation, and consensus. **A well-communicated public outreach plan produced significant citizen input that guided the overall direction of the final recommendations. The process yielded one simple message**, accepted by members of every constituency the Task Force encountered during its work:

Strive for good stewardship and efficiency in all things.

The message is clear. Through good stewardship and improved efficiency, the City of Spokane will be better prepared for any number of possible conditions such as oil scarcity, energy price volatility, or changes in temperature and precipitation patterns.

Sustainability is about recognizing the limitations to our ecosystem and functioning within those limits to ensure the health, well-being and longevity of current and future generations. The United Nations Brundtland Commission (1990) definition of sustainability is: “[to meet] the needs of the present without compromising the ability of future generations to meet their own needs.”³



Source: [Johann Dréo/Wikimedia Commons](#)

This Action Plan does not contain all the answers or solutions. It is not a bundle of regulations and mandates. The Plan is a portfolio of principles, strategies, and recommendations promoting energy-efficient development, sensible conservation of resources, and investment in money-saving alternatives to current materials, behaviors and practices.

With the help of this plan, City government can increase its efficiency and enhance its ability “to deliver efficient and effective services that facilitate economic opportunity and enhance quality of life” for generations to come.

The success of the Sustainability Action Plan depends on the support it receives. The Mayor's Office and Executive Team, other City managers and employees, as well as the City Council, other organizations in the community, and the public at large all have a role to play.

³ *Our Common Future*, 1987. Oxford: Oxford University Press.

Active and visible engagement by the City’s major decision makers and the workforce is critical. This plan must be more than a well-charted but untraveled course to better stewardship and greater efficiency. The Task Force, with good guidance from citizens who participated in the process, has provided clear strategies and recommendations to address climate change and peak oil concerns. The City government is now left to determine the best path forward the specific policies and practices needed to implement the Action Plan.

For information about the process used to generate this Action Plan, please refer to the supporting document, Sustainability Action Plan: Background, Process, & Deliberation (available at www.greenspokane.org).

3.0 Summary of Action Plan

Hundreds of suggestions, complaints, ideas, and recommendations were gathered by the Task Force and its Work Groups. Each contribution was inventoried, addressed and prioritized during the nearly year-long planning process. The Task Force also engaged in its own research by inviting local and national experts to share their expertise on climate and energy issues. Other cities’ approaches to sustainability planning also played a role in the shaping of Spokane’s final recommendations.

The many specific recommendations are too numerous to list in a simple summary. They are listed in Section 4, Sustainable Action Plan, which follows this section.

Under the goals of Climate Mitigation, Climate Adaptation, and Energy Security, the Task Force identified four guiding principles to move toward sustainability and improve efficiency and stewardship within City government. The principles are to:

1. Build stewardship into all facets of local government
2. Strengthen the connectivity of people, communities
3. Lead with incentives and education before mandates
4. Foster community resilience and socio-economic health

In harmony with these guiding principles, the Task Force also identified eight strategies to serve as the foundation for specific departmental policies designed to achieve the three goals.

1. Improve continuously
2. Emphasize renewable energy
3. Promote clean mobility
4. Enable optimal land use
5. Conserve water everywhere
6. Maximize energy efficiency
7. Optimize operating practices
8. Prepare through planning

The **final recommendations** listed in the Sustainable Action Plan that follows this summary are associated with each of the eight strategies. They **are not intended to be reactive responses to short-term problems. Rather, they should be considered groundwork for the development of internal policy by decision makers** within City government. They should frame an operating environment that will allow the City to make significant changes to ensure a vibrant future for Spokane.

The visible and active response by the Mayor and the Executive Team, Division and Departmental Managers, and the City’s workforce in general, is essential to implement lasting changes in behavior that positively affect the well-being of the City.

In a strong first step forward, the Mayor has asked the Sustainability Task Force to continue to serve in an advisory role with regard to assessing the Action Plan’s implementation. In that capacity, the Task Force will continue to seek stewardship, efficiency, and resilience in actions that will allow the City of Spokane government to become more sustainable.

4.0 Sustainability Action Plan

4.01 Goals

When the Task Force commenced its strategic planning effort to find ways for the City of Spokane government to operate sustainably in its operations, services, programs, and policies, they were given three goals to provide a framework for deliberations. Spokane’s unique planning model is highly sophisticated in its streamlined approach addressing climate and energy issues simultaneously. The goals include:

1. Climate Mitigation: attempt to reduce greenhouse gas emissions (GHG)
2. Climate Adaptation: adjust practices to deal with the effects of climate change
3. Energy Security: increase energy alternatives to reduce dependence on oil

These broad goals will ultimately lay the foundation for specific actions the City will take. City government will attempt to address the potential impacts of climate change, adapt to changing temperature and precipitation patterns, and prepare for the development and use of alternative energy sources as petroleum oil becomes more expensive and harder to find. The recommendations contained in the Action Plan address one, two, and in some cases, all three of the goals listed above.

4.02 Guiding Principles

The **Task Force received more than 800 unique contributions** to its base of information in the form of Work Group recommendations, citizen comments, citizen and staff complaints about current City practices and policies, and general suggestions. The Task Force also received multiple references to helpful resources.

As the Task Force reviewed the public input, four “guiding principles” emerged. These principles were the prominent messages embedded in the Work Group and public feedback aimed at how City government should address climate and energy issues: The four guiding principles are:

1. Build stewardship into all facets of local government
2. Strengthen the connections between people and their communities
3. Lead with incentives and education before mandates
4. Foster community resilience and socio-economic health

The Task Force believes these principles, which represent the wisdom of hundreds of civic-minded citizens, point the way to reasonable, efficient and sustainable ways to govern the City of

Spokane. These four principles will promote best practices for the wise use and conservation of limited resources. Here's how.

4.02.1 Build stewardship into all facets of local government

Building stewardship into local government will help the City deliver high quality services and operations over time. As stewards of the local environment, the City recognizes the value of available natural resources and identifies how the City can best incorporate that value into the City's decision-making framework.

4.02.2 Strengthen the connectivity of people, communities

The City must foster strong connections among people and their communities in Spokane. To do this, the City must recognize in policy and practice the diversity in transportation modes required for the movement of people, goods, and services into, through and around our community.

Active transportation options, including pedestrian and bicycle travel, are clean, efficient, and cost-effective over shorter distances. Expanded public transit allows individuals of all income levels to travel to work, medical facilities, recreational opportunities, and day-to-day destinations.

Connectivity strengthens the local economy. Promoting the local production of goods and services promotes connectivity and reduces cost of living in the community. As people gain access to local goods and services, the need to ship and travel long distances is minimized. The transportation element of the cost of many goods is reduced. This saves the city money for other uses.

The Task Force's recommendations point to a relationship between community connectivity and the capacity to deal with oil price volatility. For this reason, City government should play a leading role in strategies that promote more than the traditional design for single-occupancy vehicle travel.

4.02.3 Lead with incentives and education before mandates

Leading with incentives and education prior to mandating action is the sensible approach to governance whenever feasible. The City has the opportunity to lead by example in this regard. Through sustainable policies and practices, the City can educate the general public to community and individual savings to be had in more sustainable everyday practices. The City can adapt its incentive programs to encourage residents to adopt practices and participate in behaviors that preserve and enhance the beauty of Spokane rather than mandating policies that merely attract resistance.

4.02.4 Foster resilience and socio-economic health

Fostering resilience and socio-economic health enables the City to "bounce back" from unforeseen or unavoidable changes with little or no interruption in service delivery. This principle suggests that the City plan ahead for different scenarios and prepare itself accordingly. Fostering socio-economic health means that the City appreciates that all individuals, regardless of demographics or economic status, must have that same opportunity to "bounce back."

Equitable and comprehensive planning for varying scenarios of change will help the City and its citizens recover if faced with unforeseen hardship.

4.02.5 A Foundation to build upon

Guided by these four principles, the **Task Force proposes eight strategies to achieve the goals laid out by CTED when it funded the work of the Task Force: Mitigation, Adaptation, and Energy Security.** To help implement the strategies identified, the Task Force created clear recommendations specific to each strategy. The eight strategies and their recommendations are presented below.

4.1 Recommendations

The following recommendations of the Mayor’s Sustainability Task Force are described here as strategies. The term “strategy” implies the flexibility and commitment to change that is called for in this case. The Task Force recognizes that implementation of the recommendations contained herein can be challenging. The implementation of such strategies is the first important step toward a more sustainable future for Spokane.

4.1.1 Strategy 1: Improve continuously

Monitoring progress is particularly important when the goals are significant and the timeframes long. To get the most efficient processes, it is important to measure results, learn from others and adapt along the way. Committing to continuously improve in all policy and process helps assure good stewardship and facilitates achievement of goals. For these reasons, we recommend that the City:



Times require new equipment & new ideas

- 1-A: Set goals** because what gets measured gets done. Regularly measure and report progress toward sustainability goals. Assess the quality of outcomes and revise efforts to improve outcomes as necessary.
- 1-B: Talk to the community** about the merits and results of investments in sustainability. Explain what the City is doing to achieve a more sustainable community and why.
- 1-C: Share information** with the community about how to reduce oil use, conserve resources and increase energy efficiency to promote lower carbon emissions and a cleaner environment.
- 1-D: Invest in education** for City staff, elected officials and the community. Promote the wise use and stewardship of City resources.

4.1.2 Strategy 2: Emphasize renewable energy

Taking advantage of regionally available renewable energy not only helps reduce greenhouse gas emissions, but also helps reduce reliance on outside sources of oil-based energy. This enables Spokane to be more resilient. Supporting new local clean energy technologies helps local businesses thrive and helps workers develop the skills important to serve this growing market segment, here and elsewhere. For these reasons, we recommend that the City:



- 2-A: Increase the percentage of renewable energy** the City acquires each year, targeting 100% by 2030.
- 2-B: Use distributed small-scale power technologies** in City facilities (e.g. solar thermal, solar photovoltaic, fuel cells, wind) where it is practical and feasible.
- 2-C: Encourage renewable energy development** and use by publishing an inventory of wind and solar resource potential within City limits for use by planners and developers.
- 2-D: Amend land use policy and regulation** to preserve options and provide incentives for development of renewable resources (e.g., renewable zones, pre-approved standards, fee waivers).

4.1.3 Strategy 3: Promote clean mobility

Gasoline and diesel fuel used to power vehicles is a significant source of GHG for City government and is the most significant source of emissions for the community. This is why reducing oil dependence and improving air quality is so dependent on choices we make about transportation. Our intent here is to recognize the importance of mobility to community connectivity by encouraging use of alternative fuels and expanding modes of travel for a variety of economic, health and environmental benefits. For these reasons, we recommend that the City:



- 3-A: Prioritize investments** that improve non-motorized modes of transportation and encourage the purchase, conversion to, and use of alternative vehicle fuels (e.g., biodiesel, natural gas, electricity) and transit-oriented development.

- 3-B: Review and revise standards and practices** to remove barriers restricting expansion, safety, and use of pedestrian and bike ways.
- 3-C: Support STA** in its efforts to expand a multi-modal public transportation system that is clean, efficient, and user-friendly -- particularly in: 1) securing right-of-way for fixed-route rapid transit; and 2) aligning routes with Corridors established in the City's current Comprehensive Plan.
- 3-D: Review and revise work policies** and practices to increase support of employees who walk, bike, carpool, vanpool or bus to work.
- 3-E: Support use of electric transportation** within City limits (e.g., special parking for all-electric cars).

4.1.4 Strategy 4: Enable optimal land use

Land use choices affect energy consumption, carbon sequestration and overall community resilience. The manner in which land is used significantly drives how, how far and how often people and goods must travel. Land use determines how well natural processes that clean the air and water can function, and how much local production of food and other goods is possible. For these reasons, we recommend that the City:

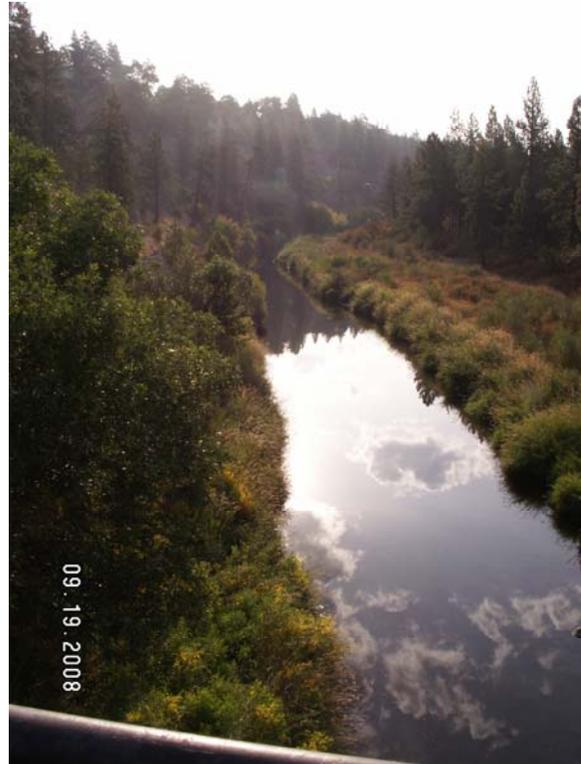


- 4-A: Encourage compact communities** by amending land use policies and regulations to eliminate barriers and incentivize mixed-use, sustainable development (e.g. natural landscaping, transit-oriented development, fuel and energy efficiency, community composting and recycling, urban agronomy).
- 4-B: Incentivize the preservation and use of eco-system functions** (e.g., trees, wetlands, aquifers) via amendments to land use policies and regulations.
- 4-C: Put suitable City land to productive use**, under appropriate terms and conditions, by allowing community gardens, farmers' markets, and other uses related to local food production. Tap the capabilities of other institutions and community organizations to help.

4.1.5 Strategy 5: Conserve water everywhere

We are fortunate to live where a large water source, the Spokane Valley-Rathdrum Prairie Aquifer and its watersheds efficiently deliver high quality water from a vast area to our doorsteps. But demand on this water source is growing. It has been called upon to serve needs from areas outside of Spokane where water resources are in decline. The commercial and residential quest for water will not diminish. Water conservation is the surest way to preserve the resource for future generations and enable the City to grow and prepare for possible climate-related changes to water availability.

Pumping water from the aquifer and delivering it to homes and businesses in the community is an energy intensive operation. This is why choices made about water allocation and use have significant implications to energy consumption. The treatment of wastewater that results from domestic and commercial water use also uses large amounts of energy. Close to half of the pumping from the aquifer comes in summer as people water outdoor landscaping. Summer is also the time of year when river and hydropower operations are at their lowest capacity. Pumping from the aquifer, particularly at these low water times, negatively impacts river levels and concentrates pollutants already in the river system. For these reasons, we recommend that the City:



- 5-A: Model best practices** by developing and implementing specific management plans to conserve water and increase usage efficiency in all City facilities and operations.
- 5-B: Prioritize implementation of projects** and practices that improve water use efficiency for the City's largest consumptive uses – parks, golf courses and wastewater treatment.
- 5-C: Develop innovative projects** for water reuse and conservation on and in City properties and buildings.
- 5-D: Invest in large-scale water re-use and storm water management projects** where practical and beneficial. Strive to achieve a net reduction in energy use and subsequent gain in carbon-capture.
- 5-E: Develop a coordinated response** to storm water challenges that looks ahead to the potential impacts of climate change on the hydrologic patterns for our region.
- 5-F: Review and revise** City policies, codes, ordinances and programs to allow for and incentivize best practices and innovation in water conservation.

- 5-G: Promote wise use and conservation** of water via public information and education.
- 5-H: Evaluate the City’s water rate structure** and adjust fees to equitably incentivize water conservation and ensure that rates reflect the market value of energy.
- 5-I: Engage all large water users** in long-range water resource planning and conservation.
- 5-J: Support state and local efforts** to remove legal barriers to small-scale rainwater harvesting.

4.1.6 Strategy 6: Maximize energy efficiency

Energy costs are expected to continue rising in the face of increasing world demand. The more the City can do to limit its energy demand and maximize its efficient use, the less cost it will bear for continued City operations. Increasing energy efficiency in facilities and operations also means that the City will be reducing its contribution to GHG emissions. For these reasons, we recommend that the City:

“Within 5 to 10 years, non-OPEC production will reach a peak and begin to decline, as reserves run out. There are new proofs of that fact every day. At the same we'll see the peak of China's economic growth. (That's why) the time has come to leave oil before it leaves us.”

*Dr. Fatih Birol, IEA Chief Economist
Interview in French pub., Le Monde
June 2007*

- 6-A: Model leading practices** by developing and implementing specific plans for reducing and managing energy use in all City operations.
- 6-B: Move toward carbon-neutral operations** in all new and retrofit construction involving City facilities.
- 6-C: Encourage innovative building design** that is climate responsive and energy efficient by creating incentive programs and removing any barriers in City codes.
- 6-D: Establish strategies to support more recycling** market opportunities and resource recovery enterprises.
- 6-E: Prioritize workforce development initiatives** and partnerships that grow green jobs and green businesses, particularly in the realm of energy efficiency.
- 6-F: Fully leverage the financial and technical support** from private and public sectors to maximize incentives for, and accelerate implementation of, energy efficiency.

4.1.7 Strategy 7: Optimize operating practices

The goal of this recommendation is an improved environment and a more resilient city. As with any budget, little things add up, and what gets measured gets done. So it makes sense to examine the routines, policies and practices of daily operation in City government and adapt them to new objectives that support improved environmental conditions and a more resilient city. The focus in this recommendation is on operational changes that can internalize a value system to reduce the City's oil dependence, overall energy demand and GHG emissions. The innovation called for here is to restructure purchasing and financial reporting at the City. These systems need to support more than dollar costs and time to delivery as evaluation criteria. The City should add potential GHG emissions reduction, resource conservation and other environmental performance criteria to the evaluation of all procurement decisions and to the systems for measuring the financial performance of the City. For these reasons, we recommend that the City:



7-A: Develop and implement plans for a leaner City fleet.

- a. Reduce the number and size of vehicles and increase vehicle fuel efficiency;
- b. Shift to using lower carbon fuels (e.g., biodiesel, natural gas, electricity), emphasizing those that are regionally available and renewable wherever practical.
- c. Develop and implement a plan to increase the City's use of electric vehicles, including the appropriate installation of the necessary support infrastructure.

7-B: Buy wisely and amend procurement policies to incorporate energy and environmental criteria into all procurement decisions. Purchase decisions should favor materials and supplies that use less fuel and fewer virgin materials in production, delivery, and disposal.

7-C: Look to local vendors first because buying local provides the environmental and energy benefits of reduced transportation costs. Buying locally keeps local taxpayers' money in the local economy. It also supports the continued development of local sources for goods and services, contributing to the community's resiliency and energy independence. Implementing this recommendation may mean the City will need to seek exemption to state procurement requirements. The City also may need to seek a legislative remedy to existing low bidder requirements that do not include the embedded cost of transportation in calculations of low bids.

7-D: Target zero-waste and evaluate ways to incentivize reduced packaging, the reuse of materials and other alternatives to traditional disposal. Include the cost of disposal and the willingness of manufacturers to take back spent merchandise in purchasing and bid evaluation criteria.

- 7-E: Centrally monitor and report costs and benefits** of City operations. Develop the infrastructure to monitor spending patterns beyond assignment to specific source accounts. Design reporting systems that can monitor expenditures and resource allocation according to their effects on the environment and the use of petroleum-based fuels by the City.
- 7-F: Improve work patterns** and strategically eliminate, consolidate and repackage City services to reduce unproductive drive time and the increased air pollution that comes with it. For example, look for opportunities to offer more services on-line, to economize on waste collection routes and frequency, and to encourage more staff telecommuting.
- 7-G: Analyze service requirements** and carefully examine work flows. Commit to an efficient reprioritization of City department operations with energy conservation and reduced GHG as objectives.
- 7-H: Incorporate environmental stewardship criteria into evaluation procedures for all City employees.** City policies and personnel protocols should include a performance evaluation standard for environmental stewardship for all City employees, particularly those empowered to define workplace expectations.
- 7-I: Establish a point person or persons within City government.** The City should designate one or more sustainability officers to work with the Executive Team and top City management to coordinate sustainability efforts within City government. Duties would include operating a central reporting system for procurement decisions and educating staff and management on the values and objectives of a sustainability program at the City, and coaching managers in how to develop those values and reporting systems within their departments.

4.1.8 Strategy 8: Prepare through planning

City government performs many vital functions and has a complex role in addressing issues of climate change and peak oil that go beyond routine operations. The City is simultaneously a leader, a model and a symbol for the community. It works in collaboration with numerous jurisdictions and entities to jointly identify and solve problems. No jurisdiction operates alone. Many issues require mutual problem solving. Preparation and planning is one of the keys to future success in addressing climate change and peak oil. The recommendations below help decision makers consider options. For these reasons we recommend that the City:

“ I rejoice to live in such a splendidly disturbing time! ”

Helen Keller

“The essential rule is play safe. It is easier to avoid a crevasse than to get out of one.”

---Field Manual, Antarctica New Zealand

- 8-A: Think ahead and adapt continuously.** Collaborate with others to identify possible risks including, but not limited to:
- a. Increased fire hazards from longer warm and dry seasonal variations;
 - b. Reduced water availability from unpredictable shifts in precipitation;
 - c. Rising numbers of new residents creating new demands on food, housing, health, utilities, roads and other support systems;
 - d. Sudden changes in fuel availability and the associated rise in cost, particularly where it affects first responder emergency services, essential city operations, or the disruption of food transportation and other essential activities.
- 8-B: Collaborate with others,** considering and adopting joint initiatives with other public service providers and plan together for contingencies. Work with partners to help address identified risks:
- a. Understand and respond to changes to aquifer and river systems (working for example with the U.S. Climate Center, Department of Ecology, and others);
 - b. Prepare a comprehensive drought response plan;
 - c. Establish mechanisms to evaluate the impacts of new industries requiring large amounts of water;
 - d. Maximize the use of available, regionally generated hydroelectric power.
- 8-C: Support growth of “clean and green” businesses in the community.** Emerging local businesses and activities that capitalize on growing public concern for environmental stewardship and local resiliency should be encouraged in any way possible. The City should seek to complement with its own activities and programs that will use local assets developed around new models of sustainability and community resilience in the private sector.
- 8-D: Support the growth of small businesses** that diversify local production and increase community self-sufficiency.
- 8-E: Monitor global, federal, and state initiatives,** and where appropriate, align local efforts with them.
- 8-F: Participate in cooperative small-scale pilot projects** to test and demonstrate new ways to support sustainable practices and be more efficient with local renewable resources.
- 8-G: Support region-wide research** and development and invest in job training in those areas that serve to support sustainable practices.
- 8-H: Reinforce an employee culture of sustainability** and adopt sustainability as a core value of the City. Support initiatives and those who would champion such in every City department. These champions will work with and be accountable to a sustainability officer for such initiatives.
- 8-I: Track the progress of carbon sequestration** methods for possible use at the Waste-To-Energy Facility.
- 8-J: Incorporate the principles and strategies reflected in this Action Plan** into neighborhood planning, particularly as these principles and strategies relate to land use, transportation, energy, and economic development.

5.0 Next Steps

This plan addresses in general terms, actions that should be taken by City government to be more sustainable and resilient in the face of issues such as peak oil, climate change, and climate mitigation. However, the Action Plan is just a beginning.

Community outreach and input. The Task Force recommends that the community at large have ample opportunity to advise the City on the merits of the Action Plan. Then as the City staff develops its implementation strategies, the package can be fully articulated in public forums between now and mid-year 2009. In that time frame, the Task Force understands that City Environmental Programs staff will conduct outreach in the community and within the City departments making the Action Plan known to as many stakeholders and staff as possible. Community outreach can also be enhanced with continuing support from the Outreach Partners (*see “Acknowledgements section for list”).* The results of this outreach can then be reported to City Council and the community at large.

Also this Action Plan should **be presented to the community with a question: What can the community beyond City government do to address these concerns and capture similar opportunities?** Although beyond the scope of this Action Plan it is hoped that the resulting conversations will prompt individuals and organizations beyond the confines of City government to find ways to operate more sustainably, for them and for the larger community.

Implementation strategies. This Action Plan lays out clear principles and a path forward. Specific actions need to follow to make the Action Plan come alive. The exact steps to its implementation need to be developed and followed. We understand that **the Mayor has charged Public Works and Utilities, specifically Environmental Programs, to expedite implementation of the Action Plan.** Environmental Programs would do this with the assistance of the City’s Green Team of designated staff and Department heads. **A three- to five-year detailed implementation plan will be developed and forwarded to City elected officials for consideration and endorsement.** Given sufficient data to evaluate effectiveness, the Task Force encourages taking early actions where ever practical consistent with Task Force recommendations and City goals.

Continued community oversight. To help the Action Plan stay on course and come to fruition, the Mayor has asked the Sustainability Task Force to continue to serve in an advisory role. To perform this role effectively, the Task Force needs a clear point of contact with the City and access to regular reporting of implementation actions under taken by the City.

In that advisory capacity, the Task Force recommends that all City departments and commissions consider the Guiding Principles, Strategic Priorities, and Proposed Recommendations in this plan, and incorporate them as appropriate in their operating policies and ongoing operations. The Task Force also notes that the Action Plan includes some recommendations that may require amendment of the City’s Comprehensive Plan. The decisions to amend the Comprehensive Plan should be made in consultation with the Planning Department, and shortly after the Action Plan is finalized. At this writing, the City Council is considering an inventory of greenhouse gases and what reduction goal(s) might be appropriate for the City. Actions indicated by the result of this assessment should be incorporated into the implementation of the Action Plan as appropriate.

The time to act is now. The Task Force is confident that implementing this Sustainability Action Plan will be instrumental in ensuring that the City has a sustainable future that will offer to those who live here and love this place a quality of life that is *near nature, near perfect.*

-END-

6.0 Glossary of Terms

Action Plan: An implementation tool containing goals and strategies to achieve a desired outcome.

Aquifer: In Spokane, usually refers to the federally recognized sole source Spokane Valley/Rathdrum Prairie Aquifer, the underground drinking water source for the region.

ASPO: Association for the Study of Peak Oil & Gas.

Climate Adaptation: Measures taken to adjust practices to reflect the changing climate.

Climate Change: Changes in temperature and precipitation patterns due to increased Greenhouse Gases in the atmosphere.

Climate Mitigation: Measures taken to reduce the quantity of Greenhouse Gas emissions into the atmosphere.

Comprehensive Plan: The legal document designating land use policy for a specific area over an extended period of time.

Consensus: An opinion or position reached by a group as a whole.

CTED: Washington State Department of Community, Trade, & Economic Development.

DOE: United States Department of Energy.

EIA: United States Energy Information Administration.

Energy Security: The diversification of energy sources to avoid an energy crisis.

Equity: The equal application of social, environmental, and economic operations, services, policies, and programs.

GMA: Washington State Growth Management Act.

Green Jobs: Employment opportunities that promote social, environmental, and economic well-being.

Green Team: A group of City of Spokane employees representing various departments in an effort to promote sustainability in City government's operations, services, programs and policies.

Greenhouse Gas (GHG): Atmospheric gases that contribute to climate change: specifically, Carbon Dioxide, Methane, and Nitrous Oxide.

Greywater: Household waste water generated from domestic processes such as dish washing, laundry, and bathing. Greywater does not include waste from toilets.

IPCC: Intergovernmental Panel on Climate Change.

Mixed-Use Development: The practice of allowing more than one type of use in a building or set of buildings. In planning zone terms, this can mean some combination of residential, commercial, industrial, office, institutional, or other land uses.

Multi-Modal Transit: A transit system designed to incorporate multiple types of transportation e.g. bus, rail, bicycle, pedestrian access, etc.

Peak Oil: The point in time when the maximum rate of global petroleum extraction is reached, after which the rate of production enters permanent decline.

Renewable Energy Development: The advancement, capacity growth, and use of renewable energy sources.

Renewable Energy: Energy generated from natural resources such as sunlight, wind, rain, tides and geothermal heat, all of which are naturally replenished.

Resilience: Ability to recover from or adjust easily to misfortune or change.

Solar Thermal: Energy captured from the sunrays used for heating.

Solar Photovoltaic: Energy captured from sunrays used for electricity.

Sounding Board: A group of community leaders, both public and private sector, to help guide the Task Force toward reasonable strategies to address climate change and energy security.

Stewardship: The responsibility for caring and managing finite resources.

Sustainability: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland definition).

Systems Thinking: A holistic approach to analysis that focuses on the way that a system's parts interrelate and how systems work over time and within the context of larger systems.

Task Force: A group of 13 citizens of Spokane appointed by Mayor Verner to create a strategic plan to help the City of Spokane government address the impacts of climate change and peak oil.

Transit-Oriented Development: A mixed-use residential or commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership.

Wind Energy: Energy captured from natural wind patterns. Wind energy is typically captured by a device called a Wind to Energy Converter (WEC).

Work Group: Groups of citizens formed by the Mayor's Sustainability Task Force to help research, brainstorm, prioritize, and suggest to the Task Force possible recommendations for how the City of Spokane government should address the impacts of climate change and peak oil.

Xeriscaping: Landscaping and gardening in ways that reduce or eliminate the need for supplemental irrigation.