

# **CITY OF KIRKLAND**

## **CLIMATE PROTECTION UPDATE**

**Based upon the U. S. Mayors Climate Protection Agreement endorsed by  
the City of Kirkland on May 17, 2005**



**May 8, 2006**

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**INTRODUCTION**

Climate disruption is an urgent threat to the environmental and economic health of our communities. With less than 5% of the world's population, the United States produces more than 25% of the global greenhouse gas emissions, and those emissions are continuing to grow. On February 16, 2005 the Kyoto Protocol, the international agreement to address climate disruption, became law for the 163 countries that have ratified it to date and the United States is not among them. For 38 of the countries with the most advanced economies, the Protocol sets binding legal commitments to reduce greenhouse gas emissions on average 5.2 percent below 1990 levels. If the United States had ratified the Kyoto Protocol our nation would be required to reduce greenhouse gas emissions by 7% below 1990 levels by 2012.

Seattle Mayor Greg Nickels, along with a growing number of other U. S. mayors, lead the development of the U. S. Mayors Climate Protection Agreement. On May 17, 2005, Kirkland City Council signed a resolution endorsing the *U. S. Mayors Climate Protection Agreement*. As of May 4, 2006, 230 mayors throughout the United States have signed the Climate Protection Agreement, including those from 16 Washington cities representing nearly 1.5 million people (see Exhibit 1). In signing the resolution, the City of Kirkland pledged to accept the Agreement's three main parts:

- a. We urge the federal government and state governments to enact policies and programs to meet or beat the target of reducing global warming pollution levels to 7 percent below 1990 levels by 2012, including efforts to: reduce the United States' dependence on fossil fuels and accelerate the development of clean, economical energy resources and fuel-efficient technologies such as conservation, methane recovery for energy generation, waste to energy, wind and solar energy, fuel cells, efficient motor vehicles, and biofuels;
- b. We urge the U.S. Congress to pass bipartisan greenhouse gas reduction legislation that includes 1) clear timetables and emissions limits and 2) a flexible, market-based system of tradable allowances among emitting industries; and
- c. We will strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution (reduce greenhouse gases to 7% below 1990 levels) by taking actions in our own operations and communities, particularly in the areas described in this report.

Signing the resolution continued a long-standing tradition of environmental stewardship in Kirkland. For over 20 years, the City has implemented various policies, regulations, and programs to protect the natural environment. In 2000, an interdepartmental team was formed to coordinate all of the City's actions for managing Kirkland's natural environment. In 2003, the City Council adopted the *Kirkland Natural Resource Management Plan*, which comprehensively summarizes best management practices and principles, Kirkland's natural resource management objectives, and recommended implementation strategies. Kirkland's progress has been acknowledged by other organizations, for example, as the City was awarded Tree City USA status.

This progress report summarizes the actions Kirkland has taken that pertain to the 12 actions outlined in the *U. S. Mayors Climate Protection Agreement*. Since many of the 12 actions are also addressed in the Natural Resource Management Plan (NRMP), the corresponding NRMP Implementation Strategy (see NRMP, Page 48) and NRMT 2006 Work Program tasks are cited below.

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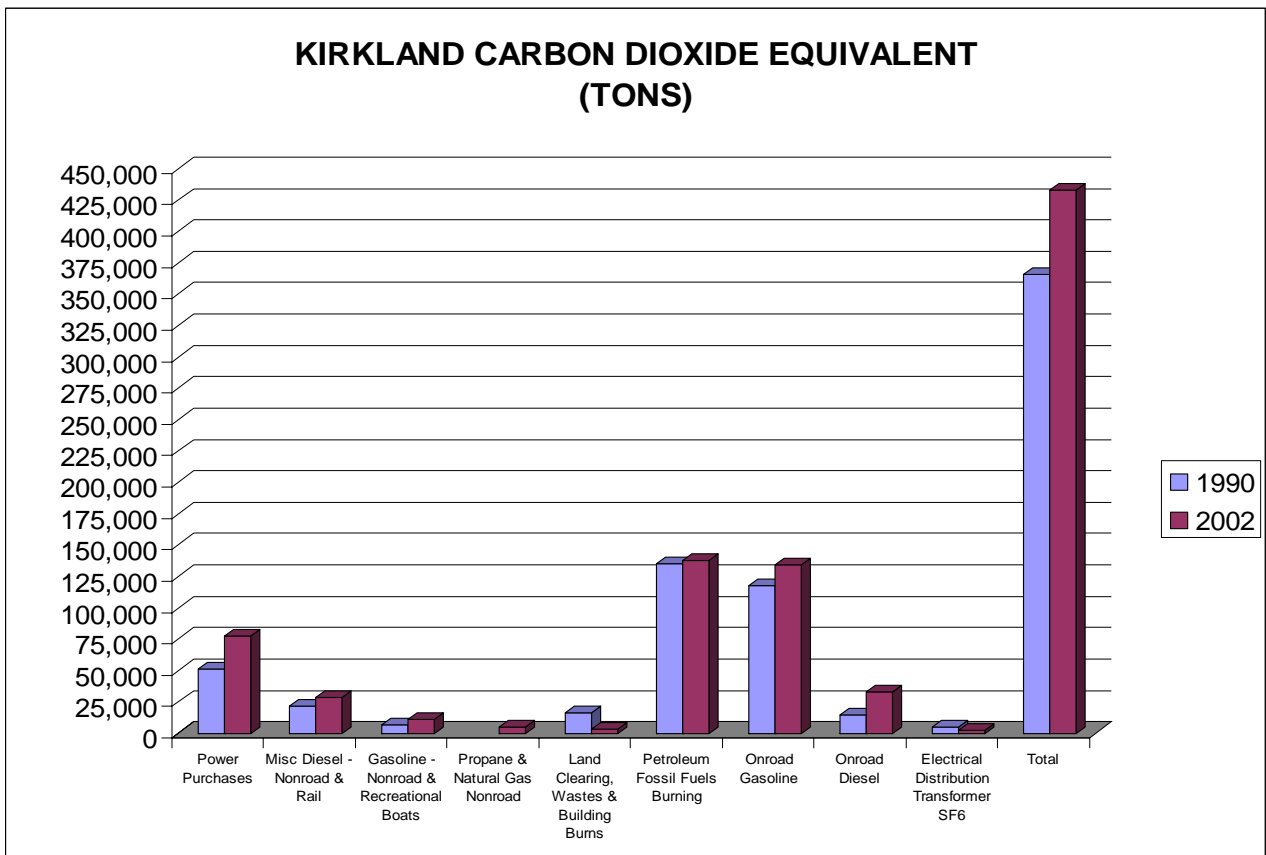
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**U.S. MAYORS CLIMATE PROTECTION AGREEMENT: ACTION LIST**

**1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan.**

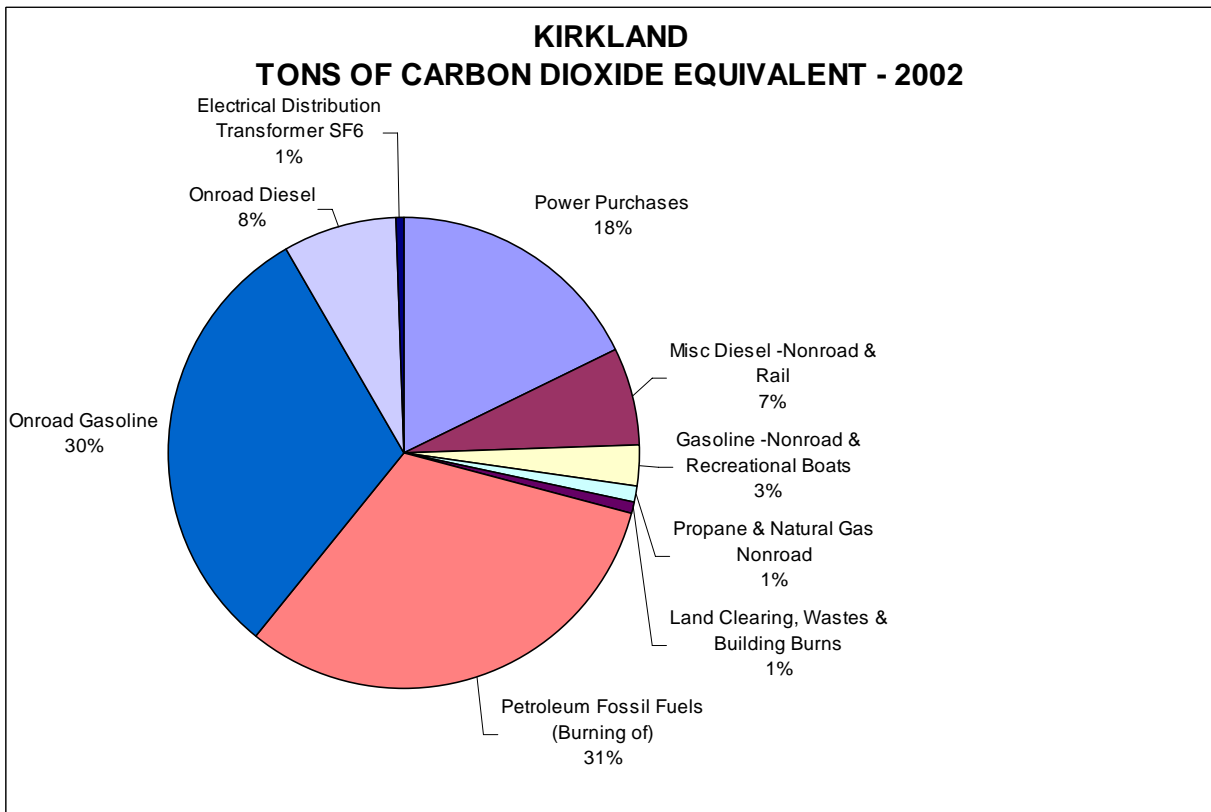
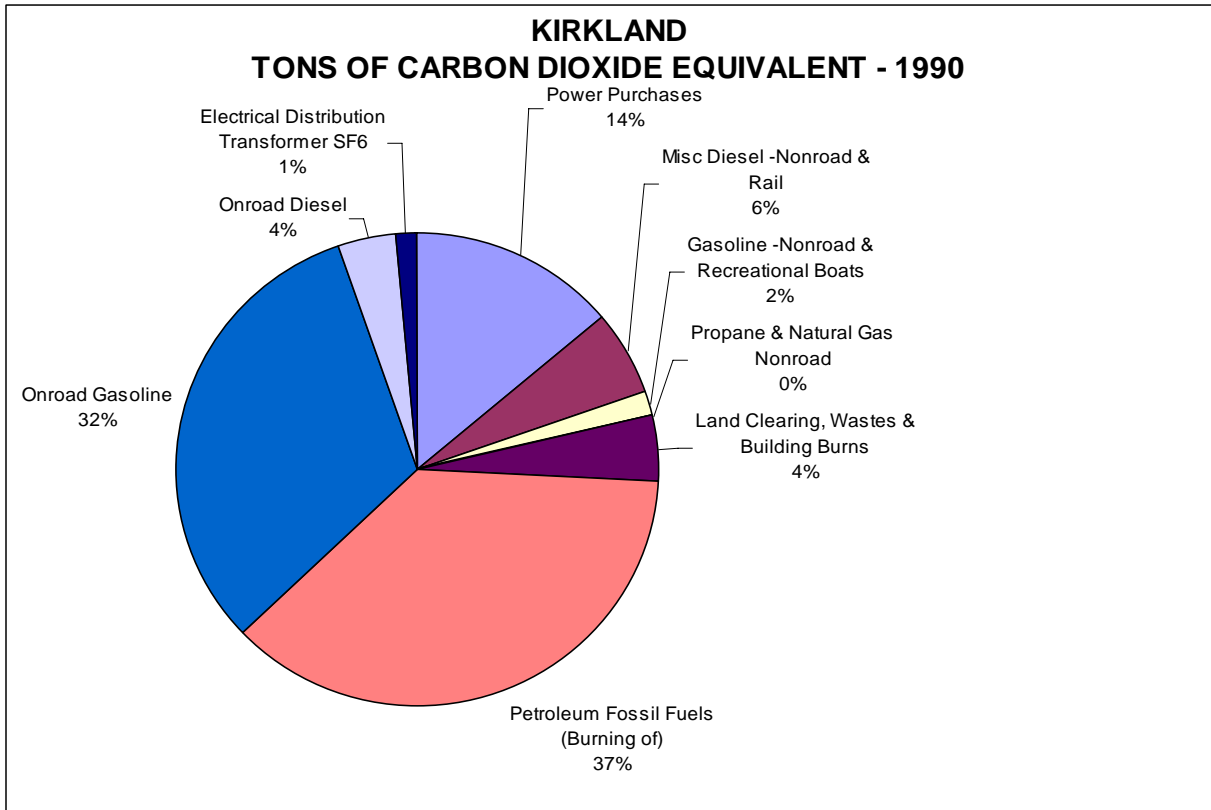
The Natural Resource Management Plan discusses climate change beginning on Page 43, under the heading of Sustainability and Human Activities: Air Quality, Climate Change, and Energy Use.

In order to conform to the *U. S. Mayors Climate Protection Agreement*, Public Works staff met with Puget Sound Clean Air Agency staff to determine how to measure Kirkland’s greenhouse gas emissions and develop reduction targets. Based on Kirkland’s number of households and Vehicle Mile Traveled (VMT) for 1990 and 2002, the Agency assisted in extrapolating Kirkland emissions inventory as a percentage of King County’s. The figures below describe citywide emissions information for 1990 and 2002. As of 2002, Kirkland’s Total Carbon Dioxide Equivalent had *increased* 18% from 1990 (see Exhibit 2 for the data) where the goal is to see a reduction of 7% from 1990 levels.



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**2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities.**

NRMT 2006 Work Program – All Tasks Support GMA Goals

The Washington State Growth Management Act (GMA) requires that Kirkland adopt and enforce land use policies and regulations to reduce and prevent sprawl, preserve open space, and create a compact, urban community. In compliance with the GMA, and indeed before the GMA required it, Kirkland implemented policies and regulations to accomplish those objectives. These are contained in the City's GMA Comprehensive Plan and codes. As a further step, to ensure a walkable community, the City adopted the Non-Motorized Transportation Plan in 1995, and updated it in 2001. Contact: Paul Stewart and David Godfrey.

**3. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling, and public transit.**

NRMT 2006 Work Program – Task 20: Enhance Transportation Demand Management (TDM) Activities

The City of Kirkland provides all its full-time full benefited employees annual bus passes to encourage the use of transit. All new employees are informed of the City TDM program. In 2005, the City participated in several METRO transportation promotions such as Ride Share Online, Wheel Options and Commuter Challenge Program; and in conjunction with those promotions, the City offered several financial incentive programs to get more employees to use alternative commutes such as carpool, bus, vanpool, bicycling and telecommuting. The City also participated and supported the national Bike to Work Month event and had the highest number of employees participating in biking to work. The City also has a guarantee ride home incentive in its TDM program. The City is continuing to work in partnership with METRO to maintain and enhance the City's TDM activities, including complying with the State's Commute Trip Reduction law.

The City also participates in programs that reach out to the community. The City contracts with METRO to manage the programs at employer sites that are affected by Commute Trip Reduction requirements. Also, all office buildings with 50,000 square feet are required to have a Transportation Management Plan which the City helps employers establish. In addition to participating in Bike to Work Month as individual employees, the City helps promote the statewide event encouraging (through prizes) citizens throughout the state to try riding their bikes to work during May. In the event, the City staffs one of the bike stations during the official "Bike to Work Day." The purpose of the station is to provide support for those that bike to work, to provide information on biking and safety, and to promote alternative transportation.

NRMT 2006 Work Program – Task 21: Encourage City Employees to Use Alternative Transportation during Workday

Employees are encouraged to use the bus, carpool, or teleconference instead of driving to business meetings during the workday. Contact Thang Nguyen or David Godfrey.

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- 4. Increase the use of clean, alternative energy by, for example, investing in “green tags”, advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology.**

The specific examples described in Action 4 are more typically handled on a bigger scale, i.e. by King County. See Actions 5 and 6 (below) for actions Kirkland has taken which generally fall under the broader umbrella of Action 4.

- 5. Make energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting and urging employees to conserve energy and save money.**

NATURAL RESOURCE MANAGEMENT PLAN–Sustainability and Human Activities, beginning on Page 43

When reviewing building permits, staff checks for compliance with the 2003 Washington State Energy Code as mandated by the state. This is one of the strictest energy codes in the country with respect to building envelope requirements (insulation R-values, window and door U-factors), mechanical equipment efficiency requirements and allowed power consumption for lighting in non-residential buildings.

The City has been gradually replacing older light fixtures with energy efficient fixtures and lamps. So far, light fixtures at three fire stations have been replaced. The replacement of light fixtures at the Maintenance Center buildings, NKCC and Hope Link is scheduled to occur in 2006.

Along these same lines, the City's signal shop is replacing incandescent street lamps with more energy efficient LEDs. The signal shop is also introducing inductive lighting technologies to some of the street light applications. This should result in great longevity for the street lights and reduced power consumption.

When the City sought a new vending machine service in 2005, energy efficient machines were a requirement of the Request for Proposals. Once the vending machines were in place, staff had Puget Sound Energy install VendingMiser devices on the machines. The VendingMiser devices power-down the machines when no one is in the room. (These devices were provided to the City by Puget Sound Energy at no charge.)

Energy efficiency and “right-sizing” are criteria taken into consideration when Public Works purchases equipment such as pumps, generators, etc. and Public Works is purchasing low-smoke oil to be used in power tools that require mixed gas.

The Grounds Division has recently purchased Weathermatic clocks to control the irrigation systems at some City facilities. These clocks monitor rainfall and shut the irrigation system down if sufficient rainfall is detected. They plan on eventually having these clocks installed in all of the City's irrigation systems.

Contact: Barry Scott

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As part of Kirkland's review of building permits, staff checks for compliance with the 2003 Washington State Energy Code as mandated by the state. This is one of the strictest energy codes in the country with respect to building envelope requirements (insulation R-values, window and door U-factors), mechanical equipment efficiency requirements and allowed power consumption for lighting in non-residential buildings. Contact: Tom Jensen

**6. Purchase only Energy Star equipment and appliances for City use.**

NRMT 2006 Work Program – Task 22: Green Purchasing Practices

The City has been replacing its old copiers with Energy Star compliant Canon multifunctional devices.

The flat screen monitors that are being purchased with our computers are more energy efficient than the conventional monitors we've purchased in the past. While the desktop computers we've been purchasing all have a sleep mode, they do not appear to be Energy Star compliant. We have become aware of an option to order Energy Star compliant Dell computers and we will take a closer look at that option when we place our next order for computers. (We need to determine the impacts to cost and delivery time.)

The City is continuing its on-going efforts to purchase energy efficient and renewable technology products and services as a part of its regular purchasing activities. In 2005, Fleet launched a program and since has completed refurbishing the beds of three major equipment trailers. Instead of normal lumber, Fleet utilized "rumber" decking material which is made from 100% recycled automobile tires.

**7. Practice and promote sustainable building practices using the U. S. Green Building Council's LEED program or a similar system.**

NATURAL RESOURCE MANAGEMENT PLAN – Sustainability...Additional Response Actions, Page 45

NRMT 2006 Work Program – Task 2: Public Involvement and Education

NRMT 2006 Work Program – Task 22: Green Purchasing Practices

Practicing Sustainable Building Practices:

The City of Kirkland's Facilities were all built before the LEED program was established. In future construction or major renovation projects, sustainable building practices will be included, per Council direction.

Promoting Sustainable Building Practices:

In December of 2004 Kirkland held a community lecture event to explore the application of low impact development (LID) techniques and practices. A panel of expert speakers provided some ideas and examples of what LID is and how it works. Contact: Paul Stewart or Jenny Gaus

Public Works oversees public education and involvement efforts on an on-going basis, including production and distribution of a storm water newsletter, a storm drain stenciling program ("Dump no

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waste, drains to stream”), the salmon watcher program, and informal education of residents and business owners when storm water infractions occur. Contact: Jenny Gaus

The Building Department promotes sustainable building practices by posting notices about up-coming “green” events at the front counter. Public Works and the Building Department are working together to develop programs to support and promote sustainable building practices. Staff is researching incentive programs and obstacles that exist in State or local codes. Contact: Tom Jenson and Elaine Borjeson

**8. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel.**

NRMT 2006 Work Program – Task 23: Alternative Fuel for Fleet

The City is continuing its on-going efforts to increase the average fuel economy of the fleet, including continuing to transition to “alternative fuel” vehicles (e.g. electric, hybrid, biodiesel, etc.) whenever feasible. After obtaining eight bi-fuel (CNG/unleaded gasoline) vehicles, the City purchased its first Toyota Prius hybrid car in 2003 for use by the Public Works Department. Since then, two additional Prius sedans have been added for use by Fire Prevention (2004) and the Planning Department (2006). The Building Department has also purchased three Ford Escape Hybrids for use by inspectors (2006). The Public Works Department has ordered an electric truck for the water meter reader (2006). Serious consideration is being given to adding a Neighborhood Electric Vehicle (NEV) for a variety of pooled uses.

Diesel retrofit programs have been investigated by the Fleet Supervisor and involve oxidation catalysts and particulate filters. Oxidation catalysts require high engine temperatures which are not reached by City vehicles due to the limited usage. Particulate filters use ultra low sulphur diesel (ULSD) exclusively (which we will switch to probably in October 2006) but have other problems in City applications with current filter technology. Contact: Tim Llewellyn

NRMP 2006 Work Program – Task 24: Use Better Diesel in Fleet

The City is currently using Low Sulfur Diesel (LSD) which has 500 parts per million. The EPA is requiring all oil companies to produce ULSD in 2006 which is 15 parts per million. ULSD will be required for all diesel engines beginning with 2007 models. The City will begin using ULSD when it becomes available and voluntarily use it to run all our pre-2007 diesel engines, in addition to the required post-2007 model diesel engines.

Kirkland is a charter member of the Puget Sound Clean Cities Coalition, which works to develop alternative fuel sources in the Puget Sound Region. On the Coalition’s work plan for 2004 is market development for biodiesel fuel by opening an in-state facility and by obtaining assistance in implementation of biodiesel through research and technical assistance. The Coalition’s Strategic Plan for 2004 – 2008 features continued efforts to promote biodiesel availability. The goal is to develop the market so that ultra-low sulfur and biodiesel fuels will become available and affordable, since their use would cut toxic emissions from diesel vehicles. In accordance with federal mandates, City generators will be fueled by ultra-low sulfur by fall of this year. Contact: Tim Llewellyn



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Other Vehicle Emission Reduction Efforts

Waste Management, the City's hauler, is contractually obligated to cooperate with the City's efforts toward reducing air pollution impacts of solid waste collection. The hauler is required to use ultra low sulfur diesel with no greater than 15 parts per million of sulfur in all of its operations within the City or other low-emissions fuels as approved by City staff. The City, in turn, is obligated to pay Waste Management \$8500 for each particulate trap installed in up to fourteen of its collection vehicles reducing emissions by up to 90%. To date, 10 vehicles have been retrofitted at a total cost of over \$69,000. Contact: Elaine Borjeson

**9. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production.**

NATURAL RESOURCE MANAGEMENT PLAN – Water is discussed on Pages 33 – 40

Through scheduled upgrades of the water and wastewater system, the City has replaced older, fixed-speed pumps with energy-efficient pumping systems equipped with sophisticated drive and control systems (Lakeshore Plaza (1998) – wastewater, 650 Zone Pump Station (2004) – water, Waverly Beach (2006/7) – wastewater). The City has also successfully eliminated several wastewater lift stations (10<sup>th</sup> Ave S (1995), Lake Ave W (2001), 90<sup>th</sup> St/Costco (2003) Juanita (2003/4) Trend (2006/7) by constructing gravity sewers; thereby eliminating the energy demands of these segments of the system.

Recovery of methane for energy production is done at a different level, i.e. by King County.

**10. Increase recycling rates in City operations and in the community.**

NATURAL RESOURCE MANAGEMENT PLAN – Reduce Solid Waste through City Programs and Services, Page 43

The City has had a long standing practice of ordering recycled copy paper and janitorial paper products. Recycled paper is also typically specified when ordering printed letterhead, envelopes, forms and other printed materials. Many of the office supply items (folders, envelopes, notepads, etc.) that are ordered have at least some recycled content. Remanufactured toner cartridges are ordered for City printers when they are available. Olympic Office Supply collects our empty toner cartridges and returns them to the toner remanufacturer.

City staff will continue to work with Olympic Office Supply and other suppliers to seek opportunities to purchase recycled and recyclable products. Contact: Barry Scott

NRMT 2006 Work Program – Task 16: New Recycling Approach

The City Council established performance measures for the Solid Waste Utility in 2002 that set the residential recycling diversion rate at 52% and average pounds of garbage per household/week at 33 lbs. In the second half of 2003, a new solid waste contract expanded curbside collection services to include

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100% commingled recycling (paper, plastic, glass, metal all in the same container) as well as the collection of electronic waste and reusable textiles at the curb. Food waste recycling was also added to the yard waste cart for the first time. Kirkland single-family residents have surpassed both of the objectives set by Council for the second year in a row, likely as a result of rate incentives and the major innovative changes to the solid waste contract. Single-family residents diverted an average of 60% of their total solid waste stream each week and disposed of an average of 29 pounds of garbage per household/week during the first ten months of 2005 (these figures do not include the 1½ tons of electronics collected in the average month; electronics are collected separately from commingled recycling).

In 2006-2007, grant funds from the King County Solid Waste Division and the Washington State Department of Ecology will be targeted at multifamily (currently 16%) and business (currently 22%) outreach to help achieve higher recycling diversion rates in these sectors where participation rates are high, but diversion remains a challenge.

The multifamily recycling diversion rate for the first ten months of 2005 is 16%, and the diversion rate for businesses is 11% (actual business rates are presumably higher because only Waste Management is required to report tonnage to the City, and businesses may recycle with any hauler they choose). Outreach to promote recycling in 2006 will include free assistance and presentations from the City for program development, newsletters, brochures, displays at public forums and collection of difficult to recycle items at one-day recycling events. The City will promote the message of easier, commingled recycling as well as unlimited recycling for multifamily residents and free recycling of up to 150% of garbage container size for businesses (with the City's contracted hauler, Waste Management). Contact: Elaine Borjeson

NRMT 2006 Work Program – Task 17: Collect Food Waste/Organics

The new solid waste contract developed in the second half of 2003 included a provision for residential curbside food waste collection. Residents may now recycle food waste with yard waste in the City-provided carts with rodent-detering lids. This has the potential to divert a significant portion (26%) of the waste stream from the landfill. A recently completed survey of 400 Kirkland residents indicates approximately 25% of single-family households are participating in food waste recycling. Educational efforts in 2006 will target increasing food waste recycling with the associated benefit of turning this commodity into compost as opposed to the cost of burying it at the landfill or treating it in the sewer system.

In December, 2004, the City Council approved budgeting \$20,000 from the solid waste utility for a pilot commercial organics (food waste) recycling program which lasted from March of 2005 to March of 2006. Thirty businesses in the Totem Lake area participated in the program and they diverted 97 tons of organic materials. The City is working closely with the King County Solid Waste Division to monitor successes, determine incentives and investigate barriers to expanding this into a long term sustainable program. To date, the greatest barrier to wide-scale implementation revolves around the issues of cost/distribution/regulatory requirements of using biodegradable bags. The City is working with the Seattle-King County Health Department, Cedar Grove Composting, King County Solid Waste Division, Waste Management and other suburban cities with pilot commercial organics programs to find solutions to these issues. Contact: Elaine Borjeson

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NRMT Work Program – Task 18: Special Collection Events

The two annual (spring and fall) residential recycling collection events and one annual business recycling collection event provide an opportunity to drop off items that can be recycled but are not collected as part of the weekly curbside collection (e.g. tires, appliances, vehicle batteries, toilets, sinks, etc.). These events are dependent upon grant funding from King County and Washington State. In 2005, residents and businesses diverted nearly 109 tons of recyclable materials from the landfill in 3 daylong events. The fall 2005 recycling event promotion included multifamily residents as well as single-family residents and resulted in an additional 10 tons of materials being collected. As a result, multifamily residents will be included in future event promotion. The 2006 spring residential event occurred on March 25<sup>th</sup> and resulted in 575 carloads with 51.5 tons of recyclable material diverted from the landfill. Contact: Elaine Borjeson

NRMT 2006 Work Program – Task 19: Sell Compost Bins and/or Rain Barrels

In the past, the City sold compost bins and rain barrels to encourage resource conservation. These items were purchased with grant funds from the King County Solid Waste Division and the Washington State Department of Ecology. Currently the City participates in Northwest Natural Yard Days (NNYD) in April/May and September. NNYD is a regional partnership with retailers and other jurisdictions offering discounts on mulching mowers, compost bins, soaker hoses, and possibly rain barrels. Compost bins are sold online at a reduced cost. NNYD also promotes education in planting correctly for the area and reducing pesticide use. Contact: Elaine Borjeson

**11. Maintain healthy urban forests; promote tree planting to increase shading and to absorb carbon dioxide.**

NRMT 2006 Work Program – Task 2: Public Involvement and Education

The Green Kirkland Initiative was introduced in 2005 and will be continuing in 2006. The program includes gauging the extent of Kirkland's tree canopy and removing harmful invasive plants in City parks. To begin, the focus is on Carillon Woods. In addition to direct benefits to the urban forest, the public is engaged in and informed through these efforts. Contact: Jason Filan

This year, the City's Urban Forester is working on another project in Kirkland neighborhoods to promote good stewardship of trees. South Rose Hill Neighborhood was awarded a Neighborhood Connections grant to plant at least 50 trees in the rights-of-way in 2006. The City's public tree inventory will help to identify empty spaces in which to place the trees. Additional funds have been set aside to have another city-wide tree planting program to plant at least 100 large-sized trees in public areas (similar to the Centennial Tree program of 2005). Contacts: Wendy Kremer and Jeff Rotter

Kirkland's 2006 Arbor Day will occur in October. Annual Arbor Day celebrations promote the City's achievement of being a Tree City USA and are a requirement for retaining Tree City USA status. Contact: Elizabeth Walker

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Future goals of the NRMT are to add stewardship information to the Natural Resource Management page of the City's website and to continue to contribute educational articles to the Kirkland Courier. Other ideas include adding tree removal permit forms, tree flyers, and surface water brochures to the Building Department's permit tree on City Hall's "Main Street" and also taking part in a kiosk and/or computer station on "Main Street" to offer tips about tree care and other natural resource management topics. Contact: Paul Stewart

NRMT 2006 Work Program – Task 5: Upgrade City Practices

The Natural Resource Management Plan (NRMP) advises that City practices and programs be updated as appropriate to reflect current knowledge and technology. To that end, the NRMT requested and was granted a one-time budget request for \$40,000 for 2005 and \$40,000 for 2006 to fund .5 FTE certified arborist for public tree management. Contact: Wendy Kremer

An additional action that would involve upgrading City practices (Task 5) and updating policies and regulations (Task 6) is the incorporation of low impact development techniques. The team plans to conduct a feasibility study to explore the potential to apply these techniques in Kirkland. Funding for the LID feasibility study was granted in the City's 2005-2006 budget. Contact: Jenny Gaus

NRMT 2006 Work Program – Task 6: Update Policies and Regulations

In 2004, several years of study and public input culminated in the adoption of new urban forest policies for Kirkland's Comprehensive Plan and new regulations for street trees. New regulations for the management of the urban forest throughout the City were adopted in late 2005. With the adoption of the new regulations, Kirkland's urban forester has worked with current planners to update forms and checklists and to develop brochures to explain new requirements that apply to owners of trees on private property. Workshops are also being held for arborists (and potential applicants) to review the City's expectations for tree plans and reports (now required). Contact: Elizabeth Walker

NRMT 2006 Work Program – Task 12: Public Tree Management Programs

a. ROW Vegetation Maintenance Pilot Program

With the arrival of a part-time arborist in the latter half of 2005, the Public Grounds Supervisor began a street tree maintenance pilot program in a designated corridor in 2006. The pilot program is intended to establish the costs of the City assuming maintenance responsibilities for public trees.

b. Neighborhood Tree Stewardship Projects

The Urban Forester (Planning) has worked with South Rose Hill Neighborhood to secure a grant for a tree planting project in 2006 (see Task 2 for more information).

c. Program for the Planting and Maintenance of Trees in Public Spaces by Staff

For both 2005 and 2006, the City has budgeted \$30,000 (each year) to plant trees in public spaces as a two-year pilot program. Nearly 100% of the Centennial trees planted in 2005 were planted in Kirkland parks and a few in ROW. It is anticipated that the newly added .5 FTE certified arborist for 2005 and 2006 will be a first step toward proactive maintenance of public trees. Contact: Jeff Rotter

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See also discussion of the Green Kirkland Initiative under Task 2: Public Education and Involvement

NRMT 2006 Work Program – Task 13: Street Tree Standards

The Urban Forester produced an updated official guide to selecting, planting and maintaining Kirkland street trees in late 2005. Where need is determined, the part-time arborist is pruning street trees to ensure correct practices for residents that receive a “must trim” letter from the Public Work’s Neighborhood Traffic Control Program group. In the summer of 2006, the part-time arborist will also be conducting a teach/train session for seasonal staff sent out by the sign shop to trim trees. Contact: Elizabeth Walker

NRMT 2006 Work Program – Task 14: Retain Tree City USA Status

The 2005 requirement for an Arbor Day proclamation and celebration was fulfilled in 2005 in Peter Kirk Park as part of Kirkland’s Centennial celebration. The new Chapter 95: Tree Management and Required Landscaping in the Kirkland Zoning Code contributed toward qualification and was used to attain a Tree City USA Growth Award in April of 2006. The Centennial Tree program, also used for the Growth Award, surpasses the four standards needed for Tree City USA. Apart from the resources spent on the amendments, the level of Kirkland’s financial support allocated for tree related tasks remains the same. Nationally, Arbor Day is recognized in April however Kirkland celebrates the day in the fall.

NRMT 2006 Work Program – Task 15: Preserve Notable Trees

Identification, maintenance, and continued preservation of notable trees would require additional specific funding. The team anticipates requesting on-going funding for the development of a Notable Tree Program at a future date. It will be important for the City to not assume the responsibility for maintaining notable trees on private property.

**12. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.**

NRMT 2006 Work Program – Task 2: Public Involvement and Education

Future goals of the NRMT are to add stewardship information to the Natural Resource Management page of the City’s website and to continue to contribute educational articles to the Kirkland Courier. Other ideas include adding tree removal permit forms, tree flyers, and surface water brochures to the Building Department’s permit tree on City Hall’s “Main Street” and also taking part in a kiosk and/or computer station on “Main Street” to offer tips about tree care and other natural resource management topics. Contact: Paul Stewart

Parks Maintenance staff routinely accommodates requests from volunteer groups (schools, youth groups, churches, etc.) by leading them in environmental restoration projects. Environmental education is combined with action. In addition, Parks staff will also administer a King Conservation District grant for the Kirkland Youth Program to implement the Juanita Bay invasive plant removal program. Contact: Jason Filan

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The Public Works Surface Water Division oversees public education and involvement efforts on an on-going basis, including production and distribution of a storm water newsletter, a storm drain stenciling program (“Dump no waste, drains to stream”), the salmon watcher program, and informal education of residents and business owners when storm water infractions occur. The update of the Surface Water Master Plan was completed in November 2005, and included opportunities for public participation. Contact: Jenny Gaus

Over the past several years, Kirkland has held a series of lectures by experts to educate the public officials, staff, professionals, and the general public of Kirkland and neighboring communities about global warming, environmentally critical areas, preventing sprawl/creating compact urban development, and low impact development techniques and green building practices. Contact: Paul Stewart

Additional examples of informational events for professionals include the Urban Forester’s recent workshop on the new tree regulations for professional arborists and Public Work’s upcoming American Public Works Association “click, listen, and learn” seminar entitled “Changing Course: Streambed Restoration/Stabilization” in January of 2006. Contact: Jenny Gaus

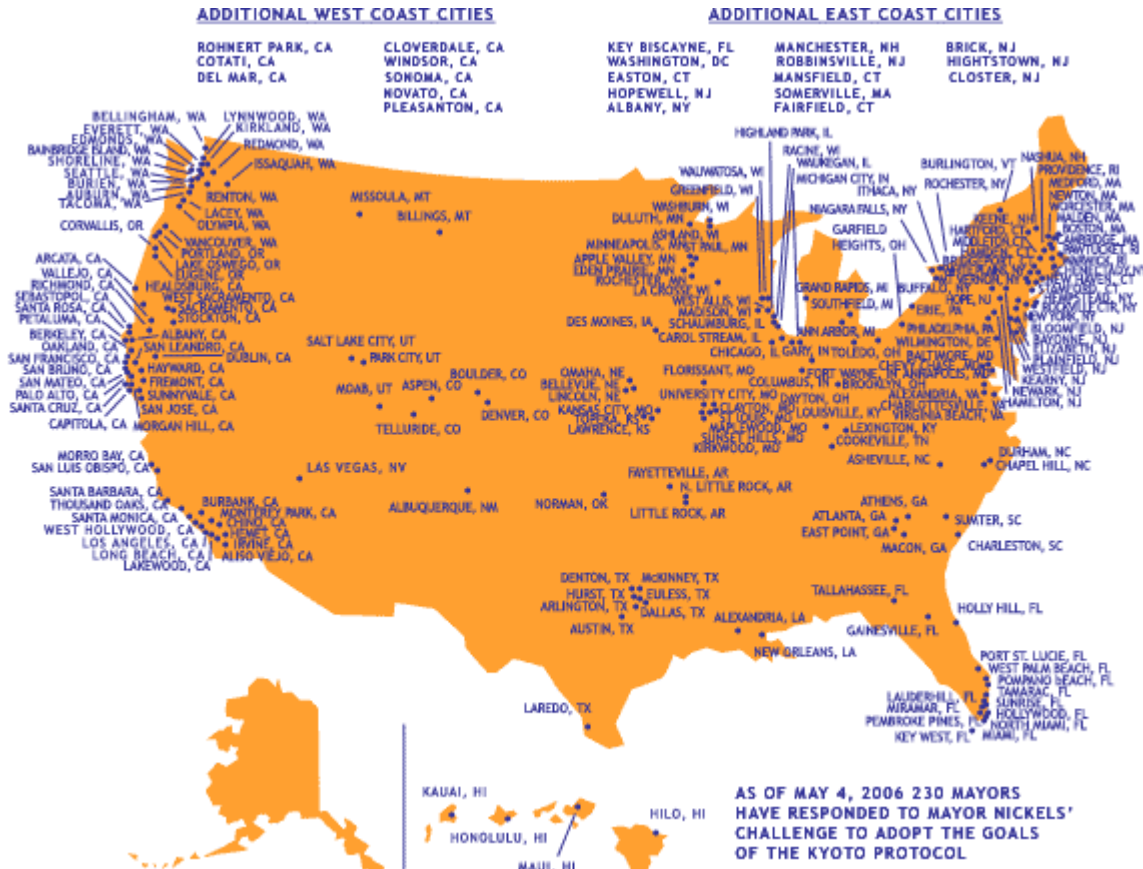
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## EXHIBIT 1

### U.S. Mayors Climate Protection Agreement - Participating Cities

As of May 4, 2006, 230 mayors have signed onto the agreement.



## EXHIBIT 2

### Kirkland – Tons Carbon Dioxide Equivalent 1990 and 2002

	King Co.	Kirkland	Reference Puget Sound Clean Air Agency Spreadsheet, Other References and Notes
<b>Tons CO2 Equivalent / 1990</b>			
Power Purchases	1,824,794	50,912	2.79% of King County (including Seattle); Sec 4, PSCAA 02 GHG Draft Rpt, 8/1/05, Pg 22
Misc Diesel -Nonroad & Rail	842,233	21,382	Tons GHG = CO2 + 23*CH4 + 296*N2O; NEI GHG 90 kg.xls; Kirkland NEI GHG 90 kg.xls
Gasoline -Nonroad & Recreational Boats	232,791	6,474	Tons GHG = CO2 + 23*CH4 + 296*N2O; NEI GHG 90 kg.xls; Kirkland NEI GHG 90 kg.xls
Land Clearing, Wastes & Building Burns	718,607	15,910	Tons GHG = CO2 + 23*CH4 + 296*N2O; NEI GHG 90 kg.xls; Kirkland NEI GHG 90 kg.xls
Petroleum Fossil Fuels Burning	4,820,967	134,987	Tons GHG = CO2 + 23*CH4 + 296*N2O; NEI GHG 90 kg.xls; Kirkland NEI GHG 90 kg.xls
Onroad Gasoline	9,681,028	117,140	Kirkland = 1.21% of King County VMT; Onrd GHG New Rev 90 rg.xls
Onroad Diesel	1,171,772	14,178	Kirkland = 1.21% of King County VMT; Onrd GHG New Rev 90 rg.xls
Electrical Distribution Transformer SF6	190,076	5,051	Apportioned from US GHG 04 by population; Table ES-2; SF6 is sulfur hexafluoride
<b>Total</b>	<b>19,482,269</b>	<b>366,034</b>	
<b>Tons CO2 Equivalent / 2002</b>			
	King	Kirkland	
Power Purchases	2,644,634	77,223	2.92% of King County (including Seattle); Sec 4, PSCAA 02 GHG Draft Rpt, 8/1/05, Pg 22
Misc Diesel Nonroad	946,569	26,827	Construction, industr, commercial, L&G eqpt; Misc Nrd 02.xls; Kirkland Misc Nrd 02.xls
Rail	69,601	2,032	Kirkland = 2.92% of King County Rail; NRD GHG Sum 02.xls
Gasoline Recreational Boats	72,239	2,109	Kirkland = 2.92% of King County Rail; NRD GHG Sum 02.xls
Gasoline Nonroad	318,218	9,226	Construction, industr, commercial, L&G eqpt; Misc Nrd 02.xls; Kirkland Misc Nrd 02.xls
Propane & Natural Gas Nonroad	169,101	4,938	Industrial and Commercial Equipment; Misc Nrd 02.xls; not inventoried in 1990
Land Clearing, Wastes & Building Burns	123,246	3,517	Kirkland = 2.92% of King (Y Waste, Id clearing, garbage, bldg fires); Open Burn GHG 02.xls
Petroleum Fossil Fuels Burning	6,575,900	137,568	Kirkland = 2.92% of King Area source petroleum; Area Sc Fossil GHG 02.xls
Onroad Gasoline	10,616,813	133,772	Kirkland = 1.26% of King County VMT; Onrd Veh GHG 02 rg.xls
Onroad Diesel	2,625,423	33,080	Kirkland = 1.26% of King County VMT; Onrd Veh GHG 02 rg.xls
Electrical Distribution Transformer SF6	97,790	2,524	Apportioned from US GHG 04 by population; Table ES-2; SF6 is sulfur hexafluoride
<b>Total</b>	<b>24,259,534</b>	<b>432,816</b>	
<b>CHANGE FROM 1990 TO 2002</b>		<b>+18.24%</b>	
<b>Surrogates</b>			
	King	Kirkland	Surrogate Ratio (%), and Reference
1990 Housing Units	647,323	18,063	2.79 (Ref: WA State Office of Finanacial Management Pop Trends Report, 2002)
2002 Housing Units	764,008	22,288	2.92 (Ref: WA State Office of Finanacial Management Pop Trends Report, 2002)
1990 Vehicle Miles Traveled (1000s)	13,464,895	162,829	1.21 (Ref: 1990 HPMS, DOT Rpt DVMTBYCO 4/28/92, and City of Kirkland e-mail 5-1-06)
2002 Vehicle Miles Traveled (1000s)	16,277,979	204,482	1.26 (Ref: 2002 HPMS, DOT Rpt DVMT02CORpt.xls, and City of Kirkland email 5-1-06)

Table excludes sources in King County assumed not to exist in Kirkland. Such Sources include:

Cement Plants, Power Utilities, Points Sources, Chemical Industries, Aircraft, Diesel Vessels, Livestock, Farms, Landfills, Silviculture, and Logging