




King County
Administrative Policies and Procedures

Executive Orders,
Policies & Procedures

Title	Document Code No.
Executive Order on Environmental Management Strategies for Global Warming Preparedness	PWT 7-7 (AEO)
Department/Issuing Agency	Effective Date.
Approved  3-22-06	4-1-06

This Order requires that King County Departments employ innovative environmental management as a means for the region to mitigate and adapt to global warming.

WHEREAS, this Order requires that King County Departments employ innovative environmental management as a means to mitigate regional contribution to global warming; and

WHEREAS, in its role as a regional government, King County has demonstrated significant corporate citizenship and public leadership by employing critical policy levers of 1) land use, 2) public transit provision, 3) environmental management, and 4) economic development intended to stimulate climate-friendly fuel and technology markets, in ways that are supportive of global warming adaptation and mitigation; and

WHEREAS, global warming is expected to lead to water supply shortages, flooding, and shoreline erosion, matters over which King County maintains a responsibility to reduce the risk of harm to public health and safety; and

WHEREAS, "environmental management" includes the infrastructure for and provision of solid and organic waste and wastewater treatment by King County, which can be used in innovative ways as detailed below to buffer global warming impacts; and

WHEREAS, "land use" includes zoning and other regulations that can lead to reduced generation of greenhouse gases and that protect the public from public health and safety hazards, such as flooding, shoreline erosion, wildfires, and water supply shortages; and

WHEREAS, King County's responsibility in these regards represents a critical opportunity to prepare proactively for a variety of possible emergency situations involving natural resources, including but not limited to flooding, shoreline erosion, wildfires, and water supply shortages; and

WHEREAS, in February 2005, King County and Cascade Water Alliance signed a Memorandum of Understanding (MOU) to develop a countywide water supply plan that

considers both people's needs and resource protection, and expands use of reclaimed water, which will be produced in large quantities at Brightwater in 2010; and

WHEREAS, King County's innovative design of the Brightwater Wastewater Treatment Plant, to use reclaimed water for irrigation and industry purposes, demonstrates that critical infrastructure can be physically adapted in innovative ways for this region to adapt to declining water supplies and other potentially destabilizing global warming impacts; and

WHEREAS, King County's land use plans, policies and regulations to protect shoreline areas, wetlands, rivers, lakes, streams and natural vegetation from development help the region prepare for and adapt to global warming impacts; and

WHEREAS, King County's award-winning Flood Hazard Management Program continues to fund protection of watersheds, rivers and coastal areas that are vulnerable to climate variability, and provide an additional hedge against impacts from increasing floods expected from climate change; and

WHEREAS, King County Department of Natural Resources and Parks' (DNRP) management of the Cedar Hills Landfill far exceeds the national landfill average of methane gas capture, preventing over 300,000 metric tons of methane-based greenhouse gas emissions from entering the atmosphere; and

WHEREAS, this high capture rate of landfill methane gas will be converted to energy, therefore displacing fossil fuel energy use and creating additional greenhouse gas reductions of more than 100,000 metric tons; and

WHEREAS, effective management of the Cedar Hills landfill will provide the additional benefit of storing carbon-based plant matter for more than 100 years thereby sequestering over 270,000 metric tons a year of greenhouse gases as a carbon "sink" for as long as the landfill is open; and

WHEREAS, this excellence and innovation in landfill management represents an important mitigation of regional contribution to global warming, as well as a potential asset in a future carbon market; and

WHEREAS, King County's innovative management of the South Treatment Plant has enabled recapture of methane for energy use within the plant that would otherwise have been released as 12,000 tons of greenhouse gas emissions; and

WHEREAS, this recaptured methane is used for the operation of a hydrogen fuel cell within the plant, which was designed and operated as the first of its kind, on an \$8,500,000 grant over eight years from the United States Environmental Protection Agency and in partnership with Fuel Cell Energy; and

WHEREAS, this hydrogen fuel cell demonstration project represents advancement of public sector use of the hydrogen fuel cell stationary technology, an approach to waste gas recapture that will become increasingly important for other governments across the country in the name of global warming mitigation; and

WHEREAS, these examples of innovative waste and wastewater management reflect the county's commitment to global warming adaptation and mitigation that should be replicated countywide and nationwide; and

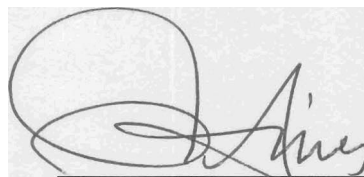
WHEREAS, such climate change adaptation and mitigation strategies carry out King County's responsibilities as an environmental management authority under the Regional Wastewater Services Plan, and its responsibilities as a land use manager under state and federal environmental law, including the Growth Management Act, strategies which should be further funded based on their value as regional solutions to problems of global warming;

NOW, THEREFORE, I, Ron Sims, King County Executive do hereby order and direct:

- (1) King County Departments to maximize the creation of resources from waste products such as waste gases and wastewater, in ways that both adapt to natural resource conditions impacted by global warming and mitigate contribution to global warming by reducing greenhouse gas emissions.
- (2) To achieve compliance with this Order, the following Actions, among others that will be developed over time, will be taken:
 - a) The county will continually review and update our land use and environmental policies and regulations to protect natural resources from global warming threat.
 - b) The county will seek to use its existing waste and wastewater infrastructure for multiple uses and in innovative ways that 1) provide an additional natural resources hedge against impacts expected from global warming and 2) potentially reduce greenhouse gas emissions in a manner consistent with the approved regional water supply plan and county Energy Plan now being formulated.
 - c) The county will draft a natural resources emergency management element for inclusion into the Global Warming Preparedness and Mitigation Plan that recommends further funding and strategies for protection of the region against natural resources emergencies related to global warming impacts, such as flooding, shoreline erosion, wildfires, and water supply shortages.
 - d) The county will fund expanded use of reclaimed water and take other measures to reduce vulnerability of the region's water supply and other critical natural resources to global warming impacts.

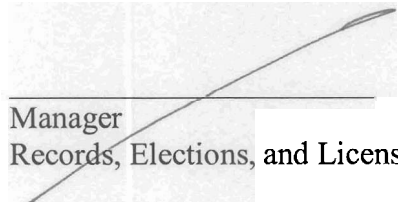
- (3) A detailed approach to carrying out these Actions and achieving compliance with this Order will be included in the natural resources emergency management element of a King County Global Warming Preparedness and Mitigation Plan, which is to be completed by January 1, 2007.
- (4) The natural resources emergency management element in the Global Warming Preparedness and Mitigation Plan will be consistent with the county's Energy Plan and related policies. The natural resources emergency management element will be updated at least every three years to ensure that the county is taking appropriate steps to achieve compliance with this Order.
- (5) The county's overall compliance with this Order will be monitored, and an annual Global Warming Report on natural resources emergency management will be issued to the Executive detailing progress on how well the region's waste and wastewater treatment and land use planning have been managed in preparation for and mitigation of future global warming impacts. The Report will also advise the Executive on planning and measures being undertaken to improve the county's strategies for employing innovations in environmental management in context of global warming. A portion of this annual report will include: a survey of innovations and best practices in environmental management worldwide; an evaluation of whether the County is demonstrating innovation and meeting those best practices; and an outline of opportunities for the County to apply further innovative approaches.

Dated this 22nd day of March, 2006.

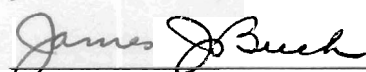


Ron Sims
King County Executive

Attest:



Manager
Records, Elections, and Licensing



Interim Director
Records, Elections and Licensing Services Division