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City of Alexandria, Virginia

MEMORANDUM

DATE: JANUARY 8, 2009

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM: JAMES K. HARTMANN, CITY MANAGER *J*

SUBJECT: RECEIPT OF PHASE I ENVIRONMENTAL ACTION PLAN FOR THE ECO-CITY ALEXANDRIA PROJECT

ISSUE: Receipt and consideration of the Phase I Environmental Action Plan prepared by the Environmental Policy Commission (EPC) for the Eco-City Alexandria project.

RECOMMENDATIONS: That the City Council:

- (1) Thank the EPC for its efforts and dedication in producing the Phase I Environmental Action Plan. Also thank Virginia Tech and City staff that assisted the EPC and the members of the community who provided comments and participated in the Eco-City process.
- (2) Receive and docket the Phase I Environmental Action Plan for public hearing on Saturday, January 24.

DISCUSSION:

Eco-City Alexandria Initiative

1. GreenVentory and Compendium of Model Practices

In 1998, City officials and community leaders engaged in a collaborative process to produce Alexandria's first environmental strategic action plan. More than 200 residents, business leaders, civic activists, and elected officials came together at the Environmental Quality of Life Summit to reaffirm their commitment to environmental stewardship of the City and to endorse the plan. The Summit and Action Plan set forth dozens of ideas and recommendations to enhance existing, and to develop new environmental programs and policies. Subsequently, the City has made significant progress in addressing the top three issues identified at the summit through the

adoption and implementation of the Open Space Master Plan, the Water Quality Management Supplement to the Master Plan and the Comprehensive Transportation Master Plan.

With the passage of time of nearly ten years, there were strong indications suggesting that the time was ripe for Alexandria to design a new environmental action plan that sets forth goals and priorities for the *next* ten years. Late in 2006, Councilman Rob Krupicka and Vice Mayor Del Pepper initiated the Eco-City Alexandria project and charged the EPC with leading this effort.

The Eco-City Alexandria project started in January 2007 and is a partnership between the EPC, City departments and Virginia Tech Department of Urban Planning and Affairs.

2. Green-Victory and Compendium of Model Practices

During the initial phase of the Eco-City Project (January - December 2007), Virginia Tech worked with the EPC and City departments to produce two documents:

- “A Green-Victory of City Environmental Policies, Plans, and Programs.” This document was developed over several months and involved Virginia Tech Professors and graduate students reviewing and summarizing existing City efforts addressing a broad variety of environmental issues implemented by the Departments of Planning & Zoning, Health, General Services, Parks, Recreation & Cultural Activities and Transportation & Environmental Services.
- “Compendium of Model Environmental Policies and Programs.” This document is intended to identify model policies, programs and Best Management Practices (BMPs) that other jurisdictions have implemented that the City may wish to consider evaluating for inclusion in the Environmental Action Plan.

3. Eco-City Charter

The Eco-City Charter was developed to guide City leaders and residents towards a more sustainable, holistic and healthy environment. It defines Alexandria’s commitment to ecological, economic and social sustainability and provides policy makers, staff, the community and business leaders with an overarching direction. The Charter includes ten guiding principles and core values linked with the City’s 2015 Strategic Plan.

An extensive public outreach process for developing and drafting the Environmental Charter was used. The process was developed under the general guidance of the Eco-City Steering Committee consisting of Vice Mayor Del Pepper and Councilman Rob Krupicka, along with the EPC Chair and senior staff from the five City departments involved in the Eco-City project. The Steering Committee also facilitated the interaction and discussion between Virginia Tech and City staff and provided input and helped with the outreach efforts.

- EPC held the Eco-City Cafe on March 8, 2008, to obtain public input to develop the Eco-City Charter. Over 120 people attended this event and made numerous suggestions about the Charter.
- The draft of the Eco-City Charter was released to the public on the day of the City's Earth Day celebration, April 26, 2008. Public input and input from City Boards and Commissions was solicited for this draft Charter.
- The City and EPC received public comments on the draft Charter, made revisions, then presented the amended Charter at another successful public forum, the Eco-City Summit, at T.C. Williams High School on May 10, 2008. About 200 citizens, elected officials and staff participated in this event to discuss and vote on the guiding principles of the Charter and the key environmental issues within each guiding principle. Mayor Bob Harvey, of the City of Waitakere, New Zealand, was the keynote speaker. He is widely considered a pioneer of the Eco-City concept for having successfully transformed Waitakere into an Eco-City. Mayor Harvey recently sent a letter of support and encouragement for the City's effort (Attachment 4). For the first time, the City used the key-pad voting system provided by Place Matters. This system allows the participants to obtain instant summary and statistical results on their voting.

Based on the strong public consensus on the Draft Charter, the EPC finalized and submitted the Eco-City Charter to City Council on June 10, 2008. After a public hearing on June 14, 2008, City Council adopted the Eco-City Charter, the first in the Commonwealth of Virginia and the region.

4. Environmental Action Plan

Following the City Council's adoption of the Eco-City Charter in June 2008, the EPC immediately began working with City staff, with assistance from Virginia Tech's Urban Planning Program, to develop the City's new Environmental Action Plan (EAP), which was divided into two phases:

- Phase I (Fall 2008) which is focused on enhancements to existing programs and those actions that can be taken between now and the end of Fiscal Year 2011 (June 30, 2011), especially considering the difficult economic cycle that the City is going through.
- Phase II (Spring 2009) which will focus on mid and longer term goals and objectives and broader policy issues and action steps that would start in Fiscal Year 2012 (July 1, 2011) and beyond.

For the development of the Phase I Environmental Action Plan (Attachment II), EPC members formed internal teams for each of the 10 Charter principles. Each team reviewed existing City plans and policies and also met with City staff to identify current initiatives and priorities. EPC's fall 2008 meetings and work sessions were almost exclusively devoted to working on the Phase I

Action Plan, and included a weekend drafting retreat with City staff and Virginia Tech to refine the goals and brainstorm proposed action steps.

City staff and EPC members then reviewed the preliminary goals and action steps to identify those actions that were feasible in light of the City's FY 2010 and likely FY 2011 budgetary/revenue limits. All other ideas were deferred for consideration as part of the second phase of the Action Plan that will commence in January 2009.

Thanks to the strong support and commitment from all City departments involved and despite the relatively short time frame, the EPC was able to finalize and disseminate the Draft Phase I EAP to the public for comments and input on November 12, 2008.

The EPC subsequently held a very successful Environmental Action Plan Open House at the Lee Center on November 17, 2008, with over 75 residents attending this event. 133 public comments were received at and following the Open House and can be divided according to the guiding principles as follows.

Guiding Principles	Number of Public Comments
Land Use and Open Space	30
Global Climate Change and Other Emerging Threats and Energy	23
Implementation	19
Solid Waste	17
Water resources	15
Air Quality	8
Transportation	8
Building Green	8
Environment and Health	5
Total	133

Significant public comments under each principle are summarized as follows.

- **Global Climate Change** – Carbon emissions are a priority, and this should be a principal focus. Need to support reduction in carbon emissions.
- **Energy** – Use of and investment in solar energy technologies. Energy audit incentive program. Education and outreach.
- **Land Use and Open Space** - Historic preservation needs to be addressed explicitly. Open space used to preserve historical and archaeological sites. Low impact landscaping practices must be used. Invasive plants need to be removed and/or their use on private properties should be discouraged.

- **Water Resources** – Storm water management. Rainwater and grey water reuse. Water conservation and reclamation. Education and outreach.
- **Air Quality** – Monitor mercury emissions from Mirant PRGS along with other emissions. CFL education to avoid sending spent CFL to Covanta, further adding mercury to our air. Initiate a fine for idling, if possible by law.
- **Transportation** – Need more bike racks and trails.
- **Green Building** – Be mindful of historic preservation in green building concepts. LEED certification and accreditation by staff.
- **Solid Waste** – Expand recycling for yard waste and businesses. Emphasize reuse. Ban on plastic bags. Reusable grocery bags.
- **Environment and Health** – Promote more community gardens. Local retail should be encouraged. Increase public awareness on how to live healthier and become more sustainable.
- **Implementation** – Education and outreach. More public and business involvement in Eco-City. Focus on green workforce. Need grassroots movement. Stronger language to change behavior. Historic preservation. Reduce carbon emissions.

The EPC considered these comments and prepared responses which are documented in Attachment 3. In response to comments, the EPC changed the Emerging Threats section to Climate Change and Other Emerging Threats and moved this section to the front of the Plan. Language was added in several sections emphasizing climate change, reuse in the solid waste section, the use of perennial and native plants, historic preservation and public education and outreach.

Comments from City staff were reflected on the version of the Phase I Environmental Action Plan that was made public on November 12, 2008. The final version before City Council incorporated comments from City staff as well.

The final draft Phase I Environmental Action Plan was approved by the EPC on December 15. The EPC sent a letter to the Mayor and Members of City Council, dated December 19, 2008 (Attachment 1), requesting that City Council adopt the Phase I Environmental Action Plan.

5. **Next Step – Phase II Environmental Action Plan**

The Phase II Environmental Action Plan is now being developed, with a goal of being completed by the end of June 2009 according to the following tentative schedule and milestones:

- Draft Phase II Environmental Action Plan issued for public comments at Alexandria Earth Day on April 25, 2009.
- Final Draft Phase II EAP approved by the EPC on May 18, 2009.
- Final Draft Phase II EAP received by City Council on June 9, 2009.
- Council Public Hearing on, and possible adoption of, Phase II EAP on June 13, 2009.

FISCAL IMPACT: The adoption of the Phase I Environmental Action Plan is not a fiscal commitment by Council to implement each and every of the over 130 action items identified in this Action Plan. Several action steps are already planned to be implemented, or are already planned within the current departmental budgets for FY 2009. Those action steps that require new or additional funding would be subject to the normal City budget process, and are subject to annual appropriation consideration by City Council. With the severe fiscal constraints in FY 2010, and likely in FY 2011, it is not certain at this time how many of these action items will be able to be implemented.

ATTACHMENTS:

Attachment 1	EPC Letter to Mayor and Members of City Council, December 21, 2008
Attachment 2	Draft Phase I Environmental Action Plan approved by the EPC
Attachment 3	EPC response to Public Comments Received on the Phase I Environmental Action Plan

STAFF:

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City of Alexandria, Virginia
Alexandria Environmental Policy Commission
P. O. Box 178
Alexandria, Virginia 22313



December 21, 2008

Mayor and City Council of Alexandria
 City Hall
 301 King Street
 Alexandria, VA 22314

Re: Draft Environmental Action Plan – Phase I

Dear Mayor Euille and Members of City Council:

Per our obligation under the Eco-City Charter 2008 to produce an action plan to implement the Charter, and with great pleasure, enclosed herewith please find the Environmental Policy Commission (EPC) (Draft) Environmental Action Plan – Phase I (Draft EAP I), approved unanimously for Council's consideration by the EPC on December 15, 2008. Also included is a document entitled "Environmental Action Plan – Phase I: Response to Public Comments." This document outlines the 133 comments received from the public on the Draft EAP I, and explains the EPC's rationale for changes made to the Draft EAP I in response.

The Draft EAP I marks a significant step on the path toward achieving the goals set forth in the Eco-City Charter to make Alexandria a sustainable city. With the invaluable assistance of the Virginia Tech University School of Urban Design, the EPC and the City's ever-dedicated staff put together a list of over 130 action items to be completed by 2012. The Draft EAP I is designed to make progress in every principle area of the Eco-City Charter, namely: Global Climatic Change and Emerging Threats, Energy, Land Use and Open Space, Water Resources, Air Quality, Transportation, Building Green, Solid Waste, Environment and Health, and Implementation. While so many action items may appear daunting, the EPC was very mindful of the current budget concerns facing the City when putting this Draft EAP I together, and incorporated many of the City's pre-existing plans and current actions into the document..

In such tense budget times, environmental issues often end up being put on a backburner, and we recognize how hard it is to balance immediate human needs with relatively longer-term environmental issues. However Alexandria may have already experienced some of the first effects of global climatic change and environmental degradation in 2006, and the citizens of Alexandria are likely to face even more daunting and serious threats in the near future. Alexandria's connection to the Potomac River makes it particularly vulnerable to rising sea levels and increased storm intensities predicted for the 21st century, and its historic Old Town is the most vulnerable. The only way to stop global climate change is to substantially reduce global greenhouse gas emissions, and Alexandria cannot do this alone. In 2005, the United States emitted approximately 6 billion tonnes of carbon dioxide. Of this 6 billion tonnes, the City of Alexandria was responsible for

approximately 2.6 million tonnes, and the City Government's contribution was about 80,000 tonnes or 3% of the city total. Therefore, even if the entire City of Alexandria were to turn off its lights, we cannot ignore that Alexandria's climate will change and we must take steps to adapt to this emerging threat.

What can a city of 150,000 people do? It can prepare for the predicted climate change and move toward a carbon-neutral, sustainable economy. The Draft EAP I is designed to do both, as well as maintain our high quality of life in Alexandria. Phase I contains actions the City government can accomplish in the near-term under the constraints of current state and federal laws and the present economic situation. Phase II, which is still being developed, will broaden the focus to include more participation from nongovernmental community groups and will propose additional cultural and economic incentives to encourage businesses and individuals to adopt environmentally and economically sustainable practices.

The Draft EAP I before you presents steps we must take now to put Alexandria in a position to weather the storms and challenges of the future while preserving Alexandria's unique character and past. We respectfully request that the Council adopt the Draft EAP and continue to support – and implement – these efforts to make Alexandria a true Eco-City.

Sincerely,



Danielle C. Fidler
Chair, Environmental Policy Commission

Cc: James K. Hartmann
William Skrabak
Rich Baier

ECO-CITY ALEXANDRIA

environment | economy | community

Environmental Action Plan Phase I (FY2009 – FY2011)

PRINCIPLE: GLOBAL CLIMATE CHANGE AND OTHER EMERGING THREATS

Alexandria must be adaptive and responsive to emerging and unforeseen environmental threats – such as climate change – that could strain infrastructure, deplete natural resources, disrupt the economy, and threaten public health. Failure to respond quickly and appropriately to such threats will likely have severe consequences for the health and economy of Alexandria and its citizens.

Goal 1: Adopt targets for reducing greenhouse gas emission reductions for 2012 and 2020.

Action 1: Adopt the proposed greenhouse gas emission reduction targets outlined in the Metropolitan Washington Council of Governments' July 2008 draft Climate Change Report.*

Action 2: Continue to inventory greenhouse gas emissions within the city using the International Council for Local Environmental Initiatives (ICLEI) computer program and finalize the emission reduction targets.*

Action 3: Assign the Environmental Coordinating Group (ECG) to propose methods to achieve the emission reduction targets and to begin drafting a Climate Action Plan that will include exploring methods for making the targets binding.

Goal 2: Institutionalize the consideration of the effects of possible climate changes into long-term planning.

Action 1: The City shall carry out a risk analysis of the effects of global warming on Alexandria.

Action 2: Empower the ECG to develop adaptation planning strategies within the city.

Goal 3: Prepare and educate city residents and business owners for a carbon-constrained economy.

Action 1: The City will disseminate educational materials on the causes of climate change, how people can reduce their climate impact, and how greenhouse gas reduction policies may affect the availability and prices of energy and other goods.

Action 2: The City Council will emphasize the benefit of increasing development density as a method for reducing greenhouse gas emissions in its discussions with citizens and business.

Goal 4: Develop a strategic planning process for improving and maintaining environmental quality.

Action 1: City management, staff, Environmental Policy Commission (EPC) members, and others will begin to regularly participate in long-term (i.e. 5, 20, and 50 years) planning activities such as scenario exercises and retreats.

Action 2: Continue institutional and funding support for the Eco-City process, including maintaining a collaborative relationship between the City, EPC, Virginia Tech, and the public to secure the advancement of the principles agreed to and adopted in the Eco-City Charter.*

PRINCIPLE: ENERGY

The quantity and sources of energy used by Alexandria's government, businesses and residents impact our environment and quality of life – whether it be through pollutants added to the air, negative effects on water quality or local contributions to climate change...We envision and work toward a day when Alexandria relies solely on renewable energy sources.

Goal 1: Explore incentives that encourage the adoption of renewable energy resources, such as wind and solar, that could yield significant reductions in the city's carbon footprint and other emissions.

Action 1: In late 2009 EPC, City Staff, and other interested parties will convene workshops to identify issues and charge questions for a feasibility study on the potential for renewable power generation within the city. Speakers will include experts in engineering, law, and economics with experience in the potential and feasibility of renewable-powered local electricity generation networks.

Action 2: Determine the amount of energy that can be produced locally and sustainably by 2020 and 2030.

Goal 2: Encourage the adoption of more energy efficient technologies and practices by the City, its residents, and businesses.

Action 1: Lengthen the allowable payback period for the City's energy efficiency investments from 7 years to 15 years to be more consistent with the City's cost of capital, and increase funds for those investments for FY 2010 by \$50,000.

Action 2: The sedans or hybrids purchased by the City in 2009 will have an average city fuel economy 20% greater than Corporate Average Fuel Economy (CAFE) requirements.

Action 3: The City will partner with local vendors, experts, and others to promote the use of products and services that reduce energy use, such as drying racks, cold-water laundry detergent, and power strips. The City will seek to implement this objective by sponsoring awareness campaigns and reducing cost of adoption.

Goal 3: Reduce energy consumption through conservation.

Action 1: The City will direct its employees to regularly shut down their computers and other office equipment at the end of each workday.*

Action 2: The City will develop a checklist for home owners and businesses to perform their own energy audits, aimed at quick and easy modifications that could yield significant reductions in energy usage.

Goal 4: Support interdepartmental planning and prioritization of energy management and investment activities.

Action 1: EPC will endorse the creation of the City's recently empanelled Energy Conservation Committee (ECC) as a model for promoting and instilling the principles of the Eco-City Charter, including the objective of interdepartmental cooperation and planning, in the pursuit of sustainability.*

Action 2: Through the City Manager's Office, make City Department participation and representation in the ECC mandatory in order to assure attainment of the energy goals of the Action Plan and the reduction of government expenditures on energy services.

Action 3: In FY2009 and FY2010, ECC will propose goals and activities for itself for the next 5 years and present these to the City Council. The goals should include plans for promoting energy conservation awareness and education of residents and business owners.

Action 4: In 2009, the City will conduct its plan for energy walkthroughs of a number of major City facilities to be distributed across a variety of City-owned building types (recreational, managerial, public safety).*

Action 5: ECC will conduct outreach to City staff to increase awareness of energy conservation strategies by educating building operators and occupants. All media forms will be used to ensure that all City staff are reached.*

Action 6: The City will use its website and other multimedia tools to advertise and describe the purpose of the ECC and its activities.*

Goal 5: Evaluate the energy needs and impacts within the city in order to set energy use objectives by initiating an energy planning process by 2010.

Action 1: The City government will initiate a process for establishing a City Energy Master Plan by 2009. City staff will conduct a scoping exercise that outlines and identifies boundaries of the plan focusing on household, business, and government energy use in the city, and is mindful of the targets adopted in the Commonwealth of Virginia 2007 Energy Plan and the 2008 Metropolitan Washington Council of Governments - National Capital Area (MWCOG-NCA) Climate Change Report.

Goal 6: Purchase less polluting energy sources for City operations.

Action 1: In FY 2009 and 2010, the City will purchase 5% of its electricity needs through green certificates, which promote the use of renewable power.*

Action 2: Purchase renewable energy credits generated for compliance with state-level renewable portfolio standard requirements equivalent to 6.5% of the City's operational needs in 2010 rising steadily to 20% in 2020.

Action 3: Use sustainable biodiesel for all of the City diesel fleet operations.*

PRINCIPLE: LAND USE AND OPEN SPACE

The City's land use and open space policies must harmonize its built and natural environments to ensure that growth does not jeopardize environmental sustainability and preserves Alexandria's character. The City's land use policies will accommodate increases in people and jobs through green development...

Goal 1: Continue to coordinate land use and site design decisions among City departments (Planning & Zoning, Transportation & Environmental Services, and Recreation, Parks, & Cultural Activities) to ensure compatibility with existing City plans that promote walking, cycling, and taking public transportation.*

Action 1: Ensure that land use decisions incorporate smart growth principles that provide incentives and disincentives to reduce vehicle use and vehicle ownership.

Action 2: Incorporate, where feasible and appropriate, improvements to bike and pedestrian facilities into ongoing Small Area Plans to ensure compatibility with the Bike and Pedestrian Plan.*

Action 3: Continue to develop and approve Small Area Plans that increase density in and around Metro stations and other transportation hubs.*

Action 4: Promote more pedestrian, bike, and transit usage during land use planning of Alexandria's major thoroughfares, including Van Dorn Street and Beauregard Street.*

Action 5: Continue to incorporate retail streets and/or small-scale retail uses into neighborhood plans, where appropriate and feasible, to increase walking destinations and opportunities for small businesses.*

Goal 2: Ensure that Small Area Plans, as well as new development and redevelopment projects, are consistent with the vision and principles of the Eco-City Charter.

Action 1: Devise a sustainability checklist based on criteria and principles from the Eco-City Charter that Planning & Zoning can use in determining the compatibility of Small Area Plans and new development and redevelopment projects.

Action 2: Prepare GIS maps to identify safest routes for children to walk to their schools, supporting the Walking School Bus Concept.

Action 3: Incorporate open and green space and sustainability standards, where appropriate (e.g., LEED, Sustainable Sites criteria, Low Impact Development principles) into Small Area Plans and the City's Green Building Policies.

Goal 3: Protect and enhance Alexandria's open space and green infrastructure including wildlife habitat, parks, trails, tree canopy, and watersheds.

Action 1: Finalize and release the Urban Forestry Master Plan. Develop a multi-year action and funding plan to implement Plan recommendations.*

Action 2: Explore a policy that expands and supplements current tree canopy coverage standards through a combination of incentives, regulations, and in-lieu fees.

Action 3: The City will lead by example by utilizing low impact landscape practices where possible, such as perennial and native plant species, rain gardens, reduced fertilizer and pesticide usage, and encouraging the removal of invasive species.*

Action 4: Continue work on completing a GIS inventory of trees located in public rights of way and other public lands, and identify locations for new trees.*

Action 5: Promote and expand Living Landscape Program to include "Adopt-a-Tree," "Celebration Tree," and/or other similar program activities, where individuals or organizations can purchase trees through the City and have them planted and maintained throughout the city.

Action 6: Continue to design and develop shaded parking lots through existing Special Use Permit/Development Special Use Permit process; expand to include the retrofitting of existing parking lots.*

Action 7: Identify potential locations to establish new school and community gardens.

Action 8: Set minimum standards for open space and green space in Small Area Plans and other City plans that can be met in part through green roofs, green decks over underground parking, or green surface lots.*

Action 9: Continue progress on protecting the 36 remaining acres, through acquisitions, easements, and dedications, to achieve the City's 100 acre open space goal.*

Action 10: Continue the Open Space Pocket Park program with the design and implementation of pocket parks on East Del Ray Avenue and South Early Street.*

Action 11: Continue progress on Four Mile Run Restoration Master Plan by completing the design competition for the Four Mile run pedestrian Bridge, finalizing the design guidelines and redeveloping the recently-acquired Four Mile Run open space properties in accordance with relevant area plans.*

Goal 4: Ensure that future land use and open space planning and project decisions will neither create or perpetuate social injustice, nor compromise the city's historic character.

Action 1: Continue to ensure representation and participation by affected groups in the Master Plan and Small Area Planning processes. Continue outreach efforts to engage low income and minority residents in land development project decisions within their neighborhood.*

Action 2: Continue to identify opportunities for affordable housing and mixed income housing in Small Area Plans throughout the city.*

Action 3: Ensure that mixed income development incorporates spaces for on- or near-site community support services (e.g., child care), where feasible and appropriate.*

Action 4: Continue to consider the importance of location of open space and public transportation to potential mixed income sites when preparing Small Area Plans or reviewing development projects.*

Action 5: Incorporate sensitivity for the city's historical character, properties, landmarks, and archeological endeavors in planning decisions.*

Goal 5: Conduct outreach and education on sustainable land use practices, policies and programs.

Action 1: Provide ongoing training, seminars, and workshops for City staff and residents about sustainable land use practices, policies, and programs, and identify and publicize existing learning opportunities available through local colleges, universities, and other sources.

PRINCIPLE: WATER RESOURCES

Alexandria's past, present, and future are indelibly linked to the Potomac River and the quality of life the river sustains. Water quality in Alexandria will be managed in a sustainable manner consistent with good stewardship of the local streams, the Potomac River and the Chesapeake Bay for the public health, ecological and recreational benefits of current and future generations.

Goal 1: Promote citizen involvement in and awareness of water quality and resource issues, particularly with regard to regulatory requirements of the Municipal Separate Storm Sewer System (MS4) permit.

Action 1: Continue compliance with Commonwealth and Federal statutes, and continue to improve the City's Municipal Separate Storm Sewer System (MS4).

Action 2: Establish a citizen stream monitoring and clean-up program, and encourage active participation by Alexandria City Public Schools (ACPS).

Action 3: Promote best management practices (BMPs) for stormwater through workshops (e.g., rain barrels, rain gardens, proper application of fertilizers and pesticides) and demonstrations (e.g., "water wise" garden tours, increased access to green roofs).*

Goal 2: Maintain and enhance stormwater and sanitary infrastructure and stream systems to minimize environmental degradation.

Action 1: Continue identifying sewer separation opportunities through the Area Wide Reduction Plan.*

Action 2: Support and provide information to the Stormwater Working Group in seeking mechanisms to finance infrastructure improvements.*

Action 3: Continue stream stabilization and restoration efforts (Cameron Run/Holmes Run Watershed Feasibility Study, Four Mile Run Master Plan and Demonstration Project, Strawberry Run Stream Restoration) and complete programs to improve water quality and quantity reduction capabilities (e.g., Cora Kelly Green Roof and Bioretention Area retrofit).*

Goal 3: Promote, require, and invest in water conservation infrastructure.

Action 1: Focus water conservation outreach and homeowner incentives in areas served by combined sewer systems.

Action 2: Explore a reclaimed water reuse partnership between the City and Alexandria Sanitation Authority.*

PRINCIPLE: AIR QUALITY

Alexandria faces significant challenges in improving air quality including those presented by emissions from vehicles, older industrial facilities, and the regional transport of air pollution. Given that one in eight residents has a respiratory illness, the City should influence and control emission sources in a manner that reflects the choices and wishes of the community.

Goal 1: Improve ambient air quality.

Action 1: Continue efforts to comply with all National Ambient Air Quality Standards (NAAQS) to reduce exposure to ambient air pollution.*

Action 2: Continue existing compliance efforts with major point sources to reduce air pollution in Alexandria.*

Action 3: Produce an easy-to-read publication (including maps and GIS tools) that details existing emission inventory data on stationary source emissions in the city.*

Action 4: Continue and expand education for City staff in the use of City vehicles and equipment by establishing an Air Quality Action Day Plan for City operations.*

Action 5: Post "NO IDLING" educational signs at or near Metro or other drop-off locations and transportation hubs where idling is prevalent.

Action 6: Encourage the development of a Green Taxi fleet by setting tight miles per gallon standards for new vehicles.

Goal 2: Reduce off-road/mobile emissions by promoting more environmentally efficient lawn care and construction equipment.

Action 1: Convene a work group of City staff and equipment providers/businesses to discuss the pending U.S. Environmental Protection Agency (EPA) regulation of two- and four-stroke engines, with a long term goal of banning the sale and use of gas-powered garden equipment.

Action 2: Educate citizens on the environmental impacts of old lawn/mobile equipment using existing City and community outreach activities and publications (e.g., FYI, web sites, civic association newsletters, etc.).

PRINCIPLE: TRANSPORTATION

The City of Alexandria will encourage modes of transportation that reduce dependence upon the private automobile by promoting mass transit and pedestrian- and bike-friendly transportation networks. The City will integrate transportation options with land use decisions in order to ensure a healthy environment while continuing economic growth.

Goal 1: Move aggressively to change the culture of city streets from "cars first" to "people first" by implementing development and transportation projects consistent with the following level of precedence: pedestrians, bicyclists, public transportation, shared motor vehicles, private motor vehicles.

Action 1: Implement actions outlined within the following completed plans: Transportation Master Plan, Bicycle and Pedestrian Mobility Plan, and An Environment for a Healthier Alexandria Study, and treat these programs as high priorities. The City will take advantage of all potential funding sources, in particular following through

with the improvements listed in the Congestion Mitigation and Air Quality Improvement Program and the Regional Surface Transportation Program.*

Action 2: Pass a resolution adopting the principles of Complete Streets (as recommended by the Transportation Master Plan) and Low Impact Development in road projects wherever practicable.

Action 3: Continue to conduct audits of the streetscape to improve safety for vehicles, pedestrians, and cyclists, and remove street clutter that contributes to the causes of accidents.*

Action 4: Continue to improve facilities for cyclists by*:

- a) Adding 2 miles of bikeways annually and piloting innovative projects on an annual basis as outlined in the Transportation Master Plan;
- b) Conducting a feasibility study for a bike sharing program; and
- c) Increasing bike storage and bike parking as outlined in the Transportation Master Plan, and continuing to offer temporary bicycle parking at special events.

Action 5: Continue to improve the experience of current and potential transit users by*:

- a) Continuing the development and deployment of transit information technologies and the eventual coordination of these systems with other regional service providers to provide a seamless delivery to users. This will commence with the contract to provide real-time information about DASH Bus services;
- b) Undertaking a study of rapid transit needs across the city; and
- c) Improving access to transit by requiring all new buses added to the DASH Bus fleet to have bicycle racks.

Goal 2: Educate individuals and organizations on the availability of transportation alternatives that will reduce dependency on single occupancy vehicles.

Action 1: Continue, expand, or implement the current transportation and bike pedestrian education programs such as*:

- a) Programs that encourage children to walk or cycle to school;
- b) Cycling proficiency program with a test for all school age youth; and
- c) Local Motion workshops and other related transportation demand management programs.

Action 2: Meet with local associations—residential and commercial—to discuss and promote the merits of reduced dependency on private vehicles.*

Action 3: Use existing informational tools, such as Local Motion, Alexandria eNews, FYIAlexandria, local media, the EPC and other organizations to promote the benefits of transportation alternatives.*

PRINCIPLE: BUILDING GREEN

Alexandria's government, businesses, and citizens impact our environment through the choices they make when renovating existing structures and constructing new ones. These choices manifest themselves in the quantity and types of energy we use, the impact we have on our water quality, the amount of waste we create, the amount and quality of green space available to us, and our public health.

Goal 1: Building on the City's green building policy, promote the idea that all development, either new or renovation, should be constructed with the lowest environmental impact as is reasonably practical. It should be remembered that retaining a building is often the best environmental solution to a particular problem.*

Action 1: Establish and promote green building standards for new commercial and residential development. Use nationally recognized criteria, such as those of the Leadership in Energy and Environmental Design (LEED) in establishing such standards.*

Action 2: Pursue conformance with green building standards as part of the Development Special Use Permit process.

Action 3: Provide green building and site design education and training to development staff in appropriate City agencies.

Action 4: Arrange for Plan Review Staff to receive LEED certification.

Goal 2: Expedite the Commonwealth's adoption of further green building standards.

Action 1: Request the Commonwealth of Virginia to adopt the latest International Code Council (ICC) building code amendments (which include elements to increase energy conservation measures) by 2011.

Action 2: Identify and encourage enhanced green measures that may be added to the next Virginia State Amendments to the ICC Building Code.

Goal 3: Provide information and technical assistance regarding green building practices to businesses and residents.

Action 1: Identify a local non-profit that can provide green building information and technical assistance to citizens.

Goal 4: The City Council will lead by example in green building practices.

Action 1: All new construction and renovation of City buildings, where feasible, will meet a LEED Silver rating, as a minimum.

Action 2: Identify a potential demonstration project for the City to achieve LEED Platinum status.

Action 3: Conduct feasibility study to install, in phases, a green roof on City Hall.*

Action 4: Encourage city-wide support for the conservation and improvement of the city's existing built resources while maintaining the unique character of the city's districts.*

PRINCIPLE: SOLID WASTE

Recognizing that managing waste is a public health issue as well as a quality of life issue, Alexandria will maintain its well-preserved public image by managing, handling, and disposing of solid waste in an environmentally sustainable manner.

Goal 1: Meet the City's goal of 35% diversion through increased waste reduction and reuse with new programs and incentives implemented by 2011.

Action 1: The City will discourage the use of bottled water in City facilities and at City functions.

Action 2: Encourage the Chamber of Commerce to work with local businesses to discourage the use of plastic or "one-use" bags and encourage the use of reusable bags as part of the "Proud to be a Green Business" initiative.

Action 3: Promote and educate the building industry about the need to recycle materials recovered from development sites by including information on how and where to recycle materials in all permit applications by 2010.

Goal 2: Expand City recycling programs to exceed the Commonwealth recycling rate mandate of 25% and achieve a target diversion goal of 35% by 2011, as outlined in the City's Solid Waste Management Plan.

Action 1: Expand the number and type of materials collected in the recycling curbside program (e.g. plastic tubs, aluminum foil/trays, empty aerosol cans, and rigid plastics).*

Action 2: Expand the multi-family (including condominiums and rental apartment complexes) recycling program by mandating recycling at commercial and multi-family developments by changing the enforcement ordinance/code to give the City the authority to fine property owners and managers for noncompliance with existing and new recycling requirements, as recommended by the Solid Waste Management Plan.

Action 3: Increase recycling in City-run facilities and educate City employees about this effort. Require compliance of all City-run facilities with new and existing recycling requirements. A pilot program in City Hall will be initiated and retrofit containers will be used as recycling bins in the parking facility. When the recycling contract is renegotiated in 2009, all City-run facilities will be covered.*

Action 4: Phase in a requirement for recycling at public and privately sponsored community events as a condition of Special Events Permit.

Goal 3: Develop an outreach strategy to educate the public on new and existing recycling mandates as well as opportunities for re-use through multiple communication and education strategies.

Action 1: Develop & launch a recycling education poster campaign at Metro stations and DASH buses and bus stops.

Action 2: Hire a full-time recycling coordinator to manage the commercial and multi-family recycling program, and to assist property owners and managers with implementation.*

Action 3: Expand the City's Solid Waste webpage and provide printable materials to educate residents on recycling programs.*

Action 4: Utilize the Volunteer Bureau and other resources to solicit volunteers to help with waste reduction outreach at Alexandria City Public Schools (ACPS) and businesses.

Goal 4: Increase the diversion of organic solid waste from disposal by improving and expanding the City's existing organic waste recycling program.

Action 1: Promote residential composting and grass-cycling through a partnership with Community Gardens, Master Gardeners, VA Cooperative Extension, expansion of composting workshops, and hosting a video on composting on the City's Solid Waste web page.

Action 2: Support and promote initiatives, such as "Proud to be Green Businesses," to encourage composting of food waste by commercial entities.

Goal 5: Maintain programs for ensuring that solid wastes are managed in accordance with Commonwealth and Federal laws and regulations in a manner that protects health, safety, and the environment.

Action 1: Expand the drop-off hours for household hazardous waste to reduce the materials contributing to the toxicity of the waste stream, and produce educational materials (with an emphasis on modern light sources that contain mercury) that stress the importance of using this facility and other methods of hazardous waste disposal.*

Action 2: Utilize mapping (e.g., Geographic Information Systems (GIS)) technology to optimize trash truck routing, thereby reducing fuel costs without impacting the level of service.

PRINCIPLE: ENVIRONMENT AND HEALTH

Sustainability is not just about the health of the earth; it is also about human health. Indoor and outdoor air quality, water quality, land use planning, toxic chemical exposure, noise and light pollution, and the safety and habitability of buildings directly impact human health and the natural environment.

Goal 1: Promote respiratory health and improve indoor air quality in both new and existing residences by improving ventilation and reducing exposure to air contaminants including secondhand smoke, radon, lead, mold, and other contaminants.

Action 1: Educate citizens about potential threats of asbestos, mold, radon, second-hand smoke, lead and other indoor air contaminants. Include publications, and programs designed for non-English speakers. By December 2009, produce a handout aimed at individuals renovating their properties advising them of these hazards.*

Action 2: By September, 2010, gather better data on the incidence of respiratory illness in the city. The hospital and a local university's Masters of Public Health (MPH) program might help to gather this data. This data will be needed for the next Community Environmental Health Assessment, as part of the planned larger community health assessment that will end by 2011.

Action 3: Further develop the Health Department's Respiratory Health Complaint Investigation Program by reassigning a portion of existing Environmental Health Division staff resources by September 2009, and including a budget supplement to meet the costs of FY2010.

Goal 2: Improve indoor air quality and health, in both new and existing work places by improving ventilation and reducing exposure to air contaminants including organic solvents, secondhand smoke, lead, and mold to promote respiratory health.

Action 1: Revive the "Proud to Be Smoke-Free" restaurant program and increase the number of participating restaurants by 20% over the number participating under the previous plan by 2011.*

Action 2: By October 2009, revise the Health Department regulations governing nail salons to put more emphasis on indoor air quality, including ventilation and reducing exposure to volatile organic compounds (VOCs).

Action 3: By April 2010, create a "Smoke-Free Work Place" program that encourages all work places in the City to go smoke-free and recognizes those that do.

Action 4: Continue to support Commonwealth legislation to allow localities to ban smoking in bars, restaurants, and other public places.*

Goal 3: Encourage healthy lifestyles and improved air quality by providing safe, active transportation opportunities, in order to reduce obesity, chronic diseases such as diabetes, heart disease, and stroke, and respiratory diseases.

Action 1: Implement the Bike and Pedestrian Mobility Plan, focusing on Safe Routes to School, improving pedestrian and bicycle infrastructure, and increasing the number of cyclists and pedestrians.*

Action 2: Work across City departments to develop a Pedestrian Design Guide to be issued by the City engineer in 2009.*

Goal 4: Improve access to fresh food, preferably locally grown and within a ½ mile walk for all residents.

Action 1: By September 2009, the Health Department will create a food system resource map using a Geographic Information System to include existing stores, markets, restaurants, and other food related programs to direct future efforts to increase access to accessible food.

Action 2: Continue to explore opportunities to expand and promote farmers' markets, especially in low-income neighborhoods.

PRINCIPLE: IMPLEMENTATION

Improving environmental quality, conservation and the public welfare requires a harmonized approach to implementation, as well as collaboration both within and around Alexandria, the primary responsibility of environmental stewardship shall be equally shared by all Alexandrians.

Goal 1: Identify and promote action steps for increasing financial investment in sustainability.

Action 1: Estimate financial investments necessary to undertake major environmental action plan steps.

Action 2: Form a task force of stakeholders to examine the means and consequences of implementing economic measures such as tax incentives and disincentives,

subsidies and fees to increase the City's resources that support sustainability initiatives and foster changes in citizens' behaviors.

Action 3: Meet with City Council, staff, and public to explore establishment of an Eco-City Fund that would provide money for citizens at below-market interest rates for sustainability projects such as green home improvements within the city.

Goal 2: Provide education and outreach to citizens to help achieve environmental goals and objectives.

Action 1: Hire an additional staff person to work on environmental education and outreach on Eco-City objectives.

Action 2: Establish Internet education and participation resources and tools, including an Eco-City blog.*

Action 3: The City and EPC will conduct face-to-face meetings with major community and neighborhood groups to raise awareness about and support for Eco-City Alexandria.*

Action 4: The City and EPC will establish an annual report card on key environmental quality and performance metrics, and on action steps accomplished by the City and publish these results.

Action 5: The City and EPC will conduct an Open House on Eco-City Alexandria.*

Action 6: Engage a broad range of stakeholders – citizens, schools, nonprofit organizations, civic associations, and private partners – to become volunteers in activities to protect and restore the city's natural resources such as water monitoring, stream and park clean-ups, restoration projects, and removal of invasive species.

Action 7: Develop GIS "green" maps for outreach and education purposes, such as environmentally-related City projects, services, alternative transportation, restoration projects, and air quality.*

Goal 3: Provide education and outreach to local businesses and related organizations to help achieve environmental goals and promote the development of green jobs within the city.

Action 1: Establish a series of Open House events for businesses to showcase their application of green practices to other businesses and citizens, and to provide networking opportunities.

Action 2: Establish Internet education and participation resources and tools for providing information on green business practices.*

Action 3: Establish a leadership group of business organizations, managers, and owners to lead business community efforts to help achieve the City's environmental goals and objectives.

Action 4: Examine the feasibility of establishing a Green Business certification program for one or more business sectors within the city.

Action 5: Examine the feasibility of leveraging the city's restaurant, hospitality, and tourism industries by combining green business practice standards and accomplishments with marketing initiatives.

Action 6: Create Eco-City Award to recognize outstanding sustainability efforts by members of the city's business community.*

Action 7: Identify and support public-private partnerships in order to create the foundation for the development of a green workforce in the city.

Goal 4: Continue steps to improve the City government's own green culture.

Action 1: Increase City staff knowledge of and coordination on environmental activities.

Action 2: Hold a retreat for City staff to discuss sustainability efforts.

Action 3: Establish a volunteer program to enlist City employees in helping meet environmental objectives in City operations.

Action 4: Develop a City "Green Purchasing Policy" that includes materials such as bio-based, recycled, and environmentally preferable products.

Goal 5: Increase community participation in carrying out implementation activities.

Action 1: Develop and implement a plan to target volunteer support for implementing Environmental Action Plan projects.*

Action 2: Increase collaboration and participation with other City volunteer committees.

Action 3: Coordinate Eco-City volunteering with other City events, such as Spring for Alexandria, and other activities beyond Earth Day.*

Goal 6: Re-examine EPC's composition and membership.

Action 1: Discuss changing the seat dedicated to a high school student and replacing the seat with an ACPS member or other education professional; discuss whether overall EPC membership should increase to meet new demands.

Action 2: Invite input and participation in Earth Day by members of local high school environmental clubs.

Action 3: The City and EPC will prioritize and develop a process and structure for EPC input and participation in the activities of other volunteer committees, including, but not limited to, those working on Small Area Plans, budget and financial affairs, transportation, waterfront, planning and zoning, industrial development, parks and recreation, public health, and water quality.

ECO-CITY ALEXANDRIA

environment | economy | community

Environmental Action Plan – Phase I *Response to Public Comments*

Public comments received by the Environmental Policy Commission (EPC) on the draft Environmental Action Plan – Phase I are set forth below according to Principle Area, and authors are identified where known. EPC responses are set forth in italics.

GLOBAL CLIMATE CHANGE AND OTHER EMERGING THREATS

1. Carbon emissions: these are now a major priority. This should be a Principle focus – focus on a rising Potomac River.

The EPC recognizes that this is the most serious long term threat the city faces and so has made the Emerging Threat Principle the lead topic in the EAP. Alexandria can encourage a reduction in energy conservation, educate its citizens, and reduce the carbon footprint of City operations, and do its best to prepare for impacts that might result from climate change. Nevertheless, City government only produces 3% of the total emissions in Alexandria, and the City has limited abilities to impose carbon emissions reductions on private businesses or citizens. The Environmental Action Plan (EAP) has been edited to address these issues as much as is possible in the short-term.

2. Carbon emissions: Need to add a comment about supporting reduction in carbon emissions

EPC agrees, and this has been added to Energy Principle Goal 1.

3. More Greenways: Areas of development such as Potomac Yards and Carlyle-Eisenhower Avenue area are barren vast parking lots. Zoning, business development must include greenways, buffer zones. Take an idea from natural resources conservation programs that are suggested for planners.

Reports by Planning and Zoning now contain a section on sustainability and all planning is reviewed against the need for low impact in its widest sense. Goals 2 and 3 under the Land Use and Open Space Principle will address this suggestion.

4. Climate Change Infusion: Emphasize the urgency of climate change more throughout the course of the document. Specifically, I'd like to see a climate change component to each goal to emphasize the importance and centrality of the issue.

See response to Comment 1. This suggestion would require us to do a complete overhaul of the document and not all important actions are immediately germane to climate change. However, the EPC agrees that climate change is our most pressing threat, and the preamble of the action plan as well as its order will reflect this. All of the proposed EAP actions will improve the environment of the city will also have an impact of reducing the man-made causes of climate change – at least within Alexandria.

ENERGY

5. Solar Use: 1) Provide information on installing solar panels. 2) During the fall, sponsor solar tours -- there are rarely any in Alexandria homes. 3) Provide information to City residents on how to install residential solar panels – what is the permitting process? (Place this under BAR or code enforcement and energy)

The City is working towards having an environmental education/resource center but this will have to become a Phase II item due to the financial situation. There is a role for industry here rather than the City as, after all, economics will be the prime determination of the source of energy for most people. BAR is aware of the issue of alternative energy sources in 'delicate' parts of the city.

Energy Goal 1: Action 1 gives the City the authority to contact industry experts and develop a plan to help disseminate relevant information on solar panels for residences.

6. Solar: Goal 5: Action 4 – conduct a feasibility study also of solar roofing using thin film solar products which per ACEE Report is less expensive than nuclear power

Although the City is authorized to conduct said study under Goal 1: Action 1, this project is beyond the scope and of the EAP and the City itself.

7. Solar Energy -- invest in solar for city buildings

The City's Energy Conservation Committee reviews alternative energy sources for the City. Potential energy sources are addressed by Goals 1, 2, and 6.

8. Electricity Tax: (as in Boulder, Colorado) -- Does the city have a plan to tax electric users like kWh city tax? Eco Incentives exercise but taxing is limited by Commonwealth

The City already has utility taxes on electricity, natural gas, and water use in Alexandria. Rates can be found on the City's website.

9. Traffic Lights: Convert city's traffic lights and street lights to LED bulbs happening

This action is already in the works.

10. Energy Efficiency in Residential and Commercial Sectors: 1) Help with public education and awareness of energy efficiency for homeowners. 2) Need more emphasis on energy efficiency beyond city buildings – look at impact on residential and business sectors.

1) Education and Outreach comment has been addressed by Implementation, Goal 1.

2) Addressed by Energy, Goal 2: Action 3.

Phase II of the action plan will include energy efficiency programs for commercial and residential buildings and structures.

11. Energy Efficiency in Public and Private Buildings: Our buildings are responsible for 50% of all our energy use. We are focusing a lot on standards for new buildings which is good, but the larger majority of our building infrastructure is and will continue to be existing buildings. I suggest we investigate ways the city can facilitate and incentivize energy upgrading all our infrastructure, public and private, by 2020.

See response to Comment 5. The proposed environmental education/resource center would be the best way to introduce this idea to citizens because all the information will be in one place with staff on hand to answer questions and give further direction. However, the environmental education/resource center will be pushed back to Phase II due to the worsening economic climate. In the interim, the Outreach Coordinator and the City's Energy Manager might be able to facilitate a forum among different classes of property owners to educate them about the City's direction and encourage owners to make changes, but this will depend upon FY10 budget. The EAP also calls for a group to look at financial incentives across the full range of environmental activities in Implementation Goal 1.

12. Energy Audit Incentive Program: Through partnerships with energy audit businesses, offer Alexandria businesses a discount or incentive to have an energy audit. Even if no incentive is available, just send all of the businesses in Alexandria an email informing them about the benefits of having an audit. If possible, get a list of businesses from the business tax payer list then possibly in a separate email, tell them to tell their customers how many green "things" they do, simply as: we recycle or we use recyclable cups and plates (part of "Proud to Green Businesses" program).

See Goal 3: Action 2 and Implementation Principle Goal 3.

13. Lawn Equipment: In Goal 2, include education of impacts of old lawn / mobile equipment to lawn-care companies that service the City and its residents. Encourage conversion to newer cleaner technology.

This is covered by Air Quality Principle Goal 2.

14. Education and Outreach: Promote programs to encourage residents to use electrical appliances during off-peak hours to balance coal-fired plant emissions

The EAP does call for energy education to citizens, but the bigger issues are State or Federal areas of concern. There is a narrowing of the gap between electricity demand and available supply which will dictate action. Whether it is the building of more coal-fired stations such as Wise County, rationing of day time supply or, in time, more nuclear plants, is beyond Alexandria's remit. Additionally, coal is a baseload technology, which means it is run at all times. Shifting consumption to off-peak

hours actually increases the consumption of coal and relative to the consumption of natural gas. To reduce coal consumption one needs to control both how electricity is supplied, as well as reduce total demand. Action by the federal or state governments is necessary to effectively achieve this goal.

15. Building code energy standards -- Building code energy standards and levels are not stringent enough; All new construction (City) to meet LEED silver – this is not enough.

The EPC agrees, but the City can only enforce Commonwealth standards. The Building Green Principle addresses related issues.

16. Permitting Function on Renewable Energy Sources -- Consider permitting of renewable energy sources – just so that the city has a record of where these are located, not for inspection.

EPC was unable to determine the intent or potential benefit of this recommendation.

17. Energy Plan for Eisenhower -- Create an energy development master plan (like a site plan but for the entire area) for the Van Dorn METRO and Eisenhower corridor. There is tremendous potential for the use of district heating in mixed use development if it is planned now.

See Goal 5. Due to the City's limitations under the Virginia law, only economics will ultimately dictate energy source decisions. But it is agreed that there is a potential for district heating schemes in the area.

18. Climate Change – this should be the central focus on the action plan with a strong connection to carbon emission reduction

See response to Comment 1.

19. City Building Retrofits – Convert all city buildings to the use of geothermal energy systems.

While economics has to play a role in Capital Investment Decisions, the City recognizes that conservation is a good start. The many goals and action items under the Energy Principle serve to evaluate and incorporate renewable energy wherever feasible.

20. Goal 3 Action 1 – also use power strips to turn off to prevent phantom power loss for government as well as county schools.

Incorporated into revised Energy, Goal 2: Action 3.

21. Goal 6 Action 1 – purchase 20% electricity through renewables and Goal 6 Action 2 – purchase 100% electricity through renewables

This is too ambitious to implement in Phase I, but could be revisited in Phase II.

22. Bus Conversion: Encourage the conversion of DASH buses and City of Alexandria schools buses to lower emission vehicles.

Addressed in Transportation Goal 1, Action 1.

23. Taxicabs: Encourage the cab companies to convert cab fleets to low emission/high MPG vehicles.

See Air Quality Principle Goal 1: Action 6.

LAND USE AND OPEN SPACE

24. Historic Preservation: The Historic Preservation Commission is thrilled at the great efforts of the EPC in drafting the draft Environmental Action Plan. Specifically, we are interested in seeing historic preservation more explicitly mentioned in the plan. We feel that a goal could be added to the first Principle regarding Historic Preservation, as well as the Building Green Principle. We hope to continue to communicate with the EPC regarding the EAP. If you have any questions, please do not hesitate to contact me or other members of the commission. (*Katie Blakesley, Historic Preservation Commission member*)

The EAP has been revised to address historic preservation more explicitly in Goal 4, as well as a new action (Action 5) under this goal.

25. Historic Preservation: Personally, I am very excited about Land Use, Goal 2: Action 2 (safe walking to schools/GIS), Goal 3: Action 7 (gardens), and Goal 4: Action 3. For Transportation, Goal 1: Action 4 (bike trails, lanes) and Goal 2: Action 1. I applaud the idea of enriching and expanding open space. I am distressed at opportunities lost at the James Bland Redevelopment and great reduction in open space. *Katie Blakesley (Katie.blakesley@gmail.com) for the Alexandria Historic Restoration and Preservation Commission.*

See response to Comment 24. The EPC is also very concerned about the preservation of open space, as reflected in Goal 2: Action 3, Goal 3, and Goal 4: Action 4.

26. Historic Preservation: Please remember that the goals in the Action Plan need to include sensitivity and compatibility in the Historic District. This relates to land use, energy, green buildings, etc. All planning must incorporate recognition of the importance of historical buildings, other landmarks, and archeological endeavors. This section should incorporate protection and enhancement to historic sites, watersheds and vistas in the City's planning process. (7 similar comments)

See response to Comment 24.

27. Open Space Used to Preserve Historical and Archaeological Sites: Open space decisions should encourage easements of gardens and alleys, especially in Old Town, where such sites could be of historical or archaeological significance. Also, these sites can be preserved by promoting open space.

This suggestion is now addressed by Goal 4: Action 5, as well as the Alexandria Open Space Plan.

28. Open Space and Historic Preservation: The open space that sustains the green canopy is an essential feature of each of the city's historic districts. In turn, the Eco-City land use and open space program can reinforce the preservation and open space objectives, so that the efforts of the two programs can be mutually beneficial.

See response to Comments 24-27.

29. Historical Elements of Neighborhoods: Unique or historic properties should be encouraged through the planning process since they influence the character of a neighborhood. Don't limit to the requirement that the structure must be more than 100 years old or within a historic district.

The EAP has been revised to address historic preservation more explicitly in Goal 4. The question of what merits historic designation is outside the scope of the Eco-City initiative.

30. Waterfront planning: This is upcoming but no mention in the Eco-City Plan and it relates to many Principles.

Waterfront and all other planning efforts will be subject to all of the goals and action steps under the Land Use and Open Space Principle.

31. Fruit: Goal 3: Action 5 - Encourage the purchase and planting of fruit and nut trees to ensure a local currency of calories that can be accessed by the community, schools, etc.

This suggestion needs to be further evaluated by the EPC and the City, given the implications for property rights and public safety. Opportunities related to fruit and nut trees will be considered for Phase II.

32. Sustainable Agriculture: Action 9 - Use the pocket park at East Del Ray as an Eco-City showcase in sustainable agriculture design by designing and planting a perennial fruit/nut garden/orchard that provides food for neighborhood residents, could also involve students from Mount Vernon and George Washington to learn about urban farming as a future career choice. (*Scarlett Williams - Custis Ave. and would be happy to discuss further.*)

The design for the aforementioned parks has been finalized, and the creation of a community garden was deemed to be inappropriate in this particular location. However, opportunities for new community and school gardens are addressed under Goal 3: Action 7.

33. Landscaping and Historic Districts: Promote and encourage plantings and landscaping appropriate to the historic character of the city's historic districts. This will help to preserve the green canopy in those areas. (*Historic Commission*)

The EAP has been revised to include sensitivity to the historic character of the City (Goal 4: Action 5) while continuing to prioritize sustainable landscaping and the use of native and non-invasive plants (Goal 3).

34. Landscaping Practices: City should lead by example by using low impact landscaping practices, such as maximizing the use of native plant species, rain gardens, and minimizing the use of fertilizers and pesticides, including herbicides.

This suggestion is consistent with Goal 3: Action 3.

35. Landscaping – Perennials: The city should reduce its reliance on annual plantings and use more perennial plants in city planters and beds.

This suggestion is consistent with Goal 3: Action 3.

36. Landscaping: Work with homeowners, apartment management companies, major landscaping/ lawn maintenance, and golf courses to educate and provide alternative ways of landscape maintenance. Emphasize mulching leaves rather than always using leaf blowers, using environmentally sound fertilizers and keeping storm water drains free from debris. Lawn companies should be required to have basic education regarding eco-healthy lawn care for all employees.

These suggestions will be addressed under Goal 5: Action 1, as well as Implementation Principle Goal 1 and Energy Principle Goal 2.

37. Tree Canopy: The city should be more large-scale in its thinking on this and more regulation on the homeowner or small property owner in an already very regulated city, will not do much to assist in green canopy goals. Perhaps it should offer incentives for communities to plant shade trees adjacent to rights of way in neighborhoods and work from that angle.

Goal 3: Action 1 is intended to address this concern; much work has gone into the Urban Forestry Master Plan, and it is now time to implement it.

38. Invasive Plants: All plant sales and trees sold, planted and maintained through the city (Earth Day, etc.) should only be native species.

The EAP has been revised to address concerns regarding invasive plants. However, native and non-invasive are not the same. While native plantings should be emphasized, non-native species should not be ruled out, particularly because climate change may dictate that some native plants are no longer as viable.

39. Invasive Plants: The city should begin a public awareness and outreach campaign about plants that are invasive.

The City currently has some outreach, but lacks staffing resources to do more. Goal 5: Action 2 and Implementation Principle Goal 1 address this need.

40. Invasive Plants: Need to mention the need to remove nonnative, invasive plants on city land and discourage their use on private property (*Ira Gitlin*)

The EAP was revised to include the removal of invasive species to the outreach and education goal under the Implementation Principle (Goal 2: Action 6).

41. Invasive Plants and Volunteers: The City's Natural Resource Manager will provide guidance and other assistance to citizen-led groups that initiate and implement efforts to provide long-term solutions to invasive plant infestations in Alexandria parks and natural areas.

See response to Comments 35-39. The Ford Nature Center has vigorously pursued the development of a more comprehensive volunteer program to address invasive plant removal, along with other conservation-related issues, in City parks. But, at present, the Nature Center lacks staff to fully implement such a program

42. Volunteers: Energize the existing volunteer program – Remove Invasive Plants (RIP) –mobilize more volunteers to work with experts and city staff to combat invasive plant species in city parks – Jim Clark and Susan McLaughlin

See response to Comment 39. The Ford Nature Center educates City residents and groups (i.e., public & private schools, Scouts troops, civic organizations, etc.) about invasive plants and the problems they pose to native plants and wildlife. Additionally, these residents/groups are regularly utilized by the Nature Center in volunteer projects to remove invasive plants from City parks.

43. Commission Collaboration: There should be stronger collaboration between the Alexandria Beautification Committee and the EPC to address these shared interests. Add new action item – “The awards given out by the Alexandria Beautification Committee will support the goals of the Eco-City Charter.” (Susan McLaughlin)

Improved collaboration between the EPC and other City boards and commissions is addressed under Implementation Principle Goal 6: Action 3.

44. Small Scale Retail into Neighborhoods: I think implementing this is particularly important! Land use and transportation decisions must be made together. Every neighborhood should be walkable. (2 comments)

This suggestion is currently addressed by Goal 1 and all of the associated action items.

45. Open Space Funding: Apply to National Park Service for Urban Park and Recreation Recovery Program to secure \$10 million needed for active recreation park "open to all from all directions" on 2/3 of the city square east of the Charles Houston Center bounded by Wythe Street on the south and N. Alfred Street on the West. The park should have a pavilion facing Whythe Street to match the walking street character of Whythe and provide supervision for the rest of the park to the north. The rest of the square should have a track for running and open space for soccer practice and instruction for youngsters.

This suggestion is too specific for incorporation into the EAP, however the comment has been forwarded to the Department of Recreation, Parks and Cultural Activities.

46. Green City: GIS Map has a lot of good information and presents a Green City! Take it everywhere, schools, libraries, businesses, events, and add practical resource data.

Thank you! GIS tools will play a key role in all of the outreach and education activities contained in the EAP.

47. Tree Replacement: Restore the RPA along Eisenhower Avenue to forest conditions. Attempt to compensate for the trees that VDOT removed along the beltway. (Jennie Morris, redweather@aol.com) (3 comments)

The tree removal noted by the commentators is a result of state and federal actions to expand the Beltway and reconstruct the Woodrow Wilson Bridge. The City will discuss replanting plans with the Commonwealth, in a manner consistent with the Urban Forestry Master Plan.

48. City tree plantings: Increase tree planting, especially along major roadways, of the types of trees and shrubs that are highly efficient in CO₂ intake – 3 comments

This suggestion is covered in multiple action items under Goal 3, particularly with respect to finalizing and implementing the Urban Forestry Master Plan.

49. Potomac Yard Redevelopment: Call for a sustainability plan for Potomac Yard that makes a model “green” community with water reuse and energy generation onsite. Be innovative! Consider a solar village with district heating or all PV heating. (3 comments)

EPC is pleased to note that the current plans for the Potomac Yard development include many sustainable features, and is continuing to advocate that all development in Alexandria be sustainable. Innovation will be required to achieve most of the goals of the EAP. As this comment applies to all new development, it is addressed under Goal 2 as well as under the Green Building Principle.

50. Alternative Building Design: Goal 1—Allow alternative building design to be approved for local code; strawbole and cob -- as they are sustainable and energy efficient building methods.

This suggestion is addressed by the goals and actions under the Building Green Principle. Any necessary code changes will be addressed in Phase II.

51. Alleys: Classify alleys as pervious surfaces to remove a lot of impervious coverage.

The EPC disagrees with the notion that some impervious surfaces should be reclassified as pervious in order to improve the percentage of impervious surface previously calculated by the City. The preferred approach is to physically convert impervious surfaces, such as alleys and parking areas, to include more sustainable features (as stated in several actions under Goal 3).

52. Code Amendment: The City should consider implementing a special category for site plans that are redeveloping a portion of an existing property. By requiring the developer to follow all rules that new developments are saddled with, many improvements that could be beneficial to the community are sometimes abandoned. (“Something is better than nothing.”)

The EPC disagrees with this suggestion. Redevelopment will occur regardless, and the City needs to ensure it goes forward responsibly with regard to environmental stewardship.

53. Reduce mowing: Reduce the width of grass mowed along city streets and along the GW Parkway. This can save resources and beautifies bike paths by creating a barrier between the path and the road.

The sentiment behind this comment is addressed by Goal 3: Action 3, which requires the use of sustainable landscaping practices. The specific suggestion will be considered by the appropriate City departments during implementation of the EAP.

WATER RESOURCES

54. Impervious Surfaces: Implement tax credits for helping reduce impervious surfaces – e.g., green roofs and changing paved drives to pervious surfaces. Also, set up a case study monitoring station for stormwater and pervious pavement.

The first suggestion will be considered as part of the Stormwater Utility Work Group's efforts, referred to in Goal 2: Action 2, as well as under targeting incentives in Goal 3: Action 2. Research/case studies may already be available on the pervious pavement, and this falls naturally under the MS4 Permit program, which is currently understaffed (Goal 1: Action 1 supports an expanded capability in this regard).

55. Chesapeake Bay watershed: Tie Goal # 1 to include interfaces with the Chesapeake Bay NGOs to stress connection with Chesapeake Bay watershed.

This suggestion is addressed by Goal 5: Action 1 under the Land Use and Open Space Principle.

56. Storm Water Management: This is probably a Phase II suggestion, but I'm particularly concerned about how to control storm water flows into streams with resulting erosion of stream banks, flooding, and pollution.

This suggestion emphasizes the need to expand the MS4 program as supported in Goal 1, and it is also addressed under Goal 2. However, a significant portion of this recommendation will move into Phase II and beyond.

57. Rainwater and Grey Water Reuse: Encourage and facilitate the use of harvested rainwater and grey water in public, commercial, and residential buildings. This would involve coordination of building and health codes as well as setting standards.

This suggestion is addressed by the actions under Goal 3. A grey water demonstration project is planned for Phase II; any necessary code changes will also be addressed in the next phase.

58. Rainwater and Grey Water Reuse: What are the possibilities of home grey water treatment-recycling? Are these systems for home installation? The next step after rain barrel systems?

See response to Comment 57. This would also be an area where outreach/education is needed, and it further justifies hiring an environmental educator/outreach coordinator. Also would naturally fall under Goal 1: Action 3.

59. Outfalls: You say there are 460 of these, and you like to know when one is gushing in dry weather. As a citizen, could I adopt and monitor an outfall? Would that help? (no contact info provided)

Monitoring of stormwater outfalls is the city's responsibility under the MS4 program, which needs to be expanded (and is supported under Goal 1). Citizen efforts are more likely to be focused on stream monitoring and cleanup, under Goal 1: Action 2, as well as Land Use and Open Space Principle Goal 5.

60. Water Conservation and Reclamation: This is probably Phase II but I would like to see consideration of water conservation in buildings and renovations whether through mandates or education. (i.e., encouragement of low-flow fixtures in all public buildings when replacements needed. Water reclamation systems in certain businesses, i.e., carwashes, laundry mats)

Exploring a retrofit-on-reconnect mandate, as well as other water conservation and reuse efforts, is slated for Phase II under Goal 3.

61. Outreach Ideas: 1) Promote education efforts to illustrate the effects of pesticide runoff from lawns on water quality in the city, region. 2) Engage the Beatley Ford Nature Center (in Alexandria) for public outreach on water quality education. 3) Provide more "interpretation/ info "support" for residential water cisterns [good job on rain barrels] 4) Create an outreach program, combined with signage, to explain the purpose of stormwater techniques and include other advertisements.

The suggested education and outreach efforts are addressed under Goal 1, as well as Land Use and Open Space Principle Goal 5. The specific suggestions will be forwarded to the Environmental Educator, once hired.

62. Education and Outreach: While Phase I is not focusing on water volume during storms, an idea is to educate neighborhoods and provide assistance in creating upstream measures to reduce stormwater inflows into storm drains (e.g., create rain gardens that intercept water flows along roads/streets that neighborhoods could plant and care for.)

This is the essence of Goal 1: Action 3 (in connection with Goal 3: Action 1).

63. Code Change Required: The existing city code hampers the ability of residential owners to install rain gardens and redirect their downspouts as a stormwater protection.

Goal 1: Action 3 and Goal 3: Action 1 are intended to assist individuals with incorporating best practices. Any necessary code changes will be addressed in Phase II.

64. Pilot Project: Work with Canal Square owner to use the old canal as a demonstration site for improved stormwater management, depending on tides and rainfall volume.

This will be considered as one of many potential demonstration projects under Goal 1: Action 3.

65. Stream Monitoring: I strongly agree with this but you need more volunteers and then staff to support them.

A successful stream monitoring program will require a commitment from a number of staff and volunteers. EPC hopes that a good starting point would be to establish a program in connection with ACPS (Goal 1 Action 2).

66. Input from others related to stormwater: I have a great deal of information I could share from my association, live in a very active community along Holmes Run Creek (Dowden Terrace neighborhood), and am willing to help in any way I can. (Kasha Helget, khelget@asla.org)

EPC and/or the City will contact the citizen as implementation of Goal 1: Action 3 moves forward.

67. Stormwater BMP Requirements: Rewrite the zoning ordinance to allow for redevelopment/renovation/additions without having requiring BMPs for portions of the project that are not being disturbed. The current requirements can be burdensome and the redevelopment may not occur. Base these requirements on the "project area", not the property.

EPC disagrees with this comment. Redevelopment will occur regardless, and the City needs to ensure it goes forward responsibly with regard to environmental stewardship.

68. Preservation of Riparian Areas. The City should no long use rip-rap rocks along water-ways because it does not preserve the natural habitat and promote riparian growth, that would naturally protect the water front and filter groundwater, improving overall water quality.

This is an interesting idea but came up too late to discuss with City Staff or include in the Phase I EAP. The EPC will look at this as a potential action item for Phase II.

AIR QUALITY

69. Emissions: Monitor mercury emissions from Mirant along with other emissions. Monitor air quality on PM_{2.5} level and publish daily on city website like state of California does. Publish daily air monitoring results prominently on the City website just like a weather report

Mirant already measures and reports mercury emissions to the VA Department of Environmental Quality, the correct authority to monitor and take action if the company exceeds its permit levels on any of its emissions. The City is in receipt of this data and has a watching brief. It would be an expensive exercise for the City to set up a similar system in parallel.

70. CFL Education: Initiate a public education program to recycle CFBs – Otherwise, spent bulbs end up in city's waste to energy plant, further adding Methyl-Mercury to our air.

This is a good point and has been added to the Solid Waste Principle.

71. Mercury Vapors: For dental offices, have advise and consent mandatory in dental offices that use "silver" (mercury) amalgams since the dental amalgams release mercury vapor and dental offices contribute mercury to the water system.

The ADA continues to advise that mercury amalgams are safe for patients but does advocate the use of Best Management Practices (BMPs) to capture waste before it enters the sewerage system. Amalgam may contain up to 49% mercury and to this end a number of dentists in Alexandria have moved to using only resin material. The VA Dental Association issues advice and Commonwealth regulations require Conditionally Exempt Small Quantity Generators (CESQGs – most dentists are CESQGs) to sign an annual statement that they have disposed of their hazardous waste correctly. Being a state issue it would be difficult for the City to enforce something over and above VA requirements (such as traps or separators) although it could presumably bring proceedings if it were to find a gross breach of contamination in the public system.

72. Idling: If possible, initiate a fine for idling (vehicles)

Discussions with the City convinced the EPC that enforcement would be difficult and the return minimal against much greater air quality problems. Whereas coach operators are targeted in Old Town with literature, and to some extent enforcement, the average citizen is not aware of the problems that arise from engine idling. Therefore, the EAP does call for signs and education in Goal 1: Action 5.

73. Leaf Blowers: Running gas powered leaf blowers all day is not healthy for the workers. Encourage lawn businesses to reduce the use of gas powered blowers.

The EPA recently introduced new regulations on gas-powered garden equipment and boat engines that will reduce the particulate emissions from these engines. The law comes into full force in 2012. The EAP asks for stakeholders to meet and discuss the impact of this ruling but also with a view to banning gas-powered tools altogether in Goal 2: Action 1. As such, this does pose problems. The City's own Recreation, Parks and Cultural Activities department would dearly like to move from gas-powered equipment but cannot find suitable alternatives for the large areas they maintain.

Noise can be handled under the City's noise regulations but in general the City prefers to advise and advocate for its citizens.

74. Higher Air Quality Standards: think that we can set higher goals than the current NAAQS. I think that we need to help every citizen understand that the electricity we use, for the most part, comes from a coal mining/coal burning facility somewhere else and that we are directly affecting another community's air quality.

The EAP does call for education on climate change issues which would have an impact on air quality issues as well. The City cannot set standards higher than those set by the Commonwealth. It should be noted that much of the pollution within Alexandria comes from outside the city, often hundreds of miles outside the city. That does not excuse the City from endeavoring to reduce the impact Alexandria has on communities down wind. The City can monitor, educate, and report permit breaches.

75. Publishing Air Quality Data

The EAP does call for the publishing of data in a readily digestible form which should include GIS mapping data. This is being worked on but will take time. PM_{2.5} data is in itself a tricky medium. It can be measured but determining the source is not so easy.

It may be traffic generated or it may have been generated by a power generator hundreds of miles away.

76. Environment and Health: Combine air quality and health concerns – raking, not leaf blowing, is good exercise and good green policy.

Goal 2: Action 1 looks to ban leaf blowers in the future and several EAP goals and action items across all principles are designed to achieve both environmental and healthy living goals.

TRANSPORTATION

77. Connectivity: Provide better connection between transportation lines and install a new trolley line; Promote light rail BRT or Streetcars within Alexandria.

This suggestion is currently addressed by Goal 1: Action 5

78. Sound Barriers Along I-395: As an Eco-City, my citizen's wish is that we get V-DOT to construct more I-395 sound barrier walls. I live at Parkfairfax and purposefully walk as far away from the freeway to get away from the traffic buzz. I have to walk all the way back to Allison and Cameron Mills to be clear of the sound. I'd pay higher taxes for that benefit!

Noise pollution will be addressed in Phase II under the Environment and Health Principle. In the meantime, the City will continue efforts under the existing noise control program.

79. Motor Coach Recommendations: Consider including work of motor coach task force in the action section.

EPC does not currently believe that this is relevant at this time, however the commission intends to improve coordination with other City groups to ensure consistency with the goals and actions contained in the EAP.

80. Shared Bicycles: Offer shared bikes at METRO stations like in DC.

The plan for a bike sharing program is included in Goal 1: Action 4.

81. Bike Racks and Trails: Need more bike racks and trails (2 comments)

The EPC agrees. This suggestion is currently addressed by Goal 1: Actions 4 and 5, as well as Land Use and Open Space Principle Goal 1: Actions 1, 3 and 5.

82. Seminary Rd. Implications: Transportation plan must gain control over Seminary Rd./ Beauregard to ensure safety, walkability to schools, home + shops, bike ability, etc. The options here have enormous impact. We must look at mass transit options and limit size of this intersection while development continues.

This suggestion is currently addressed by Land Use and Open Space Principle Goal 1: Action 5.

83. Real Time Bus Schedules Online: I would like to be involved in the effort to update the level of digital information (bus routes/ schedules) for public transit that the City is working on. As a consultant on mobile devices (handhelds/smart phones) and a frequent user of public transit, I feel that this particular area is one that I can contribute to. For instance, right now it's easy to download schedules--- yet the mobile device versions don't have maps. So it can be somewhat hard to determine if a given bus goes where you need to get to. Maps comparable to print schedules and PDF copies should be included. (*Derek Meyer, dmmeyer@email.com*)

This suggestion is currently addressed by Goal 1: Action 5. EPC and/or the City will contact the volunteer as implementation moves forward.

84. Bike Trail: There should be bike path down Telegraph Road to the John J. Kingman Highway, so that individuals can bike to work (Ft. Belvoir).

The expansion of bike trails is currently addressed by Goal 1: Action 4. The specific location suggested is not located in the City of Alexandria; staff have forwarded the suggestion to counterparts in Fairfax County.

Pedestrian Safety: Promote more awareness among drivers

This suggestion is currently addressed under Goal 1: Action 1.

BUILDING GREEN

85. Requirements: The current requirements for our development was a permit DSUP for the King St. Hotel to achieve A1 "GOAL" of 20 points. In my opinion as a resident, this requirement requires more teeth to be effective. Example: DSUP requires a contribution to HUD is so onto get a Certificate of Occupancy. Why not have the same requirements on LEED level projects going forward? I know the VA building and related codes are weak. If Alexandria wants to be the bowspirit of "green" & engage the community, the DSUP needs to have TEETH for a greener Alexandria.

The City is close to finalizing a process to encourage developers of new buildings to use a recognized green standard such as LEED but this has to be by negotiation. The City cannot enforce standards above the VA State Code – unless the developer needs additional permits.

86. Alternative to LEED: Investigate + adopt passive house standard as a goal for city buildings. Rather than a LEED Platinum building, consider a passive house standard for a city demonstration project (10% energy use of buildings built to current codes).

The City has been working with interested parties to develop a standard that would benefit the city. It has been agreed that LEED is a good standard but the City would accept equivalent standards if they are truly equivalent. The standards must do more than just have the potential to reduce energy consumption. They must lead to low impact all round.

87. LEED Certification Revisited: Under Goal 1: Item 4, reconsider LEED altogether in light of recent studies regularly LEED and actual verified energy use.

See response to Comment 86 about flexibility in particular standard used. In any case, LEED is not a static set of specifications. LEED 2009 is an improvement on previous LEED requirements

88. LEED certification: This is not the answer to sustainability and drives the price of development up higher than it should. Green building and planning can be done by using innovative architects and designers following city standards.

Other architects need a set of specifications to work to, and Planning and Zoning Staff need guidance as well. See response to Comment 85 about the work of the Green Building and Sustainable Development Working Group.

89. LEED Accreditation by Staff: This is a must; staff must be LEED accredited. Hard to ask for and regulate if there are no dedicated staff. Staff will be trained but not certified.

See Goal 1: Action 4.

90. Green vs. Solar on Rooftops: I feel uncertain about the green roof because solar power seems more important in the long term.

Solar power still has a long pay back period unless there is a subsidy. Alexandria does have a major storm water problem with sudden spates causing erosion and subsequent flooding. Green roofs have the ability to retain rainfall. The EAP however, calls for a continual investigation into alternative energy sources.

91. Historic Preservation: Eco-friendly, green design may conflict with historic preservation Principles and resolution should be sought by involving both viewpoints. Without communication, eco-friendly decisions may adversely impact historic preservation standards. Ensure consideration of historic preservation issues so that they support, and are not in conflict with, "green" building issues. Would like something included about how to deal with historic buildings--i.e., it is better to preserve historic buildings than to tear them down in the name of constructing new, green buildings, as the construction waste of tearing down the building will be more detrimental alone than the new green building will be environmentally beneficial.

See Goal 4: Action 4 and Land Use Principle Goal 4: Action 5. The EPC feels that it cannot be adamant on this topic. Global climate change is a potential killer on three fronts: storm damage, flooding and health. The area of the city most affected by all three is the Old Town and there are going to be some hard decisions to make over the next twenty years.

92. New goal: Encourage city-wide support for the conservation and improvement of our existing built resources, including the preservation and reuse of historic buildings, buildings contributing to the character of our historic districts, and other older buildings. (Historic Restoration and Preservation Commission)

Action 1: Promote the preservation and reuse of existing buildings, including in some cases their adaptation to other suitable uses. The continued use of our existing buildings reduces the amount of demolition and construction waste requiring disposal, lessens the demand for energy and other natural resources expended in new construction and conserves the energy embodied in extant structures.

Action 2: Reinvest in and maintain our older and historic communities to encourage their continued occupation and use. Reinvestment and maintenance in these communities will help to avoid the more energy intensive processes to create original, new infrastructure such as roads, water and sewer lines, and other utility distribution systems.

Action 3: Provide information, training and incentives to encourage retrofitting of the existing building stock in our historic districts. Many of our historic and older buildings are already remarkably energy efficient because of their site sensitivity, quality of construction, and use of passive heating and cooling. However, other such buildings require changes to reduce their environmental footprint. Historic buildings can be made more green without compromising their historic character.

See response to Comment 86. The EAP does call for an advice center or process for owners of existing property. Arguing the case for a specific site or property must be the domain of the HRPC rather than the EPC.

SOLID WASTE

93. Mulching: Please expand the hours and the season for leaf mulch from the Eisenhower Avenue facility. Later fall is a great time to have leaf mulch for gardens. Also consider having sites in various neighborhoods throughout the city for a truckload of mulch and people could bring and fill their wheel barrows or bags. Eisenhower Avenue is a long haul for many and not all of us have transportation.

From Solid Waste Staff: The Eisenhower site requires staffing to ensure no abuse of the site (i.e. dumping). The current budget status does not allow for unapproved overtimes (OMB), required to extend the hours of this location. We also receive a special use permit for this site which does not allow the site to be open year round or permanently open. We could look at allowing the site to be open longer but there are also safety and hazards concerning this site (i.e. fire). For Phase II, we can work with various community garden and Parks and Recreation to see if there are any possible unattended sites we could locate some mulch.

94. Multi-Family Recycling: Add "renter" to solid waste Action 2, Goal 1 – include in list of multi-family – so when search on this document, you will find the word "renter" easily and thereby, get attention of renters.

See revised Goal 1: Action 2. From Solid Waste Staff: We are working to develop a section on the website to better address those who live in multifamily locations and we can include renter as a key word.

95. Churches: Clarify the eligibility of churches in recycling programs (when the program is directed at a business, is a church eligible?). Church is interested in (1) patrons of the church recycling (i.e., electronics) and (2) church itself recycling.

From Solid Waste Staff: Churches are non-profit businesses who are subject to the rules and regulations set forth by the National, State, and Local entities. Churches have access to many outlets to recycle at little or no cost to the Church. They are not eligible to recycle to household programs.

96. Expanded Recycling for Yard Waste: Suggest that the city compost twigs, branches, along with leaves; perhaps Alexandria should partner with Arlington to achieve this - compost materials other than leaves.

From Solid Waste Staff: The City will explore markets from compost waste as part of Phase II. Unfortunately, there are no current markets/site available to the City to achieve this. This goes for the entire DC Metro area.

97. Grocery Bags: Lots of stores sell reusable grocery bags. Could the EPC get in the act, design one, which is attractive and advertises your work, and sell it at cost. I would rather be an advocate for you than for Giant, etc. Consider a design competition!

From Alexandria Earth Day Committee (AEDC): The AEDC currently sells reusable bags. This committee is chaired by the EPC. For more information, visit www.alexearthday.org.

98. Ban on plastic bags: Ban plastic bags for yard waste and charge for their use bags for retail purchases

It's difficult for the City to ban the use of plastic bags for yard waste since we do not have a way to recycle the yard waste (with the exception of leaves, which are composed by the City). EPC will explore changing code enforcement as part of Phase II.

99. Public ROW Recycling: Please install trash cans for street corners that includes a receptacle for cans/bottles and paper. This type of receptacle should replace existing garbage cans. [NOTE: Like the cans in front of City Hall only allow trash as well; all-in-one.]

From Solid Waste Staff: Currently doing as a pilot at City Hall (Goal 1: Action 3), however, the City needs to find funding source to expand the program to include buying recycling containers and developing a hauler collection method.

100. Reuse Directory: A reuse directory exists but needs sponsorship of the webpage. Donation events for Multi-vendor collection have been poorly attended in past better; need to help with better outreach and advertising. (Coleman and Oberg)

Coleman and Oberg are currently working with Councilman Krupika on exploring City options to possibly provide space. This item will be explored for Phase II efforts. Also, the Solid Waste Staff is currently upgrading the City's website (alexrecycles.org), which will include the Reuse Directory.

101. Acknowledge Existing Reuse Efforts: In the Plan, reuse is the highest priority in the recycling category; yet doesn't have any actions in Phase I of the Plan. The coalition of non-profits already exists and they collect and distribute large quantities of used, quality goods for social needs. And they want to partner with city for in-kind support, specifically publicity and storage space. They can provide staff, volunteers, and measurable results.

See response Comment 100 and Goal 3.

102. Reuse of Bikes: We need city in-kind support – publicity, contacts for storage space. This would be at bikesfortheworld.org. This group is part of the Reuse Coalition. (*Keith Oberg, Bikes for the World, Alex-Art Reuse Center*)

See response Comments 100 and 101 above.

103. Expand Recycling: Interested in expanding recycling both at drop-off centers and within the apartment/residential communities. (*Russell S. Kirsh, CPA, kirshcpa@gmail.com*)

The City introduced an expanded curbside program this fall (2008); See Goal 1: Action 1. The City will continue to expand recycling at the drop-off centers as the markets develop. Expansion of the recycling program is based on the market; we also need to make some money from our recycling programs in order to keep service. Regarding apartment/residential communities, see Goal 1: Action 2.

104. Public Awareness Campaign: Interested in seeing an increased awareness of people's actions regarding garbage (*Russell S. Kirsh, CPA, kirshcpa@gmail.com*)

See Goal 1: Action 4 (mandate recycling at public events) and all actions under Goal 2, which is dedicated to outreach.

105. Retail Packaging: How can we encourage our retailers to reduce the amount of packaging they generate that ends up in the garbage. (*Russell S. Kirsh, CPA, kirshcpa@gmail.com*)

See Goal 1: Action 5. Also, this item falls under Citizen Responsibility. Retailers are national and will do what is in their best economic interest. Citizens have a responsibility to make a choice.

106. Volume Pick-Up: Copy Charlottesville's model of fee for volume pick up. Would hopefully encourage recycling to reduce waste stream.

EPC and the Solid Waste Staff have committed to including this action as part of Phase II.

107. Recycling for Small Businesses: Allow small offices in Old Town to participate in yellow bin recycling. Employs 5-10 people too small for them to pay for commercial recycling pick-up.

EPC will explore this action for Phase II. The Solid Waste Staff is concerned about possible increase in staffing and funding.

108. Business Recycling: Allow Alexandria businesses to dispose of their bulbs, batteries, computers and other hazardous waste at the city facility.

See response to Comment 107.

109. Recycled Books: Make sure libraries and schools recycle paper in books -- see Diansbooks.org.

See Goal 3: Action 4. ACPS schools and public libraries can recycle books in current system. EPC will work with ACPS to elevate their recycling efforts.

ENVIRONMENT AND HEALTH

110. Fruit Trees: Include fruit trees in the GIS, that way you can know where local sources of fruit and nuts are for collection if the property owner is agreeable. Also encourage the planting of fruit and nut trees for local harvest. There is a GIS listing for fruit trees in 2 counties in California. (Happy to help, Scarlett Williams 703-226-9112)

This suggestion needs to be further evaluated by the EPC and the City, given the implications for property rights and public safety. Opportunities related to fruit and nut trees will be considered for Phase II.

111. Community Gardens – Promote more Community Gardens to encourage locally grown food, lower transportation costs. Make sure Zoning Ordinances do not prohibit these gardens.

This suggestion is currently addressed by Goal 3: Action 7 under the Land Use and Open Space Principle.

112. Local Retail: Every neighborhood should be walkable and include retail where food can be bought. For example, every resident shouldn't have to walk further than 1/2 mile to get a gallon of milk. (2 comments)

This suggestion is currently addressed by Goal 4 and its associated actions. Goal 1: Action 6 under the Land Use and Open Space Principle also supports the creation of local, small-scale retail.

113. Ban in Restaurants: I support efforts to ban all smoking in all city restaurants.

This suggested is currently addressed by Goal 2: Action 4.

114. Health related Education: Increase public awareness how to live healthier and become more sustainable.

This suggestion is currently addressed by Goal 3, and will be further addressed in Phase II.

IMPLEMENTATION

115. Education and Outreach to Promote Self-Regulation: A commentator thought the goals were well written and on target. His main comment was on process and implementation. He felt the city/EPC should actively encourage groups, associations, organizations and citizens to take ownership of goals or action items. Rather than just enforce/require actions or educate, he thought getting people invested in the process of "self regulation" would be a low cost way of achieving some great actions. He used the example of encouraging owners/staff of nail salons to meet themselves

and providing them with info to let them develop solutions or programs to reduce VOCs on their own. If people feel a part of the process and take ownership of the results, outcomes will be genuine and action steps can get accomplished. (*John Humphrey*)

This is the focus of Goals 1 and 2, focusing on citizens (Goal 1) and businesses (Goal 2). Increasing community participation is also described as Goal 5 of the Implementation section. Goal 1: Action 3 calls for face-to-face meetings with community and neighborhood groups by city and EPC to enlist their involvement in meeting the Action Plan's objectives. Similarly, Goal 2: Action 3 calls for the establishment of a leadership group of businesses organizations to foster collaboration in working toward the city's environmental goals and objectives. EPC welcomes public participation and comment at its many public meetings, through its internet sites, and through the open houses it is conducting.

116. Involvement of Targeted Businesses: How do we ask affected community (e.g. nail salons & VOC) for their ideas on how to solve these problems? The city should try to do this.

We ask affected communities and businesses for their ideas by bringing them together and soliciting their involvement and input, as called for under Goal 1: Action 3 and Action 5, and through Goal 2: Actions 1 - 3, and Action 6.

117. Reuse and Recycle Network: comprised of private and nonprofit businesses; support with in-kind resources from the city (also under Solid Waste)

Councilman Krupika is working with interested volunteers to explore City options to possibly provide space. This item will be explored for Phase II efforts. Also, the Solid Waste Staff is currently upgrading the City's website (alexrecycles.org), which will include the Reuse Directory.

118. Focus on Green Collar Jobs: City should partner with business community to promote green collar jobs – 3 similar comments

See revisions to Goal 3.

119. Green Collar Workforce: Under Goal 3 – consider stronger language to recognize the importance of job training/creation in the field of environmental sustainability, current JobLink/ACE initiatives, and private-public partnerships – *David Svec and Patrick Knowles, Employment Commission*

See revisions to Goal 3.

120. Green Collar Workforce: Consider adding updated actions throughout the document that support job training/creation and economic growth

See revisions to Goal 3.

121. Interface with other Commissions: EPC should connect to other city commissions, including the Historic Preservation, to be sure that there are unified. Waterfront planning effort is underway now and the Waterfront Plan should be done on Eco-City model.

Goal 5: Action 2 explicitly focuses on "collaboration and participation" with other city volunteer committees. EPC members are attempting to link Action Plan steps and activities with existing city plans and commission through both the inclusion of language referencing such plans in the Action Plan, and through direct participation in City commissions. Coordination of the various city planning processes and bodies is important to avoid working at cross purposes or duplication of effort.

122. Civic Engagement: 1) People are the integrating force of the action plan. 2) Require citizens to take action. 3) Gather community stakeholders to help implement and monitor. 4) Use VT graduate students to monitor implementation of the Action Plan. 5) Like idea of tasking community to get involved -- Alexandria Role Models. 6) Engage citizens so that they will be informed and then comply rather than to tell them -- one-way communication from city to the community is not effective.

The city's ability to require citizen action is limited, and meeting the Action Plan's goals will require a significant education effort on the part of city staff, EPC members, and concerned citizens. Goal 1 focuses on education and outreach to citizens for just this reason. The Action Plan also includes several references to establishing incentives for citizens to adopt environmentally sustainability practices in various areas. The action plan also envisions ongoing citizen and business participation in both shaping and implementing the plan. As described elsewhere, Goal 5 specifically focuses on enlisting community support in carrying out implementation activities.

123. Energy Management Systems: No mention of the city adopting an EMS (2 comments)

The Environmental Action Plan and its development are essentially the initial steps of the process of carrying out an EMS for the city, its businesses, and its residents. While the City may decide to implement an EMS process for its internal operations, the draft Action Plan specifically focuses on city government's role in meeting sustainability objectives in Goal 4 of the Implementation section, and Action 2 calls for the city to hold a staff retreat to discuss sustainability efforts.

124. Need grassroots movement: go knock on doors, find volunteers to go around every month; allow youth to take ownership of their community. Would be perfect for student volunteers to focus on reuse and recycling.

The actions under Goal 5 call for the development and implementation of a plan to target volunteer support for implementing Action Plan projects, and for increasing collaboration and participation with other City volunteer committees. Enlisting volunteers—student or otherwise—to help improve residents' recycling rates is one of the volunteer activities envisioned by EPC when it drafted this section.

125. Budget Impacts: Keep items in the budget that have an amplifying effect like expanding bike routes. There are federal and state matching funds.

EPC will attempt to work with City Staff to help identify possible action steps which can help maximize the impact of City investments, as well as possible policy objectives it can pursue to increase state and federal financial support for Action Plan goals.

126. Change Focus: 1) Refine language to make intent to come from bottom-up. There is now a lack of connection to private residents and they can do more. 2) How much change can we bear to see to the draft?

EPC concurs that the ultimate success of the Action Plan will depend on the contributions made by individual residents. Outreach to and ongoing involvement by residents and community leaders is a specific focus of the action steps under Goals 1 and 5 of Implementation.

127. Historic Preservation: The Commissions that address historic preservation and archaeological preservation welcome a collaborative approach to implementing the plan and welcome ongoing dialogue.

Great! Substantial comments regarding historic preservation have been addressed under the Land Use and Open Space Principle.

128. Reduce carbon emissions: City should hire a Carbon Emissions Ombudsman

The Action Plan calls for the hiring of an additional staff person by the city to focus on environmental outreach and education. The City's ability to hire additional staff during Phase 1, whether a Carbon Emissions Ombudsman or an environmental education and outreach specialist, is highly questionable due to the city's serious decrease in revenues due to the current recession. EPC welcomes, and will work to foster, community support for maintaining investments in the city's long-term environmental sustainability, through both projects and staff, despite the economic climate.

129. Sister City Potential: Alexandria's sister cities of Dundee, Scotland and Helsingborg, Sweden are model sustainability communities. Develop an exchange program that encourages city leaders to learn more about sustainability for these wonderful resources.

This is an excellent suggestion. While an exchange program may require more resources than are available in the current budget climate, EPC, city staff, and Virginia Tech staff will attempt to use sister city contacts, as well as contacts with other model cities such as Waitakere, New Zealand, to generate new ideas for achieving sustainability objectives.

130. Stronger language to change behaviors: Find incentives and penalties that will require Alexandrians to comply as you finalize the action plan; current language can be viewed as optional, not expected.

This is the focus of Goal 3: Action 2, which is targeted at establishing "economic measures such as tax incentives and disincentives, subsidies and fees to...foster changes in citizens' behaviors." EPC supports using the full range of policy tools to change residents' resource use habits.

131. Forge Partnerships: Forge new partnerships with local preservation, environmental, and other interested organizations (local chapters) to help promote the goals in the Action Plan. (offered by Sierra Club, Master Gardeners, and various commissions)

EPC welcomes the involvement and support of local organizations in promoting Action Plan goals, including local preservation and environmental groups. Goal 1: Action 3 of the Implementation portion of the plan calls for the city and EPC to conduct face-to-face meetings with major community groups. EPC will prioritize outreach to local environmental groups in this effort. It should also be noted that EPC meetings are open to the public, and input and collaboration are encouraged.

132. Business Role: The Chamber of Commerce should take an active role in much of this, particularly #3

EPC looks forward to significant Chamber of Commerce participation in working to help Alexandria meet its Action Plan objectives. Business sector participation is the exclusive focus of Goal 2 in the Implementation section. Action 3 of this Goal calls for the establishment of "a leadership group of business organizations, managers, and owners to lead business community efforts...." We anticipate that the Chamber of Commerce will be closely involved in this step.

133. Volunteers -- Create a Conservation Corps to help implement the Action Plan (Peter Pennington)

The actions under Goal 5 call for the development and implementation of a plan to target volunteer support for implementing Action Plan projects, and for increasing collaboration and participation with other city volunteer committees. Volunteers will play an essential role in carrying out the Action Plan, particularly with respect to stream monitoring and the removal of invasive plant species.