

# Environmental Action Plan Implementation

## Outreach and Implementation



# Alignment Matrix

Chapter / Leads	Department Staff	Management	Boards & Commissions
Energy & Climate <i>Reid &amp; Humza</i>	DGS: Bill Eger	Jeremy McPike	Climate Task Force <b>TBD</b>
Transportation <i>Carolyn &amp; Eldon</i>	T&ES: Chris Ziemann – Div. Chief	Hillary Orr – Dep. Dir.	Transp. Commission: Chapman & Aguirre PYMIG: Wilson & Aguirre
Land Use <i>Mike Kulas &amp; Brendan Owens</i>	P&Z GB: Karl Moritz - Director TC: RPCA/Bob Williams OS: RPCA/Dana Wedeles	GB: Emily Baker - DCM TC: RPCA/Jim Spengler - Director OS: RPCA/Jack Browand – Division Chief	Planning Commission: Stephen Koenig & Nate Macek Parks & Rec Commission: <b>TBD</b> Eisenhower West <b>Council?</b>
Water & Waste <i>Trip Hook &amp; Craig Berry</i>	T&ES SW: Helen Lee WR: Jesse Maines – Div. Chief	SW: Jeff Duval – Dep. Dir. of Ops WR: Bill Skrabak – Dep. Dir.	RiverRenew: Wilson & Jackson
Implementation & Outreach <i>Praveen Kathpal</i>	T&ES: Ellen Eggerton	Bill Skrabak	Eco-City Steering Committee: Pepper & Bennett-Parker

Chapter(s): Implementation & Outreach - **Targets**  
Lead Department/Staff: TES, Ellen Eggerton

How will these be measured?  
How will we know when we get there?  
Do the actions add up to achieving the target? If not, what else needs to be done?

Chapter / Topic	Goal/Target
Education and Outreach	<p><b>Motivate the public to take actions that make Alexandria more sustainable</b></p> <p>By FY2023, establish ongoing educational opportunities to increase awareness of environmental challenges and provide recommendations for adoptable daily sustainable practices for residents, businesses, and City staff</p> <p>Ellen: Identifying metrics at end of October</p>
Implementation and Monitoring	<p><b>Enhance EAP implementation by increasing monitoring, measuring, and reporting efforts by the City and the community</b></p> <p>Annual updating of EAP progress and sustainability metrics</p> <p>Ellen: Updating key indicators, adding additional items, part of network group process in October</p>

2019: Were these completed? If not, why not?  
 2020: Are these budgeted? Are they in the staff lead's performance objectives? Is this on track to be completed in FY2020?  
 2021: What needs to be included in the Manager's proposed 2021 budget?

Chapter(s): Implementation & Outreach - **Actions**  
 Lead Department/Staff: TES, Ellen Eggerton

	2019	2020	2021
<b>Education and Outreach</b>	None	10.1.1 - \$20k <ul style="list-style-type: none"> <li>Design and implement robust outreach campaigns</li> <li>Update the Green Building Resource Guide Resource Center for new small businesses and existing buildings.</li> <li>Additional outreach and education will be leveraged with Eco-City Ambassadors who go through an Eco-City Academy to assist in spreading sustainability throughout the community – <b>Launching in the spring</b>  <b>Not budgeted, YES in objectives</b></li> </ul>	Select and launch a green business recognition or certification program - <b>\$10k</b>
		10.1.2 <ul style="list-style-type: none"> <li>update Eco-City web-based information – <b>On track</b></li> <li>coordinate with related sustainability information on other city web sites - <b>On track</b>  <b>No budget required, YES in objectives</b></li> </ul>	Establish a voluntary program for residents, schools, and businesses to report their efforts in reducing their environmental impact - <b>\$30k</b>
		10.1.3 - <b>\$30k</b> : Initiate a collaborative effort to update environmental education in the Alexandria City Public School curriculum - <b>On track, Not budgeted, YES in objectives</b>	

Chapter(s): Implementation & Outreach - **Actions**  
 Lead Department/Staff: TES, Ellen Eggerton

2019: Were these completed? If not, why not?  
 2020: Are these budgeted? Are they in the staff lead's performance objectives? Is this on track to be completed in FY2020?  
 2021: What needs to be included in the Manager's proposed 2021 budget?

	2019	2020	2021
<b>Implementation and Monitoring</b>	None	10.2.1 - Update measurement methods, monitored actions, and key indicators to capture and report new, changed, and trending sustainability goals, public building performance, regional efforts, and accomplishments in online dashboards <b>YES, YES</b>	None
		10.2.2 - <b>\$10k</b> - Participate in regional and state efforts to increase the sustainability and enforcement of construction practices, regulations, and codes (International and Virginia Energy Conservation Code, recycling, stormwater management, and others). Partner with regional municipalities and organizations to provide shared professional training to contractors, design professionals, and individuals in sustainable building and operating methods to achieve more sustainable infrastructure. <b>Not budgeted, using training/conf funds.</b> <b>YES, YES</b>	

**Short-term (2022-23) and mid-term: Is there anything that needs to happen in FY2020 or be budgeted in FY2021 to keep these items on track?**

**Chapter(s): Implementation & Outreach - Actions**  
Lead Department/Staff: TES, Ellen Eggerton

	<b>Short-term 2022-2023</b>	<b>Mid-term 2024-2028</b>
Education and Outreach	None	None
Implementation and Monitoring	None	By 2024 publish interim EAP Progress report of short-term actions

Chapter(s): Implementation & Outreach - **Legislative Priorities**  
Lead Department/Staff: TES, Ellen Eggerton

**Which of these need to be emphasized in our legislative package request?**

- None

# Environmental Action Plan Implementation

## Energy & Climate





## Chapters: Energy & Climate - **Targets**

Lead Department/Staff: TES, Ellen Eggerton, Bill Eger, Jess Frech

Chapter / Topic	Target
Climate Change	By FY2030, reduce community-wide GHG emissions by 50 percent from 2005 levels. By FY2050, reduce community-wide GHG emissions by 80-100 percent from 2005 levels <b>MWCOG inventory. Actions only reach target with state/federal action.</b>
Government Facilities & Renewable Energy	By FY2030, transition all applicable Alexandria government facilities to 100 percent electricity and offset this electrical energy use by 100 percent renewable energy <b>Government knows its own energy use and actions will reach target.</b>
Government Operations & Efficiency	By FY2035, improve energy efficiency in City facilities and operations by 50 percent over a FY2018 baseline use
Community Energy Use	Reduce greenhouse gas (GHG) emissions to at least 10 metric tons of CO2e per capita by FY2022, 6 by FY2030, 4 by FY2040, and 1-3 by FY2050 from a FY2005 base year

## Chapters: Energy & Climate - **Actions**

Lead Department/Staff: TES, Ellen Eggerton, Bill Eger, Jess Frech

	2019	2020	2021
Climate Change	None	None	Establish task force to guide E&CC Action Plan; Establish sustainability criteria for city-controlled pension funds
Gov Facilities & Renewable Energy	None	Increase REC purchases to 100% of gov't facility energy use	Develop renewable energy supply strategy evaluating potential renewable energy supply implementation pathways
Government Operations & Efficiency	None	None	Initiate electric vehicle pilot programs for DASH, ACPS, and city vehicle fleet; Complete retrofits of 75% of all facilities' lighting to LED
Community Energy Use	Expand participation in state-level policy and regulatory activities	Adopt an ordinance that implements a C-PACE program; Develop a strategy for electric vehicle charging infrastructure	

## Chapters: Energy & Climate - **Actions**

Lead Department/Staff: TES, Ellen Eggerton, Bill Eger, Jess Frech

	<b>Short-term 2022-2023</b>	<b>Mid-term 2024-2028</b>
<b>Climate Change</b>	Determine appropriate policies for estimating GHG emission impacts from operations and CIP expenditures (2022)	Complete a climate vulnerability assessment. (2024)
		Develop and implement state-level engagement strategy on climate policy (2024)
		Update Emergency Operations Plan and Continuity of Operations Plan to include infrastructure resiliency. (2028)
		Update the Energy and Climate Change Action Plan, including an evaluation of benefits, feasibility, and timing of policies. (2026)

## Chapters: Energy & Climate - **Actions**

Lead Department/Staff: TES, Ellen Eggerton, Bill Eger, Jess Frech

	<b>Short-term 2022-2023</b>	<b>Mid-term 2024-2028</b>
Gov Facilities & Renewable Energy	Direct purchase of renewable energy accounts for at least 50% of government operations electricity use. (2023)	Develop electrification and renewable energy plan for government operations non-electricity energy use. (2024)
		Direct purchase of renewable energy accounts for at least 80% of government operations electricity use.
Government Operations & Efficiency	Update facility asset condition auditing process. (2023)	Implement energy efficiency strategies to reduce gov't energy use by 25%. (2027)
		Implement electrification of 25% passenger City fleet vehicles. (2024)
		Implement electrification of 10% of DASH, BRT, and trolley buses. (2028)
Community Energy Use		Develop community energy model to track and forecast program success. (2024)

## Chapters: Energy & Climate - **Legislative Priorities**

Lead Department/Staff: TES, Ellen Eggerton, Bill Eger, Jess Frech

- **Make permanent an aggregate municipal net metering pilot program, include expanded renewable energy system capacity limits, increase cost offset to equal the value of solar resources, remove administrative costs, and provide applicability across a range of utility rate classes.**
- Consider electricity load aggregation opportunities to leverage statutory retail choices.
- Provide financial incentives to local governments, state agencies, and private owners of conventional roadway, street, and outdoor lighting to convert to dark-skies compliant LED technologies.
- Commission a new study of energy efficiency potential to assess the scale, availability, and cost of energy efficiency as an economic, resiliency, and power generation resource in the Commonwealth of Virginia.
- Direct the Virginia Department of Mines, Minerals, and Energy (DMME), State Corporation Commission (SCC), Virginia Department of Environmental Quality (DEQ), utility companies, and relevant stakeholders to pursue strategic partnerships with Virginia local governments to identify the needs, coordinate the deployment of public electric vehicle charging infrastructure, and incentivize the transition of personal-occupancy vehicles to electric vehicle technologies.
- Pursue legislative opportunities to provide decarbonization via legal authority and implement a community solar or community choice aggregation-like program to provide subscription access to shared renewable energy facilities to Alexandria community members and businesses to offset individual or business GHG emissions from electricity use.
- **Lobby for bills that would expand renewable energy purchasing by the community or utility, advocate for the state of Virginia to join the Regional Greenhouse Gas Initiative (RGGI), set a renewable portfolio standard for electricity generation, and grant Alexandria authority to undertake energy and transportation initiatives to reduce GHG emissions that are currently prohibited by state law.**

# Environmental Action Plan Implementation

## Transportation



## Chapter(s): Transportation - **Targets**

Lead Department/Staff: TES, **Jen Slesinger**

Chapter / Topic	Target
Prioritizing Low-Carbon Mobility Options	By FY2023, reduce total average vehicle miles traveled (VMT) per capita by at least 1 percent per year and determine the amount of carbon reduction from transportation sector
Reduce Automobile Dependency	By FY2023, increase the share of all trips taken by public transit, walking and biking by at least 15 percent taking the 2018 Mobility Survey as the base year
Improve, Expand, and Integrate Public Transit Systems	By FY2030, double the miles of dedicated bus infrastructure to at least 1.5 miles

## Chapter(s): Transportation - **Targets**

Lead Department/Staff: TES, **Jen Slesinger**

Chapter / Topic	Target
Prioritizing Low-Carbon Mobility Options	By FY2023, reduce total average vehicle miles traveled (VMT) per capita by at least 1 percent per year and determine the amount of carbon reduction from transportation sector <i>Use the same tool as before. Jen considers it to be sound</i>
Reduce Automobile Dependency	By FY2023, increase the share of all trips taken by public transit, walking and biking by at least 15 percent taking the 2018 Mobility Survey as the base year <i>These Mobility Surveys are conducted biannually</i>
Improve, Expand, and Integrate Public Transit Systems	By FY2030, double the miles of dedicated bus infrastructure to at least 1.5 miles <i>This seems like a very low target but is considered achievable. If they work to reduce SOV miles, we should do more. There may also be cheaper alternatives such as dedicated bus lanes.</i>
<i>Additional Note</i>	<i>We expect that the actions will make progress towards the targets, but we don't know if they will exactly deliver achievement.</i>



## Chapter(s): Transportation - **Actions**

Lead Department/Staff: TES, **Jen Slesinger**

	2019	2020	2021
Low-Carbon Mobility	None	None	Develop a plan to acquire zero emissions buses on rapid transit routes and conversion of DASH fleet to zero emissions <b>2020: 75K for Study.</b> <b>Funds for vehicles are also in place.</b>
Reduce Automobile Dependency	None	None	None
Improve, Expand, and Integrate Public Transit Systems	None	None	None

## Chapter(s): Transportation - **Actions**

Lead Department/Staff: TES, **Jen Slesinger and Christine Mayeur**

	<b>Short-term 2022-2023</b>	<b>Mid-term 2024-2028</b>
<p>Low-Carbon Mobility</p> <p><i>See next 2 pages for \$\$</i></p>	Complete all engineering and education actions outlined in the 2017 Vision Zero Action Plan	complete the bicycle and pedestrian projects prioritized in the pedestrian and bicycle chapters of the Alexandria Mobility Plan (formerly known as the Transportation Master Plan). (2028)
	Add an average of 3 miles of bicycle connections <b>per year</b> , prioritizing low-stress and connectivity	Implement the 2017 walk audit recommendations for all schools (2025)
	Development review checklist for residential and commercial	
	Adopt permanent regulation for shared mobility devices	
	Determine the feasibility of a low-stress multi-modal, connective bicycle network to increase bicycle mode share	

## Chapter(s): Transportation - **Actions**

Lead Department/Staff: TES, **Jen Slesinger and Christine Mayeur**

	Short-term 2022-2023	Mid-term 2024-2028
<b>Low-Carbon Mobility</b>	Complete all engineering and education actions outlined in the 2017 Vision Zero Action Plan <b>2020: 300K design + 40K signals</b> <b>2021: 300K design + 40K signals</b>	complete the bicycle and pedestrian projects prioritized in the pedestrian and bicycle chapters of the Alexandria Mobility Plan (formerly known as the Transportation Master Plan). (2028) <i>See next page for \$\$ details</i>
	Add an average of 3 miles of bicycle connections <b>per year</b> , prioritizing low-stress and connectivity <i>See next page for \$\$ details</i>	Implement the 2017 walk audit recommendations for all schools (2025) <b>FY20-22: 50K per year. Planning and implementation are in progress.</b>
	Development review checklist for residential and commercial	
	Adopt permanent regulation for shared mobility devices	
	Determine the feasibility of a low-stress multi-modal, connective bicycle network to increase bicycle mode share <b>\$ TBD</b>	

**Note:** The Transportation Commission is recommending additional funding for Vision Zero and Complete Streets programs.

## Additional \$\$ Information for Low Carbon Mobility Actions

Complete the bicycle and pedestrian projects prioritized in the pedestrian and bicycle chapters of the Alexandria Mobility Plan (formerly known as the Transportation Master Plan). (2028)

Add an average of 3 miles of bicycle connections **per year**, prioritizing low-stress and connectivity

*Note: The 2<sup>nd</sup> item above is a subset of the first. The budgets shown do not overlap.*

2020: \$402,196 (bikeshare) + 60,000 (ped recs)  
2021: \$350,000 (bikeshare) + 80,000 (ped recs)  
2022: \$400,000 (bikeshare)  
2028: \$10,000,000

2020: \$90,000 (cs resurfacing) + \$60,000 bicycle plan implementation + \$1,409,000 (OCR) + \$1,208,869 (Van Dorn)  
2021: \$90,000 (cs resurfacing) + \$60,000 bicycle plan implementation + \$1,360,000 (OCR)  
2022: \$90,000 (cs resurfacing) + \$60,000 bicycle plan implementation

## Chapter(s): Transportation - **Actions**

Lead Department/Staff: TES, [**Jen Slesinger**]

	<b>Short-term 2022-2023</b>	<b>Mid-term 2024-2028</b>
Reduce Automobile Dependency	Develop a stand-alone Transportation Demand Management (TDM) Chapter in the Alexandria Mobility Plan <b>2023: 100K</b>	Encourage people who work in Alexandria to use sustainable mobility options by developing policies that discourage employee parking <b>2028: \$5M</b>
	Finalize construction of the Potomac Yard Metrorail station <b>2023: \$370M</b>	
Improve, Expand, and Integrate Public Transit Systems	Deploy a regionally-integrated, mobile-friendly platform that provides real-time trip information and fare payment capabilities <b>2023: \$5M</b>	Expand BRT - through construction for West End Transitway, Right-of- Way for the Duke Street Transitway, and extending Route 1 Metroway <b>2028: \$150M</b>

## Chapter(s): Transportation - **Legislative Priorities**

Lead Department/Staff: TES, **Jen Slesinger**

- Encourage statewide legislative efforts to implement stricter traffic safety laws as mandated by the 2017 Vision Zero Action Plan. Alexandria should continue to lobby the state to allocate road funding to local jurisdictions based not on car driving lanes but to adequately fund infrastructure for bicycles, pedestrians, and other low-carbon mobility options.
- Support federal, state, and regional compacts and initiatives to reduce transportation-related greenhouse gas emissions, including support of the Transportation and Climate Initiative.
- Advocate for the state to both raise the gasoline tax and to allow local jurisdictions more flexibility in raising gasoline taxes.
- Advocate for the state to have car property taxes to be assessed with an efficiency bonus/penalty and not just on the value of the vehicle.

### Additions from staff:

- Safe passing
- Stop for pedestrians
- Electric Vehicle incentives
- DUI reform
- Commuter benefits ordinance
- Road funding allocation\*

*\* At present, Road Diets reduce state funding because they reduce travel lanes.*

## Chapter(s): Transportation - **Legislative Priorities**

Lead Department/Staff: TES, **Jen Slesinger**

### Eldon's Rankings of EAP entries:

#1 Support federal, state, and regional compacts and initiatives to reduce transportation-related greenhouse gas emissions, including support of the Transportation and Climate Initiative.

#2 Advocate for the state to both raise the gasoline tax and to allow local jurisdictions more flexibility in raising gasoline taxes

#3 Encourage statewide legislative efforts to implement stricter traffic safety laws as mandated by the 2017 Vision Zero Action Plan. Alexandria should continue to lobby the state to allocate road funding to local jurisdictions based not on car driving lanes but to adequately fund infrastructure for bicycles, pedestrians, and other low-carbon mobility options.

#4 Advocate for the state to have car property taxes to be assessed with an efficiency bonus/penalty and not just on the value of the vehicle.

### Valuable additions from staff:

- Electric Vehicle incentives
- Commuter benefits ordinance
- Road funding allocation (align with low-carbon mobility actions)

# Environmental Action Plan Implementation

## Land Use and Open Space





## Chapter 4: Land Use and Open Space: **Targets**

Lead Department/Staff: TES, Parks & Rec

Chapter / Topic	Target
4.1 Tree Canopy	<p>By FY35, average overall tree canopy will be a minimum of 40%</p> <ul style="list-style-type: none"><li>• Unclear how this is measured</li><li>• This will be a hard target to hit without aggressive push by the City to have the private sector not only maintain current trees, but also plant new ones.</li></ul>
4.2 Open Space	<p>Maintain the ration of 7.3 acres of publicly accessible open space per 1,000 residents</p> <ul style="list-style-type: none"><li>• Measured through a mix of Small area plans and zoning requirements against census/tax head counts</li><li>• Believe it is an annual or bi-annual assessment</li></ul>

## Chapter 4: Land Use and Open Space - **Actions**

Lead Department/Staff: TES

	2019	2020	2021
Tree Canopy	None	None	I would recommend adding to FY21 Budget: <ul style="list-style-type: none"> <li>• Action 4.1.3 “urban forest health index rating”</li> <li>• Action 4.1.1 “updated Urban Forest Master Plan”</li> </ul>
Open Space	None	<ul style="list-style-type: none"> <li>• Re-establish the open space steering committee to reassess the methodology, evaluate, and prioritize potential open space sites</li> <li>• FY20-29 CIP provides \$13,175,000 for Open Space acquisition and development               <ul style="list-style-type: none"> <li>- <b><i>Will need to confirm this made it into the budget</i></b></li> </ul> </li> <li>• FY20 evaluate and update the requirements of open space on residential, commercial, and mixed-used private development</li> </ul>	None

## Chapter 4: Land Use and Open Space - **Actions**

Lead Department/Staff: TES

	Short-term 2022-2023	Mid-term 2024-2028
Tree Canopy	<p>Update and coordinate the Urban Forestry Master Plan, Environmental &amp; Sustainability Management System, Landscape Guidelines to support tree preservation, expansion, maintenance, native species use, and a revised tree canopy coverage goal</p> <ul style="list-style-type: none"> <li>- <b><i>Should be budgeted in earlier years to ensure completion on time</i></b></li> <li>- <b><i>Landscape update already done</i></b></li> </ul>	<p>By FY28 develop an urban forest health index rating system to determine the current and ongoing health and health needs of the urban forest in Alexandria</p> <p><b><i>- This should happen sooner and needs to be budgeted for immediately as it is possible both the rating system and inventory must both be completed which I imagine will be time intensive</i></b></p>
	<p>Enlist City partnerships to provide education and outreach to provide technical assistance and opportunities to increase native tree canopy coverage on private property</p>	<p>By FY28, develop a program that supports the planting of trees on private property, commit funding to establish the program and support ongoing implementation</p>

# Chapter 4: Land Use and Open Space - **Actions**

Lead Department/Staff: TES

<b>Open Space</b>	Short-term 2022-2023	Mid-term 2024-2028
	Evaluate increasing the target to 7.5 acres per 1,000 residents	By FY28, identify tools and techniques through stream valley plans to maintain and enhance all the City’s stream valleys for ecological and recreational benefits
	By FY23 increase the percentage of acres of public natural lands that are actively managed, by 50% to 450 acres <b>- Says in cost estimate “existing staff resources” but I am assuming the increase in managed lands has to equate to a budget increase somewhere?</b>	By FY28, seek publicly accessible opens pace opportunities in unconventional spaces such as, public alleys, re-purpose rights-of-way, parking lots, easements of trails and/or ecosystem corridors <b>- Cost estimate states \$60,000/year (part of approved CIP)</b>

## Chapter(s): Land Use and Open Space - **Legislative Priorities**

Lead Department/Staff: TES and Parks & Rec

- Advocate for state legislation that would enable the City to expand its capabilities to promote the protection of trees on public, private, and institutional land
- Advocate for state legislation that would enable the City to expand the City's capabilities to preserve and to increase tree canopy requirements on private land.
- Permitting and City approval for removing trees on private property

# Environmental Action Plan Implementation

## Green Building / Land Use



## Chapter(s): Green Building - **Targets**

Lead Department/Staff: P&Z, [**Karl Moritz**]

Chapter / Topic	Target
<b>Green Building</b>	<ul style="list-style-type: none"><li>• Green Building Policy will set expectations for how both new and existing buildings should contribute toward achieving the goals for GHG emissions, water use, and stormwater runoff reduction established in the EAP</li><li>• By FY2020 will set forth a path for new city-owned buildings to meet a net zero energy standard.</li></ul>

## Chapter(s): Green Building - **Actions**

Lead Department/Staff: P&Z, [**Karl Moritz**]

	2019	2020	2021
<b>Green Building Policy</b>	Update of city green building policy	Evaluating the feasibility of a net zero standard where applicable, for new public development	New green building staff position in the Department of Planning and Zoning
		Introducing mandatory and/or voluntary green building practices for existing buildings (including historic) and for small buildings not subject to site plan review	Establish incentive programs that encourage green building renovations for existing buildings
		Evaluate additional sustainable features to incorporate into the “Building Section” of the standard development conditions for the DSP and DSUP – Concept Development Check-in	Evaluate regulatory incentives linked to specific green building performance measures for new private development



## Chapter(s): Green Building - **Actions**

Lead Department/Staff: P&Z, [Karl Moritz]

	Short-term 2022-2023	Mid-term 2024-2028
	Update the Concept 2 Development Plan Checklist to include a requirement for a preliminary compliance narrative	Performance Monitoring Program for private development
<b>Green Building Policy</b>	<ul style="list-style-type: none"> <li>• Staff access to post construction energy and water performance data</li> <li>• Sub-metering of EV charging stations (so that whole-building metering is not affected)</li> <li>• Consideration of energy metering in multifamily and hotel developments</li> <li>• Consideration of enhanced</li> </ul>	Evaluate the possibility of establishing a fee-in-lieu program for projects that are unable to comply with the Green Building Policy
	Process for evaluating Net Zero Energy standards in new public buildings	Establish a standardized process for NZE public buildings city-wide
	Incentive programs that encourage green building renovations for existing buildings,	Investigate the feasibility of performance-based procurement for the NZE construction of public buildings
	Feasibility and methods to achieve net zero energy in existing building renovations	

## Chapter(s): Green Building - **Legislative Priorities**

Lead Department/Staff: P&Z, [**Karl Moritz**]

- Enable local jurisdictions to require energy performance disclosure by private building owners and/or utility companies.
- Advocate for local building code authority to create, implement, and enforce a local green building code.

# Environmental Action Plan Implementation

## Water Resources



## Chapter(s): Water Resources - **Targets**

Lead Department/Staff: TES, AlexRenew, CA Jesse Maines

Chapter / Topic	Target
Enhancement and Restoration	Stormwater will be managed to enhance the quality of local waterways and their ecological, public health, social, and economic benefits, by meeting 70 percent of the City's Chesapeake Bay phosphorus pollution by 2023 ahead of the regulatory requirement
One Water Infrastructure	Meeting current and future, regulatory and infrastructure demands through planning, coordination, and implementation resulting in a safe and adequate drinking water supply, reduced risk of flooding, and improved water quality

## Chapter(s): Water Resources - **Actions**

Lead Department/Staff: TES, AlexRenew, CA Jesse Maines

	<b>2019</b>	<b>2020</b>	<b>2021</b>
Enhancement and Restoration	None	Create a green infrastructure policy document that details implementation of the citywide approach as policy for implementation of green practices to reduce pollution in urban stormwater	Hire an environmental educator to create and implement educational water resources programs targeted to students and adults.
One Water Infrastructure	None	None	None

## Chapter(s): Water Resources - **Actions**

Lead Department/Staff: TES, AlexRenew, CA Jesse Maines

	<b>Short-term 2022-2023</b>	<b>Mid-term 2024-2028</b>
<b>Enhancement and Restoration</b>	By FY2023, achieve the state and federal mandated nutrient and sediment pollution reductions using the strategies in the Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan. Exceed the cumulative 40 percent reductions in the 2018 – 2023 MS4 permit to include design and construction of the Ben Brenman / Cameron Station Pond Retrofit and the Lucky Run Stream Restoration. (6.1.1)	By FY2024, develop a Green Infrastructure Program Plan to prioritize projects, increase green infrastructure projects on public and private property, and promote green infrastructure as the leading approach for stormwater management in the City. (6.1.5)
		By FY2025, achieve 100 percent of the state and federal nutrient and sediment pollution reductions using the strategies in the Chesapeake Bay TMDL Action Plan. (6.1.4)

## Chapter(s): Water Resources - **Actions**

Lead Department/Staff: TES, AlexRenew, CA Jesse Maines

	<b>Short-term 2022-2023</b>	<b>Mid-term 2024-2028</b>
<b>One Water Infrastructure</b>	By FY2022, prepare a plan to improve our National Flood Insurance Program Community Rating System score from a 6 to a 5 to reduce flood insurance rates as the first '5 rated community' in the region for property owners. (6.2.1)	By FY2025, work with Alexandria Renew (wastewater treatment) to implement the Long-Term Control Plan through the RiverRenew initiative that addresses all four combined sewer outfalls and minimizes combined sewer overflows (CSOs). (6.2.4)
	By FY2022, develop the preliminary prioritization for nuisance drainage projects and by FY2023 develop the Drainage and Flooding Projects Prioritization Plan to manage major capital construction projects. (6.2.2)	By FY2028, explore a reclaimed wastewater reuse partnership between the City and Alexandria Renew, including updating the technical and economic feasibility study for using reclaimed wastewater for irrigation of some of the larger open spaces in the city. (6.2.5)
	By FY2023, educate businesses and homeowners in water conservation practices and consider an incentive program (e.g., rebates, fees reductions or tax breaks), and provide outreach to the general public. (6.2.3)	By FY2028, collaborate with Virginia American Water and regional partners to monitor, evaluate, and ensure safe and adequate water supply for the City now, and in the future. (6.2.6)

## Chapter(s): Water Resource - **Legislative Priorities**

Lead Department/Staff: TES, AlexRenew, CA Jesse Maine

- Expand the Virginia Stormwater Best Management Practice (BMP) Clearinghouse list of accepted stormwater quality Best Management Practices to provide localities greater flexibility for development and redevelopment projects, and overall to meet the Chesapeake Bay Total Maximum Daily Load (TMDL) cleanup mandates. Support federal, state, and regional compacts and initiatives to reduce transportation-related greenhouse gas emissions, including support of the Transportation and Climate Initiative.
- Establish a grant program funded by the City to provide reimbursement to property owners for the installation of BMPs on private property.
- Seek state and federal grant funding to offset the cost of implementation of Combined Sewer System Long-Term Control Plan and burden on City rate payers.



# Environmental Action Plan Implementation

## Solid Waste



## Chapter(s): Solid Waste - **Targets**

Lead Department/Staff: TES, PRCA, Purchasing  
[Helen Lee]

Chapter / Topic	Target
Recycle	By FY2023, establish a FY2019 GHG emissions base year for the collection and processing of solid waste, measure emissions at least annually, and reduce the emissions rate by at least 12 percent
Reduce	By FY2023, reduce the total solid waste per household collected from city-served residential customers by five percent as compared with a base year of FY2018

## Chapter(s): Solid Waste - **Actions**

Lead Department/Staff: TES, PRCA, Purchasing Helen Lee

	2019	2020	2021
<b>Recycle</b>	Launch a “Recycle Right” education campaign to promote and define recycling best practices with a focus on reducing contamination of recyclables, discouraging the disposal of recyclables inside plastic bags, and maximizing the reduction in GHG emissions. (5.1.2)	Install special containers for glass only recycling at all recycling drop-off centers to improve the recyclability of glass. (5.1.1)	If no environmentally and economically justifiable alternative has been identified for recycling glass placed in the single stream, begin to phase out glass from single stream recycling and temporarily reset the City’s recycling goal accordingly. (5.1.1)
		The City’s food waste composting program will result in a net reduction in GHG emissions. (5.1.5)	Review and update the City’s recycling ordinance to reflect changes in the global recycling market and to prioritize recycling practices that maximize the reduction in GHG emissions. (5.1.4)

## Chapter(s): Solid Waste - **Actions**

Lead Department/Staff: TES, PRCA, Purchasing Helen Lee

	2019	2020	2021
<b>Recycle</b>		Conduct a Route Optimization Study to perform a review of the current truck routing, mileage, staffing levels, homes served per route and tonnages of trash collected. Ensure that routes are performed in the most efficient, economical manner, and maximize the reduction in GHG emissions. (5.1.3)	
<b>Reduce</b>	Develop online directory for reuse (consign), donation, repair and include the District of Columbia, Maryland, and Virginia to encourage residents and businesses to prevent waste and reuse existing materials.	Pilot a Share-A-Bag program to encourage residents to use reusable bags over disposable plastic bags.	Evaluate and make a recommendation to Council on whether to initiate variable-rate pricing for solid waste collection services to reduce waste and provide greater economic equity for residents.

Chapter(s): Solid Waste - **Actions**

Lead Department/Staff: TES, PRCA, Purchasing Helen Lee

	Short-term 2022-2023	Mid-term 2024-2028
<p><b>Recycle</b></p>	<p>None</p>	<p>By FY2028, evaluate public space trash and recycling bins and make recommendations for optimizing routes and other operational changes. (5.1.6)</p>
		<p>By FY2028, review commercial recycling requirements to improve resource recovery in the commercial sector. Evaluate for recycling capacity, convenience, signage, number and type of recyclables required to be recycled, education, outreach, and information required for Recycling Implementation Plan form. (5.1.7)</p>
		<p>By FY2028, evaluate organics processing market readiness and feasibility of curbside organics collection. (5.1.8)</p>

Chapter(s): Solid Waste - **Actions**

Lead Department/Staff: TES, PRCA, Purchasing  
[Helen Lee]

	Short-term 2022-2023	Mid-term 2024-2028
<b>Reduce</b>	None	By FY2028, support reduction, reuse and recovery of building material by working with regional partners to keep the Builders Recycling Guide up-to-date and share resources with commercial developers. (5.2.4)

## Chapter(s): Solid Waste - **Legislative Priorities**

Lead Department/Staff: TES, PRCA, Purchasing Helen Lee

- Support the development of a legislative proposal that would authorize the City to enact a deposit program for glass containers (i.e., a “bottle bill”) and to control the sale of disposable plastic bags (i.e., “bag law” or “plastic bag tax”) in collaboration with neighboring jurisdictions.