RVAgreen 2050 Environment Working Group *Monday, June 14th, 2021*

Impacts & Indicators





Agenda

- I. Intro: Settling in & ground rules
- II. Review: Revised strategies after the prioritization activity
- III. Key concept: impact mapping
- IV. Activity: Making impact maps for the prioritized strategies
- V. Conclusion: Wrap-up and next steps

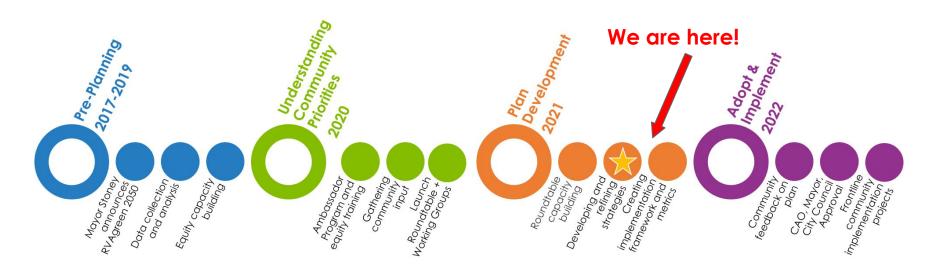
Today's Objectives

- Identify the potential impacts of the prioritized strategies
 - What are we trying to impact?
 - What does success look like for each strategy and what is our shared understanding of what is achievable?

Ground Rules / Group Expectations



Process Overview



Strategy Refinement Process Summer 2021



Strategy Prioritization

Impacts and Indicators

Implementation and Accountability

During our last meeting, we discussed:

- What strategies will most help us achieve our 2030 goals?
- Are we comfortable with the number of strategies to be prioritized?

<u>Today</u>, we will be asking the questions:

- What are the potential impacts of our strategies?
- How can those impacts inform the indicators that we use to measure success?

Over the next two meetings (July 12 & August 2), we will be thinking about:

- How will we equitably implement the plan?
- How will we ensure accountability and transparency?

RVAgreen 2050 DRAFT Structure

Goals	What is the purpose of RVAgreen 2050?
Vision	What does the ideal future look like when RVAgreen 2050 is implemented?
Community Priorities	What cross-cutting public values do we want to center in our plan?
Pathways	What leverage points will lead us towards realizing and operationalizing the goals and community priorities?
Objectives	What are the long-term aims we want to accomplish, organized into the different pathways?
Prioritized Strategies	What are the strategies that will help us achieve our goals and what are the SMARTIE actions that will lead us there?
Impacts	How will our strategies impact the community and lead to a more equitable, resilient, and adaptive Richmond?
Indicators	How will we measure success?
Implementation	How are we going to implement, measure progress, and ensure accountability in this plan?



Refined strategies

Strategy distribution after prioritization

		Obj 1	Obj 2	Obj 3	Obj 4
B&E	12	4	3	3	2
Community	10	6	4		
Transportation	9	4	3	2	
Environment	9	3	3	2	1
Waste	9	2	3	2	2



Objective 1 Refined Strategies

Objective 1: Make sure all residents have the opportunity to engage with healthy natural resources, spaces, and biodiversity.

A. Public-Private Green Space Management - Create public-private partnerships to help the City create, maintain, and manage high-quality parks, green infrastructure, and public open space, including a privately-owned public space program (a recreational easement program) to incentivize private land owners and/or developers to include publicly accessible green/open space in underserved areas. As part of green space management, conduct an impact assessment of climate change with regard to the presence of invasive species and create a plan for control and minimization of their presence and impacts.

- **B. Parks Master Plan** Develop, fund, and implement a Parks Master Plan providing all Richmonders access to a quality public park that meets the surrounding community's priorities within a 5-minute walk, bike, or bus ride. Prioritize locations based on a set of factors co-created with the community.
 - **Staffing:** Create a permanent office/position within the Department of Parks, Recreation & Community Facilities to manage partnership and volunteer programs.
 - **Green Infrastructure Fund:** Establish a fee or fund for parks and green infrastructure maintenance and the acquisition of new green space, such as \$0.005 per dollar of real estate taxes or parking fees for non-city residents at high-use locations on summer weekends.
 - Awareness: Create a program to introduce Richmonders to the City's public green and blue spaces (including how to get to them, how to use them responsibly, etc.) that is tailored to individual interests, physical ability, and other factors.

C. Community Gardening - Develop, fund, and implement, while making visible and accessible, an urban agriculture program that partners with food justice community organizations and includes an apprenticeship training program. Identify changes needed in the community garden ordinances for sales and increased funding for staffing, maintenance, and materials. Incentivize owners of multifamily dwellings to remove barriers to individuals growing their own food and allow universal access to community gardening and composting. Encourage cultivation of native plants.

Objective 2 Refined Strategies

Objective 2: Reduce risks and impacts to the community and natural environment from extreme heat and drought.

A. Impervious Surface Management - Develop, fund, and implement an urban heat island readiness and impervious surface reduction plan with a focus on vulnerable populations and ecosystems. Include tactics such as mandating benches and shade structures at all bus stops and establishing "rubber-stamped" shade structure designs that businesses can build and install in the public right-of-way. Develop a depaving program plan for impervious surfaces that includes an ordinance to allow non-DPW entities to conduct depaving projects, with standards and guidelines for such projects. Establish requirements for major development related to mandating no net increase in impervious surface areas upon project completion.

- **B. Urban Forests and Trees Planning** Develop, fund, and implement an urban forest master plan, engaging the community to develop a set of criteria for places to focus planting efforts (existing canopy, heat, plantable space, etc.). Increase City capacity internally and via community partnerships for maintaining existing resources that enhance extreme heat and drought resilience by increasing the maintenance budget, hiring (including through a workforce development program), and providing staff training and engagement opportunities to increase buy-in and decrease turnover. Identify opportunities to expand the Adopt-A-Tree program, such as by allowing community organizations to buy trees in bulk and committing to caring for the trees.
- C. Green Space Management Validate and implement the recommendations of the Mayor's Green Team (2020), including fostering interdepartmental cooperation and coordination on green space and parks projects and adopting the use of proffers or impact fees on new developments to increase green space and tree canopy. Create a citywide definition of quality green space that provides guidance on these and other strategies, which includes information on the types of spaces that provide co-benefits for climate resilience.

Objective 3 Refined Strategies

Objective 3: Reduce risks and impacts to the community and natural environment from extreme precipitation and flooding.

A. Land management practices:

- Neighborhood prioritization Use community input and data (Climate Equity Index, RVA311, RVAH2O, etc.) to identify and prioritize
 neighborhoods for extreme precipitation and flooding resilience projects including assessing existing stormwater infrastructure, green
 alleyways, stream restoration, and depaving.
- Flood-prone land Identify opportunities for the City to acquire flood-prone and other land to increase resilience to flooding.
- **Riparian development** Restrict development in riparian areas and identify locations for and engage developers on development of low flood risk areas.

B. Extreme precipitation and flooding planning and operations:

- Capacity & Resources Increase City capacity for maintenance of existing resources that enhance flood resilience by increasing maintenance budget, hiring more staff (including through workforce development program), and providing staff training and engagement opportunities to increase buy-in and decrease turnover.
- **Green Infrastructure Master Plan** Implement the Green Infrastructure Master Plan to expand green infrastructure on public lands and rights-of-way through City projects and community partnerships, and include public engagement and education programs.
- **Zoning & Permitting** Create incentives or requirements in zoning and development processes (such as proffers or impact fees) for green infrastructure on new development.
- **Project Management** Create an integrated project management portal to streamline administration and permitting of public-private partnership projects that increase resilience to the impacts of climate change, such as green infrastructure installations.

Objective 4 Refined Strategies

Objective 4: Engage the natural environment to improve air quality and reduce greenhouse gas emissions.

A. Exploration & Implementation: Explore the potential for carbon farming, sequestration, and removal on vacant public or private land, throughout the City's parks and open space system, and in coordination with other public landowners, prioritizing investments in frontline communities where feasible. Maximize carbon sequestration in parks, public green spaces, buildings, schools, and public housing by prioritizing deep root, native plantings.

Strategy Impact mapping

Purpose of Impact Mapping

What?

A framework for describing and measuring the wider impacts of urban climate action

Why?

Strategies produce multiple benefits which can become powerful tools for more & better designed climate actions and are critical to reducing barriers to action.

The **distribution** of an impact - whether it is equitable - is at the core of this approach.

For Example...

If the net growth in jobs was focused on a part of the population where employment is already high, such as high-skilled workers, but detracts from those in areas of high unemployment, this could be inequitable and possibly damaging.



"This is the evidence that urban stakeholders need to guide and make the case for climate action."

Structure of impact maps

The area of the action/strategy; these are analogous to the objectives that Sector fall under each Pathway. Any policy, program, or investment initiated with the intention to provide **Strategies** some contribution to equitable climate mitigation or adaptation. What a strategy produces, such as a provided service, facility, infrastructure, Output(s) or a financial tool. The change generated by the output; it is necessary for the intended impact **Outcomes** to occur. The medium- or long-term effect of the outcome (e.g., reduced traffic **Impacts** congestion, reduced energy bills, reduced ground level ozone).

Types of impacts

The 3 Pillars of Sustainability

Social

Economic

Environmental

Racial Equity & Environmental Justice: Potential to promote racial equity and support historically disenfranchised communities

Government Accountability: Potential to promote government accountability and transparency

Community Wealth: Potential to build community wealth and Increase jobs and education access

Housing & Buildings: Potential to expand affordable housing and reduce housing cost burden

Neighborhoods: Potential to support beautiful and safe neighborhoods

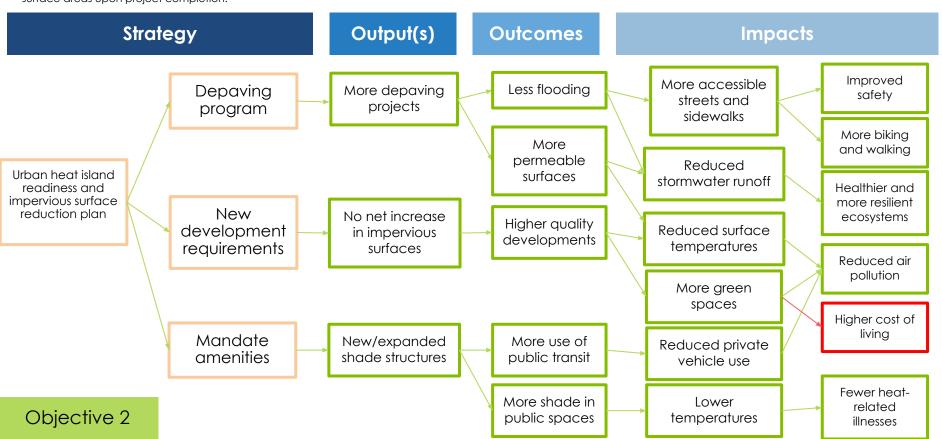
Health: Potential to promote physical and mental health and well-being

Engagement & Communications: Potential to support equitable engagement and communication

ТНЕМЕ	IMPACT GROUP	IMPACT	SDG #	SPECIFIC GROUP	DESCRIPTION
ECONOMIC IMPACTS		Biodiversity	14, 15, 11	Biodiversity protection	Protection of ecosystems and species.
				Ecosystem services	Value of services offered by ecosystems, and impact on these ecosystems and services.
				Biological diversity	""Biological diversity" means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems." (Convention on Biological Diversity, Article 2). This impact relates to changes to biological diversity and urban green surface.
				Species population	(Changes to) the size of a species population.
		Climate Change	7, 11, 13	Greenhouse gas emission	Volume of greenhouse gases, which drive global warming, emitted from man-made sources
		Air quality	3, 11, 15	Indoor air pollution	Air pollution in buildings and households.
				Outdoor air pollution	Air pollution in cities.
				Olfactory pollution	"Pollution produced by gaseous emissions in the atmosphere that, even in very small amounts, may cause injuries or a condition of general unease or sickness to persons living in the vicinity." (European Environment Information and Observation Network)
		Noise No related SDG		Indoor noise	Noise in buildings.
				Outdoor noise	Noise due to traffic and other urban activities.
		Soil quality	3, 11, 12, 15	Soil pollution	Contamination of the soil due to the presence of pollutants such as heavy metals and chemicals (herbicides, industrial wastes, and others).
				Soil degradation	"Change in the soil health status resulting in a diminished capacity of the ecosystem to provide goods and services for its beneficiaries." (Food and Agricultural Administration)
				Soil texture	Size and type of soil particles composing the land, and its impact in land subsidence and stability.

Example Environment impact map

IMPERVIOUS SURFACE MANAGEMENT: Develop, fund, and implement an urban heat island readiness and impervious surface reduction plan with a focus on vulnerable populations and ecosystems. Include tactics such as mandating benches and shade structures at all bus stops and establishing "rubber-stamped" shade structure designs that businesses can build and install in the public right-of-way. Develop a depaving program plan for impervious surfaces that includes an ordinance to allow non-DPW entities to conduct depaving projects, with standards and guidelines for such projects. Establish requirements for major development related to mandating no net increase in impervious surface areas upon project completion.



Activity

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Develop maps of outputs, outcomes, and impacts for each strategy using the Urban Climate Action Impacts Framework structure

Breakout room discussion - 30 minutes per strategy-briefly identify outputs and outcomes and concentrate on impacts

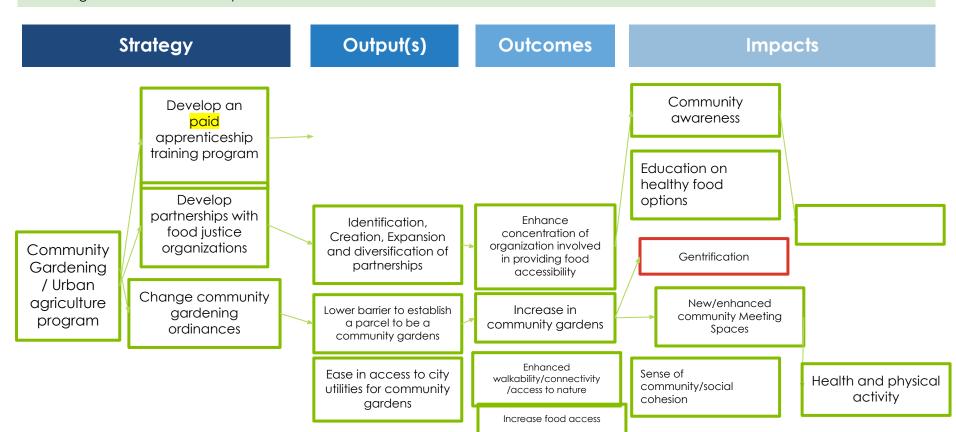
- 1. For the strategy, consider scale and scope, as well as business as usual scenario,i.e. what would it look like if the strategy were not implemented to provide context
- 2. What are the **outputs** of this strategy? What are direct, tangible results of the strategy?
- 3. What are the **outcomes** of this strategy? What is the change generated by the output?
- 4. What are the potential **impacts** that could result from this strategy? Remember to integrate equity considerations. Who are key stakeholders? What are their priorities and concerns? How is the strategy potentially impacting them-positively or negatively?
- 5. Which impacts are most significant?

Activity Groups

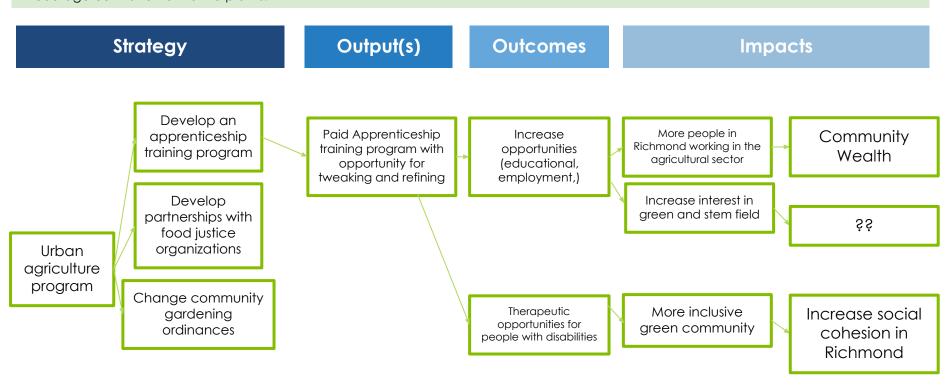
Dawn Khilia		Wendy	David	
 Parks Master Plan (Obj 1) Public-Private Green Space Management (Obj 1) 	 Community Gardening (Obj 1) Urban Forests and Tree Planning (Obj 2) 	 Green Space Management (Obj 2) Land Management Practices (Obj 3) 	1. Extreme Precip. and Flooding Planning (Obj 3) 2. Exploration and Implementation (Carbon Sequestration) (Obj 4)	
Sign-Up Shelly BP Christina Bonini	Sign-Up Kendra Janine Lester Monica Esparza Chika Anyadike	Sign-Up	Sign-Up Todd Carlene	

Go into breakout rooms!

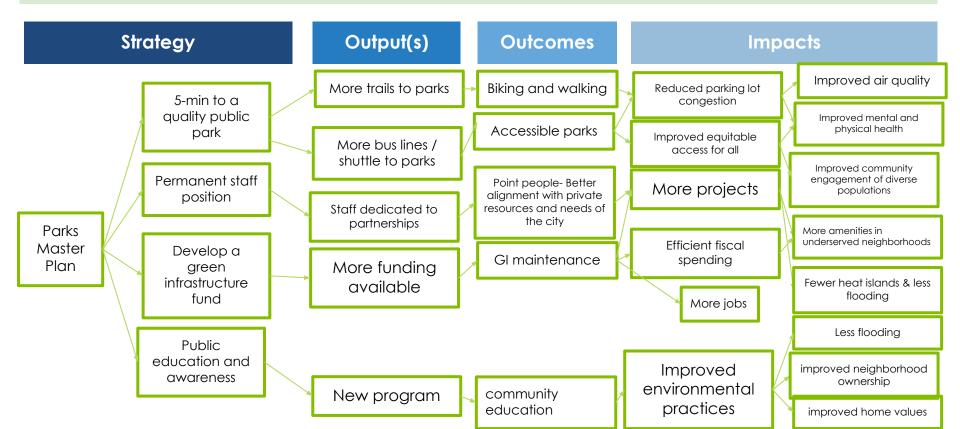
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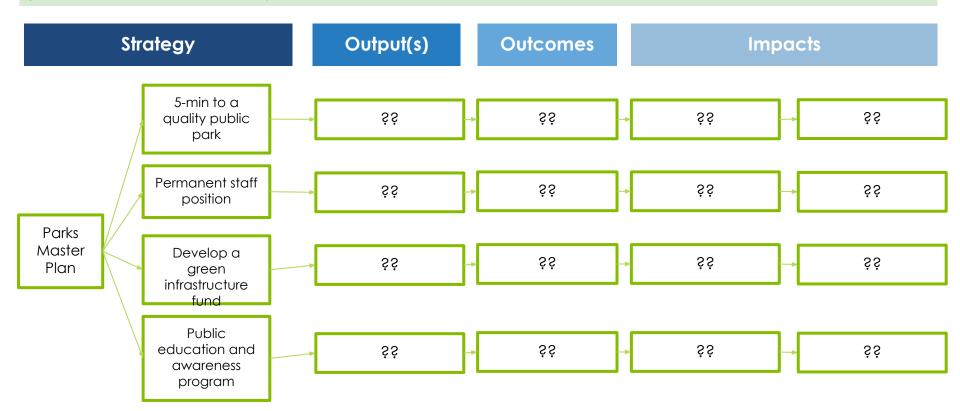
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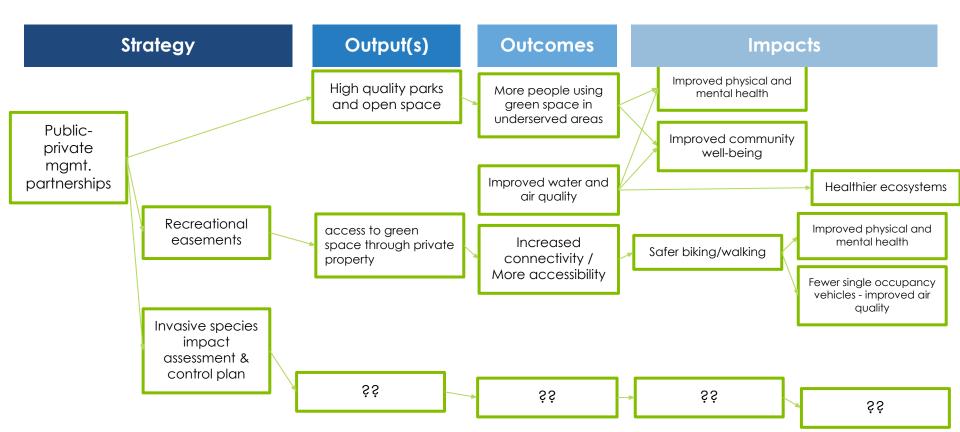
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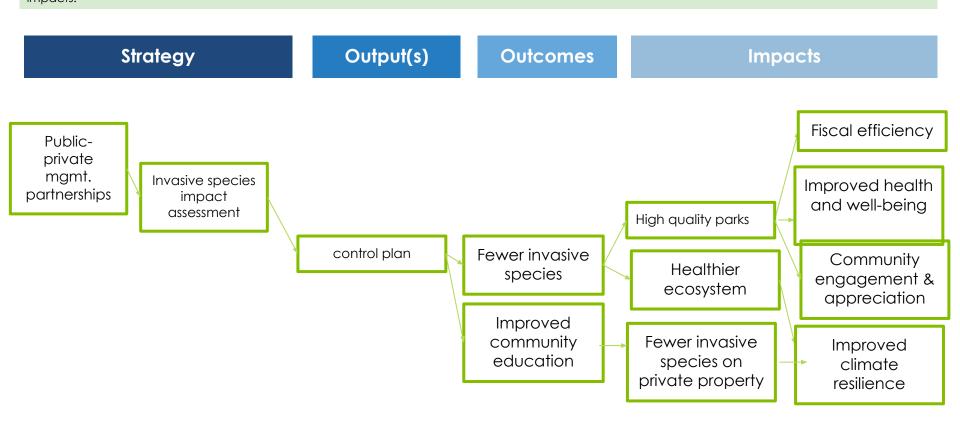
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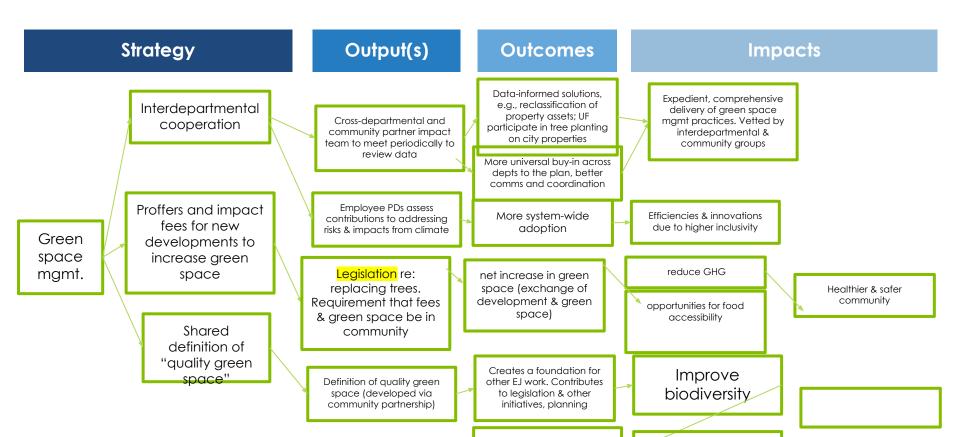
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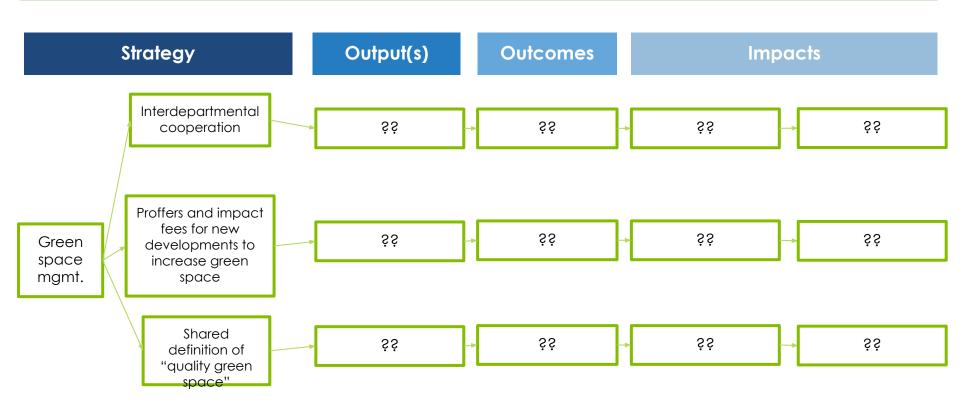
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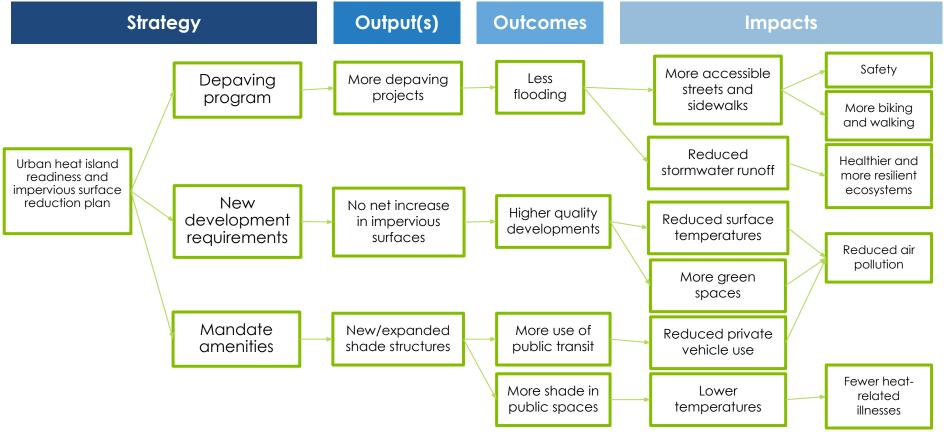
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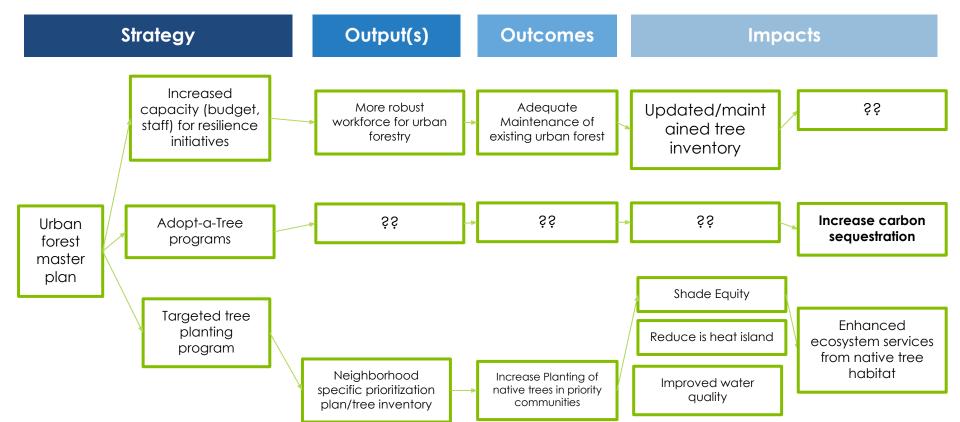
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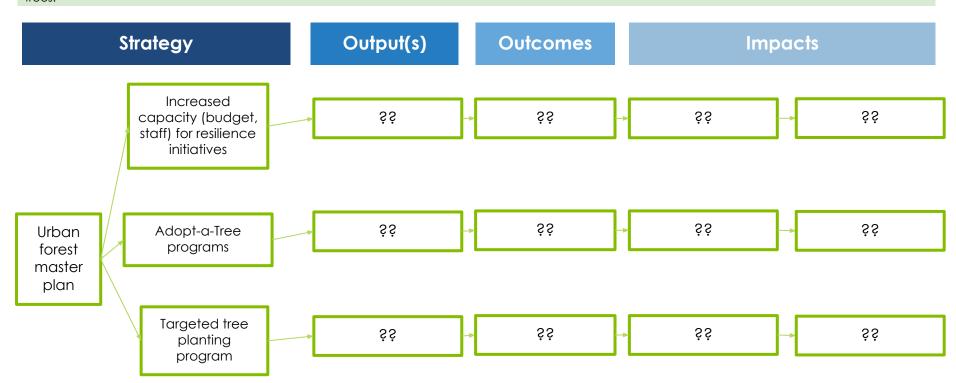
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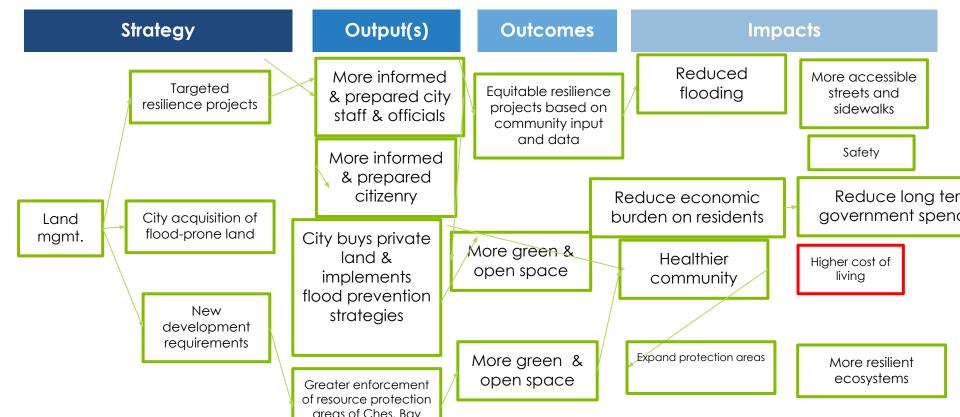


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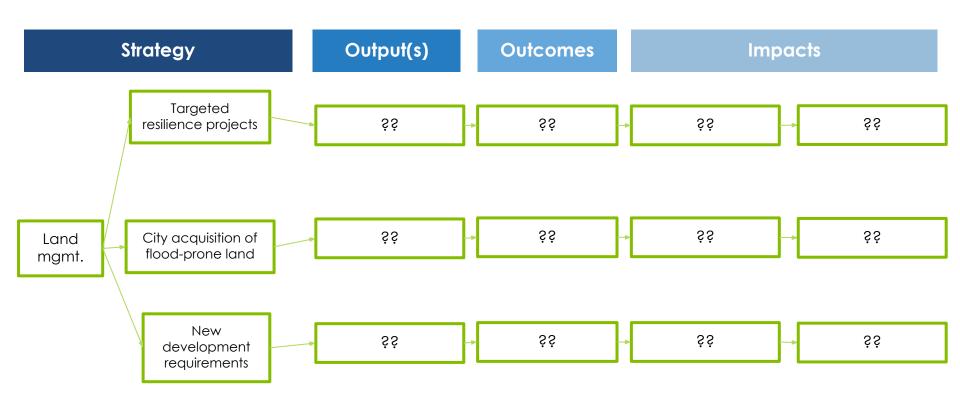
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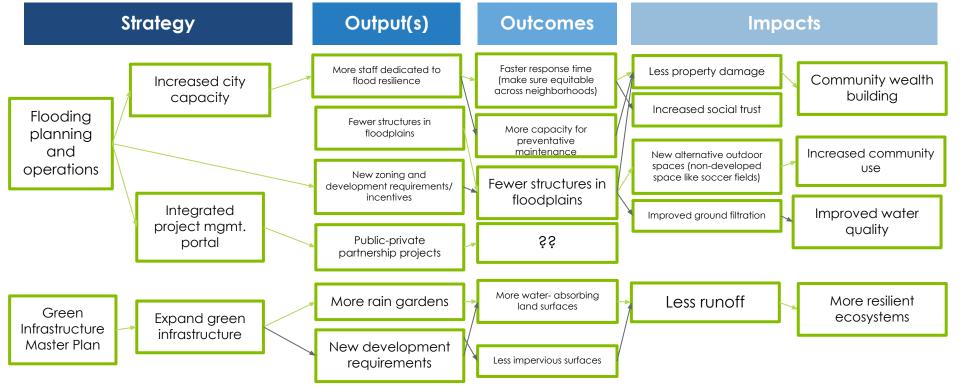
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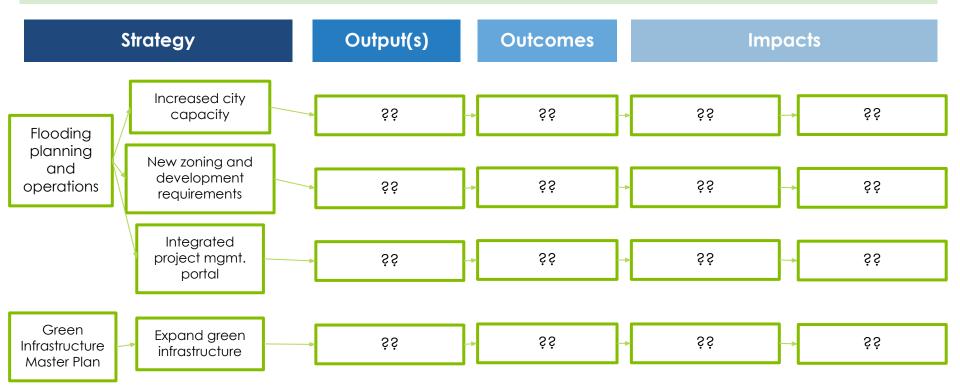
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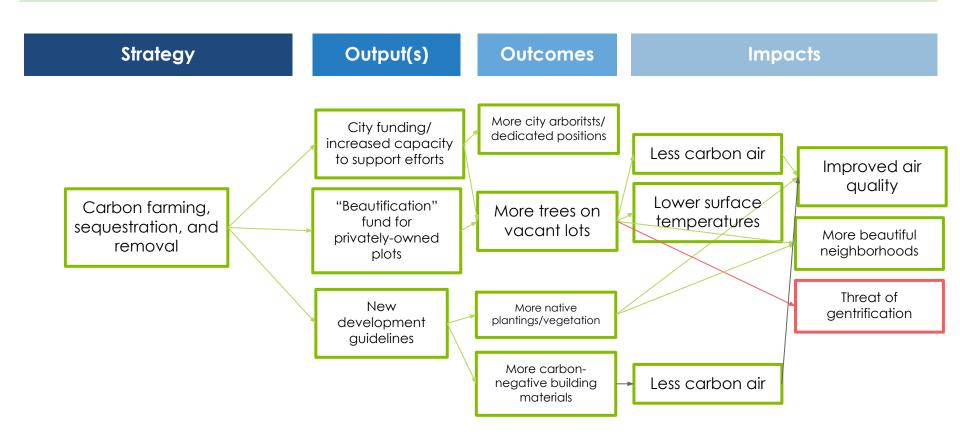
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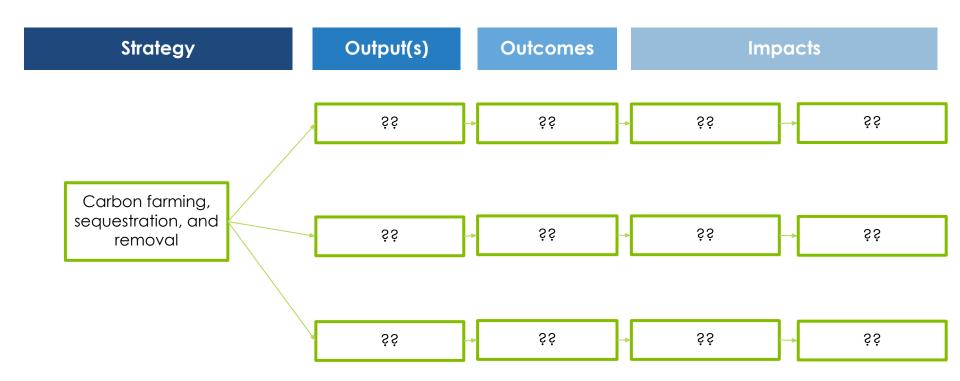
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Exit breakout rooms!

Wrap-up and next steps

- Next meeting: July 12th @1pm, "RVAgreen2050 Implementation and Accountability"
- NOW:
 - General reflections?
 - Fill out feedback survey
 - Share updates, upcoming events, and resources in the chat

THANK YOU!

Example

