

ST. GEORGE RAINWAY

Co-design for Co-benefits Engagement Summary



ST. GEORGE RAINWAY PUBLIC WORKSHOP
JUNE 1ST, 2021

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Co-design for Co-benefits Engagement Summary

Co-designing for Co-benefits

In this second phase of public engagement, we invited the community to share ideas for St. George Rainway. We worked together to come up with potential design elements and ideas that will deliver important rainwater management and drainage functions, promote active transportation, and bring exciting co-benefits to the neighbourhood.

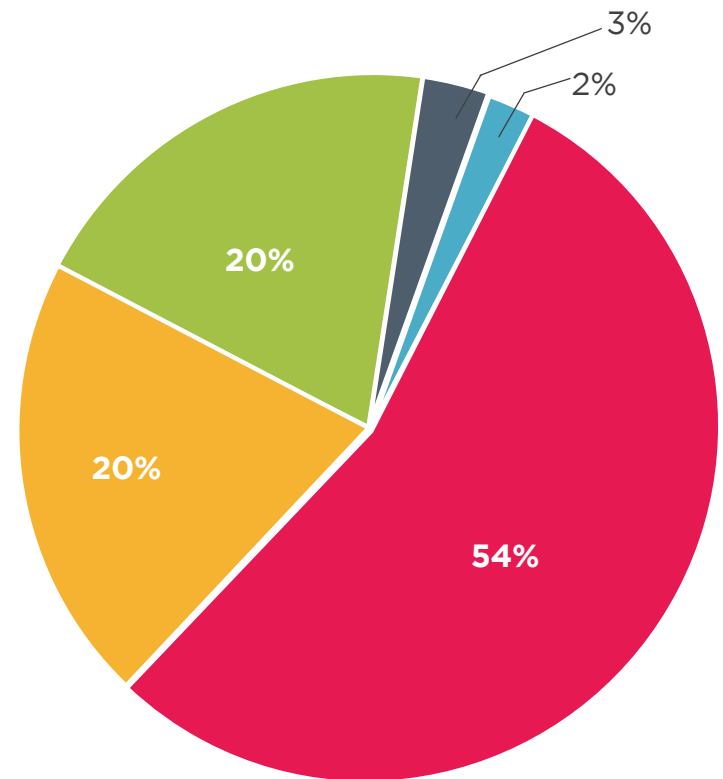
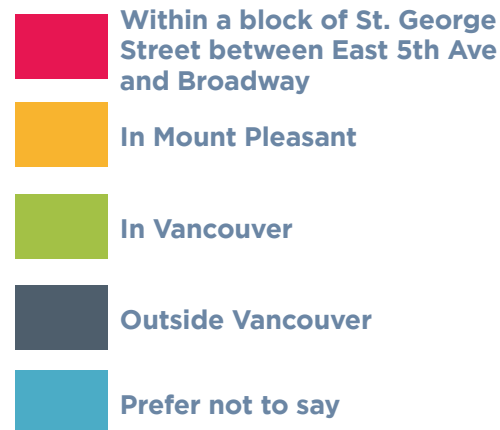
Between June 1 and July 4 2021, we held an online design workshop and ran an online survey. Participants were invited to share ideas around 4 topic areas: Mobility, Learning, Nature and Community.

The graphic recording on the previous page summarizes the conversations we had at our public workshop in early June. These ideas were further explored and prioritized through the survey. The combined results are summarized in this report.

Who we heard from

Through this phase of engagement, we have heard from people of different ages, ethnicities, abilities, income levels, and genders. We are tracking the demographics of who we hear from to make sure we reach as many types of people as we can. 74% of the respondents to our survey live in Mount Pleasant, and over 50% of respondents live within 1 block of St George. We are grateful for these neighbours and the broader community of Vancouver for sharing their thoughts and ideas for the St. George Rainway.

Where respondents live



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Emerging Themes

Here are some of the themes and ideas we heard through the Co-Design for Co-Benefits engagement process.

Nature should lead the design



Space for urban nature ranked #1 priority for street space use and *planting and green space* was the top ranked priority for public space improvements. We heard throughout the survey that nature itself is art, community, and a source of learning, and it should be the starting point for the Rainway design. Many ideas shared reflected this, including increasing shade trees, adding creative pollinator boxes, and planting native species that provide food and habitat.

Street space priorities are emerging



We know that building the Rainway will require some space trade-offs. The prioritization of street space uses was nearly identical between this survey and the November-December 2020 Vision and Values survey. Space for urban nature, walking and cycling, and rainwater management are the top priorities based on survey responses. Space for parking and car movement were the lowest priorities in both surveys.

Consider current and future parking needs



While parking scored 5th out of 6 space use priorities for survey respondents as a whole, it scored 4th for residents of Mount Pleasant and residents living within a block of the project area. Respondents asked us to consider the parking needs of the growing community. In the next phase of engagement, the City will introduce 3 different concept designs that will include different parking configurations for feedback.

Design with safety in mind



Safety concerns including how the space is used, sharp edges, steep drops, slippery surfaces, sight lines, garbage, and needles were all noted. Project designers will account for these concerns to the best extent possible through thoughtful design.

Keep the design functional and accessible to all

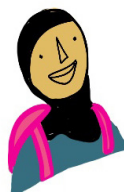


Many great ideas and considerations were shared, including designing for seniors as well as youth, creating multi-lingual signage, incorporating wheelchair friendly bench space, and ensuring noise levels remain low in close proximity to nearby homes.

Make space for Indigenous knowledge



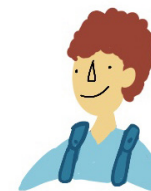
Incorporation of Indigenous history and culture was highlighted in many different survey areas. Educational signage, artwork, naming, and education around native plants and their traditional uses are some of the ideas shared with us.



by Erica Nava for @neofusion



by Erica Nava for @neofusion



by Erica Nava for @neofusion

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Design Parameters

Infeasibility of daylighting

We recognize that many in the community have a desire to celebrate and restore the lost stream below St. George Street. In this case, we aren't able to 'daylight' (or bring to the surface) the buried stream, as it has been buried too deep underground to make this possible. Instead, the Rainway will collect rainwater run-off from the surface into green rainwater infrastructure along St. George Street. Unlike a daylighted stream, water will only be visible at the surface during heavier rain events. During more modest rain events, the water will be absorbed by soil and plants and will be less likely to be seen flowing through the system. Through thoughtful landscape design, artwork, and signage (similar to the examples in the photos), we hope to honour the lost stream.

[To learn more, read our online post about how St. George Rainway will differ from traditional daylighting.](#)

Access to homes, sidewalks, laneways and driveways

Access will be retained to all homes, sidewalks, laneways, and driveways. The Rainway design will ensure that no matter what changes are made to the street, emergency vehicles can access all residences.

Plant selection

The community shared some great ideas for plants and plant selection during the co-design phase. Plants have a huge role to play in the Rainway, and are an important element in the removal of pollutants from rainwater runoff. Plants in the Rainway will be exposed to polluted rainwater runoff from the road, so we need to select hardy plants that can withstand pollutants, as well as both wet and dry periods. These plants will not be fit for human consumption but can provide food sources for birds and pollinators. We expect to use both native and resilient non-native plants to help treat rainwater runoff, encourage pollinators and biodiversity, adapt to climate change, and provide urban cooling benefits.

Tree placement

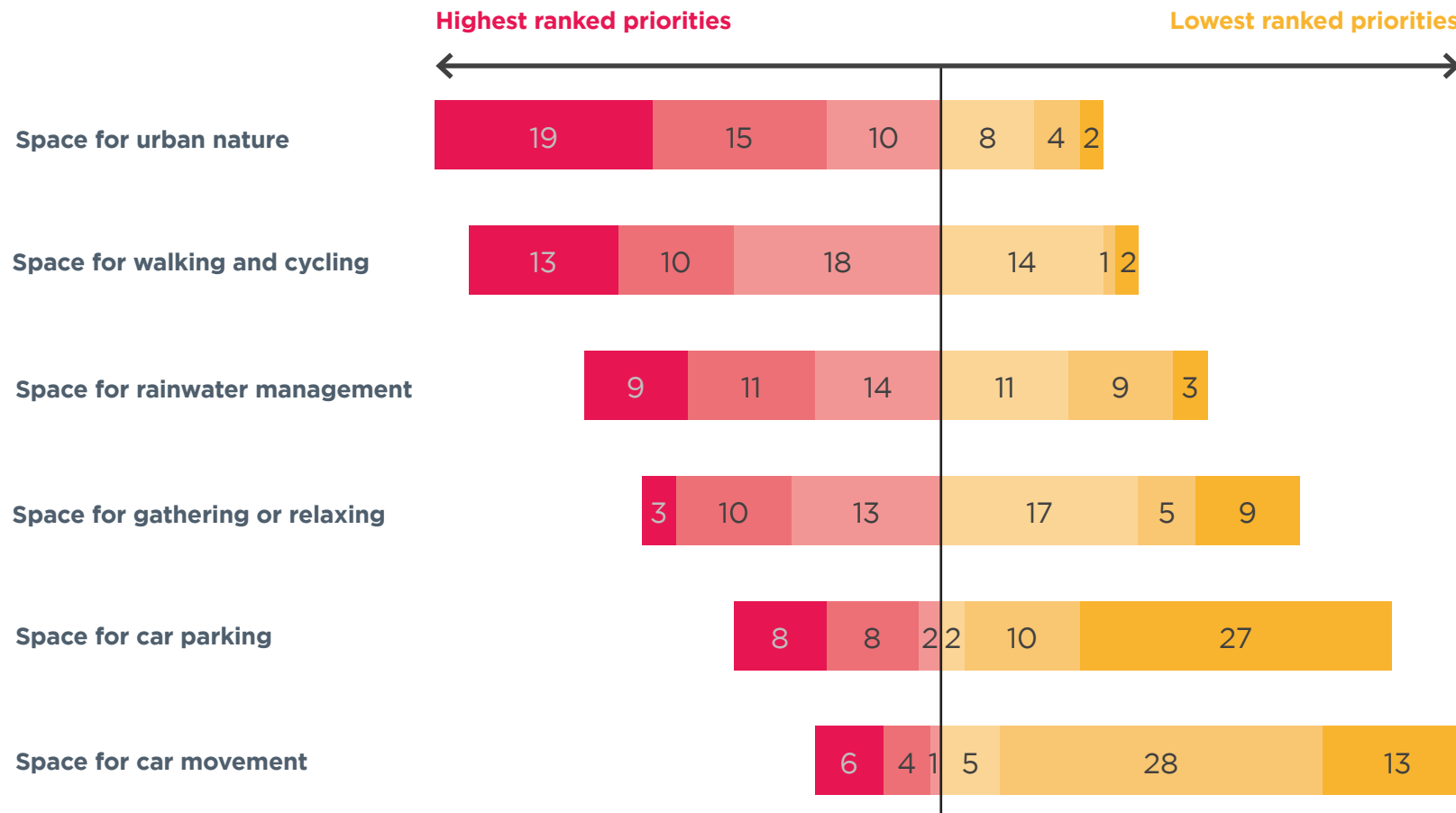
New trees will be incorporated into the Rainway to the maximum extent possible to provide shade, urban cooling and habitat. When selecting tree species for the Rainway, some of the considerations will include the trees' ability to tolerate wet and dry soils, ensuring the size of the tree won't impact sight lines for cars, and that the tree roots will not interfere with underground infrastructure.

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Design for Mobility

Street Space Priorities

The development of a Rainway will require some trade-offs. To create space for the Rainway, some road space that is currently used for parking and/or travel will need to be repurposed. Survey respondents were asked to rank 6 priorities for street space



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Design for Mobility

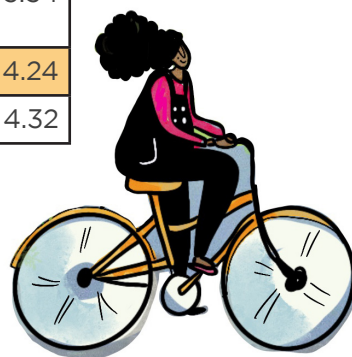
Priorities over time

The question about street space priorities was asked in two different surveys. The prioritization of street space uses was nearly identical between those two surveys.

The first survey took place during Phase 1 of engagement, between November 2 and December 7, 2020. 322 of the survey's 323 respondents answered this question. In the survey administered in Phase 2, 58 of 59 survey respondents answered this question.

Table 1: Comparison between space use rankings in two surveys (2020 & 2021)

Space use	Priority order (survey 1)	Priority order (survey 2)	Average rank (survey 1)	Average rank (survey 2)
Urban nature	1	1	2.41	2.42
Walking and cycling	2	2	2.49	2.71
Rainwater management	3	3	3.18	3.08
Gathering or relaxing	4	4	3.47	3.54
Car parking	6	5	4.62	4.24
Car movement	5	6	4.44	4.32



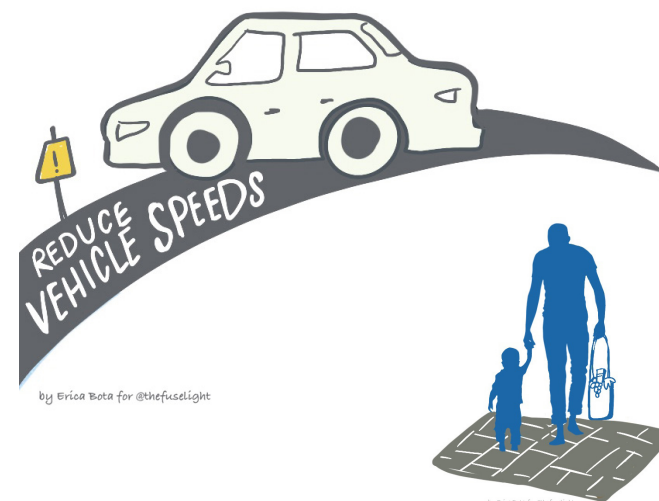
by Erica Bota for @thefusedlight

Context for reducing vehicle volume

We are looking at creating a cycling connection between 14th Ave to 6th Ave as part of this project. Current vehicle volumes on St. George Street are above the City's standards for an All Ages and Ability cycling route. We will be looking at ways to reduce motor vehicle volumes to below 500 vehicles per day.

Some ideas we heard for reducing vehicle volume

- Speeding, through-traffic, and non-resident parking are existing mobility problems on St George
- Retaining access to homes for residents and emergency vehicles is important
- Partial street closures, turn restrictions, or one-way flow would help solve traffic safety problems and create room for rainwater management and nature
- Consider traffic flow in the whole neighbourhood and the impact of nearby schools, businesses, and densification



by Erica Bota for @thefusedlight

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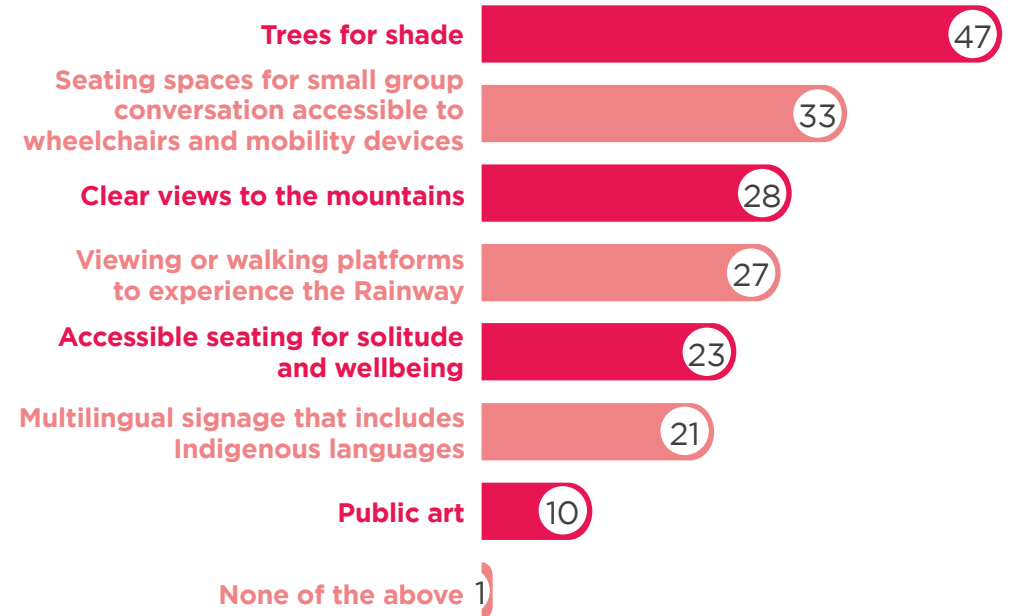
Design for Community

Public spaces can be hubs that bring neighbours and the community together. The Rainway design should reflect the culture, values, and needs of the community and foster a sense of connectedness.



Priority of ideas for creating an accessible, inclusive and welcoming space

Respondents were able to select up to 4 ideas. 59 of 59 respondents answered this question.



Some of the additional ideas we heard

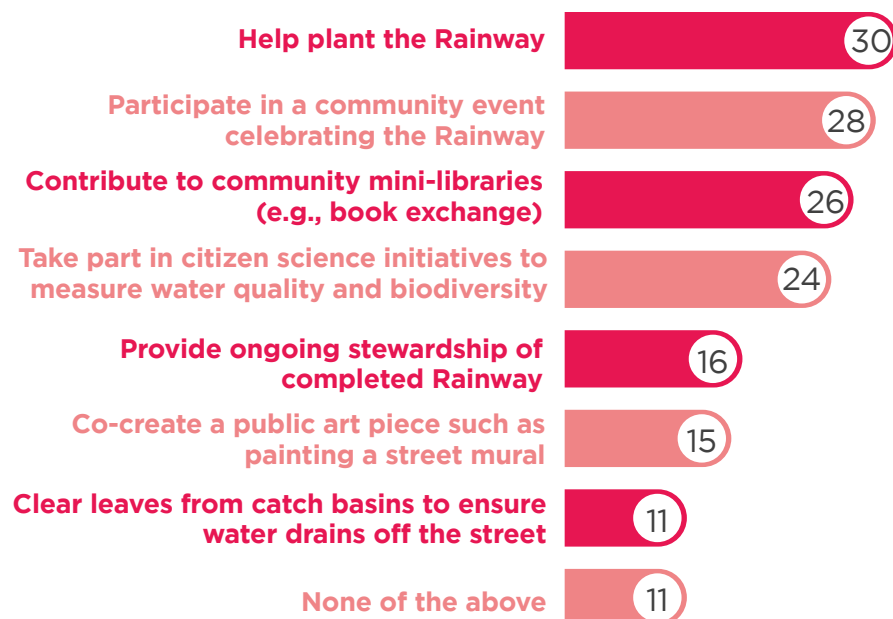
- **Car-free portion of the street** so that people can talk, connect, bond, and hear each other
- **Seating** including picnic tables and boulders for informal seating at edge of rain garden
- **Curved pathways, wider sidewalks/paths**
- **Focus on the rain garden** rather than other amenities given how close by the park is

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Design for Community

Interest in community involvement in the Rainway

58 of 59 survey respondents answered this question.

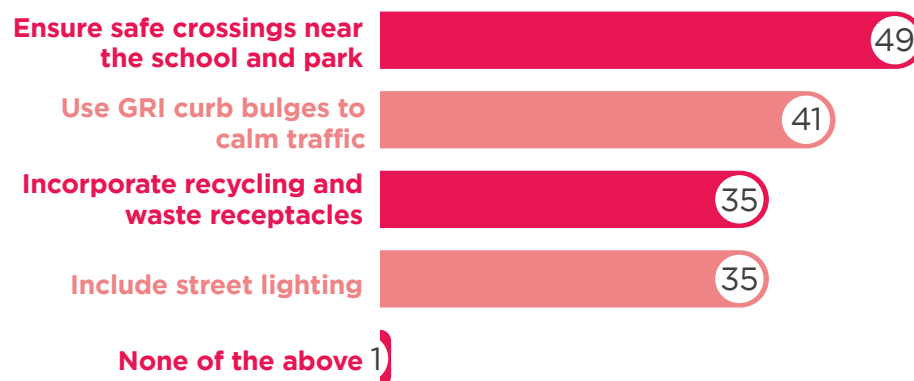


Some of the additional ideas we heard

- **Engage students** from local schools and Native Education College in activities, signage production, art, using natural materials
- Community **volunteer restoration** of the rainway
- **Free fridge, plant/seed library, free food pantry, community board**
- Community **adoption of planted areas**

Priority of ideas to make the Rainway a safe space

58 of 59 survey respondents answered this question.



Some of the additional ideas we heard

- **Reduce speed** for cars and bikes
- Provide **needle disposal boxes**
- The best way to build safety is to **strengthen community relationships**
- **Non-slip surfaces** to prevent falls

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Design for Community

Priority of types of art in the Rainway

Respondents were able to select up to 4 ideas. 57 of 59 survey respondents answered this question.



Some of the additional ideas we heard

- **Interpretive signage** itself = community art
- **Bat boxes**, nesting boxes
- **Nature** is a form of art
- **Community-based and participatory** art
- Art that **recognizes and celebrates water**

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Design for Learning

The Rainway is an opportunity to provide hands-on immersive learning for the entire community. Through intentional design, we can create an educational resource that fosters knowledge on topics such as water, green rainwater infrastructure, Indigenous cultural values and knowledge, nature, plants, and historic streams, among others.



Priority of ideas for building connections to the local schools and supporting youth engagement

Respondents were able to select up to 3 ideas. 53 of 59 respondents answered this question.



Some of the additional ideas we heard

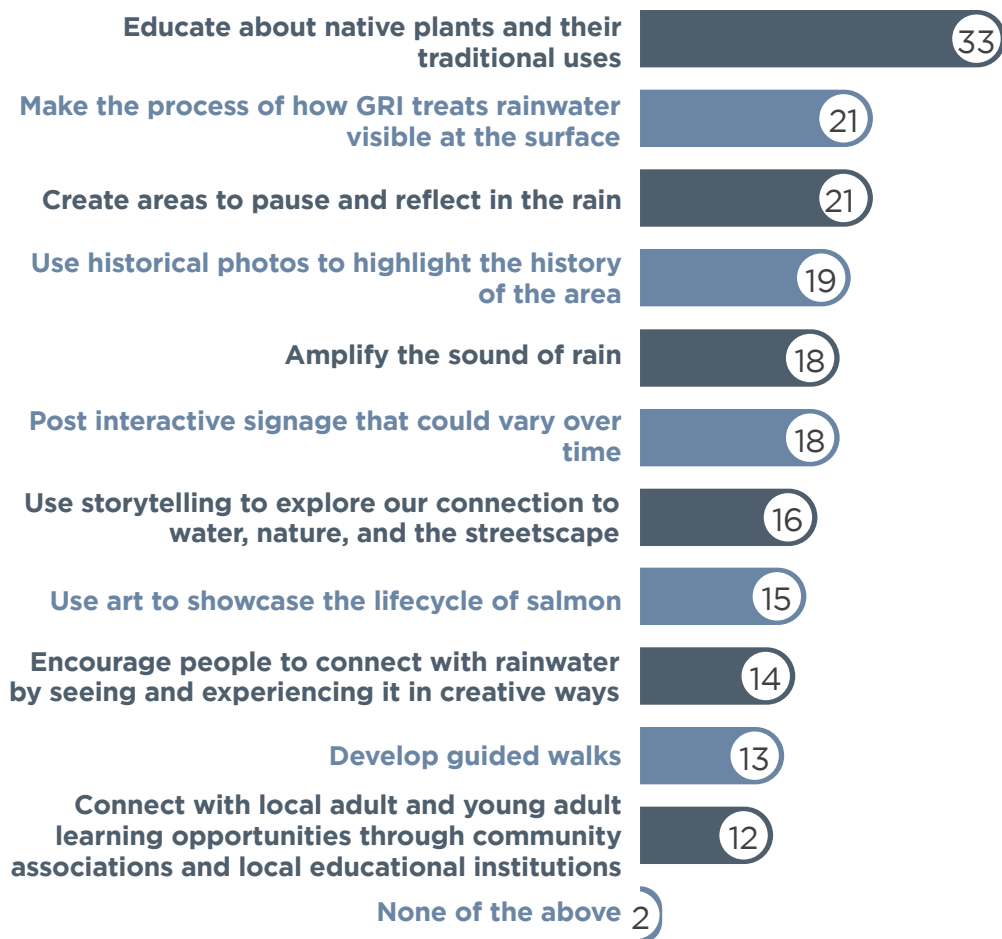
- **Student stewardship** via classrooms or clubs adopting portions of the Rainway
- Tie into **existing children's programs** at local organizations
- **Space for gathering** as a class
- The **natural space** will be interesting and educational for children
- Consider the **impacts of noise and programming** on local residents

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Design for Learning

Priority of ideas for using water to create formal and informal learning opportunities

Respondents were able to select up to 5 ideas. 55 of 59 respondents answered this question.



Some of the additional ideas we heard

- **Annual rainway celebration or seasonal gatherings** to celebrate summer solstice or fall harvest
- **Citizen science** as an opportunity for education
- Land-based **learning workshops by Indigenous knowledge-keepers** about our role in the hydrological cycle and harvesting uses for native plants
- **Rainway Residencies for an artist** to work with community or on creative water projects

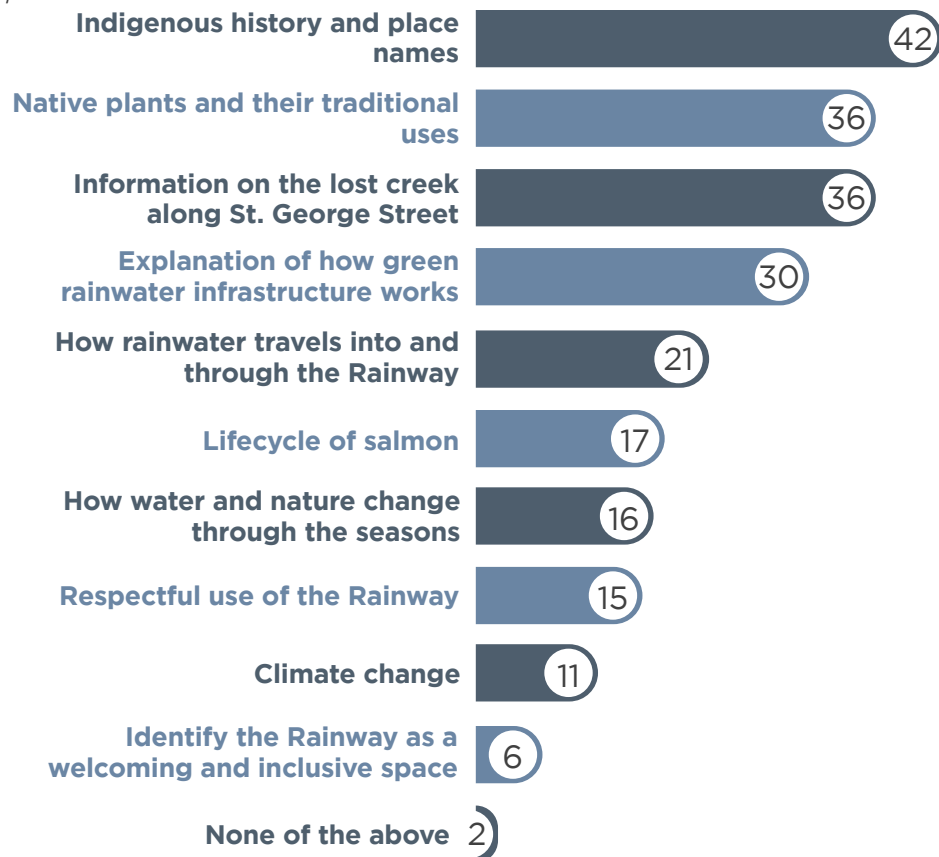


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Design for Learning

Priority of education messages for signs and artwork

Respondents were able to select up to 5 ideas. 56 of 59 survey respondents answered this question.

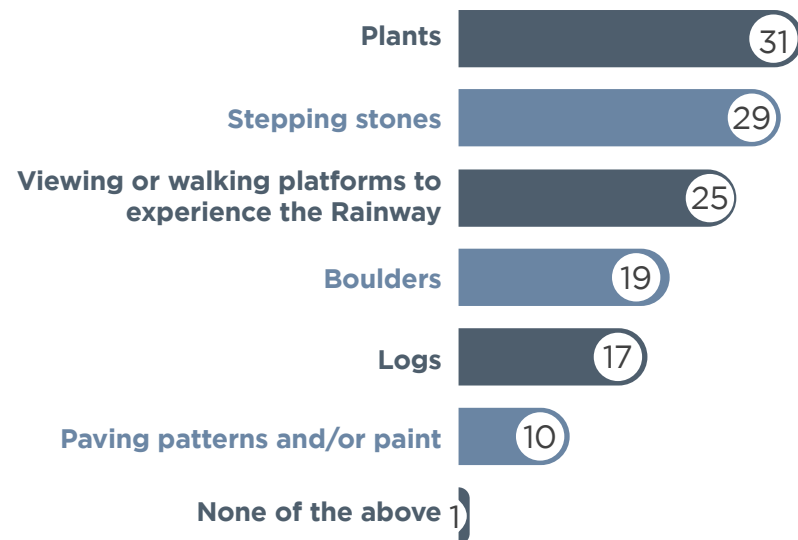


Some of the additional messages we heard

- **Respect nature** in the urban environment
- **Biodiversity** and resident wildlife that can be found in area (eye spy)
- **Water is life**, how to care for water
- **Indigenous futures**, not just histories

Priority of informal play elements

Respondents were able to select up to 3 ideas. 54 respondents answered this question.



Some of the additional ideas we heard

- **Little fairy doors** and other small wonders that encourage you to look closely
- Space for **puddles of various depth**
- **Safe plants** for squishing for areas within reach of small kids
- **Avoid having a play area** to reduce soil compaction, plant damage, noise, and safety concerns with people coming into the road

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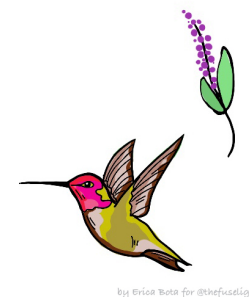
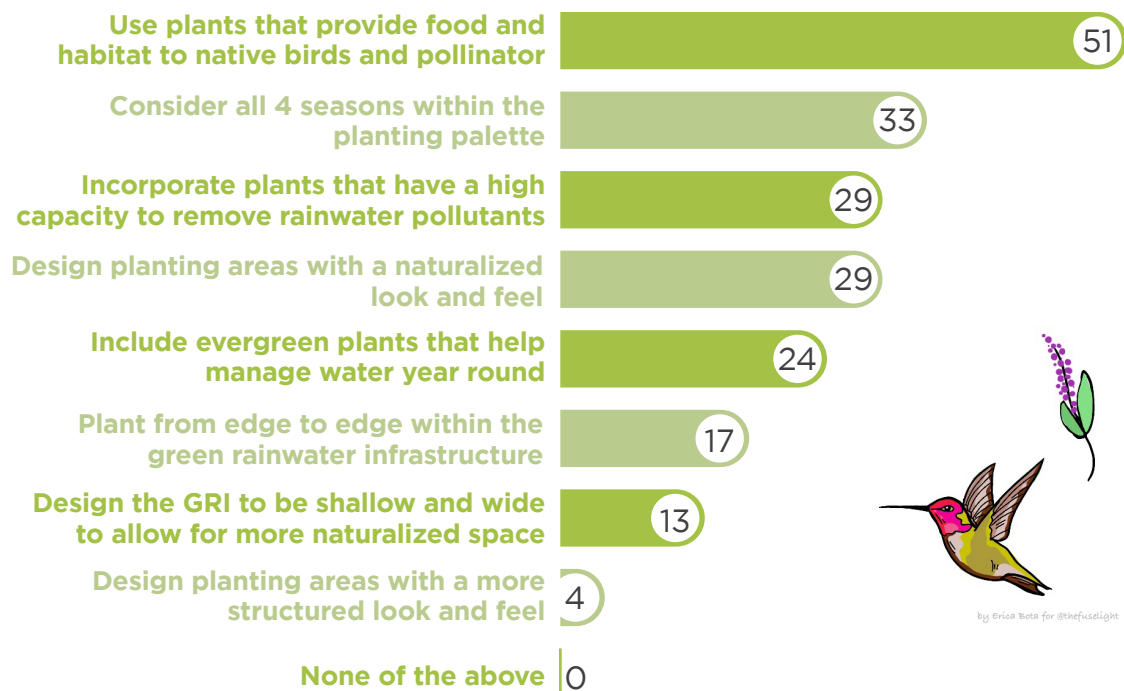
Design for Nature

Through settlement and development patterns over the past one hundred plus years, the natural systems that have sustained and connected communities on these lands for thousands of years have been disrupted. The Rainway can be designed to strengthen ecosystems as well as relationships with water and nature.



Priority of ideas for creating ecological benefits in landscape design

Respondents were able to select up to 4 ideas. 56 of 59 survey respondents answered this question.



by Erica Bala for @thefuselight

Some of the additional ideas we heard

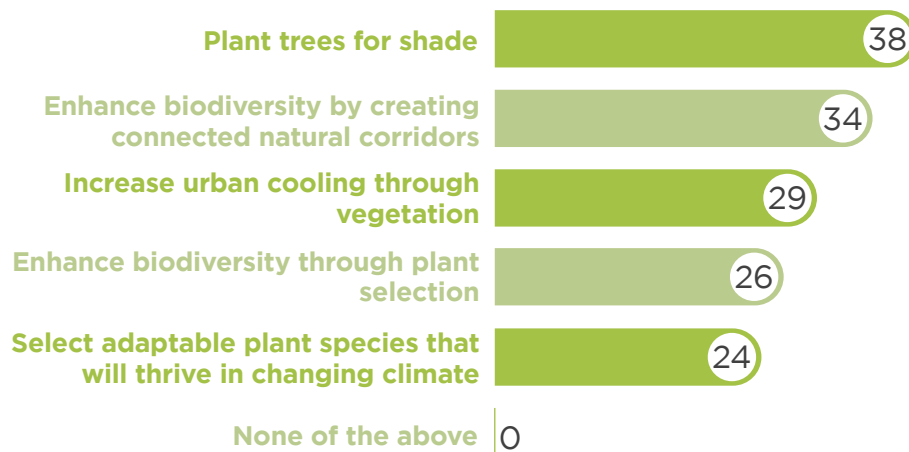
- Create a more **natural look and function**
- Preserve existing **trees** and plant new ones
- Allow natural ecological **succession** and change over time
- Consider **seasonality and habitat** when selecting plants
- **Be bold!** Prioritize nature

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Design for Nature

Priority of ideas for adapting to climate change

Respondents were able to select up to 3 ideas. 55 of 59 survey respondents answered this question.



Some of the additional ideas we heard

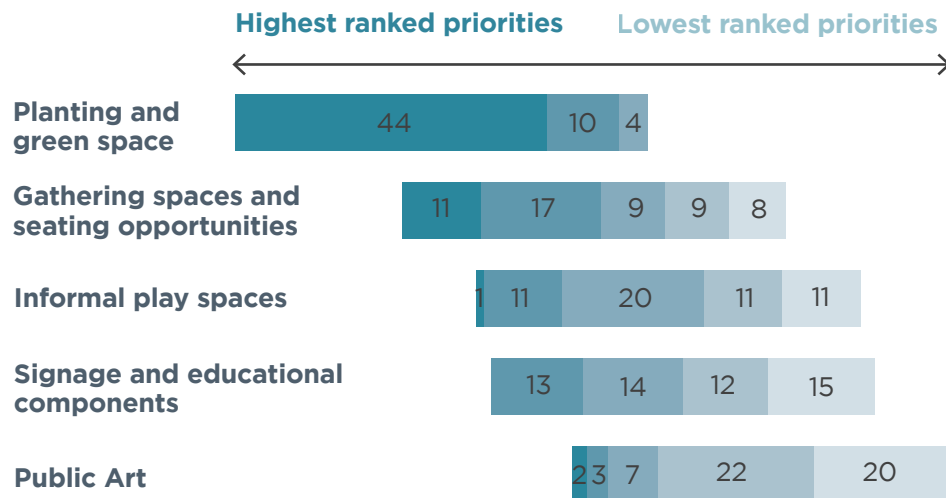
- **Protect the GRI from erosion due to extreme weather** with features like boulders and logs that stabilize soil
- **Include Indigenous Knowledge Keepers** in landscape design process
- Have **adoption programs for planted areas** as a way to get people to take an interest

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Public Space Improvements

Public space improvement priorities

58 of 59 survey respondents answered this question.



Some ideas we heard for supporting health and wellbeing through the Rainway design

- **Good seating** in nice, green nooks.
- **Chatting seating** somewhat separated from **solitude seating**, or seating for two.
- A **pleasant walking and biking** experience.
- Making it as **green and blue** as possible! Access to water and nature has been shown to improve our wellbeing.
- Make space for **community connections**! it's the most important thing for wellness
- Ensure **no standing water** and increased mosquitos
- **Reduce or eliminate space for cars** and their resultant pollution and noise.

Priority of design styles for seeing water flow through the Rainway (during and shortly after a rain event)

Respondents were able to select up to 2 design styles. 59 of 59 survey respondents answered this question.



Some of the additional ideas we heard

- **Water pump** similar to Hinge Park
- Digital signage showing the **number of litres captured and cleaned** naturally each year.
- Sculpture that causes **movement when water flows**
- Seeing water via **glass insets or viewing platform**

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Next Steps

Project timeline

we are here



How will public engagement be used?

Each stage of public engagement informs the next stage of the design process. City staff will seek public input on types of green rainwater infrastructure installed, transportation routes, placemaking, and educational opportunities. Proposed and final designs will be put forward based on public input, Council priorities, technical feasibility, and financial viability.