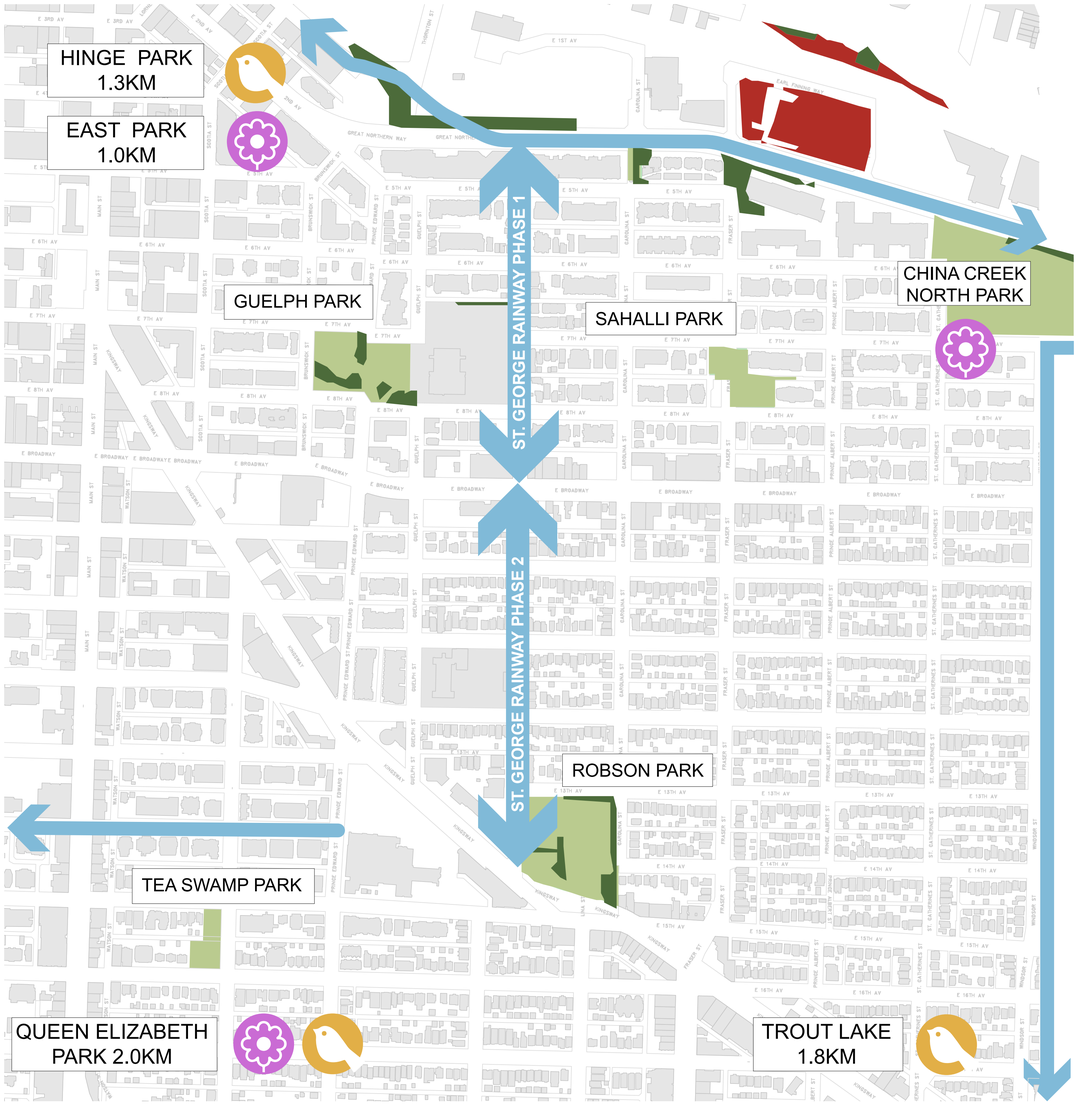
ST. GEORGE RAINWAY

Background | Biodiversity and Planting

Biodiversity and Habitat Connectivity



Linear green rainwater infrastructure projects, like the St. George Rainway, provide the opportunity to connect habitat patches and mitigate the effect of fragmentation on biodiversity. Close or well-connected habitat parks and hotspots create a habitat network, increasing the resources available to local fauna.

St. George Rainway will provide connections between existing parks, proposed greenways, and priority habitats, including forests and meadows, improving habitat value and connectivity for birds, insects and pollinators.

Priority Habitats

As identified in the City of Vancouver Biodiversity Strategy (2016)

- Forest
- Meadow

Habitat Connectivity

- Proposed blue-green system alignments
- Bird hotspot
- Pollinator Park

Tree Canopy Cover

10%
Existing Canopy Cover

23%
Maximum Potential Canopy Cover

Planting new street trees along the Rainway will help manage urban rainwater runoff, provide habitat, and help mitigate urban heat island effect. The project area currently has 10% tree canopy cover, which is lower than the city average of 18%.

The City has set the ambitious goal to grow the urban forest canopy cover to 30% by 2050. Planting trees in the Rainway could increase canopy cover in this project area by as much as 13%. With tree planting in this area limited to the east side of St. George Street – due to a water main conflict along the western boulevard – the Rainway presents an excellent opportunity to support and grow a healthy urban canopy cover.

CITY OF VANCOUVER

Connect & learn more

St. George Rainway on Shape Your City

Rain City Strategy

ST. GEORGE RAINWAY

Background | Biodiversity and Planting

Plant Communities

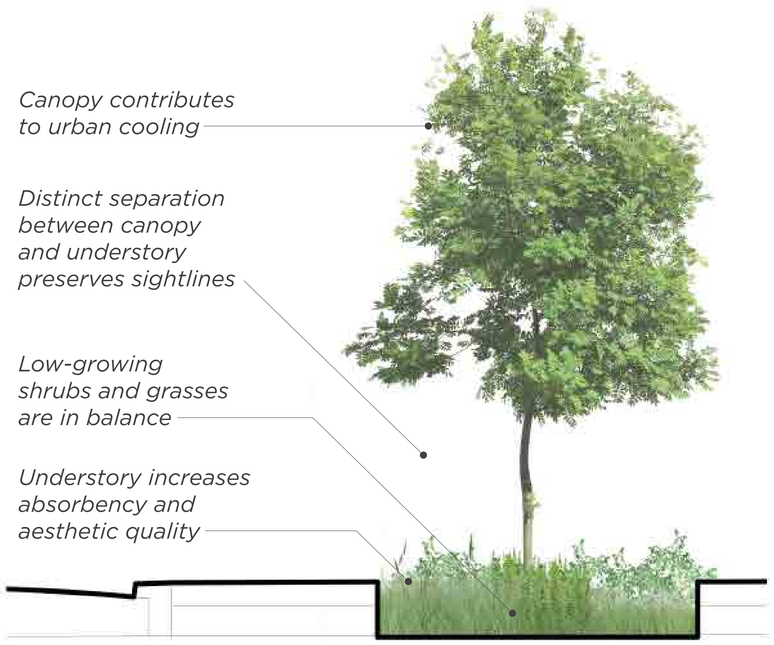
The plant community design approach seeks to leverage the framework of natural plant communities, a group of plants that occur together that share similarities in growing conditions. By emulating the structural elements and growing conditions of natural plant communities, we can design dynamic landscapes that include natural processes, like plant succession and competition, which are more resilient in the face of climate change.

There are two primary green rainwater infrastructure (GRI) plant communities that we can leverage for the St. George Rainway planting concept:

Woodland

Elements:

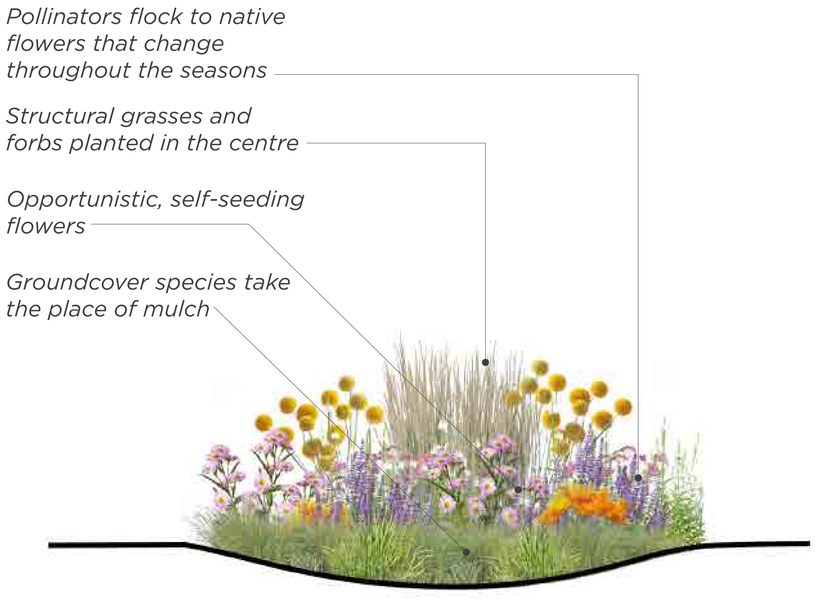
- Canopy layer
- Herbaceous and wood layer (shade tolerant)
- Perennials and flowering plants on the sides



Grassland

Elements:

- Groundcover layer
- Seasonal themes
- Filler
- Structural plants



A full planting plan will be developed as part of the final design concept. Plants will adhere to height restrictions for plants in a roadway - no more than 60 cm near intersections and 1 m away from intersections.

Planting Strategies

Informed by our engagement work, we've developed a list of planting strategies to inform our planting design concept. These include:

Select plants for **all seasons**

Use adaptive plants to **extend the bloom season**

Use an **informal planting design** strategy

Leverage **GRI plant superstars** that can handle a high pollutant load

Maximize **tree canopy**

Include plants that are part of the **historical ecology**

CITY OF VANCOUVER

Connect & learn more

St. George Rainway on Shape Your City

Rain City Strategy