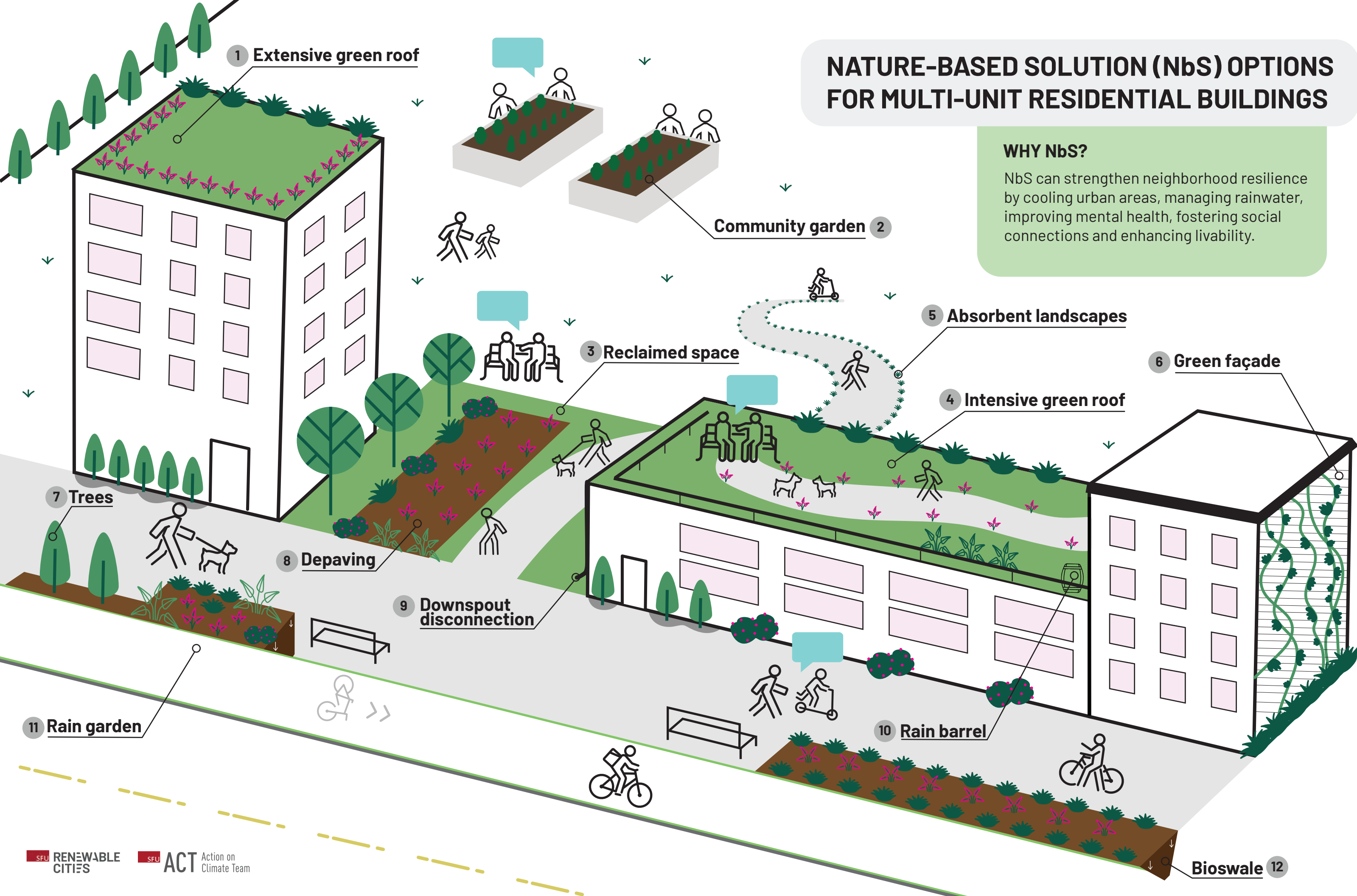


NATURE-BASED SOLUTION (NbS) OPTIONS FOR MULTI-UNIT RESIDENTIAL BUILDINGS

WHY NbS?

NbS can strengthen neighborhood resilience by cooling urban areas, managing rainwater, improving mental health, fostering social connections and enhancing livability.



WHAT NbS ARE AVAILABLE FOR MULTI-UNIT RESIDENTIAL BUILDING SITES IN B.C.?

Ideas for private properties, whether it's a new build or a retrofit:

SFU RENEWABLE CITIES

sfu.ca/renewable-cities

SFU ACT Action on Climate Team

sfu.ca/act

1 Extensive green roof

- Lightweight and covered with shallow soil that grows hardy plants like grasses and succulents
- Lower maintenance and mainly used for environmental benefits, not for people to access



Image: Zinco

2 Community garden

- Shared spaces for growing plants, vegetables, flowers
- Found on rooftops, courtyards or streets
- Planted directly in the ground or in planters, depending on space and conditions



Image: Nina Grossman, Sooke News Mirror

3 Reclaimed spaces*

- Areas where these surfaces have been replaced with green courtyards, walkways or micro-forests, turning unused or paved areas into useful, eco-friendly spaces for community gathering



Image: City of Vancouver

***Retrofit focused**

4 Intensive green roof

- Built with deep soil to support a wide variety of plants, including small trees
- Requires more maintenance and structural support, but can create vibrant green spaces, like gardens, patios or small parks, for social gathering and relaxation



Image: City of Vancouver

5 Absorbent landscapes

- Designed to let water soak into the ground, helping to capture and store rainwater
- Simple and effective and includes typical gardens or other natural surfaces



Image: City of Toronto

6 Green façade

- Use climbing plants that grow from the ground or planters, relying on a trellis or wire system to climb up the wall



Image: Bent Architecture

7 Trees

- Readily available NbS
- Can thrive in paved areas by using soil cells (underground structures that support pavement while providing loose, healthy soil for tree roots to grow)



Image: Servpro

8 Depaving*

- Process of removing hard surfaces like asphalt or concrete to allow water to soak into the ground



Image: Earthbound Report

9 Downspout connections

- Process of separating a downspout from the storm sewer system and directing it to a garden, rain barrel or absorbent landscape



Image: Langley Advance Times

10 Rain barrels

- Containers placed under downspouts to collect rainwater from rooftops
- Collected water can be used for irrigation or other non-potable purposes

11 Rain gardens

- Shallow, vegetated garden areas designed to capture and absorb rainwater
- Rocks and water-loving plants help filter and treat the water before it soaks into the ground



Image: Erin Seagren, Vancouver is Awesome

12 Bioswales

- Larger landscaped features that collect and filter rainwater
- Designed with plants and layered soils to improve treatment before the water soaks into the soil or flows to the sewer system



Image: City of Vancouver