

# Commune-licating Green Infrastructure

Freeman Anthony – City of Bellingham  
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***Commune – Webster's noun – A group of people who live together and share responsibilities, possessions, etc.***



# Changes in Systems = Changes in O&M

- ‘High Performance = High Maintenance’
- Centralized and Grey to Spread out and Green
- Spread out and green needs a bit more attention
  - Public Works (and Gov’t) have limited resources
    - We are adapting to new requirements
    - These things take time
    - Function before fashion
  - Share some responsibility/empower locals/green = footfall = green
  - Parks Dept Community Involvement
    - Maintenance
    - Enhancement



# Sharing the responsibilities

- Sidewalks
- Planter strips
- Why not raingardens?
- Locals have a sense of ownership/pride
- City can:
  - Promote project/volunteers
  - Provide training
  - Recognition





# How to get grant funding...

- Partner with hip non-profits to come up with witty acronyms and logos (not specialty of public sector)
- Think big and target obvious need
  - Downtown (no meaningful stormwater treatment)
  - Lots of hardscape
  - Close to listed creek
- Partner up!
- Have a few test cases under your belt (biggest reason to try stuff out)



# Downtown Improvement Gardens (DIG)

- Did all of the things on the preceding page
- Project scoping
  - Identified watershed in downtown
  - Calculated potential locations – 4 per intersection, 18 intersections – 72 possible locations
  - Assume 50% technically/economically feasible = 36! (project will more than double the facilities we own/oversee)
  - Got Grant – Crikies mate, now we have to do it!
  - Refined locations with businesses and parking services
  - Non-profit partner secured stewards and maintenance commitments

# Outreach

- City
  - Open house/Neighborhood Mtgs (we want raingardens!)
  - Web site – usual capital project stuff
  - Council – supportive (legacy statements and policy)
  - Downtown Bellingham Partnership – Merchant Organization
- Sustainable Connections
  - Support at public meetings
  - One-on-one with businesses as stewards
  - Three training sessions
  - Equipment distribution
  - Social media (another thing we in the public sector generally fail at)



# Finished Project – Fresh and New





# Finished Product – In the thick of it!



# Finished Product – In the thick of it!



# Steward Materials

CITY OF BELLEVUE Low Impact Development

## DIG Downtown Improvement Gardens Maintenance Plan

Thank you for being a DIG Steward

Item	Condition	Steward Maintenance Activity
<b>Rain Garden Surface</b>	Visible sediment in the rain garden that reduces drainage rate.	<ul style="list-style-type: none"> <li>Remove sediment accumulation. If sediment is deposited from water entering the rain garden, address the source and clean the area.</li> <li>Call Public Works if problem persists.</li> </ul>
<b>Ponded Water</b>	Notice accumulation of water indicating drainage stop.	<ul style="list-style-type: none"> <li>Remove leaves.</li> <li>Call Public Works if problem persists.</li> </ul>
<b>Pipe Inlet/Outlet</b>	Ponded water remains in the basin more than 2 days after a storm.	<ul style="list-style-type: none"> <li>Check for blockage or debris.</li> <li>Call Public Works.</li> </ul>
<b>Water Inlet</b>	Water flows into catch basin, not reaching rain garden.	<ul style="list-style-type: none"> <li>Call Public Works.</li> </ul>
<b>Weeds</b>	Visible weeds in rain garden.	<ul style="list-style-type: none"> <li>Remove weeds by hand, especially in spring when they are small and the weeds are young.</li> <li>Do not pull weeds out by the roots unless they get to seed.</li> <li>Water back after weeding, use "MULCH".</li> </ul>
<b>Vegetation</b>	Significant damage to plants, including, but not limited to, dead, dying, or damaged plants, or plants that are not growing.	<ul style="list-style-type: none"> <li>Make any damage from pedestrians, pet or other traffic through the rain garden.</li> <li>Report if needed.</li> <li>Call Public Works with questions.</li> </ul>
<b>Mulch</b>	Vegetation is covering plants and sediments.	<ul style="list-style-type: none"> <li>Plant vegetation to maintain clear sidewalks and right-of-way as needed or to desired aesthetics. Mulch granules should be left in place unless stated for aesthetics or when blocking water or soil loss.</li> <li>Call Public Works with questions.</li> </ul>
	Vegetation is covering plants and sediments.	<ul style="list-style-type: none"> <li>Keep water inlets and outlets in the rain garden clear of vegetation to prevent.</li> <li>Call Public Works if problem persists.</li> </ul>
	Water table belows reach level one percent or more depth than 2 inches.	<ul style="list-style-type: none"> <li>Call approved water table level to a depth of 2 inches.</li> <li>Keep all rainwater from runoff areas.</li> <li>Call Public Works with questions.</li> </ul>

For questions, concerns or to report problems with your rain garden, please contact Public Works Operations at 360-776-7700

This is made possible by the Washington State Department of Ecology

Sustainable Connections



GOOD FOR DOWNTOWN  
 GOOD FOR THE CREEK  
 GOOD FOR BUSINESS

## DIG DOWNTOWN IMPROVEMENT GARDENS

We are providing volunteer maintenance for engineered rain gardens, also known as bioretention cells. Collectively, these engineered rain gardens treat and infiltrate stormwater from our downtown and improve Whatcom Creek.

**PROUD to be a DIG STEWARD**

Sustainable Connections | ECOLOGY | CITY OF BELLEVUE

# Working together



## We “DIG” new rain gardens along York streets

By Anne Mackie,  
YNA Secretary, Newsletter Editor

The new “Downtown Improvement Gardens” – the “DIG” program – along Magnolia St. and at the corner of Ellis and Commercial streets in the York Neighborhood, are the result of a \$600,000 Dept. of Ecology grant obtained by the City.

The new rain gardens are a filtering system to help reduce pollutants as they travel via storm water into nearby streams and, eventually, into Bellingham Bay. The project is 75% funded by the Dept. of Ecology with the City providing 25% of the funding.

In addition to filtering storm water, the rain gardens also bring improvements for pedestrians by adding bulb-out intersections, which help to slow down vehicle traffic. Drought-tolerant plants have been added. New parking spaces created by the project will be well used.

A “DIG Steward” program has been established to keep up the maintenance on the rain gardens in the coming years. York’s 22 new rain gardens have been adopted by businesses to oversee trash clean-up, weeding, and watering, if needed, said Freeman Anthony, project engineer with the City Public

Works Dept. Public Works will take care of functional maintenance such as flow paths, piping, and sediment removal.

Making a two-year pledge to be Rain Garden Stewards are the following local businesses. We appreciate their dedication to quality improvement of storm water and to helping beautify the neighborhood.

### Thank-you neighboring businesses:

Alicia’s Bridal & Formal House, Aslan Brewery, Back In Motion, Bellingham Public Market, Bellingham / Whatcom County Housing Authority, Bellingham Flea Market, Banyon Vision Center, Chuckanut Builders, Ciao Thyme, Firestone Complete Autocare, Garden Street United Methodist Church, Greenleaf Bookkeeping, HUB Northwest, Klicks Running and Walking, Kulshan Services, Stan’s Auto Body, Studio Galactica, Terra Organic and Natural Foods, Texture Clothing, The Bell Tower Studios, TranTech Engineering LLC, Unlimited Auto Service, Western Solar, Whatcom Council of Governments, and Whatcom Educational Credit Union.

And, thank-you to Rose Lathrop, with Sustainable Connections, for her recruitment of these stewards.

[COB Home](#) > [Services](#) > [Environment](#) > [Stormwater](#)

## Stormwater Stewards

The City of Bellingham is working hard to keep our waterways clean. One approach is through [Low Impact Development](#) techniques like rain gardens. To help keep these rain gardens functioning properly and looking great, the City has partnered with [Sustainable Connections](#) to develop stewardship programs including Stormwater Stewards and [Downtown Improvement Garden](#) Stewards.

These stewardship programs aim to engage local businesses and community members to help maintain rain gardens that reduce pollutants headed to our bay. These rain gardens can also create attractive urban green spaces, enhance bicycle safety and help protect our investment in the piped sewer system.

Becoming a Stormwater Steward is voluntary. As a steward, you partner with the City to pick up trash, pull weeds, and make sure curb openings and overflow drains work properly. Your work will help keep dirty stormwater out of our streams and keep the streetscape attractive.

# General Interrogation?



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