

An aerial photograph of a wetland or riparian area. A winding waterway, possibly a stream or small river, flows through a landscape of green grass and trees. Several large logs are scattered across the grassy areas, some partially submerged in the water. The background shows a road and more trees.

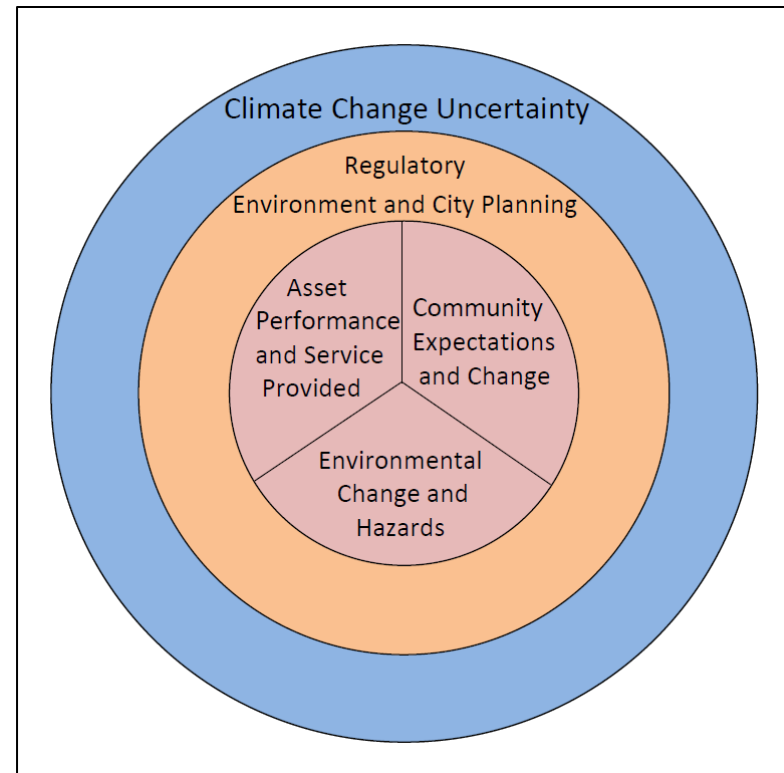
Delivering Blue-Green Infrastructure:

**An exploration of barriers and
uncertainties surrounding the city-
wide implementation of BGI
facilities**

**Samantha Hamlin and Marissa Matsler
Johnson Creek Science Symposium
May 21, 2015**

Who we met with...

- Institutional midlevel managers and practitioners
 - BES
 - BPS
 - Metro
 - BoT

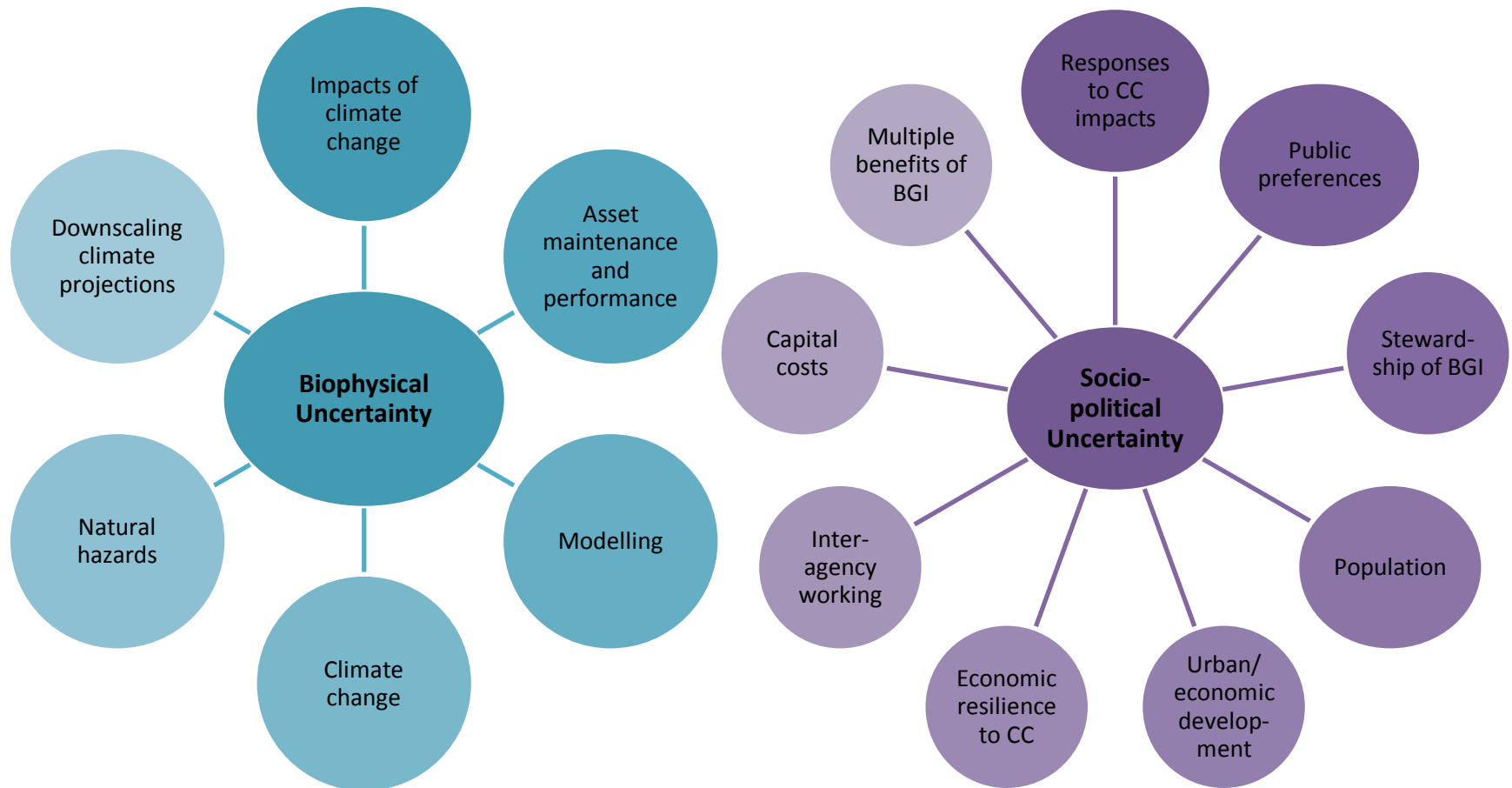


An aerial photograph of a wetland landscape. A winding waterway, possibly a canal or a natural stream, flows through the scene. The surrounding land is covered in dense, green vegetation, likely grasses or reeds. A wooden fence runs across the middle ground, enclosing a portion of the land. The overall scene suggests a managed or natural wetland environment.

Some concerns...

- Concerns and Challenges
- Uncertainties
 - Biophysical processes
 - Socio-political processes

And uncertainties...



What we did...



An aerial photograph showing a bioswale, a shallow, vegetated ditch designed to manage stormwater runoff. The swale is filled with water and surrounded by lush green grass. A rustic wooden fence runs across the field, partially enclosing the area. The title 'What we found...' is overlaid in white text on the top left of the image.

What we found...

- **Maintenance** of facilities was a primary concern of residents
 - Attitudes appear influenced most strongly by site-specific physical and aesthetic characteristics
 - Trees perceived positively while rushes and grasses perceived more negatively
- General knowledge of bioswales is reaching some residents, but wider understanding of many **co-benefits** is lacking
- Resident **acceptance** of bioswales is multi-faceted
 - Trends lacking across age of installation
 - Positive reaction to program as a whole; mixed reactions to individual swales

What's next?



Green Street Stewardship Activities Chart

After registering and adopting a Green Street use this chart to clarify your activities. See the how-to steps on the following pages.

Green Street Care and Maintenance Activity	BES / Contractor Activity		Stewardship Activity	
	2 year Establishment Phase	Long Term Stewardship Phase	2 year Establishment Phase	Long Term Stewardship Phase
Clear curb openings of leaves, trash, debris. Push aside sediment.	YES	YES	YES	YES
Remove trash	YES	YES	YES	YES
Clear top of overflow drain (do not lift the grate)	YES	YES	YES	YES
Water only during periods of drought	YES	YES	YES	YES
Remove Weeds	YES	YES	NO	YES (with training)
Trim Trees and plants	YES	YES	NO	NO
Remove or Replace plants and trees	YES	YES	NO	NO
Remove Sediment	YES	YES	NO	NO
Structural Repairs	To report damage or other repair needs call 503-823-1424			



from BES 2012 "Green Street Steward's Maintenance Guide"
<https://www.portlandoregon.gov/bes/article/319879>



Thank You

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