

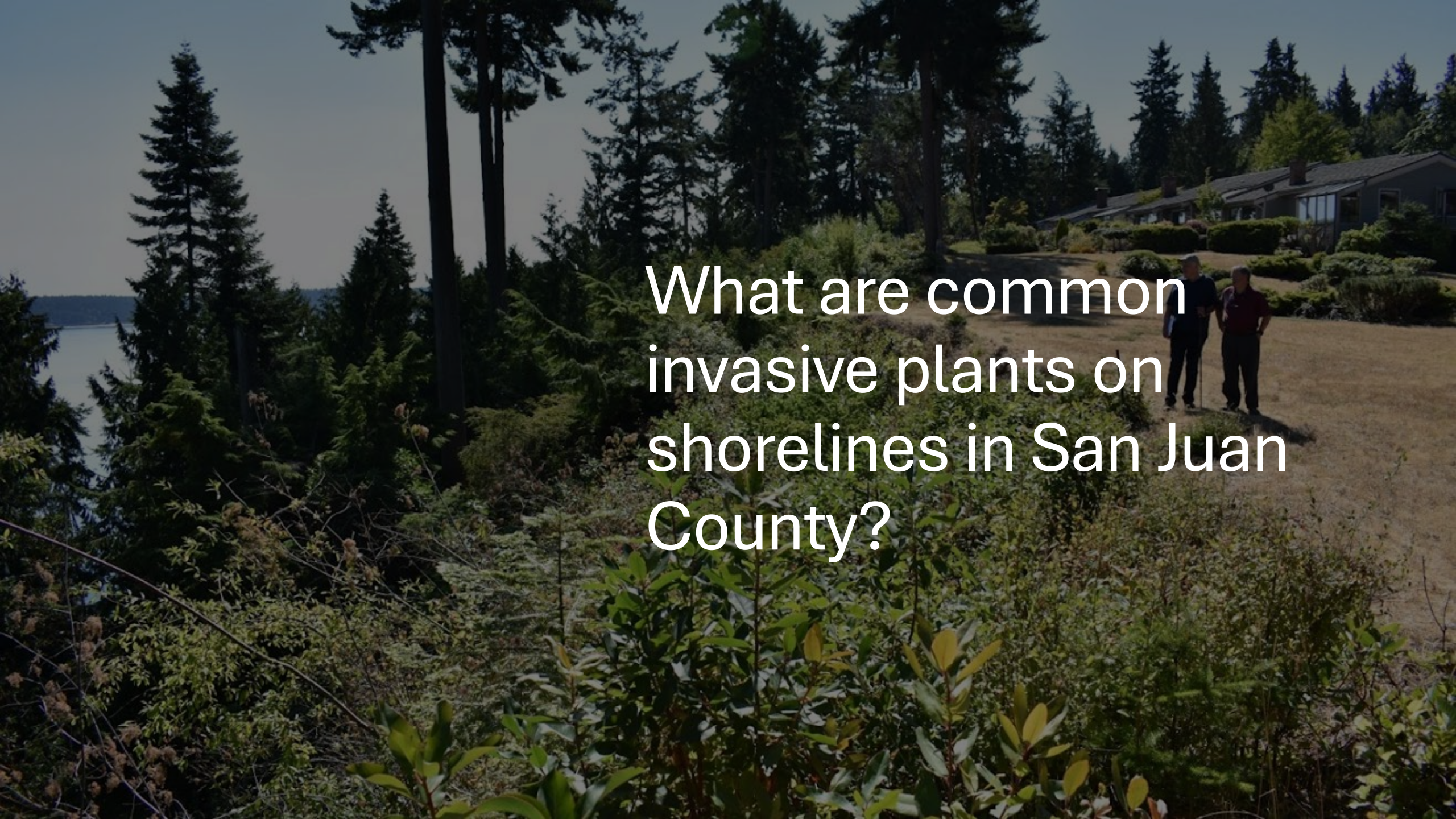
# Weed Control, Restoration, Rehabilitation

January 17<sup>th</sup>, 2025  
Friday Harbor



# Friends *of the* San Juans





What are common  
invasive plants on  
shorelines in San Juan  
County?



## Scotch broom (*Cytisus scoparius*)

Grows on drier slopes,  
exposed to sunlight.

Grows after soil  
disturbance.

Seeds remain active for  
80+ years. Through fire .  
And water.

Dead-heading and  
cutting stems is  
efficient control.





Himalayan blackberry  
(*Rubus armeniacus*)

Grows year round.

Commonly harbors  
Norwegian rats.

UW study shows cutting  
takes ~10 years to kill  
roots.

Digging roots up on  
slope is not  
recommended.

Herbicide is good  
option for control.











## English (and Irish) Ivy (*Hedera helix* & *H. hibernica*)

An unusual case of death: suffocation caused by leaves of common ivy (*Hedera helix*). Detection of hederacoside C, alpha-hederin, and hederagenin by LC-El/MS-MS. 2003 Journal of Analytical Toxicology.

Grows across property boundaries. Becomes neighborhood endeavor.

Aerial ivy (growing on trees) can cause tree failure.

Can conceal slope faces.

Pelargonic acid.





# Carpet Roll

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## Can generally be composted.

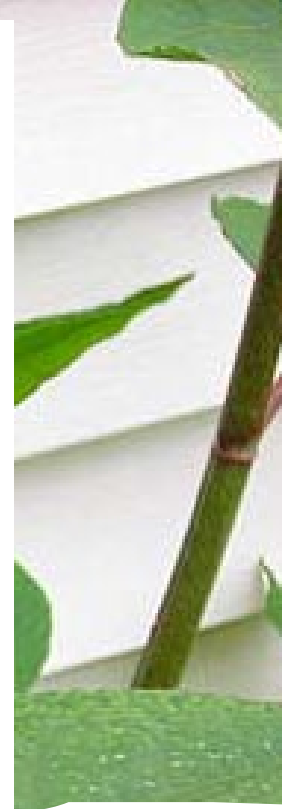
- Himalayan blackberry
- Scotch broom (if not seeding)
- English laurel
- English holly
- Butterfly bush

## NO Compost – Bag and Trash

- **Bindweed!!!**
- Knotweed
- English ivy
- Poison hemlock







Knotweed  
(*Fallopia spp.*)

Very efficient at vegetative propagation

Can root nodule from 2" piece of stem

Multiple varieties – all highly invasive in US

Injection is best treatment (JK Injector)

Watch your glyphosate rates!



Field bindweed  
(*Convolvulus arvensis*)

Fragile, wire-like

Often requires a  
complete overhaul

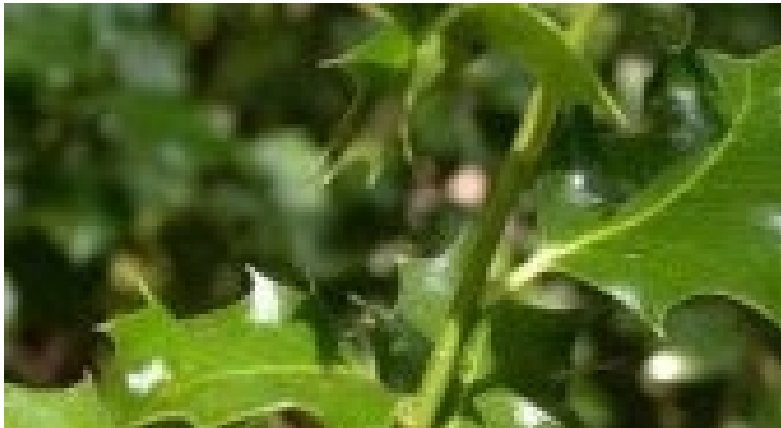
Stop it before it  
establishes!

Roots are multiple feet  
deep.

Rhizomes fracture  
easily.







English holly  
(*Ilex aquifolium*)



English laurel  
(*Prunus laurocerasus*)

Cutting will cause  
excessive sprouting.

Cut stump or injection.



# Poison hemlock (*Conium maculatum*)

Entire plant is highly toxic. Seeds, leaves and sap are all toxic.

Looks similar to native wild carrot.

Poison hemlock has red blotches on the stem while wild carrot does not.



Wild carrot

Poison hemlock

Wild parsnip



# Techniques – Weeds & Rehabilitation



# Herbicides







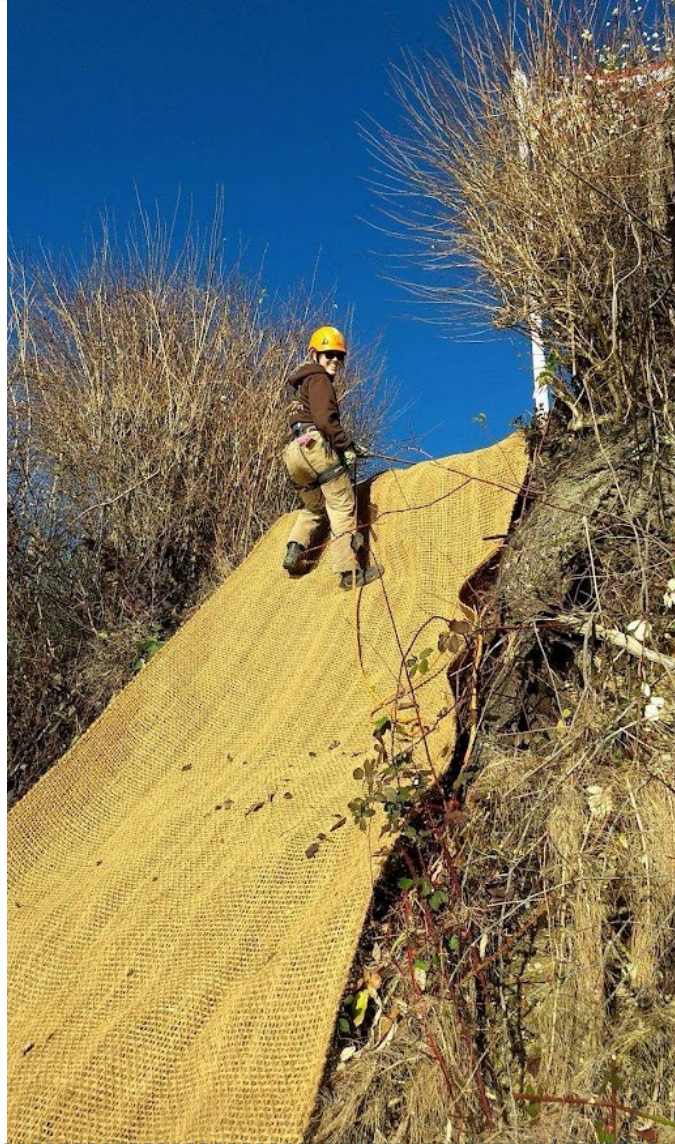
# Native Plant Release

Help established plants grow & reproduce.



# Vertical Strip

- Remove invasives inline with the rappel. 4-6 feet wide.
- Install erosion control fabric, or coir logs to slow down sheetflow.
- Mulch may not be helpful. <1” mulch.









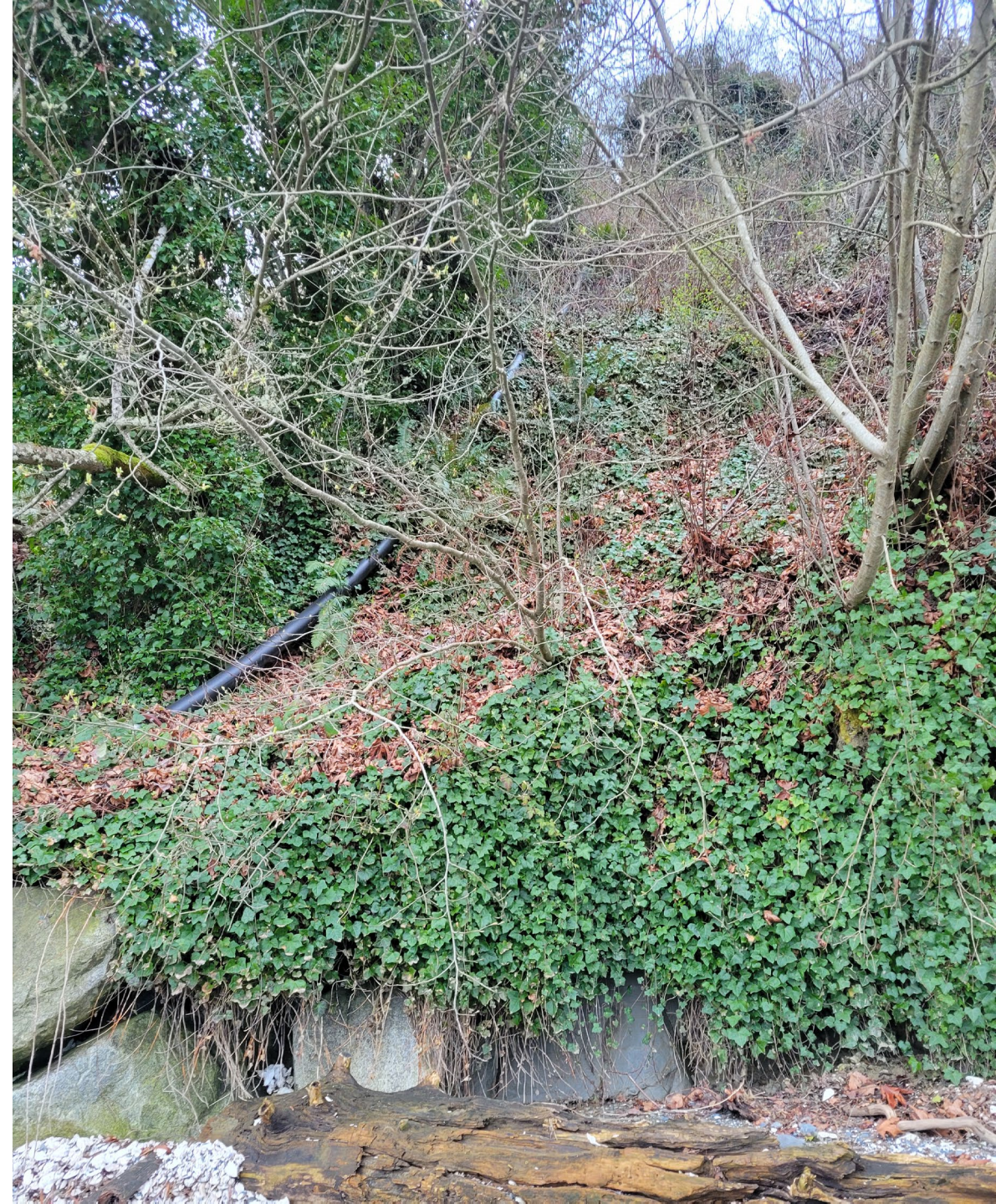


**Sheet Mulching  
after Law Removal**




# How much to remove?

- Depends
- Stable. 1 year
- Indicators of instability. 3-5 years.








# Native Plant Expectation





A photograph of a formal garden. In the foreground, there is a well-maintained green lawn. A large, rounded, dense green hedge is the central focus. To the right, there are more hedges and a tall, thin tree with a yellow light fixture. In the background, a wooden picket fence runs across the middle ground. Beyond the fence is a large, calm blue lake. The far shore of the lake is lined with a dense forest of evergreen trees under a blue sky with light clouds. A white circular graphic with a blue border is overlaid on the top left corner, containing the text 'Formal Garden'.

Formal  
Garden



# Plant Tubes

- Young plants
- Install on slope without digging
- High mortality – plant triple







Live stakes





What's wrong with this photo?





# Coir Fabric

- Difficult to install on natural surfaces.
- Must be in contact w/ soil.
- Quick way to combat erosion.
- Plantable medium.





# Ideas, Indicators and Plans





Near vertical  
high bluff  
75% HEDHEL

- Generally deciduous
- Lack of age classes / younger
- Few species – homogeneity
- No vertical stratification  
(canopy change)







Pistol Butt Trees

Soil Creep











Lawns







Sod removal





**Evan  
Sussman,  
Sonshine  
Tree Care**





Evan Sussman, BCMA  
Sunshine Tree Care





Evan Sussman, BCMA  
Sonshine Tree Care





# Liberty Bay - Poulsbo





# Agnew











4 growing  
seasons



1 growing  
season

No irrigation in  
Sequim. ~16/in year.





PENINSULA  
ENVIRONMENTAL

Questions?

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