

Urban & Community Forestry Climate Preparedness & Response



Your Property and Climate Change: What you can do.

Urban & Community Forestry Climate Preparedness & Response

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DNRP Director's Office

<http://www.kingcounty.gov/forestryCPR>

<http://www.kingcounty.gov/climate>



The Urban and Community Forestry Climate Preparedness and Response program is funded in partnership between King County, the National Wildlife Federation, and the USDA Forest Service, Urban & Community Forestry Program. The USDA is an equal opportunity provider and employer.

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October 29th Agenda:

12:05-12:25: Project background and website overview

12:25-12:40: Question and Answer; Volunteers try GIS tool and take forest health assessment

12:40-1:00: General audience input for getting the word out

1:00-1:30: Developing the communications/outreach plan

Urban & Community **Forestry** Climate **P**reparedness & **R**esponse

ForestryCPR
Revive the Heart of our Forests!

A resource for King County landowners and others interested in the relationship between climate change and forests

LEARN

- How climate change will impact your property and forest and how to reduce these impacts
- How local forests absorb and store climate pollution

EXPLORE

- Analyze your property for its existing climate change related characteristics using a map based GIS tool
- Get custom guidance by taking a simple forest health assessment resulting in recommendations just for you

GET CONNECTED

- Local resources and expertise to help you take action to enhance your forest
- Incentives and partners that can help you protect your land
- Trainings and opportunities to learn how to plant trees, identify and remove invasive weeds, and more!



General Guidance

1. Overview

2. How Forests Reduce Local Climate Change Impacts

3. Take Action on Your Forest

The Forest and Climate Change Connection

Healthy forests play an exceptional role in responding to climate change because they:



Absorb and store climate pollution



Reduce local climate change impacts



General Guidance

How Forests Reduce Local Climate Change Impacts

- ▣ [Climate Pollution, Climate Change and Forests](#)
- ▣ [Flooding, Climate Change and Forests](#)
- ▣ [Water Resources, Climate Change and Forests](#)
- ▣ [Salmon, Climate Change and Forests](#)
- ▣ [Forests and Climate Change](#)
- ▣ [Biodiversity, Climate Change and Forests](#)



General Guidance

Salmon, Climate Change and Forests

The Challenge: Salmon survival

- Salmon are not only an icon to the King County region, but they are an important natural resource that supports commercial, sport, and tribal identities and economies. According to the NOAA National Fisheries Science Center, in 1996, fish caught by Washington commercial fishers were worth an estimated \$148 million. In addition, recreational anglers spent approximately \$700 million on fishing related expenses, which translated into over 15,000 Washington jobs.
- The best available science indicates that climate change impacts on the freshwater period of salmon lifecycle are mostly negative. These impacts include increased winter flooding, (which can kill young salmon) and decreased summer stream flow with warmer river water temperatures, which can inhibit the spawning success of returning adult salmon.



The Role of Forests: Keeping streams cool, clean and productive

- Healthy forests do many things to help support salmon including filter water pollution, keep water cool, shade salmon eggs and young salmon, and provide critical habitat for bugs that feed young salmon.





General Guidance

For All Sites - Yards to Forests

- ☐ [Plant New Trees](#)
- ☐ [Remove Invasive and Noxious Weeds](#)
- ☐ [Plant Native Species](#)
- ☐ [Improve Soil Health](#)
- ☐ [Plant Climate Change Resilient Species](#)
- ☐ [Reduce Stormwater](#)
- ☐ [Grow Food](#)



Resources for each action are structured in this common format:

What	A quick overview
When	Under what circumstances you should consider the action
Climate Benefits	Information about how the action relates to climate change
How	Information on local programs that can help you take the action

For Forests

- ☐ [Protect Land from Development](#)
- ☐ [Develop and Implement a Forest Management Plan](#)
- ☐ [Thin Dense Forests](#)
- ☐ [Restore Declining Red Alder Forests](#)
- ☐ [Protect your Land from Forest Fire](#)
- ☐ [Improve Tree Health](#)





General Guidance

What When Climate Benefits How

How

The preferred approach for weed control involves selecting from a range of possible control methods to match the management requirements of each specific site and species. The goal is to maximize effective control and to minimize negative environmental, economic and social impacts.

For all control methods, the best results will occur when methods are employed repetitively over several growing seasons. If chemical removal is necessary, make sure to follow the directions carefully.

Mechanical removal: Some invasive and noxious weeds – like blackberries - can be removed by pulling at the root or cutting at the base. Some species – such as field bindweed or St. Johns Wort – require removing the root system to effectively kill them.

Chemical or herbicidal removal: Using mechanical techniques is recommended when possible, but for some weeds like Giant Hogweed, which can cause ultraviolet radiation upon contact with skin, you may have to rely on herbicides. The seed banks of Giant Hogweed may contain over 1000 seeds per bloom, and eradication using chemicals is the only highly effective method.

Maintain plant cover: After removing invasive plants, replant with native species so that the weeds don't have a chance return.

*Go back to the site of the invasive or noxious weeds once a year for five years for removal in addition to planting natives.


- [Garlic mustard](#) — Manually, pull the plants after they begin to bolt until they are through the flowering and while the seed pods are still green (usually between April and June). Mowing will not control garlic mustard unless it is repeated throughout the growing season.
- [Policeman's helmet](#) — Hand pulling is effective at all stages of life since the plant has shallow roots. Mechanical control using brush cutting tools is also effective and will reduce the risk of erosion that could happen with hand pulling.

To Learn Details, Explore these Resources:

- [King County Noxious Weed Control](#): See photos and descriptions of individual weeds to identify and get further information on specific removal instructions.
- [King County Best Management Practices](#): Get recommendations on specific weed removal.

Geographic Information System Tool

108 12th ave e, seattle, wa



Selected property

Parcel number: 2925049087
Address: 1400 E PROSPECT ST

[Analyze this property](#)



Geographic Information System Tool

Users are provided:

- What the characteristic represents
- Why the characteristic is important (related to climate change)
- Where the data comes from

Carbon

17727.0 MTCO₂e (total)

114.0 MTCO₂e per acre



Above average carbon amount

The average tree height is 41.2 feet

Development pressure

The nearest undeveloped parcel is under Moderate development pressure.

Wildlife Habitat Network(s)

A wildlife habitat network is 0.3 miles away to the East

Protected areas

80.0% of land within 1/2 mile is protected from development



Forest Health Assessment

7. Do you have invasive or noxious species on your property?

- ☐ No
- ☒ Yes
- ☐ Not sure

Are any of the **weed species** County Class A noxious species?

- ☐ Giant hogweed
- ☐ Garlic mustard
- ☐ Policeman's helmet

or invasive species?

- ☐ Knotweeds
- ☒ Scotch broom
- ☒ Poison Hemlock
- ☐ Himalayan blackberry
- ☐ Bittersweet nightshade
- ☐ Herb Robert
- ☐ Old man's beard
- ☐ English ivy
- ☐ Morning glory
- ☐ Yellow archweed



Scotch Broom

8. Which best describes the soil?

- ☐ Dark, carbon rich, well drained soil.
- ☐ Light colored sandy or rocky soil drains fast.
- ☐ Silty or clay rich soil that doesn't drain quickly.



Forest Health Assessment – Tailored and Prioritized Recommendations

1 Develop and Implement a Forest Management Plan

2 Restore Declining Red Alder Forests

3 Improve Tree Health

When

If some trees on your property appear to be dying or are dead, take action to make your trees healthy. Tree health can be affected by [weather](#), [disease](#), [insect](#) or [animal damage](#). Symptoms may include:

- tree and [needles that appear yellow, brown, or red](#) or if needles are dead or covered in honeydew.
- [stumps or roots seem to be rotting or dried out](#).
- trees may appear to have been [attacked by insects such as beetles](#) or animals such as beavers

Climate Benefits

Healthy trees not only provide a habitat for wildlife, but store large amounts of carbon in an organic form - in trunks, roots, and leaves. A healthy tree also plays an important role in flood control- one medium sized tree can absorb 2,380 gallons of rain annually!

How

To better gauge what challenges may be affecting your trees health, please see specific descriptions and images below:

If your trees are affected by:

- **Root rot** – Rotting stumps, crown fade, and broken rotted roots
 - To lessen the effects of root rot on your land, removal of the rotted trees is recommended. When planting new trees, completely remove all old stumps and roots. For further information on root rot: [ODF Root Rot Management](#) (external link, Acrobat pdf)



Why is Forestry CPR “Climate Smart”?

- Healthy forests:
 - are less vulnerable to the impacts of and reduce the impacts from climate change
 - e.g. forest fires, drought, pest infestation, extreme weather
 - provide habitat buffer zones and wildlife corridors
 - important to the protection of ecological function and biodiversity
 - store more carbon
 - provide diverse environmental, economic and health benefits
 - e.g. flood risk reduction, healthy ecosystems for salmon, cooling value and healthy places for people and wildlife

A bridge between reducing emissions and preparing for impacts

Next Steps

- Outreach, engagement, promotion of the website
- National Wildlife Federation is sharing and promoting the tool as a model
- Longer term plan is to work to connect landowner climate action to the King County Public Benefit Rating System Program property tax incentive program

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Questions/Suggestions?



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