

FINAL BILL REPORT

SHB 1114

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Synopsis as Enacted

Brief Description: Encouraging utility mitigation of urban heat island effects.

Sponsors: House Committee on Environment & Energy (originally sponsored by Representatives Dye and Ramel).

House Committee on Environment & Energy
Senate Committee on Environment, Energy & Technology

Background:

Urban Heat Islands.

According to the United States Environmental Protection Agency, urban heat islands are zones of relative warmth created by air and surface temperatures that are higher than those of surrounding rural areas. Within a large city, air temperatures can be 2 to 22 degrees Fahrenheit higher than its rural surroundings. As air temperature rises, so does demand for air-conditioning, leading to increased electric power demand.

The Evergreen Communities Recognition Program.

Under the 2008 Evergreen Communities Act, every city and county in the state has the discretionary authority to pursue recognition as an Evergreen Community. There can be multiple gradations of Evergreen Communities, and the Department of Commerce is responsible for identifying the criteria necessary for each gradation. Criteria for becoming an Evergreen Community includes developing a community forestry program, recognizing Arbor Day, and completing a forest inventory. The application process for becoming an Evergreen Community is managed through the Department of Natural Resources' Tree City USA recognition program.

Electric Utilities and Urban Forestry.

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not part of the legislation nor does it constitute a statement of legislative intent.

Municipal utilities, public utility districts (PUDs), and investor-owned utilities are encouraged to provide information to their customers regarding landscaping that includes tree planting for energy conservation. Electric utilities are encouraged to request voluntary donations from their retail electric customers for the purposes of urban forestry. The request may be in the form of a check-off on the billing statement or another form of request for a voluntary donation.

Voluntary donations collected by electric utilities may be used to:

- support the development and implementation of Evergreen Community ordinances for cities, towns, or counties within their service areas; or
- complete projects consistent with model Evergreen Community management plans and ordinances.

The use of appropriate tree plantings for energy conservation is encouraged as part of electric utilities' energy conservation programs.

Cool Roofs.

According to the United States Department of Energy, a cool roof is one that has been designed to reflect more sunlight and absorb less heat than a standard roof. Cool roofs can be made of a highly reflective type of paint, a sheet covering, or highly reflective tiles or shingles. Standard roofs can reach temperatures of 150 degrees Fahrenheit or more in the summer. Under the same conditions, a cool roof could stay more than 50 degrees Fahrenheit cooler and save energy by reducing demand for air-conditioning.

2020 Environmental Justice Task Force.

The Environmental Justice Task Force (EJ Task Force) was created through a proviso in the state's 2019-2021 Operating Budget (Engrossed Substitute House Bill 1109, section 221, subsection 48). Among the recommendations in the final report of the EJ Task Force are those focused on using the Environmental Health Disparities (EHD) map. The Washington Tracking Network (WTN) and the EHD map are publicly available tools that bring attention to environmental and human health conditions statewide, and integrate data and analyses that can support pro-equity planning in state agency activities.

Recommendation 12 of the EHD map recommendations advises state agencies to consider the following four initial ways of using the WTN mapping tools and EHD data in agency activities:

- build demographic and environmental context to guide and inform place-based activities;
- conduct environmental justice review and analysis as routine practice for programs and projects;
- center environmental justice as the priority intended outcome in resource allocation decision processes; and

- evaluate and measure reductions in disparities through service equity improvements.

Recommendation 13 advises state agencies to use overall EHD map rank 9 and 10 as a starting point to identify overburdened communities.

Summary:

Consumer-Owned Utilities.

The Legislature encourages any municipal electric utility or PUD to assist its customers in the acquisition and installation of materials and equipment, for compensation or otherwise, for the conservation or more efficient use of energy including, but not limited to, materials and equipment installed as part of a utility cool roof program. The use of appropriate tree plantings for energy conservation is highly encouraged as part of these programs.

It is the policy of the state that any tree planting program engaged in by a municipal electric utility or PUD where energy reduction is a goal, and as part of a broader energy conservation program, should accomplish the following:

- reduce the peak-load demand for electricity in residential and commercial business areas during the summer months through direct shading of buildings provided by strategically planted trees;
- reduce wintertime demand for energy in residential areas by blocking cold winds from reaching homes, which lowers interior temperatures and drives heating demand;
- protect public health by removing harmful pollution from the air and prioritize in communities with environmental health disparities;
- utilize the natural photosynthetic and transpiration process of trees to lower ambient temperatures and absorb carbon dioxide;
- lower electric bills for residential and commercial business ratepayers by limiting electricity consumption without reducing benefits;
- relieve financial and demand pressure on the utility that stems from large peak-load electricity demand;
- protect water quality and public health by reducing and cooling stormwater runoff and keeping harmful pollutants from entering waterways, with special attention given to waterways vital for the preservation of threatened and endangered salmon;
- ensure that trees are planted in locations that limit the amount of public funding needed to maintain public and electric infrastructure;
- measure program performance in terms of the estimated present value benefit per tree planted and equitable and accessible community engagement consistent with the Department of Health's EHD map recommendations 12 and 13, and with the community engagement plan guidance in appendix C of the final report of the EJ Task Force;
- give special consideration to achieving environmental justice in goals and policies, avoid creating or worsening environmental health disparities, and make use of the Department of Health's EHD map to help guide engagement and actions; and

- coordinate with the Department of Natural Resources Urban and Community Forestry Program's efforts to identify areas of need related to urban tree canopy and to provide technical assistance and capacity building to encourage urban tree canopy.

Municipal electric utilities and PUDs may use voluntary donations for urban forestry solicited from retail electric customers to fund a tree planting program for energy conservation that accomplishes the goals of the statewide policy.

Investor-Owned Utilities.

The Utilities and Transportation Commission must consider and may adopt a policy allowing an incentive rate of return on investment in investor-owned utilities' tree planting programs and cool roof programs to improve the efficiency of energy end use. Any tree planting program for which an investor-owned utility seeks an incentive rate of return on investment should accomplish the same statewide policy goals as those provided for consumer-owned utilities.

Investor-owned utilities may use voluntary donations for urban forestry solicited from retail electric customers to fund a tree planting program for energy conservation that accomplishes the goals of the statewide policy.

Votes on Final Passage:

House	98	0
Senate	47	0

Effective: July 25, 2021