

# HOUSE BILL REPORT

## HB 1381

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### As Reported by House Committee On:

Environment & Energy  
Appropriations

**Title:** An act relating to salmon-safe communities.

**Brief Description:** Concerning salmon-safe communities.

**Sponsors:** Representatives Dye, Lekanoff and Pollet.

### Brief History:

#### Committee Activity:

Environment & Energy: 1/23/23, 2/16/23 [DPS];

Appropriations: 2/21/23, 2/23/23 [DPS(ENVI)].

#### Brief Summary of Substitute Bill

- Directs the Department of Ecology (Ecology), in collaboration with the Department of Fish and Wildlife (DFW) and the Department of Natural Resources (DNR), to conduct an evaluation of the urban heat island effect and water temperatures in urban areas, including a pilot-scale monitoring study assessing a variety of factors related to this issue.
- Requires that Ecology, in collaboration with the DFW and the DNR, produces a report to the Governor and the Legislature by June 30, 2030, regarding the findings of the pilot-scale monitoring study and the factors identified as correlating to changing water temperatures.

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### HOUSE COMMITTEE ON ENVIRONMENT & ENERGY

**Majority Report:** The substitute bill be substituted therefor and the substitute bill do pass. Signed by 15 members: Representatives Doglio, Chair; Mena, Vice Chair; Dye, Ranking Minority Member; Ybarra, Assistant Ranking Minority Member; Abbarno, Barnard, Berry, Couture, Duerr, Fey, Goehner, Lekanoff, Ramel, Slatter and Street.

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*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.*

**Staff:** Andrew Hatt (786-7296) and Robert Hatfield (786-7117).

**Background:**

Urban Heat Islands.

According to the United States Environmental Protection Agency, the urban heat island effect is when urban areas experience higher average temperatures than outlying areas, due to structures such as buildings, roads, and other infrastructure absorbing and re-emitting the sun's heat more than natural landscapes such as forests and water bodies. Due to urban areas often having limited greenery and a high concentration of built structures, daytime temperatures can be about 1 to 7 degrees Fahrenheit higher on average than temperatures in outlying areas, and nighttime temperatures can be about 2 to 5 degrees Fahrenheit higher on average.

The urban heat island effect can have a variety of impacts on communities and the environment, including increased energy consumption, elevated emission of pollutants, and negative public health effects for vulnerable populations. Another impact of the urban heat island effect is that heat from hot urban surfaces can be transferred to water running into urban streams, thereby increasing water temperatures. Water temperatures affect aquatic ecosystems, and rapid changes can be stressful, and even fatal, to aquatic species such as salmon.

The Washington Environmental Health Disparities Map.

The Washington Environmental Health Disparities Map is an interactive mapping tool that compares communities across the state for environmental health disparities, aiming to provide insights on where public investments can be prioritized to buffer environmental health impacts. The map shows measurements of pollution, such as ozone and diesel emissions, as well as indicators such as poverty and cardiovascular disease. It was launched in 2019 by the Washington State Department of Health as part of its Washington Tracking Network program, which focuses on making public health data more accessible to the general public.

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**Summary of Substitute Bill:**

The Department of Ecology (Ecology) is directed to evaluate the urban heat island effect and other factors influencing water temperatures in urban areas throughout the Puget Sound region, in collaboration with the Department of Fish and Wildlife and Department of Natural Resources. This evaluation is to include:

- the collection of data and identification of data gaps needed to conduct both a broad scale synthesis of data regarding water temperature, tree canopy, riparian habitat, air temperature, and land cover, and a pilot-scale monitoring study focused on comparing the water temperatures of Puget Sound lowland streams relative to land cover and tree canopy in urban areas draining to those systems by June 30, 2025;

- the design and proposal of a coordinated pilot-scale monitoring study focused on assessing and mapping water temperatures in urban areas, as well accounting for any resources needed to produce the broad scale synthesis of relevant data described above by June 30, 2025;
- subject to the availability of funds appropriated, the production of a report that synthesizes on a broad scale the available data on riparian habitat, land cover, water temperatures, air temperatures, and tree canopy, including relevant agency data, maps, and analyses related to high-resolution change detection, tree canopy, temperature, and riparian habitat by June 30, 2027;
- subject to the availability of funds appropriated, the production of a publicly available website to display water temperature, tree canopy, riparian habitat, air temperature, land cover, and urban heat monitoring and mapping data, compatible with the Department of Health's Environmental Health Disparities Map by June 30, 2027;
- subject to the availability of funds appropriated, a pilot-scale monitoring study focused on addressing water temperatures in urban areas of the Puget Sound lowlands across relevant factors between July 2025 and July 2029; and
- the delivery of a report to the Governor and the Legislature regarding the findings of the pilot-scale monitoring study investigating urban water temperatures, and the factors that were identified as having a significant correlation to reduced or elevated water temperatures by June 30, 2030.

**Substitute Bill Compared to Original Bill:**

As compared to the original bill, the substitute bill:

- removes provisions regarding new reporting requirements for local governments operating under Phase I Municipal Stormwater Permits, and awards issued to permittees by the Department of Ecology (Ecology); and
- adds provisions directing Ecology, in collaboration with the Department of Fish and Wildlife and the Department of Natural Resources, to conduct an evaluation of the urban heat island effect and water temperatures in urban areas, including a broad synthesis of data and a pilot-scale monitoring project.

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**Appropriation:** None.

**Fiscal Note:** Available. New fiscal note requested on February 16, 2023.

**Effective Date of Substitute Bill:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony:**

(In support) Salmon and trout are sensitive to water surface temperatures. Seattle and Portland are in the top 10 in the nation for worst urban heat island effect. There is a lot of

work being done in rural communities to help salmon find cool waters, but this does not address the problem in urban areas where there are a lot of impervious surfaces. This bill is an important first step in addressing the urban heat island effect and would help gather information and establish positive incentives regarding the issue. It also addresses urban streams buried underground, which are an issue facing salmon and other fish as they have negative effects on the overall aquatic ecosystem.

(Opposed) This bill is an unfunded mandate on local governments. It would require local governments to do significant compliance and monitoring which is resource intensive, especially in unincorporated counties covered by Phase I permits. Local governments have undiversified funding sources and cannot afford to take on these new responsibilities.

(Other) It is important for cities to address the urban heat island effect as a part of salmon recovery efforts, but there are issues with the bill related to adding additional requirements for Phase I permittees under the National Pollutant Discharge Elimination System (NPDES). The Department of Ecology has delegated authority under the Clean Water Act to administer NPDES permits, and as such there is a public process that the federal government has established that must be followed in order for Ecology to add new requirements under Phase I permits. There are already existing requirements related to tree canopy and impervious surfaces for Phase I permits, which could potentially lead to conflict between those proposed in this bill. Innovation is important to solving environmental issues and using prizes is a good idea. Measuring pollutants from homeowners is not addressed in this bill, and this policy would make shipping and port activities more difficult.

**Persons Testifying:** (In support) Representative Mary Dye, prime sponsor; and Harry Branch, Olympia Urban Waters League.

(Opposed) Paul Jewell, Washington State Association of Counties.

(Other) John Worthington; Todd Myers, Washington Policy Center; and Jeff Killelea, Department of Ecology.

**Persons Signed In To Testify But Not Testifying:** None.

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## HOUSE COMMITTEE ON APPROPRIATIONS

**Majority Report:** The substitute bill by Committee on Environment & Energy be substituted therefor and the substitute bill do pass. Signed by 30 members: Representatives Ormsby, Chair; Bergquist, Vice Chair; Gregerson, Vice Chair; Macri, Vice Chair; Stokesbary, Ranking Minority Member; Chambers, Assistant Ranking Minority Member; Corry, Assistant Ranking Minority Member; Berg, Chandler, Chopp, Connors, Couture, Davis, Dye, Fitzgibbon, Harris, Lekanoff, Pollet, Riccelli, Rude, Ryu, Sandlin, Schmick, Senn, Simmons, Slatter, Springer, Steele, Stonier and Tharinger.

**Staff:** Dan Jones (786-7118).

**Summary of Recommendation of Committee On Appropriations Compared to Recommendation of Committee On Environment & Energy:**

No new changes were recommended.

**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date of Substitute Bill:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony:**

(In support) This bill is being put forth because there are significant differences between temperatures in the urban areas surrounding the Puget Sound region and nearby rural and suburban areas. There is data showing that in Seattle, temperatures can be up to 17 degrees warmer on summer days when compared to surrounding areas. This has a significant impact on the experience of both humans and wildlife. Additional studies have found that when built structures are rained on, some of the water runoff flows into the Puget Sound up to 30 degrees warmer than the temperature of the Puget Sound. If we do not know the scope and scale of the problem, it is hard to determine the effect that this change in water temperature is having on the aquatic ecosystem and species such as orcas. As there is increased infill development and density in built areas, we need to think about the impacts on the surrounding ecosystems. This bill asks agencies to obtain data on the impact of this issue in the Puget Sound region. This information would be used to create innovative technology to deal with stormwater runoff, redirecting it into green and gray infrastructure and improving the well-being of both people and wildlife.

(Opposed) None.

**Persons Testifying:** Representative Mary Dye, prime sponsor.

**Persons Signed In To Testify But Not Testifying:** None.