

PUGET SOUND

National Estuary Program

IMPACT OF FOREST CONDITION ON MACROINVERTEBRATE COMMUNITIES AND BIOTIC INTEGRITY

This study seeks to understand how forest conditions in the Puget Sound region affect stream benthic macroinvertebrate communities and benthic index of biotic integrity (B-IBI) scores, which are used to characterize stream health.

What we're doing

King County scientists will identify forest conditions that have the strongest relationship with stream benthic macroinvertebrate communities and B-IBI scores. These results will be put in the context of current and historic forestry best management practices (BMPs). County scientists may suggest options for improving current BMPs, or highlighting which current BMPs are sufficiently protective.



WHY IS THIS ISSUE IMPORTANT

Biotic integrity is typically best in forested stream basins, which frequently also support timber harvest operations. By keeping the land profitable through controlled harvests, commercial forestry prevents



the basins from converting into land uses that are associated with poorer biotic integrity. However, some harvest activities may negatively impact stream quality. This study seeks to identify and promote practices that are mutually beneficial to working lands and healthy streams.

WHAT YOU CAN DO

Healthy forests are critical to restore and protect stream health, especially in the areas directly adjacent to streams. Anyone can help promote healthy forests. Activities include volunteering to plant native trees and shrubs in restoration areas (private landowners can also do this along streams on their own properties) and encouraging local planners to protect existing forested lands from development.

ABOUT KING COUNTY WATER AND LAND RESOURCES DIVISION

The Division protects, restores, and manages King County's water and land using the best available science, data, and innovations in collaboration with its partners and the community.

FOR MORE INFORMATION

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