GIS and Landscape Data for Puget Sound Stream Basins

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GIS Data

Two shapefiles were created and are posted on the Puget Sound Stream Benthos (PSSB) for regional partner use. Please see associated technical memos for descriptions of how these data were derived (Leinenbach 2011a, b, and Wilhelm et al. 2013). The shape files were created at two spatial scales for 1,131 benthic macroinvertebrate sampling locations, mostly within the Puget Sound basin:

- 1kmWS_Final_1131_usalb. The contributing watershed extending 1km upstream (see Figure 1).
- WS_Final_1131_usalb. The entire contributing watershed upstream from 1,131 benthic macroinvertebrate sampling locations (see Figure 2).

Landscape Metrics

A number of landscape metrics including land cover and physical characteristics were calculated for each of the 1,131 macroinvertebrate sampling locations. The results of these calculations are stored in an Excel spreadsheet ("AllGIS_LandscapeResults_May2013") with three worksheets containing (1) the data; (2) descriptions of the column headings; and (3) contact information for questions and description of abbreviations. This spreadsheet is stored on the PSSB.

References

Leinenbach, P. 2011a. Automated watershed digitization using NHDPlus datasets and the ArcHydro extension. USEPA, Seattle, Washington.

Leinenbach, P. 2011b. Landscape sampling of the 1027 sampling sites in the Puget Sound Basin. USEPA, Seattle, Washington.

Wilhelm, J.O., P. Leinenbach, L. Fore, D. Lester, K. Adams, and G. Hayslip. 2003. Watershed delineation and land cover calculations for Puget Sound Stream Basins. King County Department of Natural Resources and Parks, Seattle, Washington.
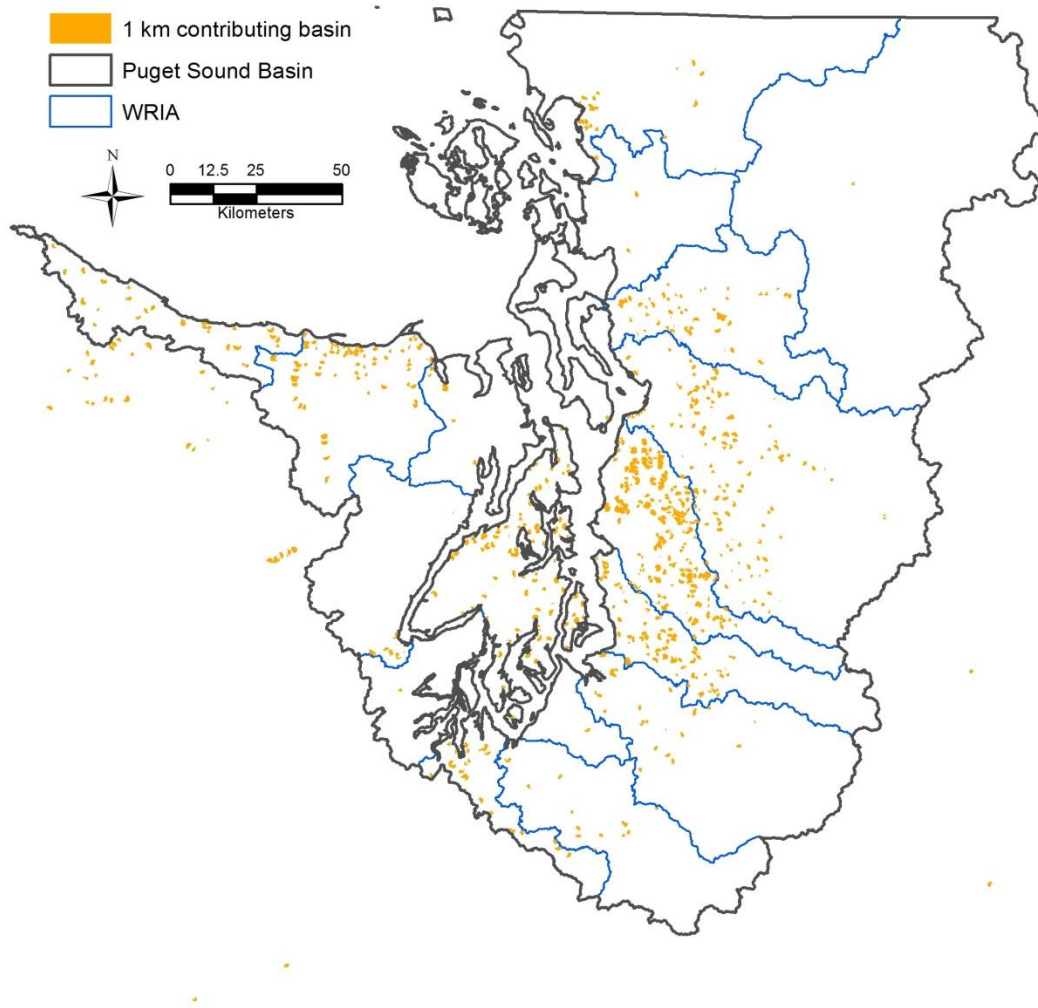
Figure 1. 1-km contributing watershed for 1,131 benthic macroinvertebrate sampling locations. Shapefile is available on the PSSB.
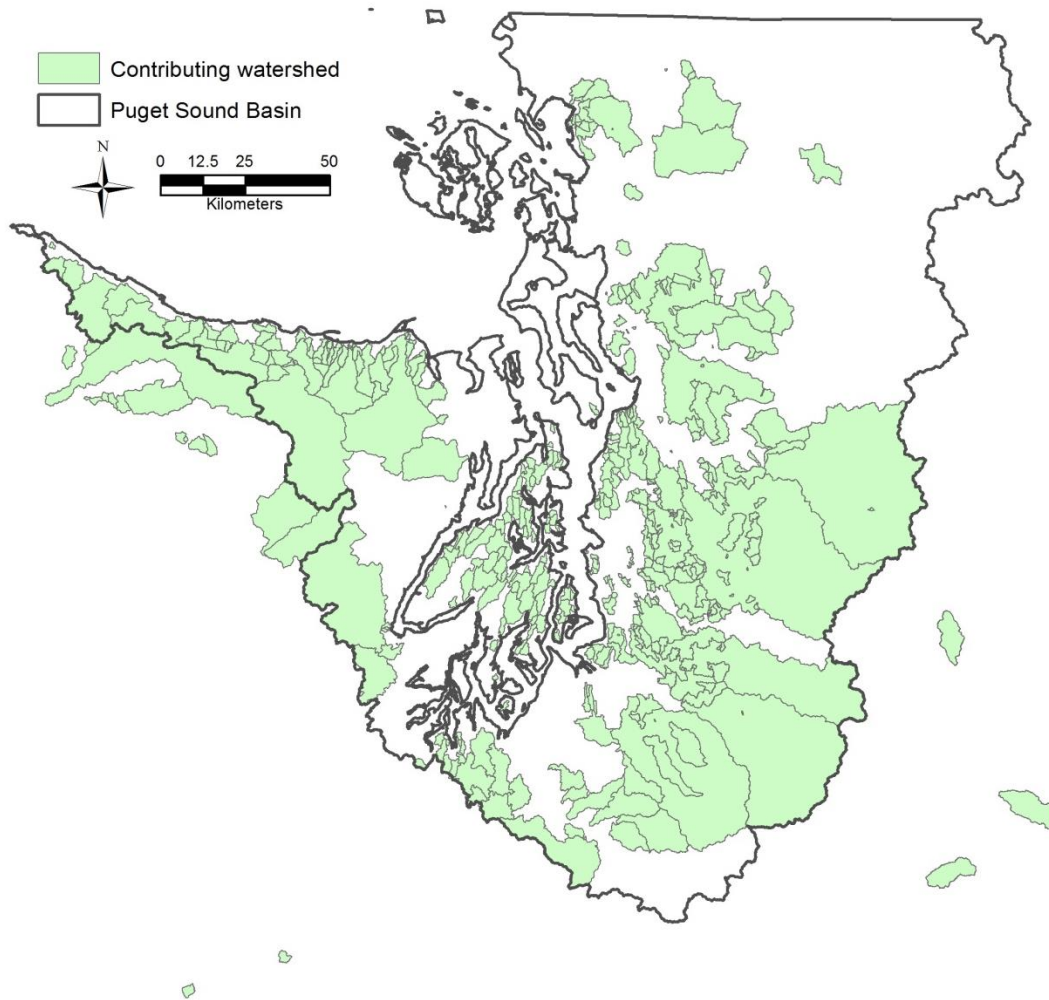
Figure 2. Entire contributing watershed for 1,131 benthic macroinvertebrate sampling locations. Shapefile is available on the PSSB.
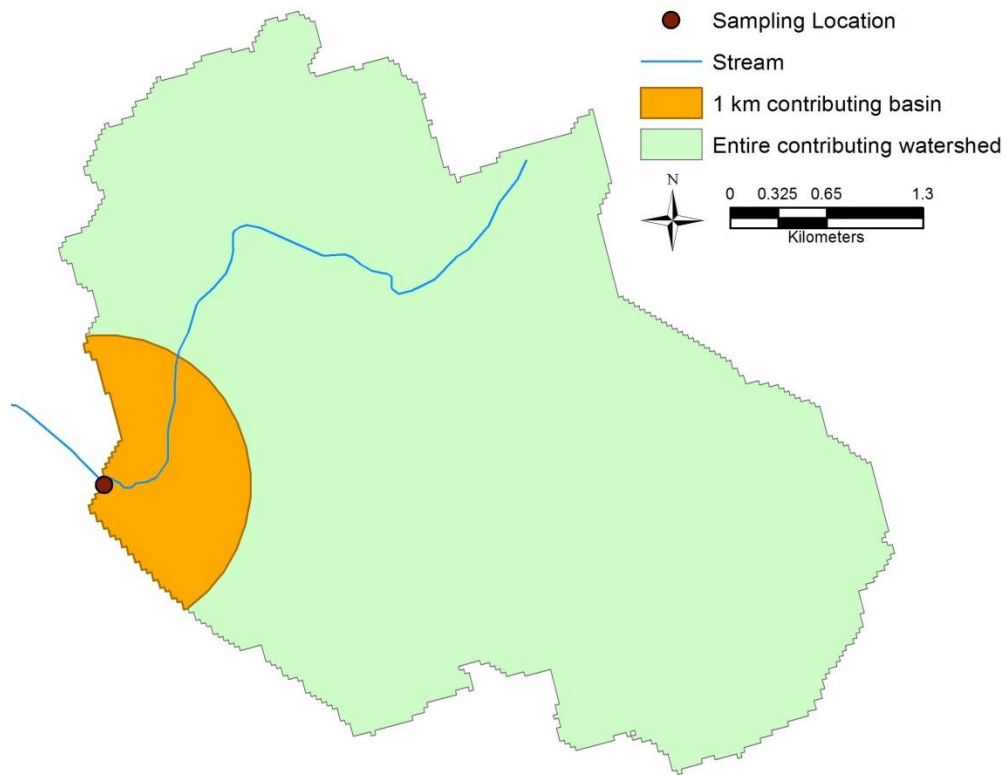
Figure 3. Example of sampling location (black dot), 1-km basin (orange), and contributing watershed (green) for one of 1,131 sampling locations.