

Due to space limitations, we have created this supplemental file that includes two points of interest for the readers: 1) tables that illustrate the five highest and lowest scoring Local Health Areas for each index presented in the manuscript across both treatments, and 2) a full accounting of the sources for included data.

Highest and Lowest-scoring LHAs by EnviroScreen Treatment

Due to space limitations in the body of the accompanying manuscript, we are unable to provide a deep description of key changes to the highest and lowest scoring LHAs across both treatments of the EnviroScreen. Supplemental Tables S1, S2 and S3 report on the five highest and lowest scoring LHAs in terms of pollution burden, population characteristics and EnviroScreen scores by treatment. The results below coincide with the more general description of percent changes to overall scores which is more fulsomely explained in the main body text of the manuscript.

Table S1. Highest and Lowest LHA Pollution Burden Scores from two treatments of the EnviroScreen Methodology in British Columbia, Canada

CalEnviroScreen – HIGHEST SCORE		BCEnviroScreen – HIGHEST SCORE	
LHA	Pollution Burden Score	LHA	Pollution Burden Score
Burnaby	10	Fernie	10
Richmond	9.79	Peace River South	9.77
Central Okanagan	9.46	Kamloops	9.57
Greater Victoria	9.14	Central Okanagan	9.56
North Vancouver	8.84	Trail	9.01
CalEnviroScreen – LOWEST SCORE		BCEnviroScreen – LOWEST SCORE	
Central Coast	1.95	Central Coast	3.12
Powell River	2.34	Powell River	3.88
Bella Coola Valley	2.87	Haida Gwaii	4.05
Burns Lake	3.33	Sunshine Coast	3.70
Vancouver Island West	3.56	Bella Coola Valley	4.62

Table S2. Highest and Lowest LHA Population Characteristics Scores from two treatments of the EnviroScreen Methodology in British Columbia, Canada

CalEnviroScreen – HIGHEST SCORES		BCEnviroScreen – HIGHEST SCORES	
LHA	Population Characteristics Score	LHA	Population Characteristics Score
Telegraph Creek	10	Telegraph Creek	10
Central Coast	9.89	Central Coast	9.93
Merritt	9.70	Merritt	9.29
Cowichan Valley	8.49	Hope	8.87
Hope	8.42	Cowichan Valley	8.11
VERSION 1 – LOWEST SCORES		VERSION 2 – LOWEST SCORES	
Smithers	2.77	Smithers	2.83
Revelstoke	3.50	Southern Gulf Islands	3.98
Southern Gulf Islands	3.73	Revelstoke	4.03
Oceanside	3.99	Nelson	4.34
Vancouver Island West	4.08	Peace River North	4.41

Table S3. Highest and Lowest CalEnviroScreen and BCEnviroScreen Scores from two Applications of the EnviroScreen Methodology in British Columbia, Canada

CalEnviroScreen – HIGHEST SCORES		BCEnviroScreen – HIGHEST SCORES	
LHA	CalEnviroScreen Score	LHA	BCEnviroScreen Score
Central Okanagan	65.24	Merritt	75.9
Prince George	62.99	Telegraph Creek	74.45
Burnaby	62.62	Quesnel	67.19
Vernon	59.86	Kamloops	65.09
Telegraph Creek	57.85	Fort Nelson	63.23
CalEnviroScreen – LOWEST SCORES		BCEnviroScreen – LOWEST SCORES	
Powell River	11.30	Powell River	19.52
Bella Coola Valley	14.13	Haida Gwaii	20.3
Smithers	15.58	Smithers	22.47
Sunshine Coast	15.79	Sunshine Coast	23.30
Haida Gwaii	16.30	Southern Gulf Islands	23.92

Supplementary Data References

- BC Oil and Gas Commission. (n.d.-a). *Geophysical Lines (Permitted)* [Data Warehouse]. BC Oil and Gas Commission Open Data Portal. Retrieved September 23, 2020, from https://data-bcogc.opendata.arcgis.com/datasets/bd0a685c1f614b4b89ace6564e5e3cc4_0
- BC Oil and Gas Commission. (n.d.-b). *Geophysical Plans (1996-2004)* [Data Warehouse]. BC Oil and Gas Commission Open Data Portal. Retrieved September 23, 2020, from https://data-bcogc.opendata.arcgis.com/datasets/81d619920b6848e9a3f0f0201d126cae_0
- BC Oil and Gas Commission. (n.d.-c). *Pipeline Segments (Permitted)* [Data Warehouse]. BC Oil and Gas Commission Open Data Portal. Retrieved September 23, 2020, from https://data-bcogc.opendata.arcgis.com/datasets/359b7e14fafa4abc84ff873bc55015fb_0
- British Columbia Ministry of Environment and Climate Change Strategy. (2020). *B.C. Source Drinking Water Quality Guidelines: Guideline Summary*. (WQG-01; Water Quality GuidelineSeries). Province of British Columbia. https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/waterquality/water-quality-guidelines/approved-wqgs/drinking-water-and-recreation/source_drinking_water_quality_guidelines_bcenv.pdf
- British Columbia Ministry of Environment and Climate Change Strategy - Environmental Emergencies and Land Remediation. (2020). *Environmental Remediation Sites* [Data Warehouse]. BC Data Catalogue. <https://catalogue.data.gov.bc.ca/dataset/environmental-remediation-sites>
- British Columbia Ministry of Environment and Climate Change Strategy - Knowledge Management. (2020). *BC Environmental Monitoring System Results—4 Year Current Results* [Data Warehouse]. BC Data Catalogue. <https://catalogue.data.gov.bc.ca/dataset/949f2233-9612-4b06-92a9-903e817da659>
- British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development - BC Wildfire Service. (2020). *Fire Perimeters—Historical* [Data Warehouse]. BC Data Catalogue. <https://catalogue.data.gov.bc.ca/dataset/fire-perimeters-historical#edc-pow>
- British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development - Forest Tenures. (2018). *Forest Tenure Road Section Lines—Data Catalogue* [Data Warehouse]. BC Data Catalogue. <https://catalogue.data.gov.bc.ca/dataset/forest-tenure-road-section-lines>

British Columbia Ministry of Health - Health Sector Information Analysis and Reporting. (2020). *Local Health Area Boundaries* [Data Warehouse]. BC Data Catalogue. <https://catalogue.data.gov.bc.ca/dataset/local-health-area-boundaries>

British Columbia Ministry of Jobs, Economic Development and Competitiveness - International Marketing. (2020). *Hazardous waste facilities* [Data Warehouse]. BC Data Catalogue. <https://catalogue.data.gov.bc.ca/dataset/hazardous-waste-facilities>

CANUE - The Canadian Urban Environmental Health Research Consortium. (2017a). *Air Quality—Fine Particulate Matter (PM2.5) (Annual Dataset)* [Data Warehouse]. CANUE - The Canadian Urban Environmental Health Research Consortium. <https://www.canuedata.ca/canue/metadata.php>

CANUE - The Canadian Urban Environmental Health Research Consortium. (2017b). *Air Quality—Ozone (Annual Dataset)* [Data Warehouse]. CANUE - The Canadian Urban Environmental Health Research Consortium. <https://www.canuedata.ca/canue/metadata.php>

Ministry of Forests, Lands, Natural Resource Operations and Rural Development - GeoBC. (n.d.-a). *BC Transmission Lines—Data Catalogue* [Data Warehouse]. BC Data Catalogue. Retrieved September 23, 2020, from <https://catalogue.data.gov.bc.ca/dataset/bc-transmission-lines>

Ministry of Forests, Lands, Natural Resource Operations and Rural Development - GeoBC. (n.d.-b). *Digital Road Atlas (DRA)—Master Partially-Attributed Roads—Data Catalogue* [Data Warehouse]. BC Data Catalogue. Retrieved September 23, 2020, from <https://catalogue.data.gov.bc.ca/dataset/digital-road-atlas-dra-master-partially-attributed-roads>

Ministry of Forests, Lands, Natural Resource Operations and Rural Development - GeoBC. (n.d.-c). *Railway Track Line—Datasets—Data Catalogue* [Data Warehouse]. BC Data Catalogue. Retrieved September 23, 2020, from <https://catalogue.data.gov.bc.ca/dataset/railway-track-line>

Natural Resources Canada Lands and Minerals Sector. (2020). *Principal Mineral Areas, Producing Mines, and Oil and Gas Fields (900A) and Top 100 Exploration Projects in Canada* - [Data Warehouse]. Open Government Portal. <https://open.canada.ca/data/en/dataset/000183ed-8864-42f0-ae43-c4313a860720>

Natural Resources Canada Strategic Policy and Results Sector. (2020). *Location of mill facilities* [Data Warehouse]. Open Government Portal. <https://open.canada.ca/data/en/dataset/46f1bb92-f936-4a56-a83b-c440db7c25d8>

Pacific Climate Impacts Consortium. (2020). *Plan2Adapt* [Data Atlas]. Pacific Climate Impacts Consortium. <https://services.pacificclimate.org/plan2adapt/app/>

Potapov, P., Yaroshenko, A., Turubanova, S., Dubinin, M., Laestadius, L., Thies, C., Aksenov, D., Egorov, A., Yesipova, Y., Glushkov, I., Karpachevskiy, M., Kostikova, A., Manisha, A., Tsybikova, E., & Zhuravleva, I. (2008). Mapping the World's Intact Forest Landscapes by Remote Sensing. *Ecology and Society*, 13(2). <https://doi.org/10.5751/ES-02670-130251>

Provincial Health Service Authority. (2020). *BC Community Health Data* [Data Atlas]. BC Community Health Atlas. <http://communityhealth.phsa.ca/Home/AtlasFAQ>

Statistics Canada. (2016). *2016 Census Profile of Dissemination Areas* [Canadian Census Analyser download]. <http://dc.chass.utoronto.ca/census/>

Wilderness Committee. (n.d.). *Kinder Morgan Trans Mountain Tar Sands Pipeline—Existing & Proposed Expansion* [Data Atlas]. Retrieved September 23, 2020, from <https://www.arcgis.com/sharing/rest/content/items/b48aff5799614346970d8487cc0d8e00>