

PORT TOWNSEND
QUADRANGLE

PUGET
SOUND
REGION

STATE OF WASHINGTON

Although the location of data sites is only an initial step in the compilation of subsurface geologic and hydrologic data from the water wells mentioned previously, a location map itself is useful in showing where data are available and, by the distribution of water wells, where ground-water usage tends to be concentrated. Figure 1 is a map of the San Juan Islands, with data sites plotted on the large map and suggests the great importance of ground-water usage in the island areas of San Juan and Santa Barbara Counties. Most dense concentrations of wells in these islands represent developed areas, and the locations of wells in these places for which careful judgment is required in ground-water development, and other activities of man that may affect ground-water supplies, are particularly important. For example, some of the shore-side communities, such as Santa Barbara, rely on ground-water pumping that provides a dependable, good-quality water supplies and higher rates the pumping might result in salt-water intrusion into nearshore aquifers. Furthermore, water-well sites in all parts of the islands, and especially in the locations where attention should be given to avoidance of ground-water pollution.

County	Number of well records	County land in map area in square miles (square kilometers)	Approximate number of wells recorded in map area per square mile (square kilometer)
Island	1171	170 (\$50)	6.9 (2.6)
San Juan	140	23 (6)	6.1 (2.3)
Challam	64	18 (46)	3.6 (1.4)
Snohomish	1071	320 (830)	3.3 (1.3)
Jefferson	142	62 (160)	2.3 (0.9)
Skagit	574	350 (900)	1.6 (0.6)

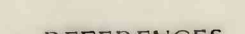
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Figure 2. -- Relation between listings in table 1 and locations on large map