

Appendix B
Methodology for Assessing Cumulative Impacts



Build-out Analysis Methodology

For the Pierce County SMP Update – Cumulative Impacts Analysis

Pierce County parcel data was used to develop a build-out analysis data layer for completion of the SMP Update Cumulative Impacts Analysis. The build-out analysis was completed as an important tool to help estimate and describe the amount and the location of future development that may be allowed to occur within SMA jurisdiction under current regulations. It is also beneficial in allowing a community to test its development regulations – to get a glimpse of its possible future when all the remaining buildable land is developed to the maximum extent allowed under the proposed Draft SMP regulations.

The results of the analysis were used as a geospatial tool for understanding development patterns along the shoreline in combination with the results of the Inventory and Characterization Report. Below is a list of the analysis categories and their descriptions:

Build-out analysis categories (completed for all parcels intersecting the County’s shoreline jurisdiction):

Category	Description	Assumption
Vacant Dividable	Undeveloped parcels that can be further developed.	Based on total parcel size and base zoning density
Vacant Non-dividable	Lands which cannot be subdivided into multiple lots under current zoning regulations.	Based on total parcel size and base zoning density
Underdeveloped (Occupied Dividable)	Existing residential property that is developed, but not to the density allowed for zoning (i.e. – a 40 acres parcel zoned R5 that has 1 residence but could be developed as 8 lots).	Only completed for residential properties: based on total parcel size and base zoning density
Fully built out (Occupied Non-dividable)	Already developed at the density allowed by zoning (i.e. – a 5 acre parcel zoned R5 with a single family residence). Includes forest lands and open space lands where specific land use designations limit potential for any future development or land division.	Residential properties: based on existing development (presence / absence) total parcel size and base zoning density
Not Eligible	Lands where development will not occur.	This <u>does not include</u> public lands such as state and county parks, tax exempt properties, long term commercial forests, etc. and <u>does not include properties</u> that have critical areas that would not meet the minimum size requirements for future development.

Note: Determining whether a property is underdeveloped or dividable is based on assumptions established by the County.

The “Fully built out (Occupied Non-dividable)” category primarily highlights single-family residential lots that are fully built-out with an existing primary residential structure and that are platted with existing lot sizes generally consistent with density prescribed by underlying zoning. The category also include forest lands and open space lands where specific land use designations limit potential for any future development or land division. While these areas are coded as “fully built-out”, they generally support very little if any existing development and/or modification. These areas were considered “fully built-out” because there is minimal potential for additional development or land division within the foreseeable future.

Forest lands zoned Forest Resource and reported in County records as “DESIG FOREST LND RCW 84.33” in the “land use designation” field are reported as fully built-out. These lands generally occur in the upper reaches of freshwater river shorelines (White, Puyallup and Nisqually watersheds) and are predominantly designated Natural shorelines by the Draft SMP. Similarly, open space lands on the marine shoreline (often zoned R10) and reported in the County records as “CU OPEN SPACE RCW 84.34 CURRENT USE” in the “land use designation” field are reported as fully built-out. A similar pattern occurs with some designated park lands (zoned PR) on the County. These conservation and park open space lands are scattered across the County’s marine shorelines, and are predominantly designated Natural or Conservancy shoreline by the Draft SMP.

All build-out analysis information was derived by Pierce County Planning and Land Services staff looking at what the Zoning categories are at a parcel level in combination with the parcel areas and the number of allowable dwelling units/acre for each zoning category. Below are the basic steps used to complete the build-out analysis¹:

1. Identify appropriate data for analysis – This included current parcels, zoning and shoreline jurisdiction
2. Overlay zoning with parcels information
3. For residential properties, calculate existing density and lot size. Determine maximum density and minimum lot size based on each zoning category. Classify property as residential vacant dividable, residential vacant non-dividable, residential underdeveloped or residential fully built-out.
4. For commercial properties, calculate existing lot size. Determine minimum lot size based on each zoning category. Classify property as commercial vacant dividable, commercial vacant non-dividable, or commercial fully built-out.
5. For resource use (agricultural and forest use) properties – as well as parks and recreation (PR zoning) properties, calculate existing lot size. Determine minimum lot size based on each zoning category. Classify property as vacant dividable, vacant non-dividable, or fully built-out.
6. Create a new development category field and CODE parcels based on the above categories and descriptions.

¹ 1. Property areas inventoried as critical areas (wetlands, erosion hazards, floodways) were not excluded from the analysis – County staff made the assumption that while future development may be limited on such parcels, allowances for use and historical development patterns suggest that some use and development is possible.