

Introducing...

SnoScape Landscape Imaging

A New Online Mapping Service Offered by
Snohomish County

SnoScape is another example of our commitment to the effective use of information technologies to serve our communities. It will allow us to identify not only where our County should grow over the next 20 years, but what areas of habitat we need to protect.

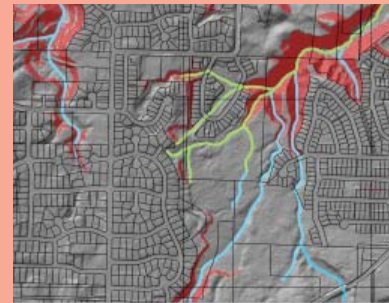


Snohomish County Executive Aaron Reardon

SnoScape adds accuracy and speed to permitting and planning in high-growth areas – and offers residents a unique view of their county.

SnoScape is now available as a free, on-line service to help citizens conduct fast, accurate research into the geographic features of land parcels of interest to them.

The application's sophisticated technology also enables the County to provide faster, higher quality reviews of development proposals submitted by landowners.



SnoScape increases the speed and efficiency of the permitting process by enabling more accurate pre-screening of properties for known critical area features.

The initial version of SnoScape will be limited to Southwest Snohomish County. The County's Southwest Urban Growth Area, stretching from Everett south to the County line and east of Mill Creek and Bothell, is the first to be imaged using the new technology.

SnoScape is accessible through Snohomish County's website at www.snoco.org, search "SnoScape."

SnoScape: more accurate and precise landscape imagery than any previous County mapping tool.

SnoScape is a sophisticated web-based application that uses advanced remote sensing technologies and computer-generated mapping graphics to display streams and slopes on land parcels within the county's Southwest Urban Growth Area.

Topographic contours are depicted at 5-foot intervals rather than the 20-foot intervals featured on previous digital maps. The application also delineates slopes of 33-percent and greater, crucial information for those preparing preliminary site plans for development projects.

SnoScape's ability to more accurately locate streams has increased the identification of streams in the County's Southwest Urban Growth Area by nearly 142 stream-miles. The program also provides stream-typing information that indicates possible fish habitat.

Future enhancements to SnoScape will include wetland modeling data and expanded coverage to other areas of the County.



SnoScape utilizes an array of sophisticated remote sensing technologies and up-to-date data layers to model landscape features.

Remote sensing is one of the primary components for modeling slope and drainage features. SnoScape utilizes aerial orthophotography, high resolution satellite imagery, and airborne based Light Detection and Ranging (LiDAR) imagery to generate high-quality displays of landscape features such as valleys, slopes, vegetation, and water bodies.

Satellite Imagery

SnoScape uses the best available high-resolution satellite imagery data from the Digitalglobe Quickbird2 satellite. The data consists of both visible and infrared images with two-foot ground resolution. All imagery is orthophotorectified using the digital elevation models derived from the LiDAR data.

LiDAR Imagery

The Light Detection and Ranging (LiDAR) technology measures the distance from an aircraft to the earth's surface by precisely timing the round trip travel time of a brief pulse of laser light. The Global Positioning System (GPS) is a satellite navigation/location system using radio waves to determine precise location of points in three dimensions. From a multitude of these three dimensional points a Digital Elevation Model (DEM) is constructed. The DEM is used to generate slope data and to locate streams and drainage patterns.

Other GIS Data References Used to Verify New Stream Data

A variety of reliable data sources are used to evaluate whether new stream data generated by LiDAR/satellite imaging is incorporated into SnoScape's data layers:

- Subdivision and Plat Plans
- Critical Area Site Plans (CASP)
- SWM Drainage Inventory
- WSDOT Culvert Inventory Plans
- Adopt-a-Stream Foundation South County Culvert Inventory
- Snohomish County Stream and Wetland Inventory

Quality Assurance and Quality Control

QA/QC is considered throughout the entire process, particularly as derived data layers become complete. County biologists, cartographers, and GIS analysts review the data and make revisions and updates.

SnoScape's citizen website application is very similar in operation to other Snohomish County citizen application tools now in use for parcel query and permit/planning review.

A Methodology of Data Compilation and a list of Additional Sources, links, and references are available for review on the SnoScape section of the Snohomish County website at www.snoco.org.

