

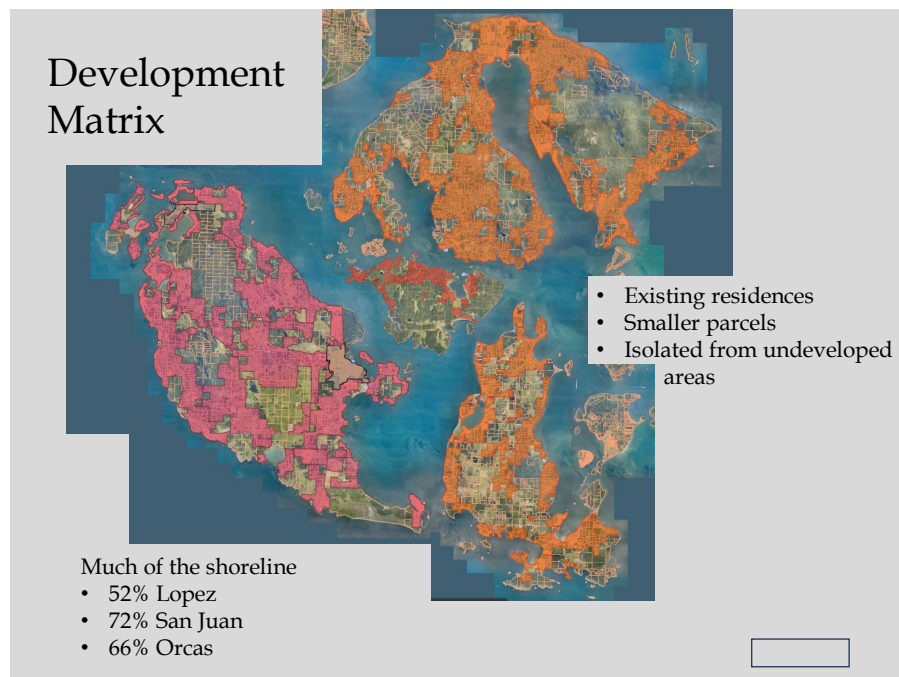


FACT SHEET

THE LAND BANK AND CLIMATE ADAPTATION

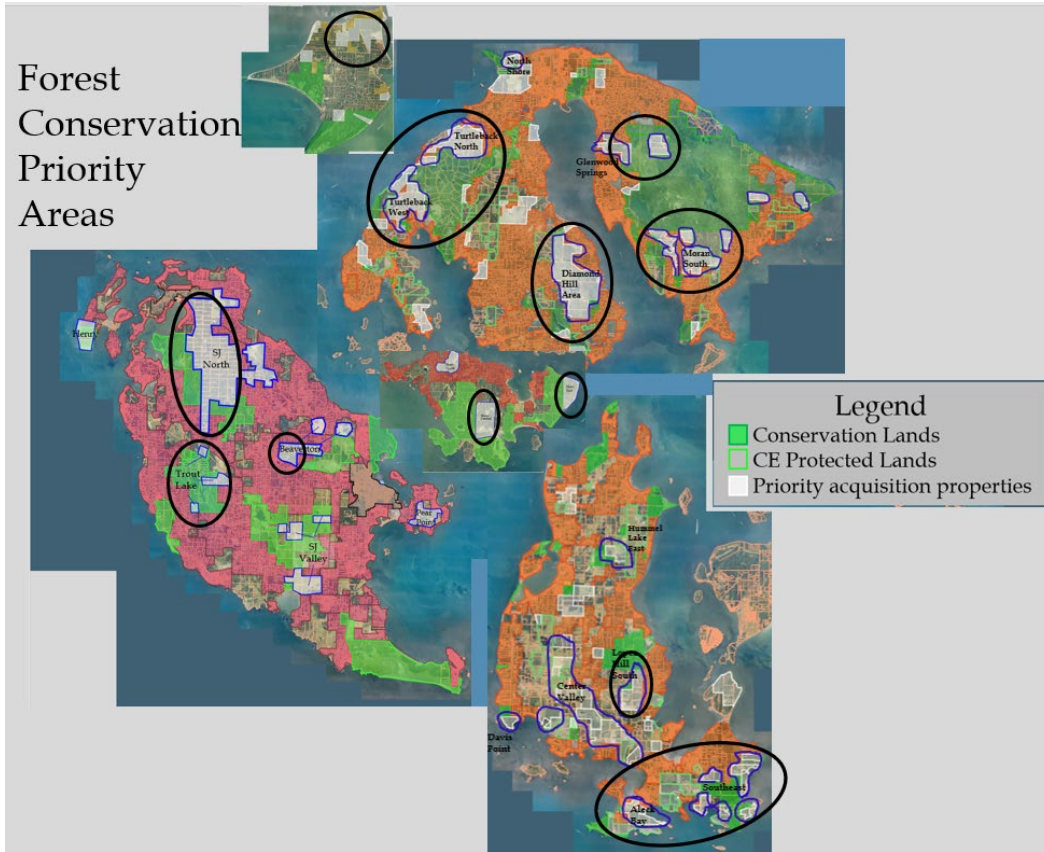
1. Protecting Key Properties to Limit Sprawl is a Top Priority

San Juan County has the potential for nearly 10,000 additional residences. With roughly 2/3 of the larger islands already part of a "development matrix", the Land Bank's focus on protecting key areas will help ensure that new development and infrastructure happens where it makes the most sense. This climate-friendly strategy increases the efficiency of development, limits unnecessary clearing and saves places for wildlife.

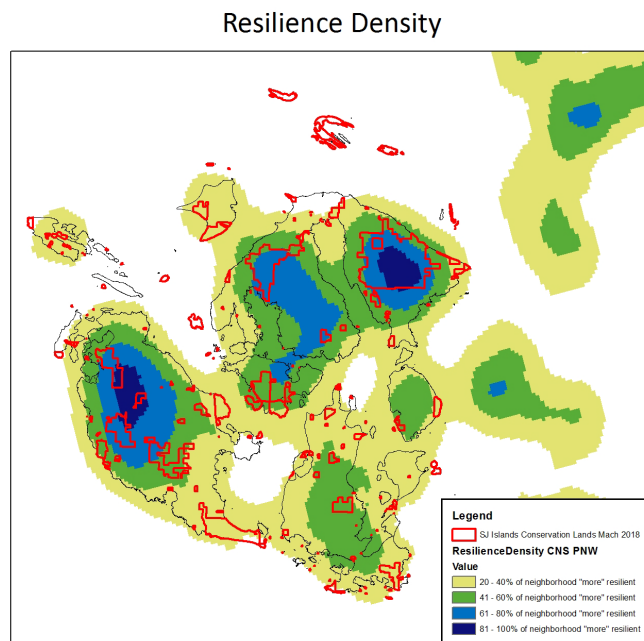


Our summers are becoming hotter and drier. Most fires started in the County originate on developed properties or along roadsides, often from run-away burn piles or from sparks from mowing. Intact, healthy natural areas can serve as a break to potentially catastrophic wildfires, particularly when under active management.

Additional protection in the areas shown below would bolster existing public lands, increasing the adaptive ability of forests and the wildlife that depends on them.



The Land Bank’s forest conservation priorities largely mirror areas identified by the Nature Conservancy in the adjacent map for their predicted ecological resiliency under climate change predictions.



2. Managing Forests to Reduce Risk of Catastrophic Wildfire and Improve Forest Health

Many forests in the islands are in poor health due to unnaturally high tree density. The Land Bank is increasing the pace and scale of forest thinning to reduce fuel for potentially catastrophic wildfires and to increase the vigor of remaining trees. This work has been under way for several years on Turtleback Mountain, Cady Mountain, and Mount Grant in partnership with the Islands Conservation Crops (ICC), Rainshadow Consulting, Blackcap Restoration, Samish Indian Nation, and WA Department of Natural Resources.

By managing fuels through “conservation burns” we help lock carbon in place for long periods of time. A typical 4'x4' burn pile produces on average 2.5 cubic feet of biochar. Since the fall of 2021, Land Bank staff and the ICC have burned 317 piles on Mt. Grant, 646 piles on Turtleback, and 37 piles on Cady Mountain, yielding over 83 cubic yards of biochar or 16 tons of CO₂ equivalent.

In addition to thinning densely stocked conifers, the Land Bank has also worked to create shaded fuel breaks on some of our more vulnerable areas. Fuel breaks are established by removing fuels along key corridors to prevent fires from spreading. This work is being done with funding obtained from the Washington Department of Natural Resources.

3. Carbon Sequestration on Agricultural Lands and Wetlands

The Land Bank is working with our farmland lessees to better manage pastures to improve soil health. By changing grazing regimes and amending soils, more carbon is stored in plant roots and yields are increased.

We are also exploring the use of basalt rock dust to actively sequester carbon from the atmosphere, improve soil health and reduce acidity. We are currently working on a pilot project in conjunction with Dr. Noah Planavsky of Yale University to spread basalt on 10 acres of agricultural land. Dr. Planavsky has sourced the material and will have it barged to San Juan at no cost to the County. The Land Bank will collaborate with SJC Public Works to move the material to the application site.

Two Land Bank Preserves contain vast quantities of peat, one of the most carbon-rich substrates in the world. Beaverton Marsh on San Juan and Hummel Lake on Lopez also host peat bogs with rare plants.