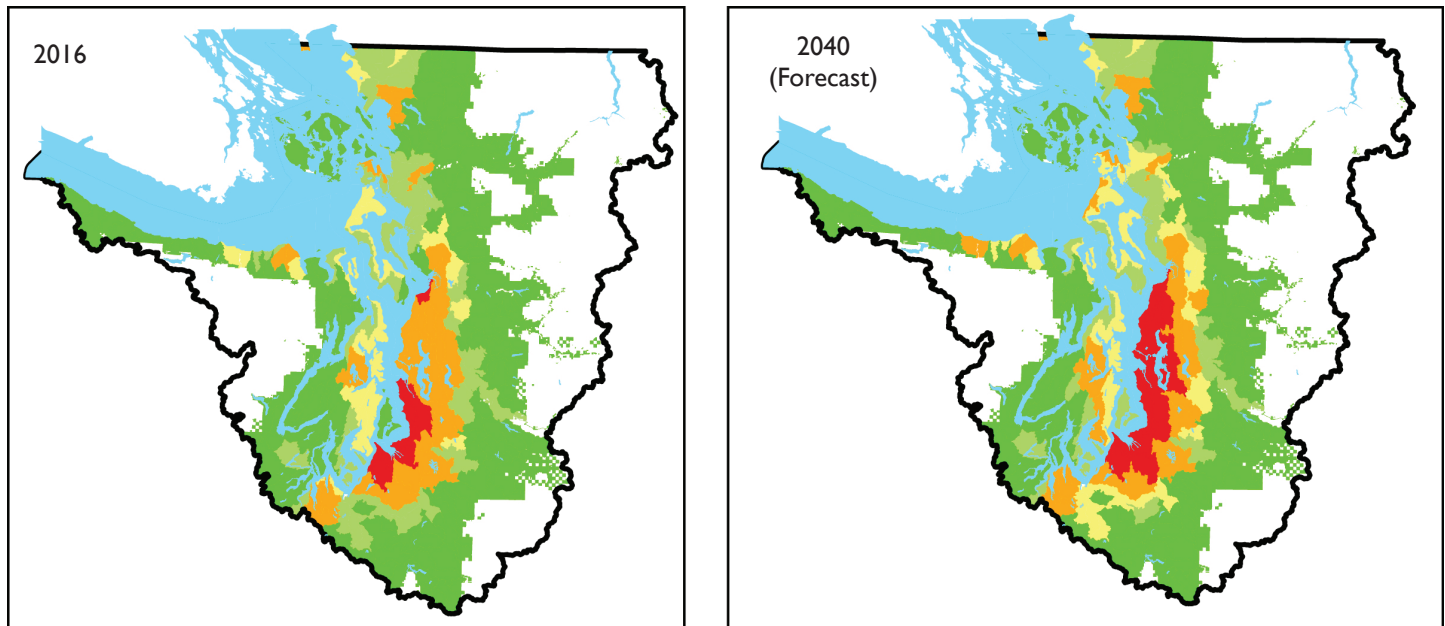


# Impervious Surface Continues to Increase

Excluding federal lands, impervious surface area increased to about 7% in 2016, an increase of 1.2% since 2011. By 2040, the forecast population for Puget Sound will increase an additional 1,100,000 beyond 2016; with an associated increase to almost 8.5% impervious surface area. The Puget Sound Salmon Recovery Plan lists minimizing impervious surfaces as a key strategy for protecting habitat.<sup>1</sup>



As impervious surface increases in a watershed, stream temperatures and sediment transport are likely to increase, along with a decrease in in-stream biodiversity by reducing the number of insect and fish species. It will also contribute to pollutants in stormwater runoff, which can contaminate local aquatic systems.<sup>2</sup> Contaminated runoff poses significant threats to freshwater, estuarine and marine species, including the Pacific Northwest's salmon and steelhead runs.<sup>3</sup> The addition of impervious surface reduces water infiltration and increases runoff, causing higher peak flows during wet times and lower dry weather flows due to lack of groundwater recharge.<sup>4</sup>

Between 2006 and 2016 the rate of annual impervious surface increase has decreased from the rate between 1986 and 2006. In correlation to population, the 2040 impervious surface forecast is based upon a continuation of the 2006-2016 behavior. If the population increases much more than forecast, or if an improving economy causes people to regress to 1986-2006 behavior, there is potential for an even greater increased impervious surface level. It is essential as we recover from the current 2020 budget crisis, that economic recovery does not take precedent over

environmental resiliency, so we need to ensure that new infrastructure projects limit the amount of new impervious surfaces.

The Chinook Recovery Plan leans heavily on local planning, land-use policies, and provisions contained in the local watershed plans to protect federally designated habitat.<sup>5</sup> However, even with critical areas ordinances, planned development areas outside of the designated Urban Growth Areas will continue to contribute to increases in impervious surface area.

## Impervious Surface Categories

- Little to No Impact (0-4%)
- Beginning to Impact (4-7%)
- Impacting (7-12%)
- Degrading (12-40%)
- Potentially Unrestorable (>40%)
- Waterbodies
- Puget Sound Area Boundary

## Puget Sound Impervious Surface 1986-2040 forecast, excluding NPS and USFS

