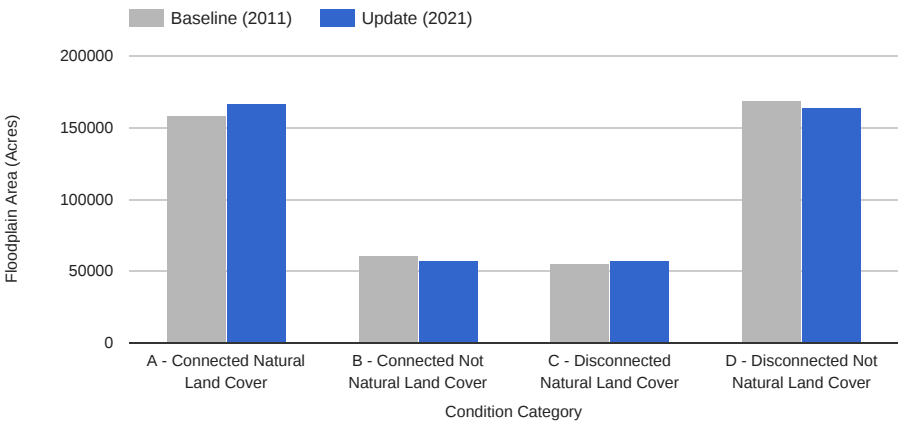
PUGET SOUND
VITAL SIGNS

INDICATOR
FLOODPLAIN FUNCTION IN LARGE AND SMALL RIVER SYSTEMS

This indicator measures the amount (acres and percent) of floodplain area in functional condition in Puget Sound's 17 major rivers. Floodplain function is assessed at a regional scale using river connectivity and land use and cover. Areas that have natural land cover and unrestricted river flow are expected to be the most functional and provide the most ecosystem services. Floodplain function is impaired in areas with non-natural land cover or restricted river flow due to constraints or barriers (for example, roads, railroads, and levees).

Floodplain function in large and small river systems

By: Condition Assessment



Floodplain condition assessment across Puget Sound's 17 major rivers. Total area in acres for the four categories of floodplain condition at two time periods: 2011 baseline and circa 2021 update.

Indicator Progress

GETTING BETTER

Target Status

NO TARGET

Target

No targets are currently set for this indicator.

Data Source

Floodplains Conditions Assessment (Environmental Science Associates and Puget Sound Partnership 2023)

Indicator Lead

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Last Updated

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Key Vital Sign Indicator Results

- Puget Sound's 17 major rivers include more than 440,000 acres of floodplain. Over half (55 percent) of the region's floodplain area is found in three of the 17 major rivers: Skagit, Snohomish, and Nooksack Rivers.
- Across the region, 38 percent (166,294 acres) of the total floodplain area is highly functional (Category A - Connected Natural Land Cover). The remaining 62 percent has reduced floodplain function. This includes 163,374 acres (37 percent of the total floodplain area) where the floodplain is disconnected and classified as developed, cultivated, or other non-natural land cover (Category D - Disconnected Not Natural Land Cover).
- A comparison of floodplain conditions between 2011 and circa 2021, showed the greatest change occurred in Category A (connected natural land cover), with an increase of 8,134 acres. This includes changes in connectivity, land cover, or both. The total area of Category D (disconnected non-natural land cover) declined by 4,925 acres.
- Connected floodplain area [including natural (Category A) and non-natural land cover (Category B)] increased by 3,567 acres since the 2011 assessment. While this points to improving progress in floodplain function, the change in connectivity affects less than 1 percent of the total floodplain area and extensive portions of historical habitat remain lost or degraded across Puget Sound.
- Changes in connectivity between the two time periods largely reflect reconnection projects, including areas associated with the Nisqually Delta Restoration, Dungeness River Reconnection, and Smith Island Estuarine Restoration in the Snohomish River.
- The extent and composition of functional floodplain area varies by watershed. Please see Interpretation of Results section for additional summaries.

CONTRIBUTING PARTNERS

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