Valley Floor vs. Green River Floodplain: The Physical-Continuity Tradeoff in Kent, Tukwila & Auburn

Pillar: Structural Factors | **Basis:** Dec 2025 Breaches & King County Baseline | **Primary Source:** King County DNRP / USACE / BC ESG B7 | **As Of:** Dec 2025 Breaches – 2031 Horizon

Washington's highest concentration of launch and orbital-compute manufacturing (Blue Origin, Stoke Space, Cowboy Space, Starfish, BlackSky) sits on the Green River Valley floor—where King County estimates a 1-day floodplain shutdown costs >=$46M and December 2025 levee breaches pushed permanent Desimone repairs toward 2031.

Documented Policy & Site-Selection Record

• Cluster Concentration on the Valley Floor: Kent (#1388) and Tukwila (#1397) house Blue Origin, Stoke Space, Cowboy Space (291,035 sq ft), Boeing Defense/Space, BlackSky, and Starfish Space.

• December 2025 Breach Record: On December 15, 2025, the Desimone Levee in Tukwila breached, closing 6 miles of SR 167 and triggering ~1,100 evacuations; permanent repairs extend toward 2031 (#2107, #2137).

• Economic Exposure: King County estimates a 1-day Green River floodplain shutdown costs at least $46M in lost output across ~65,000 jobs and >1/8th of Washington GDP (#2119).

• Site-Selector Tradeoff: While the Valley offers unmatched large-bay industrial shells, competitors like Huntsville (Cummings Research Park) and Texas pitch greenfield, non-floodplain campuses.

Valley Industrial Continuity Factors for Space Site Selectors

Factor	Documented Record	Batch 7 Deep Dive
Dec 2025 Desimone Breach	Closed 6 mi of SR 167; permanent fix toward 2031	Post #2107 & #2137
Hanson Dam Protection	Credited with ~$7.8B damage prevented (Dec 2025 prelim)	Post #2113
Daily Shutdown Arithmetic	>=$46M/day King County floodplain output loss	Post #2119
Non-Floodplain WA Options	Bothell, Marysville, Redmond, Bellevue, Moses Lake	Posts #1400–#1409, #1454

Founder, Staffer & Site-Selector Takeaways

• Founder Takeaway: When signing a 10-year Kent or Tukwila industrial lease, pair flood-insurance and zero-rise/BFE engineering checks (#2131) with SR 167 detour planning.

• Staffer Takeaway: State-funded levee and Hanson Dam resilience investments directly protect Washington's primary launch-manufacturing corridor.

Cross-Cluster Links & Primary Sources

• **WA Space Cluster Hub (#1382):** https://bcesg.org/washington-space-cluster-census/

• **Green River Valley Floodplain Overview:** https://bcesg.org/wa-space-valley-green-river-floodplain-overview/

• **Dec 2025 Desimone Levee Breach & 2031 Horizon:** https://bcesg.org/wa-space-valley-dec-2025-desimone-levee-breach/

• **Green River Floodplain $46M/Day Arithmetic:** https://bcesg.org/wa-space-valley-46m-daily-floodplain-arithmetic/

• **2026–2031 Levee Repair Horizon:** https://bcesg.org/wa-space-valley-levee-repair-timeline-2026-2031/

• **Kent WA Space Cluster Profile:** https://bcesg.org/kent-wa-space-cluster-profile/

• **WSDOT Puget Sound Gateway Program:**
https://wsdot.wa.gov/construction-planning/major-projects/puget-sound-gateway-program

• **Washington State Department of Commerce:** https://www.commerce.wa.gov/

Provenance Note: Cross-links directly to Batch 7 Freight, Rail & the Valley primary records (#2104, #2107, #2113, #2119, #2137).