MEADOWDALE PROPOSED ALEA/ESRP/SRFB DESCRIPTION:

Snohomish County will restore stream, estuary, and nearshore processes at the mouth of Lund’s Gulch Creek in Meadowdale Beach Park, located at the north end of Brown’s Bay in Puget Sound (PS). Restoration for rearing juvenile Chinook and other salmonids entails:

· Removing 17,000 cy of fill to re-establish a 1.3 ac estuary.

· Replacing a 6’ culvert under the BNSF railroad and 128 lf (2,000 cy) of hardened shoreline armor with a 5-span railroad bridge creating a 90’ opening for a widened channel meander to restore sediment delivery processes (80-250 CY/YR) to the nearshore and improve connectivity to nearshore pocket estuary habitat.

· Removing 75 lf of streambank armor and placing LWD to improve instream habitat.

· Planting native vegetation to enhance nearshore and creekside riparian habitat.

· Relocating park infrastructure inland, including benches, picnic tables and a portable restroom enclosure.

· Rerouting pedestrian circulation w/ crushed rock and asphalt paths with 7 viewpoints and 4 interpretive signs, a boardwalk over an existing wetland, and a pedestrian bridge over the creek for viewing salmon.

This project presents a resilient solution to a major stressor along a section of PS identified by PSNERP as "most degraded" to demonstrate a healthy coastal ecosystem can co-exist with critical transportation infrastructure. The project also increases eco-based recreational and educational experiences for 65,000 annual visitors, addresses public safety, and provides ADA access to 1 of only 3 County PS shorline parks.

ESRP:

Snohomish County will use this grant to restore stream, estuary, and nearshore processes at the mouth of Lund’s Gulch Creek in Meadowdale Beach Park, located at the north end of Brown’s Bay in Puget Sound. Restoration entails replacing a 6’wide culvert under the BNSF railroad and 128 lf (2,000 cy) of hardened shoreline armor with a five-span railroad bridge, removing 17,000 cy of fill to re-establish a 1.3 ac estuary for juvenile Chinook and other salmonid rearing habitat. The 90’ opening will provide a widened channel meander, restore sediment delivery processes of up to 250 cy annually to the nearshore and improve connectivity to pocket estuary habitat in the nearshore. Additionally, removal of 75 lf of streambank armor, native vegetation plantings and LWD placement will improve nearshore, stream buffer and in-stream habitat.

This project proposes a resilient solution to a major stressor along a section of Puget Sound that PSNERP identified as "most degraded" demonstrating that a healthy coastal ecosystem can co-exist with critical transportation infrastructure. The project enhances recreational and educational experiences for the 65,000 annual visitors, addressing public safety, and providing ADA access to one of only three County-owned saltwater access parks. This project is part of a larger project that includes viewpoints, picnic tables, benches, a pedestrian bridge, interpretive signage, and addl riparian and stream enhancement upstream of this project.

SRFB:

Snohomish County will complete a Puget Sound nearshore restoration project at Meadowdale Beach Park located at the North end of Browns Bay at the inlet of Lund’s Gulch Creek. A historic (pre-railroad) pocket estuary will be re-established and connected to the nearshore by removing 17,000 CY of fill, creating 1.3 ac. of high functioning, low energy, and sustainable rearing habitat for non-natal juvenile Chinook (threatened). Approx. 128 lf (2,000 CY) of shoreline armor, associated undersized 6’ wide culvert under the BNSF rail-line, and 75 lf of streambank armor will be removed and replaced with a 5-span railroad bridge to provide a 90’ opening to restore natural channel meander and sediment delivery to the nearshore (80-250 CY/YR); 27 pieces of wood will be placed in the estuary for habitat structure for juvenile salmonids.

This park project will additionally improve quantity and quality of the creek delta and lower stream reach habitats known to be used by non-natal juvenile Chinook salmon by enhancing beach nearshore and riparian areas outside the estuary. The protected park setting and the County’s commitment to maximize restoration make this a unique opportunity in central Puget Sound. This multi-benefit project is precedent-setting by working with BNSF on railroad modifications, providing a resilient solution to a long-standing conflict; and illustrating how Puget Sound Recovery can occur in areas historically impacted.

ALEA:

Snohomish County will use this grant to restore ecological functions and processes associated with Lund’s Gulch Creek, a coastal salmon-bearing stream, and develop public amenities at Meadowdale Beach Park, located at the northern end of Brown’s Bay on Puget Sound. Approximately 17,000 cubic yards of fill will be removed and substrates, large wood and native plantings installed to re-establish a 1.3-acre estuary. A starter cobble channel will initially be provided, but eventually a widened channel meander (6’ to 90’) will allow natural sediment delivery to the nearshore. Seven viewpoints including benches and picnic tables, and 4 interpretive signs will be constructed with a pedestrian bridge installed over the creek for viewing salmon. Crushed rock and asphalt paths including a boardwalk over an existing wetland will provide pedestrian circulation. A portable restroom enclosure will replace the existing structure. The primary recreation opportunity provided by this project is increase quantity, quality and diversity of habitat for the enjoyment and eco-based education of visitors. The primary restoration benefit is to provide critical rearing habitat for ESA-listed threatened juvenile Chinook, and other salmonids.