5.3.5 Des Moines to Federal Way

The Des Moines to Federal Way subarea is likely the area of highest function as habitat along the mainland portions of WRIA 9. It is comprised of three drift cells, one of which extends southward from Des Moines to Dumas Bay, a small one extending south and east from the west edge of Dumas Bay into Dumas Bay, and one extending south and west toward Tacoma (see Map 2). There are several small tributaries where salmon spawning has been documented. Tributary mouths here are generally armored and piped, and exist in residential settings. The northern portion of the subarea has a feeder bluff with mature riparian vegetation with houses atop the bluff. Further south, the houses are at the base of the bluff and an armored road is along the shoreline. There is extensive continuous armoring in this area; the road and seawall continue through to Redondo Beach. As the shoreline turns to a more east-west alignment, there are two areas of feeder bluffs with no houses at the base of the bluff; these two areas are separated by a section of continuous shoreline armoring with some houses and little riparian vegetation. West of Dumas Bay, there is a largely unarmored feeder bluff with mature trees and a few houses at the base of the bluff.

Several small creeks enter Puget Sound in this subarea. The WDFW (2002) SASSI report identifies three streams with documented salmon utilization in the freshwater portion and two streams with presumed salmon utilization. However, other creeks in this subarea may be periodically utilized by salmon and the creek mouths of all tributaries, particularly those that are not in pipes, may be utilized by juvenile salmon migrating and rearing in the nearshore. Three creeks flow into Dumas Bay at the south portion of the subarea. The two larger streams that enter the eastern and southern portion of Dumas Bay have documented salmon utilization (WDFW 2002). The furthest west creek entering Dumas Bay has an extensive marsh associated with it and generally high quality riparian vegetation, but it is surrounded by residences. The creek flowing into Dash Point State Park in the western margin of the subarea is the other documented salmon stream (WDFW 2002).

5.3.5.1 Habitat Needs and Goals

Habitat goals for this subarea include maintaining and conserving its sediment supply and conserving and restoring the tributary mouths and marshes present in

Dumas Bay. These are important habitat needs because of the location of Dumas Bay within the context of relatively intact marine riparian vegetation west of the bay and the bay's potential to provide needed marsh habitat for feeding and refuge.

5.3.5.2 Priority Recommendations

Habitat recommendations in this subarea include the following (Map 11):

- *Conserve* two extended sections of unarmored feeder bluffs west of Dumas Bay that have mature riparian vegetation and LWD across the intertidal zone. These sections are separated by a reach with houses at the base of bluffs. The long-term existence of houses in this reach may be threatened through landslides or sea level rise. Nearshore habitat function would be enhanced by future activities that reconnect the sediment supplies to the intertidal zone, and/or by not allowing structures to be rebuilt.
- *Restore* the tributary mouth at Dash Point State Park. The lower reaches of the creek (upstream and downstream of the road) could be restored to remove armor, add sinuosity, and add riparian vegetation.
- *Conserve* an extended reach east of Dumas Bay that has unarmored feeder bluffs that have mature vegetation. This reach is centrally located in its drift cell, but is the first extended reach of sediment source that is well connected with the intertidal zone. Therefore, it is a particularly important sediment supply area for the downdrift areas, including Dumas Bay.
- *Restore* exceptional feeder bluff areas north of Redondo Beach. Several residences and an access road disconnect the feeder bluffs from the intertidal zone. This reach is located near the updrift end (start) of a drift cell that continues south and west to Dumas Bay. A long-term solution to reconnecting the sediment source and allowing landslide material to reach the intertidal zone will improve habitat conditions throughout an extended drift cell.
- *Conserve and restore* tributary mouths in Dumas Bay. Fully reconnect a marsh at the west end of Dumas Bay that is currently restricted by a berm.
- *Rehabilitate* riparian vegetation at residential properties east of Dumas Bay that may allow adding vegetation close to shore.

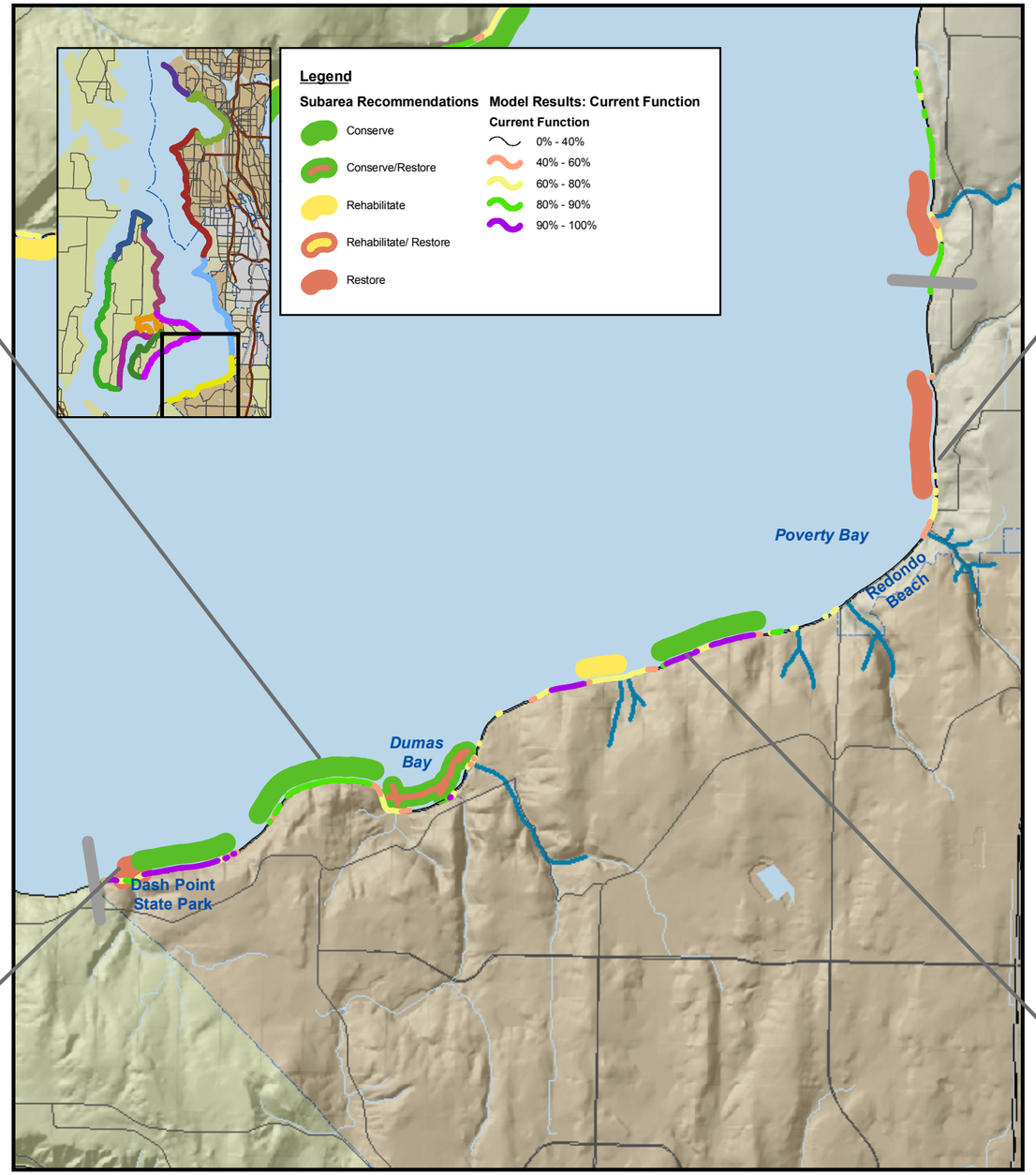
Des Moines to Federal Way

This subarea provides some of the longest extended reaches of good functioning habitat along the mainland portions of WRIA 9. It contains several unarmored feeder bluffs, several small tributaries, and three larger creeks that flow into Dumas Bay.

Conserve unarmored shoreline west of Dumas Bay
Conserve two extended sections of unarmored feeder bluffs west of Dumas Bay that have mature riparian vegetation and large woody debris across the intertidal zone.

Restore excetonal feeder bluffs
Several residences and a road disconnect the feeder bluff from the intertidal zone. A long term solution to reconnect the sediment source will improve habitat conditions throughout the drift cell.

Restore mouth of Dash Point Creek
The lower reaches of the creek (upstream and downstream of the road) could be restored by removing armor, adding sinuosity, and adding riparian vegetation.



Conserve feeder bluffs east of Dumas Bay
This is an extended reach with unarmored feeder bluffs that have mature vegetation. The reach is centrally located in its drift cell, but is the first extended reach of sediment sources that are well connected with the intertidal zone. Therefore it is a particularly important sediment supply area for the downdrift areas, including Dumas Bay.

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Scale in Feet

Map 11
Des Moines to Federal Way Subarea and Priority Recommendations
Identification of Priority Habitats
WRIA9 Nearshore Habitat Assessment