

Table 7—Functions Summary

Waterbody	Performance of Function by Segment	Score
Segment 8—Wallace River: CITY LIMIT AT MOONLIGHT DRIVE/WALLACE RIVER TO WESTERN CITY LIMITS		
Hydrologic:		
Segment 8	<u>Summary</u> : the river appears from aerial interpretation to be functioning in balance between bed load transport and channel movement and conveyance.	
Segment 8	<u>Transport of water and sediment</u> : the river in this Segment is fully functioning to convey water and sediment. The latest aerials (Google on-line) reveal a very large log jam on the lower portion of the Segment; lodged against the right bank of the river, just northeast of Green Lane if it was extended to the north across the river.	5
Segment 8	<u>Attenuation of flow energy</u> : the river has a floodplain on the south side (left bank) of the river in this Segment; portions of it are forested and provide opportunity for physical resistance to flood flows.	4
Segment 8	<u>Developing pools, riffles, gravel bars</u> : the river seems well established within this Segment; with some gravel bars evident. There is less obvious pool; riffle complexes visible via the aerial photographs, though there is LWD for potential in-channel complexity.	3
Segment 8	<u>Recruitment and transport of LWD and other organic material</u> : sufficient forest and riparian woodlands are present along the left bank of this Segment to provide recruitment of LWD and organics into the channel to support downstream food webs.	4.5
Vegetation:		
Segment 8	Summary:	
Segment 8	<u>Maintaining temperature</u> : conditions of overhanging and riparian forest in this Segment range from excellent to non-existent. At the east end of the Segment is a large area that is completely unvegetated; it is unclear what the cause of this condition is; if it is temporary or permanent. The mid-section of the Segment is fully vegetated on the left bank; and the western portion of the Segment is less vegetated due to residential practices. (the north bank of the river is not in the City but it is nearly devoid of forest for most of it's length; therefore any benefit the overhanging forest may have within the City in this segment is negated by conditions in the County across the river).	3
Segment 8	<u>Removing excess nutrients and toxic compounds</u> : the floodplain offers the potential for nutrients and toxics to be removed from the waters; however the residential uses within the Segment are all on individual septic systems, and therefore have the potential to be contributing to the water quality impacts in the river.	2.5
Segment 8	<u>Sediment removal and bank stabilization</u> : the vegetation within the riparian fringe of the river has the potential to remove sediment ; woody debris and forested conditions along the left bank have the opportunity to slow flows and stabilize the banks in this Segment.	3
Segment 8	<u>Attenuation of flow energy</u> : LWD within the channel an the condition of the vegetated riparian area and floodplain can function to attenuate flood flows.	3
Segment 8	<u>Provision of LWD and organic matter</u> : the forested riparian zone and floodplain provide opportunity for the recruitment of LWD into the river channel. A large log debris jam is present in the most recent aerials in the lower portion of the Segment.	3
Hyporheic:		
Segment 8	Summary:	
Segment 8	<u>Removing excess nutrients and toxic compounds</u> : the floodplain is sufficiently vegetated to assist with sediment removal and nutrient uptake; however residential on-site sanitary conditions may contribute to nutrient and toxics introduction into the river.	2.5
Segment 8	<u>Water storage</u> : it would be assumed that the floodplain of the river would provide storage of flood flows on the surface and access to recharge the hyporheic zone as well.	3

Segment 8	<u>Support of vegetation</u> :vegetation in the upper portion of the Segment is relatively intact; however in the lower portion of the Segment, residential activities have reduced and impacted the type and extent of vegetation remaining.	2.5
Segment 8	<u>Sediment storage and maintenance of base flows</u> :the river channel indicates the storage and aggradations of gravels in-channel; there is likely opportunity for recharge of the hyporheic zone from the floodplain within the Segment.	2.5
Habitat:		
Segment 8	Summary:	
Segment 8	<u>Physical space and conditions for life history</u> :this Segment is located generally within the lower density residential portions of the northern extent of the City of Gold Bar. Although it is removed from the Skykomish River, there is significant habitat available; though not as accessible as the upstream portion, Segment 7. Forest removal to the north of the river in this Segment 8 limits terrestrial species that depend upon forest habitats.	3
Segment 8	<u>Food production and delivery</u> :as described above, this Segment has opportunity for delivery of small and large woody debris into the river system; as well as organics to support downstream food webs.	3