

Revised Report on the Environmental Review by Stantec Consulting

- Stantec have revised their report to include a comparison of the potential effects of 140 m bridges, 241 m bridges and existing conditions.
- The comparison focuses on the differences in the areas that would be affected within the floodplain and on the adjacent forested slopes for the two bridge configurations.

Differences in Areas Affected

- The 140 m bridge configuration would require infilling of the floodplain area outside of the bridges and some in front of the bridge abutments.
- A set of piers would be required, corresponding to the central ones required for the 241 m bridges.
- The fill and abutment construction would be confined in the floodplain mostly to existing agricultural land, as well as to the forested slopes at the edges of the floodplain.
- Parts of the abutments and associated fill for the west end of the bridges would intrude into flood zone habitat.

Size of Areas Affected

- Three drawings show the area of the bridge (attached)
- Figure 1 shows existing habitat types and land uses within the highway right of way: agricultural land, flood zone habitat, scour zone, and upland forested.
- Figure 2 shows the 241 m bridge configuration and areas that would be disturbed by construction or habitat lost permanently by the structure and associated fill and cover material
- Figure 3 shows the same information as Figure 2, but for a 140 m bridge configuration

Habitat and Land Disturbance Within Intervale and Adjacent Slopes for Two Bridge Configurations		
Habitat/Land Use Type	Area (hectares) (1 hectare = 10,000m² = 2.47 acres)	
	241 m Bridge	140 m Bridge
Agricultural land	0.18	0.53
Flood zone habitat	0.16	0.20
Scour zone habitat	No change	No change
Upland forested habitat	0.23	0.55

Sensitive Terrestrial Species Affected

- A patch of Coffee Tinker’s Weed would be lost in the construction of a bridge pier in either bridge configuration. These might be successfully transplanted.
- For the 140 m bridges, the additional area of flood zone habitat that would be lost on the west bank of the river (0.4 ha) does not include any identified sensitive terrestrial species.
- The rich intervale habitat has been substantially degraded by past agricultural practices.
- Wooded flood zone habitat that now supports rare and uncommon species was previously cleared.
- Existing agricultural uses within the highway right of way will be discontinued. The flood zone habitat can be allowed to reestablish on these lands and might support additional patches of the sensitive plant species now found in the flood zone habitat.

Scour Effects

- The deeper scour depth predicted for the 140 m bridges and possible wider scour of the banks would require similar mitigation as for the 241 m bridges.

Ice Effects

- Effects of ice are expected to be the same for either bridge length and would not be different than for current conditions.