

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

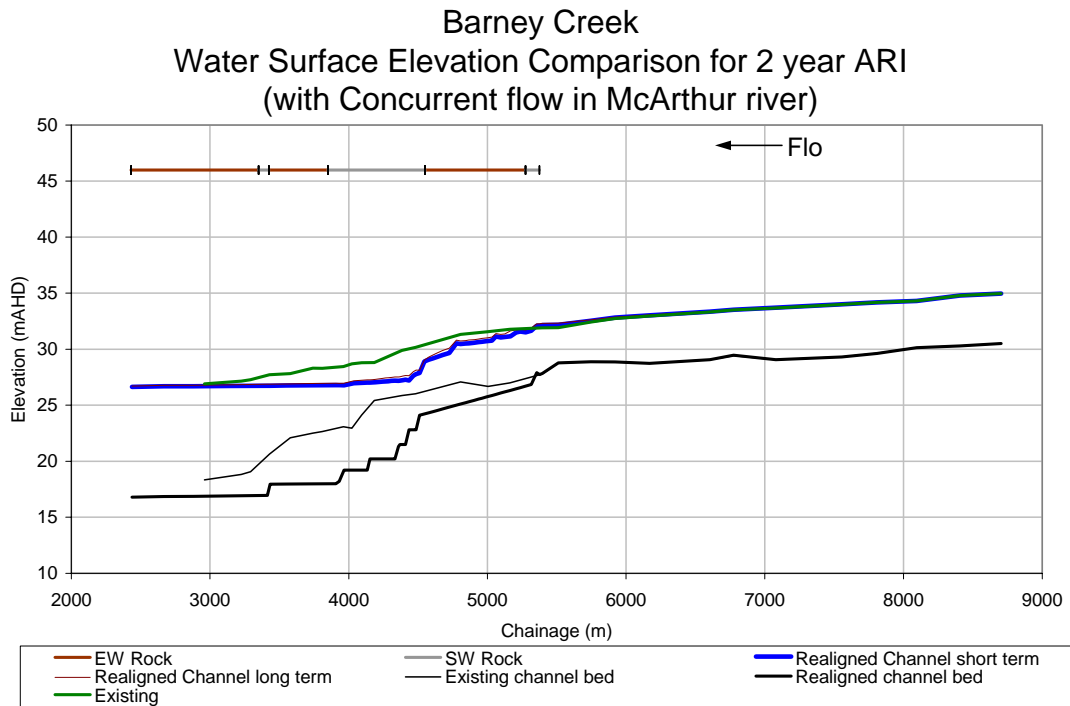


Figure F.2.1 – Barney Creek Water Surface Elevation Comparison for 2 year ARI (Concurrent Flow in McArthur River)

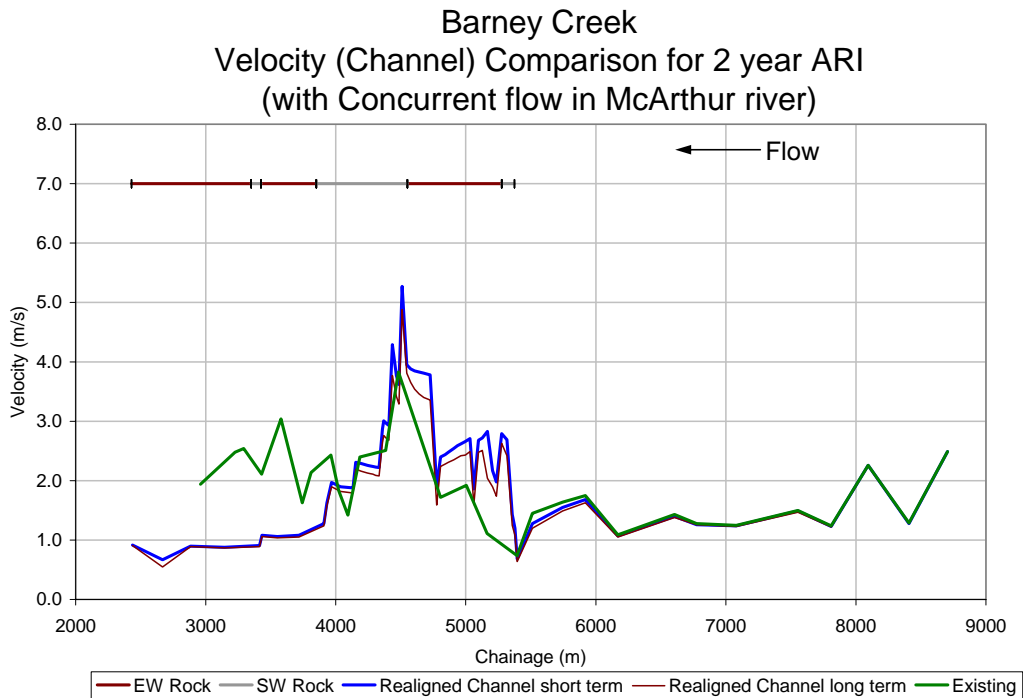
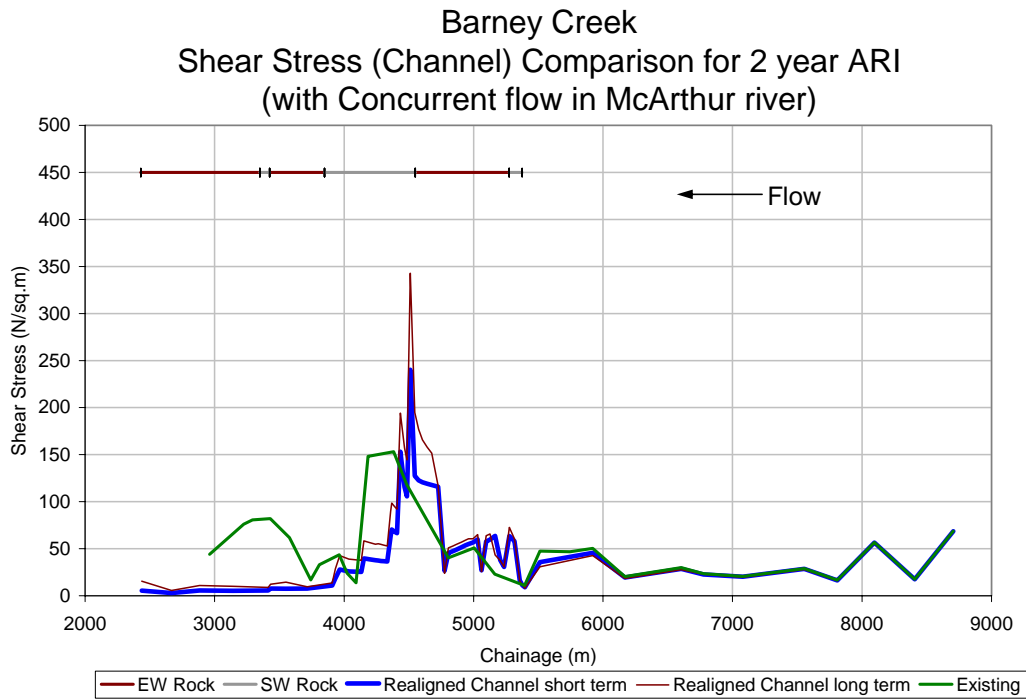


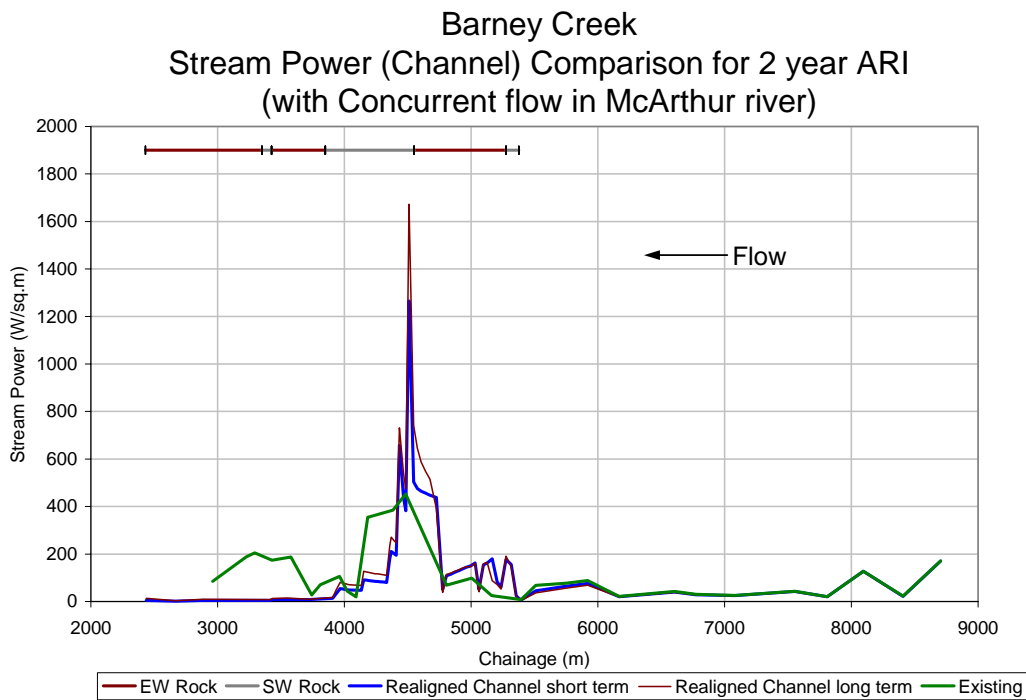
Figure F.2.2 – Barney Creek Velocity (Channel) Comparison for 2 year ARI (Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results



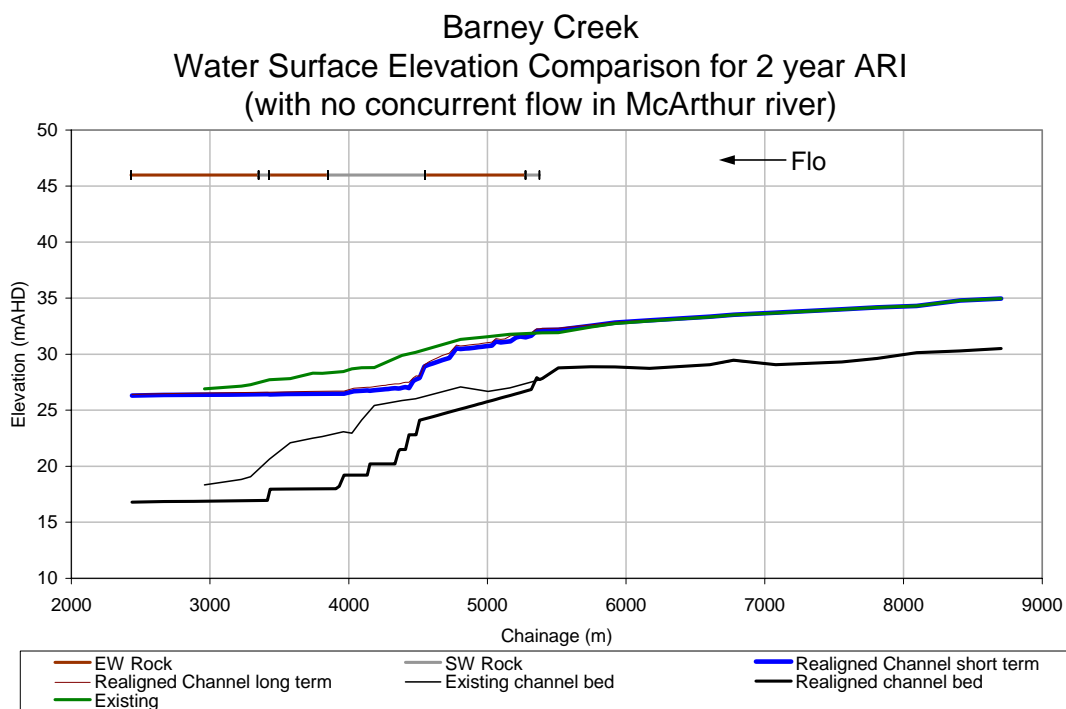
**Figure F.2.3 – Barney Creek Shear Stress (Channel) Comparison for 2 year ARI
(Concurrent Flow in McArthur River)**



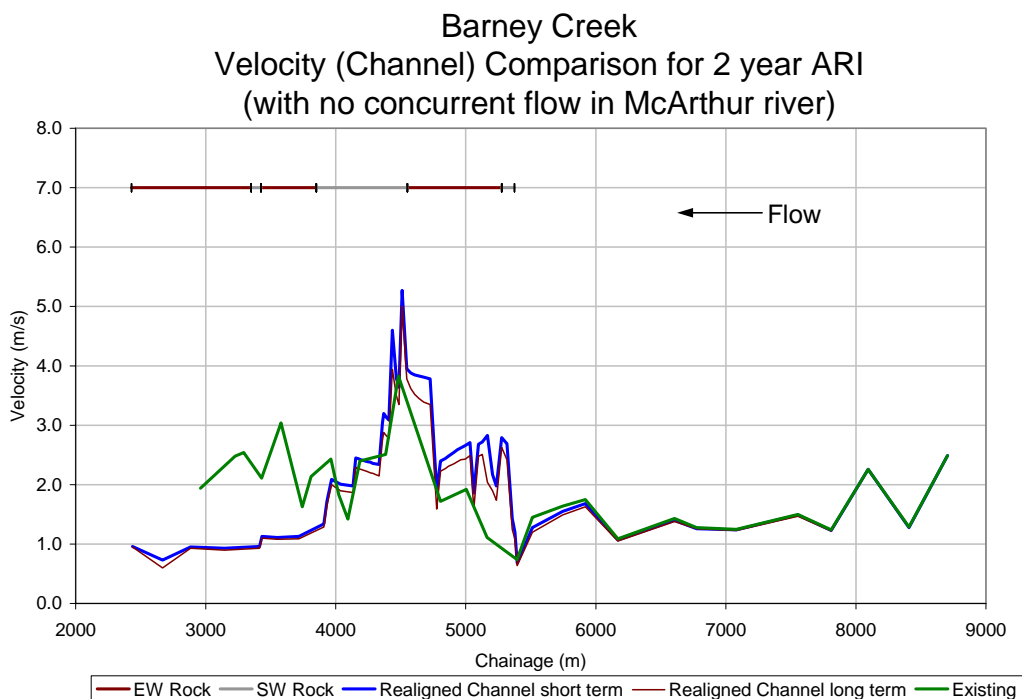
**Figure F.2.4 – Barney Creek Stream Power (Channel) Comparison for 2 year ARI
(Concurrent Flow in McArthur River)**

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results



**Figure F.2.5 – Barney Creek Water Surface Elevation Comparison for 2 year ARI
(No Concurrent Flow in McArthur River)**



**Figure F.2.6 – Barney Creek Velocity (Channel) Comparison for 2 year ARI
(No Concurrent Flow in McArthur River)**

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

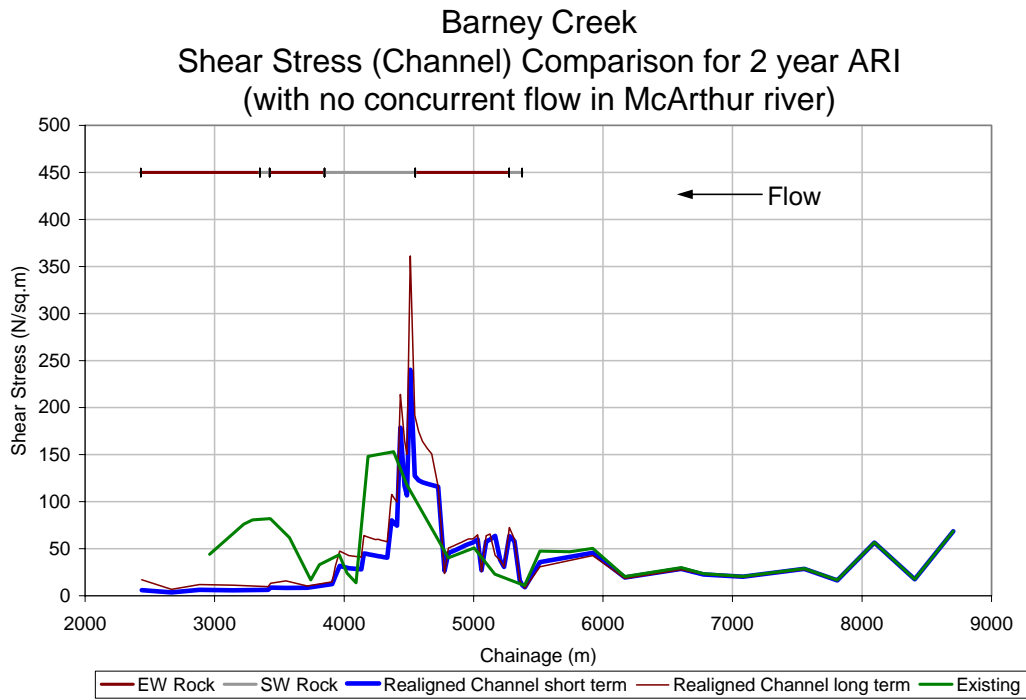


Figure F.2.7 – Barney Creek Shear Stress (Channel) Comparison for 2 year ARI (No Concurrent Flow in McArthur River)

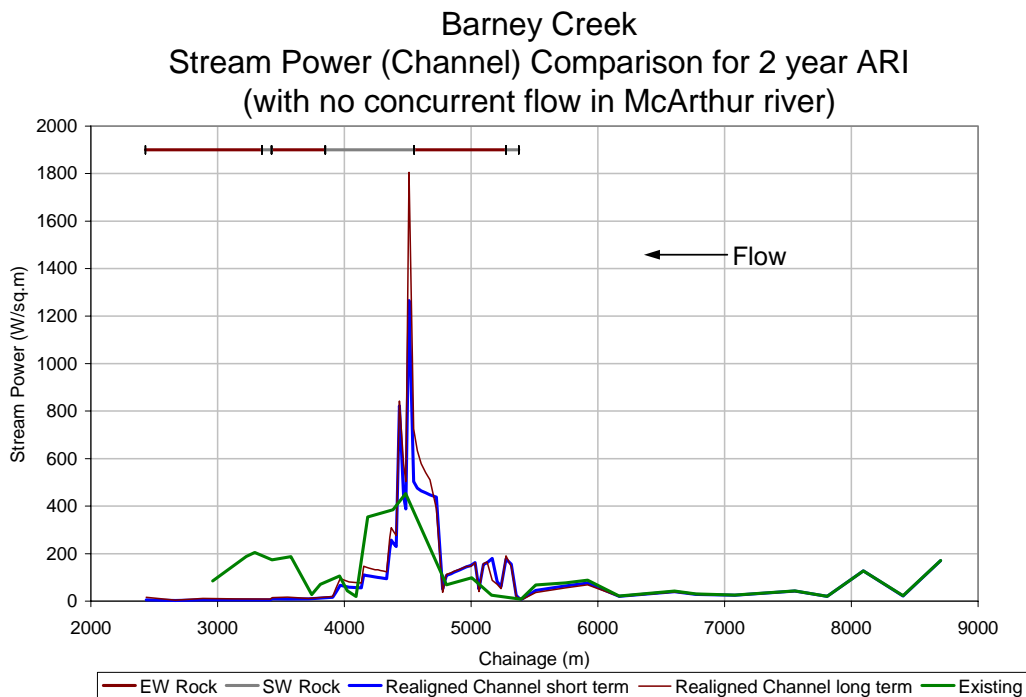


Figure F.2.8 – Barney Creek Stream Power (Channel) Comparison for 2 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

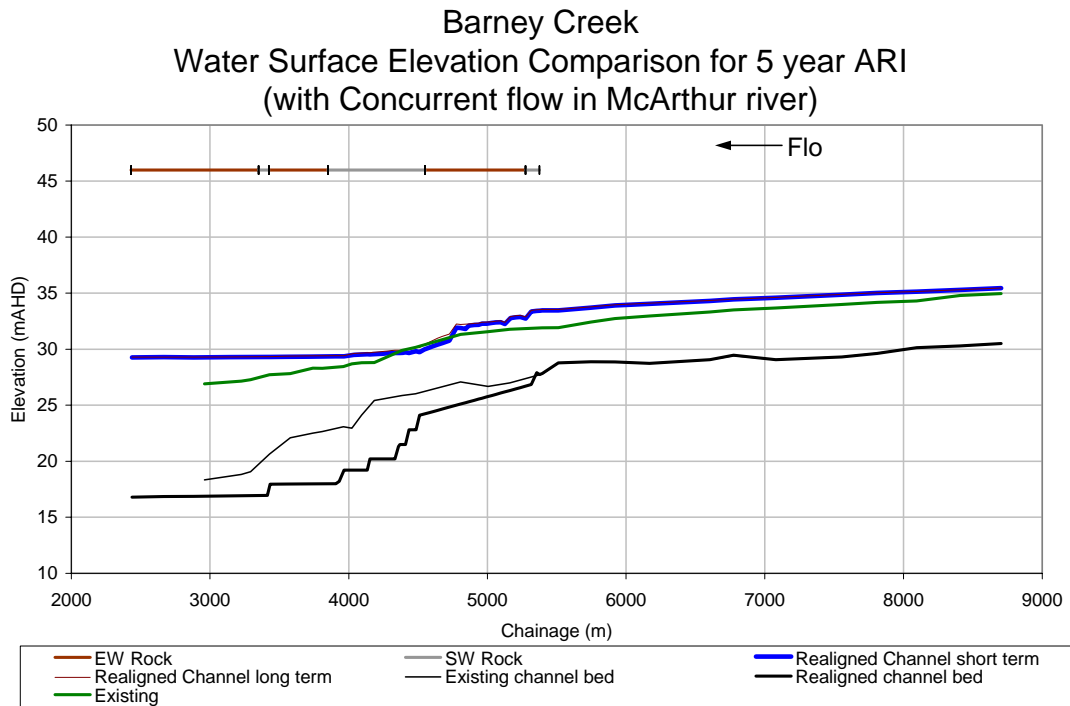


Figure F.2.9 – Barney Creek Water Surface Elevation Comparison for 5 year ARI (Concurrent Flow in McArthur River)

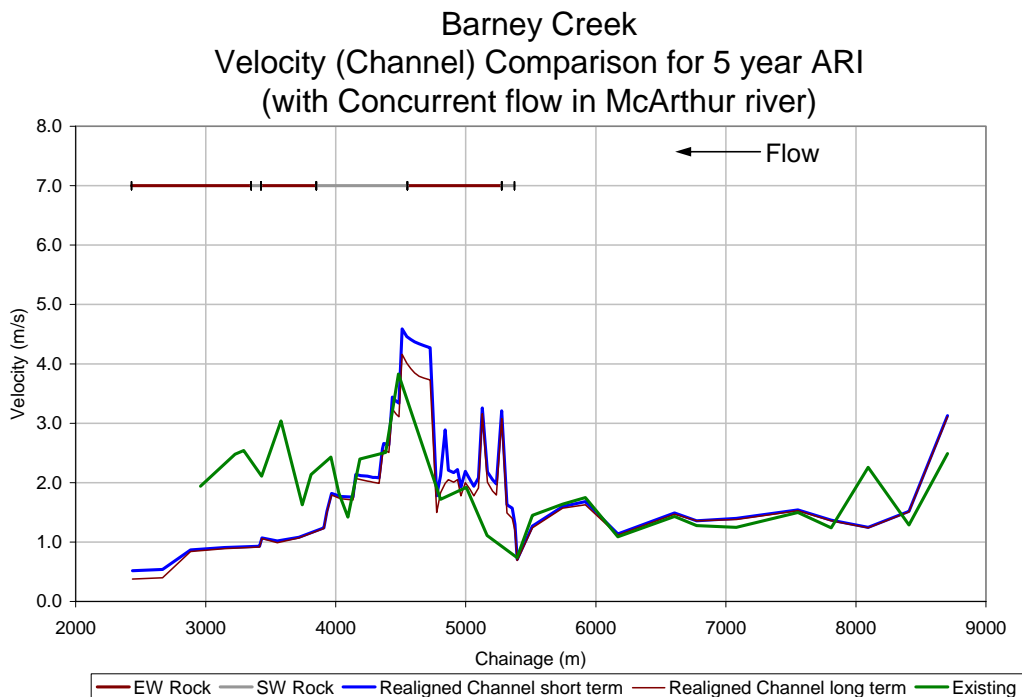


Figure F.2.10 – Barney Creek Velocity (Channel) Comparison for 5 year ARI (Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

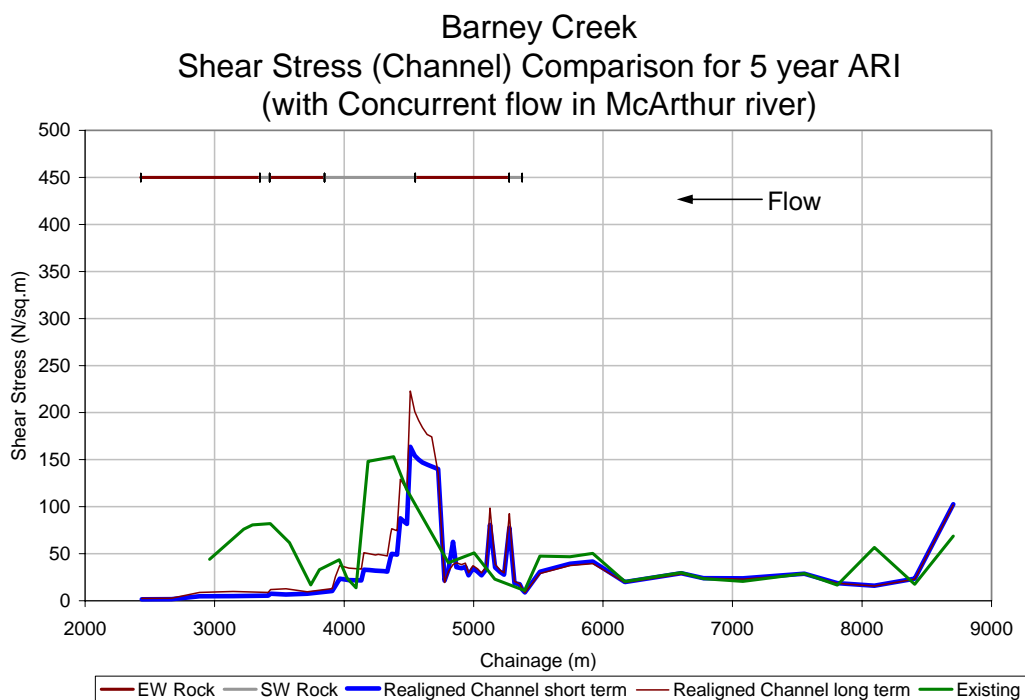


Figure F.2.11 – Barney Creek Shear Stress (Channel) Comparison for 5 year ARI (Concurrent Flow in McArthur River)

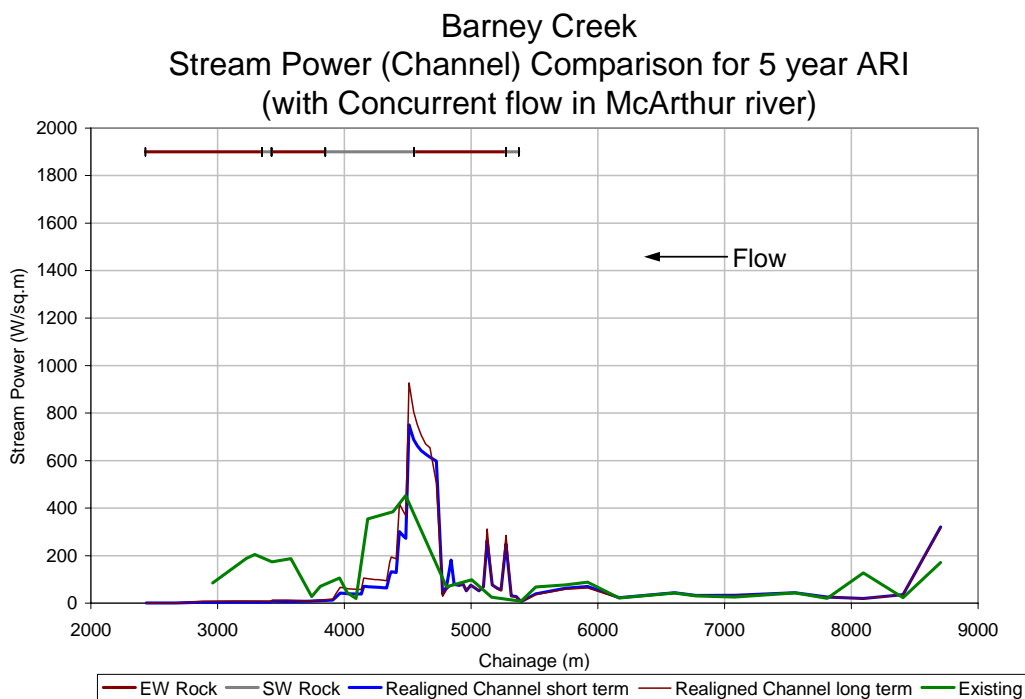
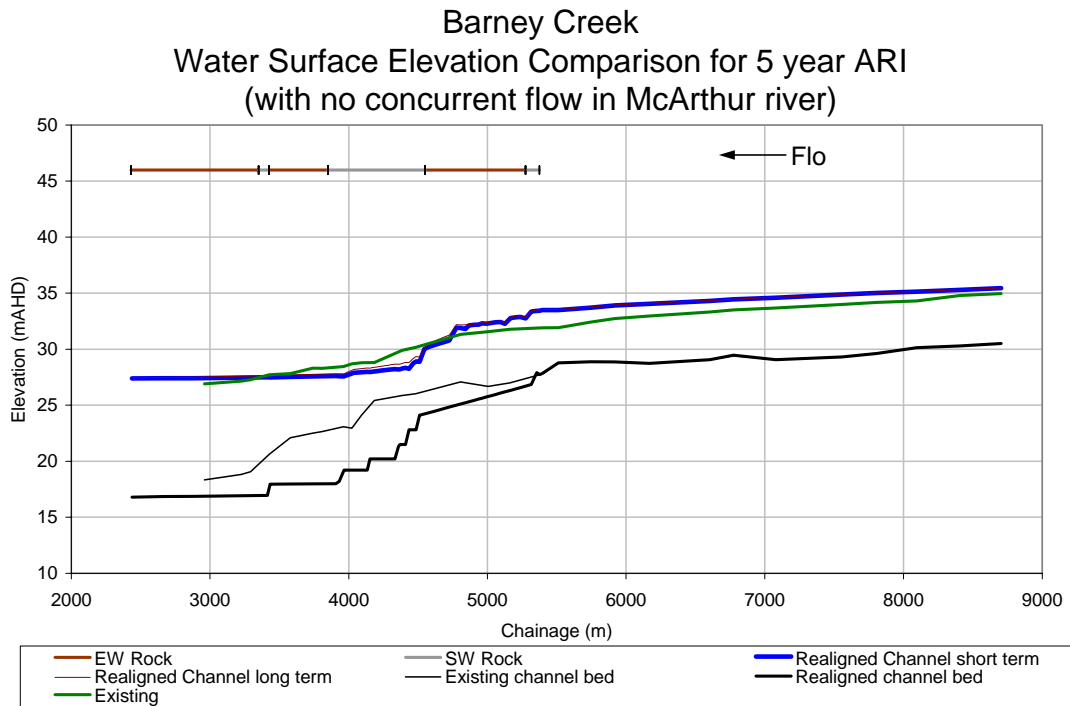


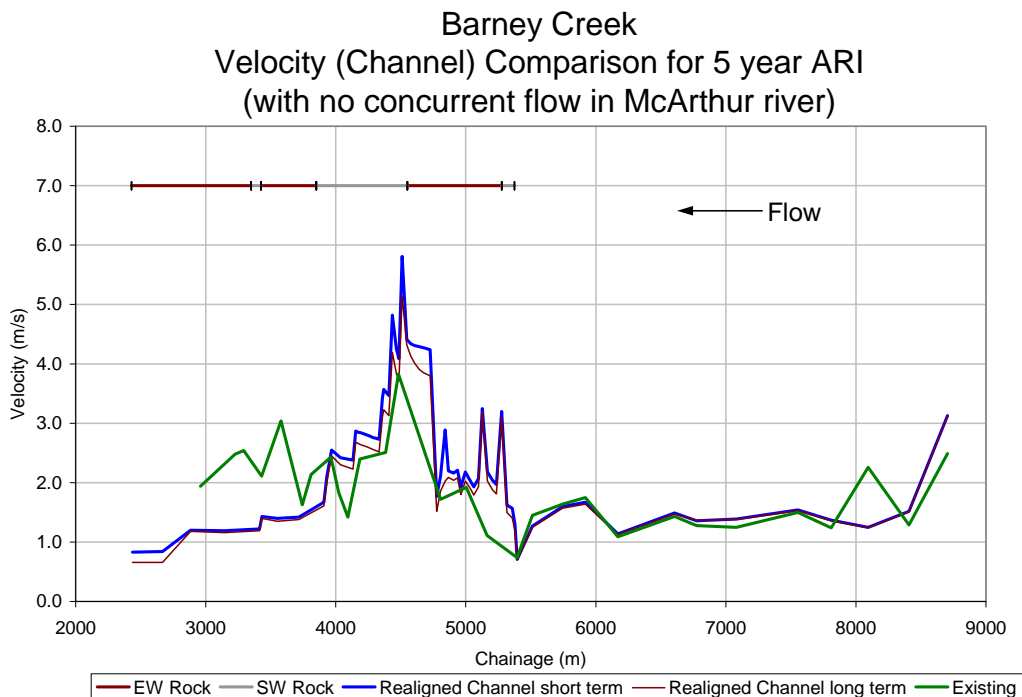
Figure F.2.12 – Barney Creek Stream Power (Channel) Comparison for 5 year ARI (Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results



**Figure F.2.13 – Barney Creek Water Surface Elevation Comparison for 5 year ARI
(No Concurrent Flow in McArthur River)**



**Figure F.2.14 – Barney Creek Velocity (Channel) Comparison for 5 year ARI
(No Concurrent Flow in McArthur River)**

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

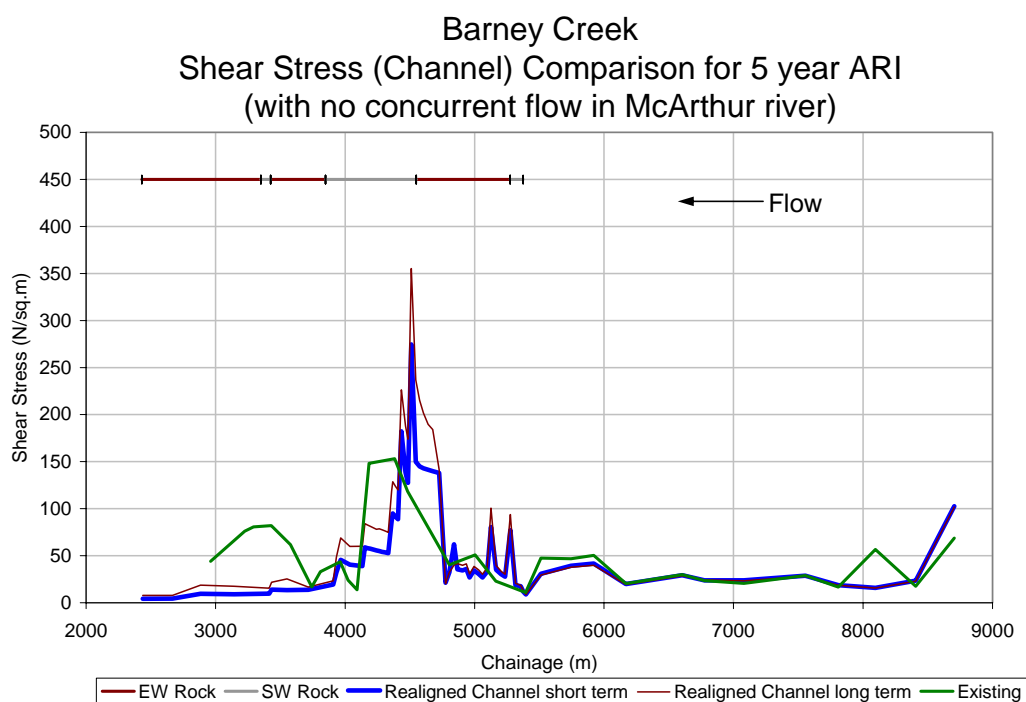


Figure F.2.15 – Barney Creek Shear Stress (Channel) Comparison for 5 year ARI (No Concurrent Flow in McArthur River)

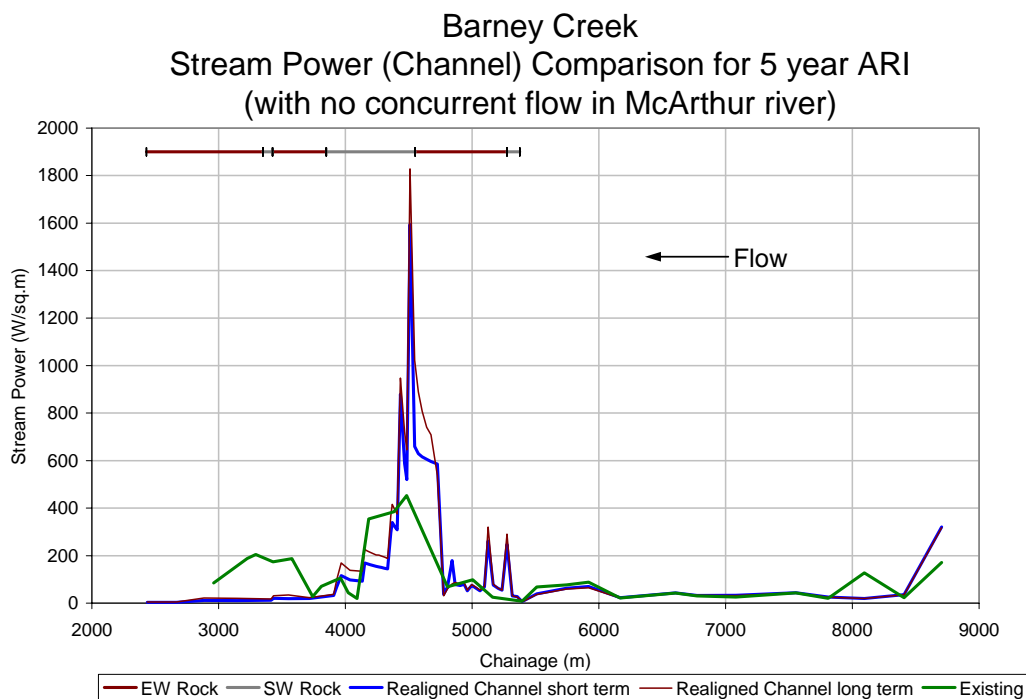


Figure F.2.16 – Barney Creek Stream Power (Channel) Comparison for 5 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

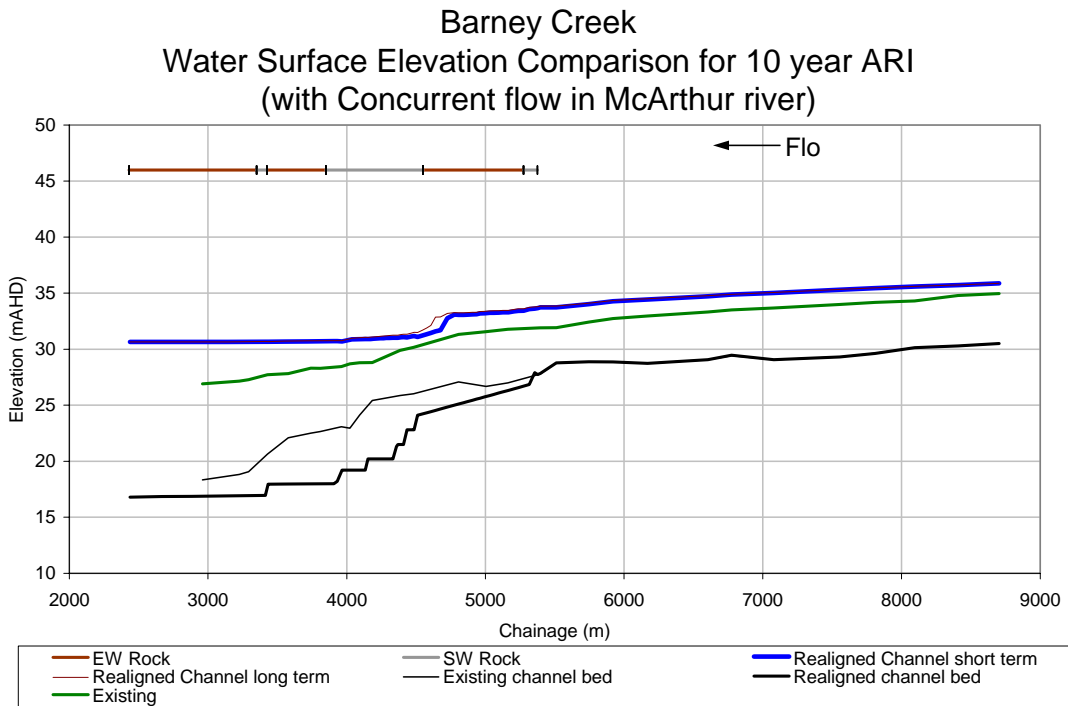


Figure F.2.17 – Barney Creek Water Surface Elevation Comparison for 10 year ARI (Concurrent Flow in McArthur River)

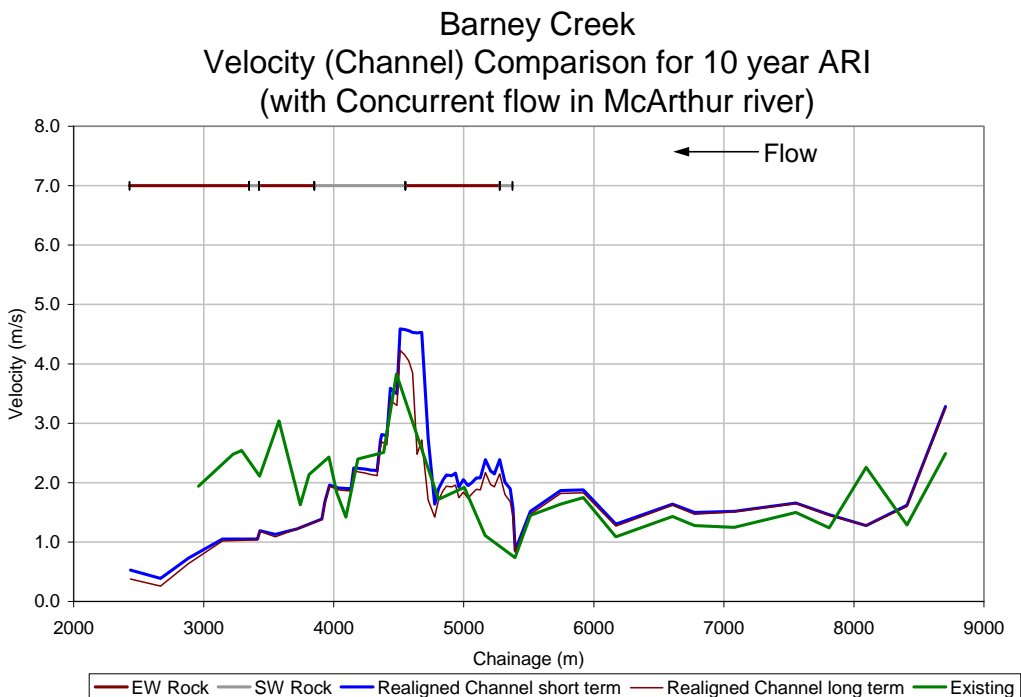


Figure F.2.18 – Barney Creek Velocity (Channel) Comparison for 10 year ARI (Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

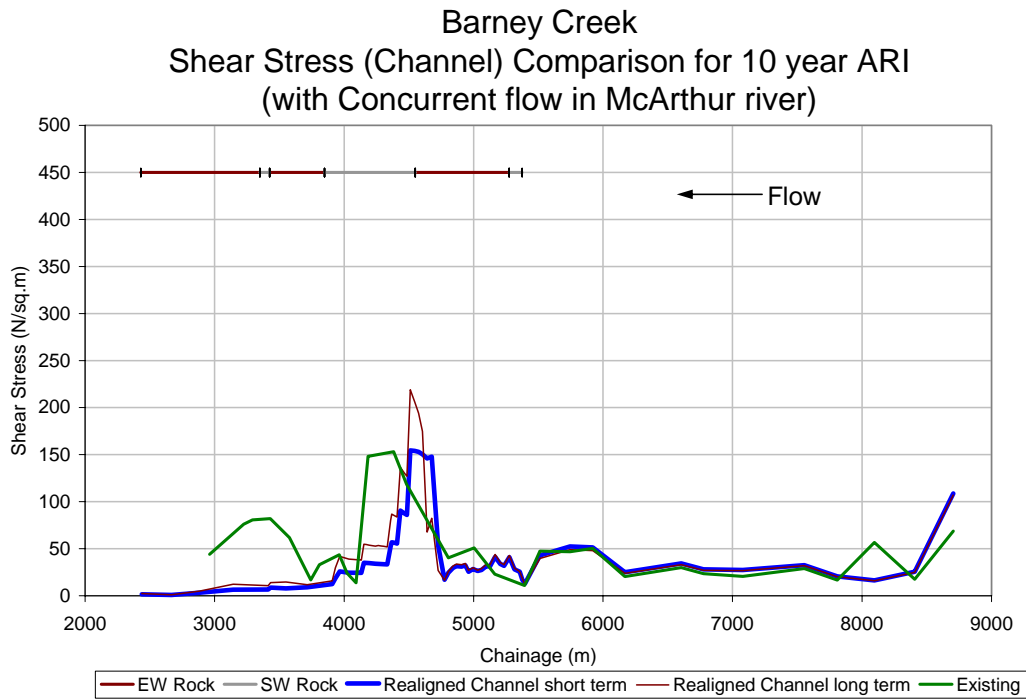


Figure F.2.19 – Barney Creek Shear Stress (Channel) Comparison for 10 year ARI (Concurrent Flow in McArthur River)

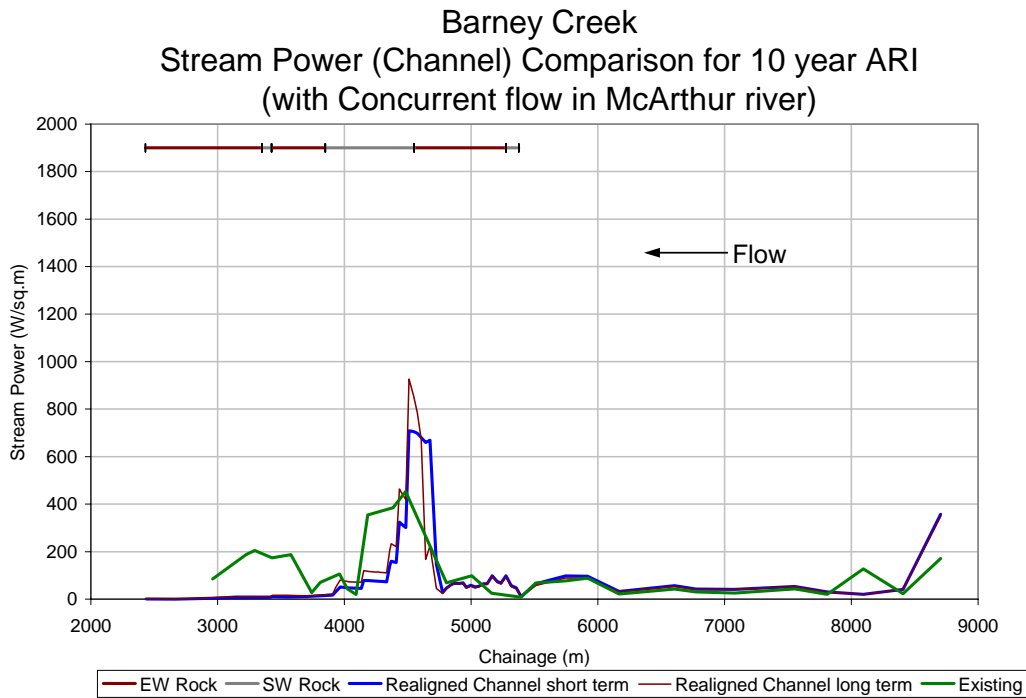


Figure F.2.20 – Barney Creek Stream Power (Channel) Comparison for 10 year ARI (Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

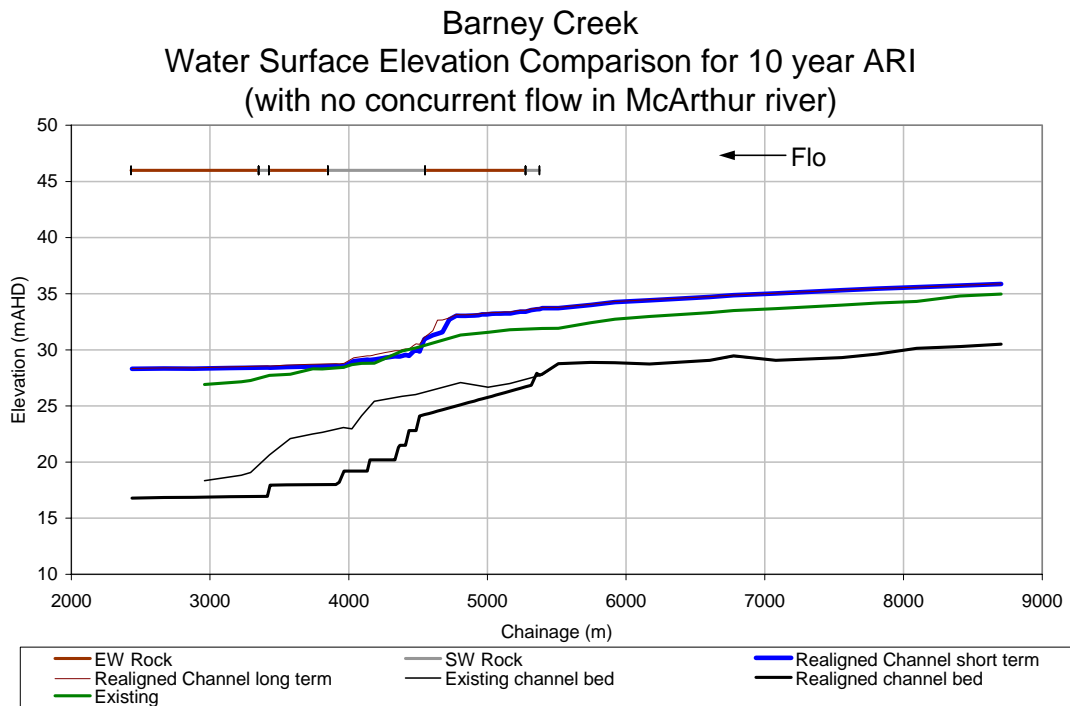


Figure F.2.21 – Barney Creek Water Surface Elevation Comparison for 10 year ARI (No Concurrent Flow in McArthur River)

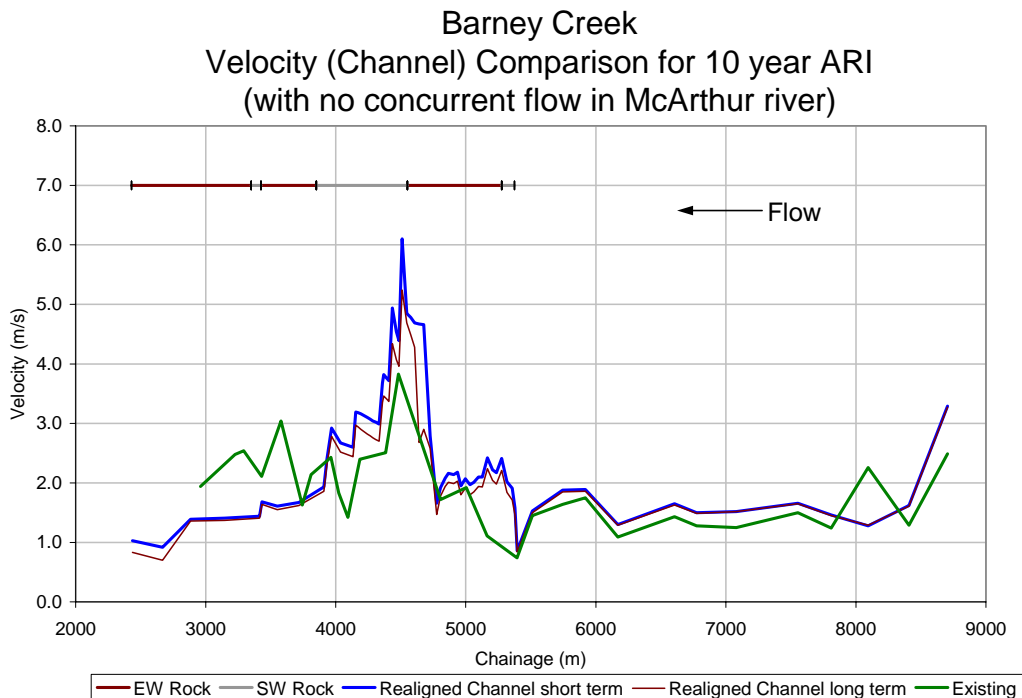


Figure F.2.22 – Barney Creek Velocity (Channel) Comparison for 10 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

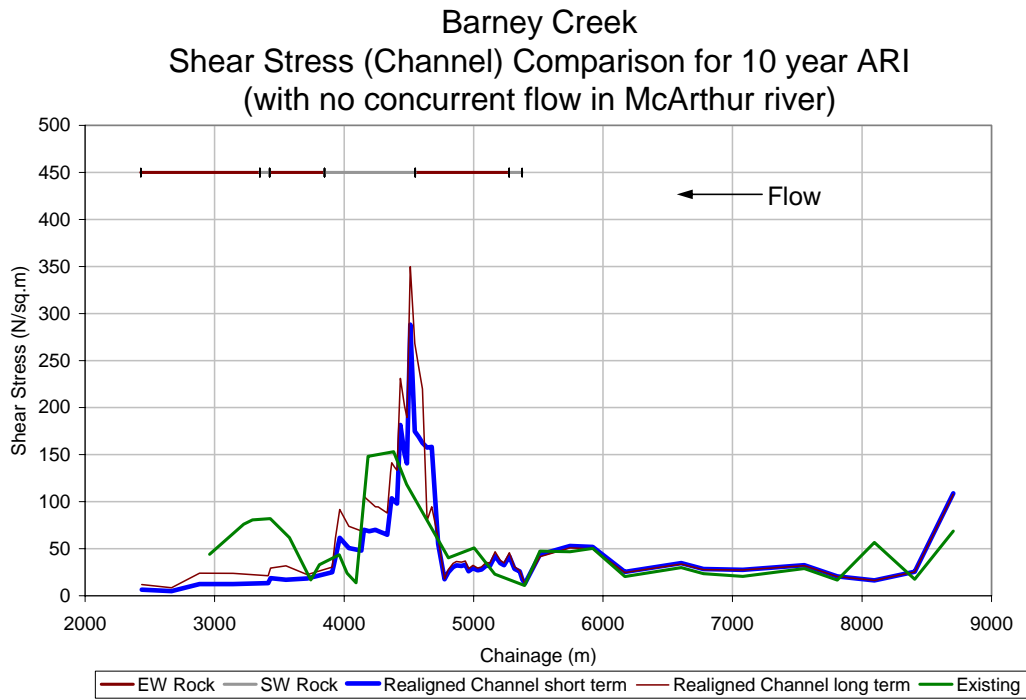


Figure F.2.23 – Barney Creek Shear Stress (Channel) Comparison for 10 year ARI (No Concurrent Flow in McArthur River)

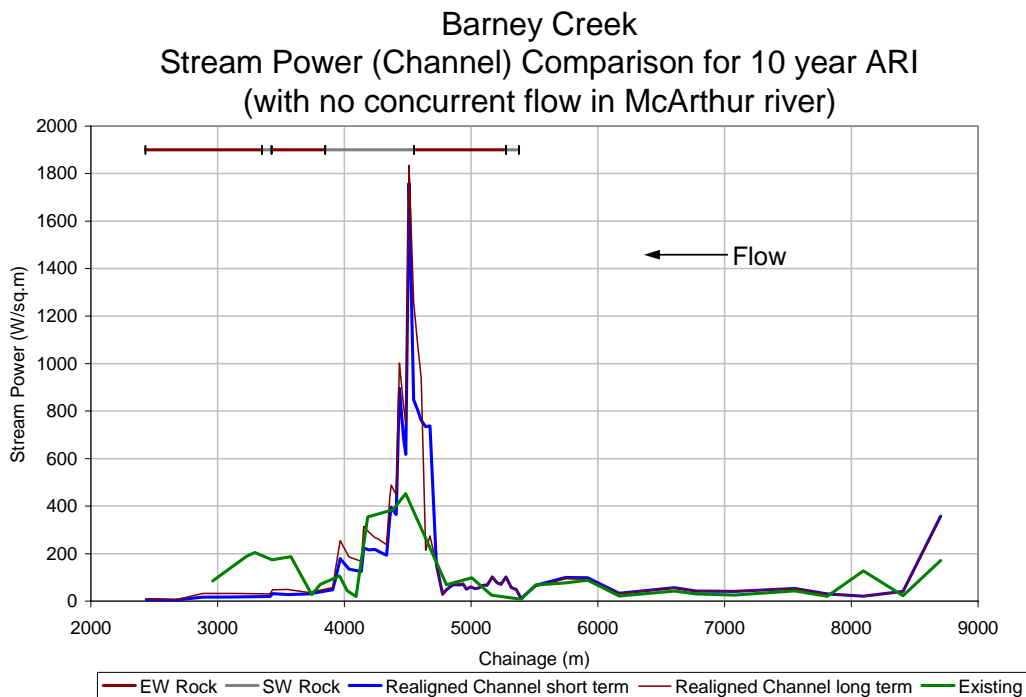


Figure F.2.24 – Barney Creek Stream Power (Channel) Comparison for 10 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

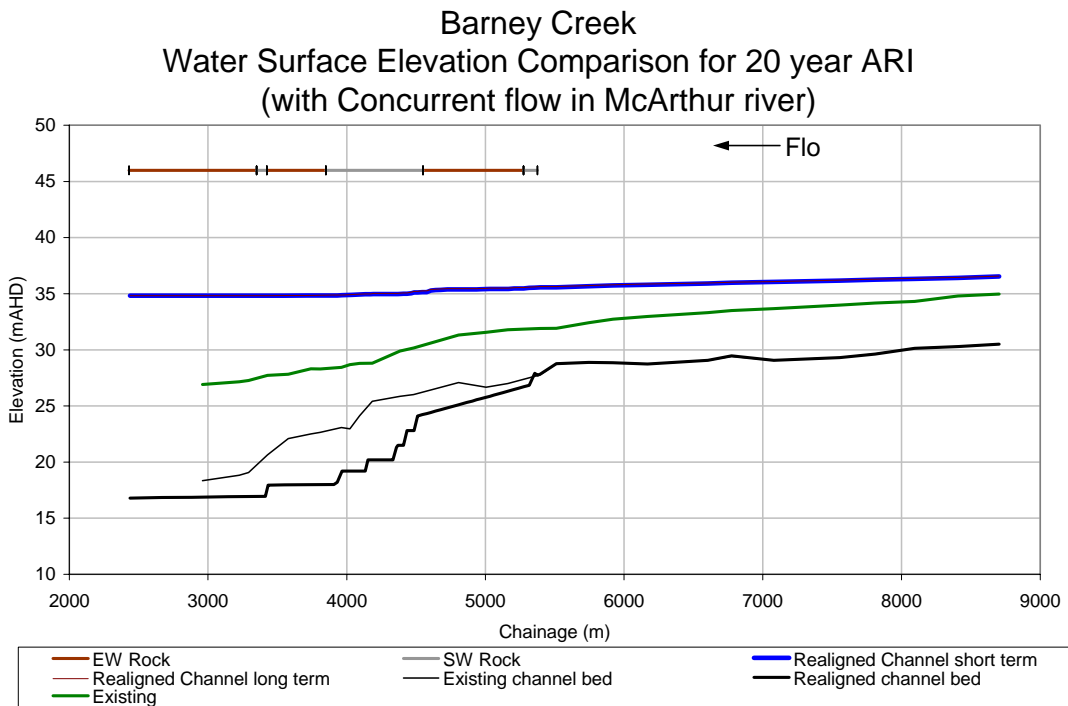


Figure F.2.25 – Barney Creek Water Surface Elevation Comparison for 20 year ARI (Concurrent Flow in McArthur River)

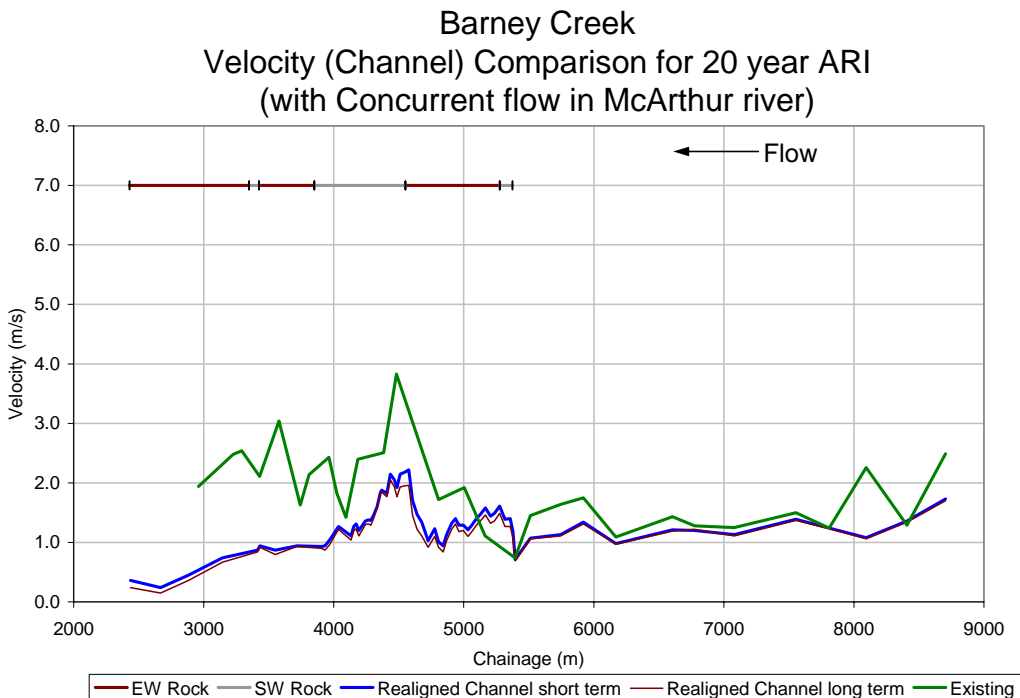


Figure F.2.26 – Barney Creek Velocity (Channel) Comparison for 20 year ARI (Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

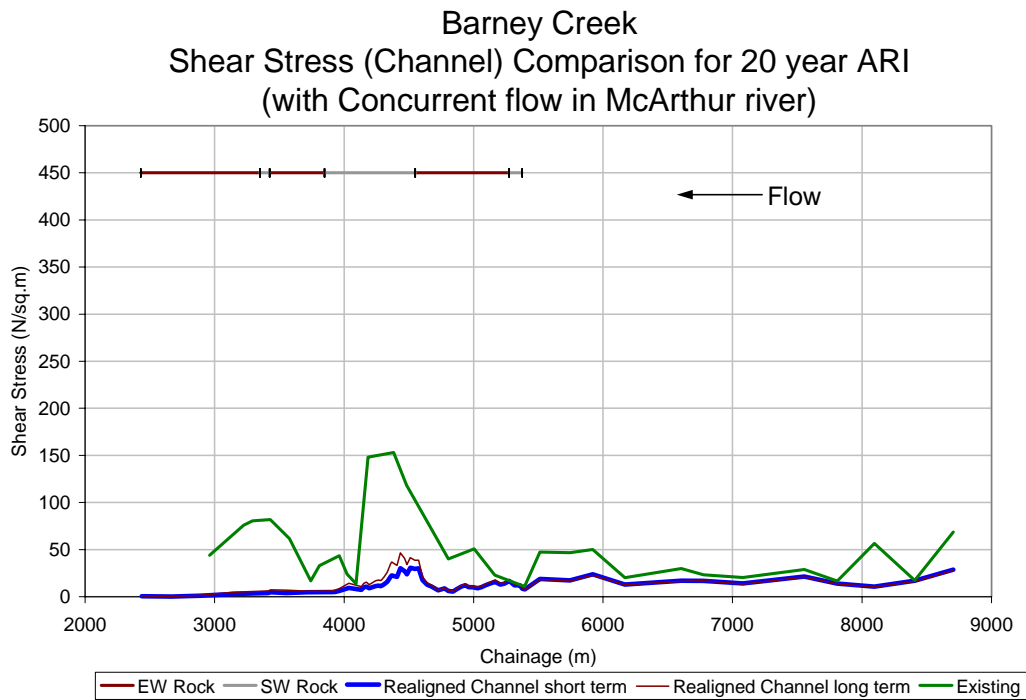


Figure F.2.27 – Barney Creek Shear Stress (Channel) Comparison for 20 year ARI (Concurrent Flow in McArthur River)

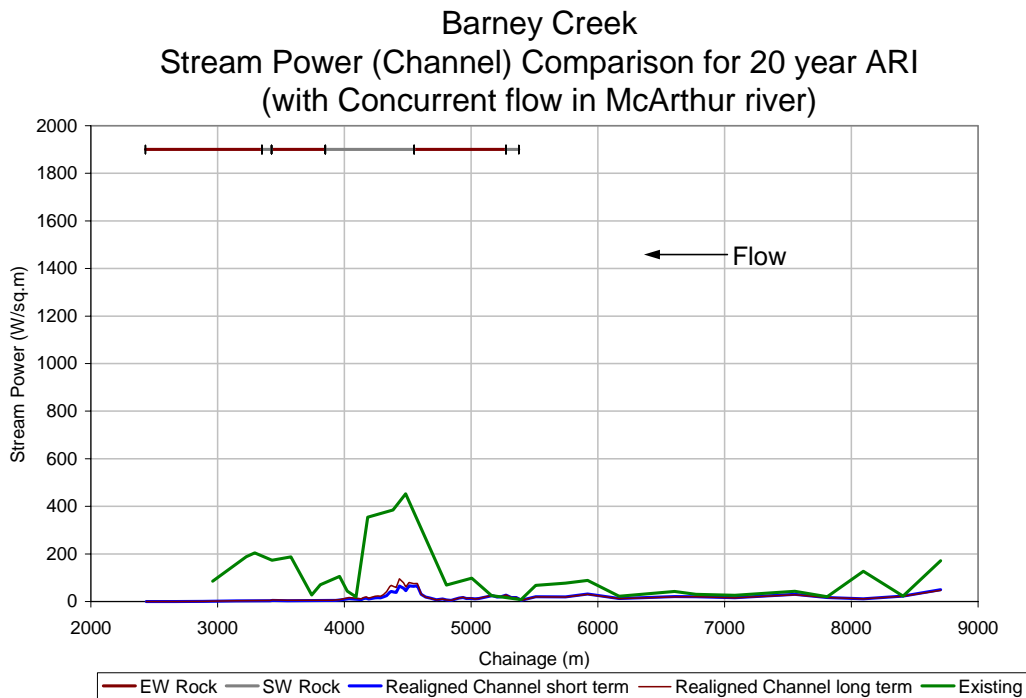


Figure F.2.28 – Barney Creek Stream Power (Channel) Comparison for 20 year ARI (Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

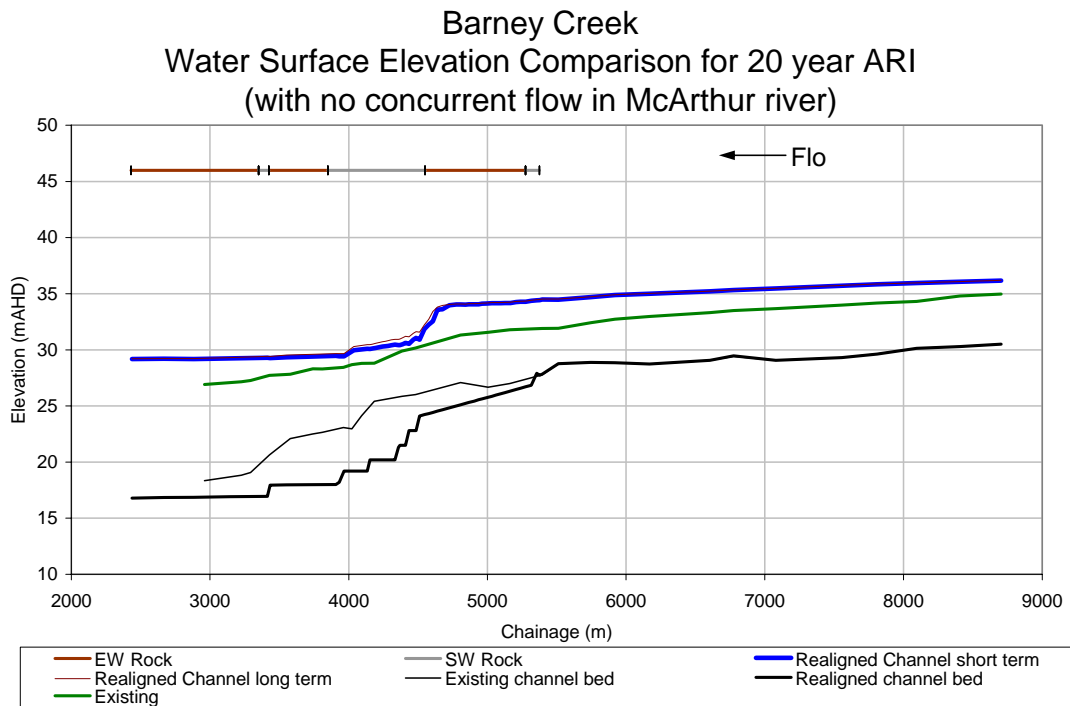


Figure F.2.29 – Barney Creek Water Surface Elevation Comparison for 20 year ARI (No Concurrent Flow in McArthur River)

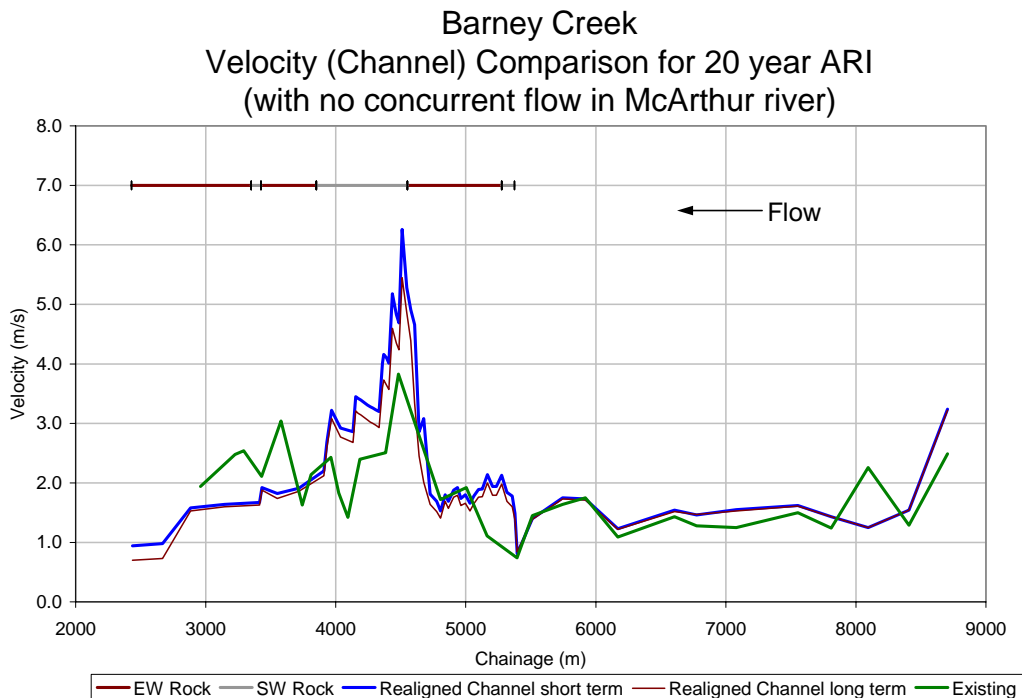


Figure F.2.30 – Barney Velocity (Channel) Comparison for 20 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

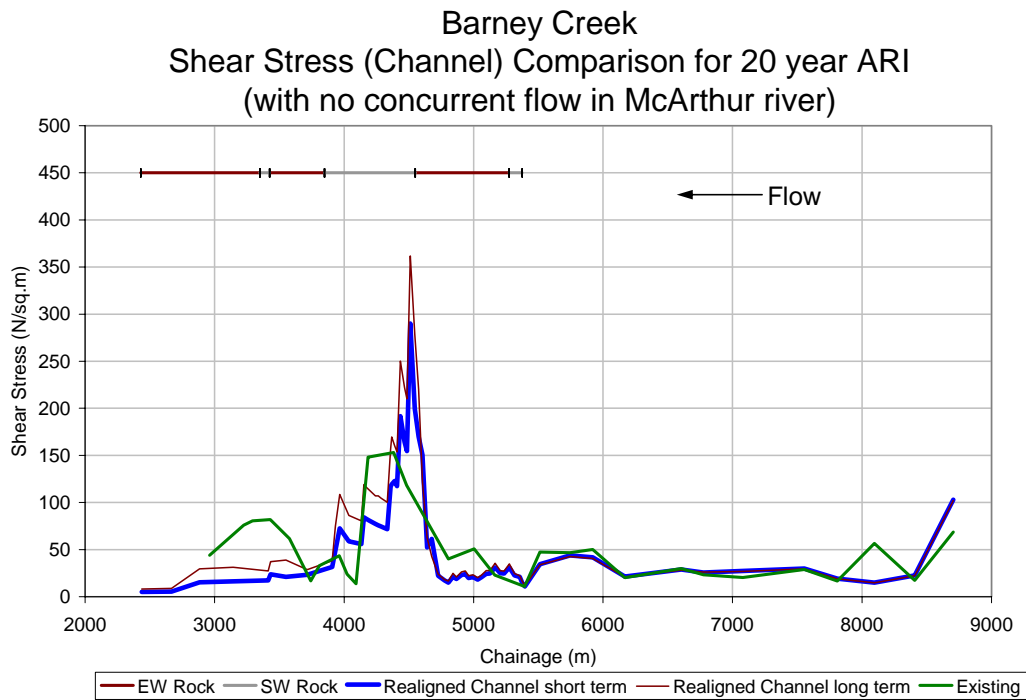


Figure F.2.31 – Barney Creek Shear Stress (Channel) Comparison for 20 year ARI (No Concurrent Flow in McArthur River)

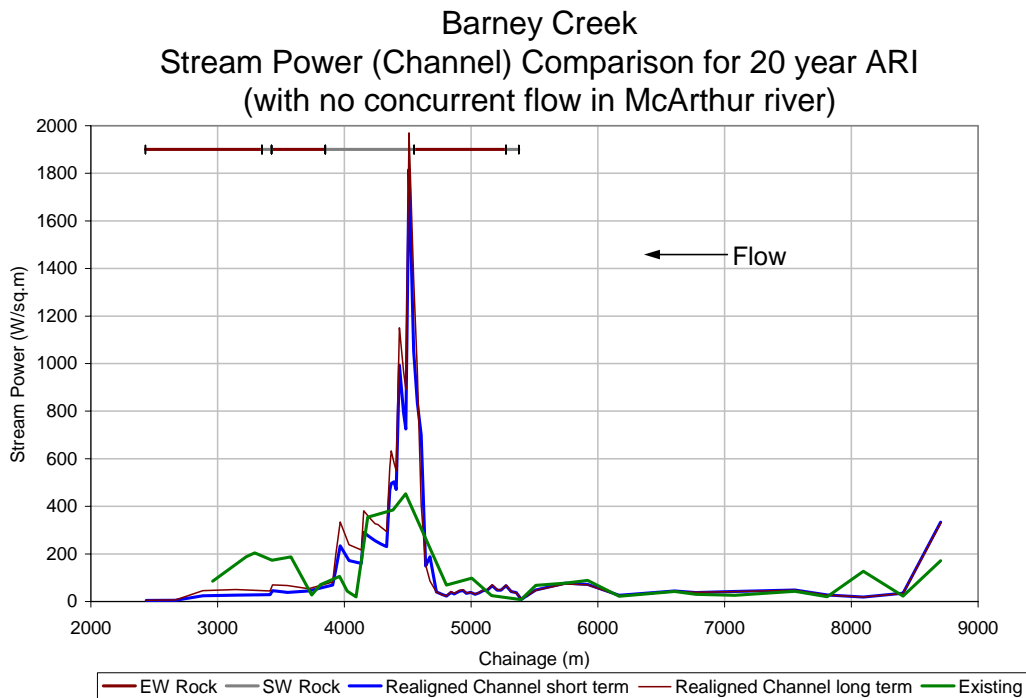


Figure F.2.32 – Barney Creek Stream Power (Channel) Comparison for 20 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

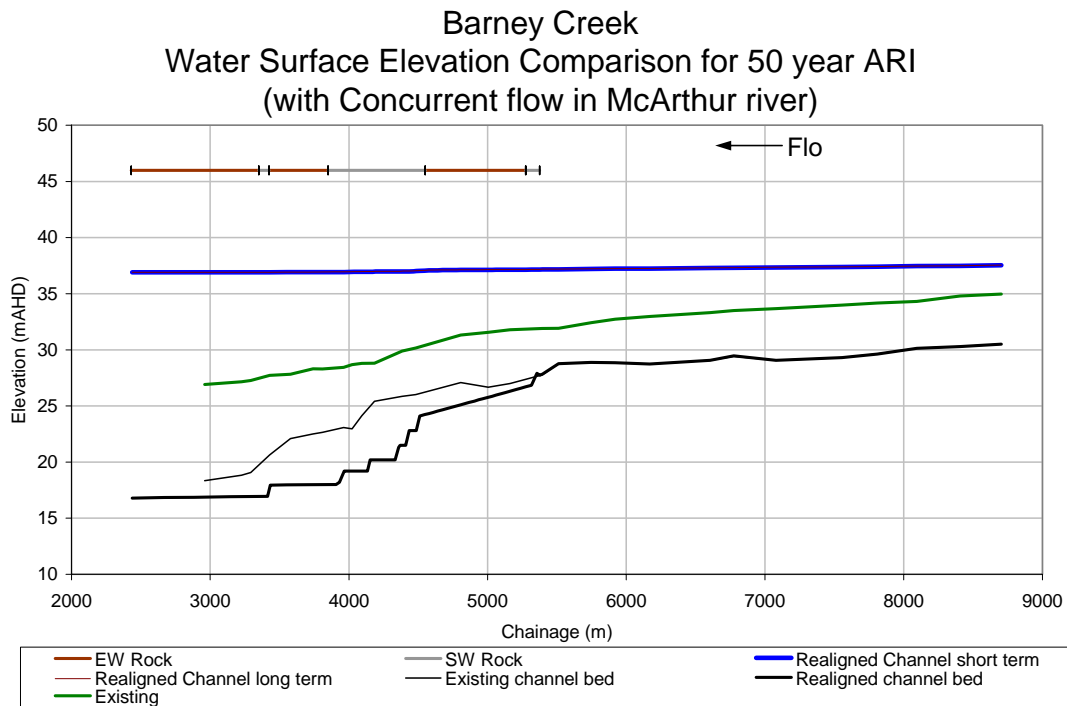


Figure F.2.33 – Barney Creek Water Surface Elevation Comparison for 50 year ARI (Concurrent Flow in McArthur River)

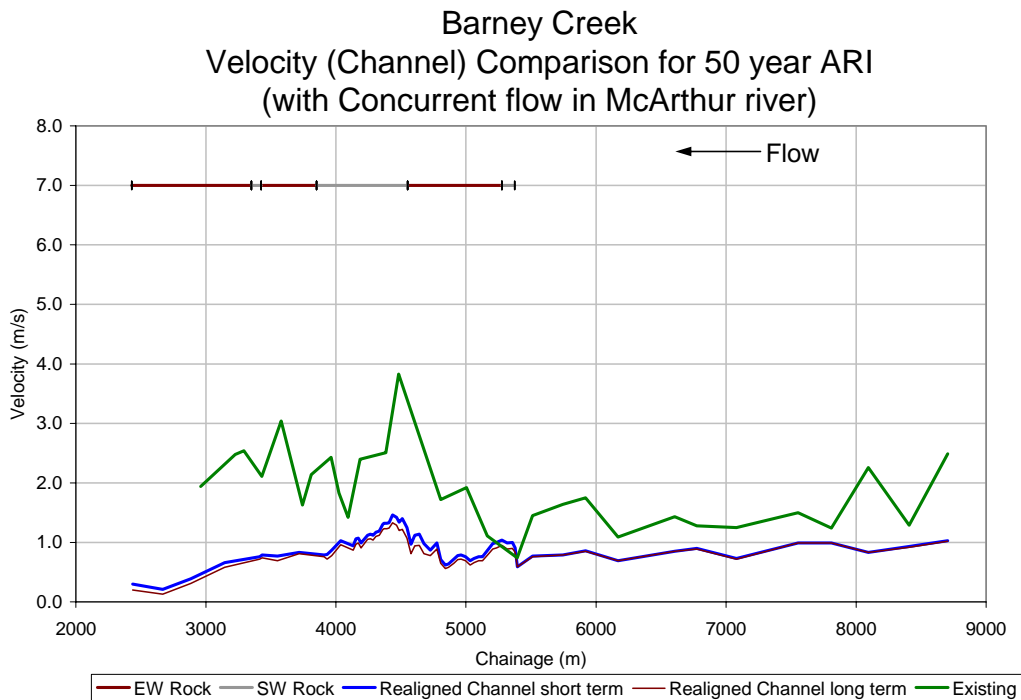


Figure F.2.34 – Barney Creek Velocity (Channel) Comparison for 50 year ARI (Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

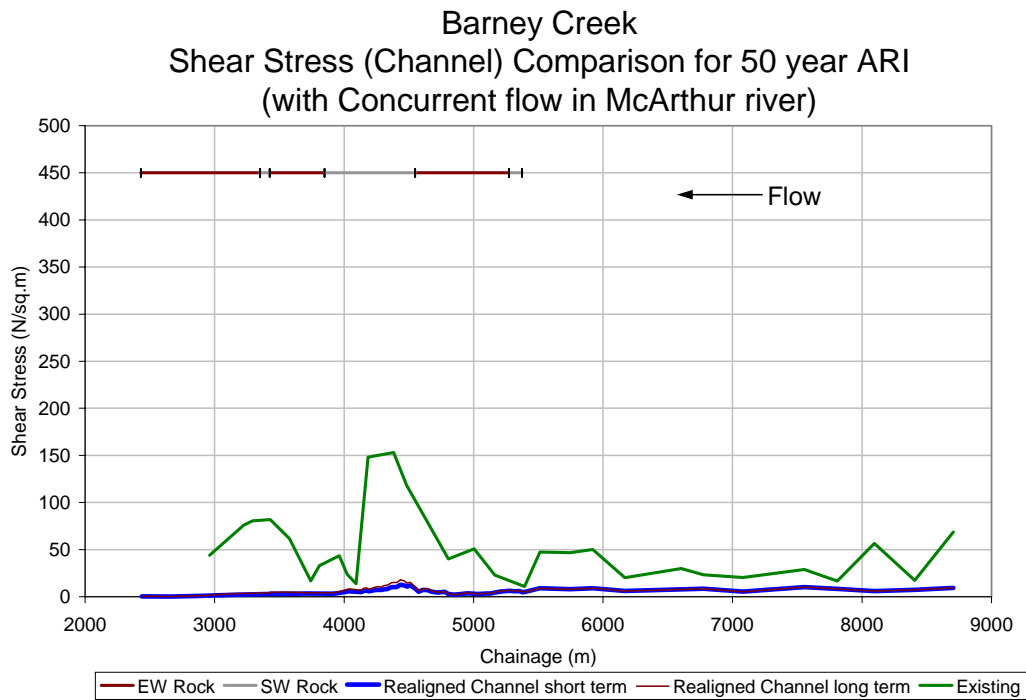


Figure F.2.35 – Barney Creek Shear Stress (Channel) Comparison for 50 year ARI (Concurrent Flow in McArthur River)

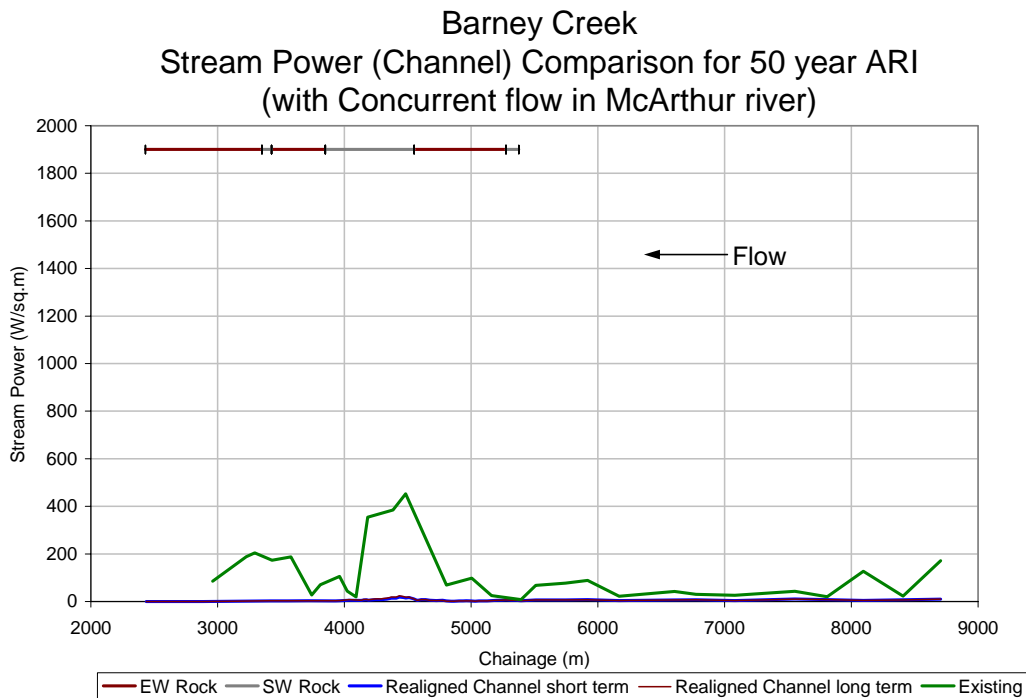


Figure F.2.36 – Barney Creek Stream Power (Channel) Comparison for 50 year ARI (Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

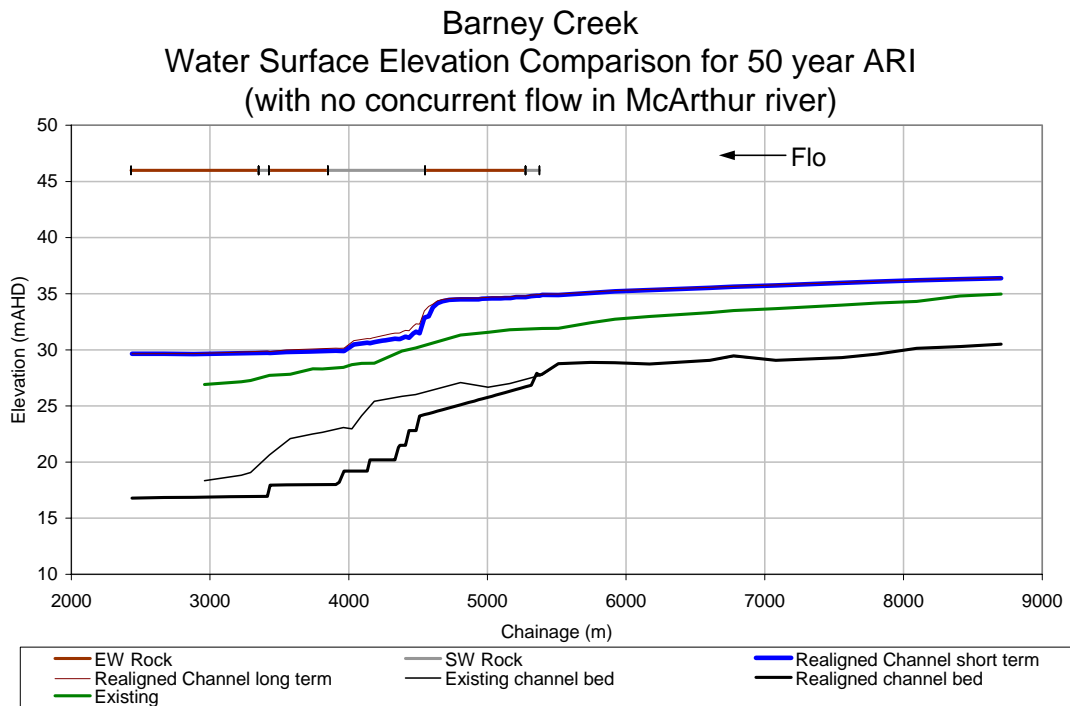


Figure F.2.37 – Barney Creek Water Surface Elevation Comparison for 50 year ARI (No Concurrent Flow in McArthur River)

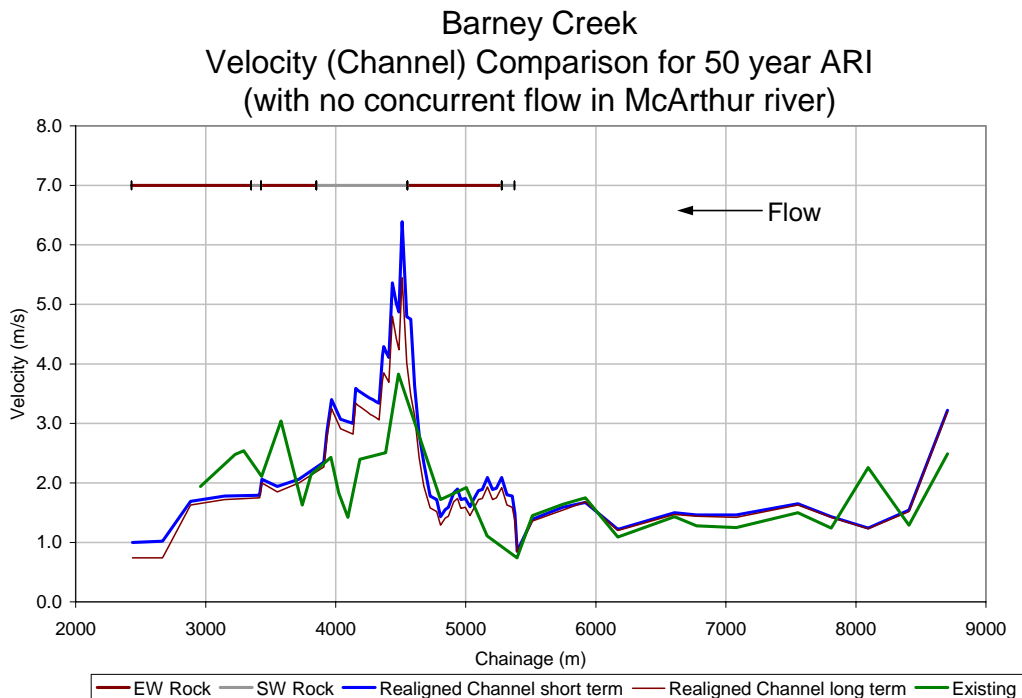


Figure F.2.38 – Barney Creek Velocity (Channel) Comparison for 50 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

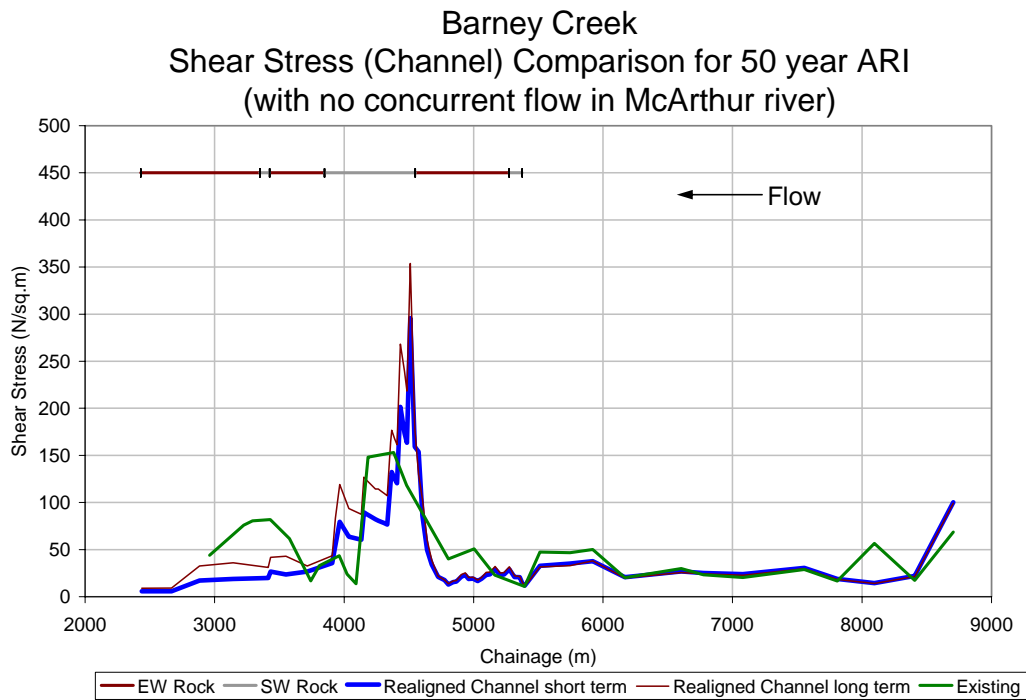


Figure F.2.39 – Barney Creek Shear Stress (Channel) Comparison for 50 year ARI (No Concurrent Flow in McArthur River)

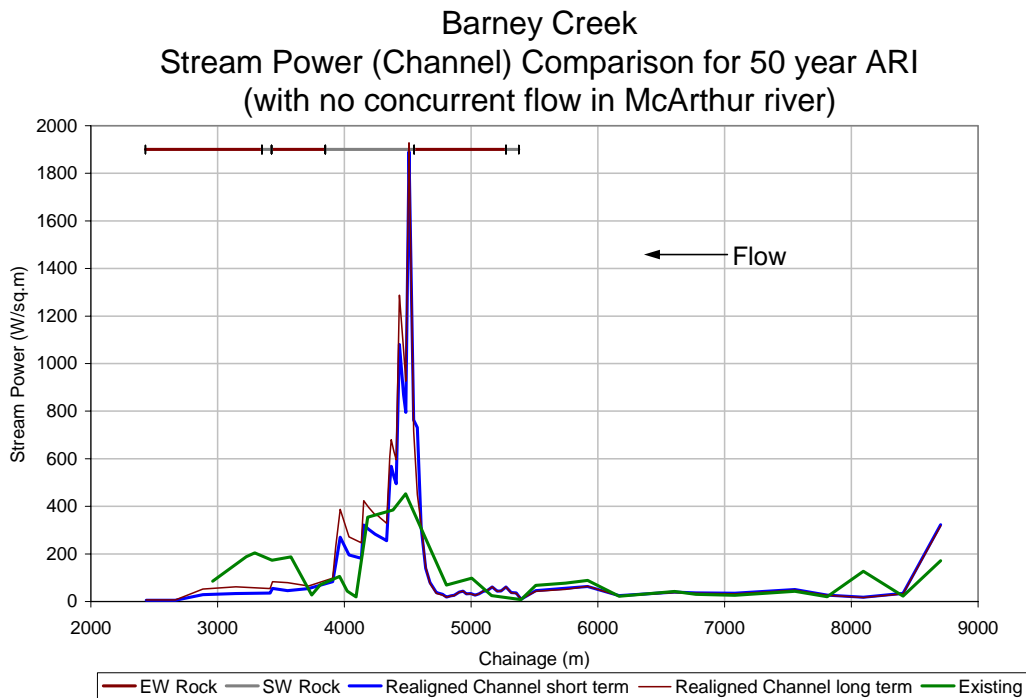


Figure F.2.39 – Barney Creek Stream Power (Channel) Comparison for 50 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

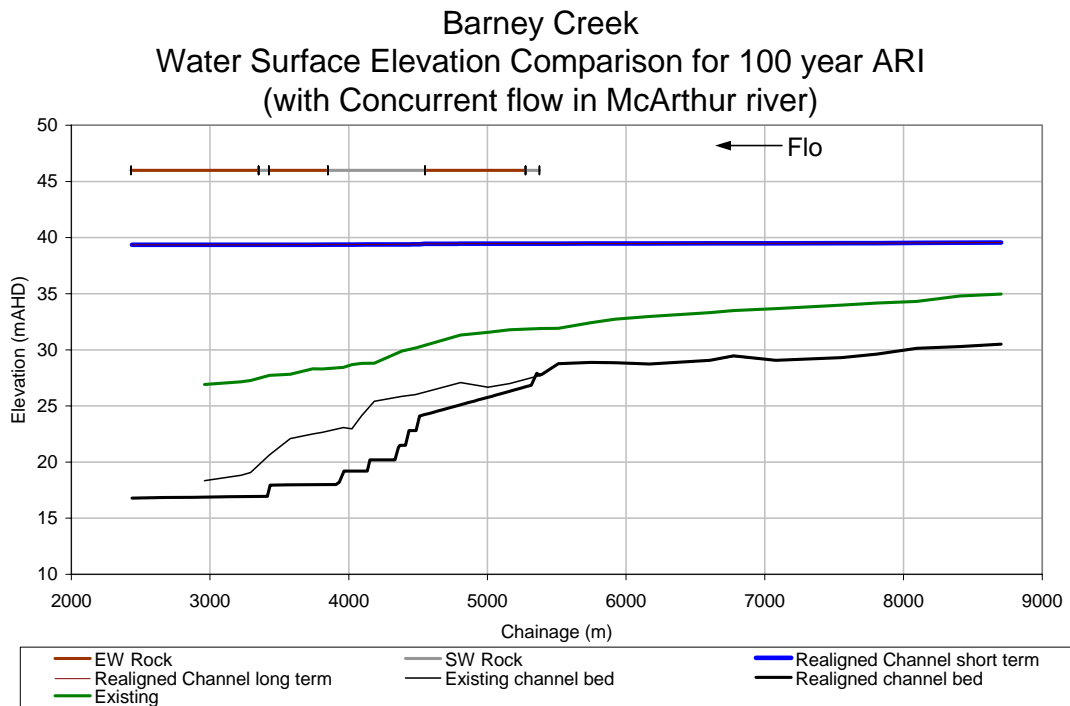


Figure F.2.40 – Barney Creek Water Surface Elevation Comparison for 100 year ARI (Concurrent Flow in McArthur River)

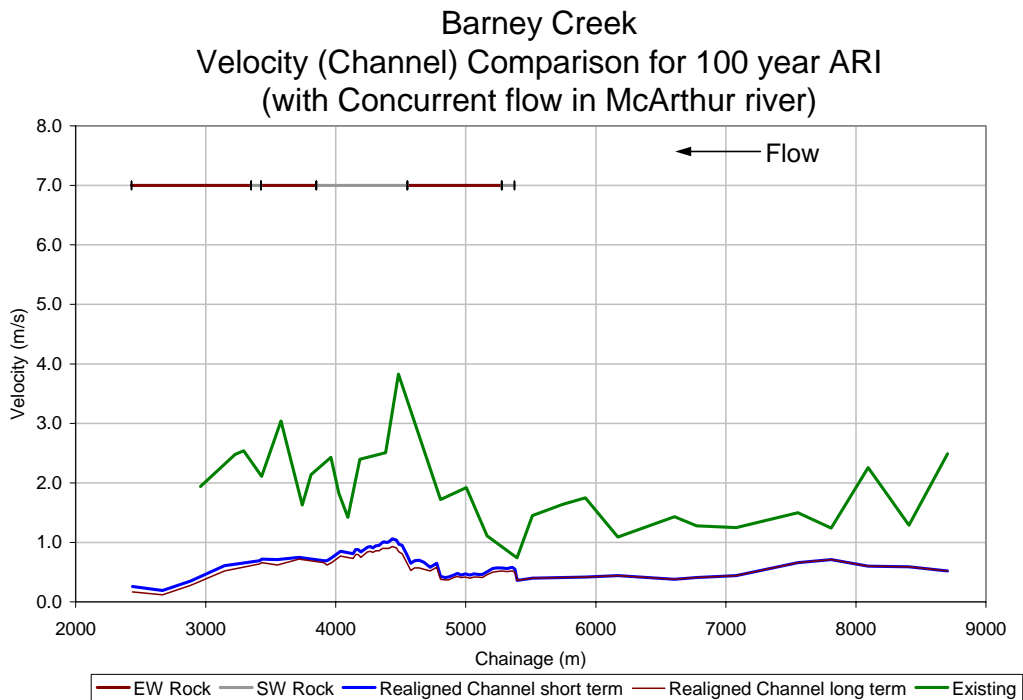


Figure F.2.41 – Barney Creek Velocity (Channel) Comparison for 100 year ARI (Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

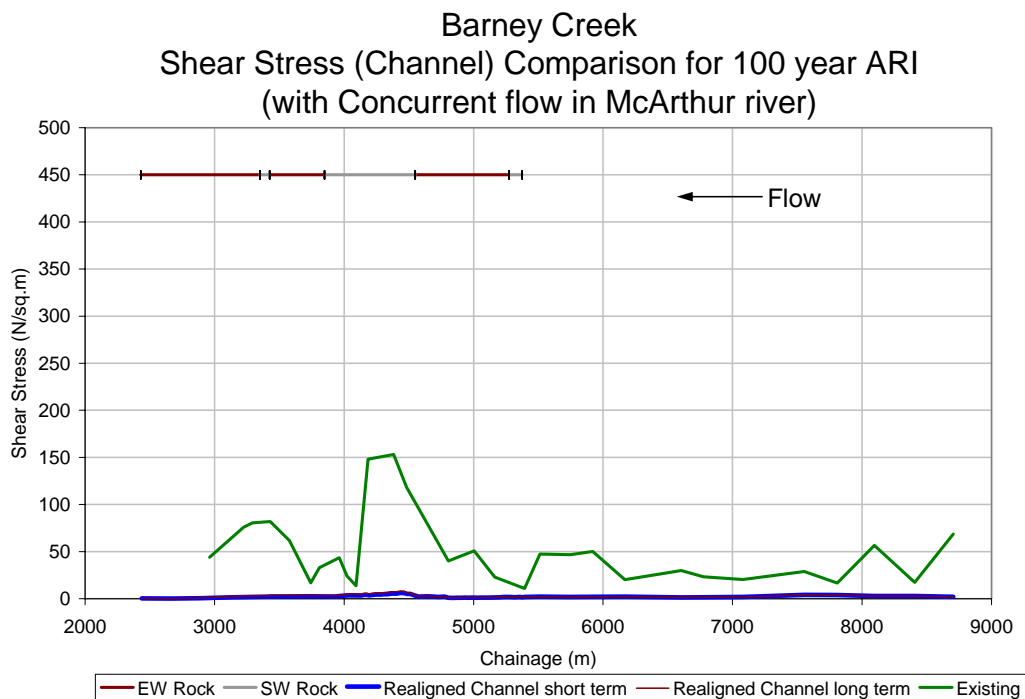


Figure F.2.42 – Barney Creek Shear Stress (Channel) Comparison for 100 year ARI (Concurrent Flow in McArthur River)

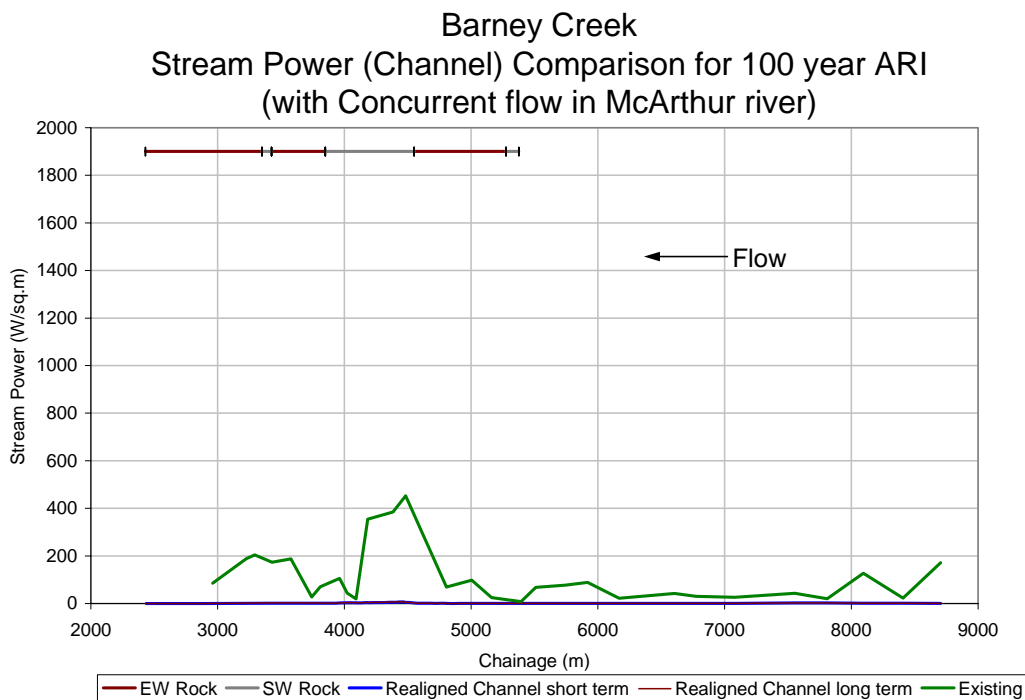


Figure F.2.43 – Barney Creek Stream Power (Channel) Comparison for 100 year ARI (Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

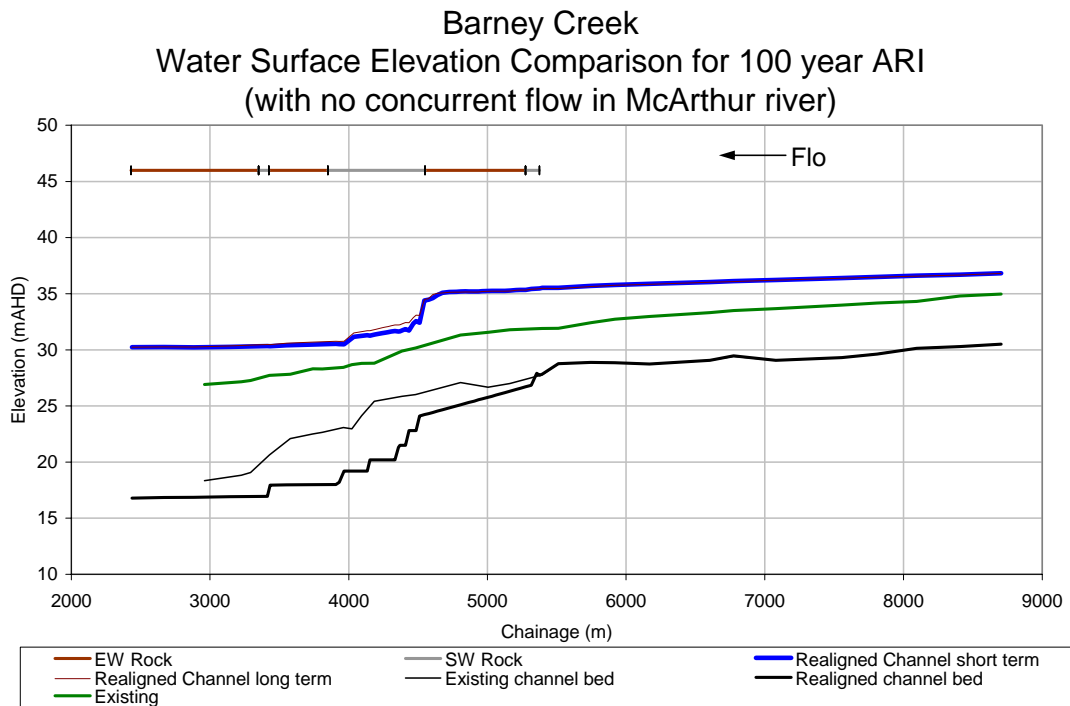


Figure F.2.44 – Barney Creek Water Surface Elevation Comparison for 100 year ARI (No Concurrent Flow in McArthur River)

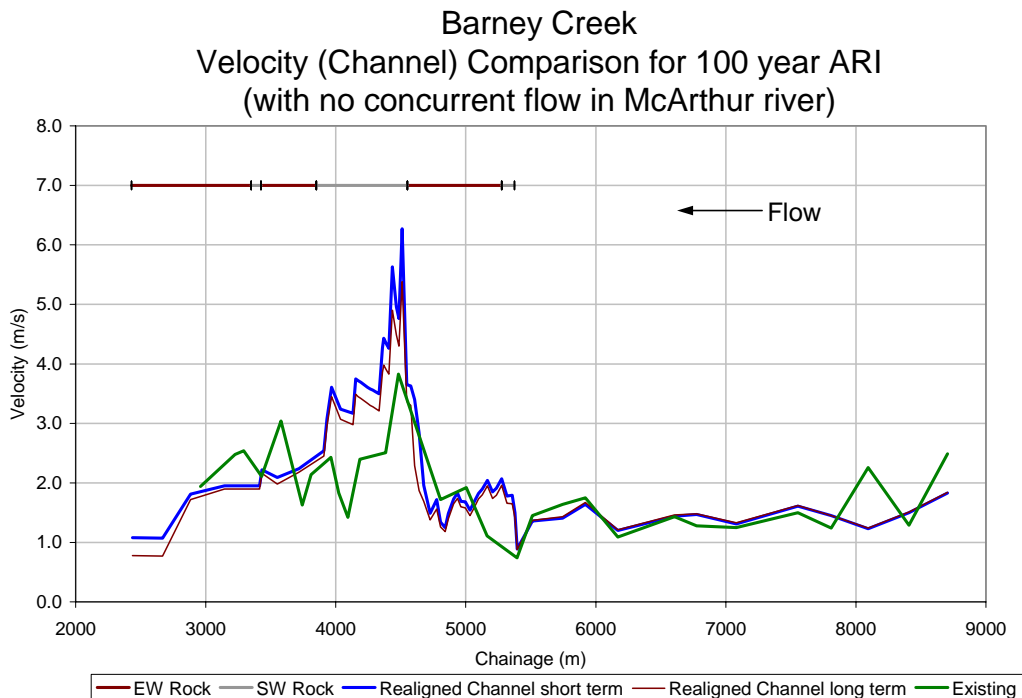


Figure F.2.45 – Barney Creek Velocity (Channel) Comparison for 100 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

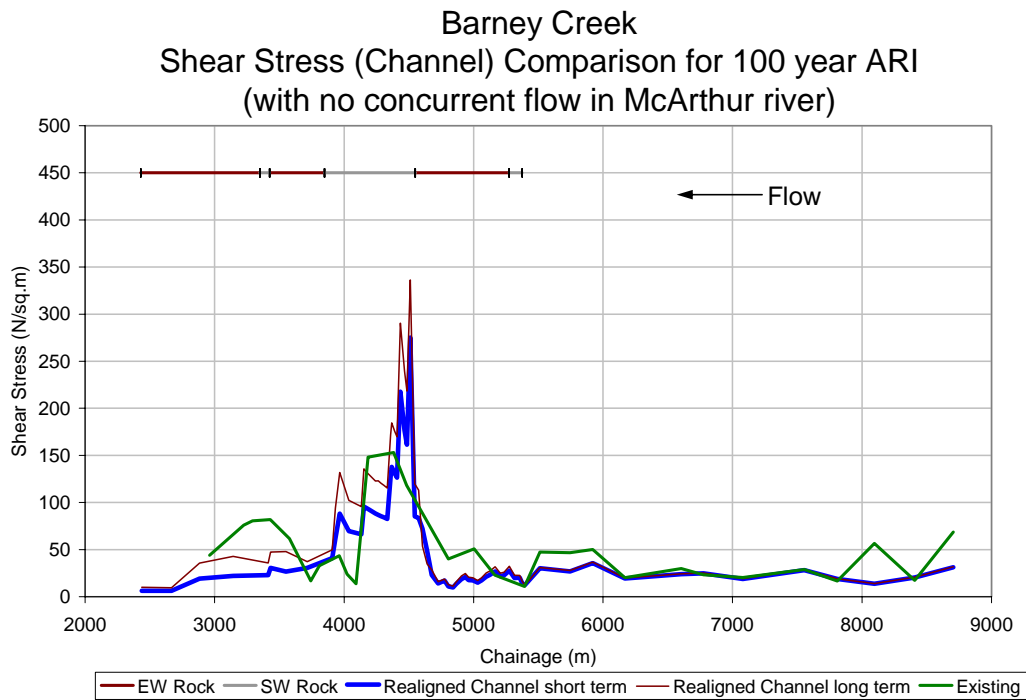


Figure F.2.46 – Barney Creek Shear Stress (Channel) Comparison for 100 year ARI (No Concurrent Flow in McArthur River)

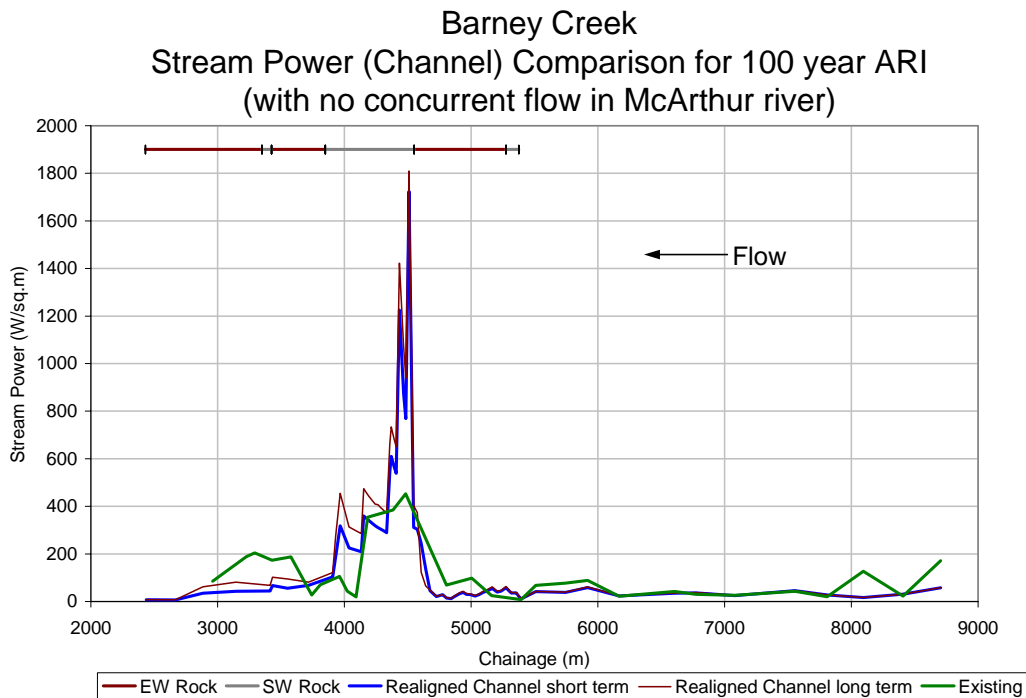


Figure F.2.47 – Barney Creek Stream Power (Channel) Comparison for 100 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

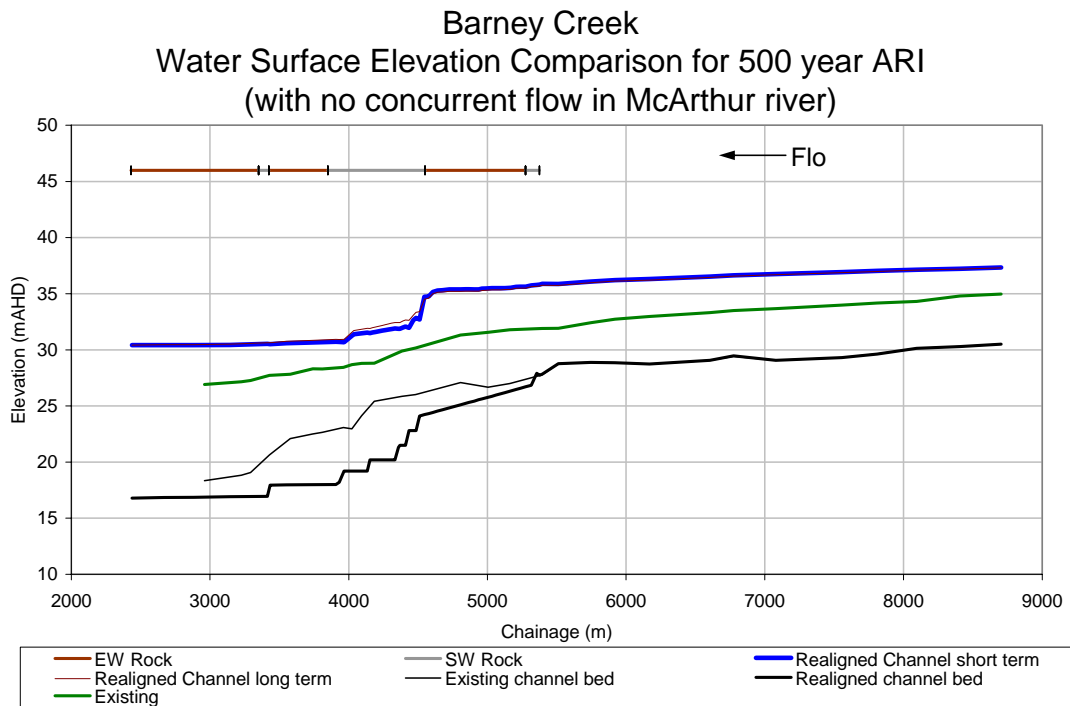


Figure F.2.48 – Barney Creek Water Surface Elevation Comparison for 500 year ARI (No Concurrent Flow in McArthur River)

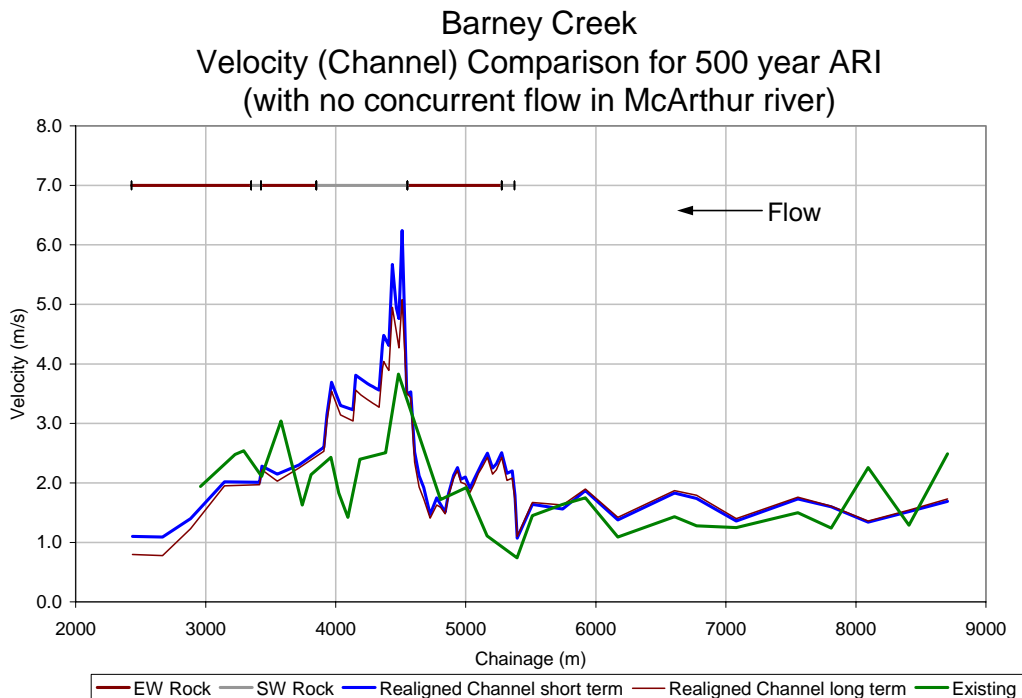


Figure F.2.49 – Barney Creek Velocity (Channel) Comparison for 500 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

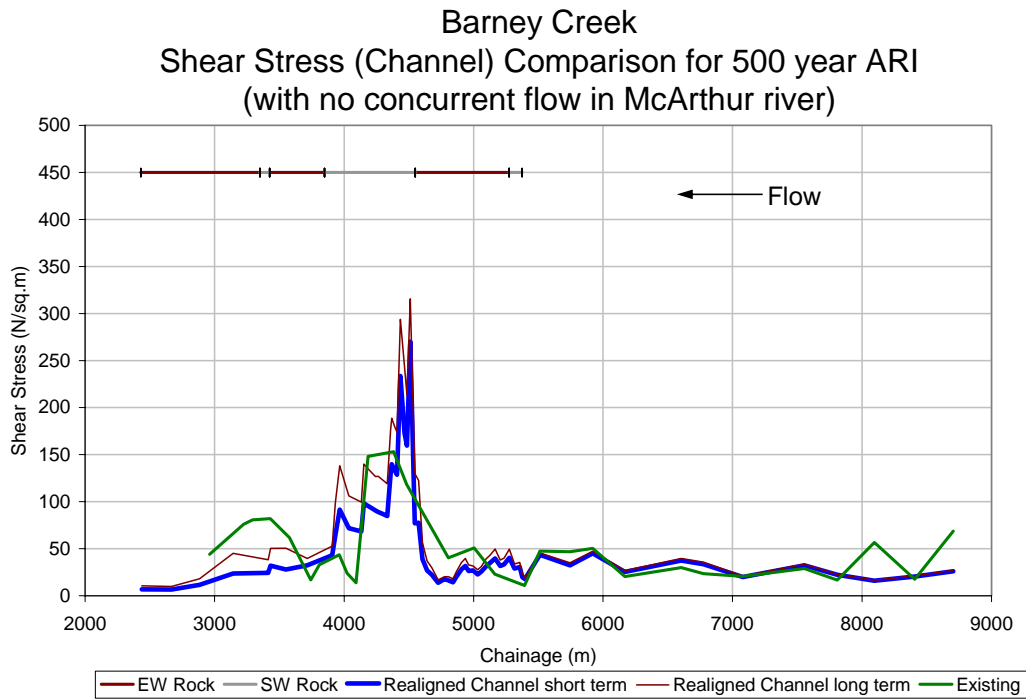


Figure F.2.50 – Barney Creek Shear Stress (Channel) Comparison for 500 year ARI (No Concurrent Flow in McArthur River)

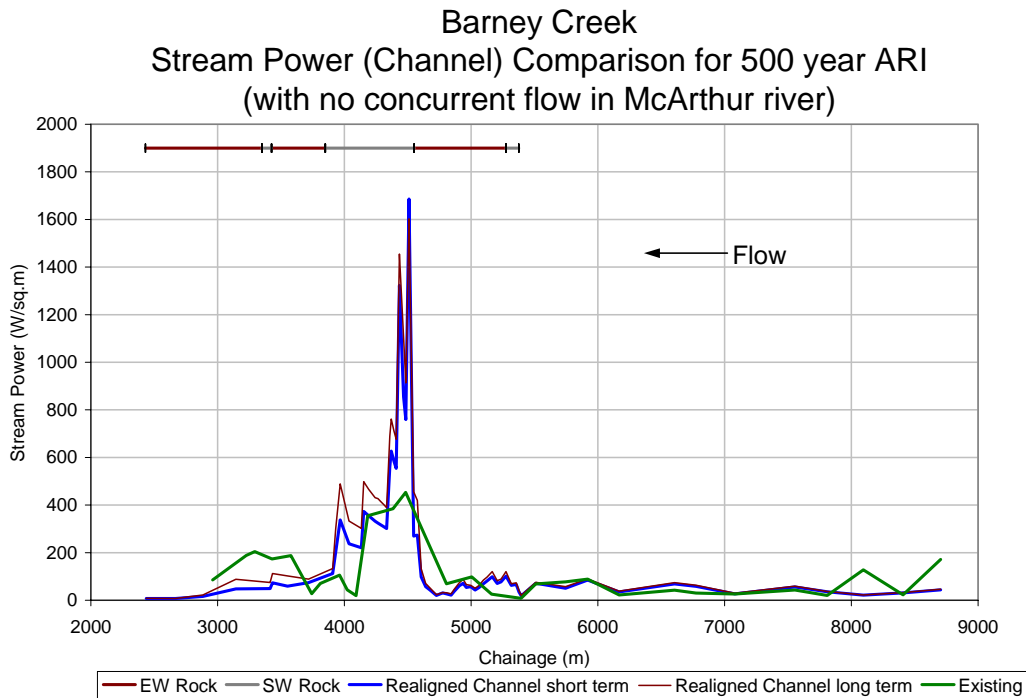


Figure F.2.51 – Barney Creek Stream Power (Channel) Comparison for 500 year ARI (No Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

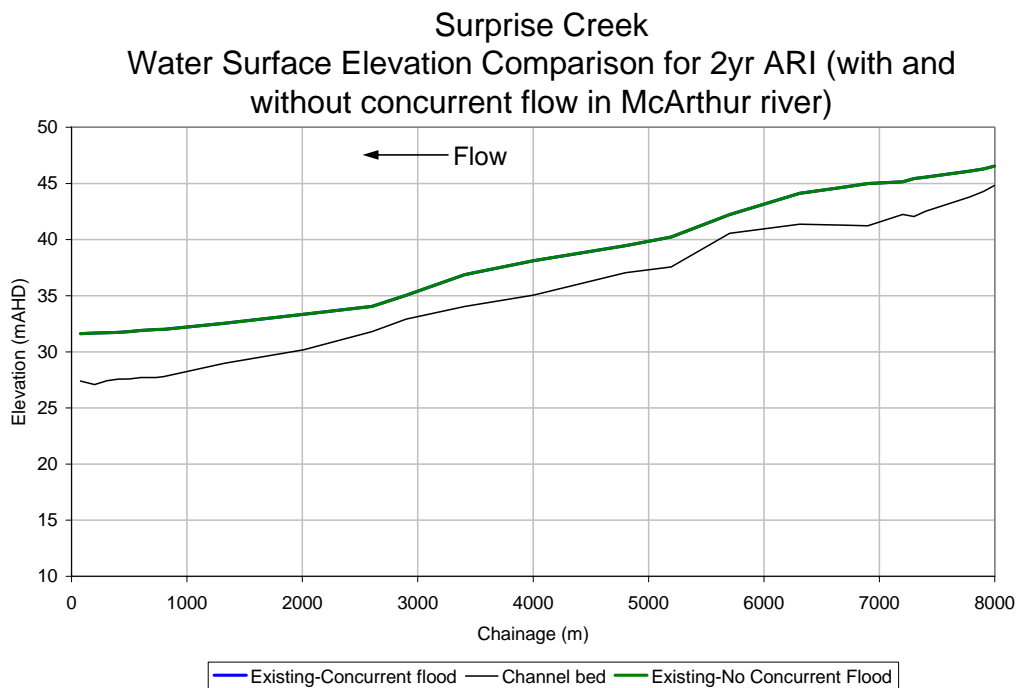


Figure F.2.52 – Surprise Creek Water Surface Elevation Comparison for 2 year ARI (With and Without Concurrent Flow in McArthur River)

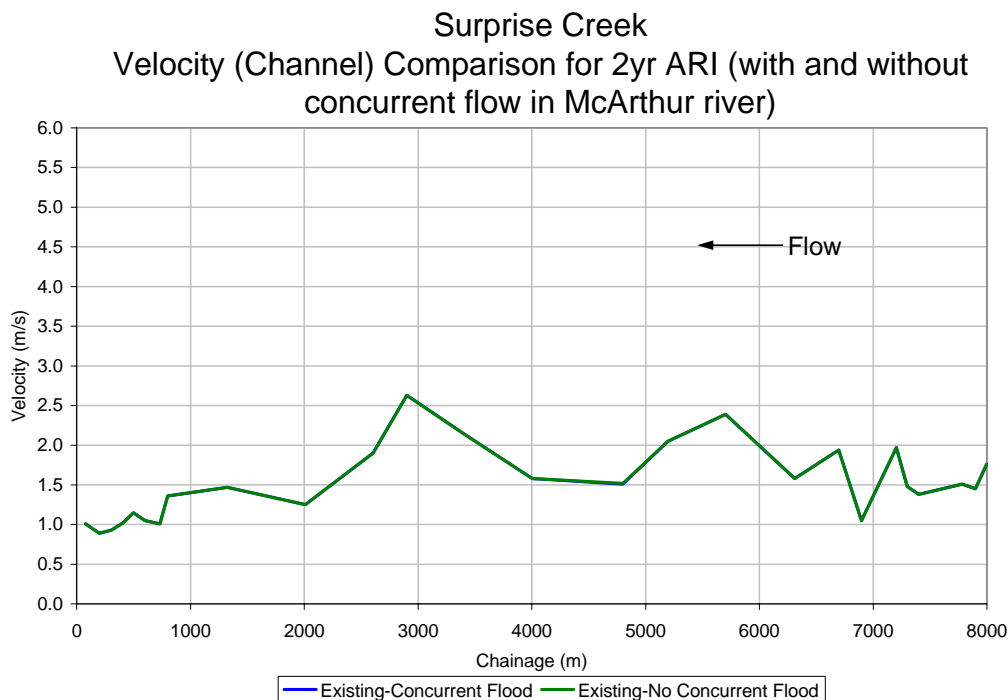


Figure F.2.53 – Surprise Creek Velocity (Channel) Comparison for 2 year ARI (With and Without Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

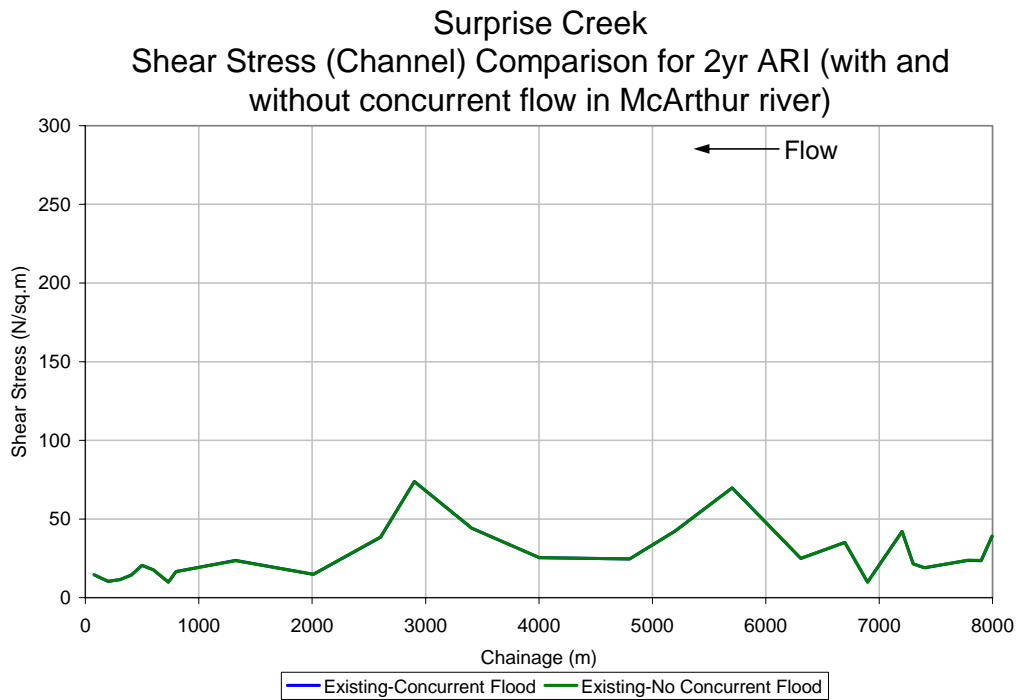


Figure F.2.54 – Surprise Creek Shear Stress (Channel) Comparison for 2 year ARI (With and Without Concurrent Flow in McArthur River)

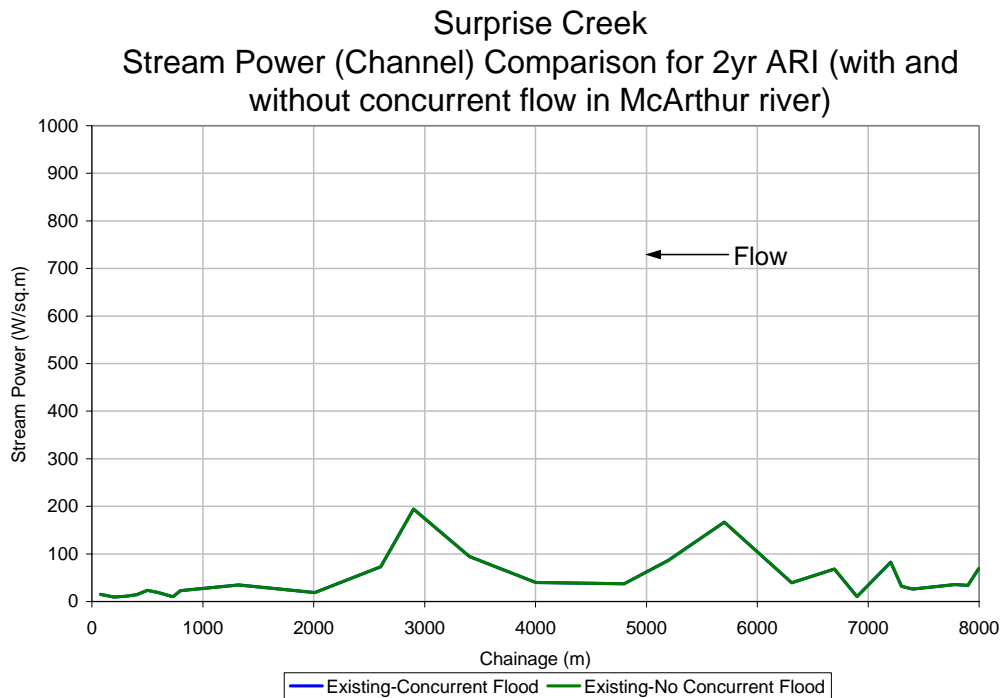


Figure F.2.55 – Surprise Creek Stream Power (Channel) Comparison for 2 year ARI (With and Without Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

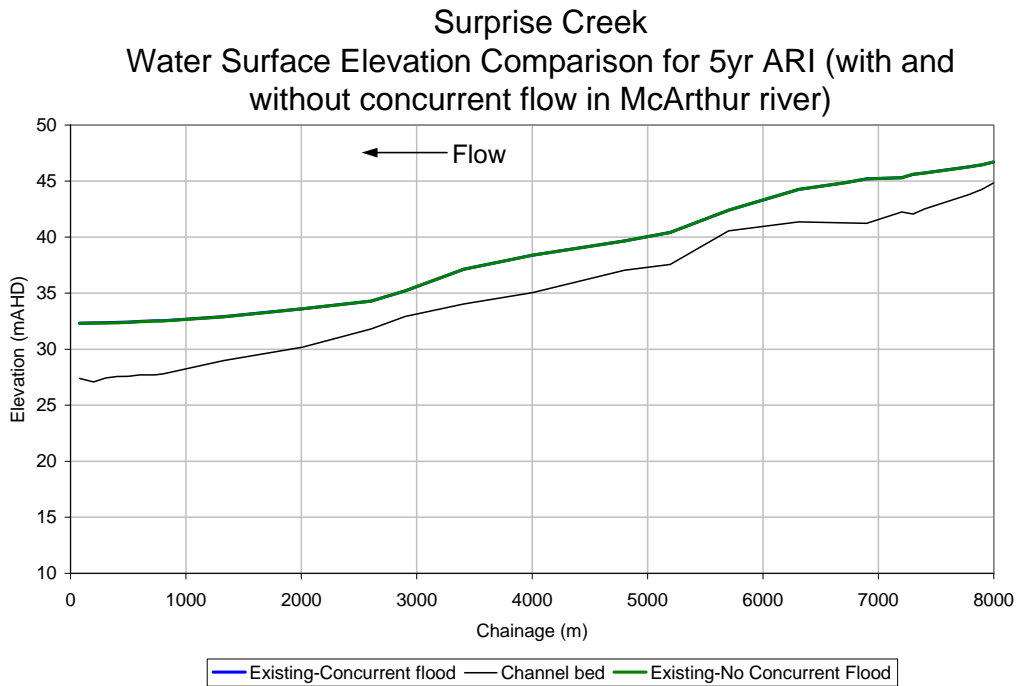


Figure F.2.56 – Surprise Creek Water Surface Elevation Comparison for 5 year ARI (With and Without Concurrent Flow in McArthur River)

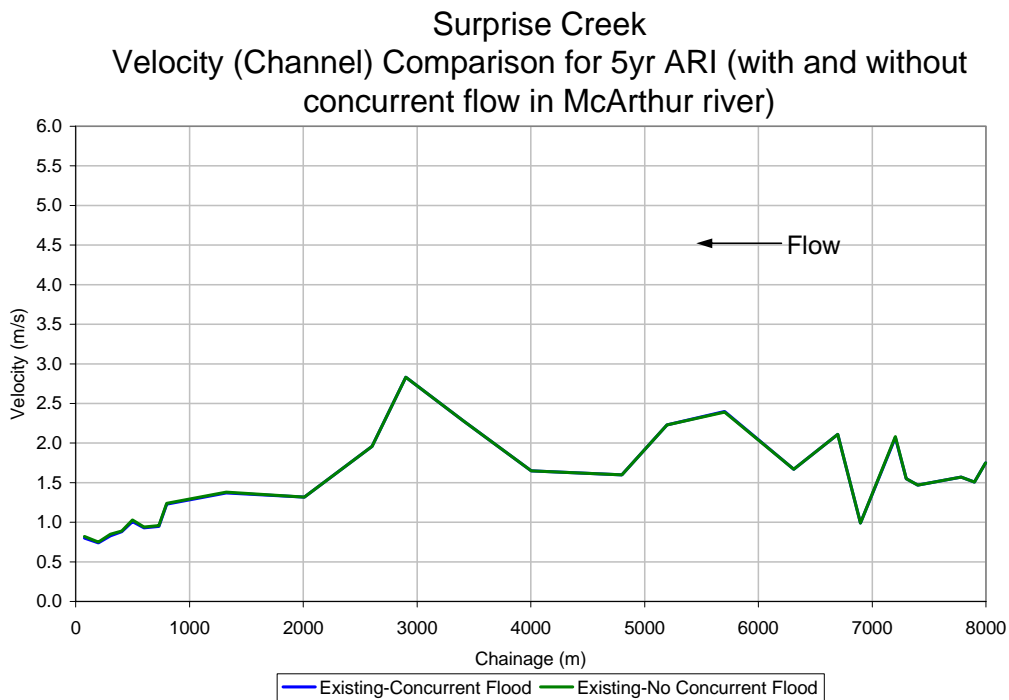


Figure F.2.57 – Surprise Creek Velocity (Channel) Comparison for 5 year ARI (With and Without Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

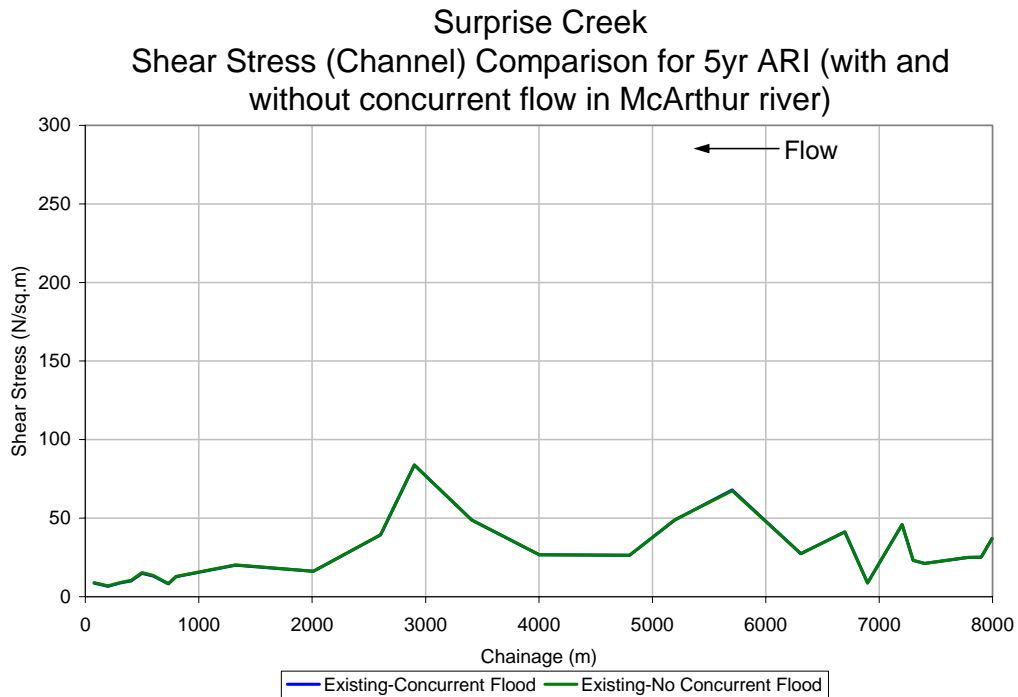


Figure F.2.58 – Surprise Creek Shear Stress (Channel) Comparison for 5 year ARI (With and Without Concurrent Flow in McArthur River)

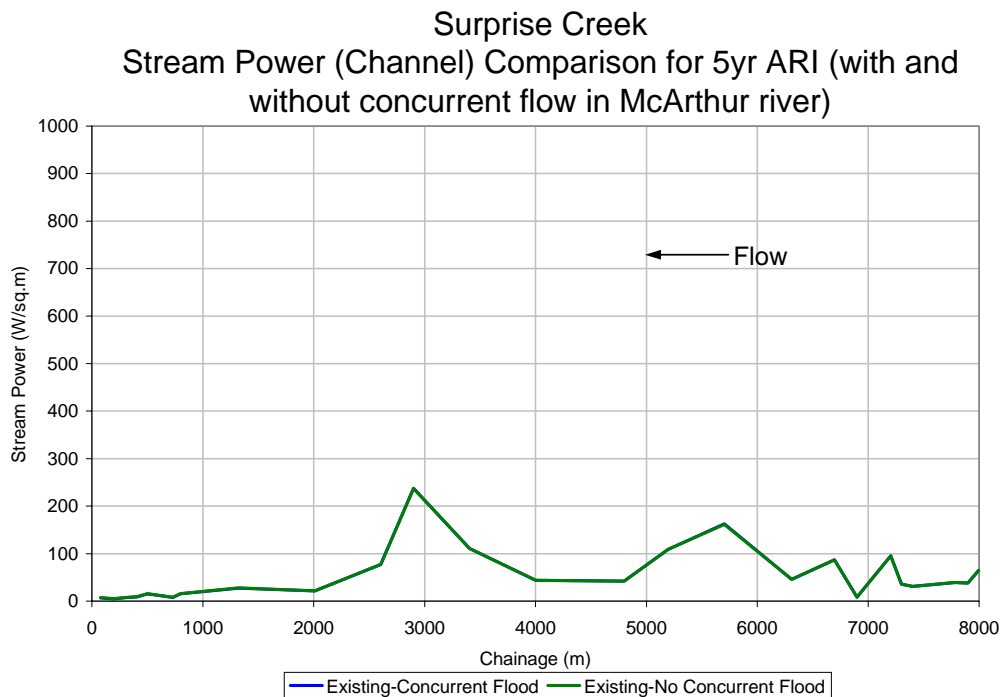


Figure F.2.59 – Surprise Creek Stream Power (Channel) Comparison for 5 year ARI (With and Without Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

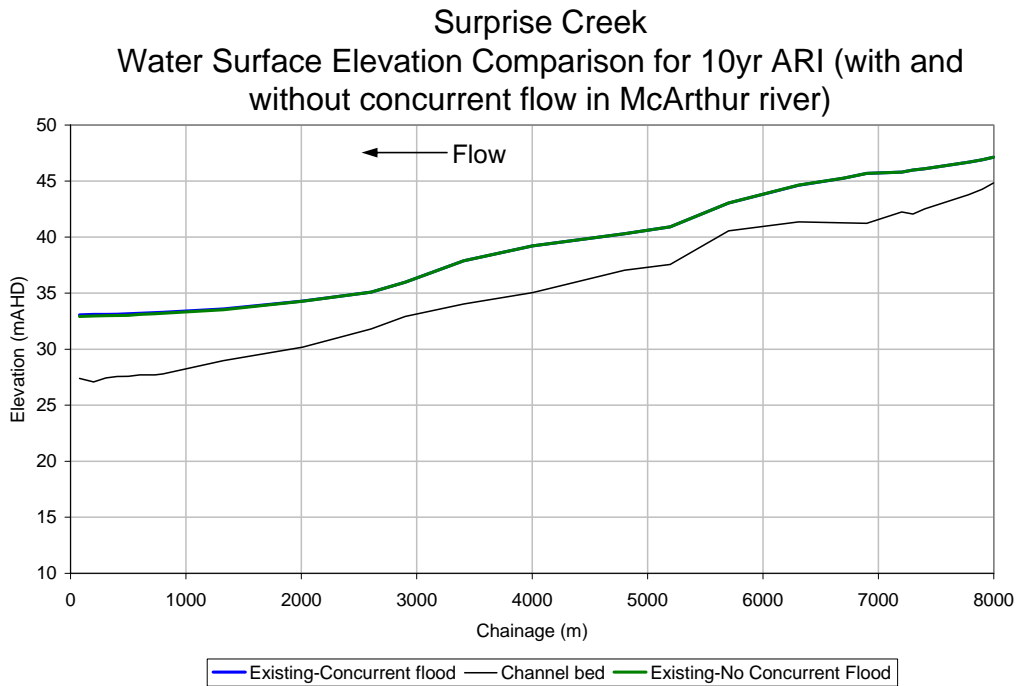


Figure F.2.60 – Surprise Creek Water Surface Elevation Comparison for 10 year ARI (With and Without Concurrent Flow in McArthur River)

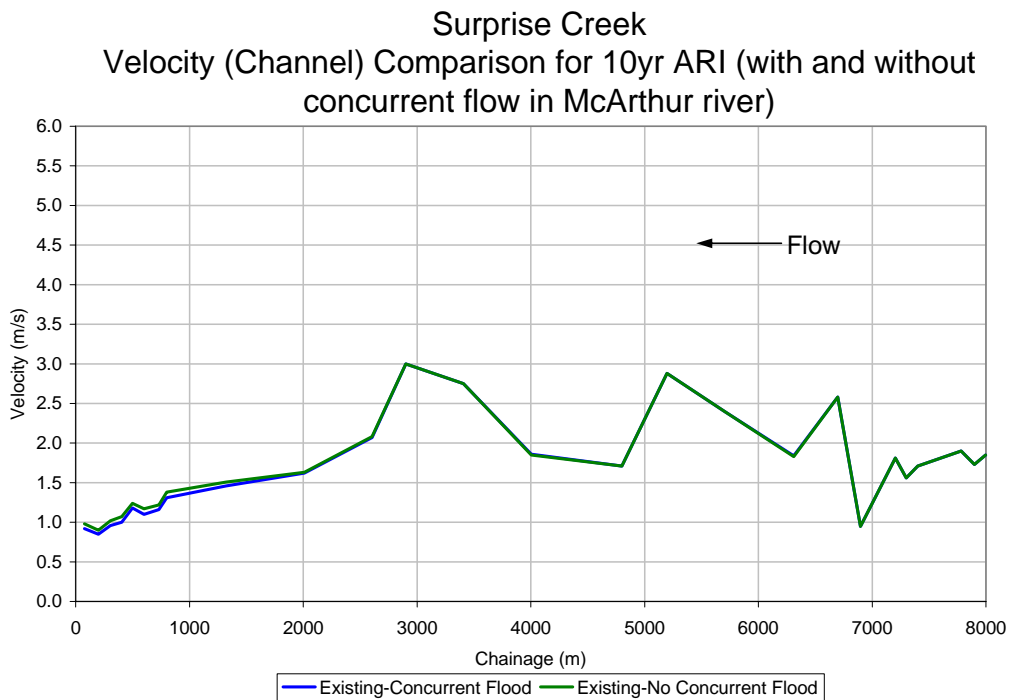


Figure F.2.61 – Surprise Creek Velocity (Channel) Comparison for 10 year ARI (With and Without Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

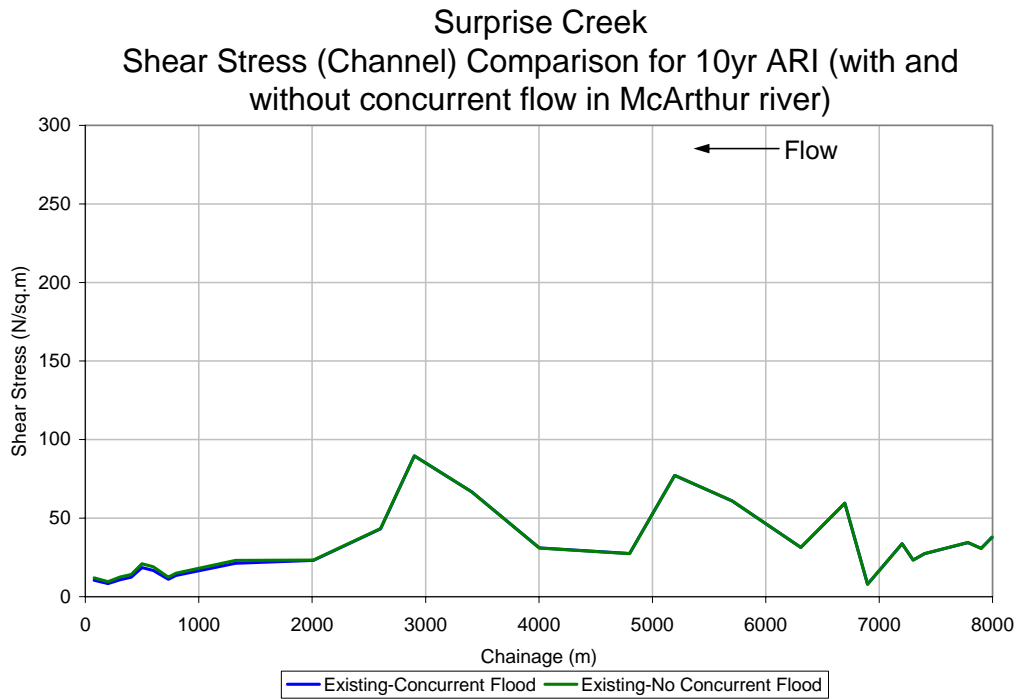


Figure F.2.62 – Surprise Creek Shear Stress (Channel) Comparison for 10 year ARI (With and Without Concurrent Flow in McArthur River)

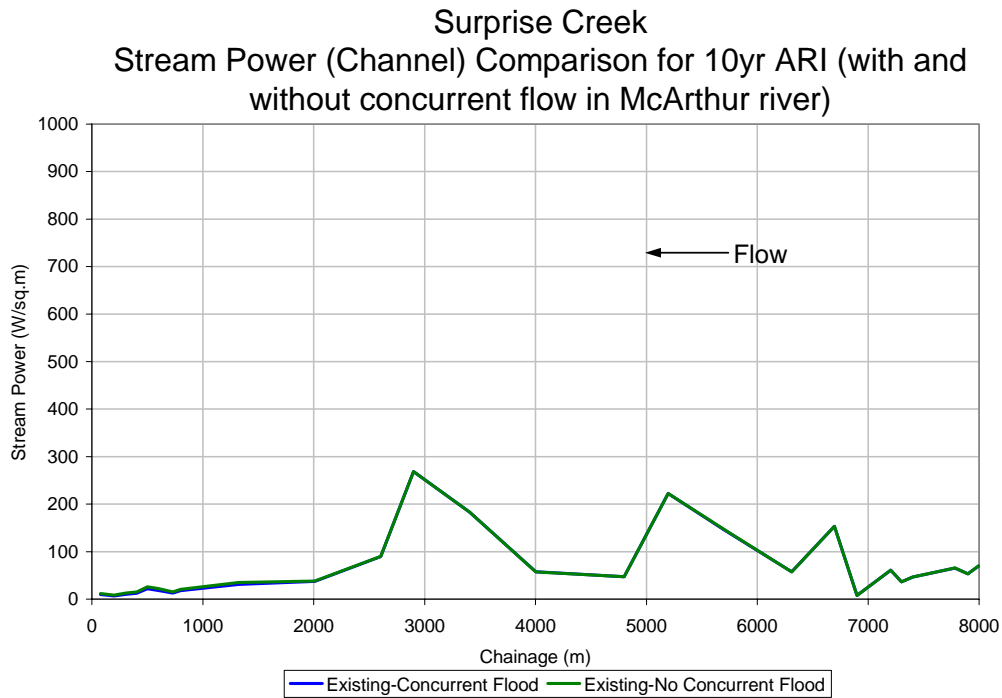


Figure F.2.63 – Surprise Creek Stream Power (Channel) Comparison for 10 year ARI (With and Without Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

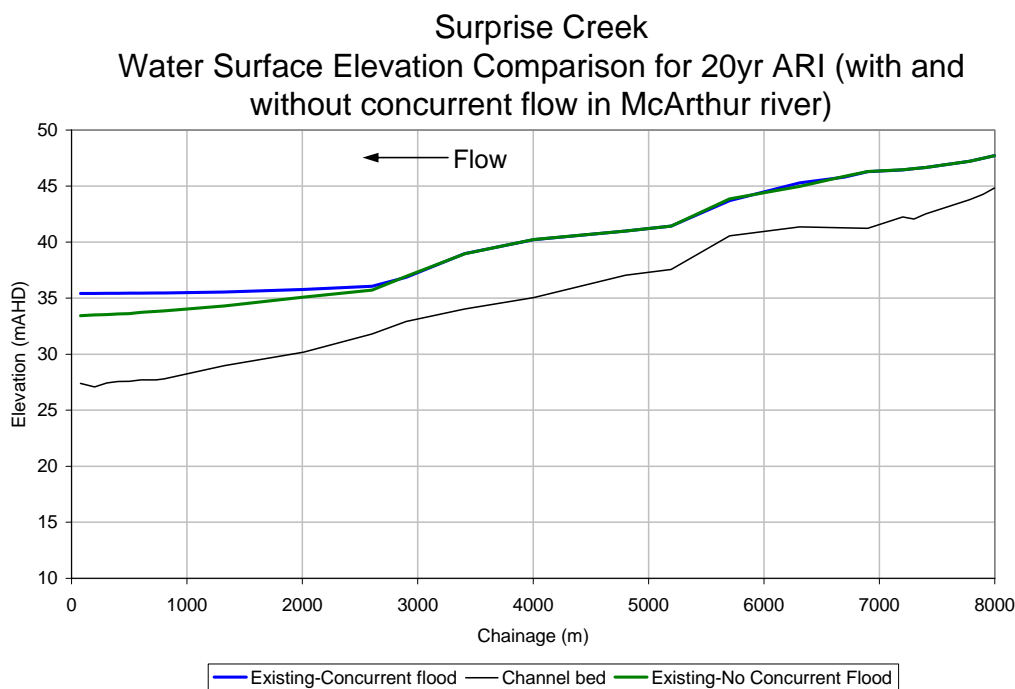


Figure F.2.64 – Surprise Creek Water Surface Elevation Comparison for 20 year ARI (With and Without Concurrent Flow in McArthur River)

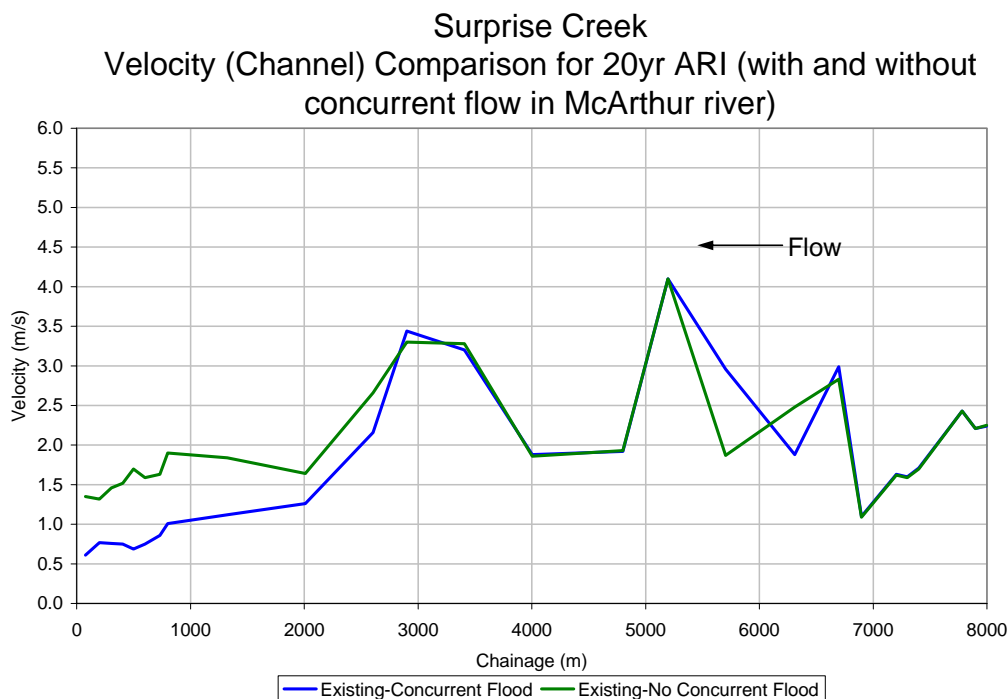


Figure F.2.65 – Surprise Creek Velocity (Channel) Comparison for 20 year ARI (With and Without Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

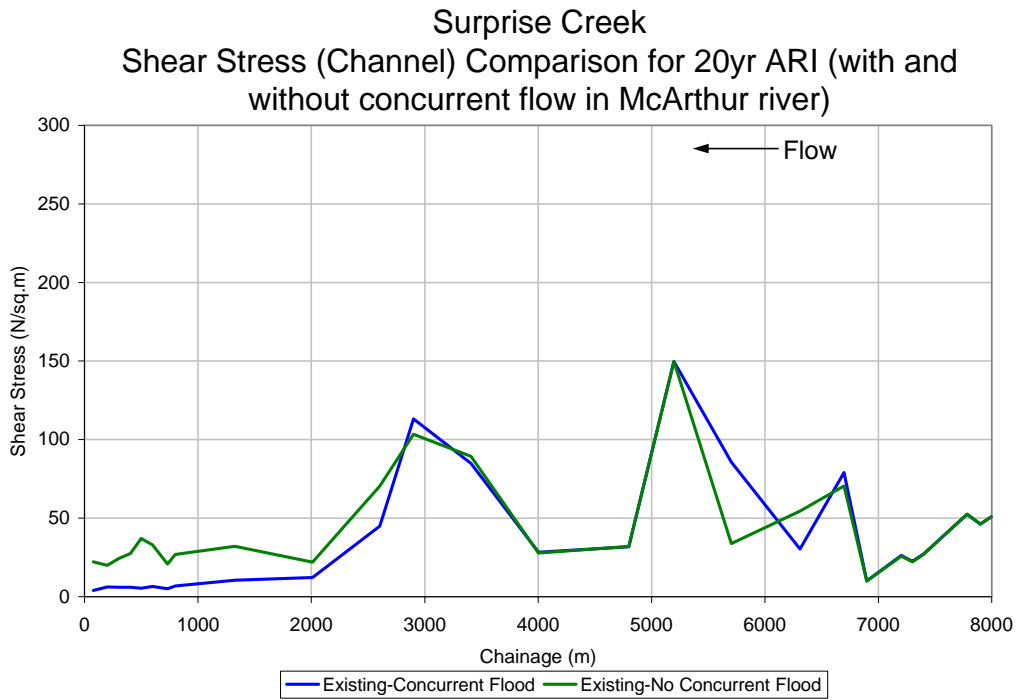


Figure F.2.66 – Surprise Creek Shear Stress (Channel) Comparison for 20 year ARI (With and Without Concurrent Flow in McArthur River)

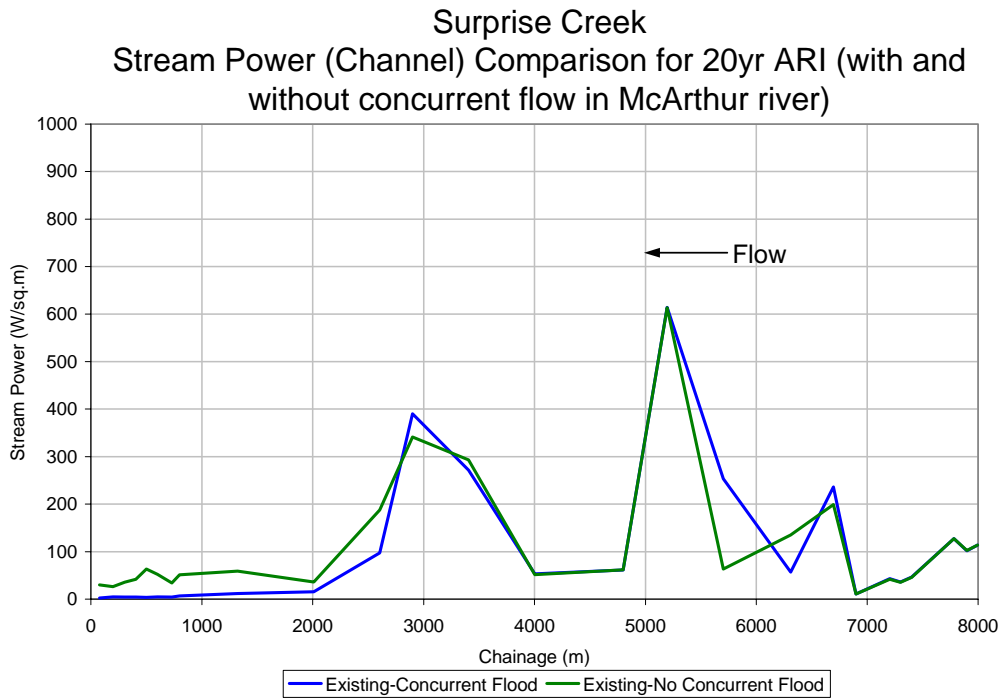


Figure F.2.67 – Surprise Creek Stream Power (Channel) Comparison for 20 year ARI (With and Without Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

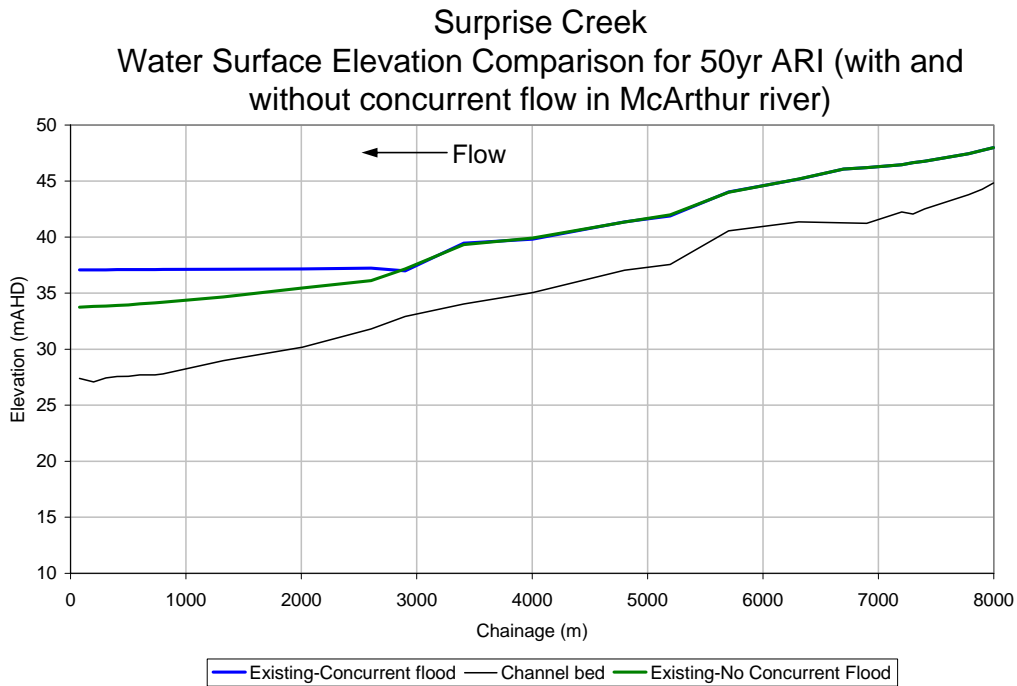


Figure F.2.68 – Surprise Creek Water Surface Elevation Comparison for 50 year ARI (With and Without Concurrent Flow in McArthur River)

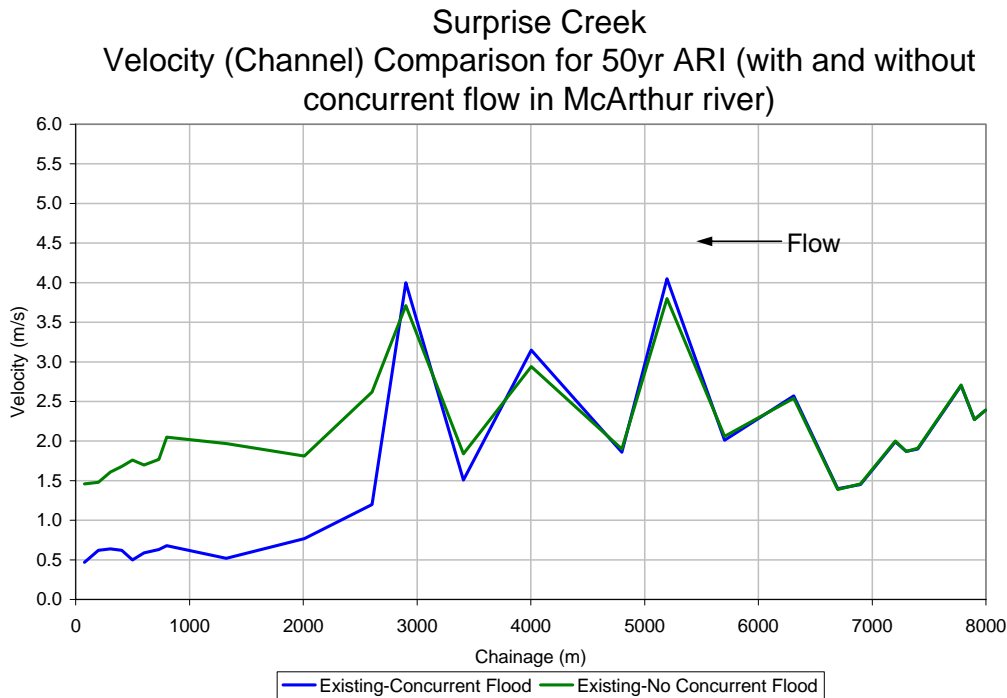


Figure F.2.69 – Surprise Creek Velocity (Channel) Comparison for 50 year ARI (With and Without Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

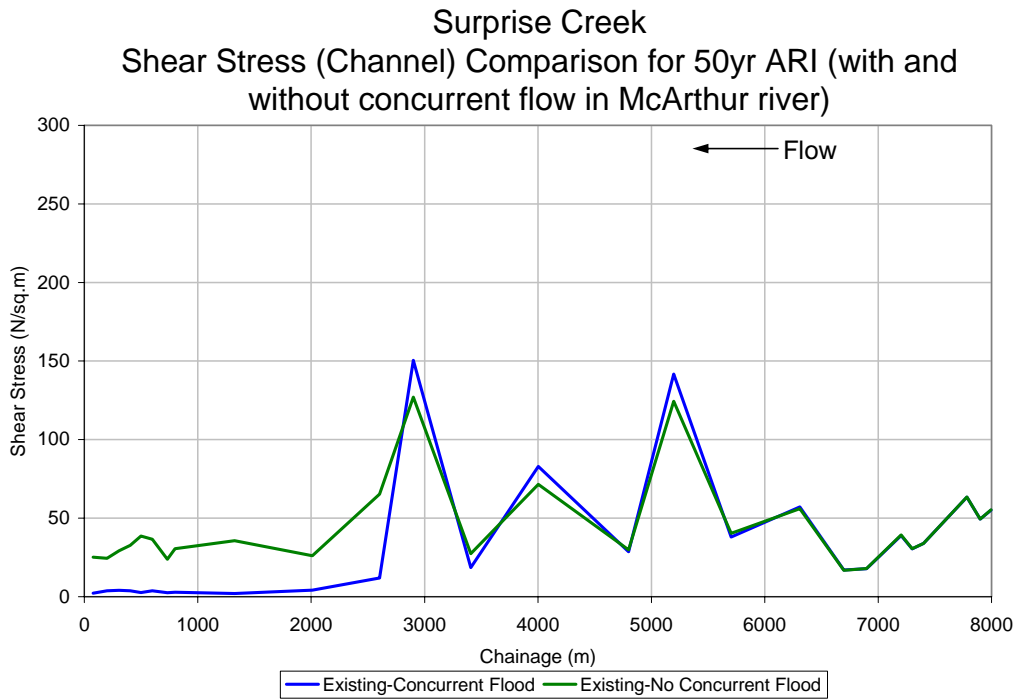


Figure F.2.70 – Surprise Creek Shear Stress (Channel) Comparison for 50 year ARI (With and Without Concurrent Flow in McArthur River)

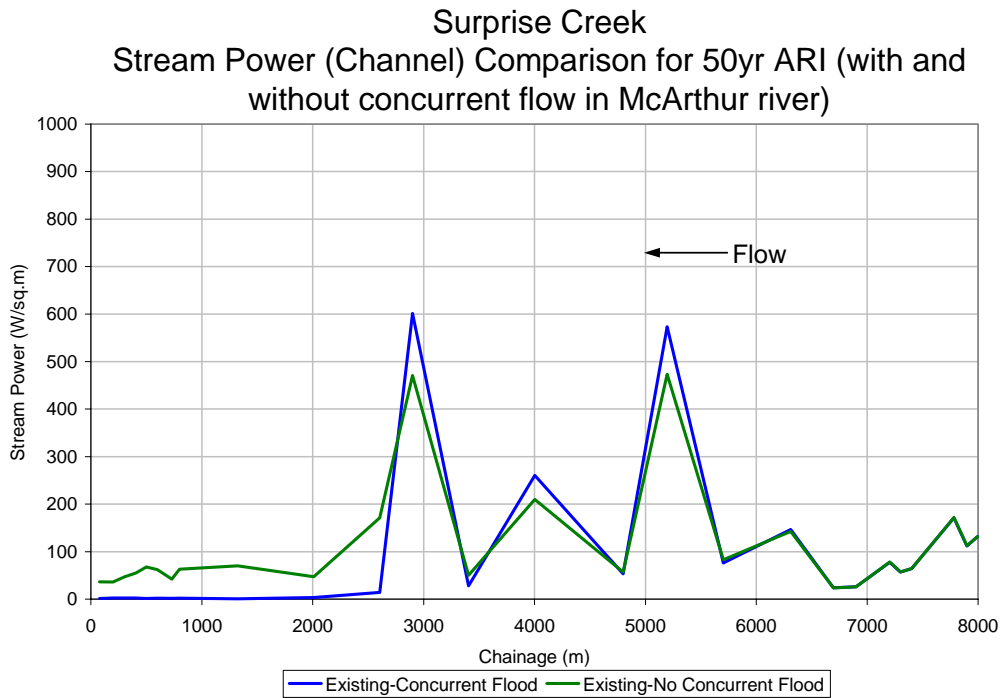


Figure F.2.71 – Surprise Creek Stream Power (Channel) Comparison for 50 year ARI (With and Without Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

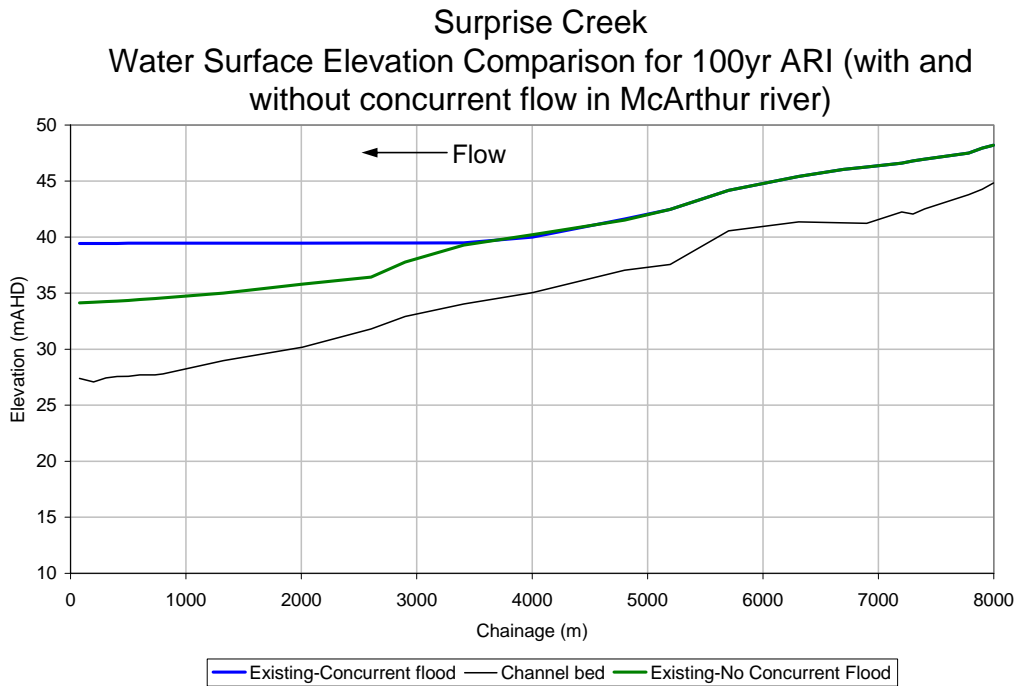


Figure F.2.72 – Surprise Creek Water Surface Elevation Comparison for 100 year ARI (With and Without Concurrent Flow in McArthur River)

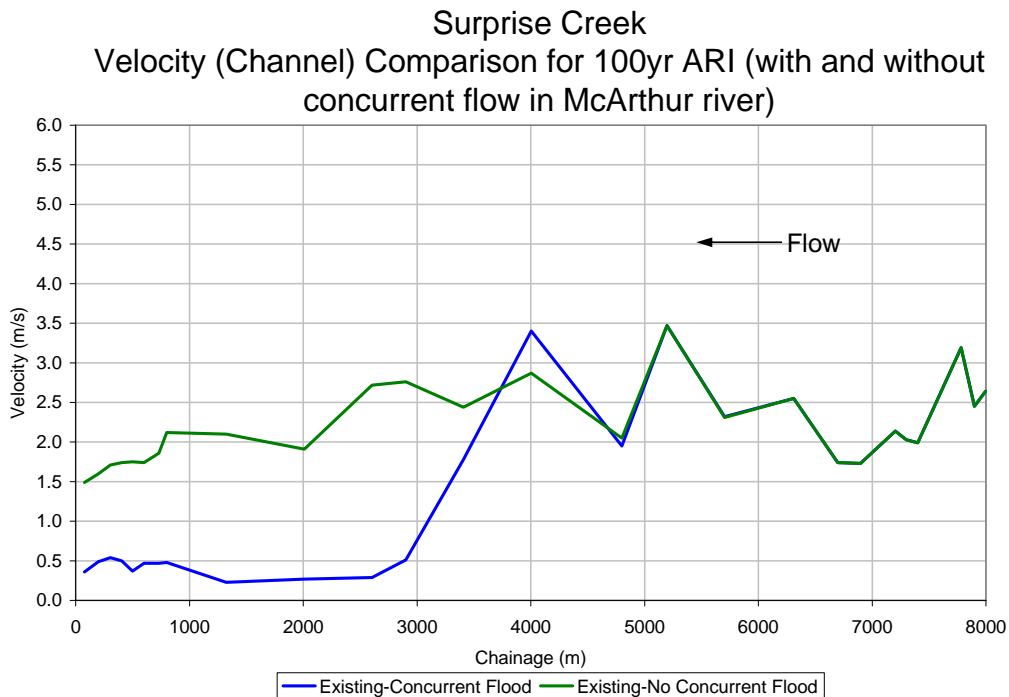


Figure F.2.73 – Surprise Creek Velocity (Channel) Comparison for 100 year ARI (With and Without Concurrent Flow in McArthur River)

Appendix F.2

Barney Creek and Surprise Creek Hydraulic Modelling Results

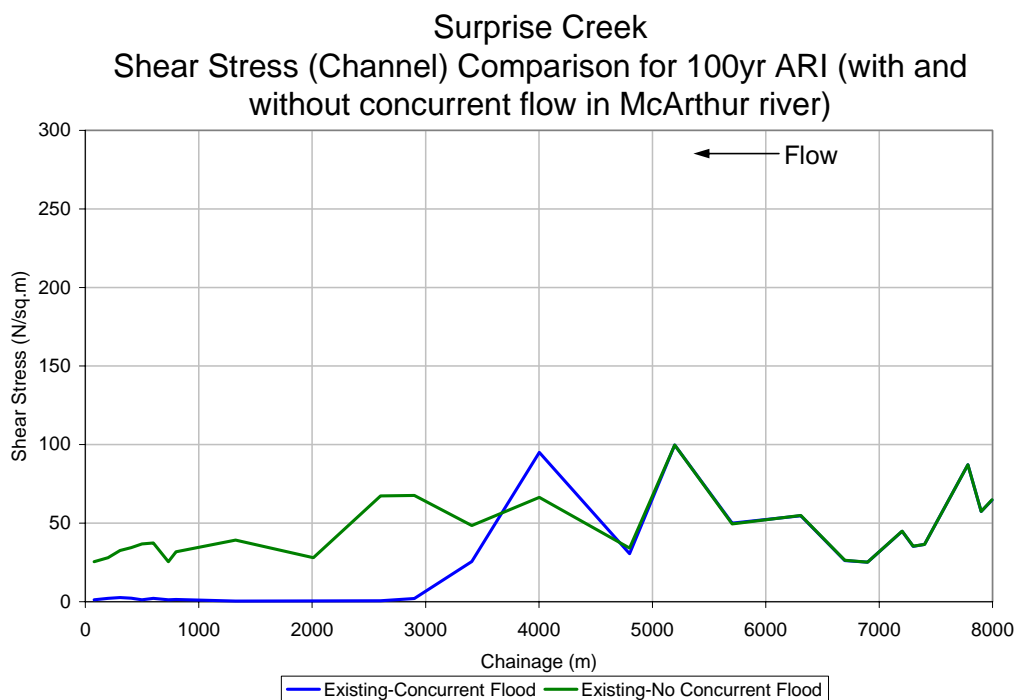


Figure F.2.74 – Surprise Creek Shear Stress (Channel) Comparison for 100 year ARI (With and Without Concurrent Flow in McArthur River)

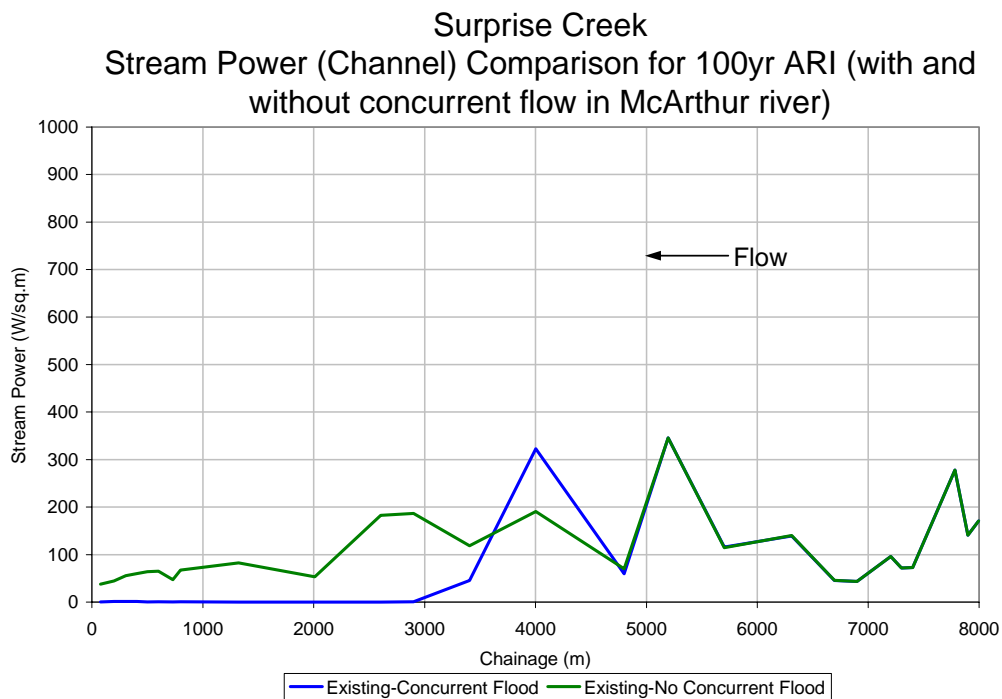


Figure F.2.75 – Surprise Creek Stream Power (Channel) Comparison for 100 year ARI (With and Without Concurrent Flow in McArthur River)