

WUA based on Minimum Suitability Thresholds

Prepared for the Combined
Aquatics Working Group

March 22, 2005

WUA at Minimum Suitability Thresholds

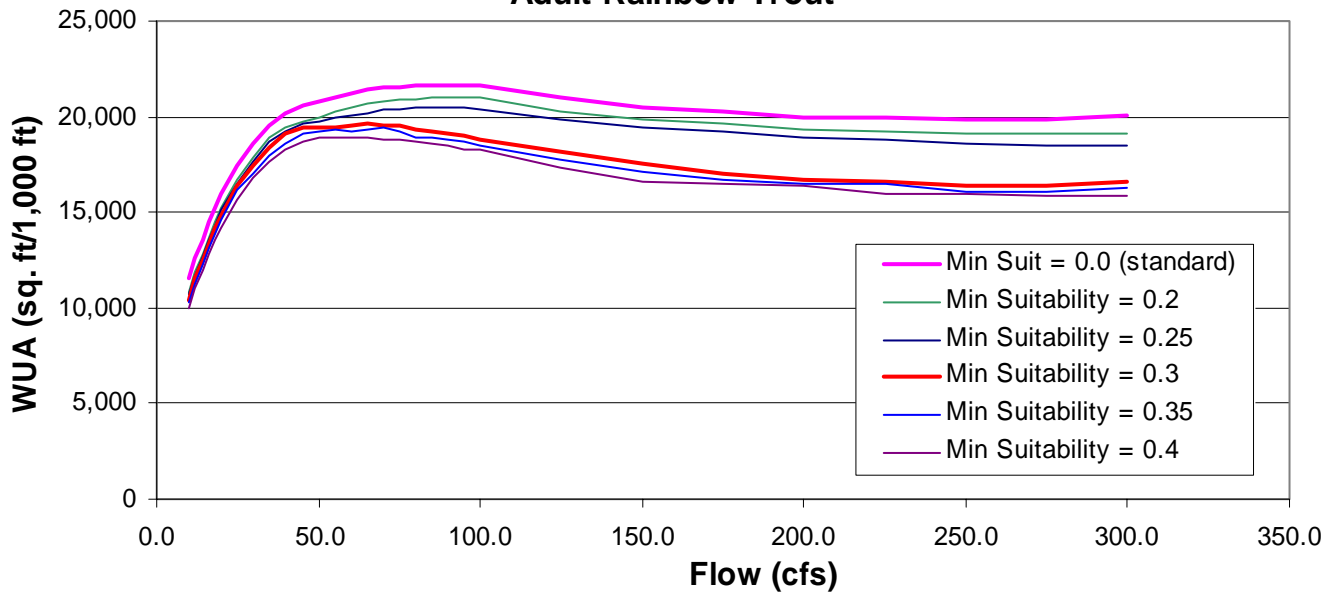
- The USFS requested an analysis of the WUA functions to a minimum suitability threshold of 0.3
- Analysis was conducted using minimum suitability thresholds ranging from 0.2 to 0.4 for adult and spawning WUA
- Spawning WUA was evaluated based on “ideal” substrate

Results of Minimum Suitability Threshold Analysis

- Indicated minor reductions in quantity of adult habitat, but little change in the shape of the curve
- Similar results for spawning based on “ideal” substrate
- Changes would not result in a change in the flow recommendation

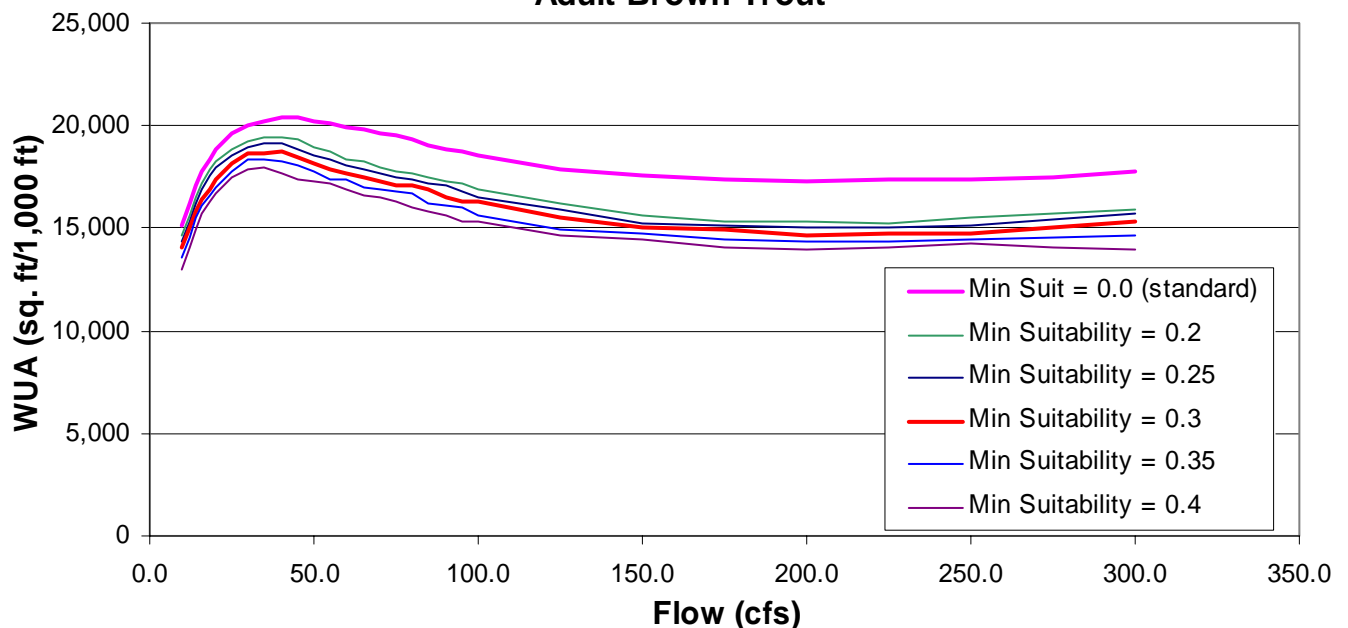
South Fork San Joaquin River - Bear to Florence Adult Trout

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Bear to Florence Adult Rainbow Trout



* WUA calculated based on inclusion of cells where the composite suitability equals or exceeds the indicated minimum suitability threshold. Minimum suitability threshold is indicated in the legend.

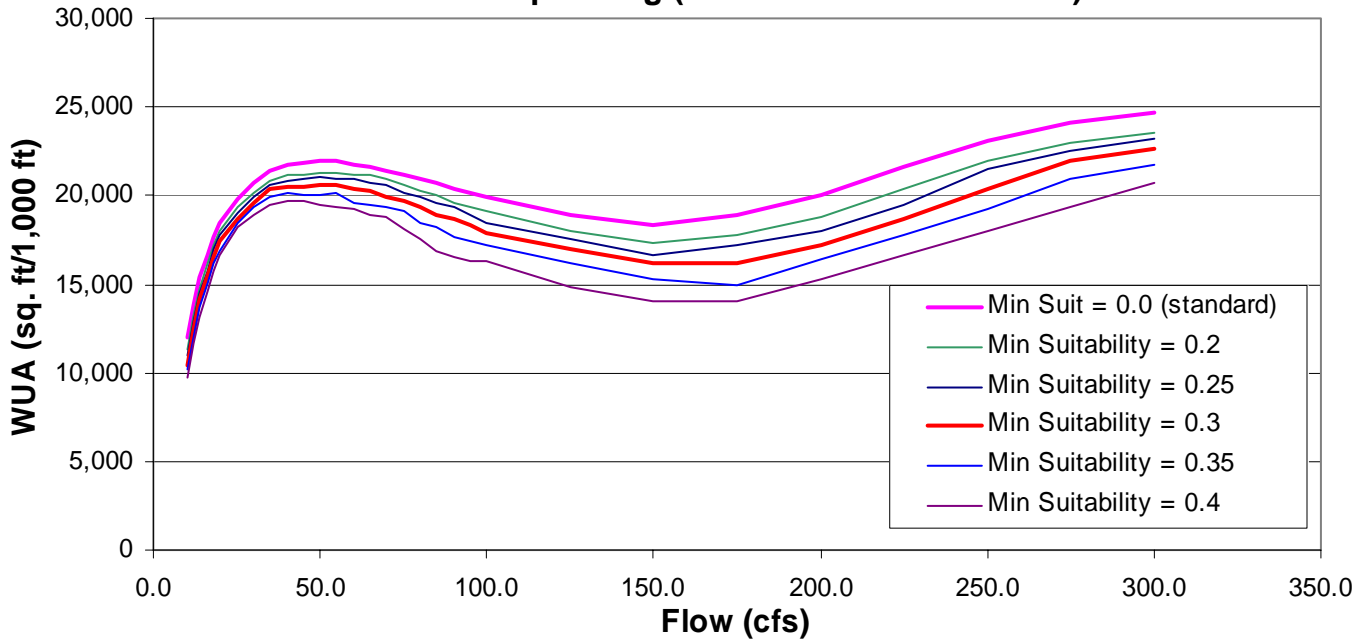
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Bear to Florence Adult Brown Trout



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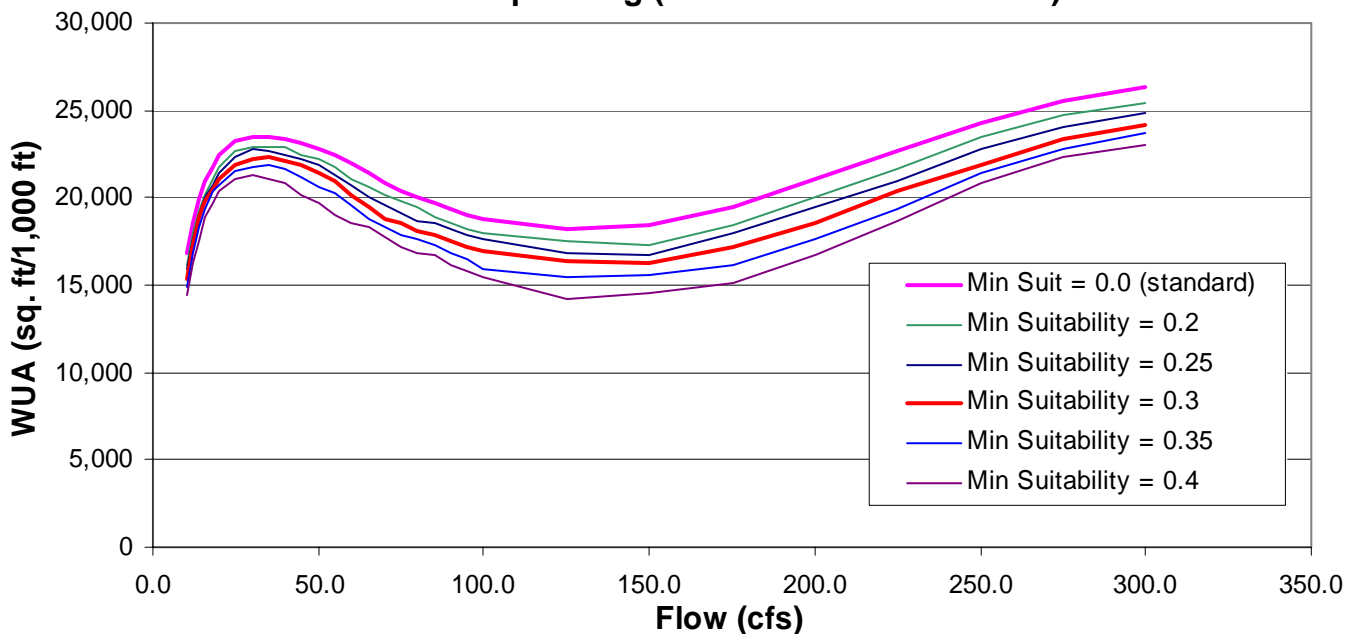
South Fork San Joaquin River - Bear to Florence Spawning

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Bear to Florence Rainbow Trout Spawning (100% Suitable Substrate)



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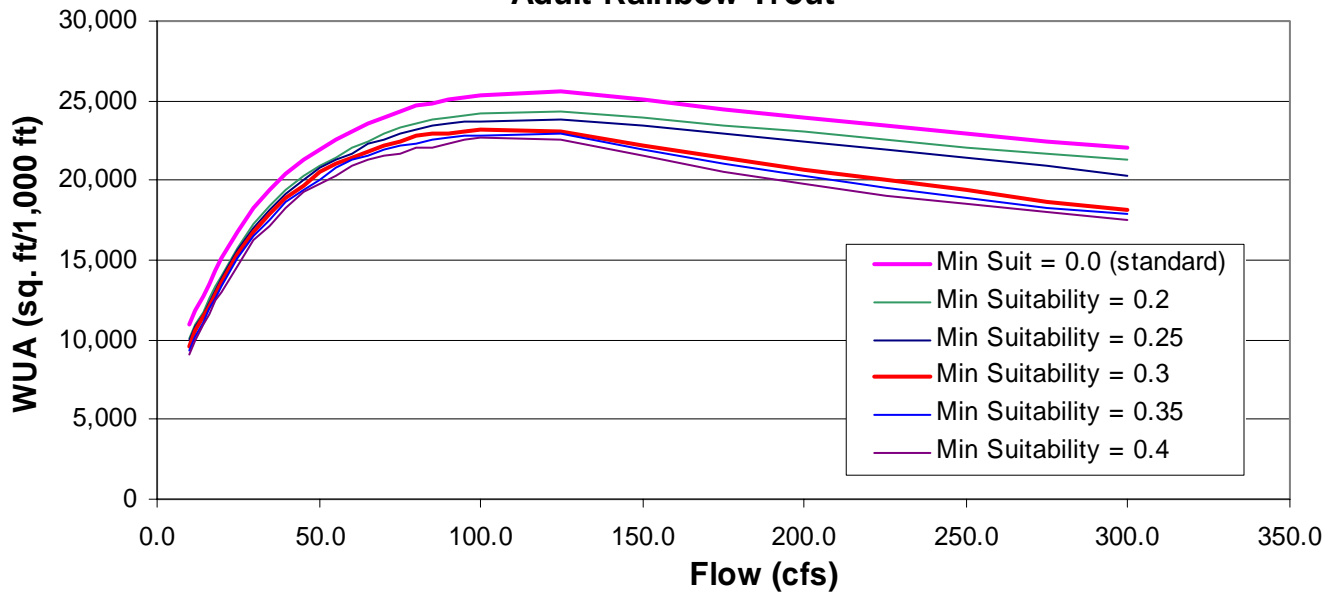
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Bear to Florence Brown Trout Spawning (100% Suitable Substrate)



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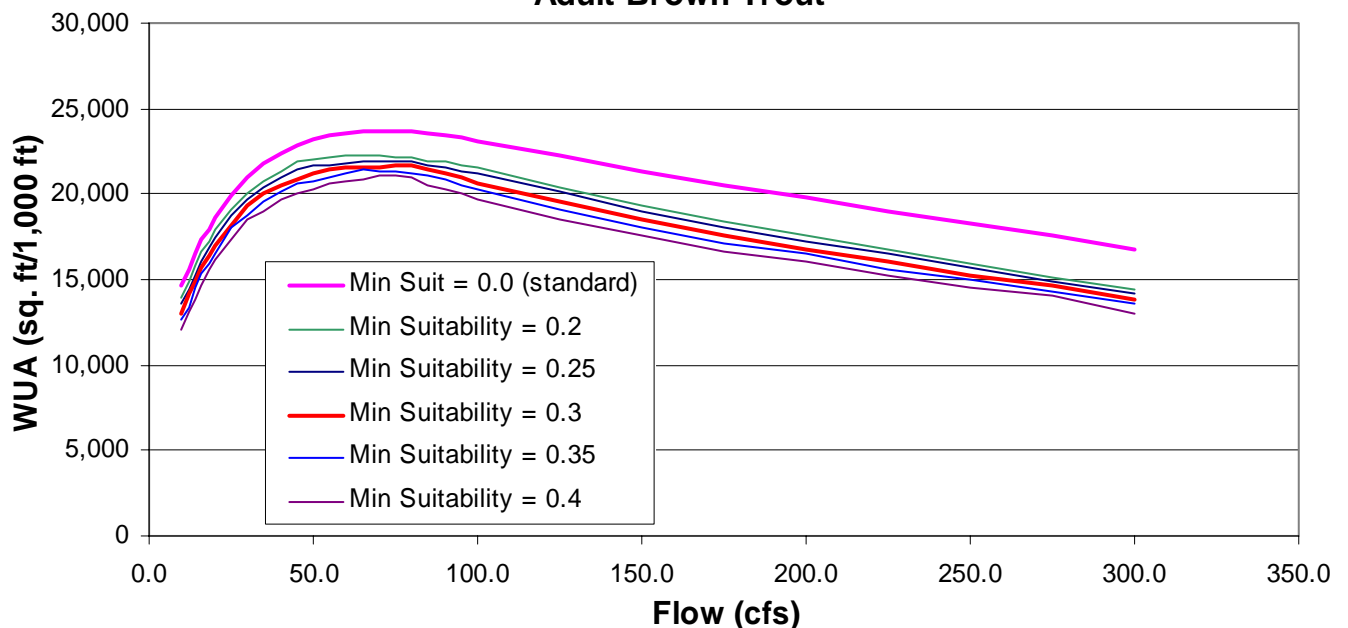
South Fork San Joaquin River - Mono to Bear Adult Trout

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Mono to Bear Adult Rainbow Trout



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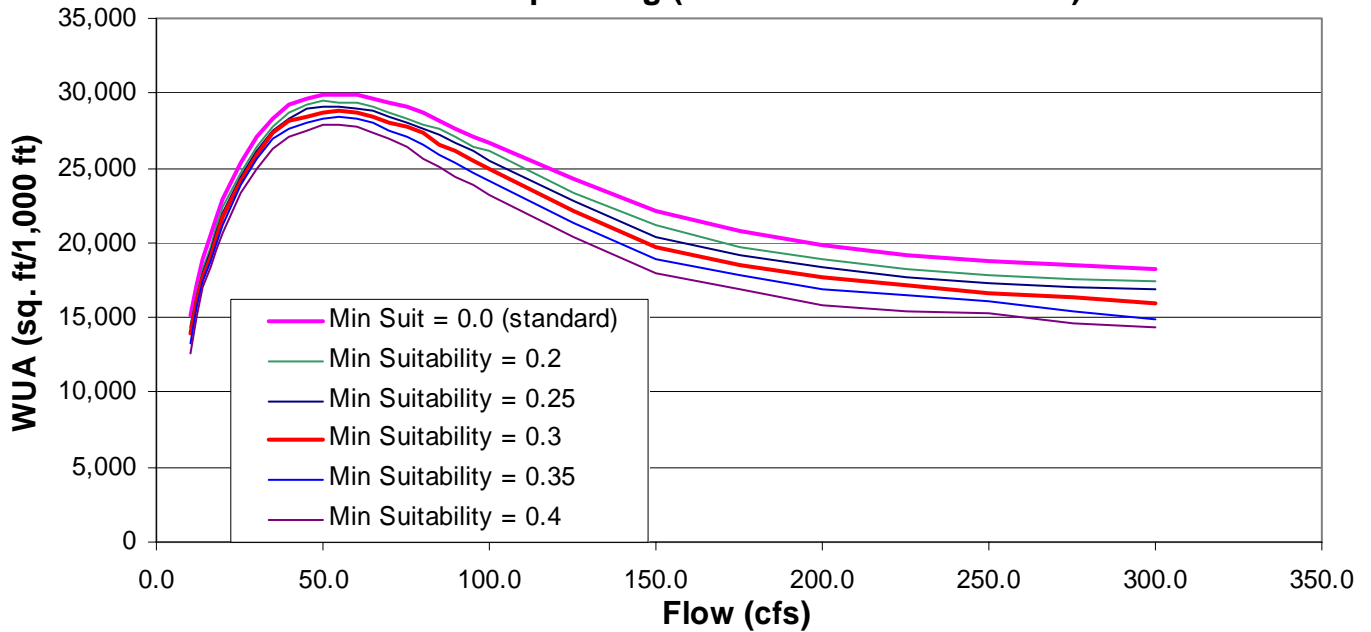
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Mono to Bear Adult Brown Trout



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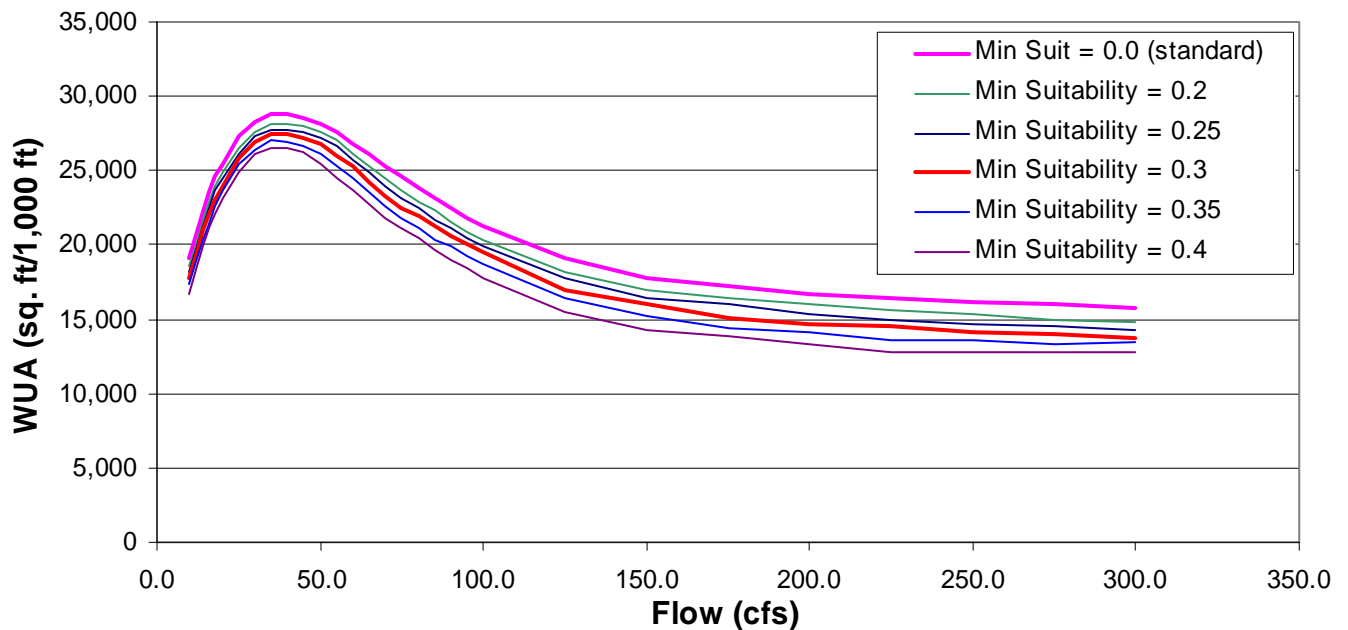
South Fork San Joaquin River - Mono to Bear Spawning

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Mono to Bear Rainbow Trout Spawning (100% Suitable Substrate)



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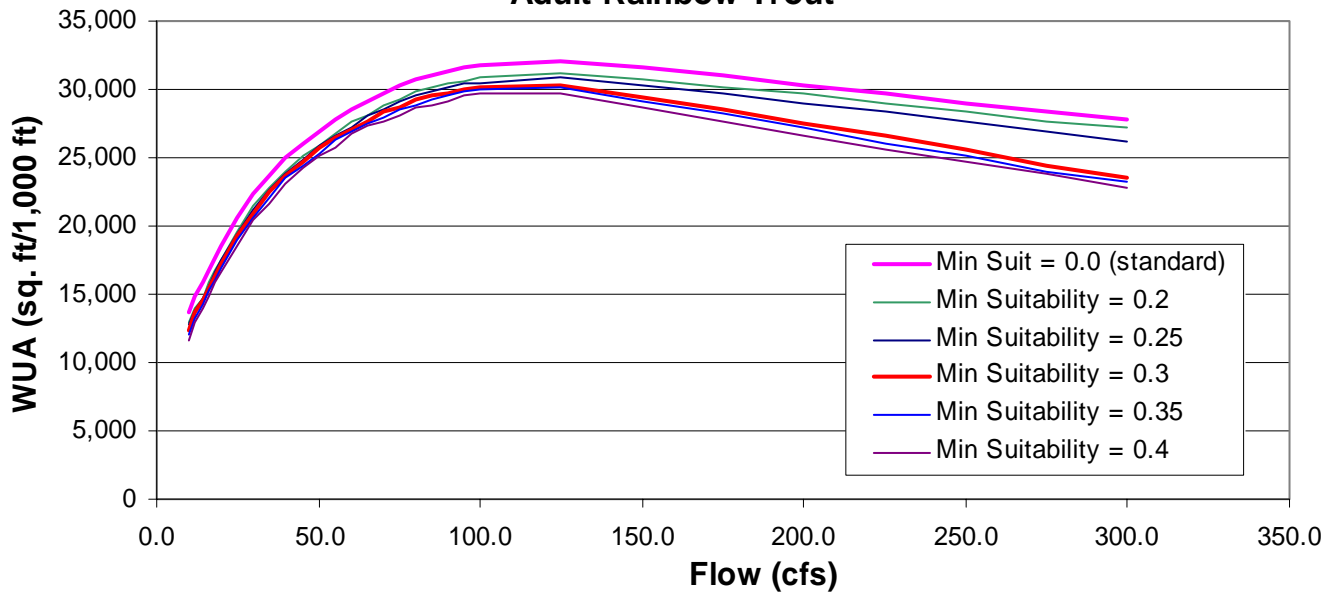
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Mono to Bear Brown Trout Spawning (100% Suitable Substrate)



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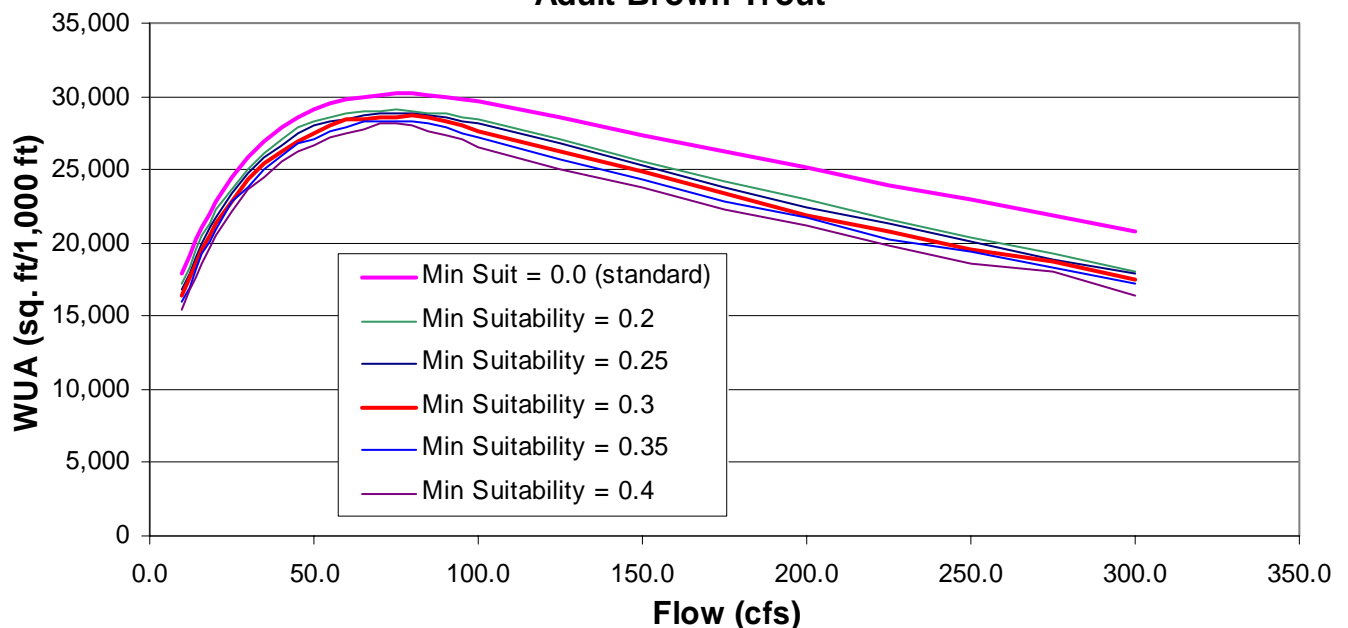
South Fork San Joaquin River - Rattlesnake to Mono Adult Trout

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Rattlesnake to Mono Adult Rainbow Trout



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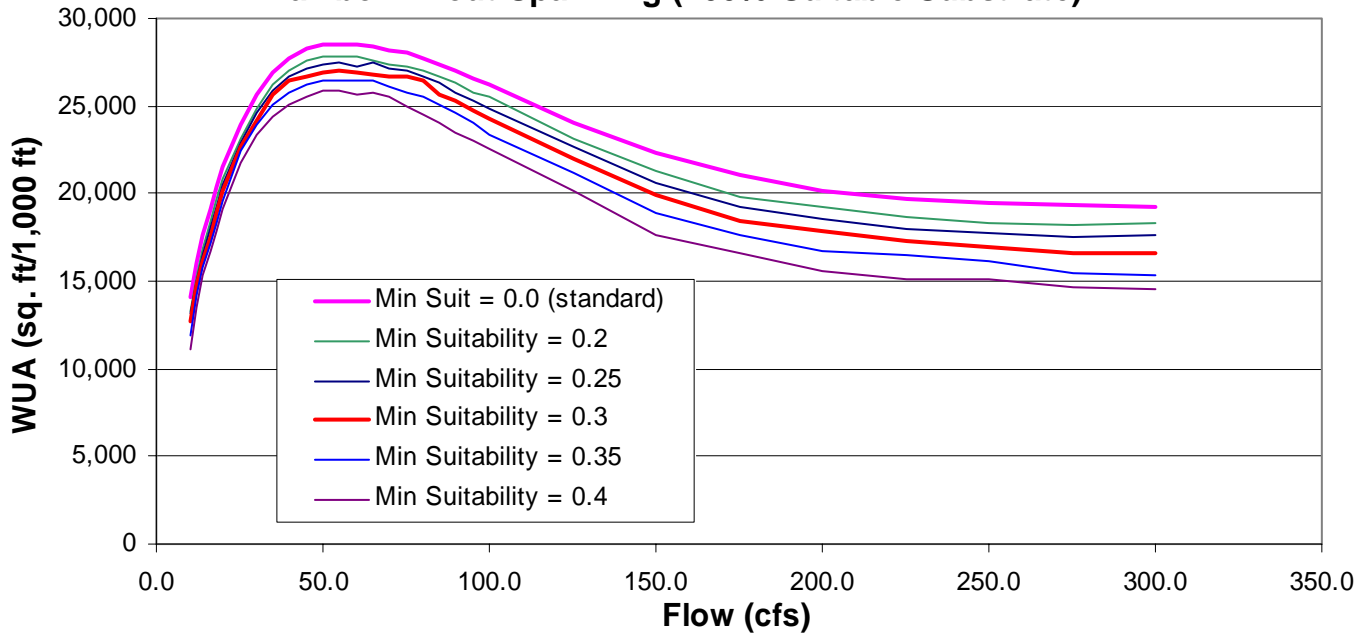
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Rattlesnake to Mono Adult Brown Trout



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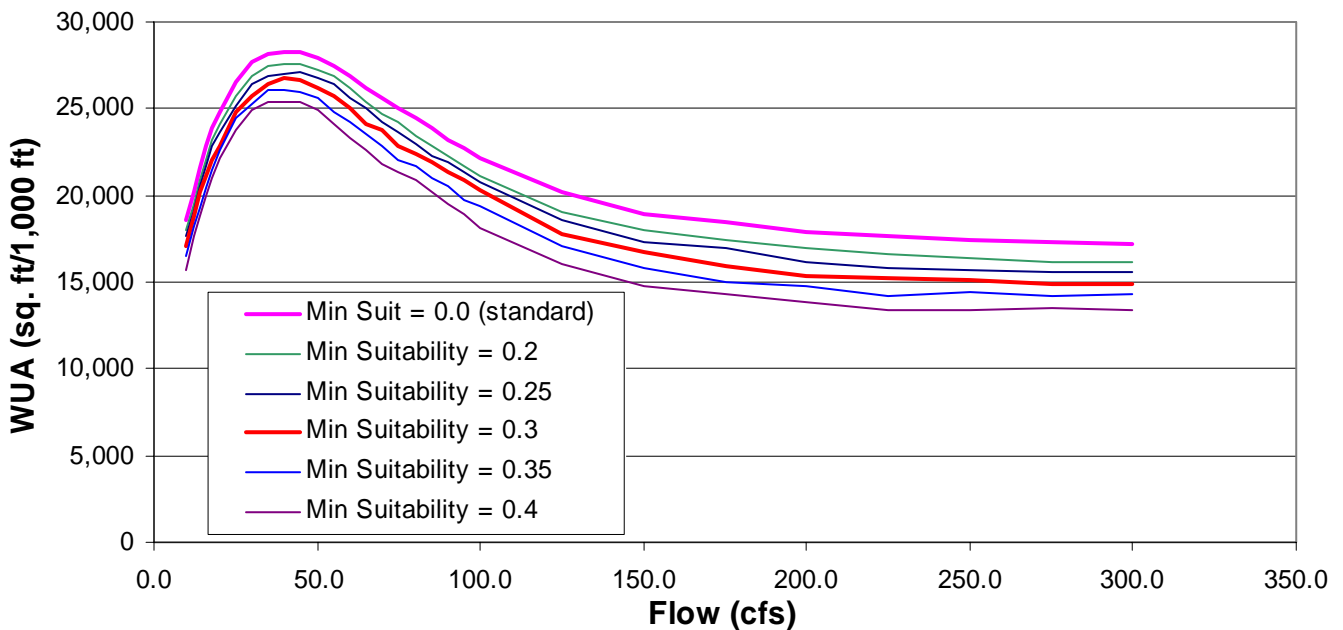
South Fork San Joaquin River - Rattlesnake to Mono Spawning

**WUA Function Sensitivity to Selected Minimum Suitability
Thresholds*, SF San Joaquin River - Rattlesnake to Mono
Rainbow Trout Spawning (100% Suitable Substrate)**



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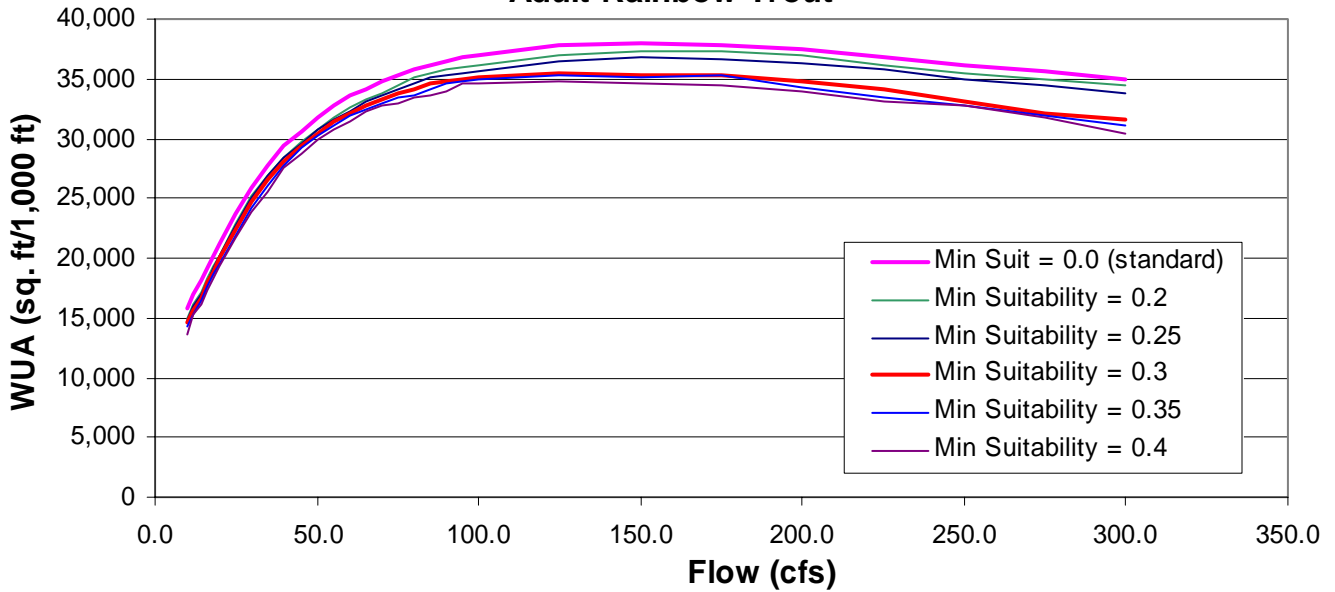
**WUA Function Sensitivity to Selected Minimum Suitability
Thresholds*, SF San Joaquin River - Rattlesnake to Mono
Brown Trout Spawning (100% Suitable Substrate)**



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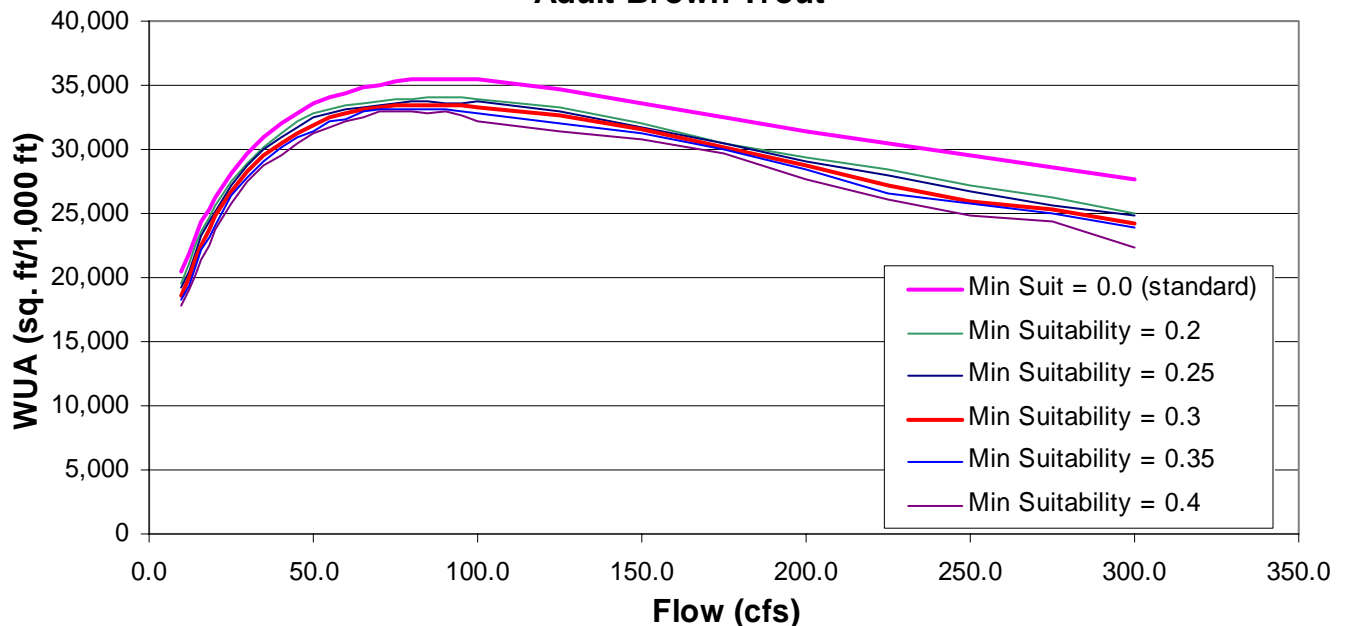
South Fork San Joaquin River - Hoffman to Rattlesnake Adult Trout

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Hoffman to Rattlesnake Adult Rainbow Trout



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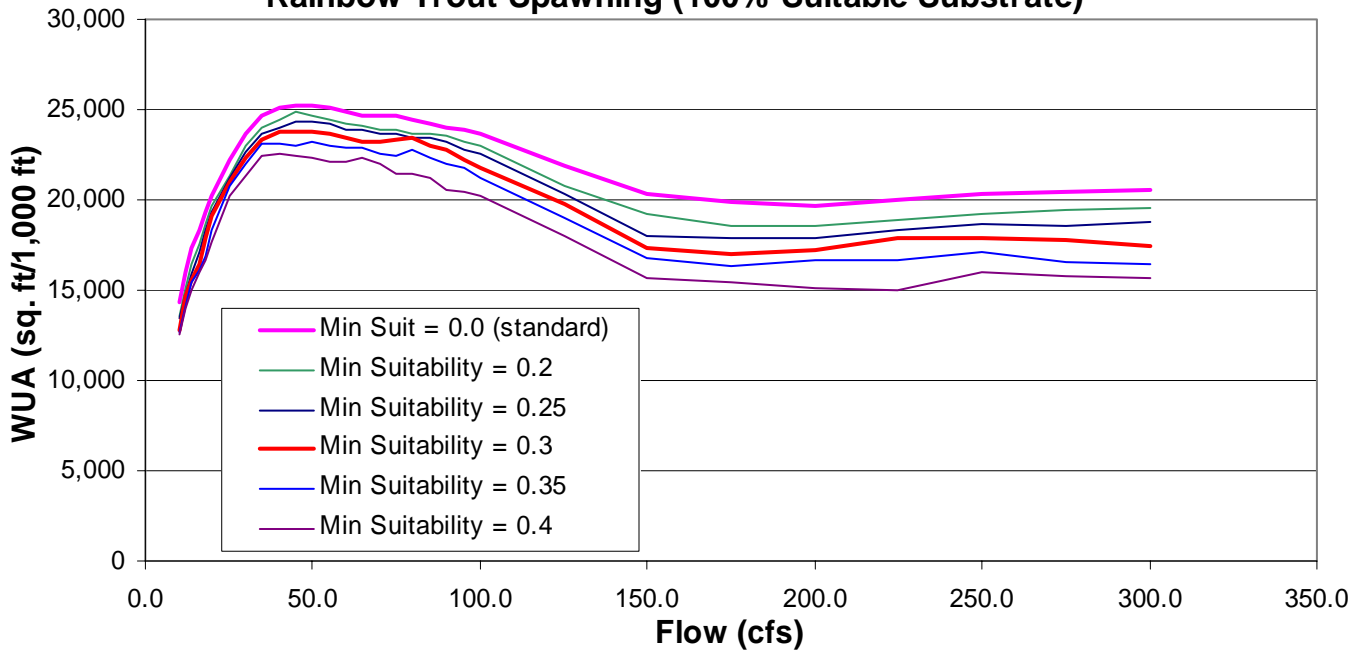
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Hoffman to Rattlesnake Adult Brown Trout



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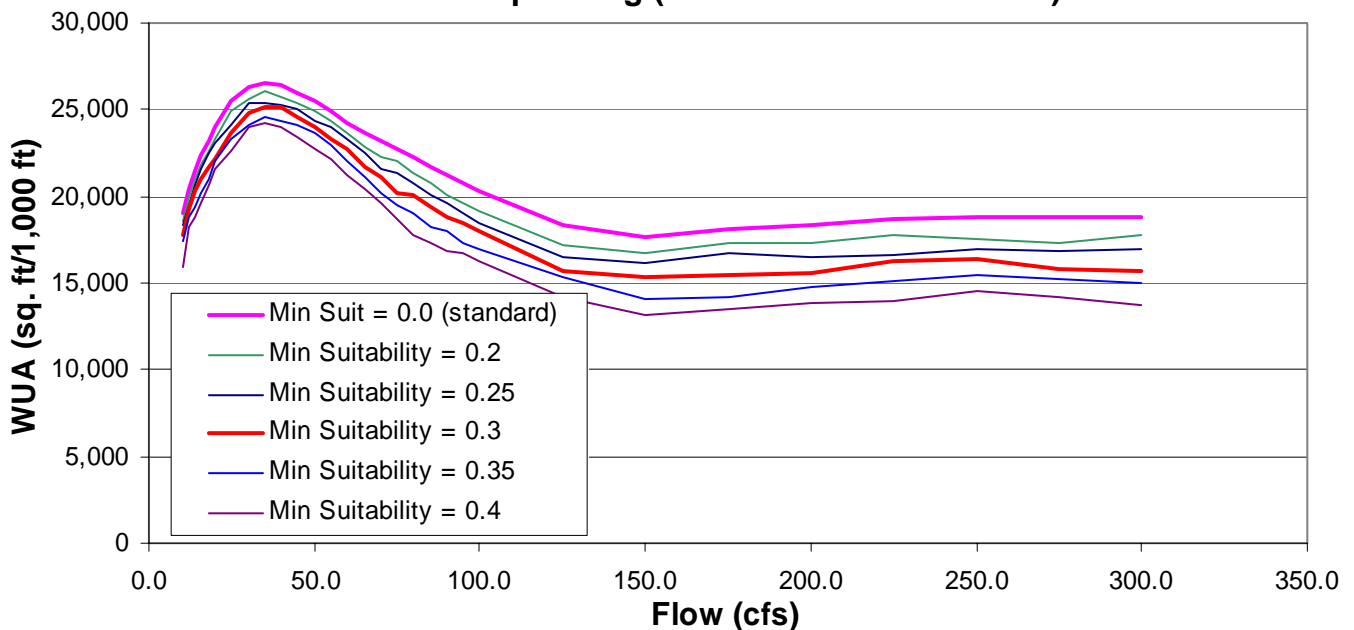
South Fork San Joaquin River - Hoffman to Rattlesnake Spawning

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Hoffman to Rattlesnake Rainbow Trout Spawning (100% Suitable Substrate)



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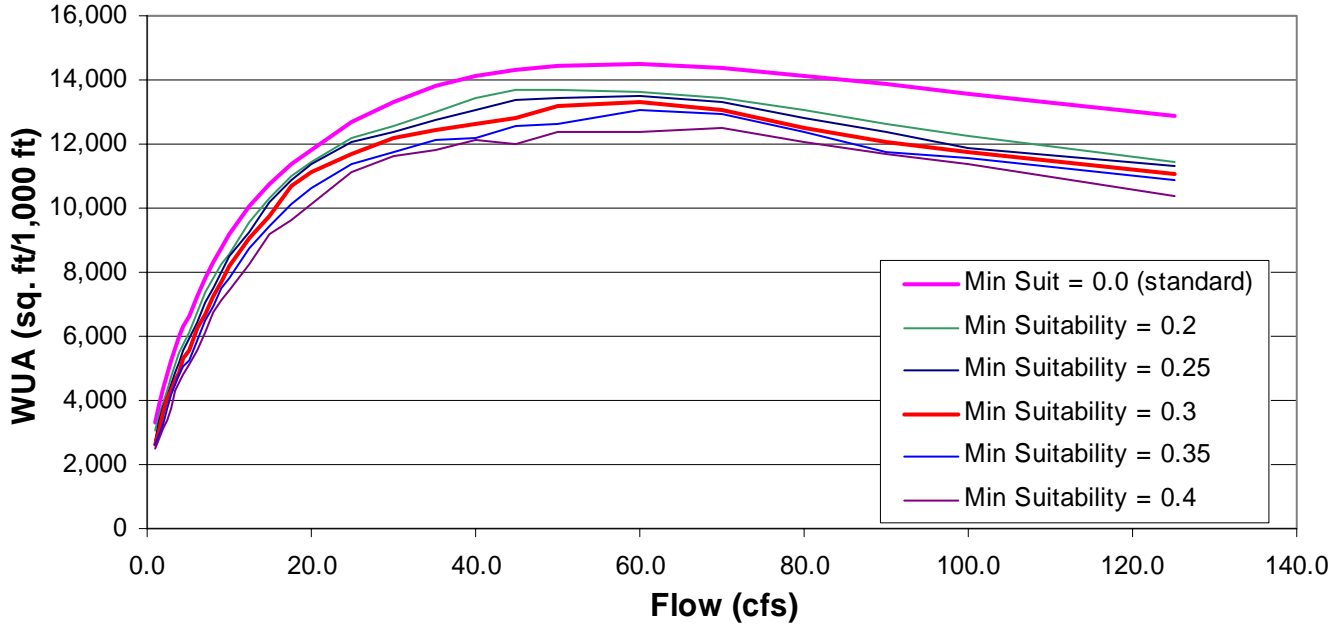
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, SF San Joaquin River - Hoffman to Rattlesnake Brown Trout Spawning (100% Suitable Substrate)



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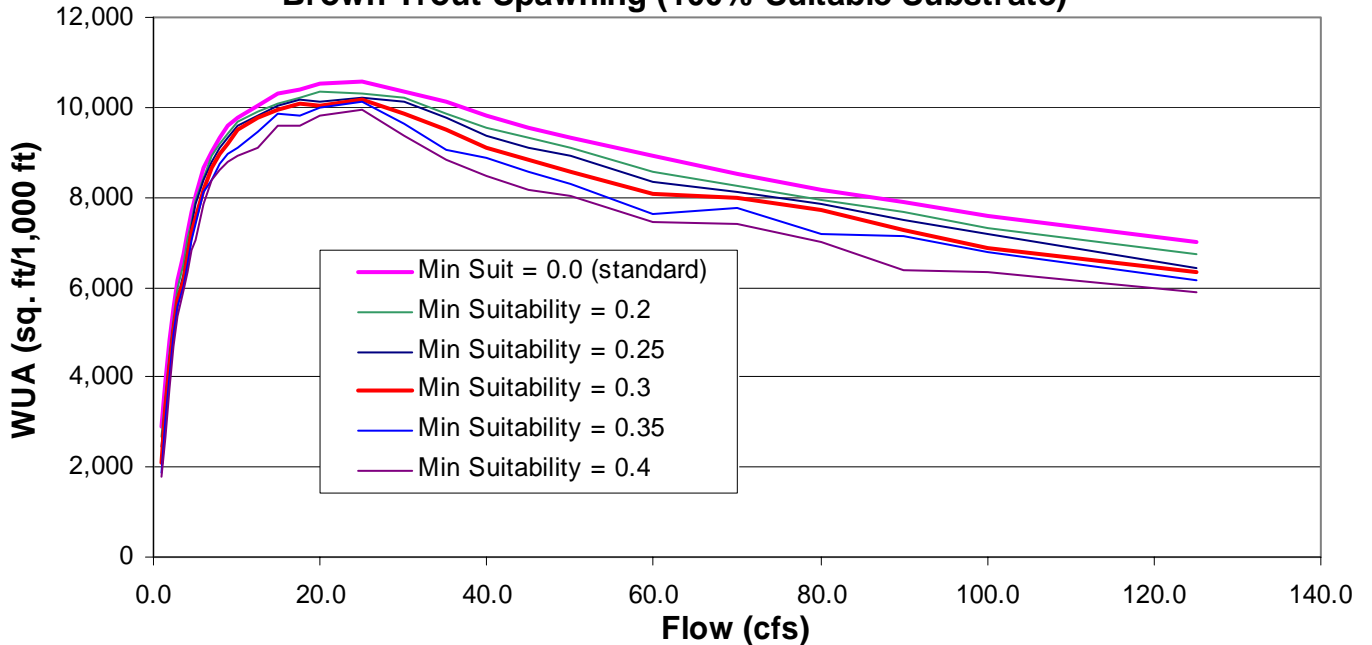
Bear Creek

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Bear Creek Adult Brown Trout



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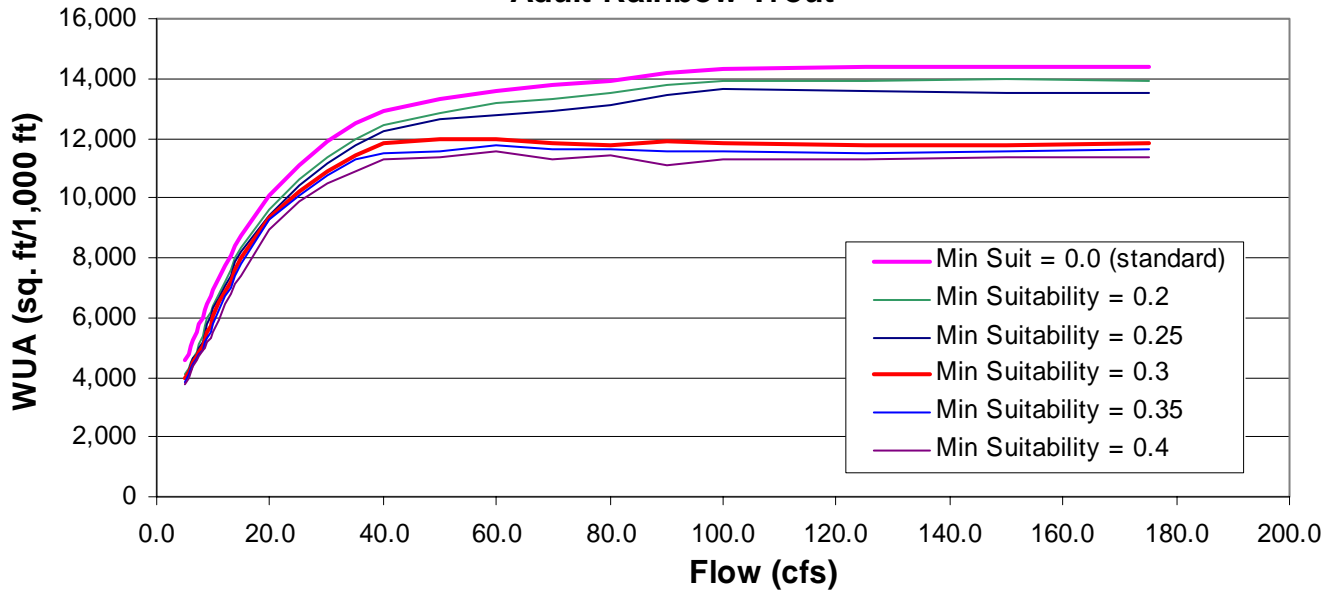
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Bear Creek Brown Trout Spawning (100% Suitable Substrate)



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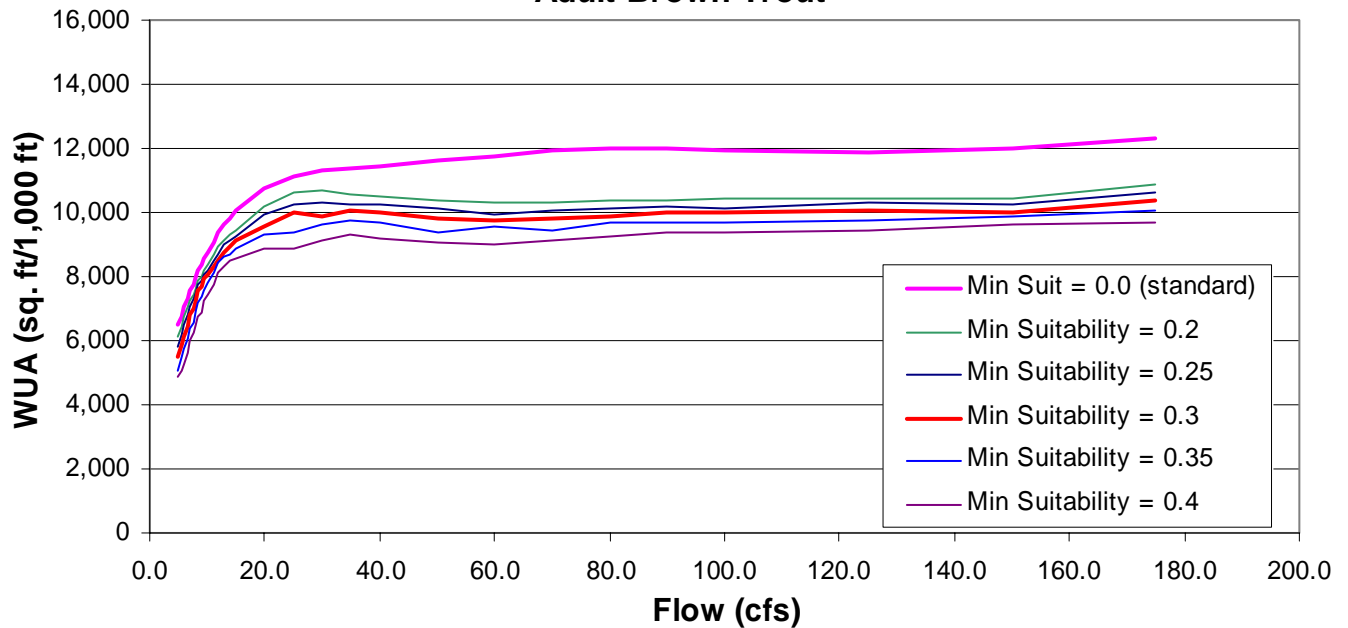
Mono Creek Adult Trout

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Mono Creek Adult Rainbow Trout



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WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Mono Creek Adult Brown Trout

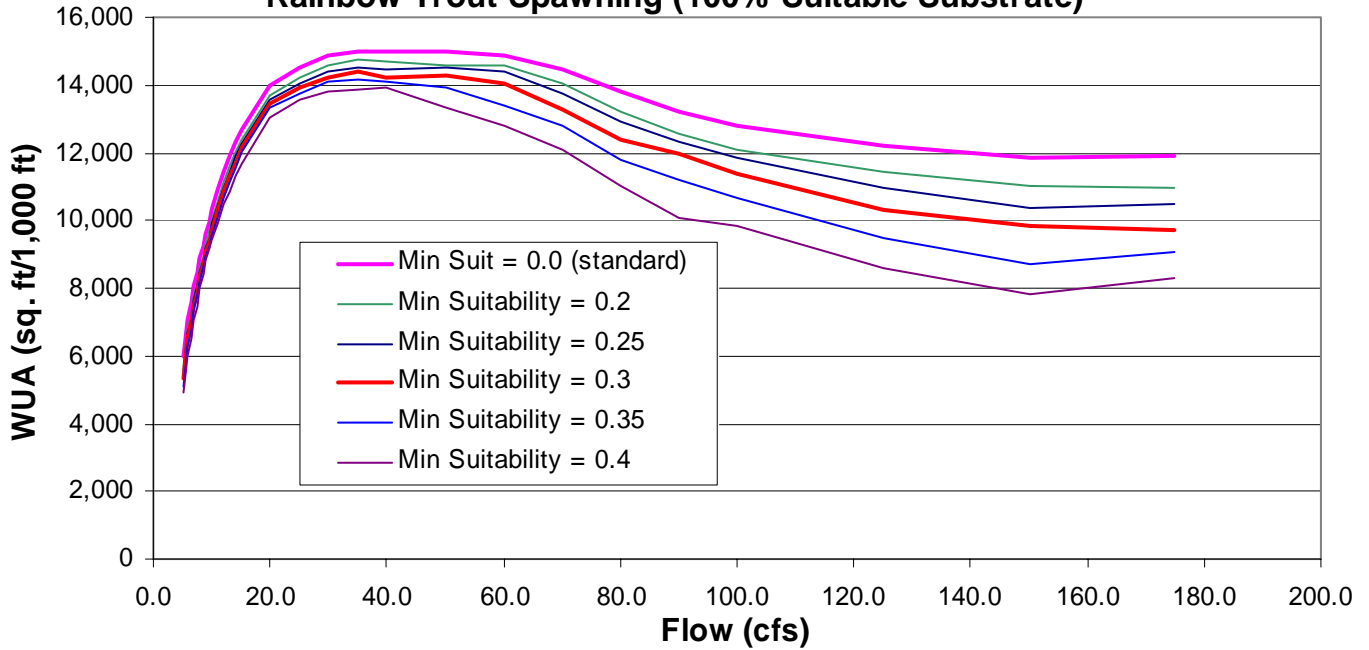


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Mono Creek Spawning

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Mono Creek

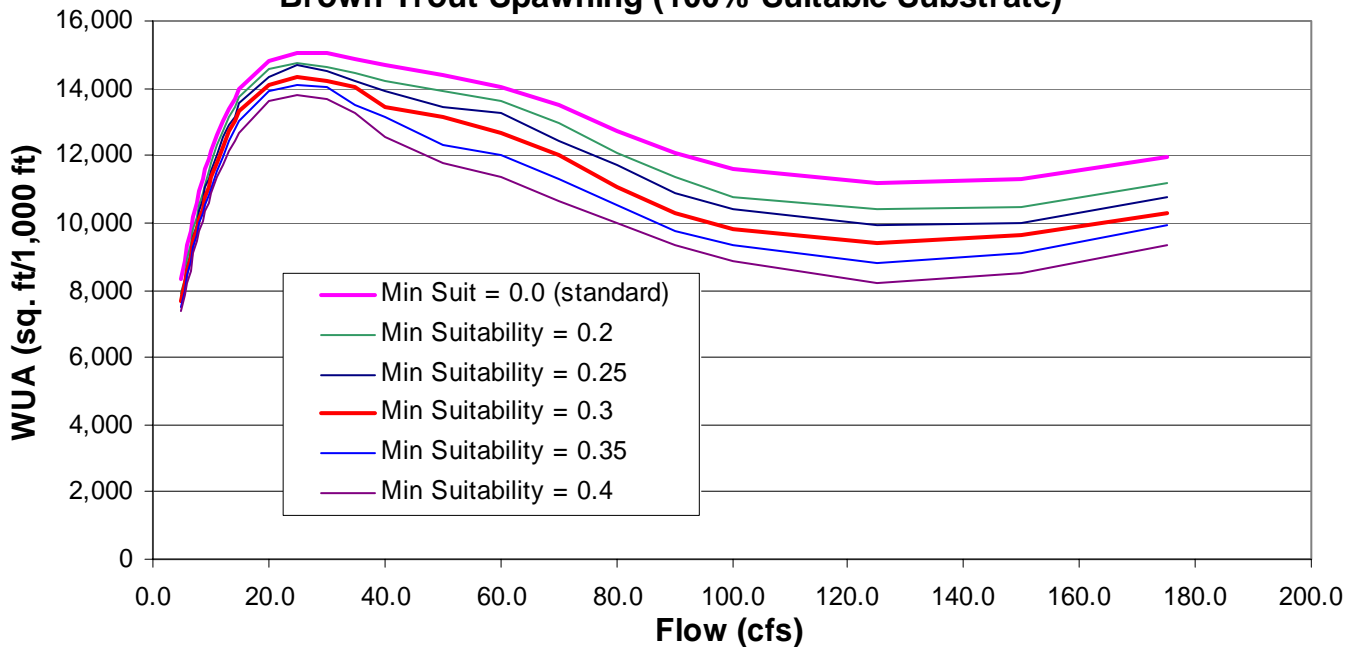
Rainbow Trout Spawning (100% Suitable Substrate)



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WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Mono Creek

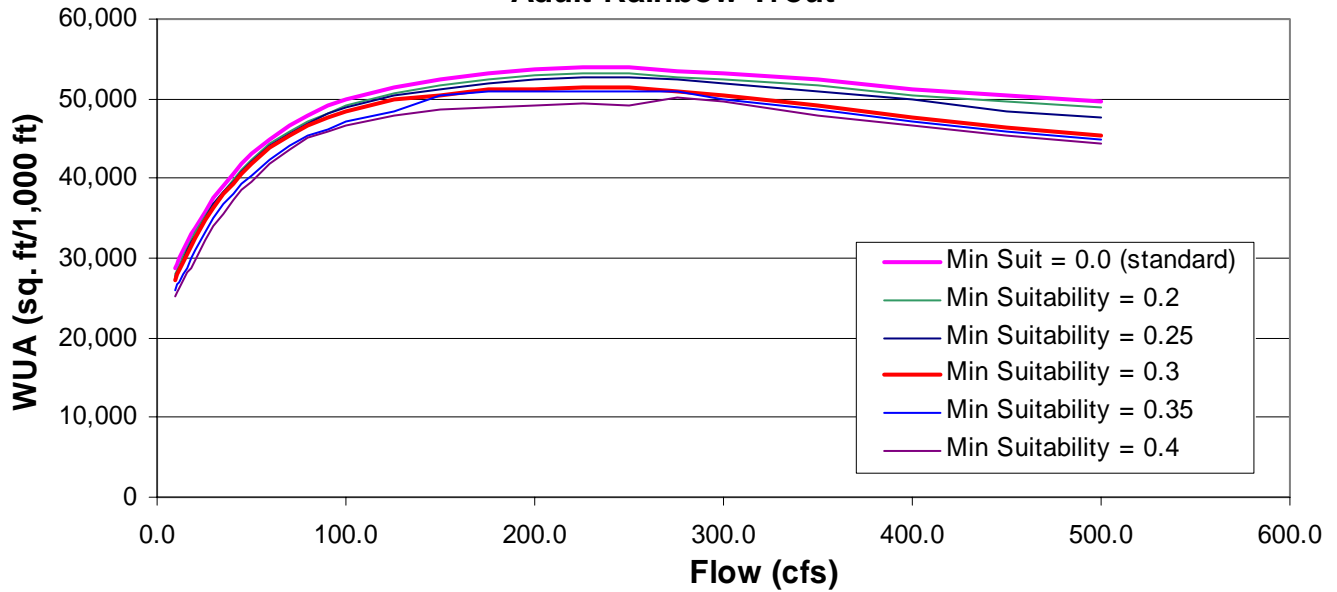
Brown Trout Spawning (100% Suitable Substrate)



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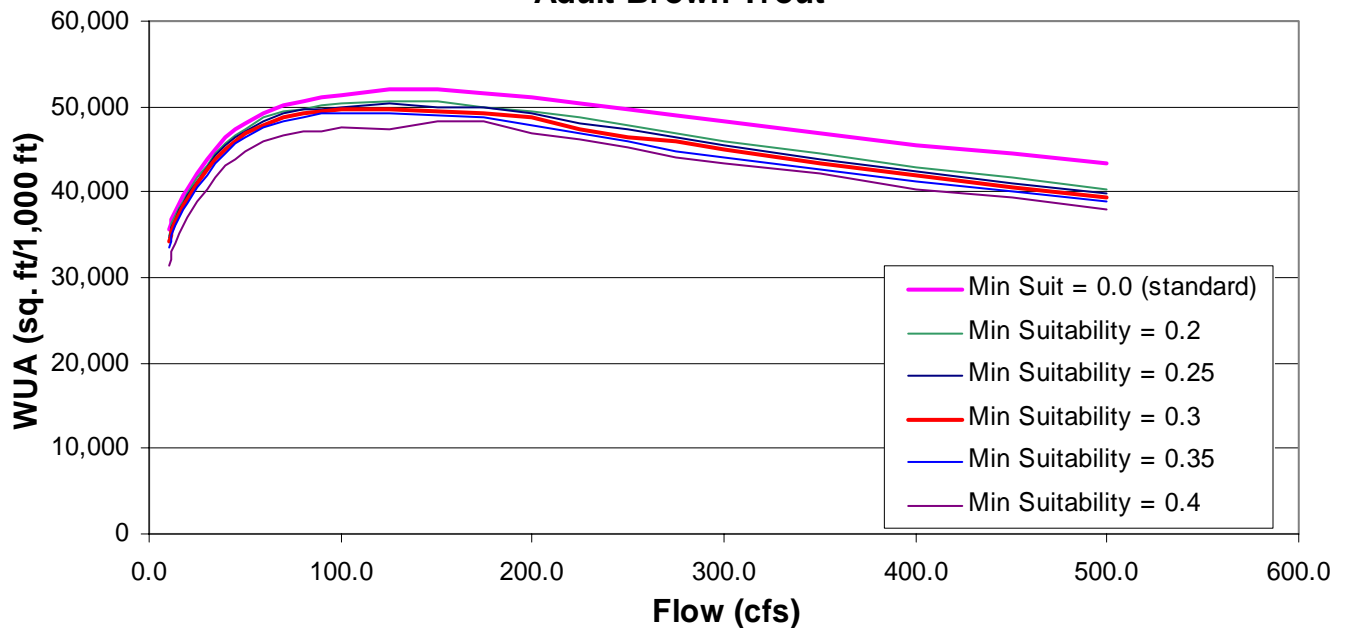
San Joaquin River - Mammoth Reach Adult Trout

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, San Joaquin River - Mammoth Reach Adult Rainbow Trout



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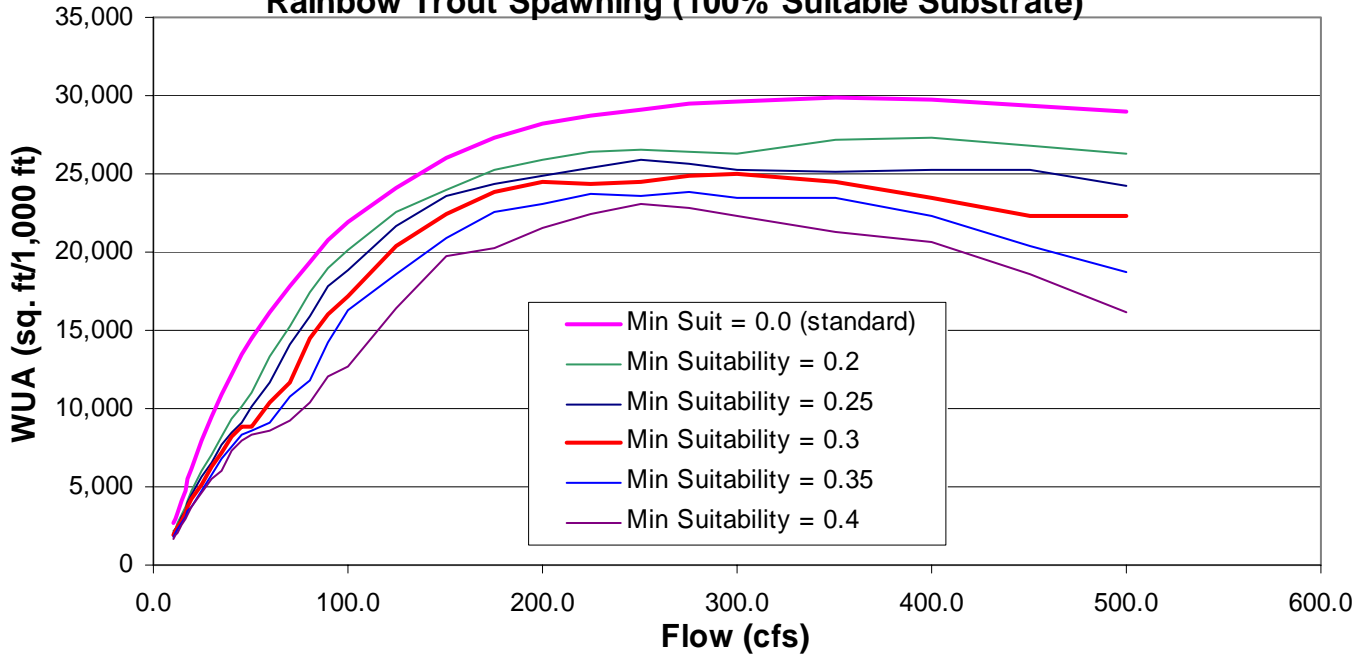
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, San Joaquin River - Mammoth Reach Adult Brown Trout



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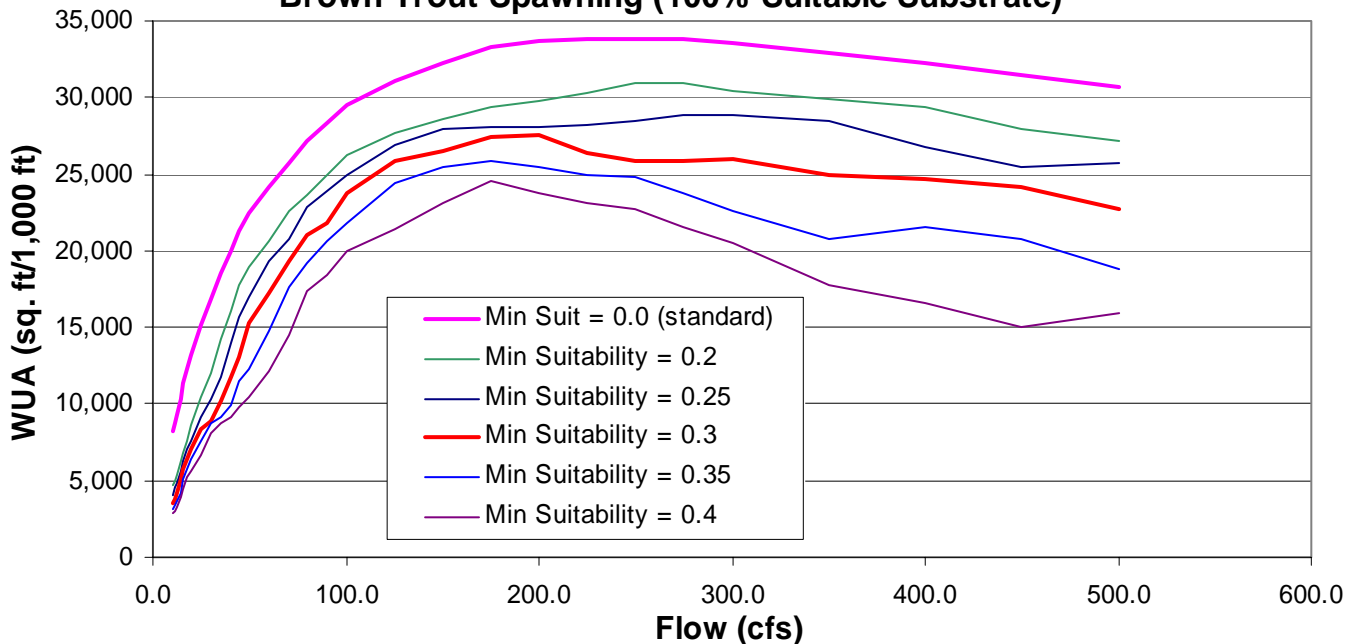
San Joaquin River - Mammoth Reach Spawning

**WUA Function Sensitivity to Selected Minimum Suitability
Thresholds*, San Joaquin River - Mammoth Reach
Rainbow Trout Spawning (100% Suitable Substrate)**



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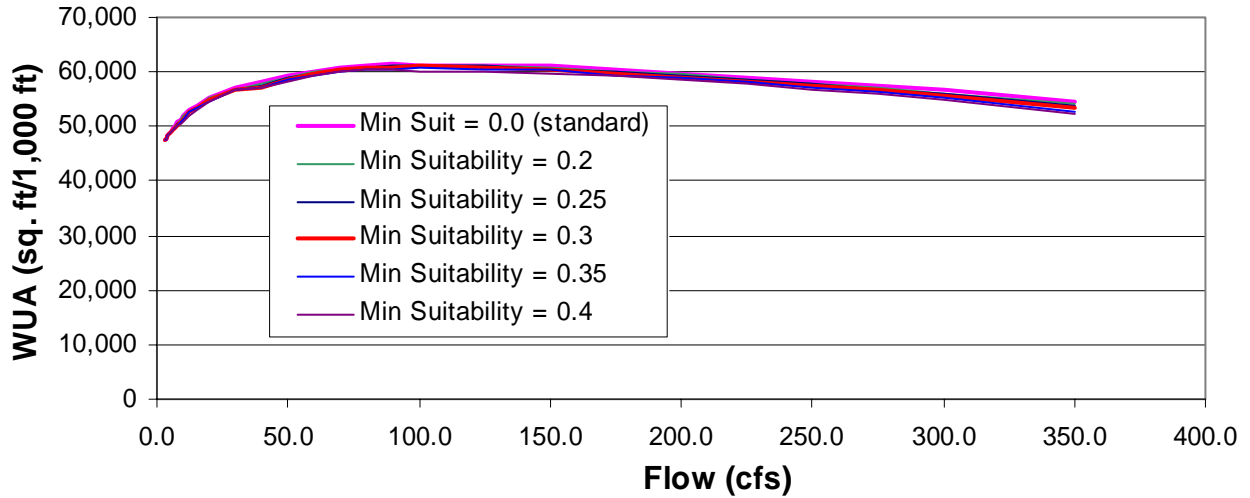
**WUA Function Sensitivity to Selected Minimum Suitability
Thresholds*, San Joaquin River - Mammoth Reach
Brown Trout Spawning (100% Suitable Substrate)**



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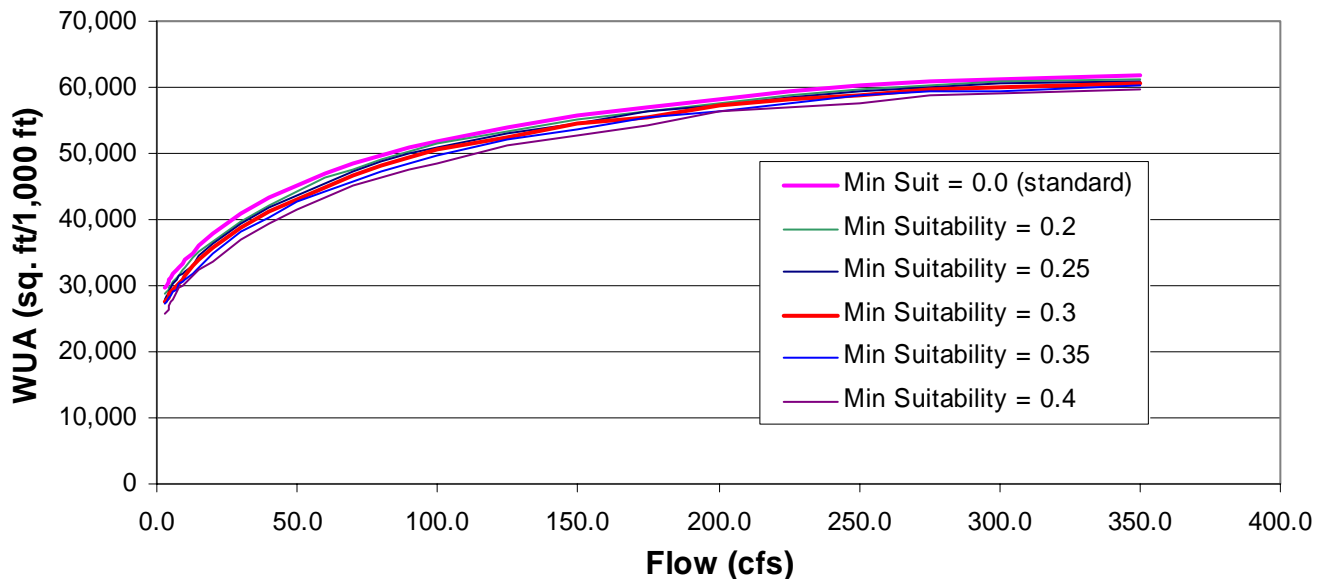
San Joaquin River - Stevenson Reach Non-Trout Species

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, San Joaquin River - Stevenson Creek (non-trout) Juvenile Hardhead



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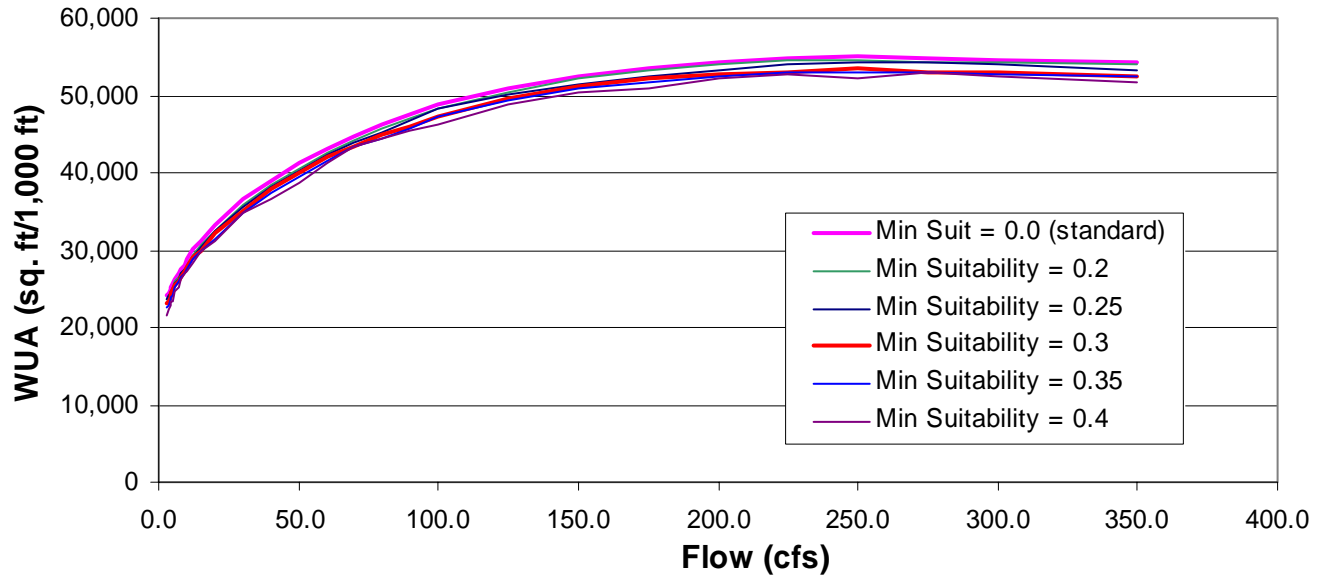
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, San Joaquin River - Stevenson Creek (non-trout) Adult Sacramento Sucker



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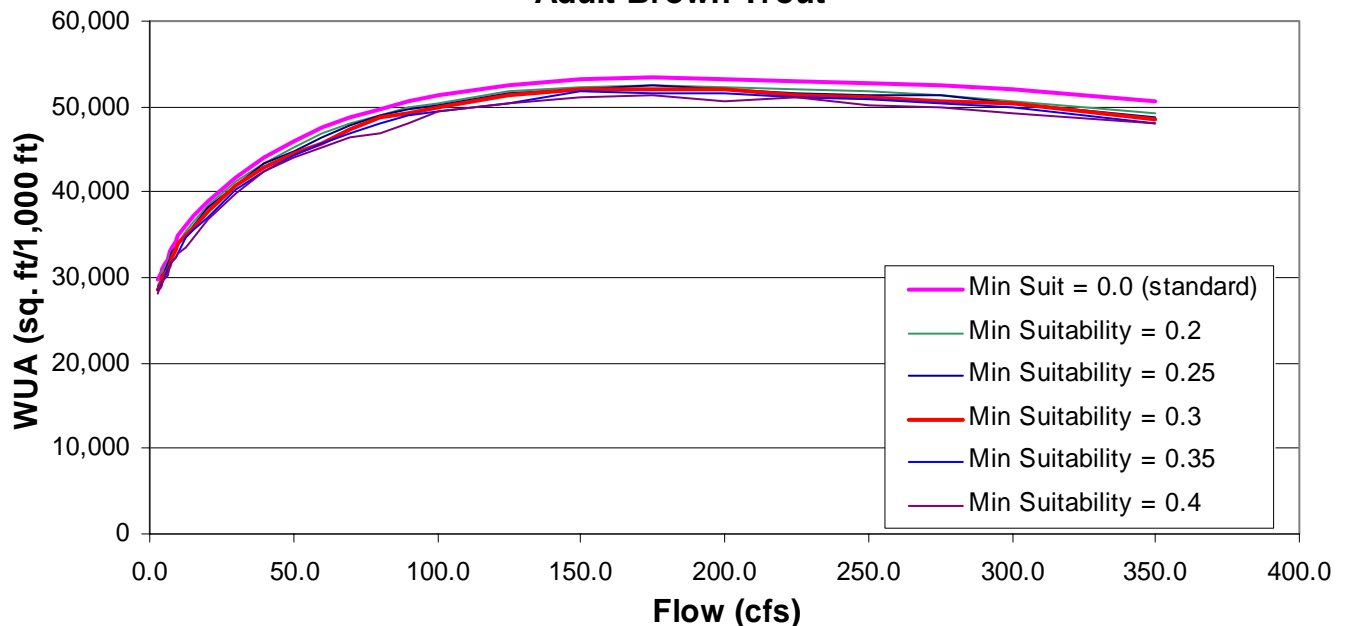
San Joaquin River - Stevenson Reach Adult Trout

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, San Joaquin River - Stevenson Reach Adult Rainbow Trout



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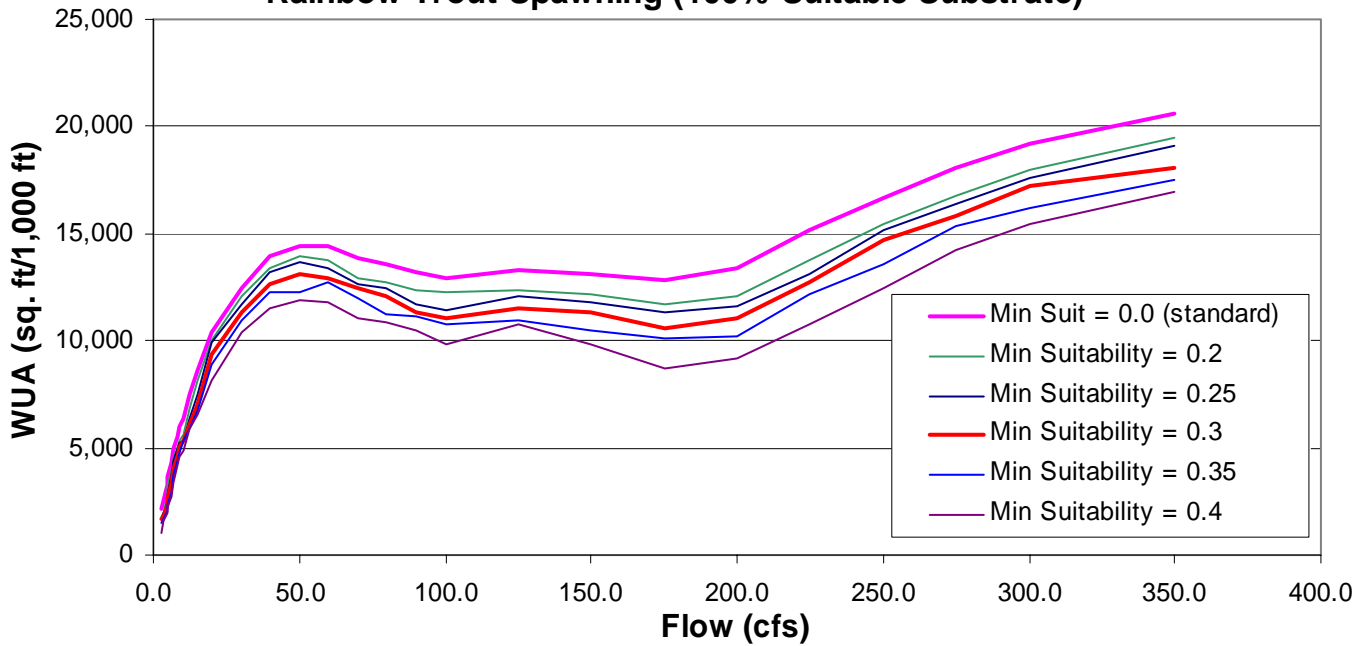
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, San Joaquin River - Stevenson Reach Adult Brown Trout



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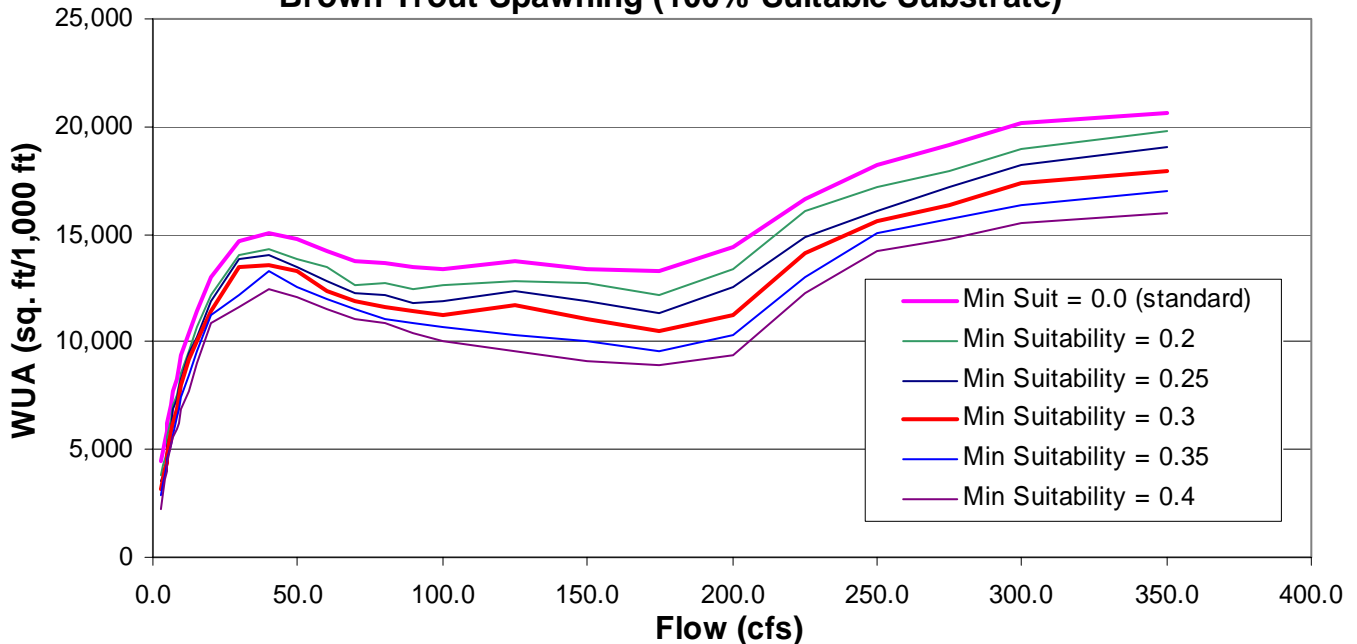
San Joaquin River - Stevenson Reach Trout Spawning

**WUA Function Sensitivity to Selected Minimum Suitability
Thresholds*, San Joaquin River - Stevenson Reach
Rainbow Trout Spawning (100% Suitable Substrate)**



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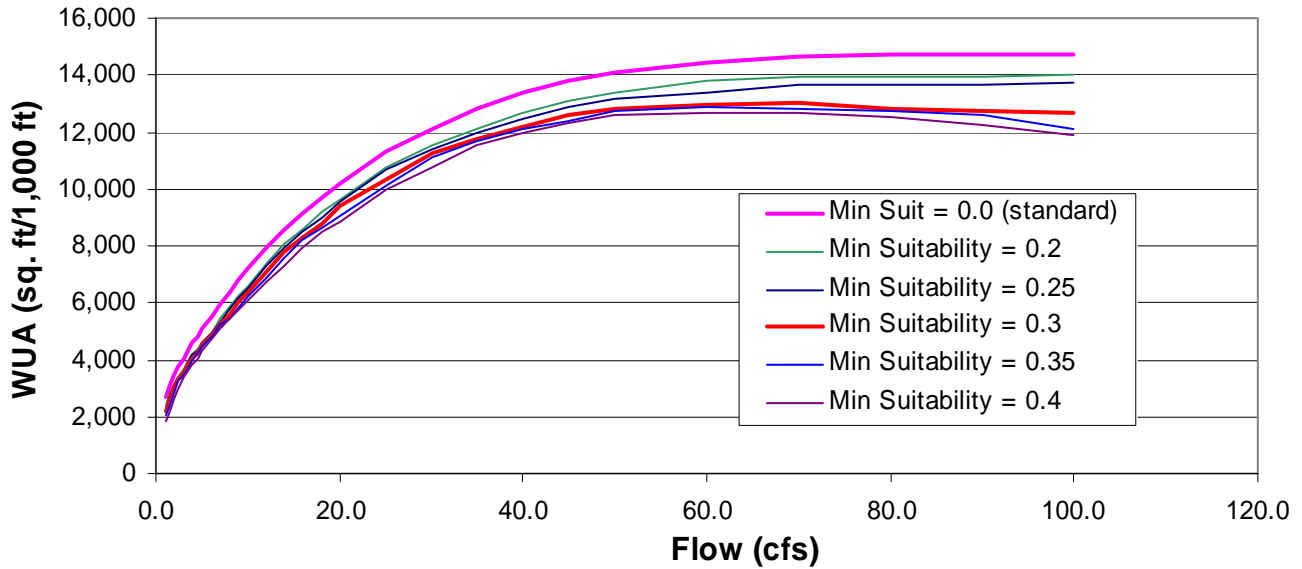
**WUA Function Sensitivity to Selected Minimum Suitability
Thresholds*, San Joaquin River - Stevenson Reach
Brown Trout Spawning (100% Suitable Substrate)**



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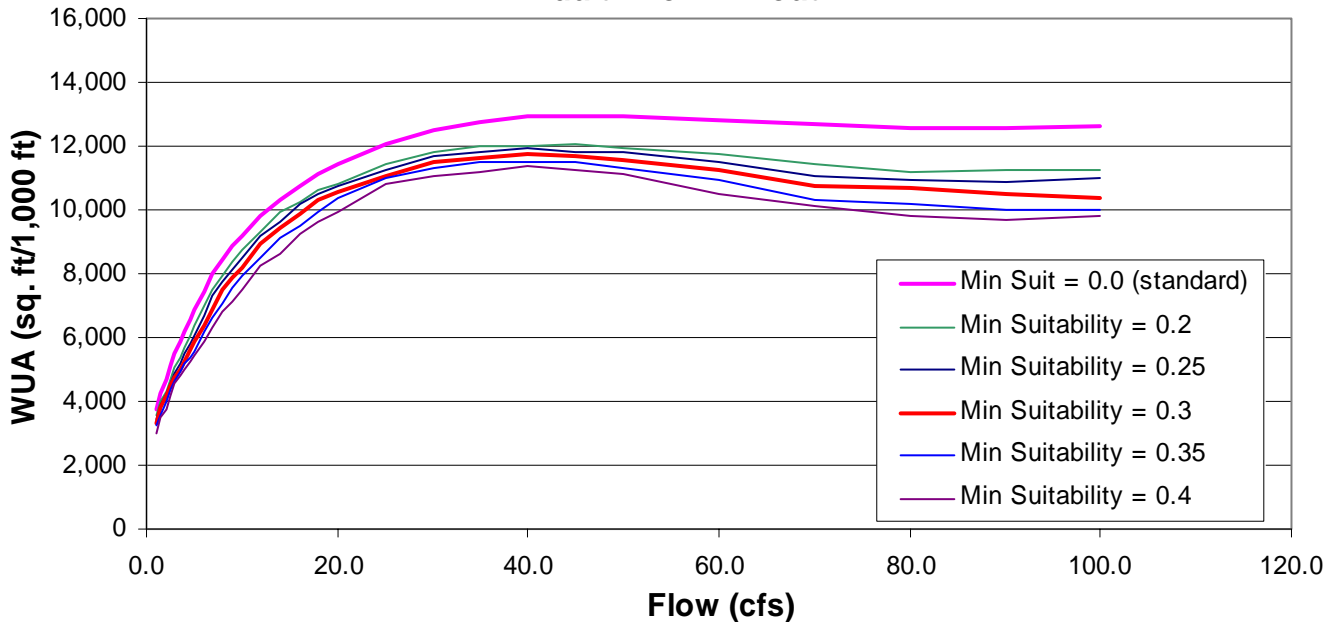
Big Creek - PH2 to Dam 4 Adult Trout

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Big Creek - PH2 to Dam 4 Adult Rainbow Trout



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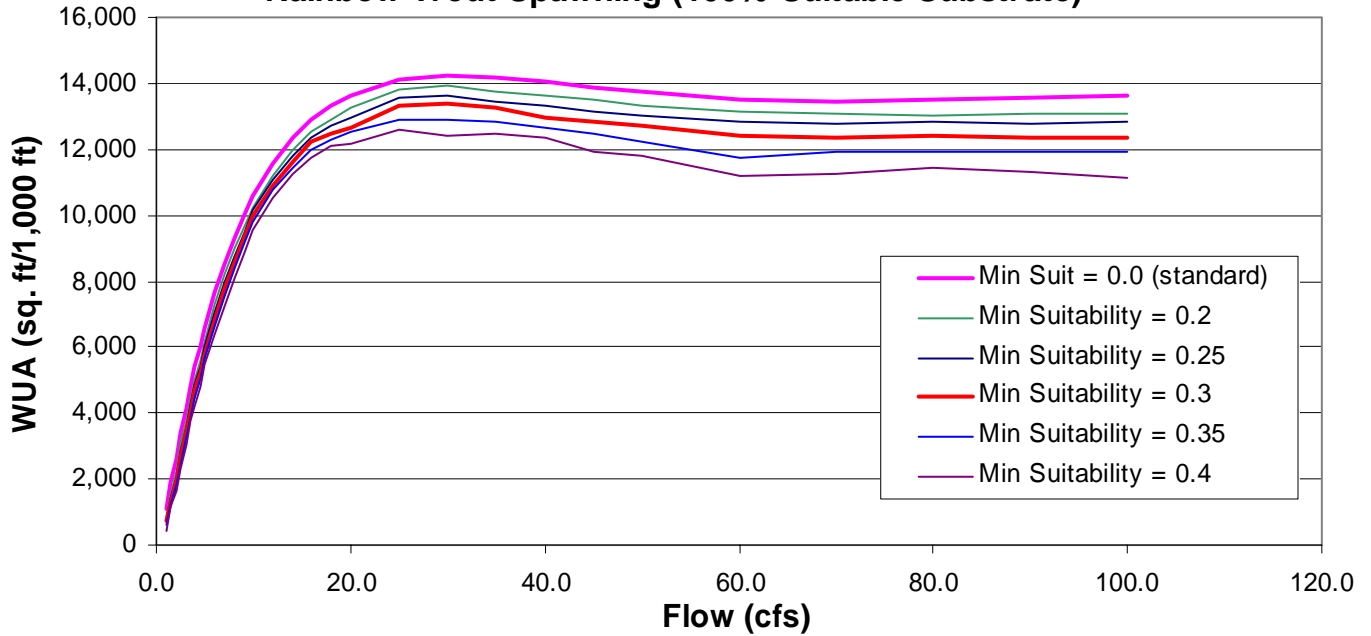
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Big Creek - PH2 to Dam 4 Adult Brown Trout



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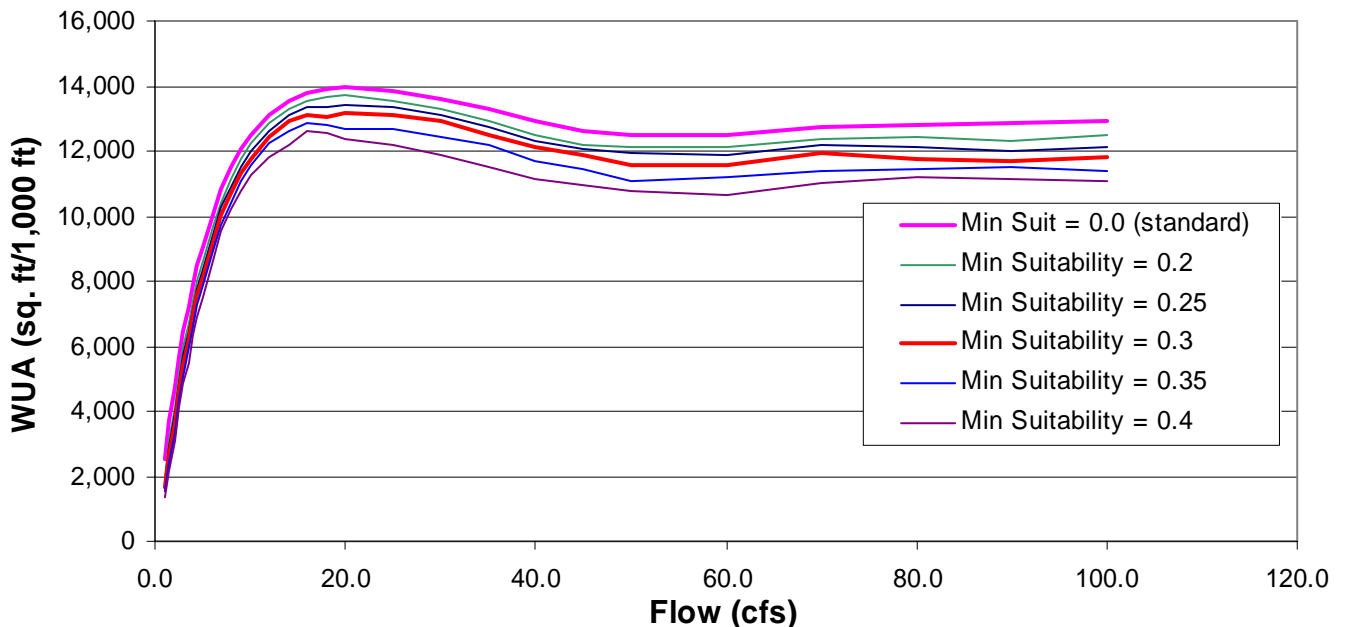
Big Creek - PH2 to Dam 4 Trout Spawning

**WUA Function Sensitivity to Selected Minimum Suitability
Thresholds*, Big Creek - PH2 to Dam 4
Rainbow Trout Spawning (100% Suitable Substrate)**



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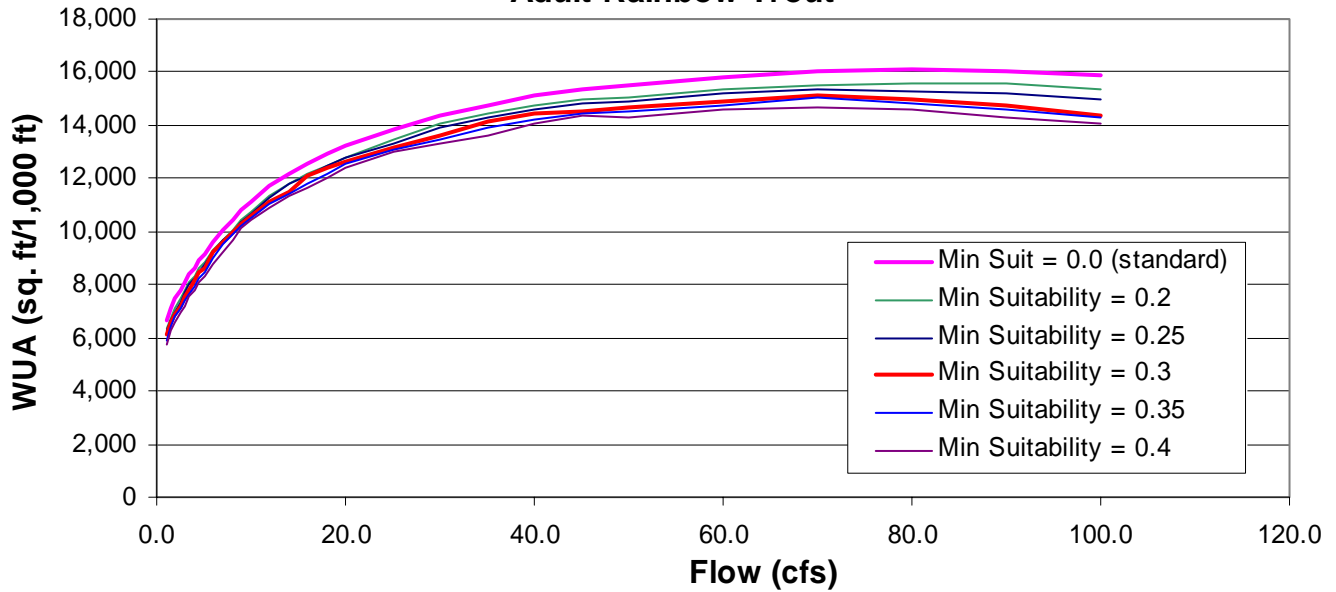
**WUA Function Sensitivity to Selected Minimum Suitability
Thresholds*, Big Creek - PH2 to Dam 4
Brown Trout Spawning (100% Suitable Substrate)**



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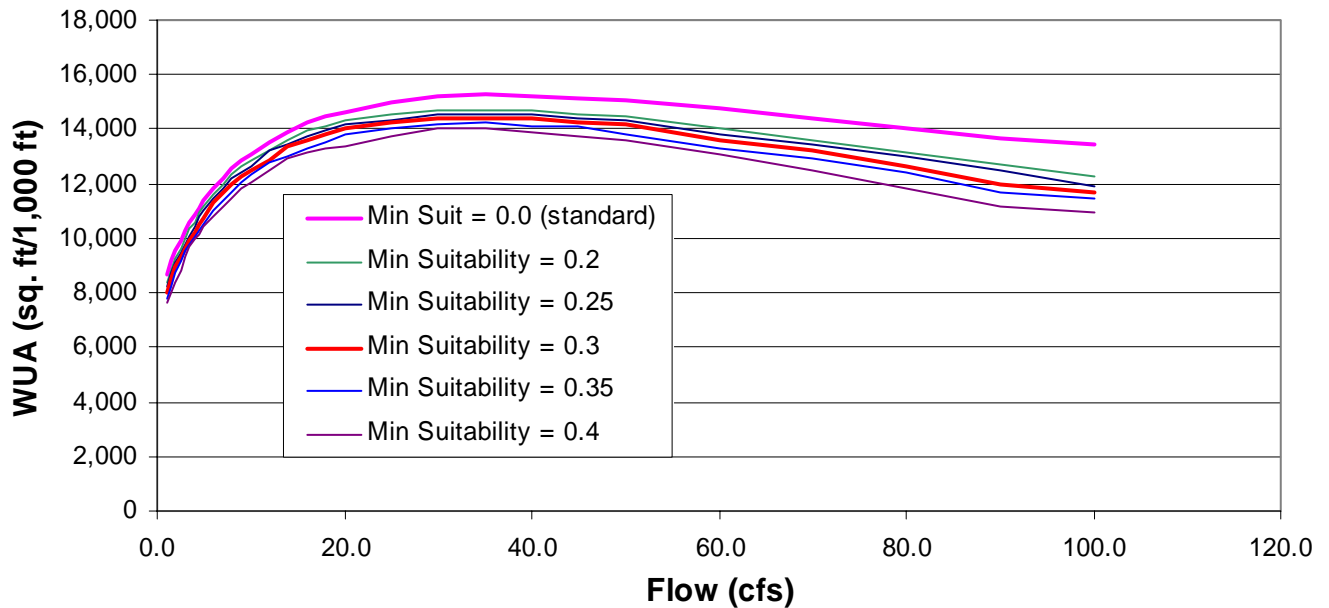
Big Creek - PH8 to Dam 5 Adult Trout

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Big Creek - PH8 to Dam 5 Adult Rainbow Trout



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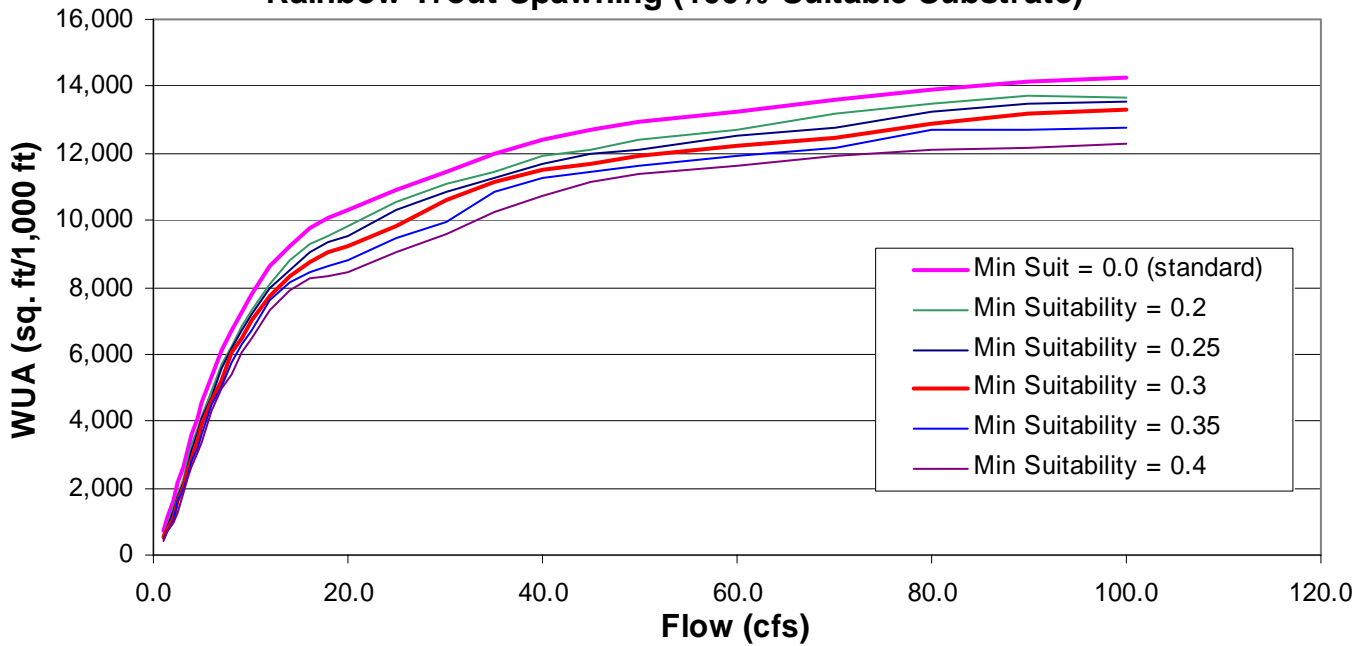
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Big Creek - PH8 to Dam 5 Adult Brown Trout



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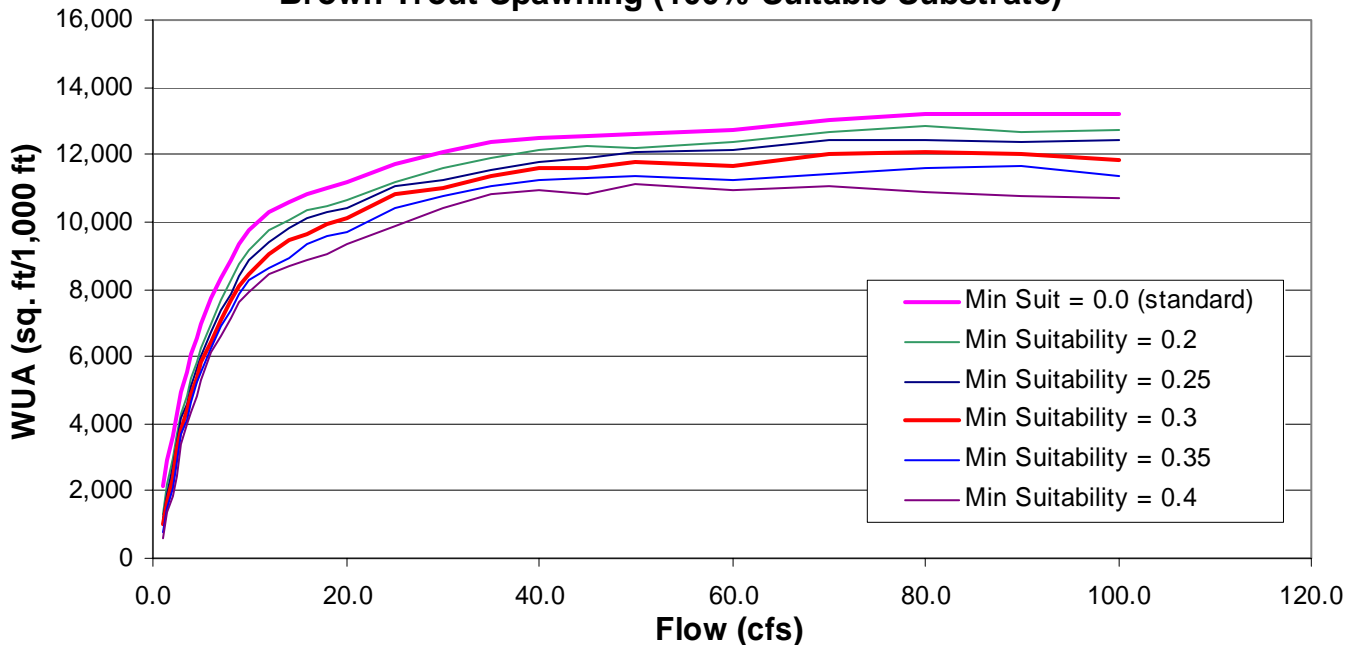
Big Creek - PH8 to Dam 5 Trout Spawning

**WUA Function Sensitivity to Selected Minimum Suitability
Thresholds*, Big Creek - PH8 to Dam 5
Rainbow Trout Spawning (100% Suitable Substrate)**



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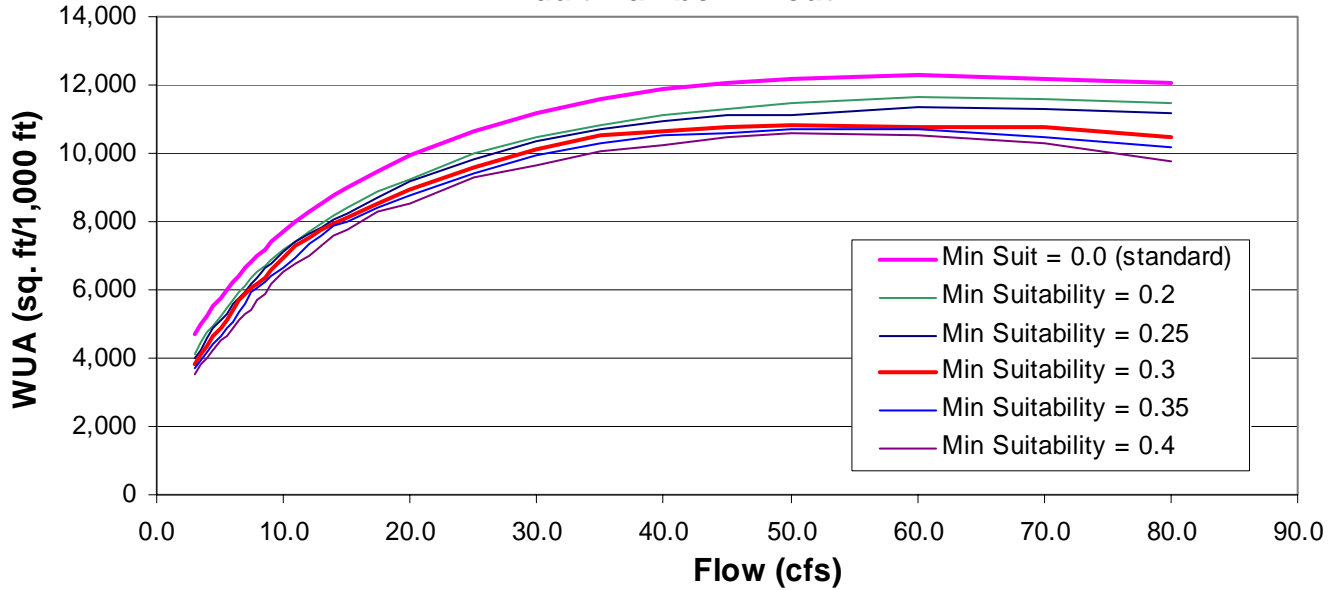
**WUA Function Sensitivity to Selected Minimum Suitability
Thresholds*, Big Creek - PH8 to Dam 5
Brown Trout Spawning (100% Suitable Substrate)**



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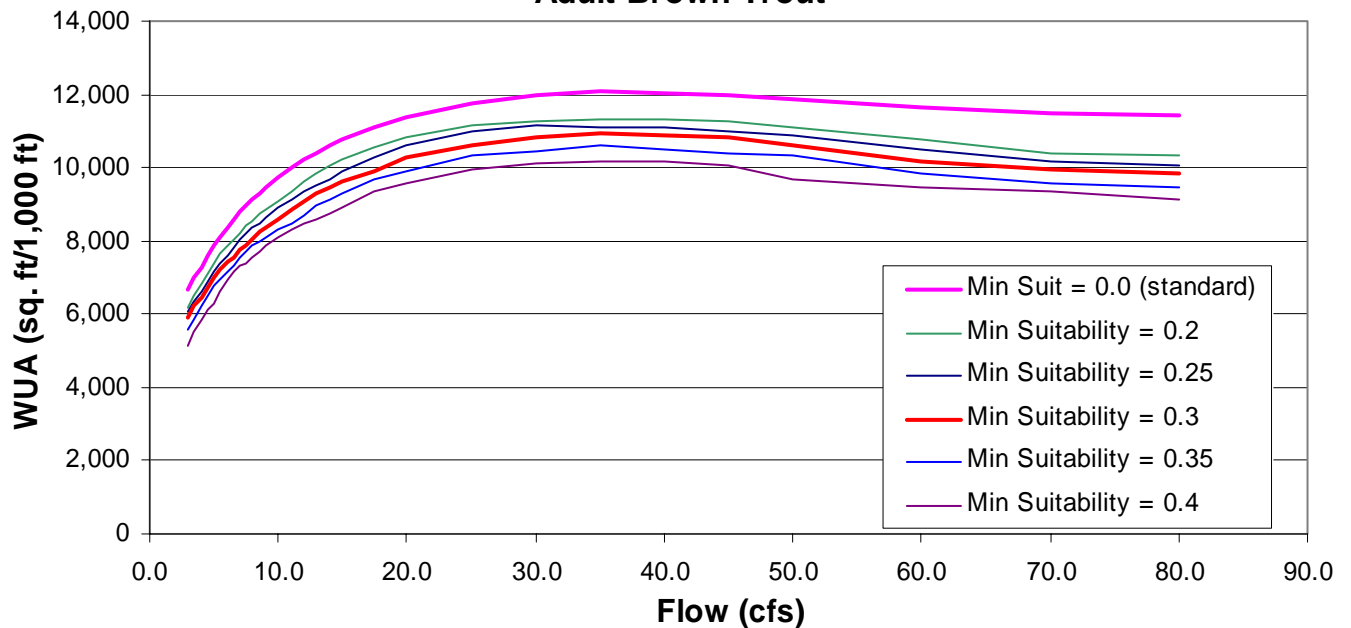
North Fork Stevenson Creek Adult Trout

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, North Fork Stevenson Creek Adult Rainbow Trout



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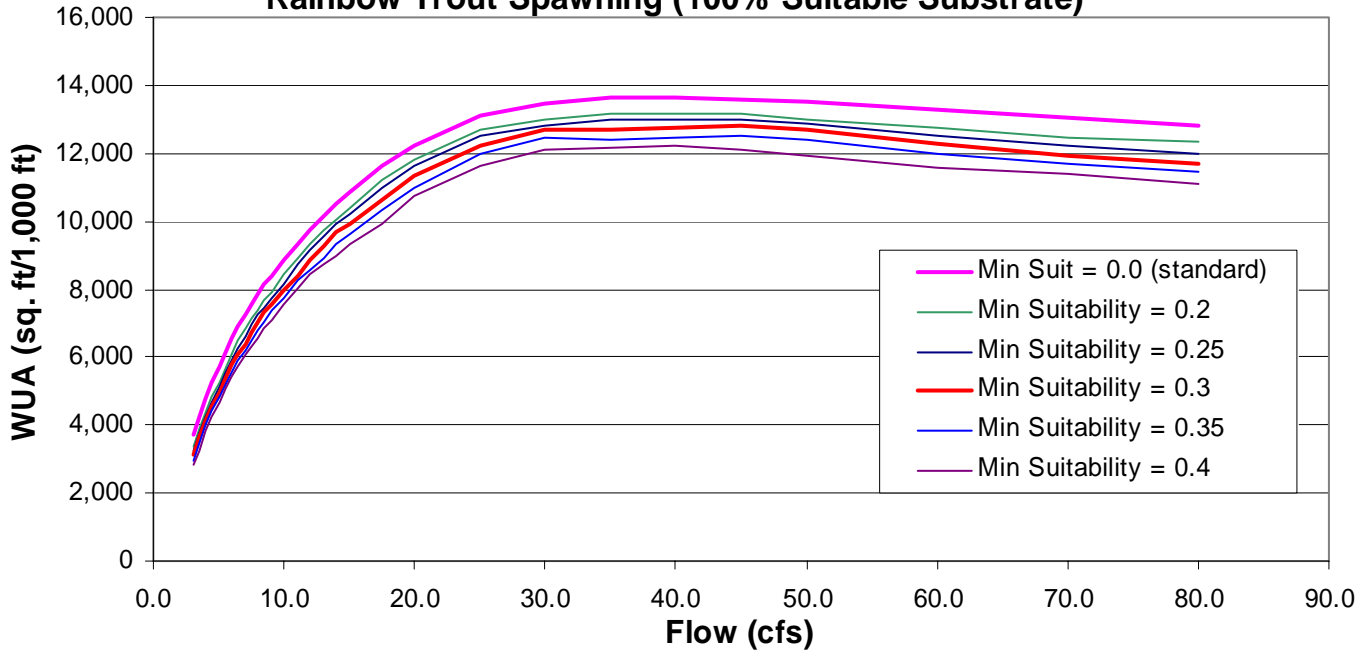
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, North Fork Stevenson Creek Adult Brown Trout



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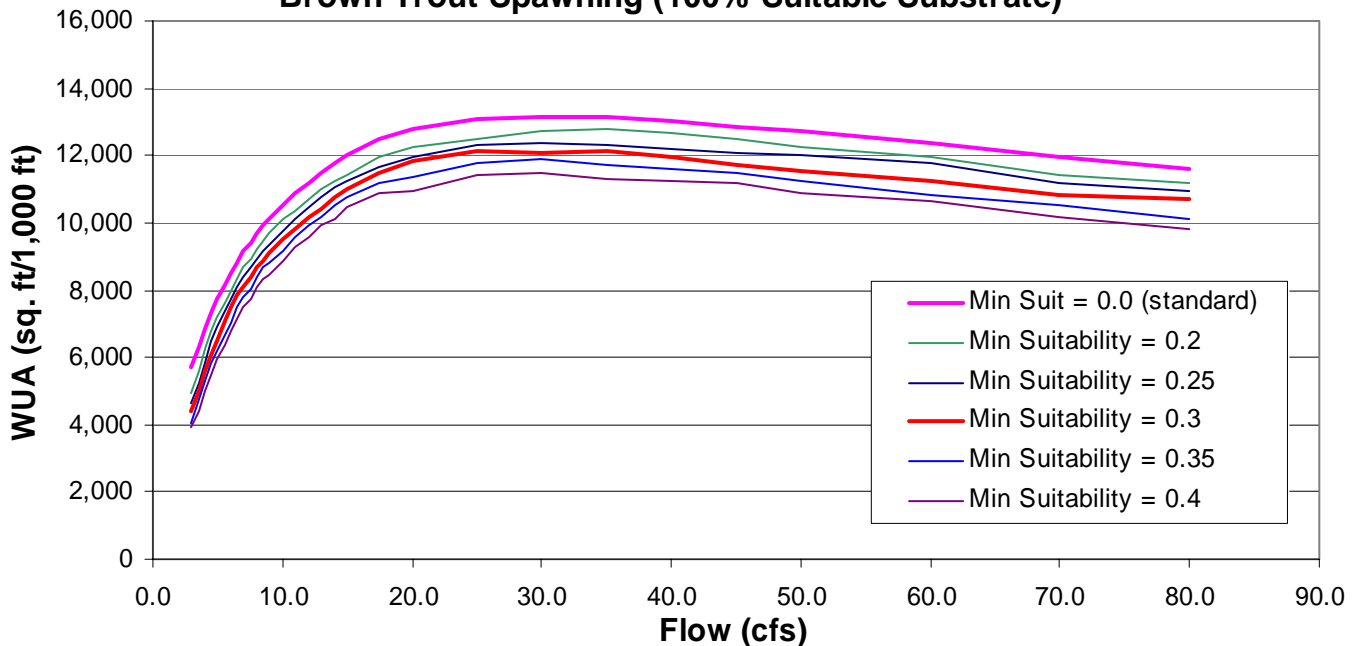
North Fork Stevenson Creek Trout Spawning

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, North Fork Stevenson Creek Rainbow Trout Spawning (100% Suitable Substrate)



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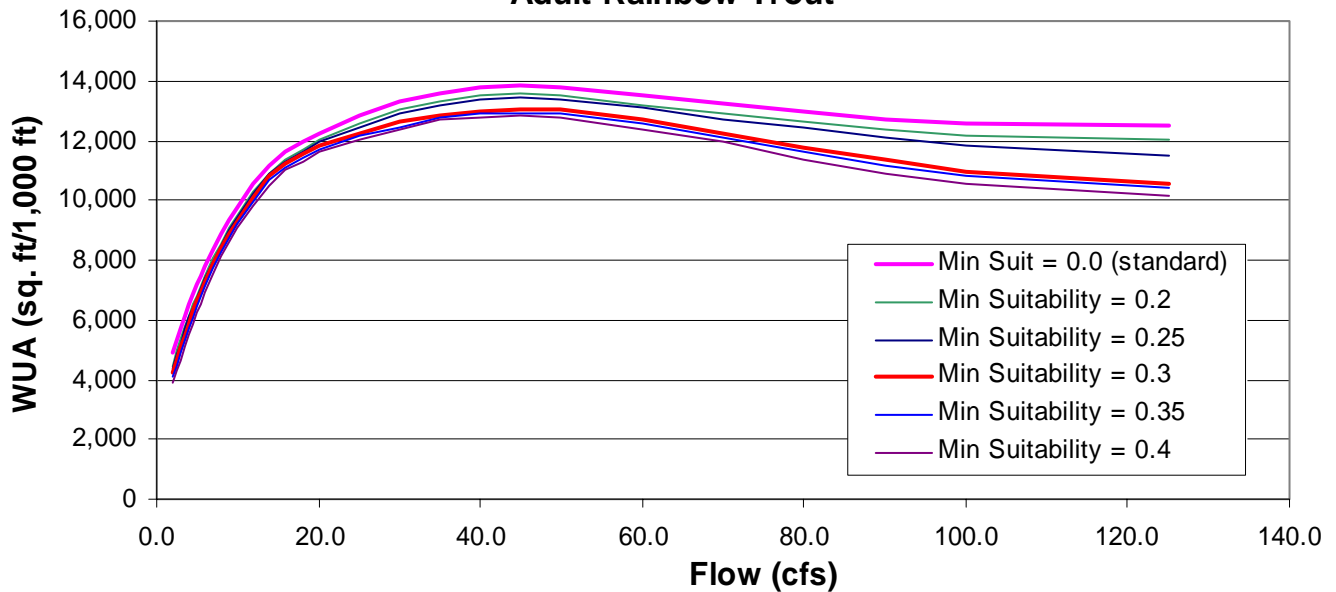
WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, North Fork Stevenson Creek Brown Trout Spawning (100% Suitable Substrate)



* WUA calculated based on inclusion of cells where the composite suitability equals or exceeds the indicated minimum suitability threshold. Minimum suitability threshold is indicated in the legend.

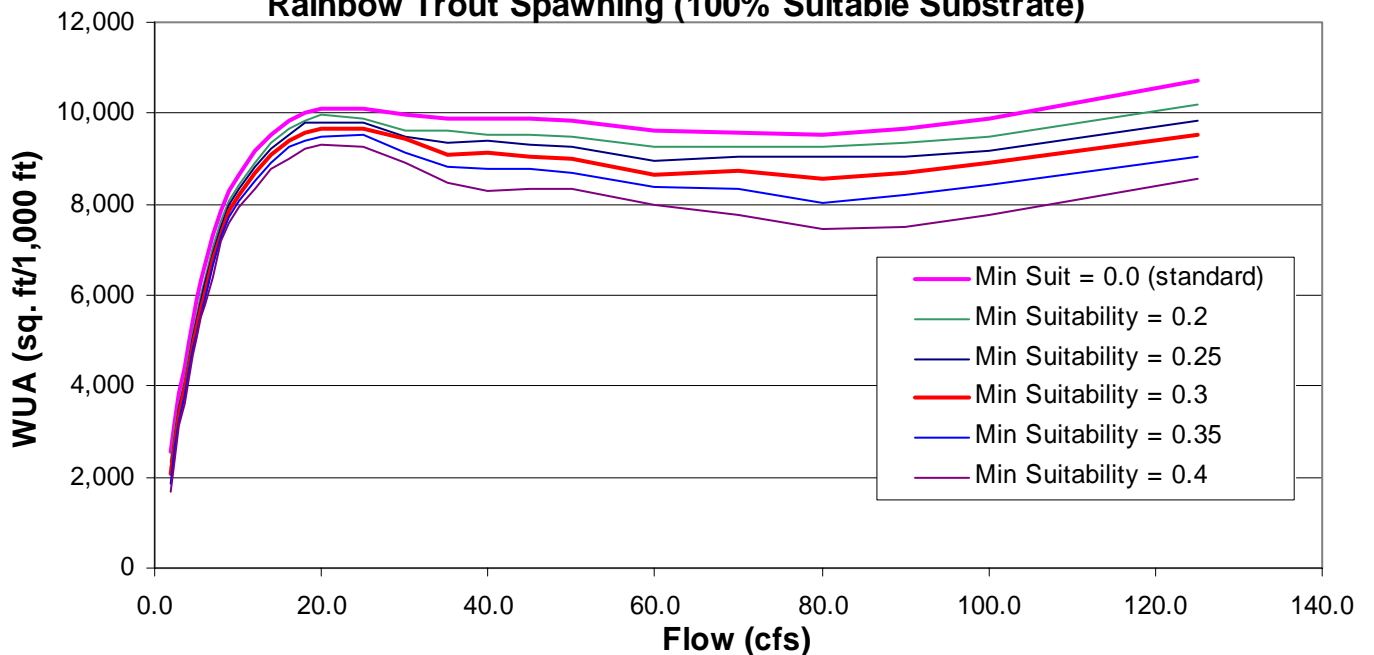
Stevenson Creek Rainbow Trout

WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Stevenson Creek Adult Rainbow Trout



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WUA Function Sensitivity to Selected Minimum Suitability Thresholds*, Stevenson Creek Rainbow Trout Spawning (100% Suitable Substrate)



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