Appendix F

Spatial Deptions of Additional Metals

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Of the metals analyzed in the suspended solids samples for this study, only arsenic was highlighted in the report, because it is the only metal that is a human health contaminant of concern for the Lower Duwamish Waterway (LDW). This appendix provides figures to spatially depict the results for the additional metals for both the baffle sediment trap samples and the filtered solids samples.

When available, suspended sediment concentrations are compared to the sediment cleanup goals established in the LDW Record of Decision (EPA 2014). These include the point-based benthic cleanup goals for LDW contaminants of concern (Table F-1). Arsenic is the only metal with a site-wide human health cleanup goal, and so this is not included in this appendix. Comparing chemical concentrations in suspended solids to these cleanup goals is meant only as a reference point. These cleanup goals apply to bedded sediment in the LDW at various spatial scales. Suspended solids do not match the potential exposure duration or pathways of bedded sediment. Sediment concentrations in the areas where the suspended solids settle will be impacted by a variety of physical processes, including mixing with current bed sediment and varied suspension times. Cleanup goals are included in the figure if suspended solids concentrations were higher than the cleanup goal.

	Cadmium	Chromium	Copper	Lead	Nickel	Silver	Vanadium	Zinc	Mercury
Point-based Benthic Cleanup Goal	5.1	260	390	450	NA	6.1	NA	410	0.41

Baffle Sediment Traps

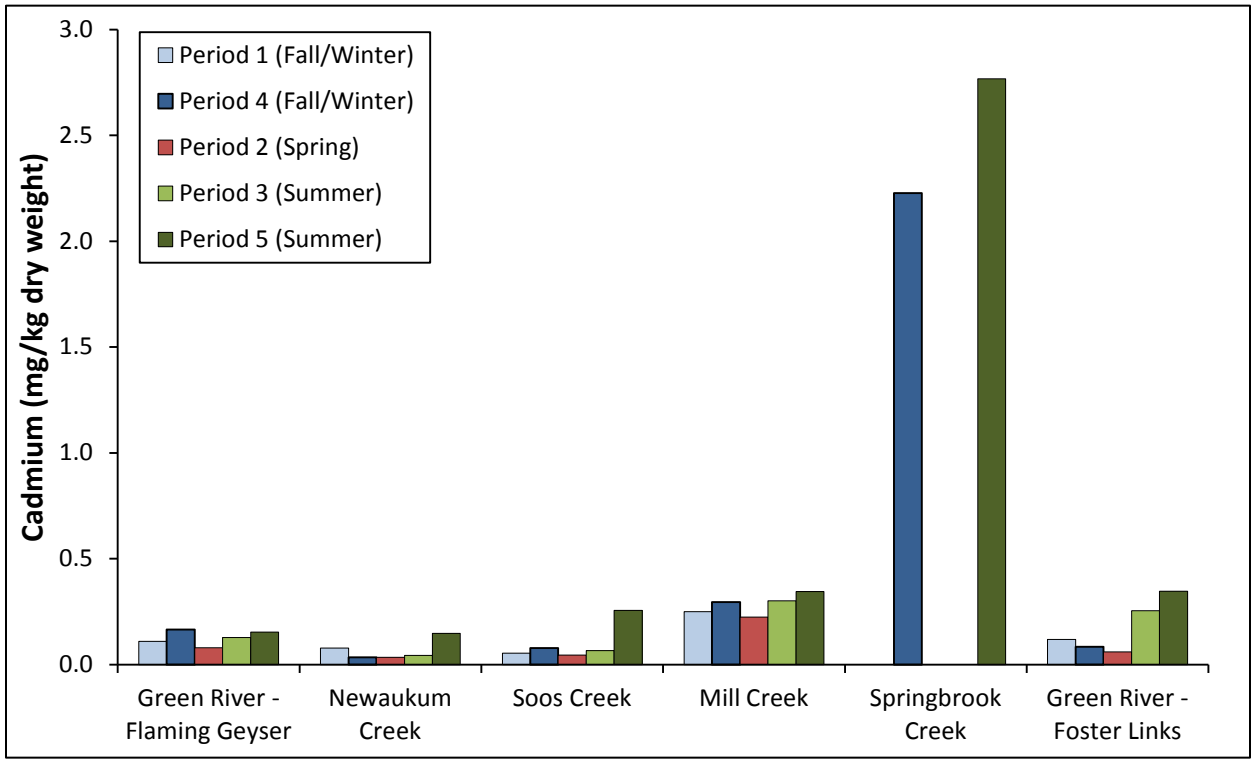

Figure F-1. Cadmium Concentrations in Baffle Sediment Trap Samples by Site and Period.

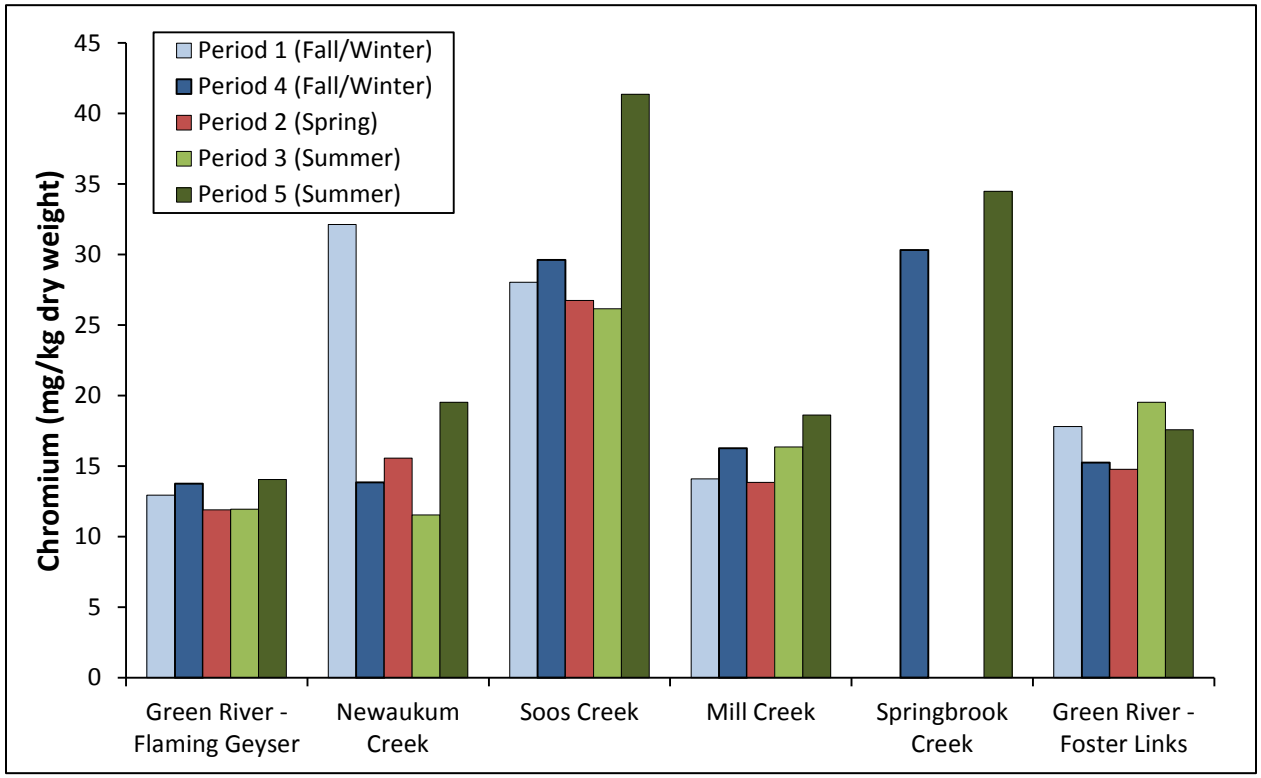

Figure F-2. Chromium Concentrations in Baffle Sediment Trap Samples by Site and Period.

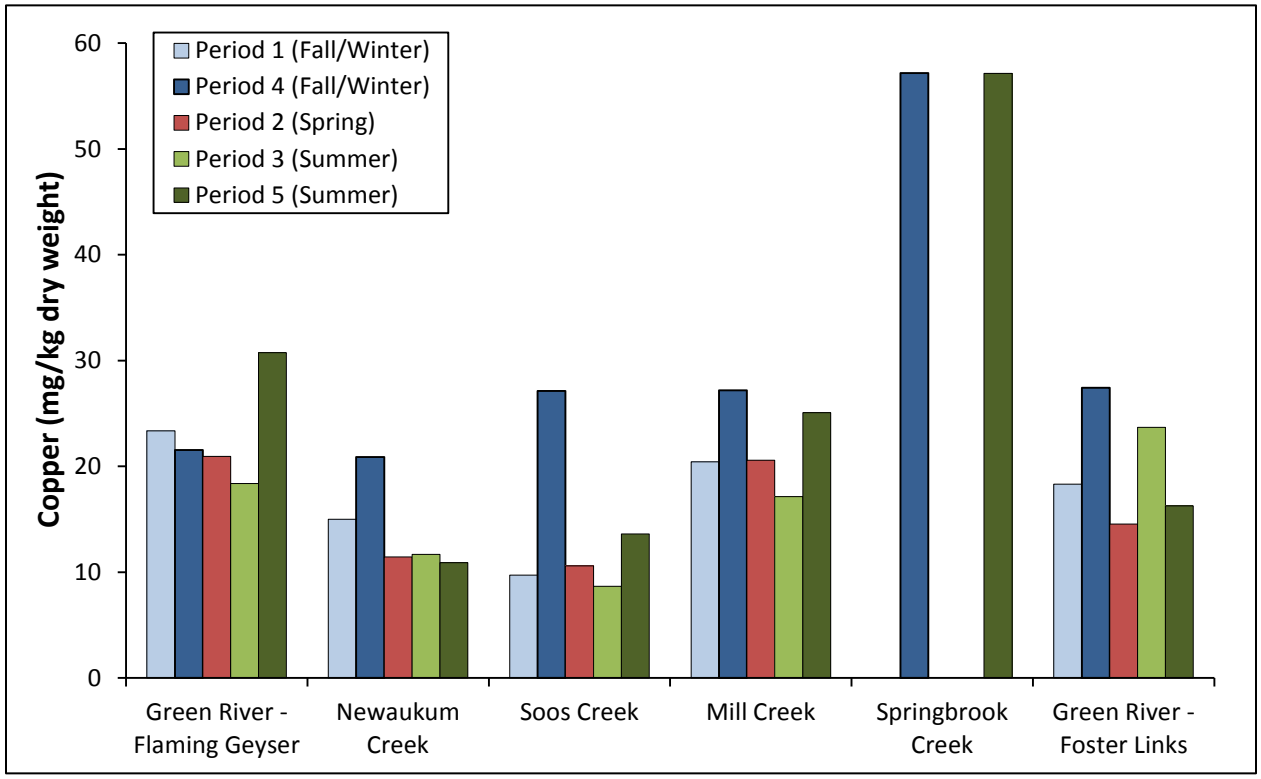

Figure F-3. Copper Concentrations in Baffle Sediment Trap Samples by Site and Period.

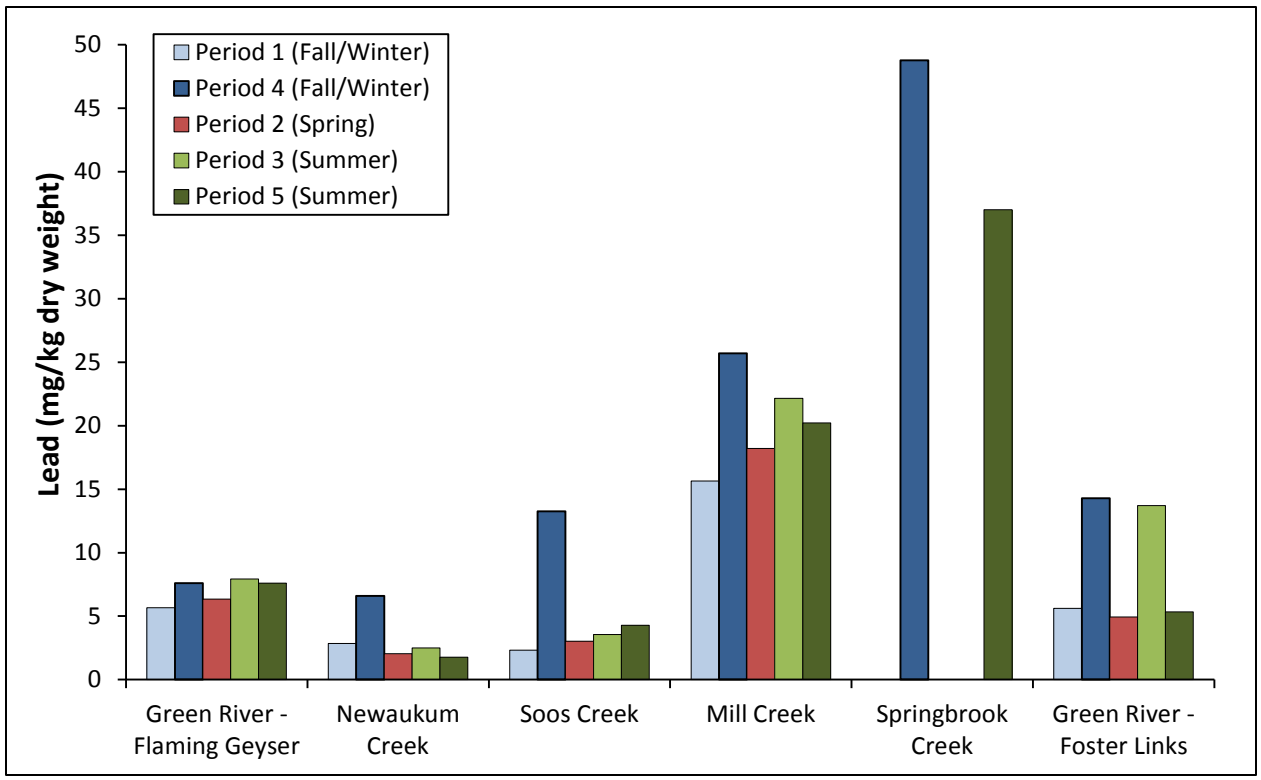

Figure F-4. Lead Concentrations in Baffle Sediment Trap Samples by Site and Period.

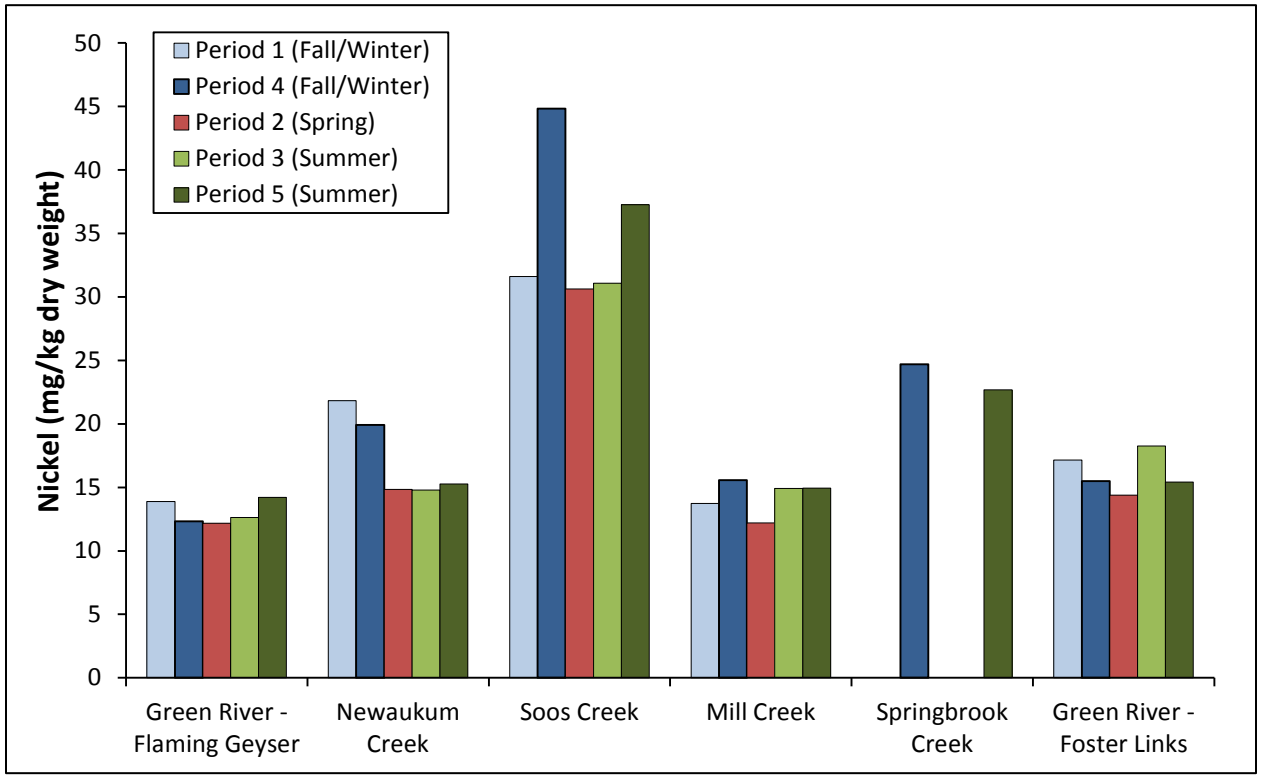

Figure F-5. Nickel Concentrations in Baffle Sediment Trap Samples by Site and Period.

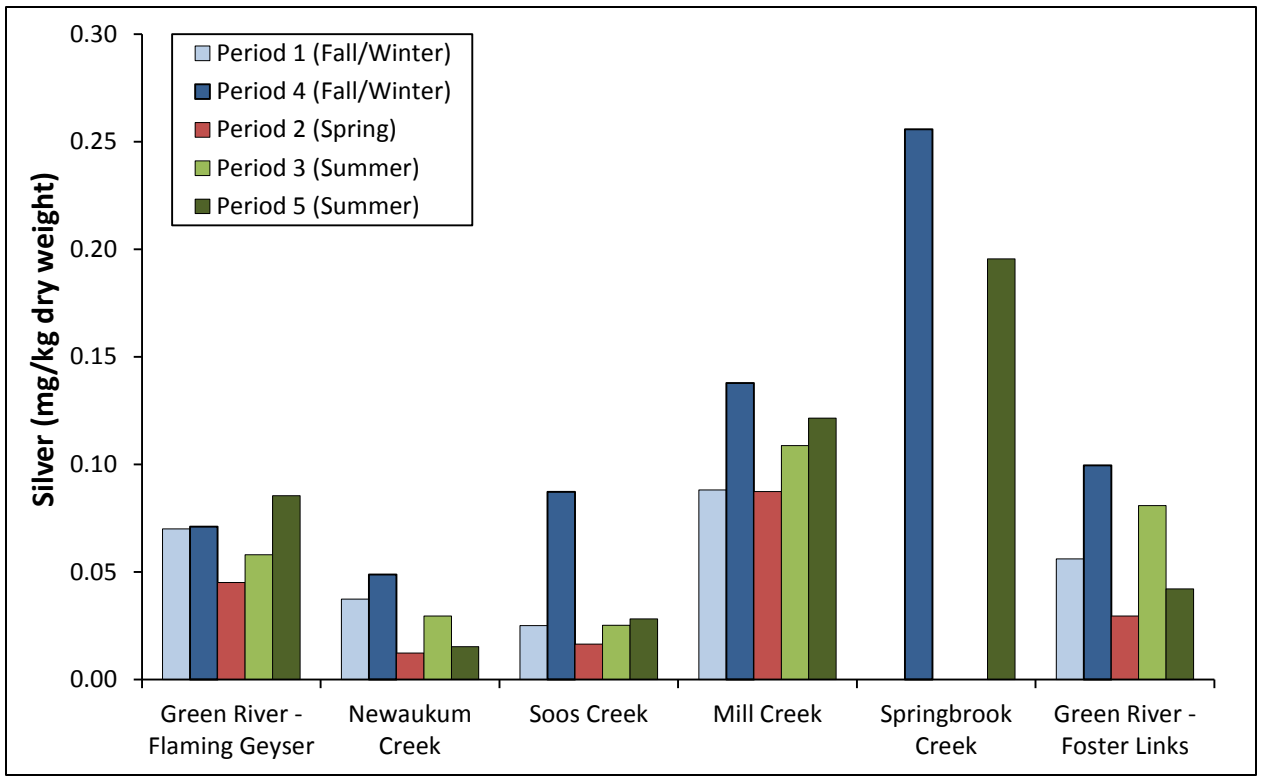

Figure F-6. Silver Concentrations in Baffle Sediment Trap Samples by Site and Period.

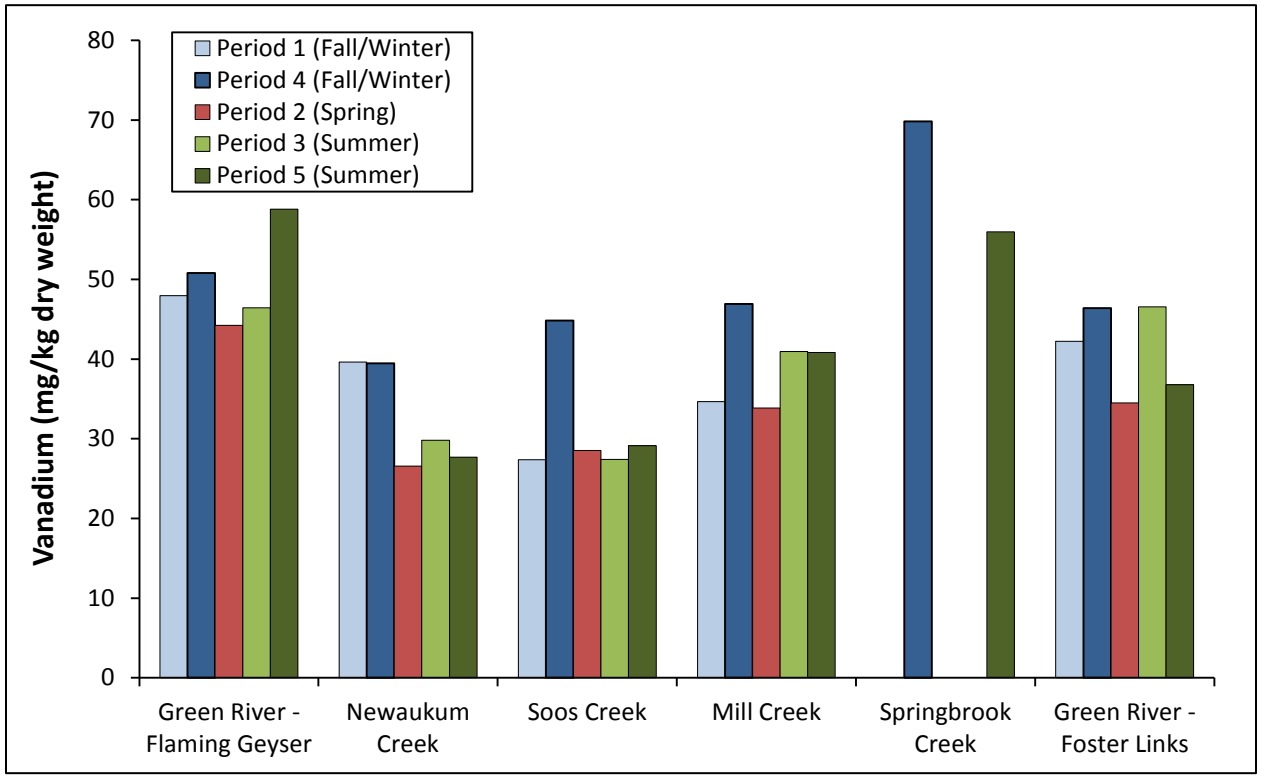

Figure F-7. Vanadium Concentrations in Baffle Sediment Trap Samples by Site and Period.

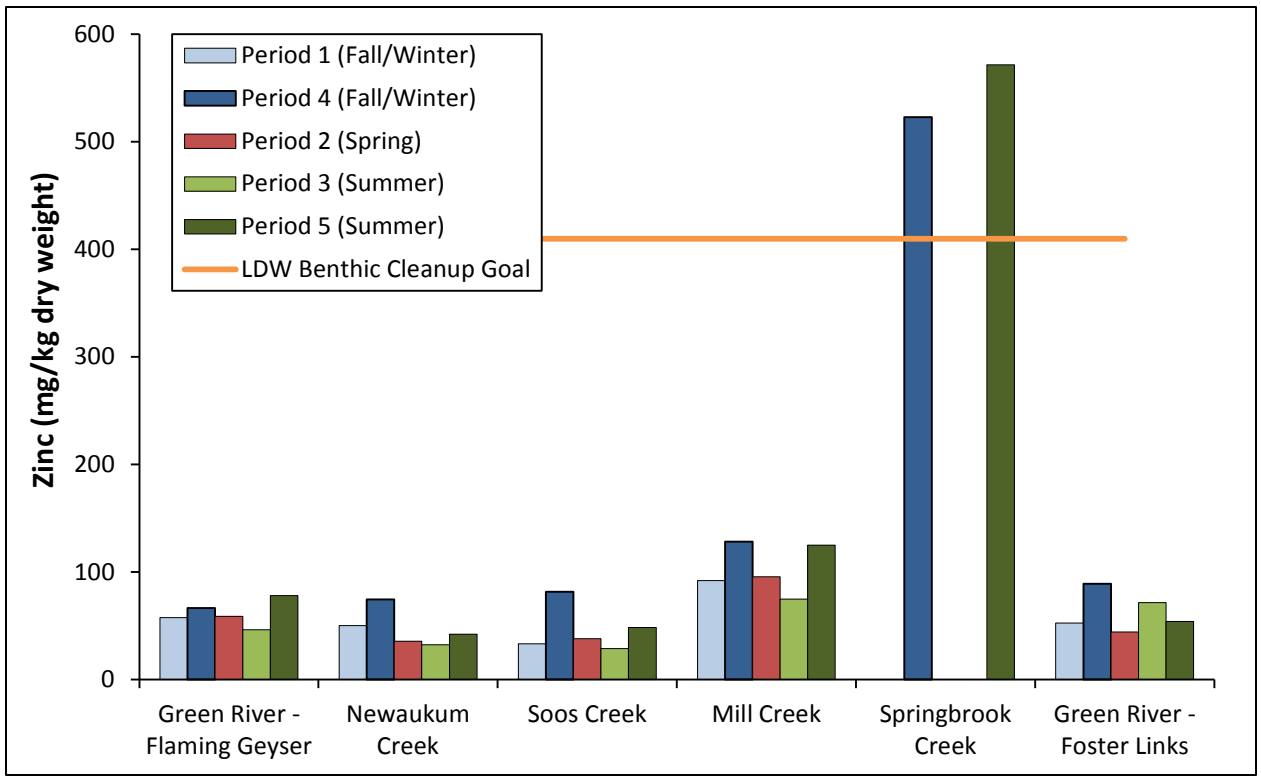

Figure F-8. Zinc Concentrations in Baffle Sediment Trap Samples by Site and Period Compared to the LDW Benthic Cleanup Goal.

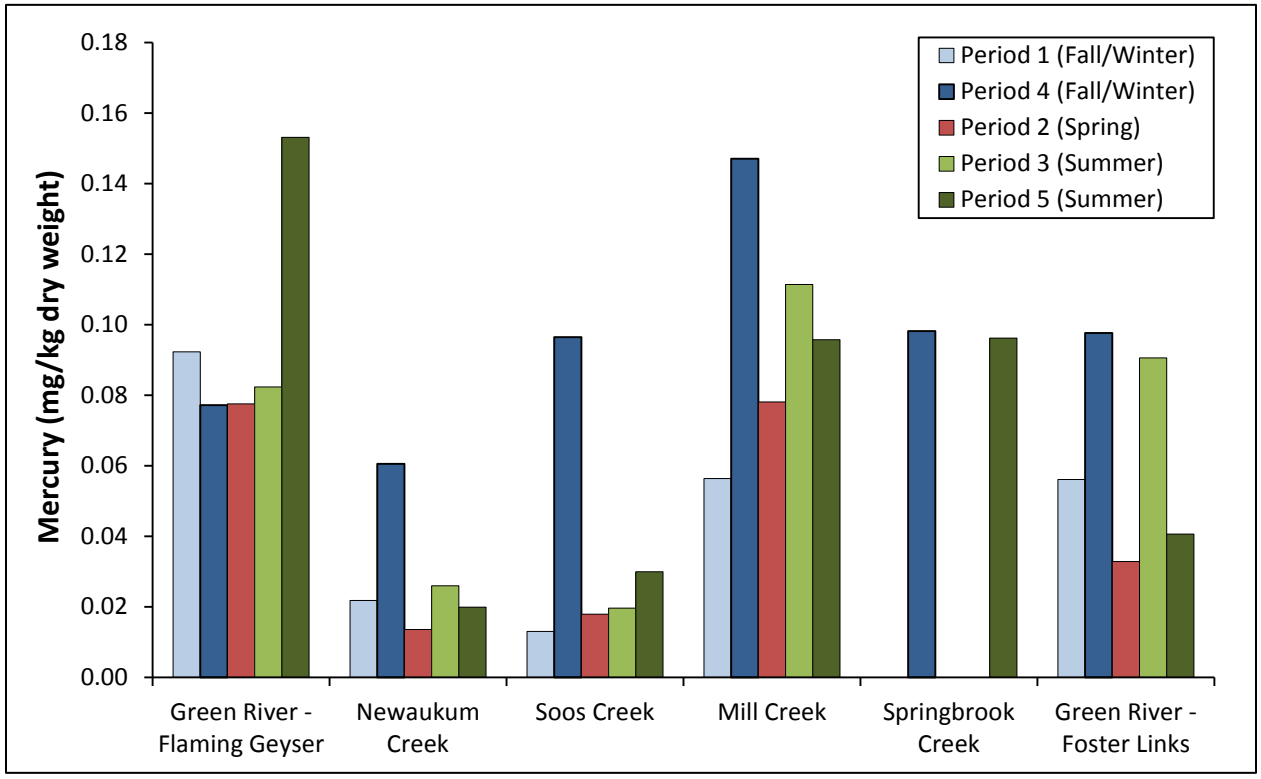

Figure F-9. Mercury Concentrations in Baffle Sediment Trap Samples by Site and Period.

Filtered Solids

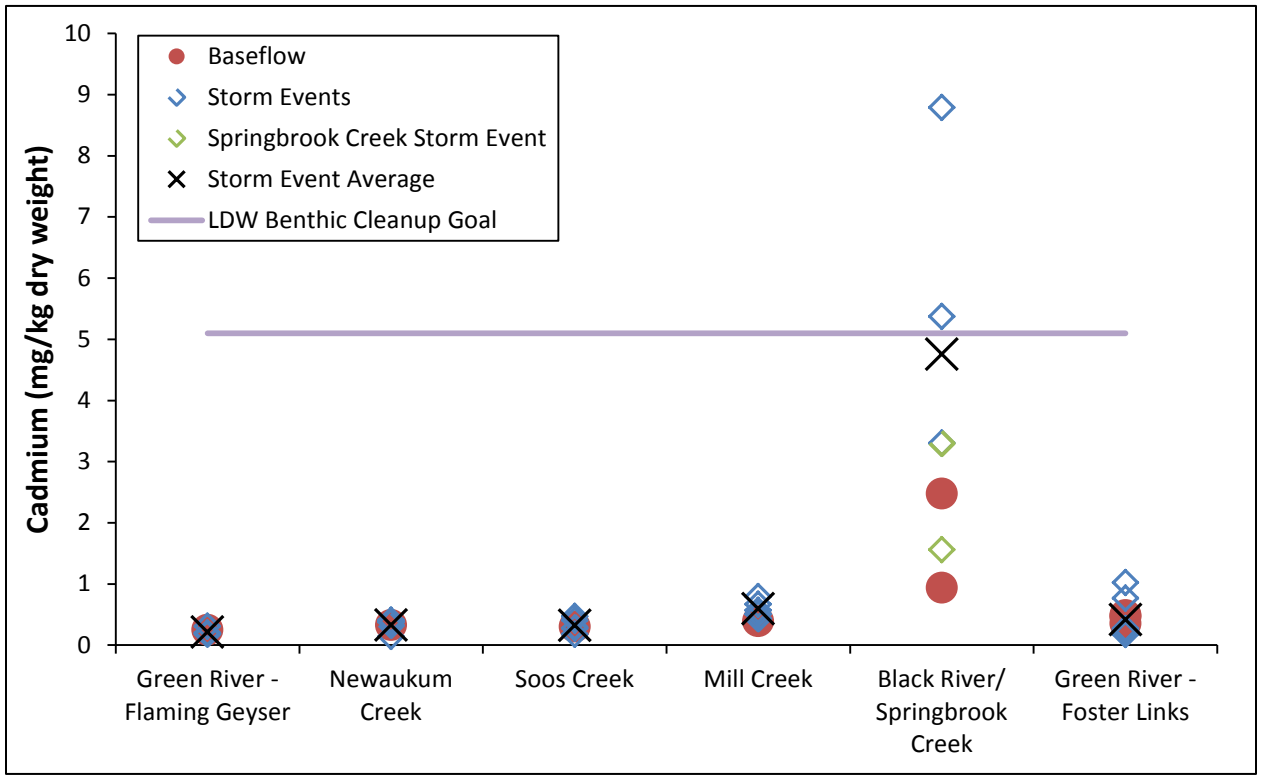

Figure F-10. Cadmium Concentrations in Filtered Solids Samples by Location Compared to the LDW Benthic Cleanup Goal.

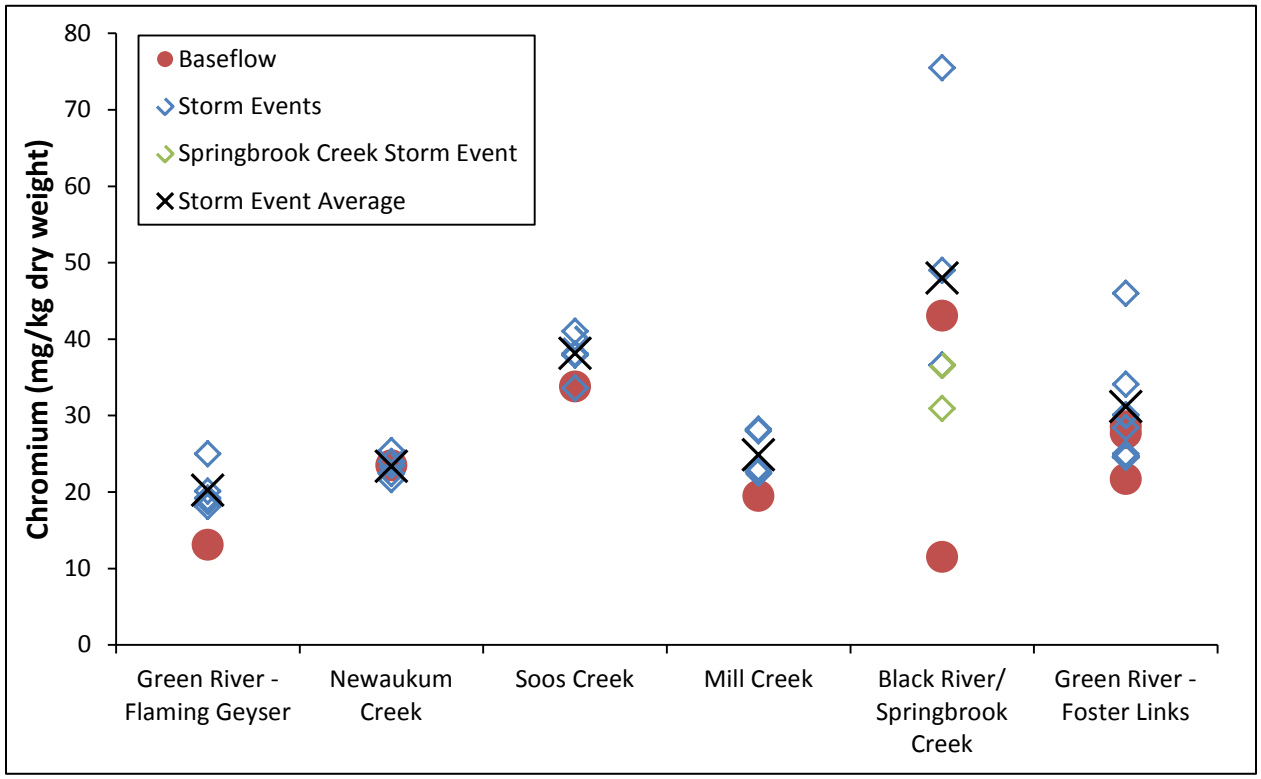

Figure F-11. Chromium Concentrations in Filtered Solids Samples by Location.

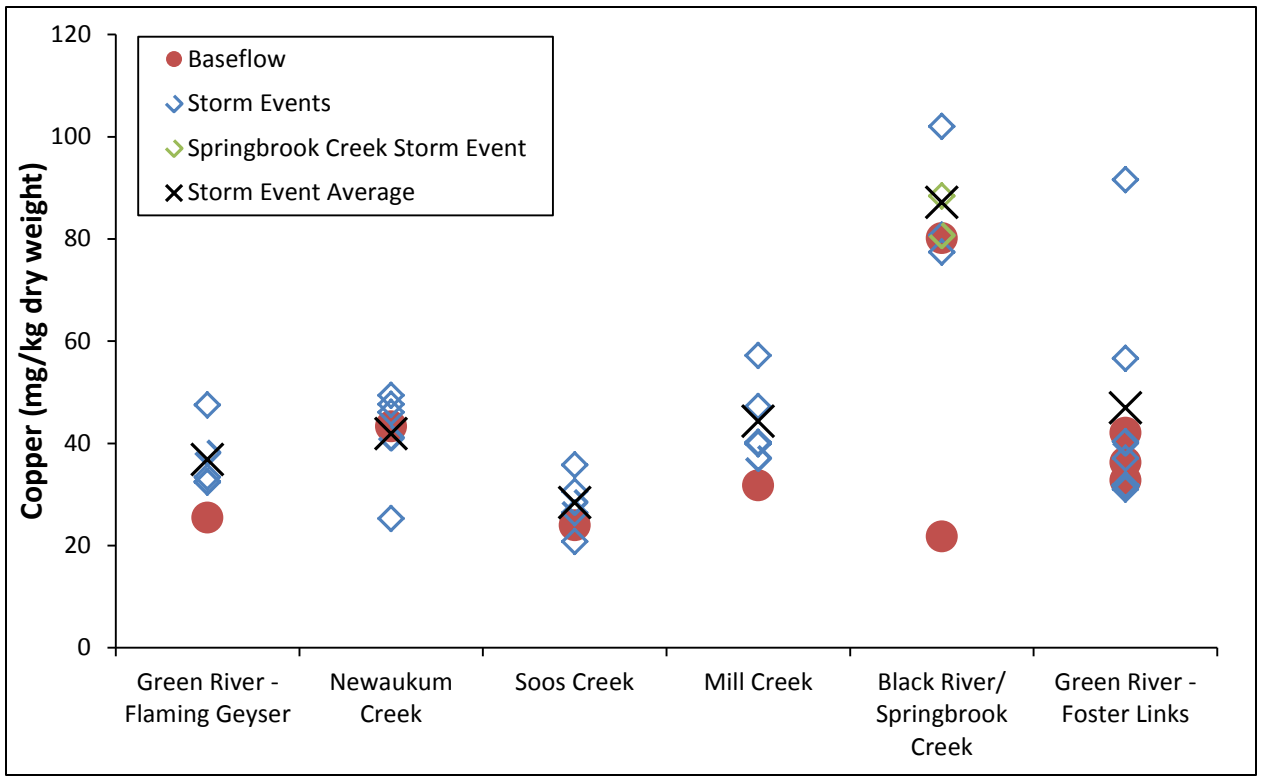

Figure F-12. Copper Concentrations in Filtered Solids Samples by Location.

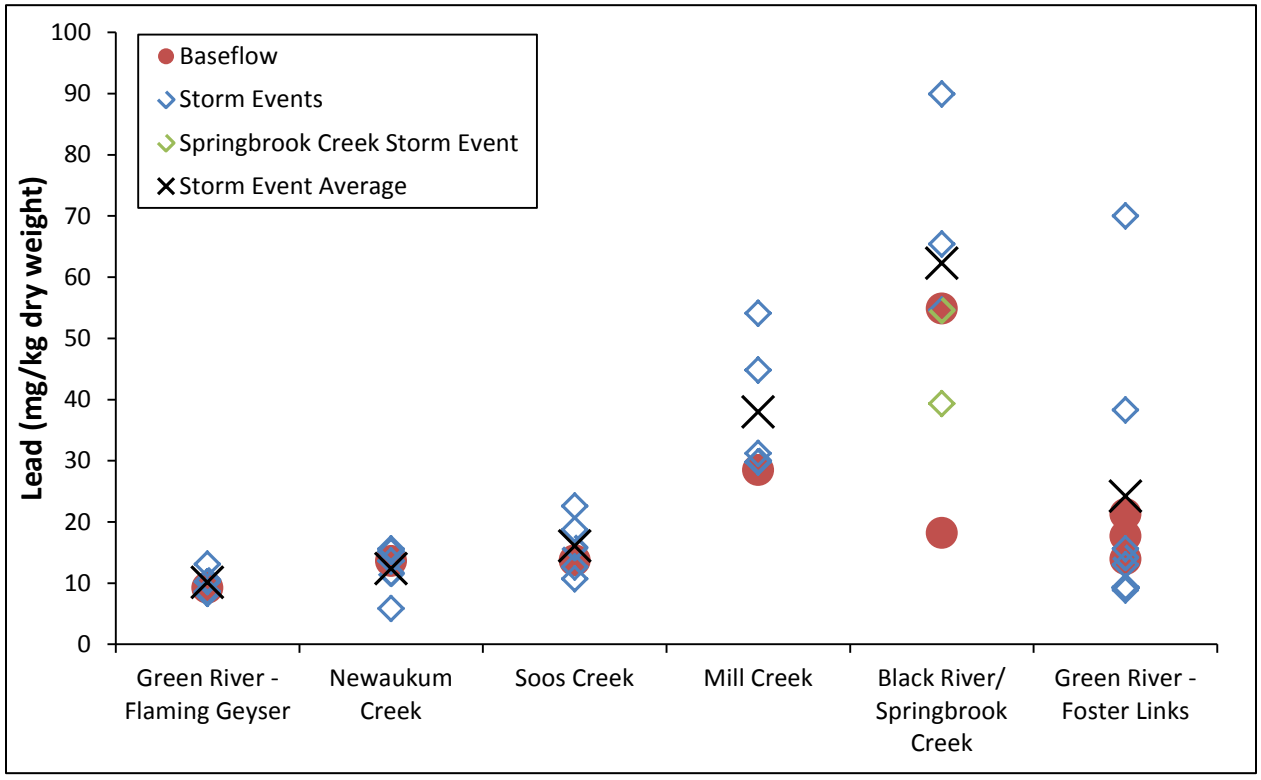

Figure F-13. Lead Concentrations in Filtered Solids Samples by Location.

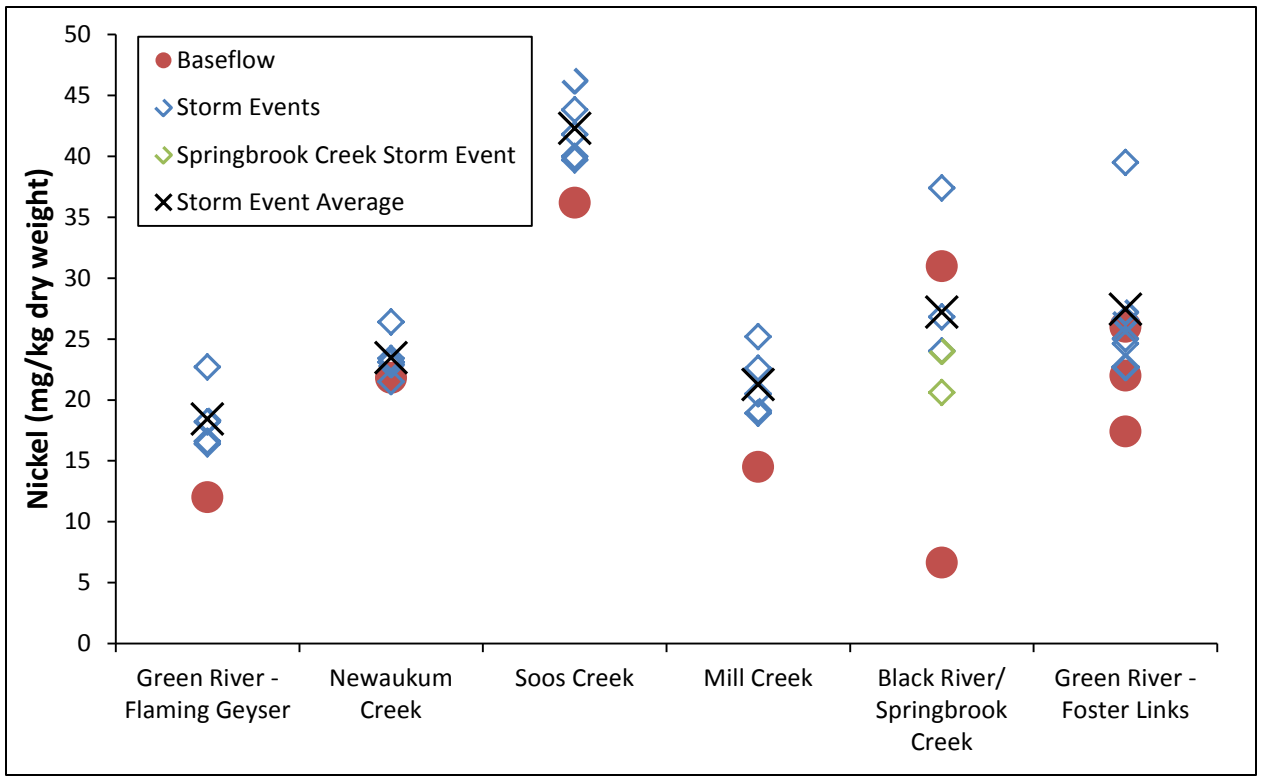

Figure F-14. Nickel Concentrations in Filtered Solids Samples by Location.

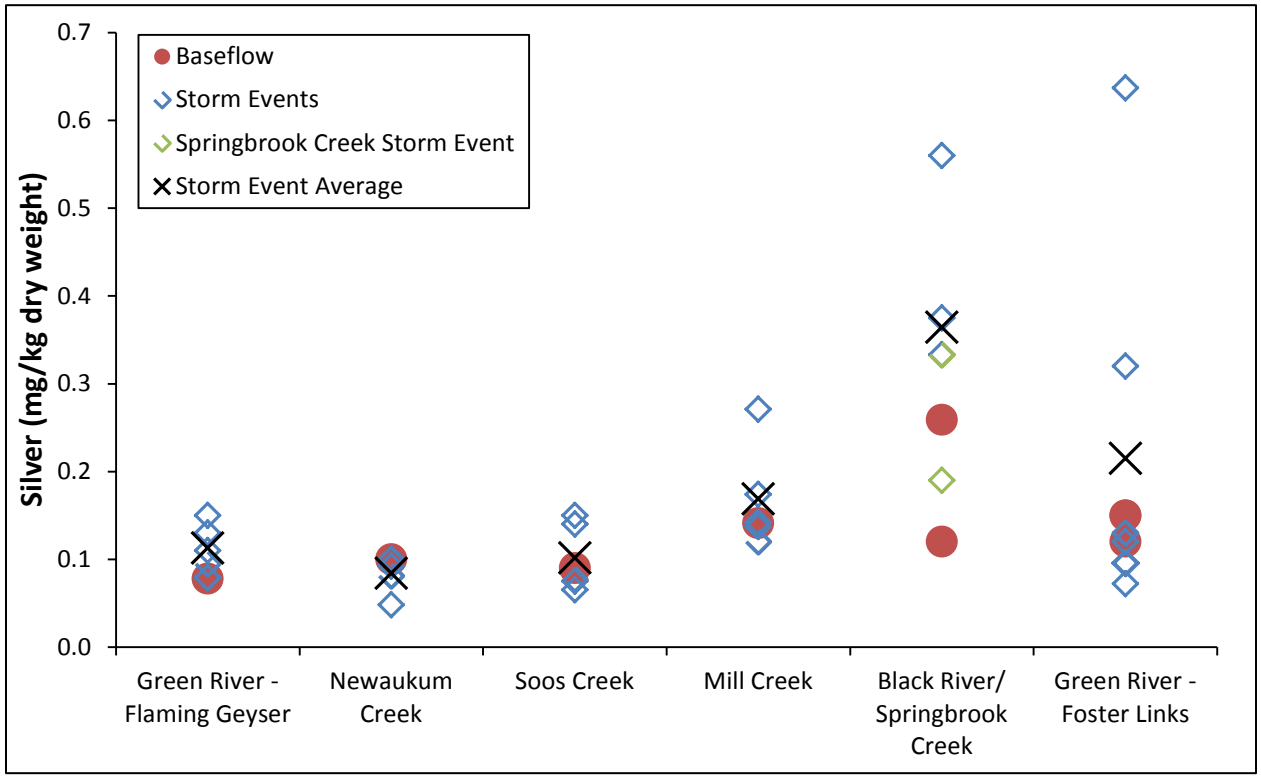

Figure F-15. Silver Concentrations in Filtered Solids Samples by Location.

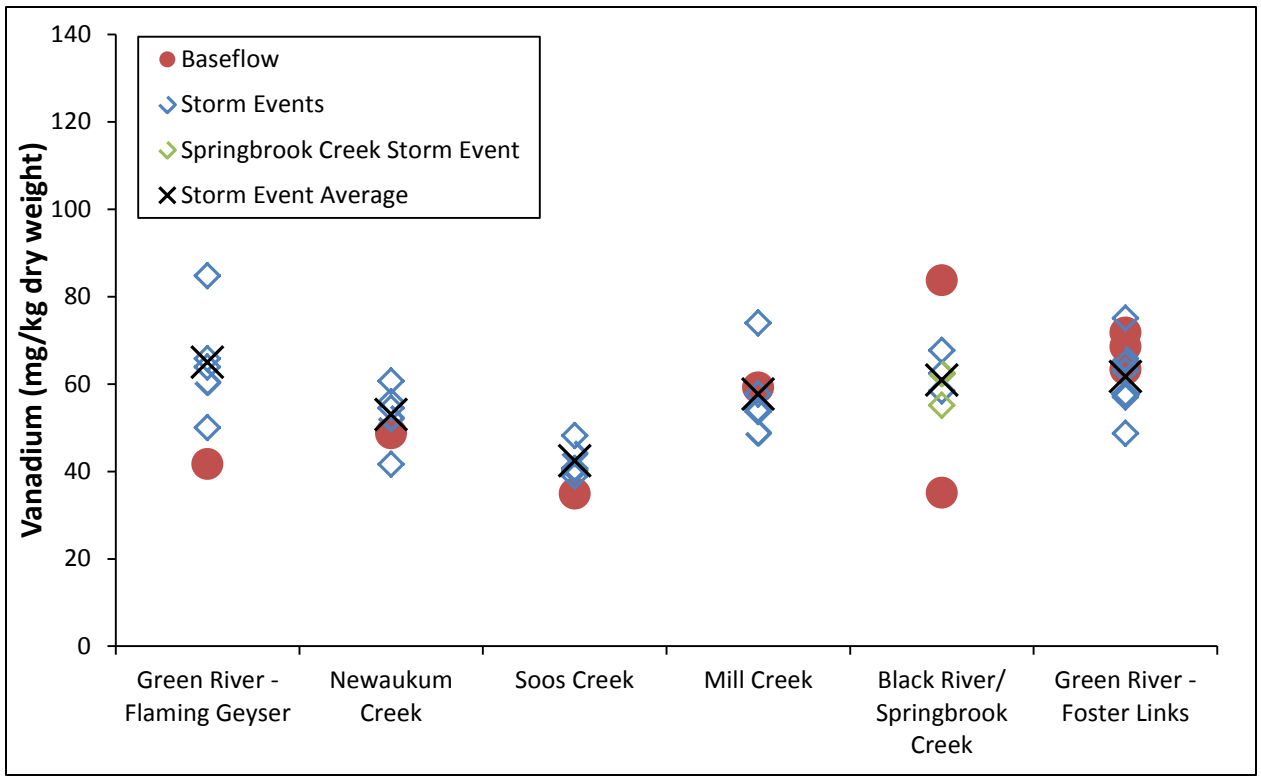

Figure F-16. Vanadium Concentrations in Filtered Solids Samples by Location.

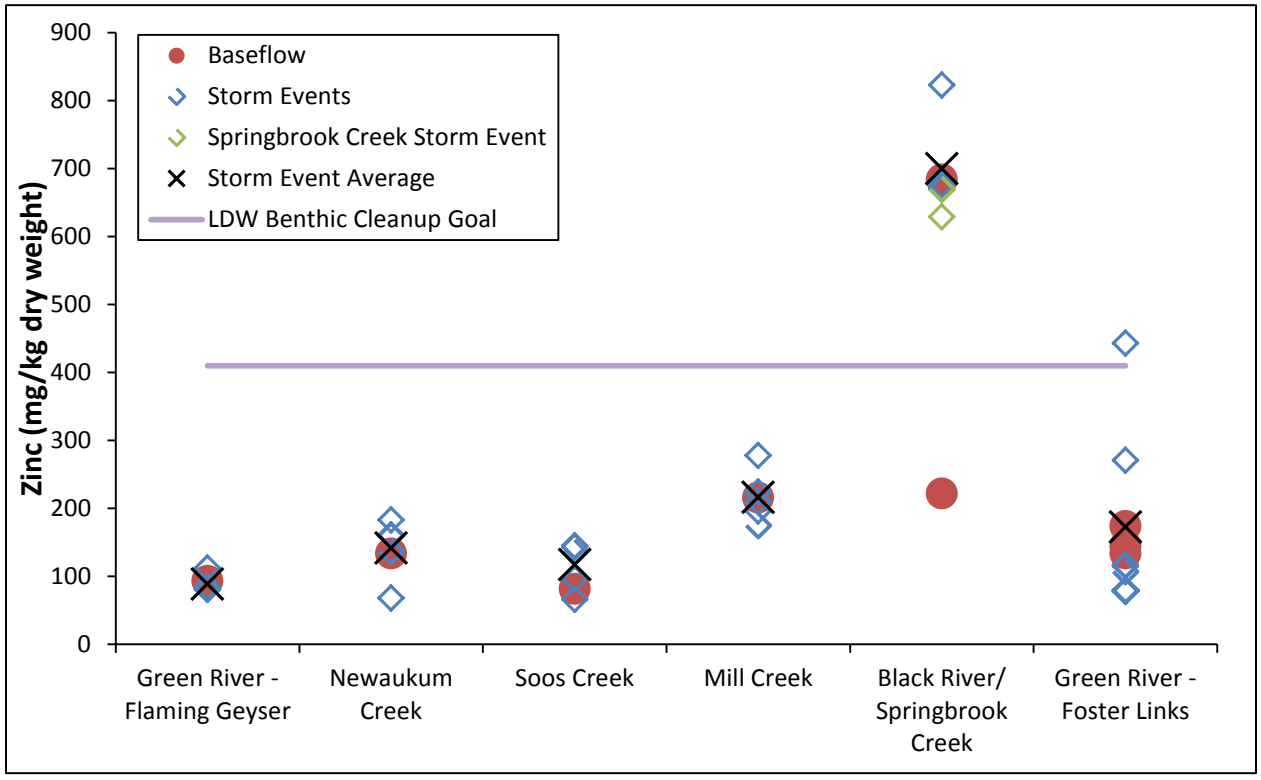

Figure F-17. Zinc Concentrations in Filtered Solids Samples by Location.

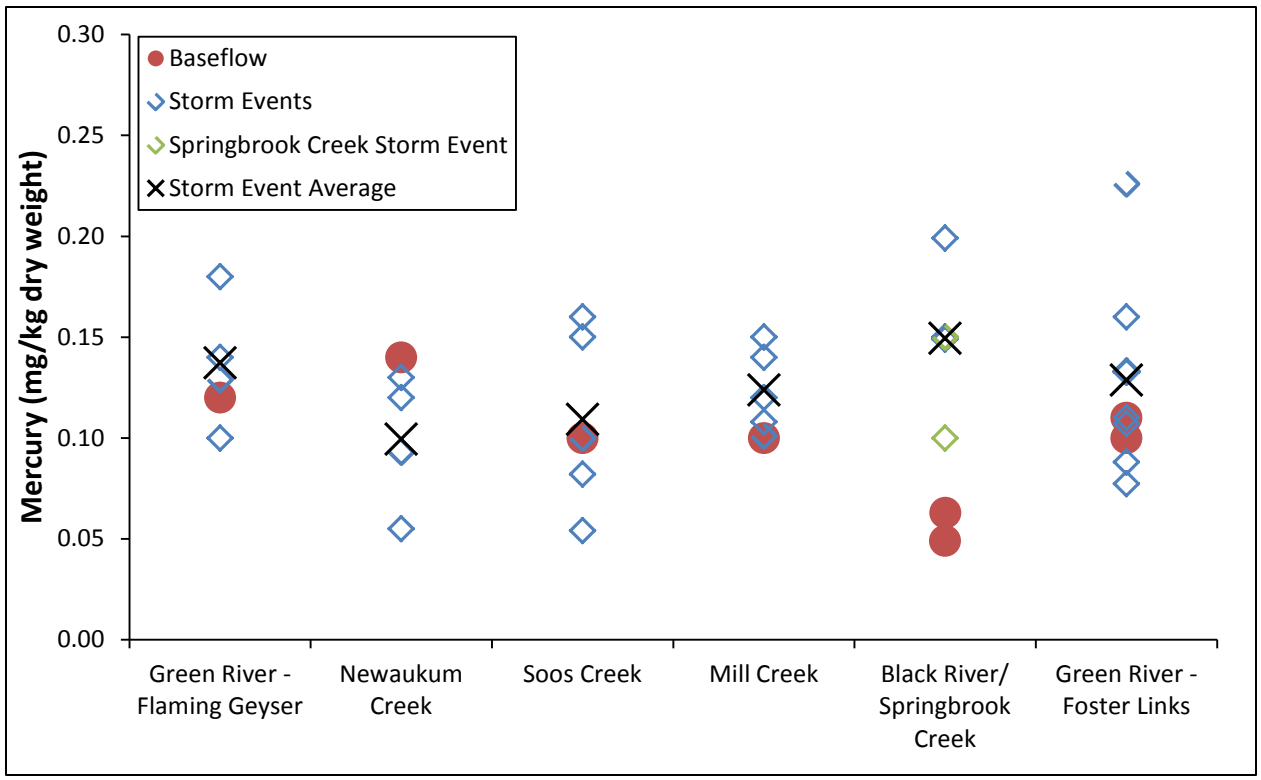

Figure F-18. Mercury Concentrations in Filtered Solids Samples by Location.