|  |  |  |  |
| --- | --- | --- | --- |
| Station | Number of grab samples | Adjusted R2 Volume vs TP Load | Adjusted R2 Volume vs TDP Load |
| JBT01 | 16 | 0.94\* | 0.98\* |
| JBT02 | 12 | 0.92\* | 0.95\* |
| JBT04 | 15 | 0.92\* | 0.96\* |
| JBT05 | 16 | 0.91\* | 0.91\* |
| JBT06 | 15 | 0.97\* | 0.97\* |
| JBT07 | 12 | 0.95\* | 0.95\* |
| JBT11 | 12 | 0.95\* | 0.96\* |
| JBT13 | 14 | 0.86\* | 0.92\* |
| JBT14 | 11 | 0.92\* | 0.94\* |
| JBT16 | 15 | 0.83\* | 0.94\* |
| JBT18 | 12 | 0.95\* | 0.93\* |
| JBT19 | 4a | 0.98\* | 0.98\* |

aMultiple samples were sediment laden due to burial of the autosampler intake line and excluded from the analysis as a result.

\*significant at P<0.01

Instantaneous loads were calculated using grab sample concentrations and corresponding instantaneous flows. The term instantaneous is used nominally here, as the flowmeters actually sum flow over a 15-minute time period. Load and flow were log transformed in order to meet parametric assumptions. Instantaneous flow readings of zero occurred periodically because some low volumes fell below the flowmeter’s programmed detection limit of 100 L. In these instances, flow was averaged over a two-hour period or obtained from readings of truly instantaneous flow made in the field. Simple linear regressions were then applied to log transformed flow and load. Resulting regression estimates were then applied to the continuous 15-minute flow record to obtain a corresponding continuous record of load. These values were then summed at the monthly level.