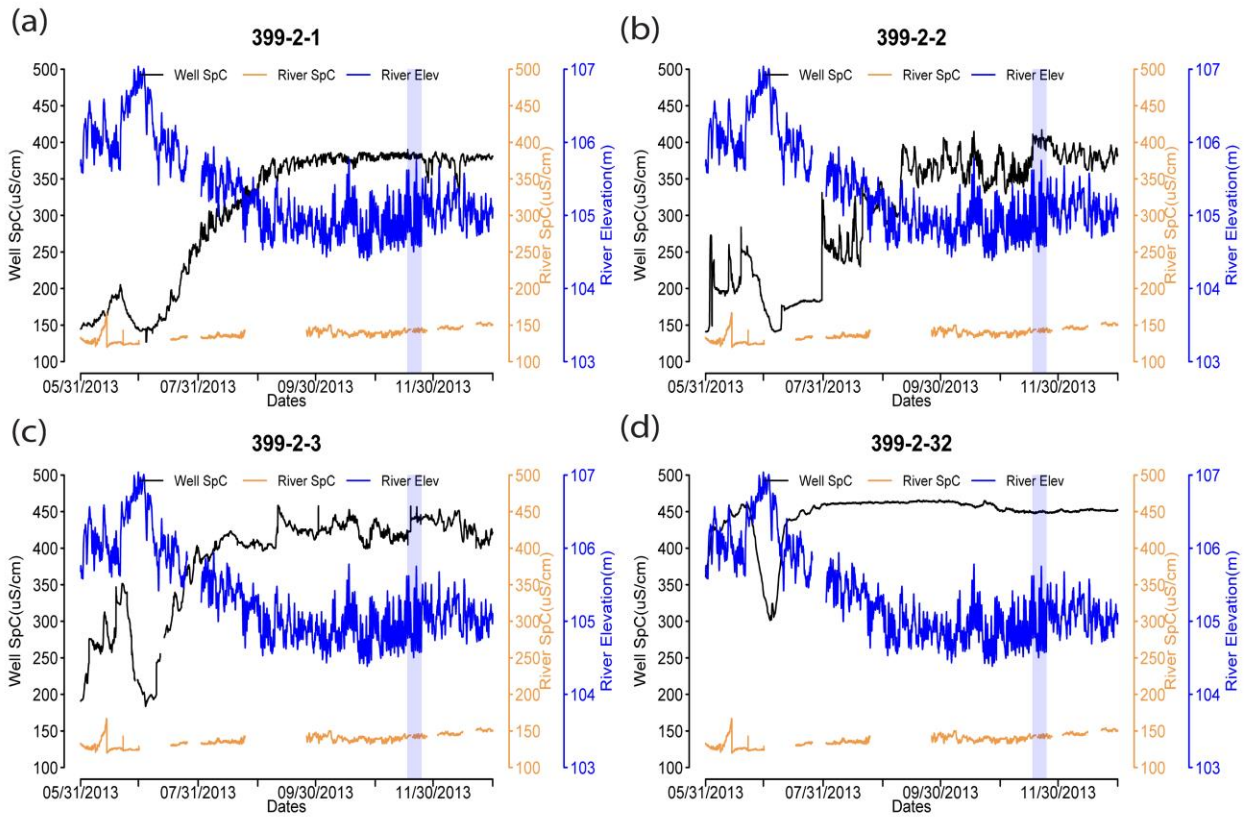
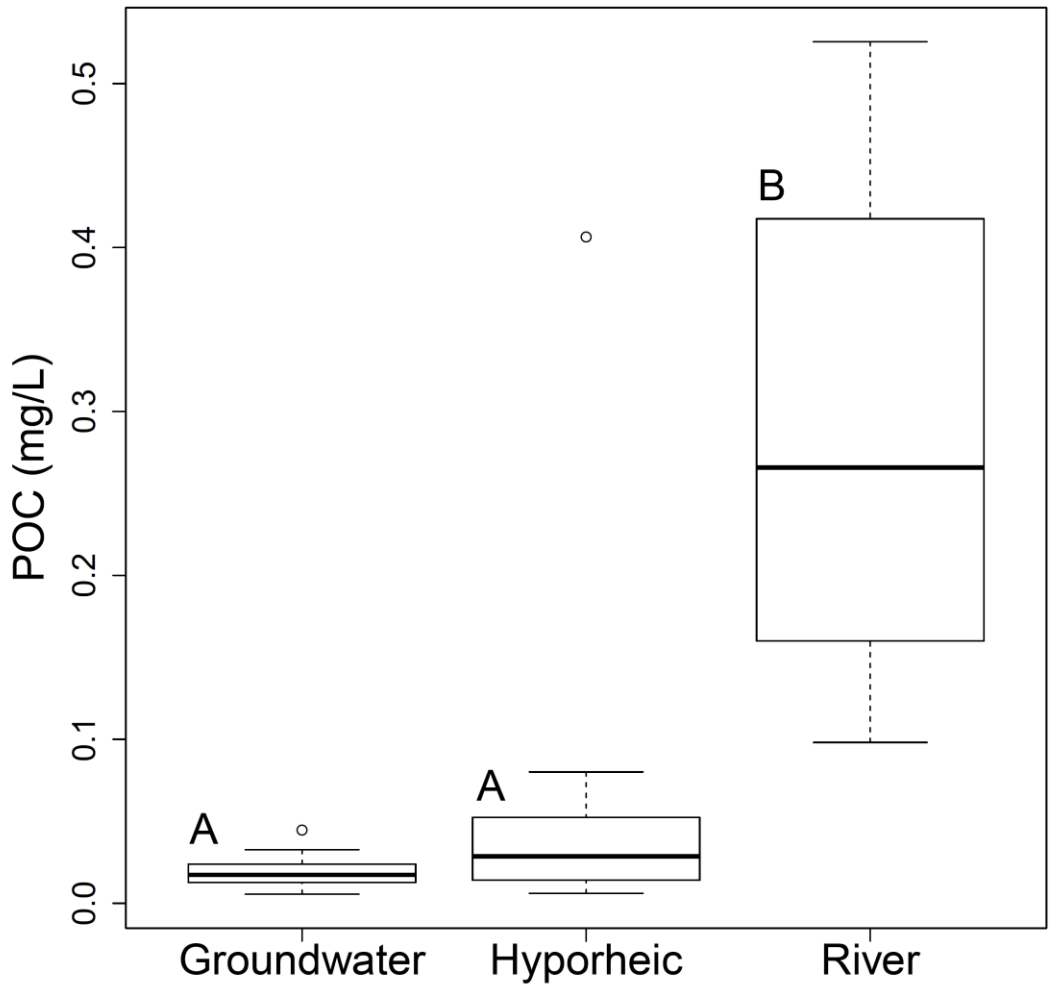
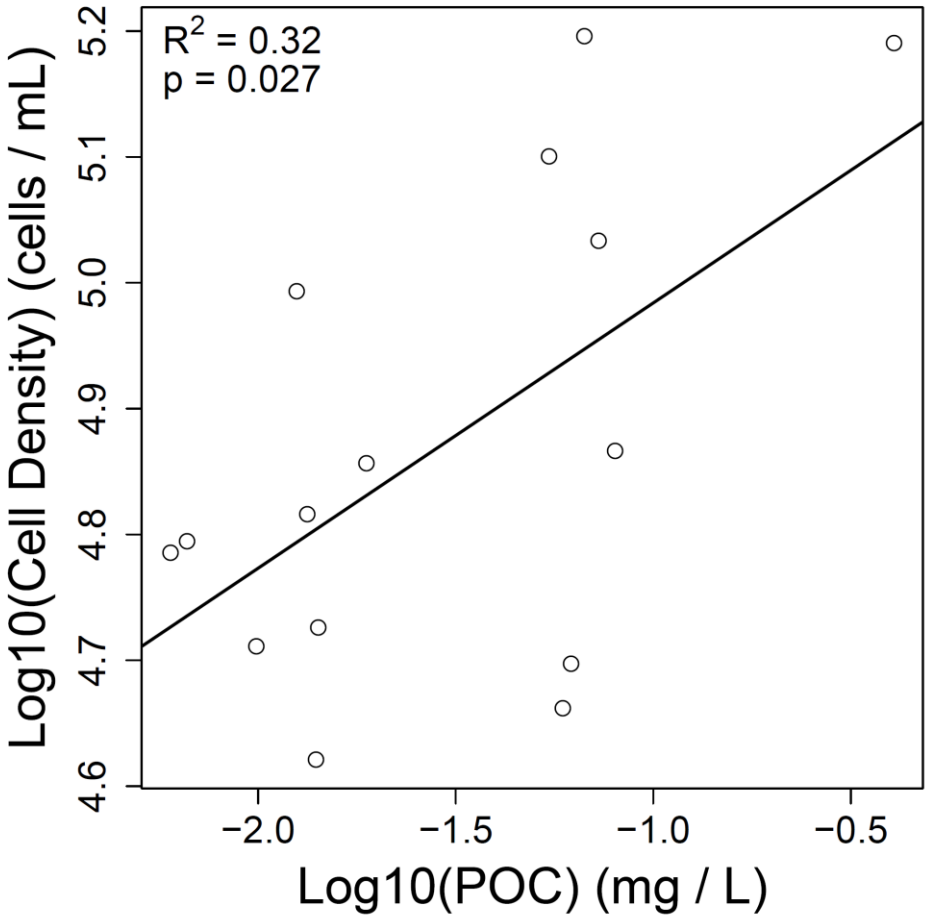


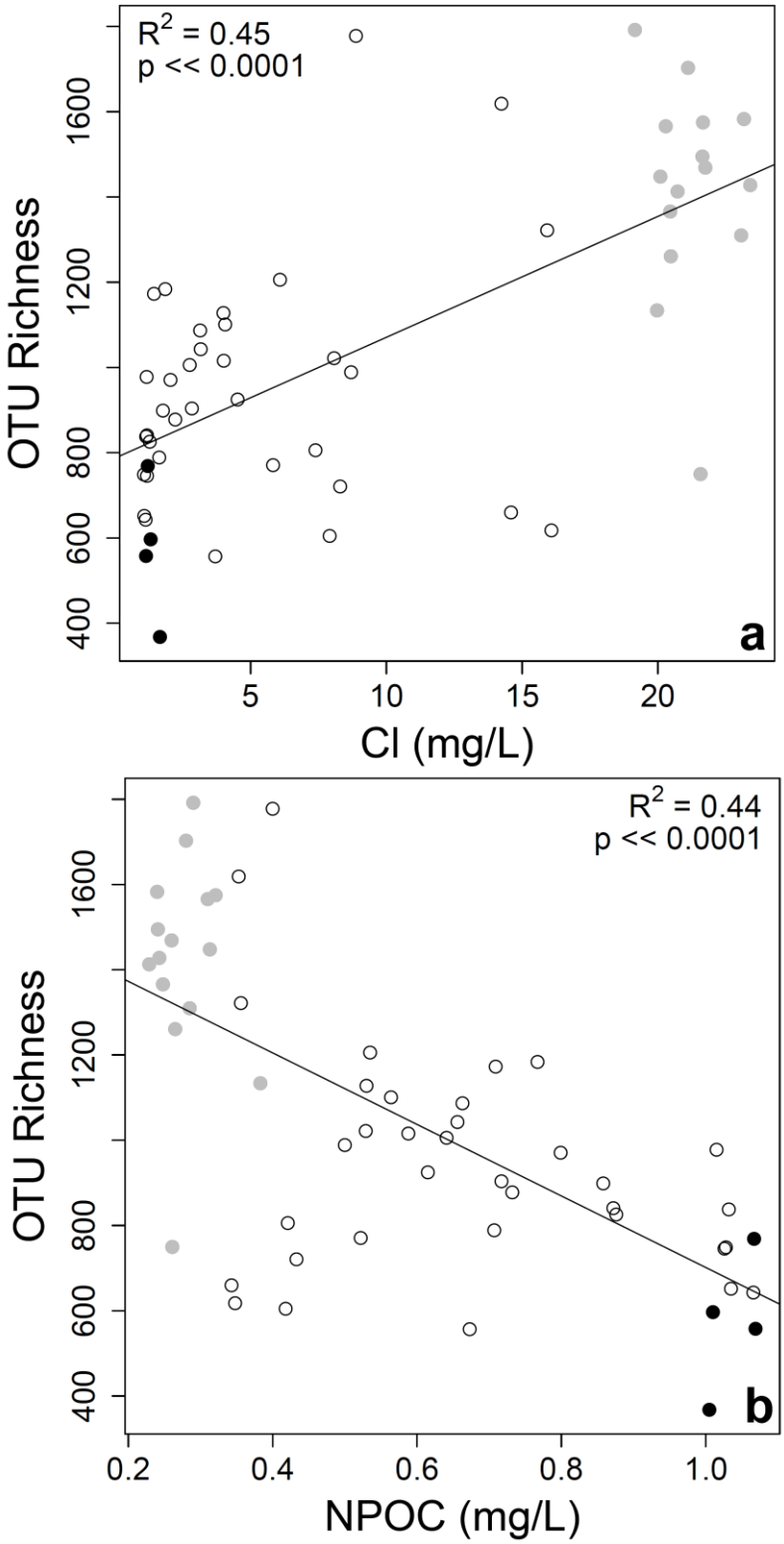
Supplementary Figure 1. Specific conductance in river water and sampled groundwater wells with the well name indicated at the top of each panel. Specific conductance (SpC) in river water and river elevation are the same on all panels. The sampling period is indicated by the light purple polygon. It is clear that during high river stage (near July 1st) there is intrusion of river water into all four wells, as evidenced by the drop in groundwater well SpC. Following the period of high river stage there is a slow decline in river elevation and then a period of flucuating, but not directionally changing, river stage. Our sampling occurred during this phase whereby the SpC in all four groundwater wells was relatively high and stable, indicating pure (or very nearly pure) groundwater was sampled from the groundwater wells. Sensors in the groundwater wells were placed in the screened interval, which is near to and crosses the top of the saturated zone; this is also the depth sampled in the present study for aqueous chemistsry and microbial communities. River SpC and elevation were logged approximately 300m downstream of our sampling domain.



Supplementary Figure 2. Boxplots summarizing distributions of particulate organic carbon across different water sources. Different letters incidate statisitically significant differences ($p < 0.05$).



Supplementary Figure 3. Relationship between suspended cell density and particular organic carbon concentration within hyporheic water samples. Particulate organic carbon is abbreviated as POC. The solid line is the linear regression model and statistics are provided.



Supplementary Figure 4. Number of microbial operational taxonomic units within a sample related to Cl and non-purgable organic carbon concentrations. Operational taxonomic unit is abbreviated as OTU and non-purgable organic carbon is abbreviated as NPOC. Solid lines indicate regression models and statistics are provided; symbols as in Figure 3.