

Description of Additional Supplementary Files:

Supplementary Data 1: Genome locations of unique transposon insertion events in .bed format.

Supplementary Data 2: List of genes classified as essential, not essential or unclear by TraDIS and sliding window.

Supplementary Data 3: Differences in essentiality with different cut-offs. Only the locus tag with at least one modification is being provided. The rest remains the same as in Dataset S2 despite the cut-off changes.

Supplementary Data 4: Genes with “domain” essential.

Supplementary Data 5: Orthologs with *E. coli*.

Supplementary Data 6: Conservation of *P. limnophila* proteins.

Supplementary Data 7: Paralogs in *P. limnophila*.

Supplementary Data 8: List of organisms used in the conservation analysis.

Supplementary Data 9: List of organisms used in the phyletic distribution.