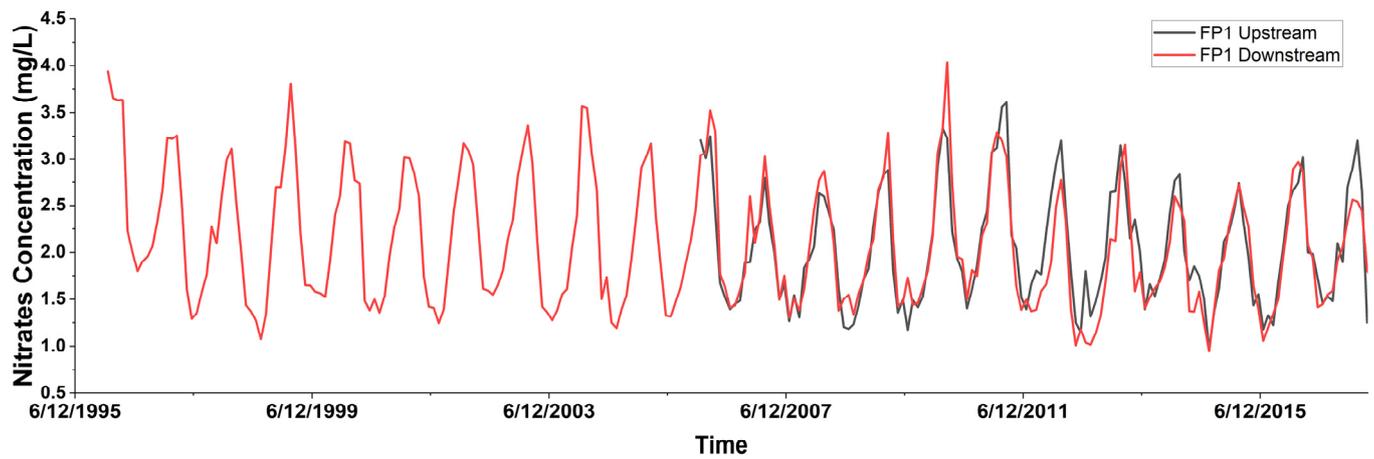




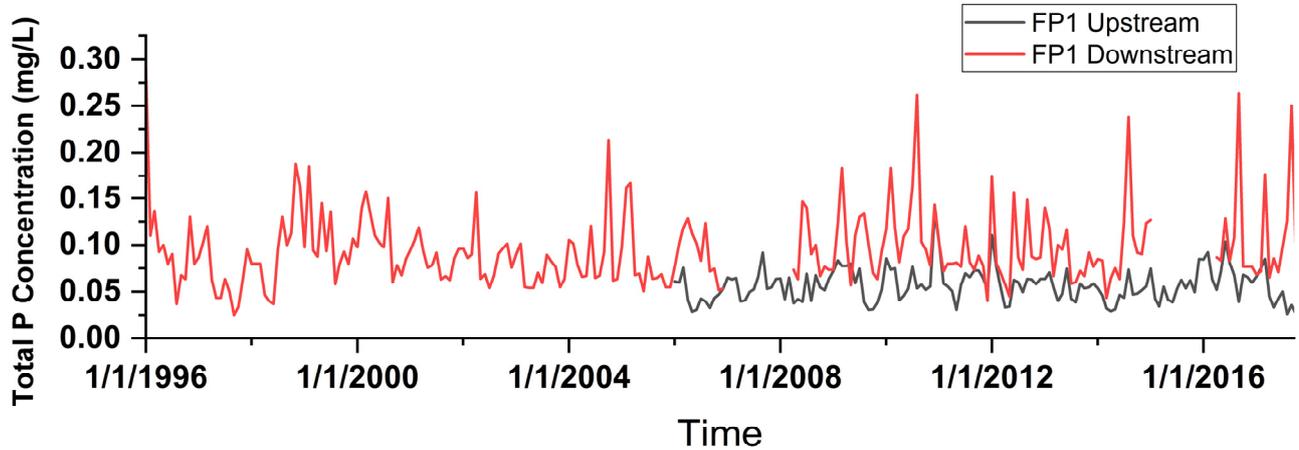
Holistic Approach for Estimating Water Quality Ecosystem Services of Danube Floodplains: Field Measures, Remote Sensing, and Machine Learning

Alain Hoyek, Leonardo F. Arias-Rodriguez * and Francesca Perosa

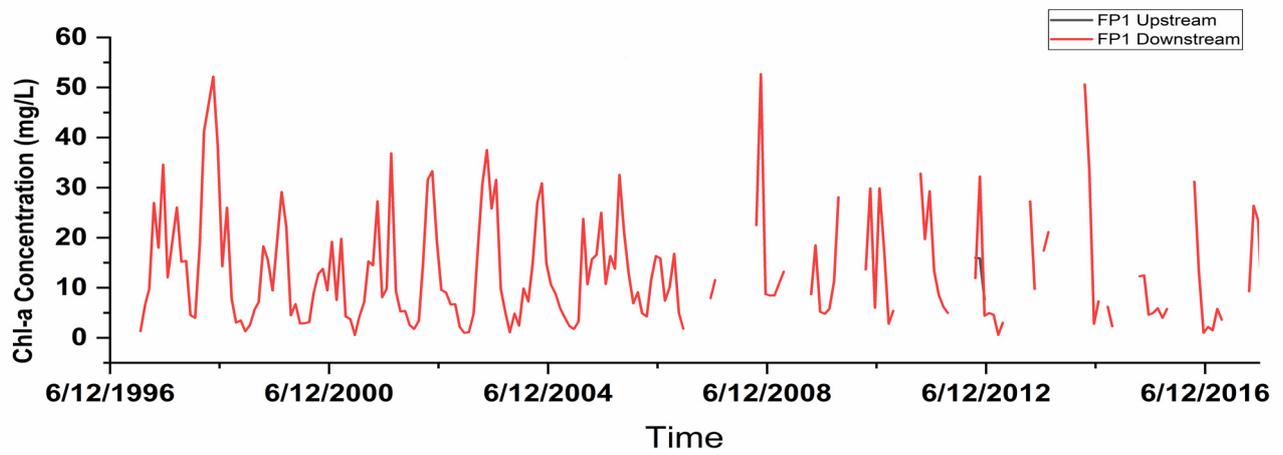
Supplementary Materials:



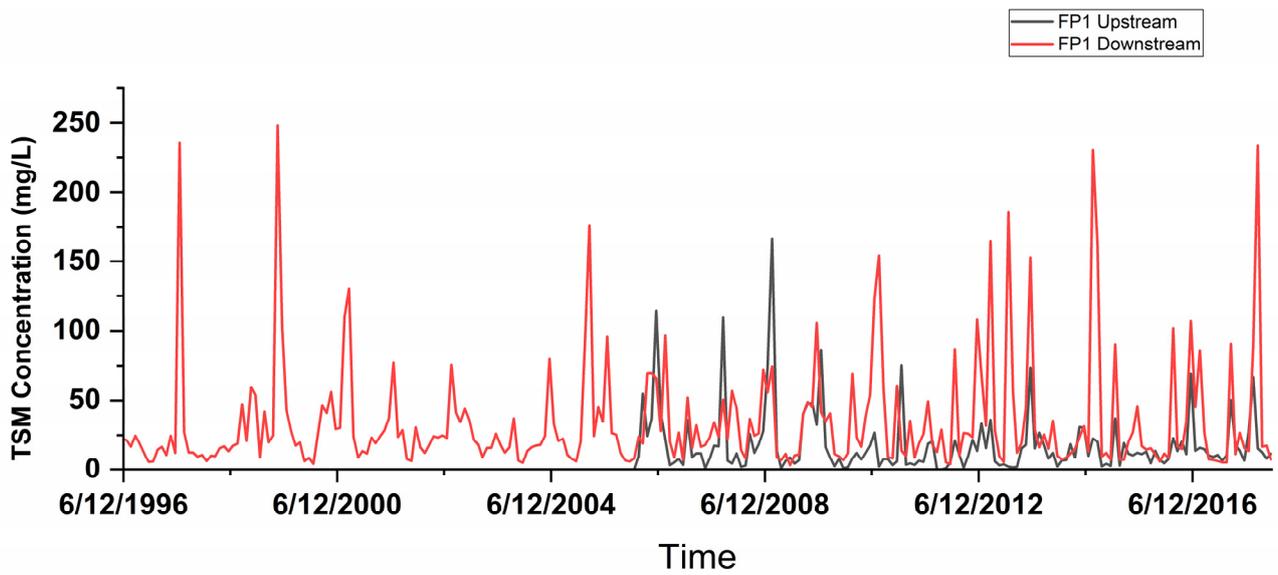
(a)



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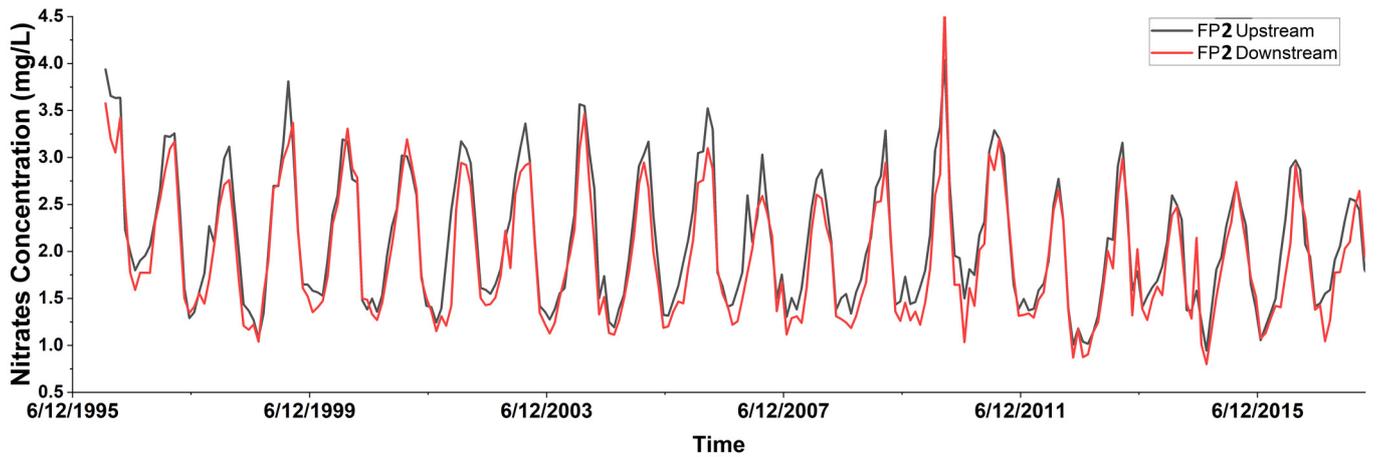


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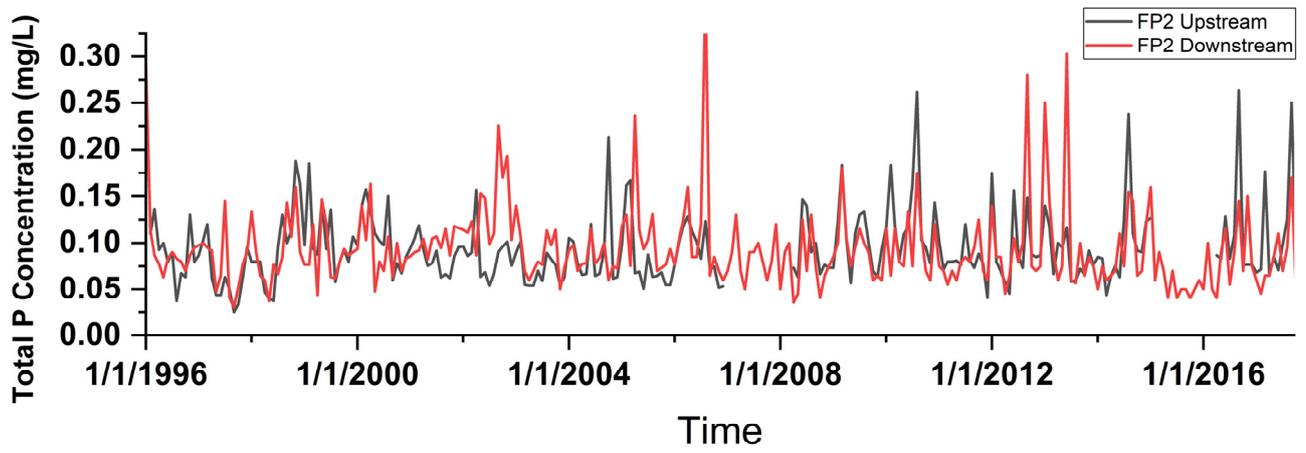


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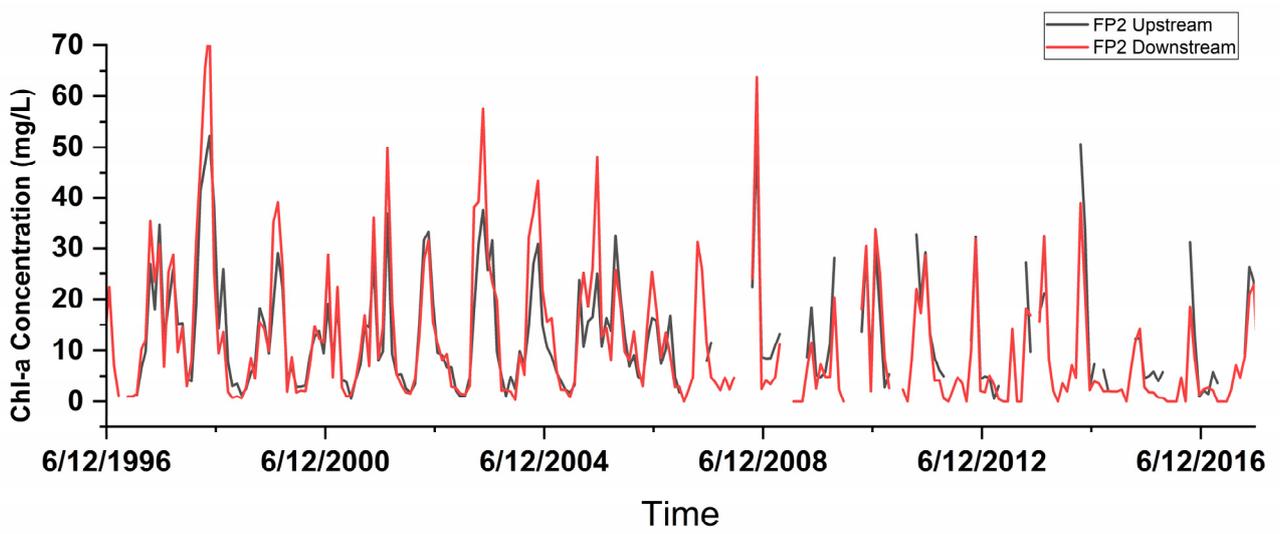
Figure S1. Time series plots for floodplain 1 showing the concentration of: a) Nitrates, b) Total Phosphorus, c) Chlorophyll-a and d) TSM.



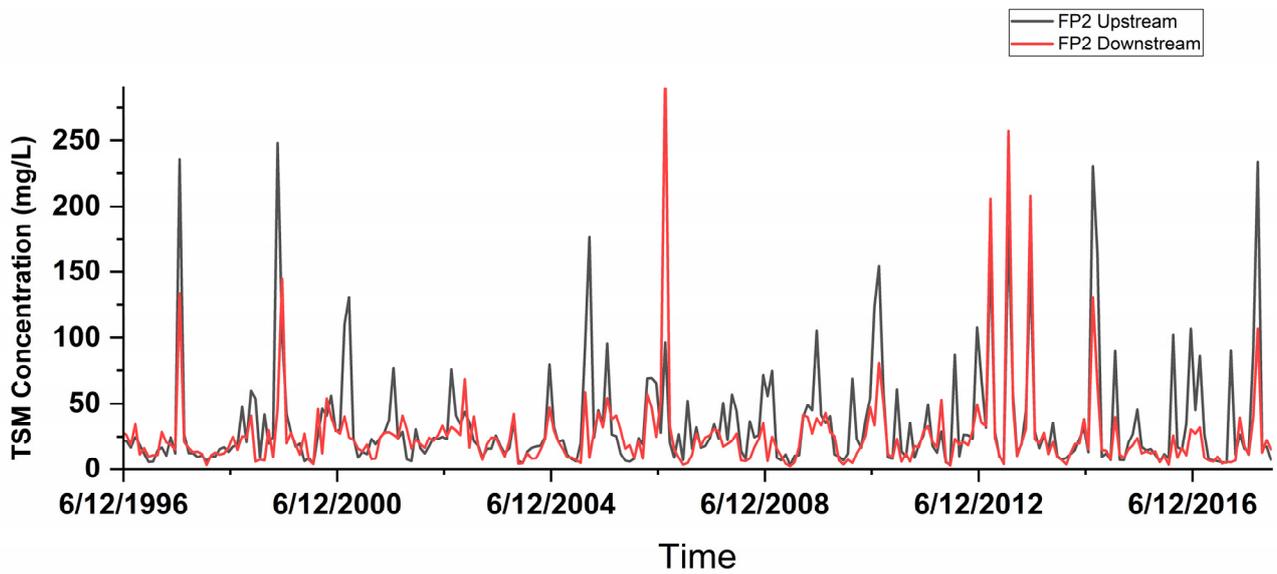
(a)



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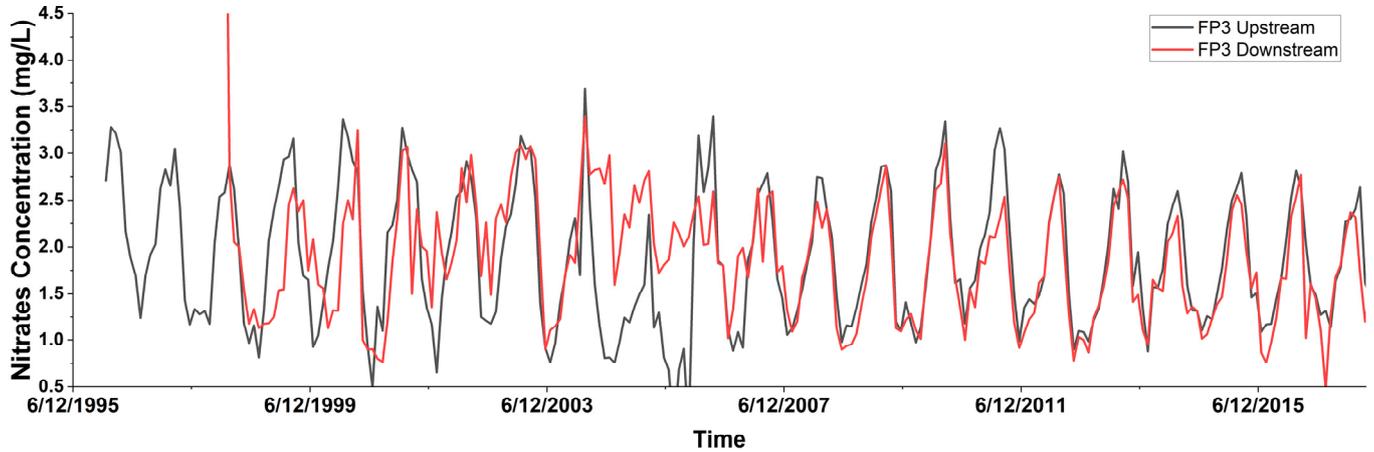


(c)

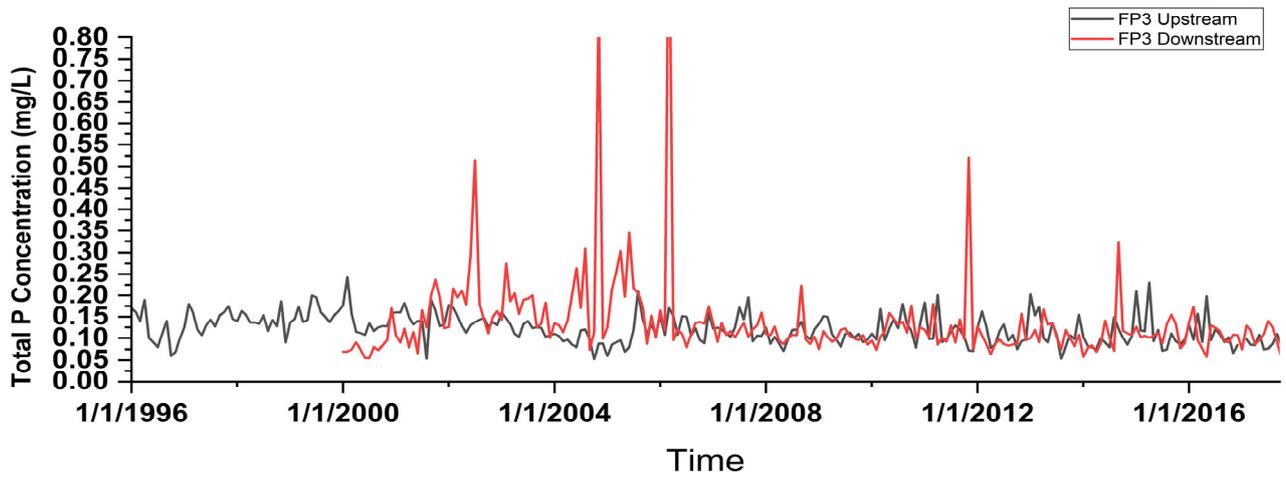


(d)

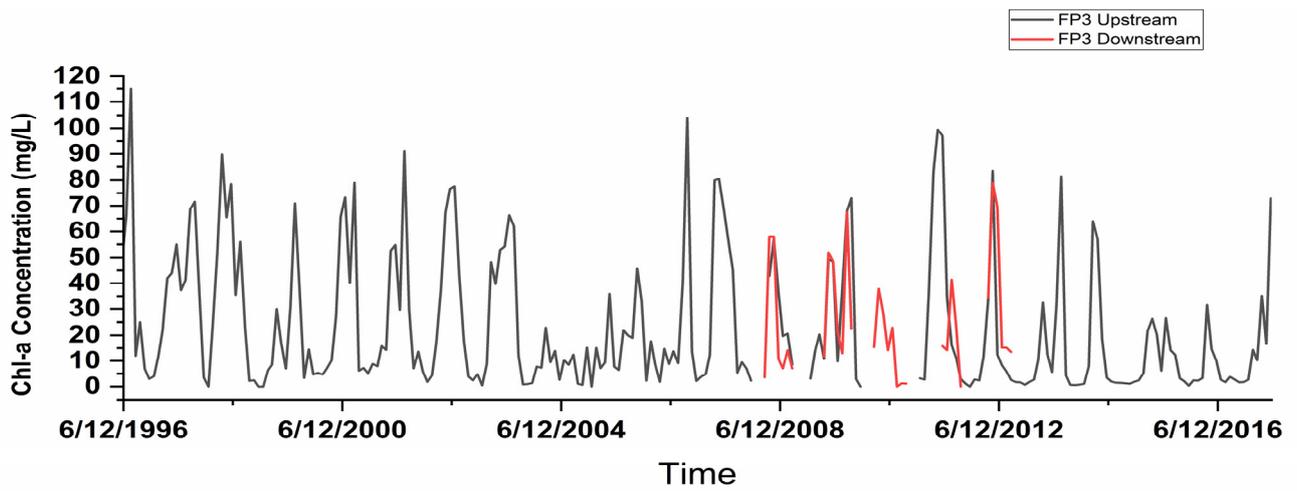
Figure S2. Time series plots for floodplain 2 showing the concentration of: a) Nitrates, b) Total Phosphorus, c) Chlorophyll-a and d) TSM.



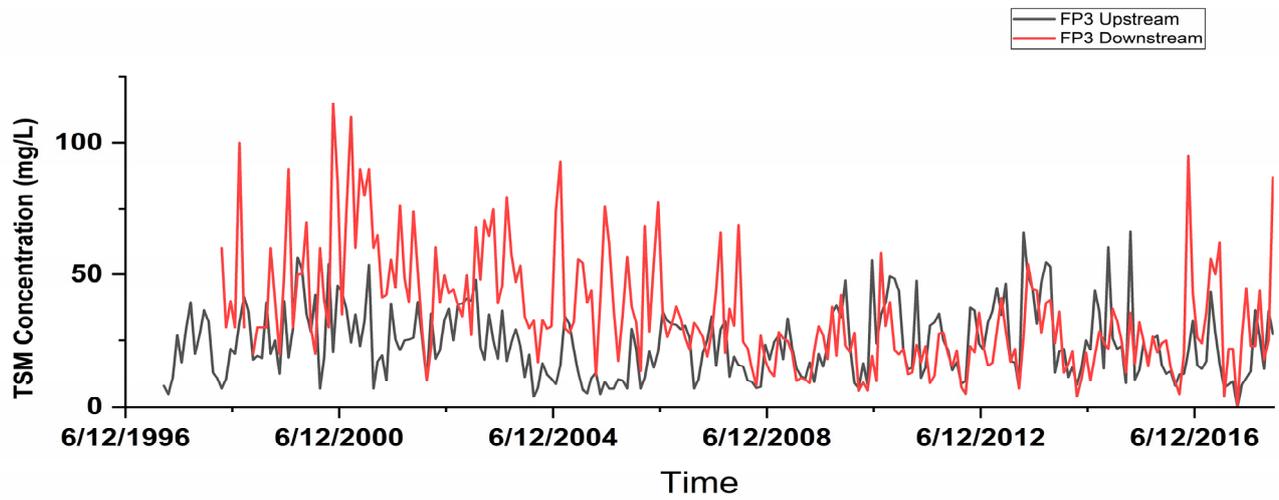
(a)



(b)

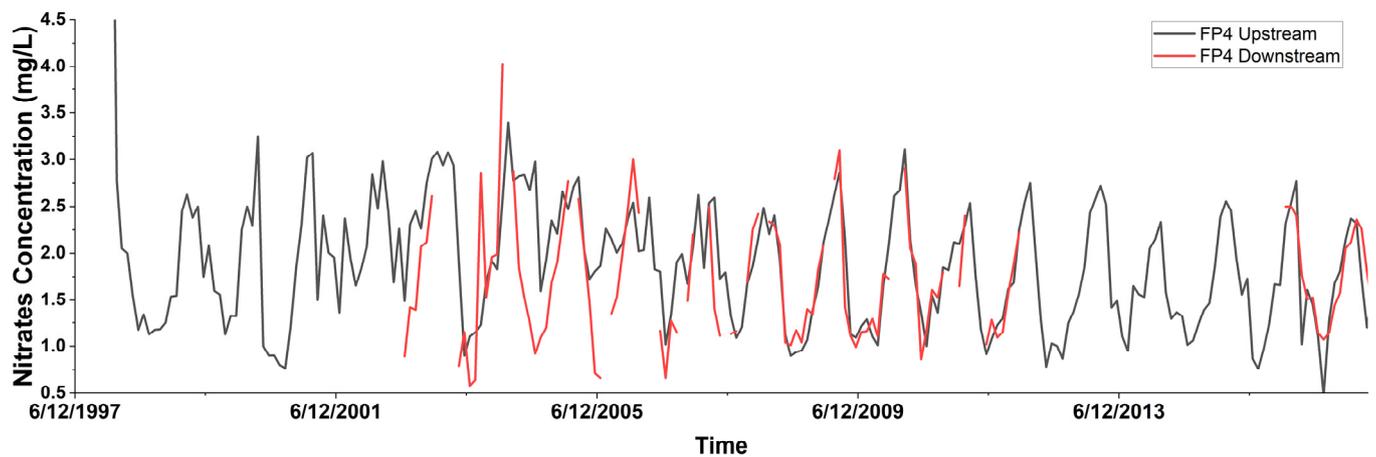


(c)

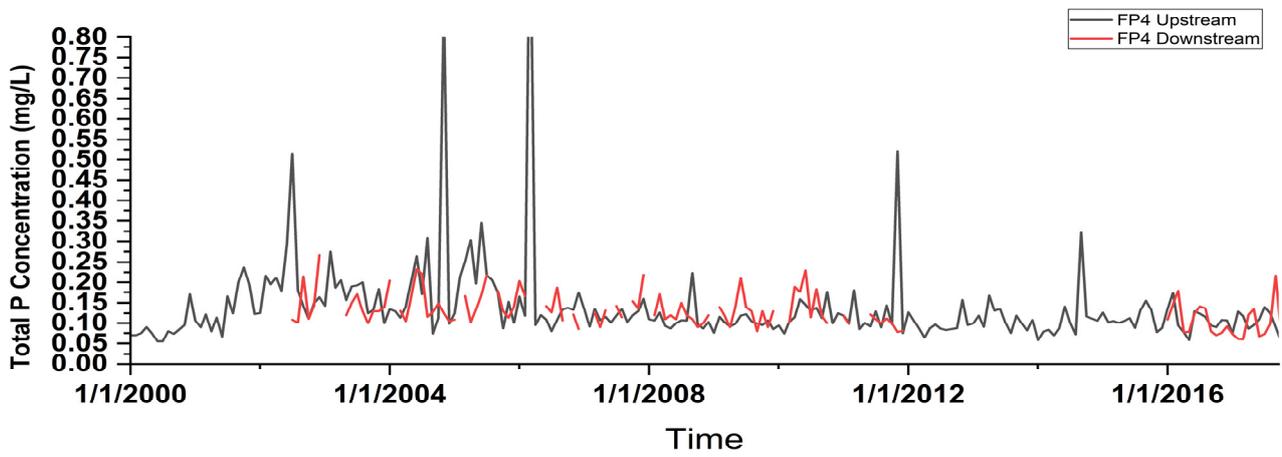


(d)

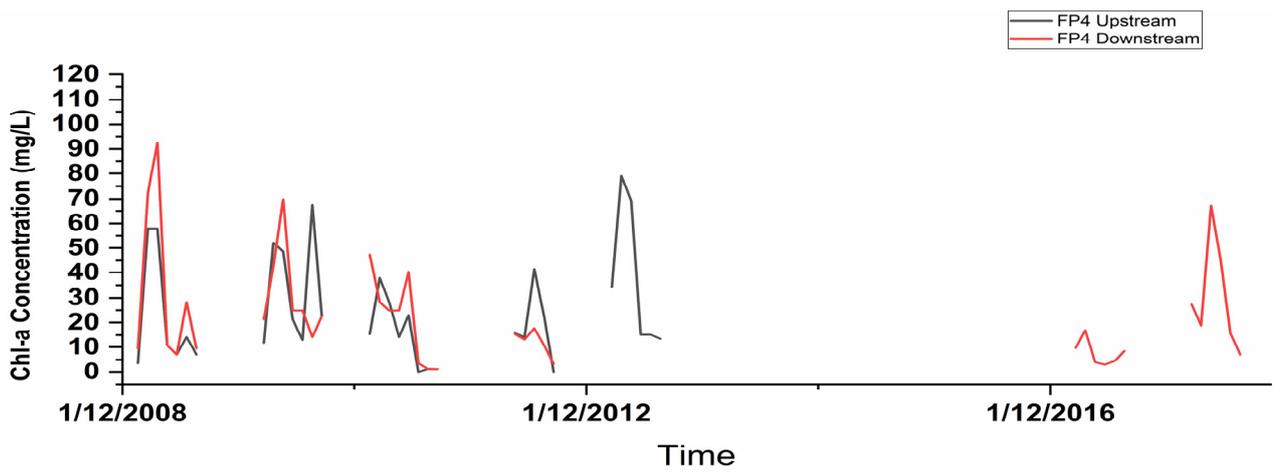
Figure S3. Time series plots for floodplain 3 showing the concentration of: a) Nitrates, b) Total Phosphorus, c) Chlorophyll-a and d) TSM.



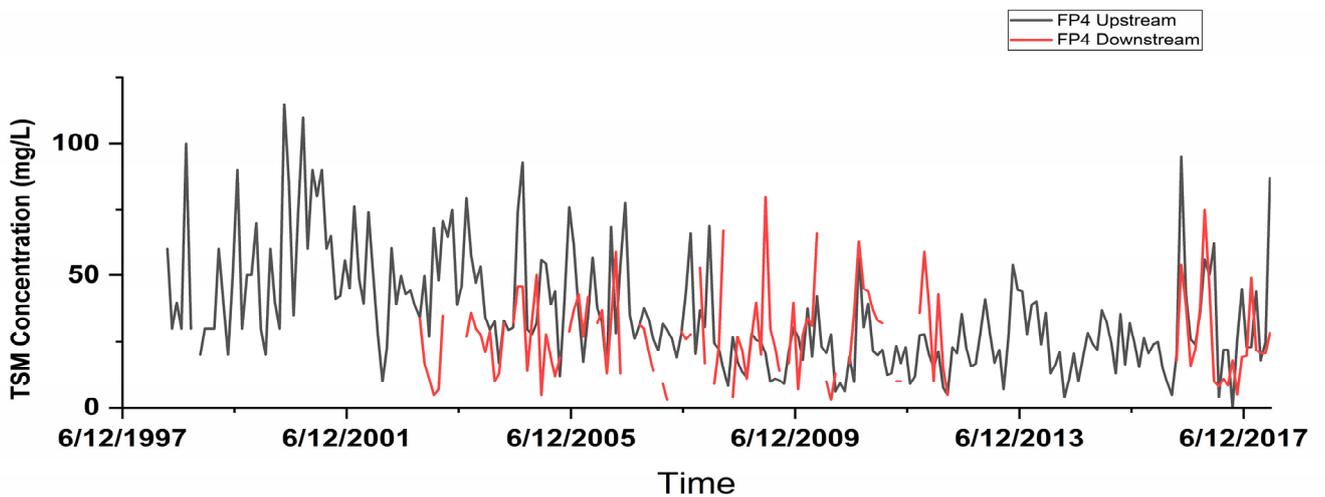
(a)



(b)

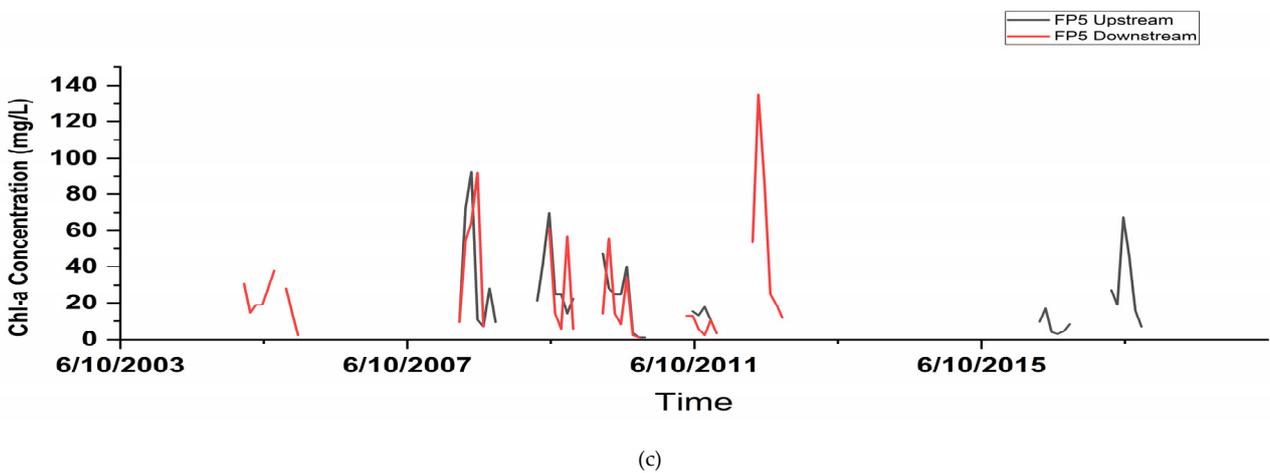
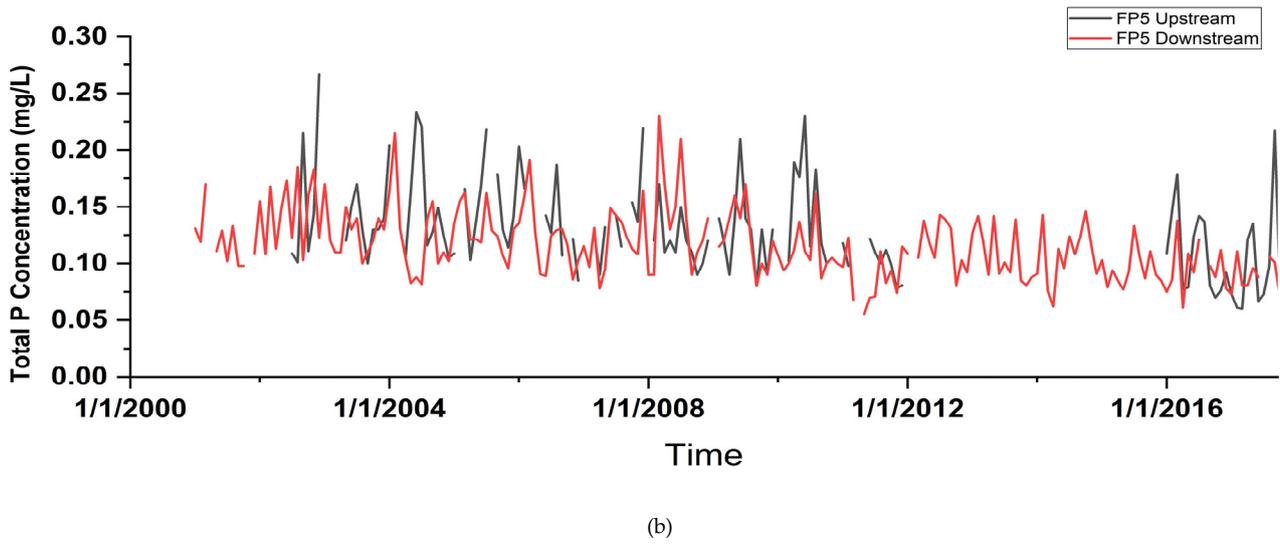
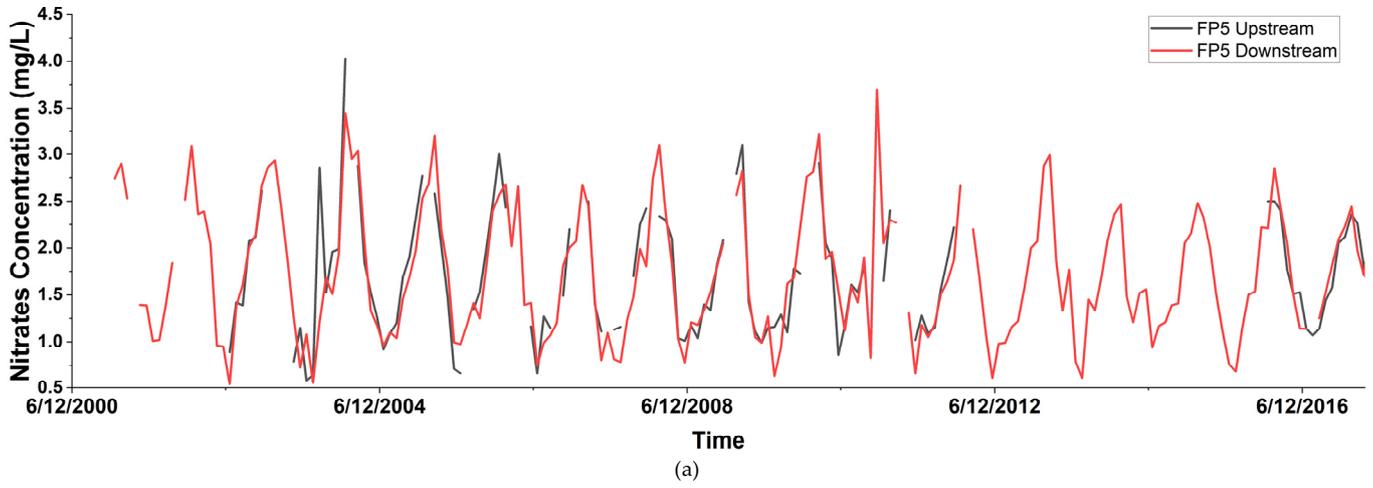


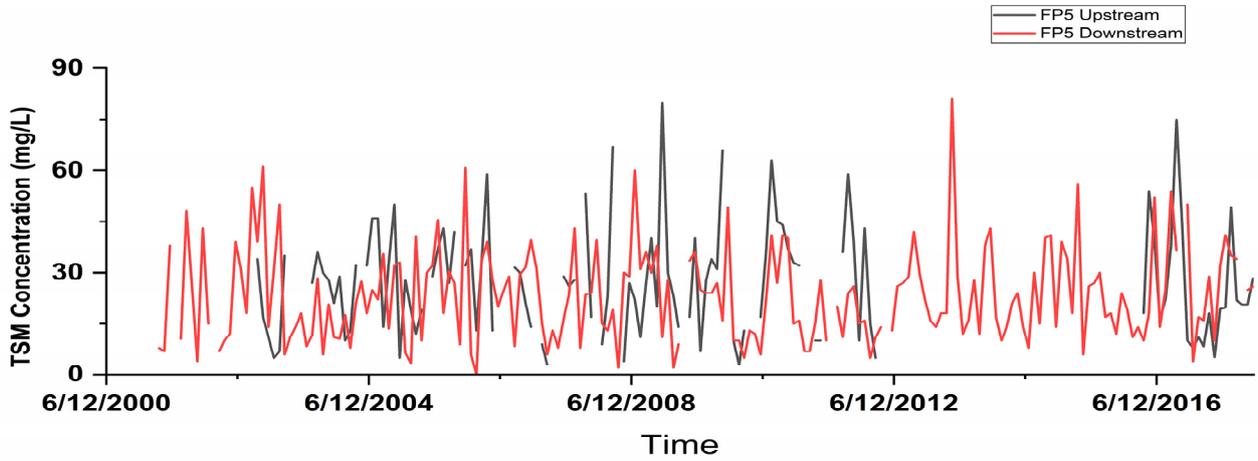
(c)



(d)

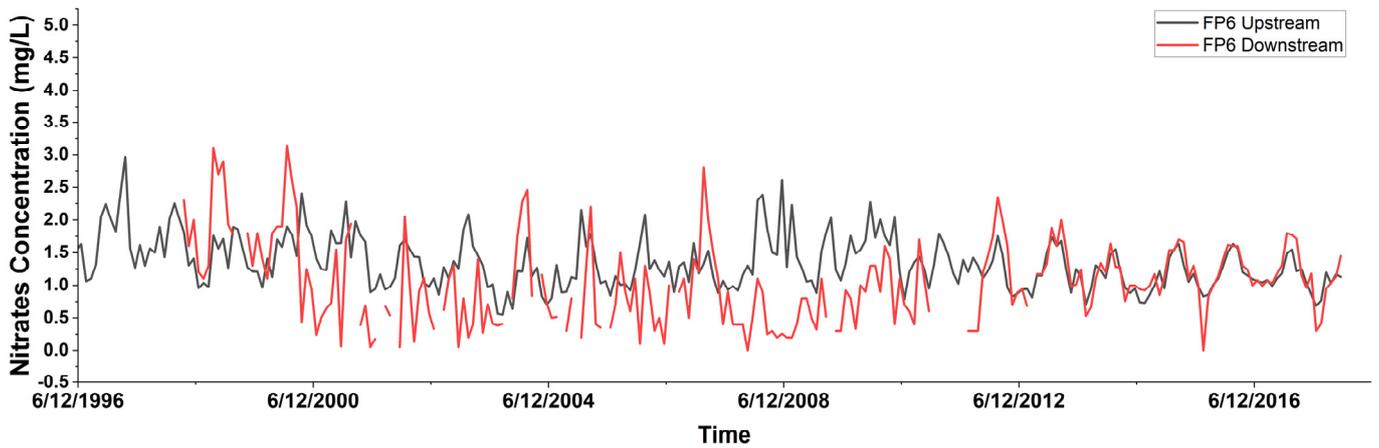
Figure S4. Time series plots for floodplain 4 showing the concentration of: a) Nitrates, b) Total Phosphorus, c) Chlorophyll-a and d) TSM.



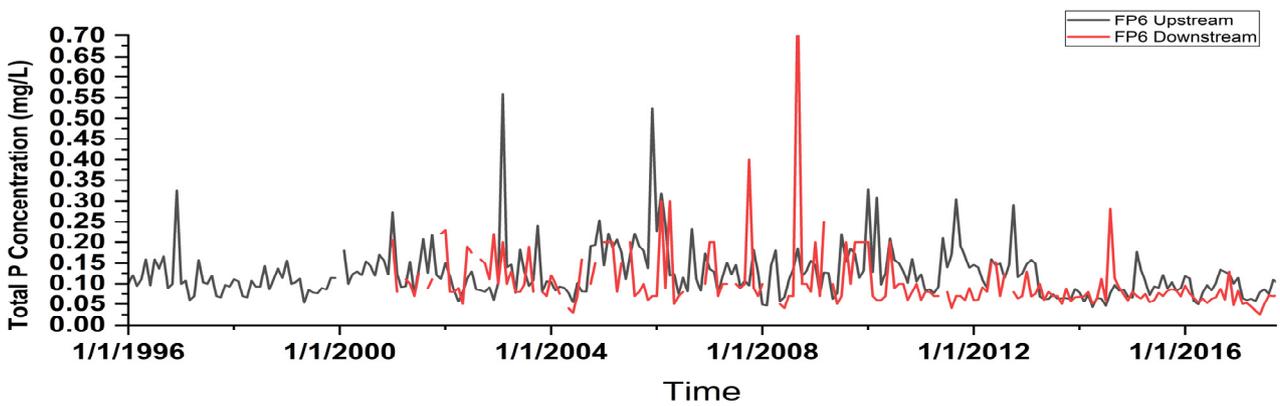


(d)

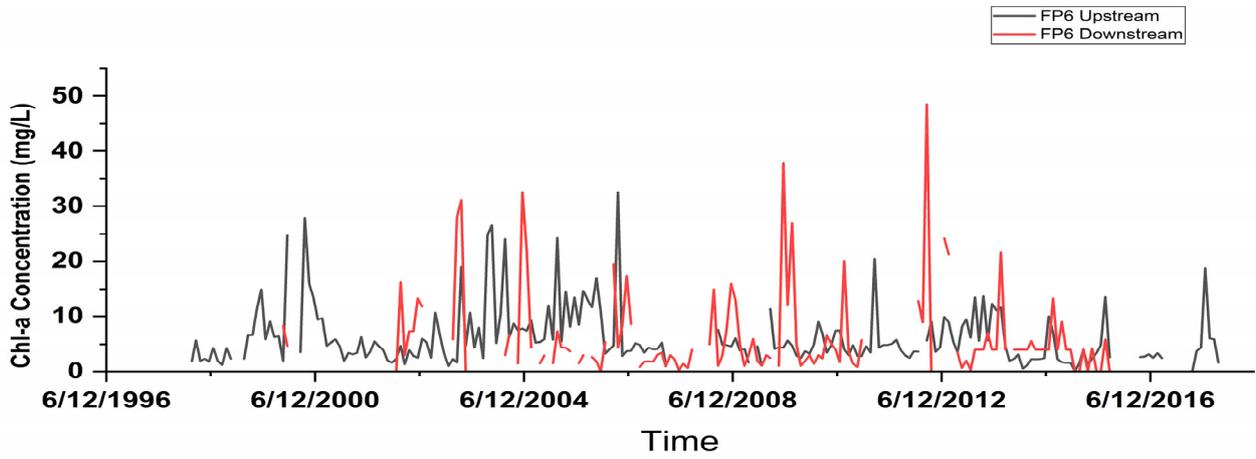
Figure S5. Time series plots for floodplain 5 showing the concentration of: a) Nitrates, b) Total Phosphorus, c) Chlorophyll-a and d) TSM.



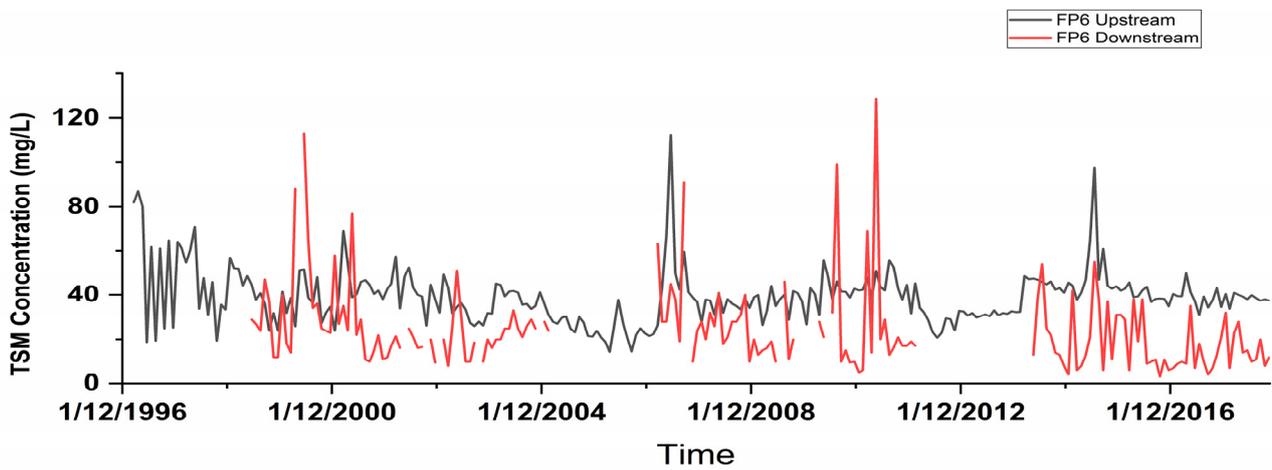
(a)



(b)

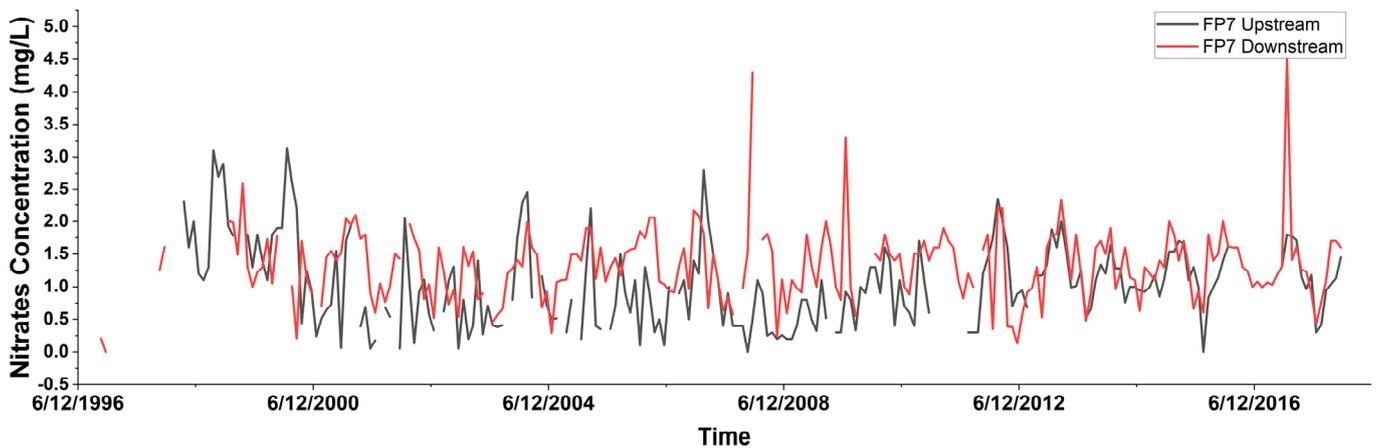


(c)

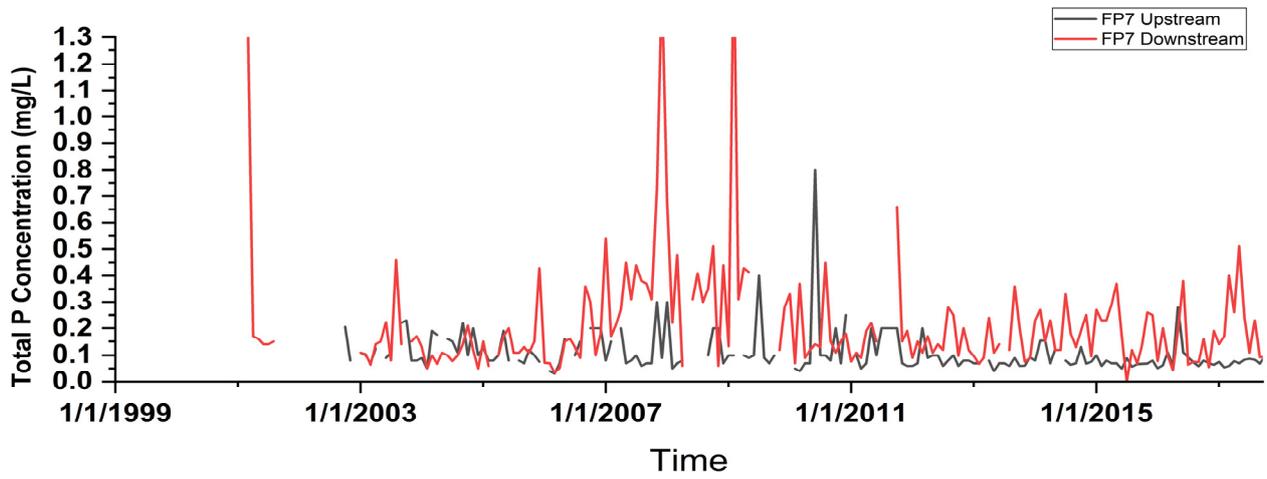


(d)

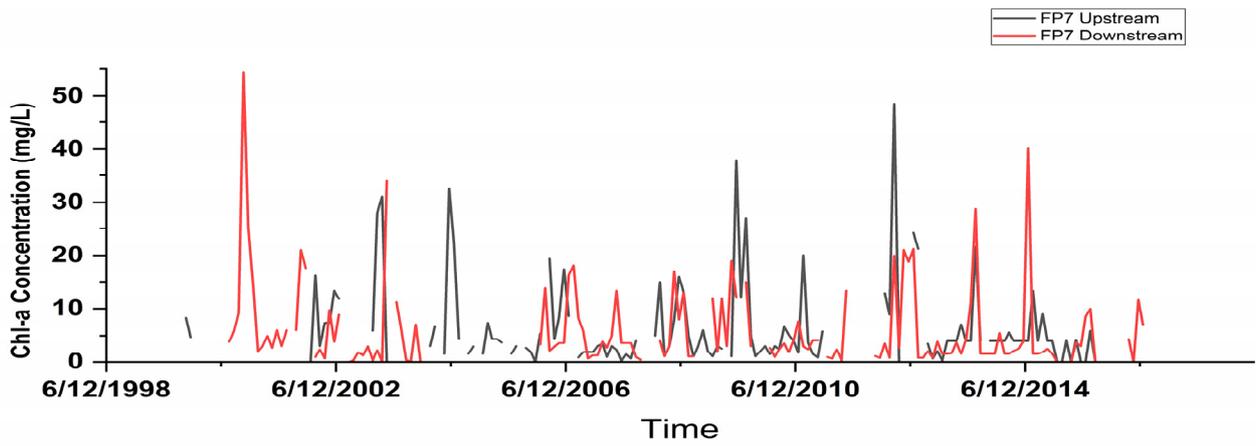
Figure S6. Time series plots for floodplain 6 showing the concentration of: a) Nitrates, b) Total Phosphorus, c) Chlorophyll-a and d) TSM.



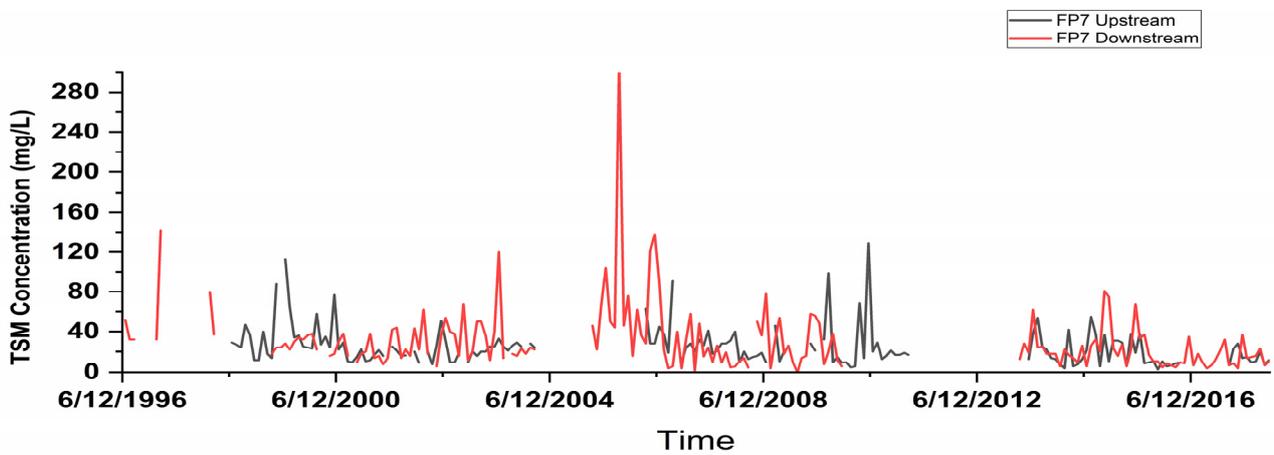
(a)



(b)

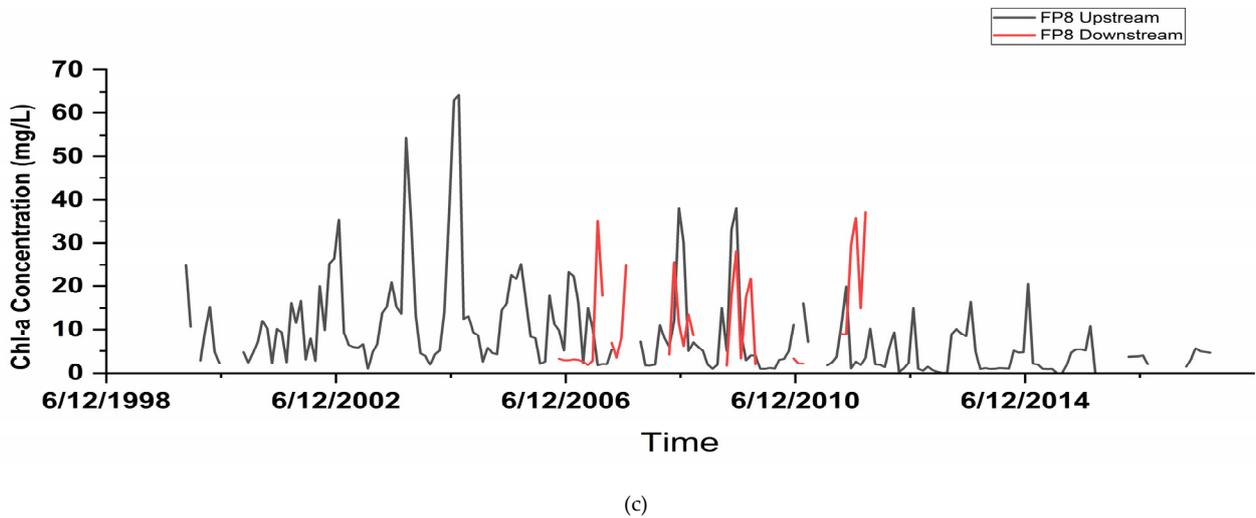
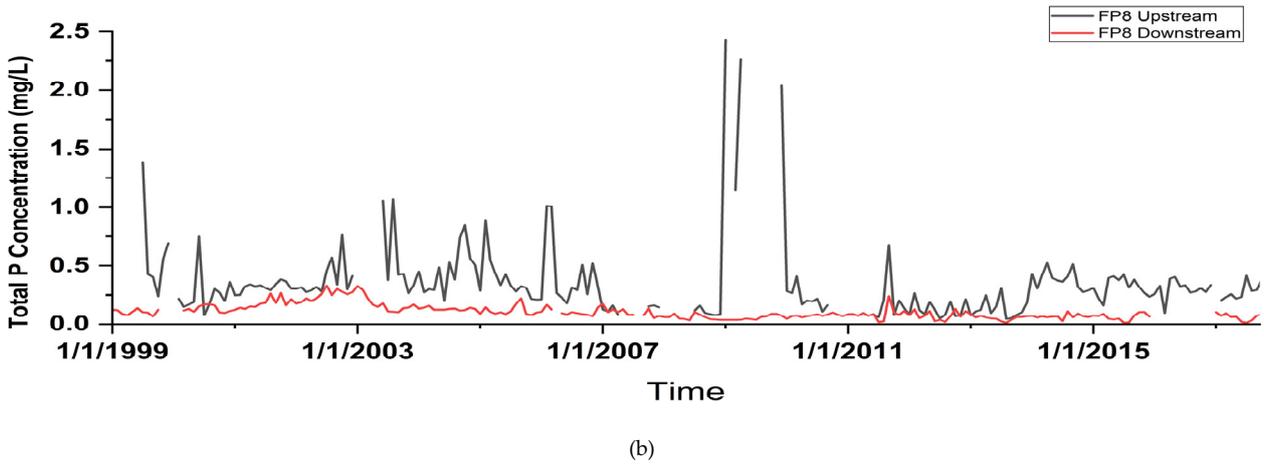
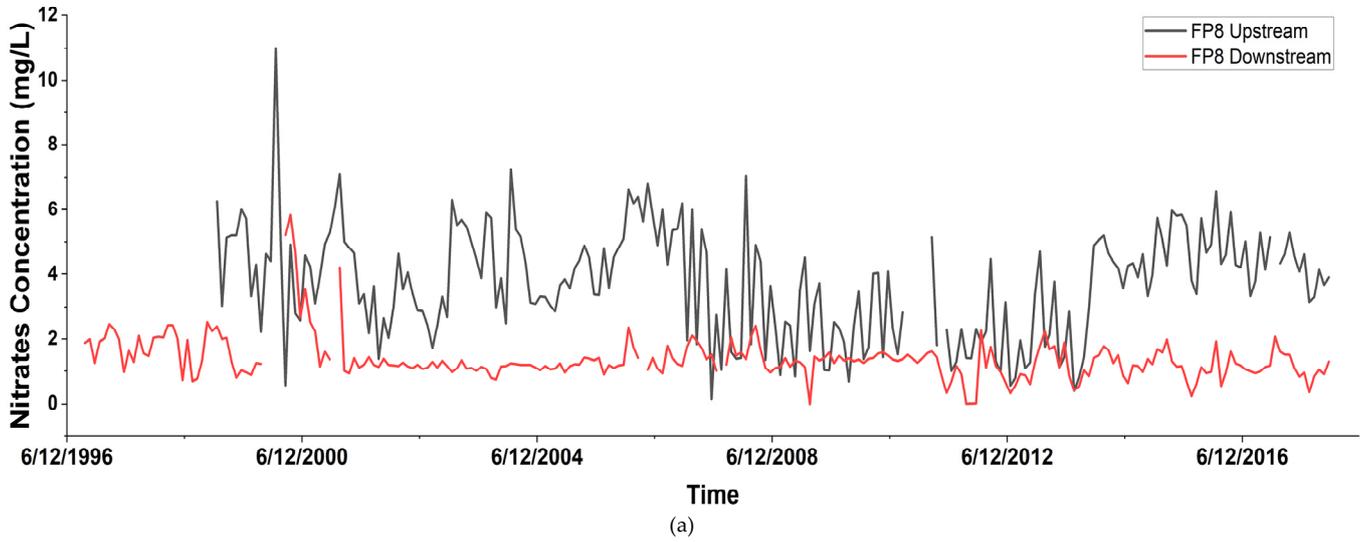


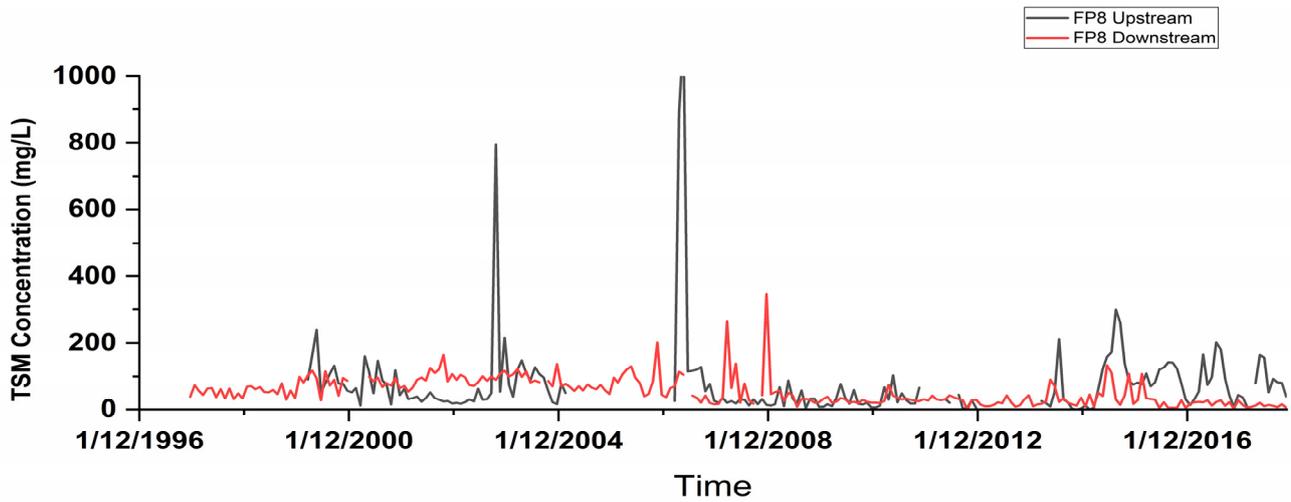
(c)



(d)

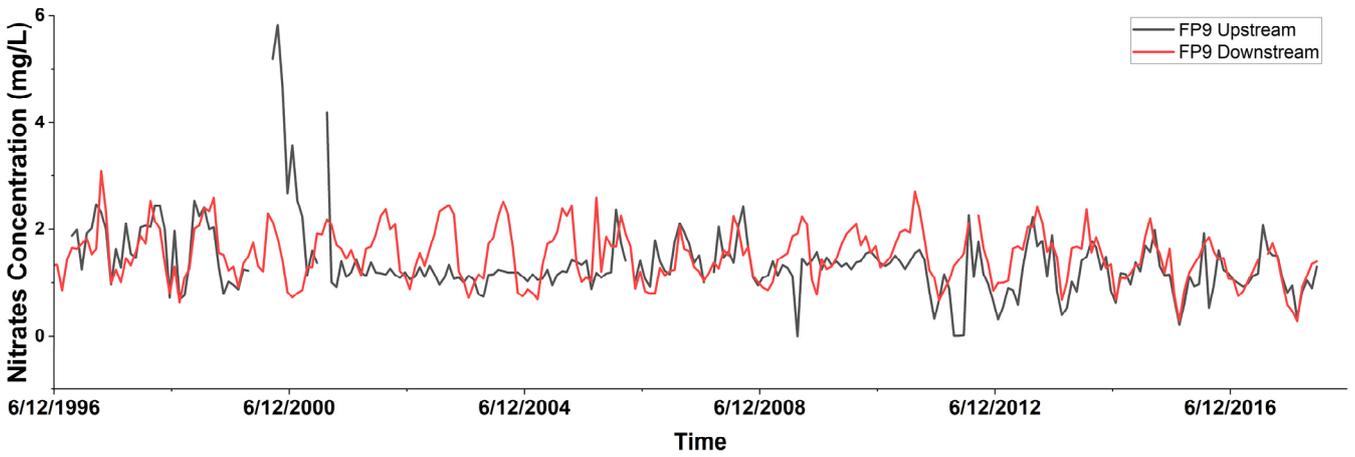
Figure S7. Time series plots for floodplain 7 showing the concentration of: a) Nitrates, b) Total Phosphorus, c) Chlorophyll-a and d) TSM.



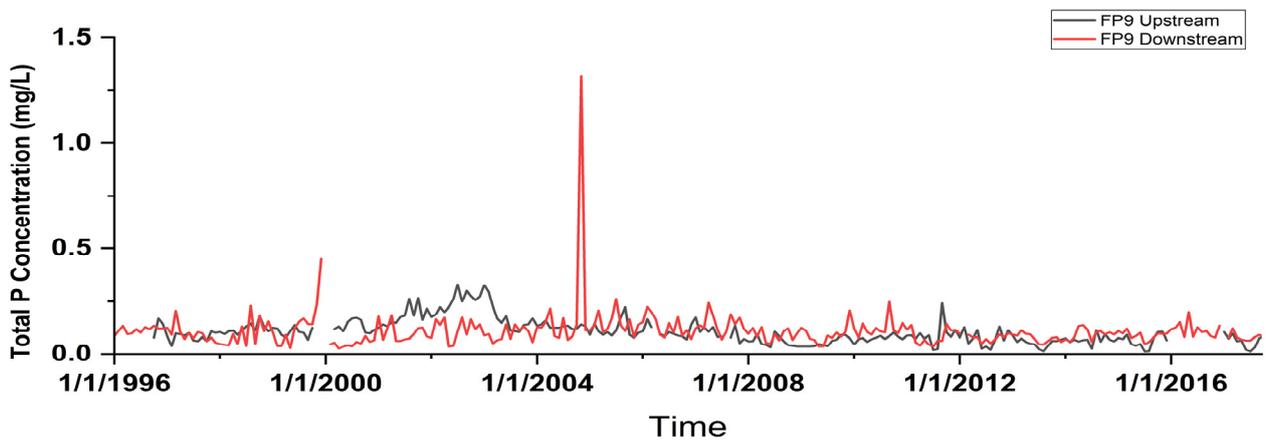


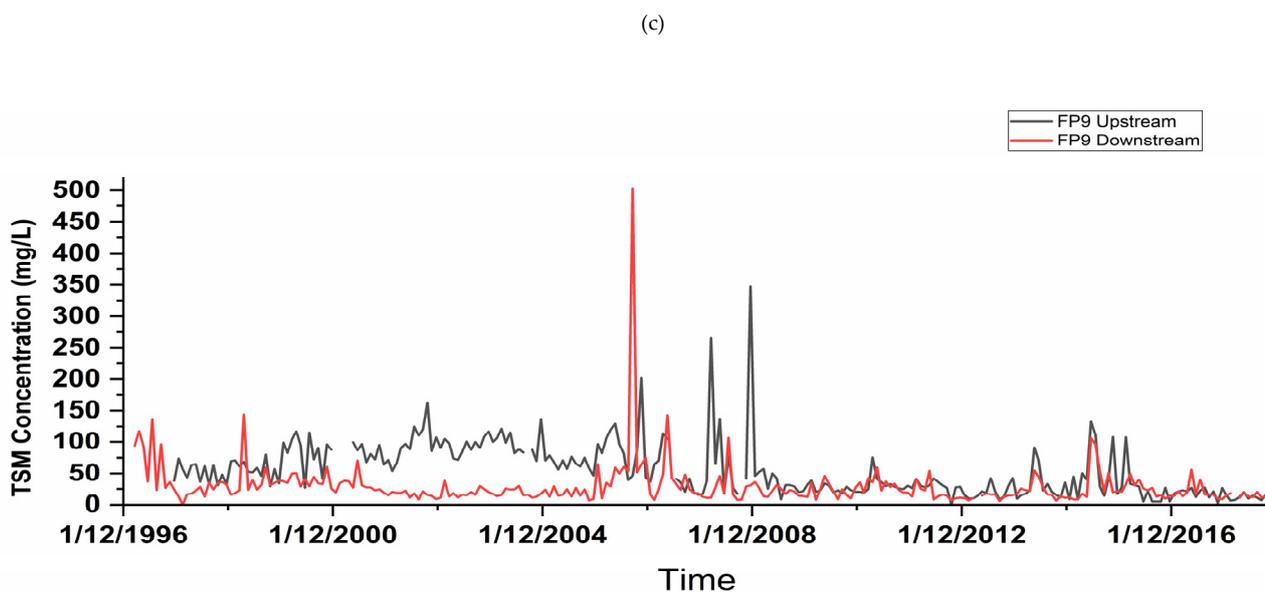
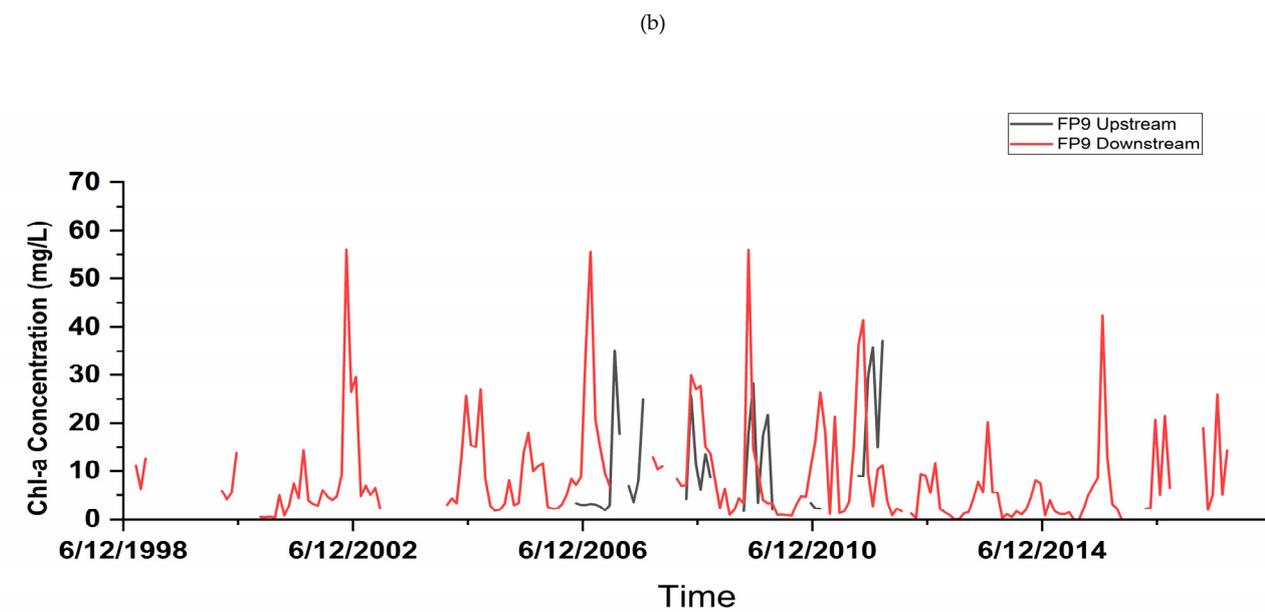
(d)

Figure S8. Time series plots for floodplain 8 showing the concentration of: a) Nitrates, b) Total Phosphorus, c) Chlorophyll-a and d) TSM.



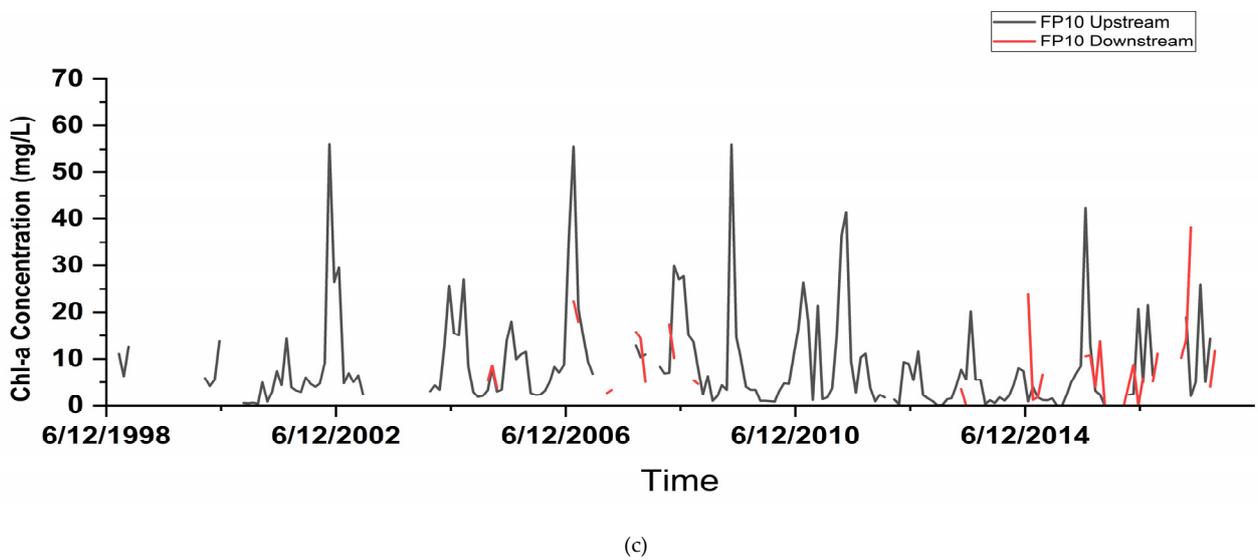
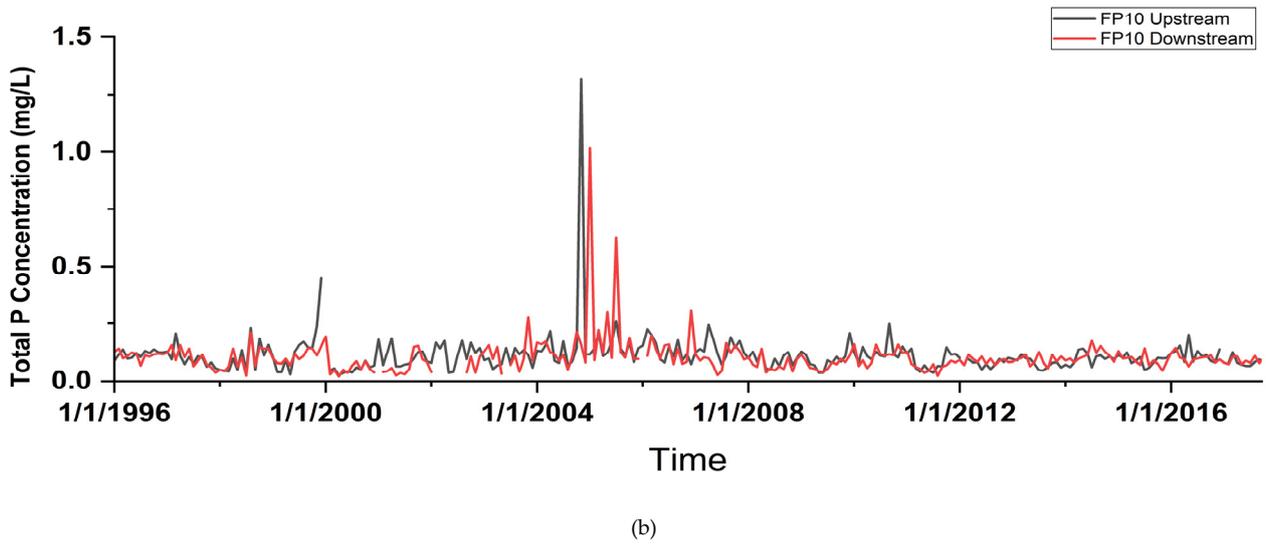
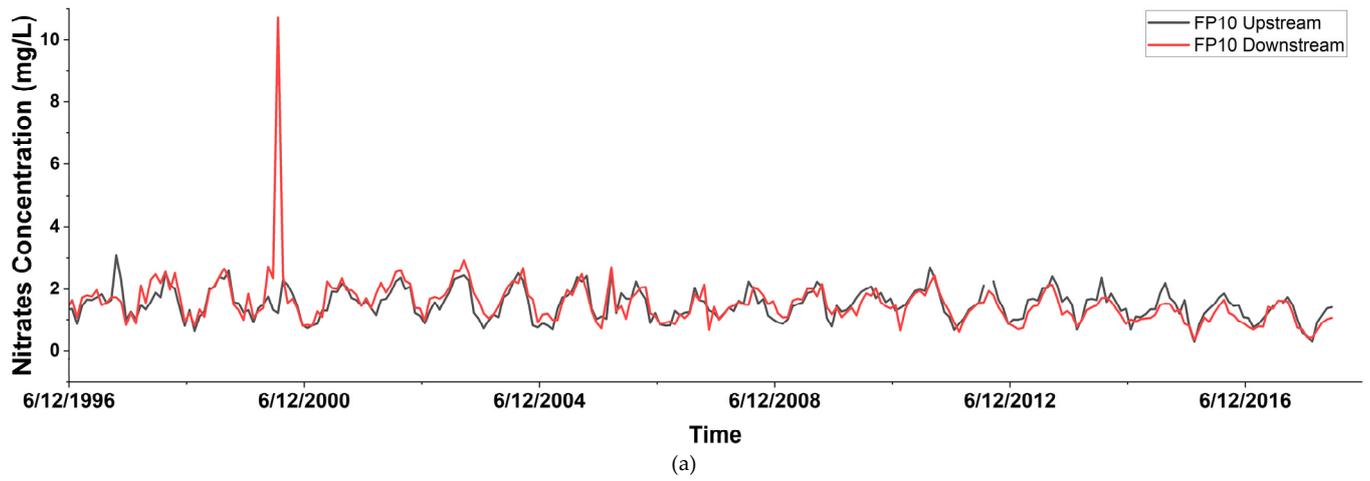
(a)

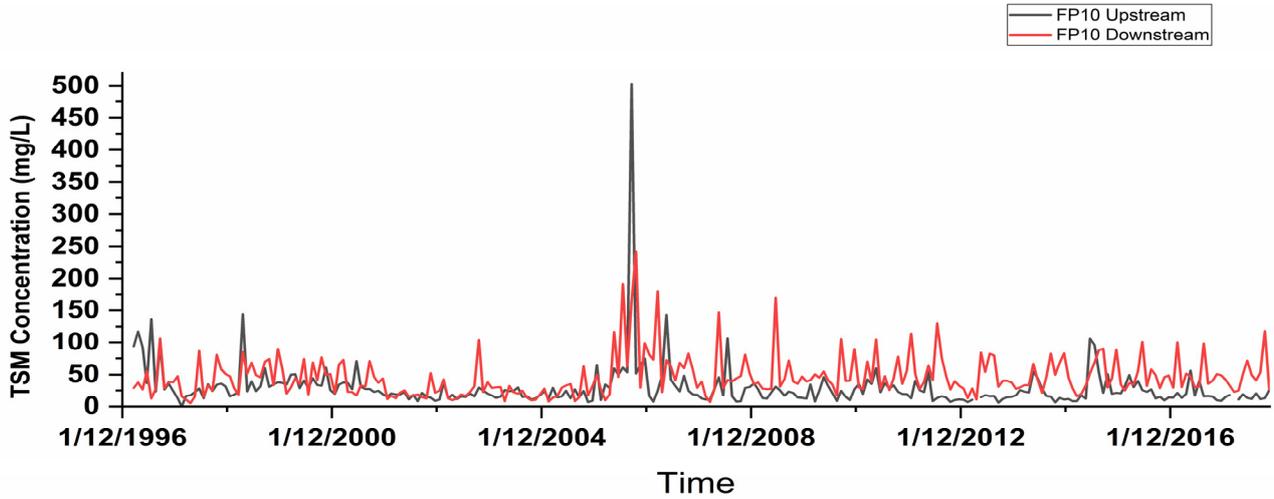




(d)

Figure S9. Time series plots for floodplain 9 showing the concentration of: a) Nitrates, b) Total Phosphorus, c) Chlorophyll-a and d) TSM.





(d)

Figure S10. Time series plots for floodplain 10 showing the concentration of: a) Nitrates, b) Total Phosphorus, c) Chlorophyll-a and d) TSM.

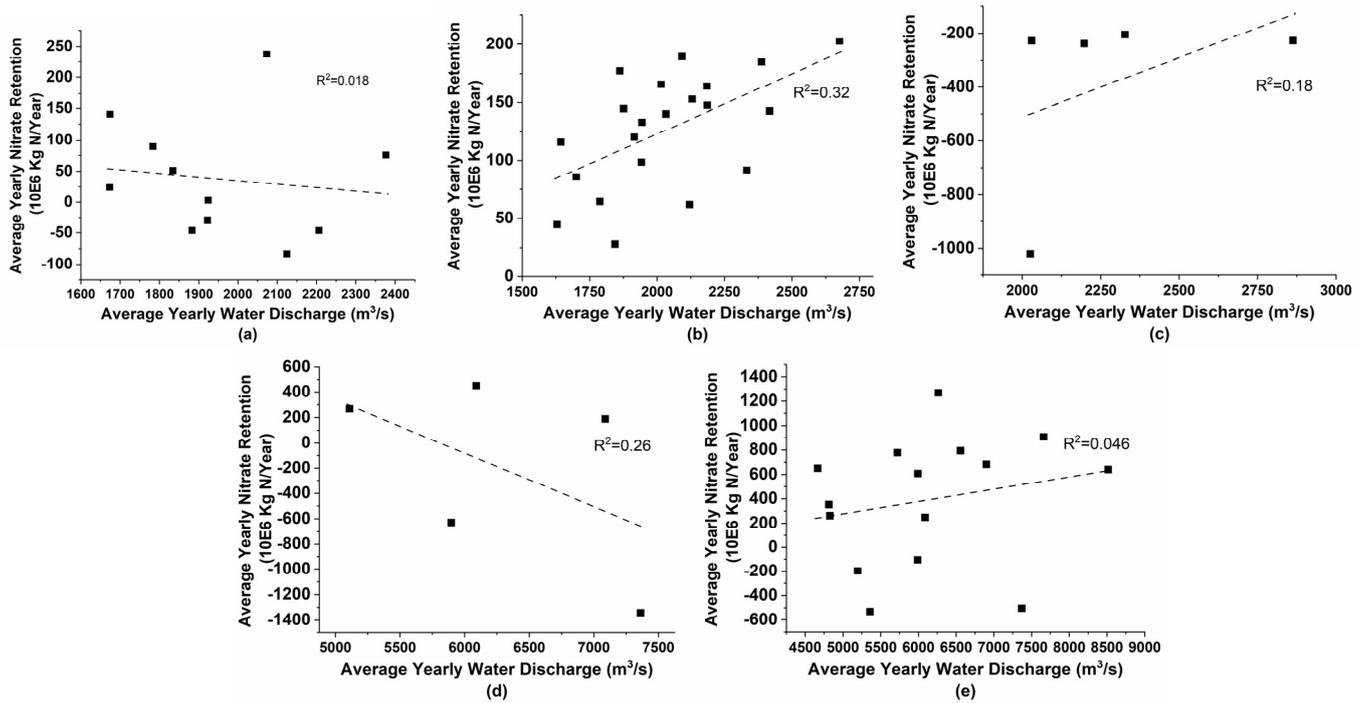


Figure S11. Correlation between the Nitrogen Retention and the water discharge values for: a) FP1, b) FP2, c) FP3, d) FP9 and e) FP10.

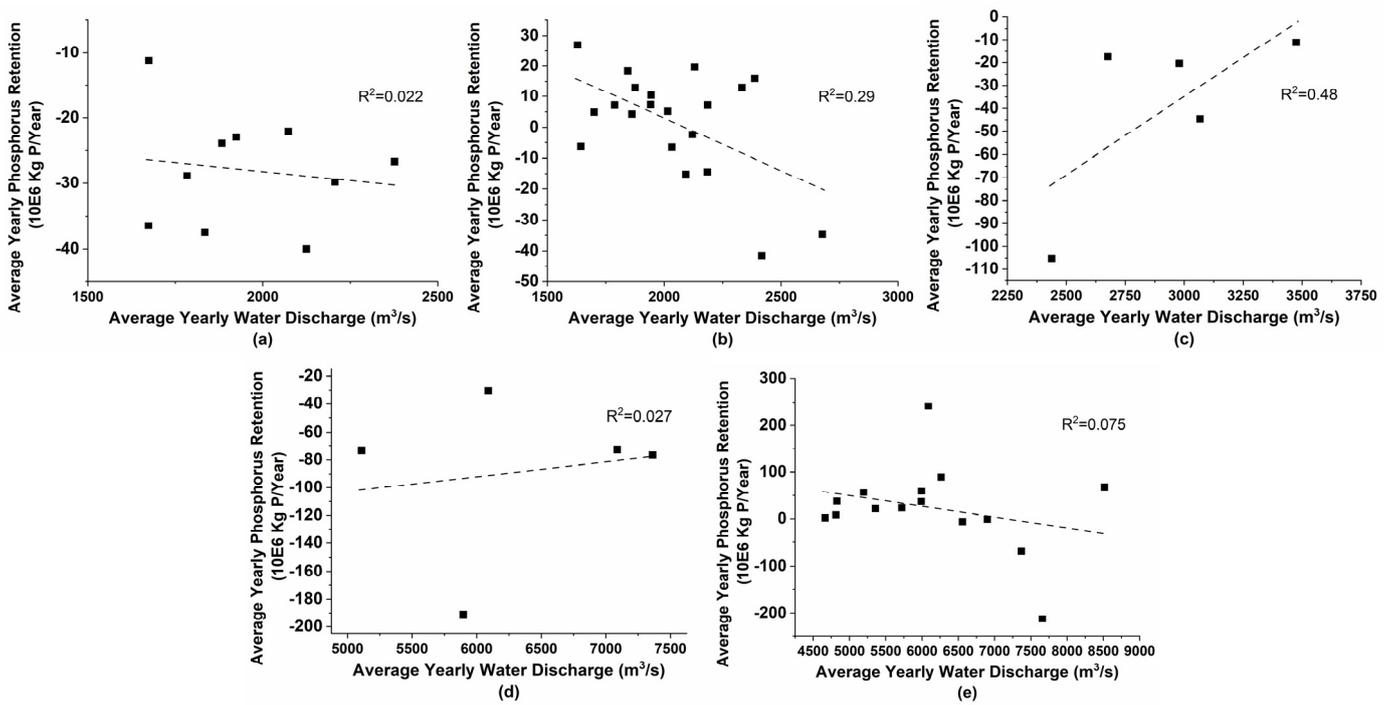


Figure S12. Correlation between the Phosphorus Retention and the water discharge values for: a) FP1, b) FP2, c) FP3, d) FP9 and e) FP10.

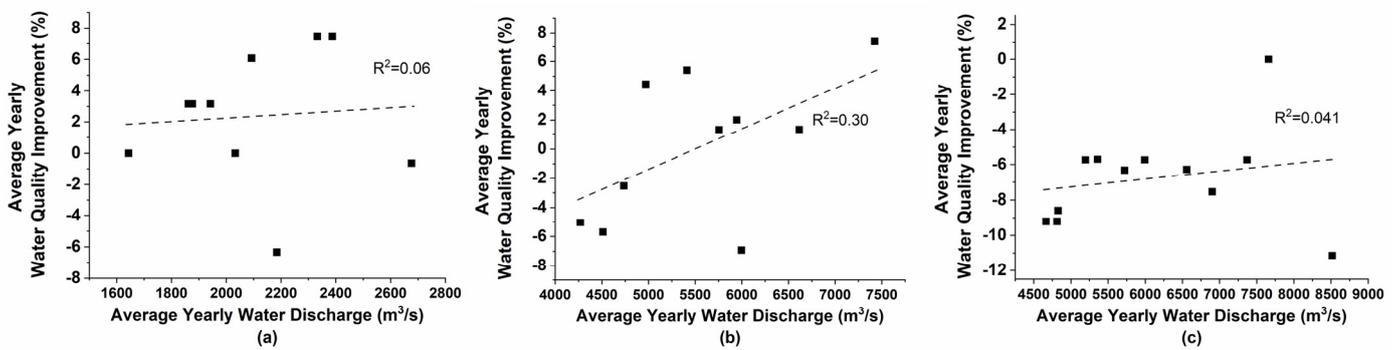


Figure S13. Correlation between the water quality improvement and the water discharge values for: a) FP2, b) FP6 and c) FP10.