



AARHUS
UNIVERSITY

DEPARTMENT OF AGROECOLOGY

STØTTET AF

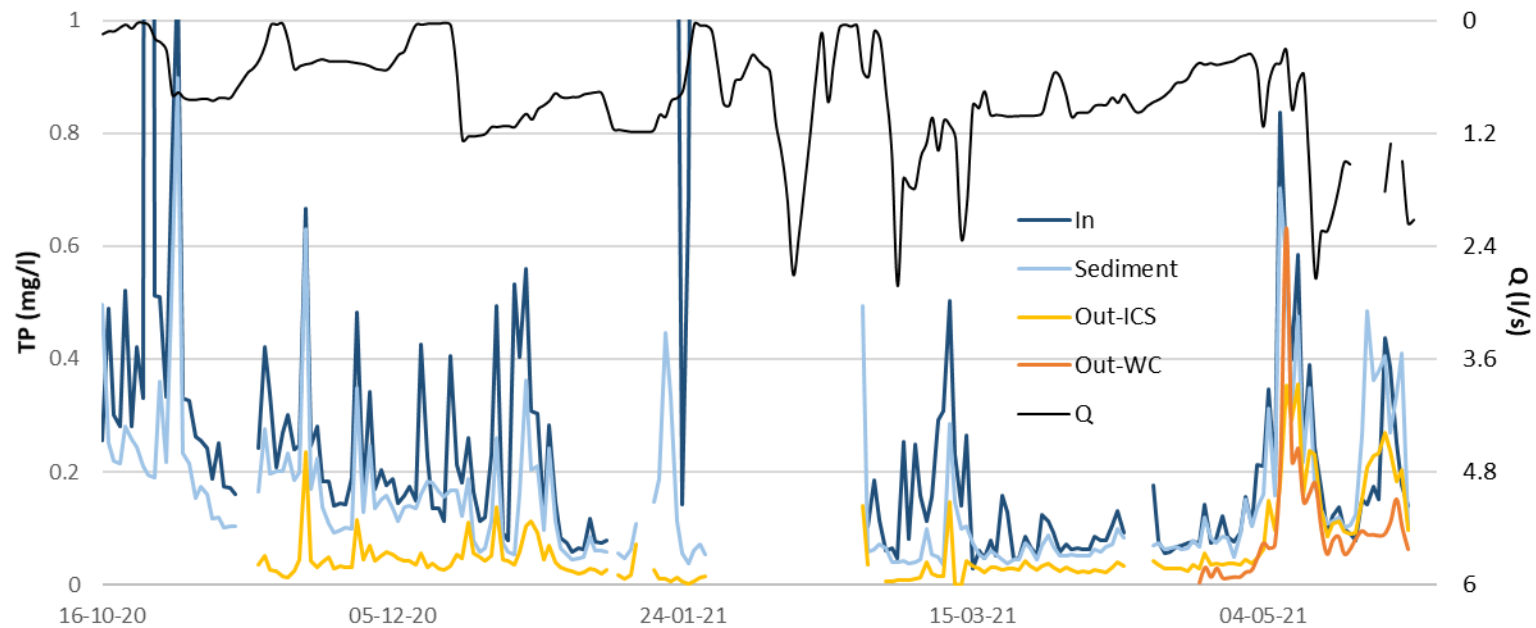
Promilleafgiftsfonden for landbrug

Sediment and reactive filter to remove particulate and dissolved phosphates:

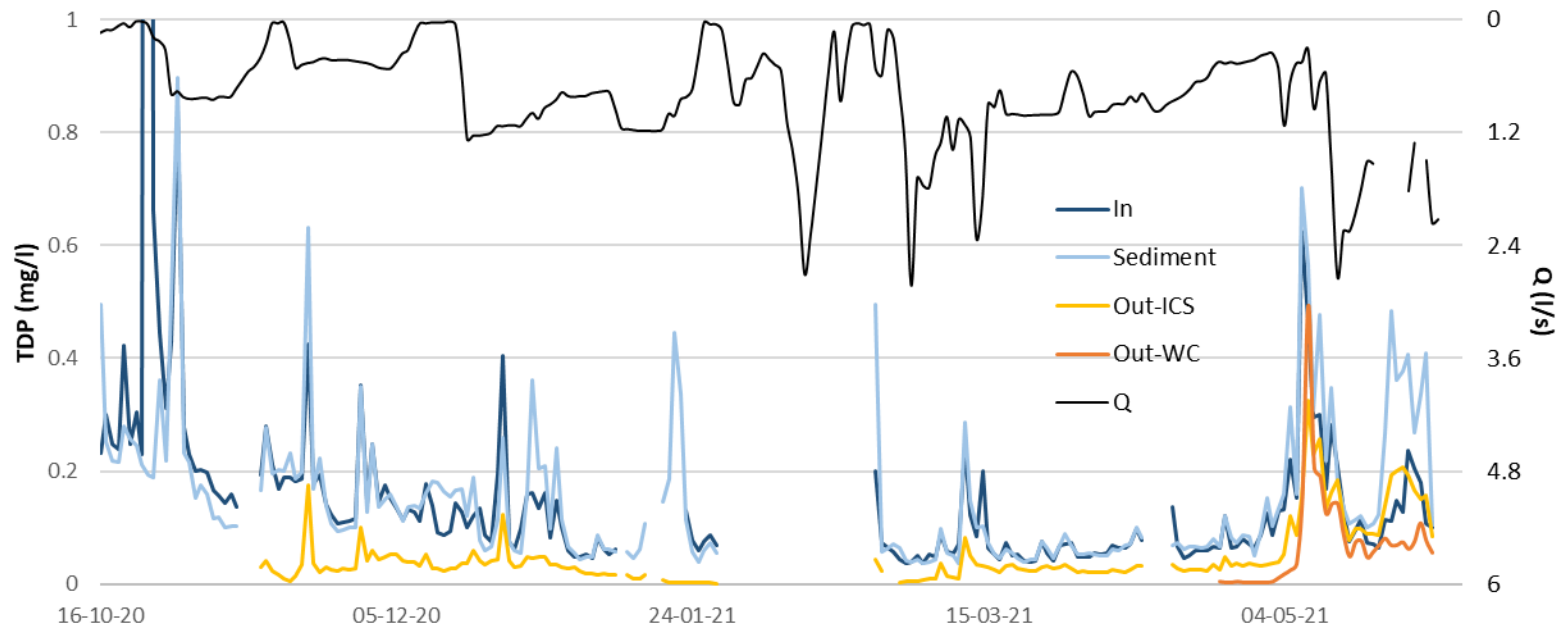
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System view





NB: AGRO and WaterCare are owner of the Out-ICS and Out-WC data, respectively.



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Monthly data overview

Month	Q (m3)	WaterCare DPF filter					
		TP load (g)	TP removal (%)	TDP load (g)	TDP removal (%)	PP load (g)	PP removal (%)
dec-19	718	61	9	42	4	19	44
jan-20	1089	97	15	48	-11	49	66
feb-20	531	78	-7	28	-35	50	26
mar-20	1598	77	-71	59	-105	18	-31
apr-20	1054	106	5	68	-14	38	54
maj-20	316	70	-55	56	-72	14	22
jun-20	228						
jul-20	98						
aug-20	88						
sep-20	108						
okt-20	613	243	30	190	23	53	56
nov-20	1299	276	31	207	16	69	75
dec-20	1798	448	28	250	2	197	75
jan-21	2133	253	48	74	20	180	75
feb-21	1825	13	35	17	16	5	67
mar-21	3245	463	31	228	10	235	69
apr-21	1904	463	13	108	2	25	60
maj-21	2678	581	6	403	-7	178	42

Incomplete data

Monthly data overview

Month	Q (m3)	TP load (g)	TP removal (%)	ICS filter		PP load (g)	PP removal (%)
				TDP load (g)	TDP removal (%)		
nov-20	59	12	76	10	79	2	14
dec-20	225	30	58	23	61	7	18
jan-21	214	17	72	9	72	8	79
feb-21	27	3	82	1	68	2	72
mar-21	272	18	58	15	58	3	68
apr-21	190	11	55	10	57	1	28
maj-21	268	53	30	41	29	12	15

Incomplete data

- The DPF (sediment) filter performed well during the last drainage season.
- Removal performance of TP, TDP and PP generally decreases towards the end of the drainage season.
- The ICS (iron coated sand) performed well.
- Filtration of fine sediment remains a challenge reducing the efficiency of the reactive filter.