

SMUSI 5.1  
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\*\* Abflüsse und Schmutzfrachten \*\*  
\*\* an den \*\*  
\*\* Entlastungsbauwerken \*\*  
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Optimierung 1+2+4.4  
Stand 2017  
RR 1962-2012

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Bilanzierungszeitraum: 01.01.1962 00:00 - 31.12.2012 23:59  
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Anfangsbedingungen  
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Beckenfuellung ..... (%) : 0  
Anfangsverlust ..... (%) : 100  
  
Muldenverluste nach NG (ATV-A118)  
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Neigungsgruppen ..... (-) : NG 1 NG 2 NG 3 NG 4  
Muldenverluste ..... (mm) : 1.50 1.00 0.50 0.50

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Niederschlagskenngrößen  
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echte Regenreihen  
Regenreihennummer ..... (-) : RRNR 2 Mittel  
Jahresniederschlagshöhe ..... (mm) : 1347.0 1347.00  
Niederschlagshöhe (Bilanz) ..... (mm) : 68909.568909.50  
Niederschlagsdauer (Bilanz) ..... (h) : 60386.9 60386.9

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Absetz- und Reinigungswirkungen  
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Absetzklaffen .....	(-) :	s	m	g	h	
Absetzwirkung fuer AFS .....	(%) :	5.0	15.0	25.0	60.0	
	Stoff :	AFS	BSB5	CSB	TOC	NH4-N
Absetzwirkung bezogen auf AFS .....	(%) :	-	35.0	30.0	30.0	0.0
TW-Ablaufkonzentrationen der KLA (mg/l) :		25.0	8.0	43.0	10.0	12.3
						1.0

Definierte Schmutzpotentiale nach Flaechentyp

	Stoff :	AFS	BSB5	CSB	TOC	NH4-N	PO4-P
Flaechentyp 0	..... (kg/ha*a) :	770.0	60.0	600.0	200.0	6.0	6.5
Flaechentyp 1	..... (kg/ha*a) :	400.0	281.0	478.0	150.0	40.1	7.3

Resultierende Regenwasserkonzentrationen

Flaeche	FL-Typ	NG	RRNR	Stoff :	AFS	BBS5	CSB	TOC	NH4-N	PO4-P
F3	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F1	2	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F80	3	2	2	(mg/l) :	35.6	25.0	42.5	13.3	3.6	0.6
F4	1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F5	2	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F15	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F18	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F2	2	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F79	1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F78	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F6	1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F7	1	3	2	(mg/l) :	35.6	25.0	42.5	13.3	3.6	0.6
F8	1	3	2	(mg/l) :	35.6	25.0	42.5	13.3	3.6	0.6
F9	1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F19	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F17	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F14	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F16	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F13	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F11	1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F12	1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F36	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F37	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F34	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F35	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F10	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F43	1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F59	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F49	1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F48	1	3	2	(mg/l) :	35.6	25.0	42.5	13.3	3.6	0.6
F51	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F50	1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F58	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F52	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F53	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F57	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F54	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F55	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F56	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F25	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F26	1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7

Resultierende Regenwasserkonzentrationen

Flaeche	FL-Typ	NG	RRNR	Stoff :	AFS	BBS5	CSB	TOC	NH4-N	PO4-P	
F27		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F28		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F60		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F61		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F62		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F64		1	3	2	(mg/l) :	35.6	25.0	42.5	13.3	3.6	0.6
F63		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F65		1	3	2	(mg/l) :	35.6	25.0	42.5	13.3	3.6	0.6
F67		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F76		0	3	2	(mg/l) :	68.5	5.3	53.4	17.8	0.5	0.6
F77		0	3	2	(mg/l) :	68.5	5.3	53.4	17.8	0.5	0.6
F47		0	2	2	(mg/l) :	70.2	5.5	54.7	18.2	0.5	0.6
F46		1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F32		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F83		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F33		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F38		1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F39		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F44		1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F40		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F41		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F42		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F20		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F21		1	3	2	(mg/l) :	35.6	25.0	42.5	13.3	3.6	0.6
F22		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F23		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F24		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F45		1	3	2	(mg/l) :	35.6	25.0	42.5	13.3	3.6	0.6
F66		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F68		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F71		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F70		1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F72		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F73		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F74		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F75		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F30		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F29		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F31		1	1	2	(mg/l) :	37.4	26.3	44.7	14.0	3.8	0.7
F82		1	2	2	(mg/l) :	36.5	25.6	43.6	13.7	3.7	0.7
F75.1		0	1	2	(mg/l) :	72.1	5.6	56.2	18.7	0.6	0.6

Resultierende Regenwasserkonzentrationen

----- Stoff : AFS BSB5 CSB TOC NH4-N PO4-P  
Flaeche FL-Typ NG RRNR

Optimierung 1+2+4.4  
 Stand 2017  
 RR 1962-2012  
 Bilanzierungszeitraum: 1. 1.1962 0:00 - 31.12.2012 23:59

Seite 1  
 SMUSI 5.1

Niederschlagshoehe (mm/a) : 1346.60  
 Niederschlagsdauer (h/a) : 1180.05

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 \* Gebiets- und Systemkenngrößen \*  
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		Direkteinzugsgebiet			Gesamteinzugsgebiet			Trockenwetterabfluss			Entlastungsbauwerke											
	Bez.	A	VG	Au	A	VG	Au	EZ	EZ	mxQt	Qd	Qkue	V	VS	qr	te						
	Typ	AAus	A	AAus	AAus	A	AAus	EZTr	EZTr	mQt	l/s	l/s	cbm	cbm/ha	l/(sha)	h						
	-	ha	%	ha	%	ha	%	-	-	l/s	l/s	l/s	cbm	cbm/ha	l/(sha)	h						
I B11	DLB	H	I	0.8	25	0.2	45	I	45	I	0	0	0	0	0	7	62	10	49.4	34.2	0	
I B10	SKO	H	I	9.4	25	2.4	425	I	425	I	1	0	1	1	I	7	52	22.0	2.7	2	I	
I B35	FGB	H	I	11.4	30	3.4	428	I	428	I	1	0	1	1	I	55	355	104.3	16.0	1	I	
I R11	RUE	I	I	9.3	17	1.6	392	I	392	I	1	0	1	1	I	145	108		67.8		I	
I B26	RRB	H	I	11.3	44	4.9	510	I	510	I	1	0	1	2	I	350	550	0.0	70.6	0	I	
I B36	FGB	H	I	1.6	25	0.4	74	I	74	I	1	0	1	1	I	35	12	24.9	11.5	0	I	
I B34	SKO	H	I	27.8	29	8.1	832	I	832	I	2	1	0	2	I	35	646	87.0	2.8	5	I	
I B12	SKO	H	I	6.4	73	4.7	311	I	311	I	2	0	2	4	I	195	483	60.3	20.9	0	I	
I B14	FGB	N	I	26.1	56	14.5	1531	I	1531	I	3	0	3	6	I	351	468	24.1	1.9	2	I	
I V10	Verz.	I	I	52.5	33	17.2	1543	I	1543	I	2	4	1	7	I	944					I	
I B13	DLB	N	I	4.4	36	1.5	129	I	1376	I	2	0	0	2	I	61	84	160	66.5	5.4	1	I
I B19	RRB	H	I	0.8	80	0.6	20	I	20	I	0	4	0	5	I	63	229	0.0	48.7	2	I	
I B22	RRB	H	I	56.8	17	9.4	1952	I	1952	I	2	3	0	5	I	105	0	0.0	10.6	0	I	
I B16	SKO	H	I	45.6	32	14.7	2121	I	5538	I	8	1	1	9	I	66	1022	49.2	1.3	5	I	
I V15	Verz.	I	I	36.7	31	11.4	1456	I	1456	I	2	0	0	2	I	700					I	
I B33	SKO	H	I	70.7	18	12.7	5138	I	6398	I	11	3	18	32	I	103	1645	109.5	3.0	6	I	
I B18	SKU	H	I	192.2	30	57.4	5722	I	5742	I	8	10	2	19	I	261	18216	3673		4	I	
I B17	SKU	H	I	7.0	0	0.0	0	I	5538	I	8	1	1	9	I	198	661	50	50.3	4.2	0	I
I B15	SKO	H	I	42.1	39	16.5	1894	I	1894	I	3	0	0	3	I	129	573	34.8	7.6	1	I	
I V11	Verz.	I	I	0.0	0	0.0	0	I	6398	I	11	3	18	32	I	110					I	

I	B31	SKU	H	I	0.0	0	0.0	0	I	109.8	22	24.2	6398	I	11	3	18	32	49	I	103	600	5	109.7	3.0	0	I
I	B32	SKU	H	I	0.0	0	0.0	0	I	0.0	0	0.0	0	I	0	0	0	0	0	I	49	100	5	0.0	0.0	0	I
I	B180	RRB	H	I	0.0	0	0.0	0	I	0.0	0	0.0	0	I	0	0	0	0	0	I	18	6260	0.0	0.0	0.0	97	I
I	R12	RUE	I	I	8.2	40	3.3	408	I	8.2	40	3.3	408	I	1	0	0	1	1	I	1203			368.4			I
I	B23	SKU	H	I	81.4	24	19.6	3295	I	138.3	21	29.0	5247	I	7	4	1	12	19	I	98	6170	2569	88.6	3.0	8	I
I	B52	SKU	H	I	236.8	30	70.3	7329	I	650.9	29	188.7	26834	I	39	22	24	85	136	I	450	12385	555	65.1	1.9	0	I
I				I	7.0				I	8.5				I						I							I
I	Summe	Mischsystem		I					I	650.9	29	188.7	26834	I	39	22	24	85	136	I	450	12283	65.1	1.9			I
I		Trennsystem		I					I	0.0				I						I				1.0			I
I		Aussengebiete		I					I	8.5				I			0	0		I							I
I				I					I					I						I							I

Optimierung 1+2+4.4  
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 Bilanzierungszeitraum : 1. 1.1962 0:00 - 31.12.2012 23:59

Seite 2  
 SMUSI 5.1

Niederschlagshoehe (mm/a) : 1346.60  
 Niederschlagsdauer (h/a) : 1180.05

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 \* Zulauf- und Entlastungskenngrößen \*  
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Z U L A U F		V o l u m e n		Z a h l		D a u e r		B e k		T s d . c b m		V o l u m e n		S u m m e				
B a u w e r k	T y p	Z a h l	D a u e r	V Q t	V Q m	K U	B U	B e k	I (D r o s s e l)	K U	B U	T s d . c b m	T s d . c b m	T s d . c b m	%			
-	-	-	h	T s d . c b m	T s d . c b m	-	h	h	h	h	h	h	h	h				
I B11	DLB H I	836	631	0.150	2.381	4	0	21	I	1.7	0.0	12.2	I	( 2.269)	0.112	0.000	0.112	5
I B10	SKO H I	461	923	2.333	27.292	130	227	I	I	I	135.1	596.0	I	( 16.655)	10.638	10.638	39	I
I B35	FGB H I	441	1019	2.045	41.123	2	66	I	I	I	1.0	52.0	I	( 40.155)	0.968	0.968	2	I
I R11	RUE I	466	903	1.891	21.189	9	I	I	I	I	2.7	I	( 20.015)	1.174	1.174	6	I	
I B26	RRB H I	401	967	3.108	52.382	1	3	I	I	I	0.2	2.0	I	( 52.134)	0.248	0.248	0	I
I B36	FGB H I	419	1068	3.387	23.477	4	16	I	I	I	1.4	6.6	I	( 23.273)	0.204	0.204	32	I
I B34	SKO H I	330	1272	10.111	131.639	34	170	I	I	I	99.7	679.0	I	( 95.730)	35.909	35.909	28	I
I B12	SKO H I	389	1164	9.013	93.569	1	21	I	I	I	0.3	12.5	I	( 93.220)	0.349	0.349	12	I
I B14	FGB N I	404	1021	11.803	203.896	94	259	I	I	I	94.2	669.1	I	( 151.053)	52.844	52.844	26	I
I B13	DLB N I	375	1200	10.509	109.418	56	41	159	I	55.7	18.7	242.4	I	( 93.525)	12.302	3.591	15.893	23
I B19	RRB H I	417	873	14.141	6.488	0	3	I	I	I	0.0	3.3	I	( 6.488)	0.000	0.000	0	I
I B22	RRB H I	361	1170	22.690	112.553	0	49	I	I	I	0.0	86.2	I	( 112.553)	0.000	0.000	0	I
I B16	SKO H I	288	1456	46.308	399.307	58	166	I	I	I	339.5	1128.3	I	( 251.737)	147.570	147.570	48	I
I B33	SKO H I	338	1825	204.213	265.264	18	129	I	I	I	56.3	592.3	I	( 223.088)	42.177	42.177	26	I
I B18	SKU H I	288	1349	92.852	661.577	I	I	I	I	I	I	I	I	I	I	I	I	I
I B17	SKU H I	255	1675	53.231	254.566	0	0	0	I	0.0	0.0	0.0	I	( 254.566)	0.000	0.000	48	I
I B15	SKO H I	387	1105	12.315	179.244	49	103	I	I	I	130.7	184.6	I	( 157.722)	21.522	21.522	12	I
I B31	SKU H I	335	1851	207.301	221.251	428.553	I	I	I	I	0.0	0.0	I	( 221.251)	0.000	0.000	26	I
I B32	SKU H I	0	0	0.000	0.000	0.000	I	I	I	I	0.0	0.0	I	( 0.000)	0.000	0.000	A=0	I
I B180	RRB H I	23	60	0.000	139.583	139.583	I	I	I	I	25.0	958.1	I	( 62.244)	77.339	77.339	A=0	I



I R12	RUE	I 458	984	2.124	36.731	38.855	I	0	I	0.0	I ( 36.715)	0.016	0.016	0	I	
I B23	SKU H	I 304	1347	54.999	332.114	387.113	I	19	I 111	I 79.9	I ( 257.041)	0.000	75.073	23	I	
I B52	SKU H	I 185	2639	797.080	1657.212	2454.292	I	89	I 99	I 691.1	I (1361.810)	0.000	295.401	36	I	
I		I					I		I						I	
I	Summe	I		798.163	2146.215	2944.378	I		I		I 0.000	382.869	394.532	777.245	36	I
I	KLA	I	185	2639	798.163	1368.779	I		I							I
I	Summe TW	I		6097	1873.935		I		I							I

Optimierung 1+2+4.4  
 Stand 2017  
 RR 1962-2012  
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Niederschlagshoehe (mm/a) : 1346.60  
 Niederschlagsdauer (h/a) : 1180.05

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 \* Maximalabfluesse in den Auslasskanaelen \*  
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Bez.	Typ	Anzahl	Qmax	Scheitel	Qm	Q>Qm	Dmax	Dauer	Dm	D>Dm	Vmax	Volumen	V>Vm	
			cbm/s	Datum	cbm/s		h	Datum	h		Tsd.cbm		Tsd.cbm	
I B11	DLB H	I 223	0.189	8-7-1993	0.027	74	1.3	8-7-1993	0.4	101	0.180	4-8-2001	0.026	75
I B10	SKO H	I 6641	1.853	8-7-1993	0.034	1628	19.5	5-3-2006	1.0	2018	5.081	21-5-1999	0.082	1455
I B35	FGB H	I 125	2.182	26-8-1993	0.451	45	1.3	8-7-1993	0.4	46	2.245	4-8-2001	0.396	46
I R11	RUE	I 453	1.700	8-7-1993	0.132	115	1.3	8-7-1993	0.3	173	1.946	4-8-2001	0.133	104
I B26	RRB H	I 30	2.115	26-8-1993	0.671	11	0.5	4-8-2001	0.3	13	1.528	4-8-2001	0.424	10
I B36	FGB H	I 221	0.426	8-7-1993	0.060	75	1.0	24-5-2003	0.3	112	0.358	4-8-2001	0.047	72
I B34	SKO H	I 1734	4.099	4-8-2001	0.223	421	26.6	21-5-1999	2.9	648	27.061	21-5-1999	1.060	527
I B12	SKO H	I 63	1.687	26-8-1993	0.458	27	0.7	24-5-2003	0.3	25	1.315	24-5-2003	0.283	25
I B14	FGB N	I 4834	6.234	26-8-1993	0.250	1346	10.7	14-1-2004	1.0	1595	14.958	14-1-2004	0.559	1200
I B13	DLB N	I 2866	0.979	8-7-1993	0.098	1106	13.0	21-5-1999	1.0	986	8.290	21-5-1999	0.284	737
I B19	RRB H	I 0	0.000	0-0-0	0.000	0	0.0	0-0-0	0.0	0	0.000	0-0-0	0.000	0
I B22	RRB H	I 0	0.000	0-0-0	0.000	0	0.0	0-0-0	0.0	0	0.000	0-0-0	0.000	0
I B16	SKO H	I 2957	5.151	4-8-2001	0.285	899	44.0	5-3-2006	5.9	1060	45.266	21-5-1999	2.554	986
I B33	SKO H	I 923	9.580	4-8-2001	0.559	213	33.2	5-3-2006	3.1	336	50.532	21-5-1999	2.338	273
I B18	SKU H	I 0	0.000	0-0-0	0.000	0	0.0	0-0-0	0.0	0	0.000	0-0-0	0.000	0
I B17	SKU H	I 0	0.000	0-0-0	0.000	0	0.0	0-0-0	0.0	0	0.000	0-0-0	0.000	0
I B15	SKO H	I 2533	7.107	26-8-1993	0.179	503	27.9	21-5-1999	2.6	1004	23.054	21-5-1999	0.435	471
I B31	SKU H	I 0	0.000	0-0-0	0.000	0	0.0	0-0-0	0.0	0	0.000	0-0-0	0.000	0
I B32	SKU H	I 0	0.000	0-0-0	0.000	0	0.0	0-0-0	0.0	0	0.000	0-0-0	0.000	0
I B180	RRB H	I 482	22.854	4-8-2001	2.280	118	23.1	21-5-1999	2.7	156	129.406	21-5-1999	8.211	134

I RL2	RUE	I	6	I	0.487	26- 8-1993	0.285	4	I	0.3	26- 8-1993	0.2	1	I	0.210	26- 8-1993	0.137	4	I
I		I		I					I					I					I
I B23	SKU H I	978	I	7.971	4- 8-2001	0.576	242	I	35.8	23- 6-1993	4.2	342	I	95.463	21- 5-1999	3.928	275	I	
I		I		I				I					I						I
I B52	SKU H I	4567	I	5.328	4- 8-2001	0.210	1738	I	78.8	13- 3-1988	7.7	1695	I	80.683	22- 5-1999	3.312	1250	I	
I		I		I				I					I						I
I																			

Optimierung 1+2+4.4  
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Niederschlagshoehe (mm/a) : 1346.60  
 Niederschlagsdauer (h/a) : 1180.05

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 \* Schutzfrachten ausgewählter Stoffe \*  
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Bauwerk	Bez.	Zulaufl	SFz	10** 1 kg/a	SFe	10** 1 kg/a	SFe (ges)	Au (ges)	kg/ (ha.a)	Entlastung	Spez.	Entlastung										
Name	I	AFS BSB5	CSB	TOC	NH4-N	PO4-P	AFS BSB5	CSB	TOC	NH4-N	PO4-P	AFS BSB5	CSB	TOC	NH4-N	PO4-P						
I RÜB Schwangauer Straß	I B11	g	I	14	10	17	5	1	0	I	0	0	0	0	0	I	8	7	12	4	1.1	0.2
I RÜB Ziegelwies	I B10	h	I	188	132	225	71	19	3	I	38	27	45	14	4	I	161	113	192	60	16.1	2.9
I RÜB Zell	I B35	h	I	215	151	256	80	22	4	I	2	1	2	1	0	I	5	4	6	2	0.5	0.1
I RÜ Faulenbach	I R11	I	I	139	97	166	52	14	3	I	2	1	2	1	0	I	11	8	13	4	1.1	0.2
I RRB Luitpoldstrasse	I B26	h	I	321	226	384	121	32	6	I	1	0	1	0	0	I	1	1	2	0	0.1	0.0
I PW-Lechbrücke	I B36	h	I	219	154	262	82	22	4	I	0	0	0	0	0	I	129	91	155	49	13.0	2.4
I RÜB Osterreuthen	I B34	h	I	856	602	1023	321	86	16	I	113	80	136	43	11	I	100	70	120	38	10.1	1.8
I RÜB Lechufeweg	I B12	h	I	689	484	824	258	69	13	I	1	1	1	0	0	I	45	31	53	17	4.5	0.8
I RÜB iVa ehem. Kurhaus	I B14	h	I	1246	875	1489	467	125	23	I	198	140	238	75	20	I	102	72	123	38	10.3	1.9
I RÜB IVb ehem. Kurhaus	I B13	g	I	811	570	969	304	81	15	I	41	35	60	19	5	I	76	59	102	32	8.9	1.6
I RRB Niederried	I B19	h	I	614	431	733	230	62	11	I	0	0	0	0	0	I	0	0	0	0	0.0	0.0
I RRB Alterschrofen	I B22	h	I	1306	917	1560	490	131	24	I	0	0	0	0	0	I	0	0	0	0	0.0	0.0
I RÜB Füssen-Ost	I B16	h	I	3402	2384	4054	1272	340	62	I	682	489	833	261	71	I	215	154	263	83	22.3	4.1
I RÜB Hopfen	I B33	h	I	5200	3167	5891	1860	449	87	I	162	60	163	52	9	I	115	58	124	40	8.3	1.8
I RÜB Füssen-West	I B18	-	I	6089	4277	7276	2283	610	111	I						I						
I PW-Ost	I B17	-	I	3020	2106	3581	1124	299	55	I	0	0	0	0	0	I	215	154	263	83	22.3	4.1
I RÜB Augsburgener Straße	I B15	h	I	1140	801	1362	427	114	21	I	65	45	77	24	6	I	39	28	47	15	3.9	0.7
I PW Hopfen I	I B31	-	I	5096	3147	5797	1829	447	86	I	0	0	0	0	0	I	115	58	124	40	8.3	1.8
I PW Hopfen RW	I B32	-	I	0	0	0	0	0	0	I	0	0	0	0	0	I	0	0	0	0	0.0	0.0
I RRB-West	I B180	h	I	466	327	557	175	47	9	I	213	150	255	80	21	I	0	0	0	0	0.0	0.0
I RÜ Eschach	I R12	I	I	213	149	254	80	21	4	I	0	0	0	0	0	I	0	0	0	0	0.0	0.0



Optimierung 1+2+4.4  
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Niederschlagshoehe (mm/a) : 1346.60  
 Niederschlagsdauer (h/a) : 1180.05

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 \* Schutzkonzentrationen ausgewaehlter Stoffe \*  
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Baue r k	Name	Bez.	Z u l a u f		E n t l a s t u n g		A F S B S B 5		C S B		T O C		N H 4 - N		P O 4 - P									
			Cz	mg/l (Minimum)	Cz	mg/l (Mittel)	Cz	mg/l (Maximum)	Cp	mg/l (Mittel)	Ce	mg/l (Mittel)	Ce	mg/l (Mittel)	Ce	mg/l (Mittel)	Ce	mg/l (Mittel)						
I	RÜB Schwangauer Straß	I B11	g	10	7	12	4	1	0	I	30	26	44	14	4	1	I	15	13	22	7	2	0	I
I	RÜB Ziegelwies	I B10	h	10	7	12	4	1	0	I	129	91	155	49	13	2	I	36	25	43	13	4	1	I
I	RÜB Zell	I B35	h	12	8	14	4	1	0	I	37	26	44	14	4	1	I	19	13	23	7	2	0	I
I	RÜ Faulenbach	I R11	I	6	5	8	2	1	0	I	41	29	49	15	4	1	I	15	10	18	5	1	0	I
I	RRB Luitpoldstrasse	I B26	h	18	13	21	7	2	0	I	35	25	42	13	4	1	I	25	18	30	9	3	0	I
I	PW-Lechbrücke	I B36	h	9	7	12	4	1	0	I	35	27	46	14	4	1	I	18	14	24	7	2	0	I
I	RÜB Osterreuthen	I B34	h	9	8	13	4	1	0	I	358	250	425	133	36	6	I	32	22	38	12	3	1	I
I	RÜB Lechuferweg	I B12	h	18	13	22	7	2	0	I	35	25	42	13	4	1	I	30	21	36	11	3	1	I
I	RÜB iVa ehem. Kurhaus	I B14	h	14	13	22	7	2	0	I	165	66	107	34	8	1	I	38	26	45	14	4	1	I
I	RÜB IVb ehem. Kurhaus	I B13	g	1	0	1	0	1	0	I	117	45	71	22	6	1	I	26	22	38	12	3	1	I
I	RRB Niederried	I B19	h	0	0	0	0	0	0	I	0	0	0	0	0	0	I	0	0	0	0	0	0	I
I	RRB Alterschrofen	I B22	h	0	0	0	0	0	0	I	0	0	0	0	0	0	I	0	0	0	0	0	0	I
I	RÜB Füssen-Ost	I B16	h	13	9	16	5	1	0	I	436	254	432	135	36	7	I	46	33	56	18	5	1	I
I	RÜB Hopfen	I B33	h	11	2	12	4	0	0	I	198	142	246	77	21	4	I	38	14	39	12	2	1	I
I	RÜB Füssen-West	I B18	-	12	8	14	4	1	0	I							I							I
I	PW-Ost	I B17	-	0	0	0	0	0	0	I	0	0	0	0	0	0	I	0	0	0	0	0	0	I
I	RÜB Augsburgener Straße	I B15	h	16	11	19	6	2	0	I	656	461	784	246	66	12	I	30	21	36	11	3	1	I
I	PW Hopfen I	I B31	-	0	0	0	0	0	0	I	0	0	0	0	0	0	I	0	0	0	0	0	0	I
I	PW Hopfen RW	I B32	-	0	0	0	0	0	0	I	0	0	0	0	0	0	I	0	0	0	0	0	0	I
I	RRB-West	I B180	h	12	9	15	5	1	0	I	78	55	94	29	8	1	I	28	19	33	10	3	1	I

	I	17	12	21	7	2	0	I	25	18	30	10	3	0	I	20	14	24	8	2	0	I	
I RÜ Eschach	I						0	I					3	0	I								
I	I						0	I					9	2	I								
I RÜB Waltenhofen	I	5	5	9	3	1	0	I	94	66	113	35	9	2	I	36	25	43	13	4	1	I	
I	I						0	I					38	7	I								
I RÜB KA	I	12	8	17	5	1	0	I	688	296	505	159	38	7	I	50	36	64	20	5	1	I	
I	I						0	I					38	7	I								
I	I						0	I					38	7	I								

Optimierung 1+2+4.4  
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 \* Wirkung der Mischwasserbehandlung \*  
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I	I	I Entlastungsfracht ohne MB			I Entlastungsfracht mit MB			I Wirkungsgrad der MB											
		I AFS	I BSB5	I CSB	I AFS	I BSB5	I CSB	I AFS	I BSB5	I CSB									
I Bez.		I SFOMB 10** 0 kg/a			I SFOMB 10** 0 kg/a			I etaMB = 1-SFOMB/SFoMB (%)											
I	I	4	3	5	2	0	0	1	3	1	0	0	I	59.9	51.3	50.7	46.7	46.7	
I	I	630	442	753	236	63	11	I	379	266	453	38	I	39.8	39.8	39.8	39.8	39.8	
I	I	126	88	151	47	13	2	I	18	13	22	7	2	0	I	85.5	85.5	85.5	85.5
I	I	27	19	32	10	3	0	I	6	4	7	2	1	0	I	76.6	76.6	76.6	76.6
I	I	6	4	7	2	1	0	I	4	3	5	2	0	0	I	33.5	34.2	34.3	34.6
I	I	2505	1767	3006	943	253	46	I	1132	798	1357	426	114	21	I	54.8	54.9	54.9	54.9
I	I	89	64	109	34	9	2	I	10	7	12	4	1	0	I	88.4	88.5	88.5	88.6
I	I	5374	3776	6424	2016	539	98	I	1985	1396	2376	745	199	36	I	63.1	63.0	63.0	63.0
I	I	879	635	1082	339	92	17	I	411	350	604	189	55	10	I	53.2	44.9	44.2	40.3
I	I	7	5	8	3	1	0	I	0	0	0	0	0	0	I	100.0	100.0	100.0	100.0
I	I	602	423	720	226	60	11	I	0	0	0	0	0	0	I	100.0	100.0	100.0	100.0
I	I	11006	7860	13387	4201	1131	206	I	6820	4889	8330	2614	705	128	I	38.0	37.8	37.8	37.7
I	I	4619	1790	4638	1493	253	63	I	1624	603	1626	524	86	22	I	64.8	66.3	64.9	66.1
I	I	10045	7057	12005	3767	1007	183	I	0	0	0	0	0	0	I	100.0	100.0	100.0	100.0
I	I	0	0	0	0	0	0	I	0	0	0	0	0	0	I	0.0	0.0	0.0	0.0
I	I	1376	966	1644	516	138	25	I	645	453	771	242	65	12	I	53.1	53.1	53.1	53.1
I	I	0	0	0	0	0	0	I	0	0	0	0	0	0	I	0.0	0.0	0.0	0.0
I	I	0	0	0	0	0	0	I	0	0	0	0	0	0	I	0.0	0.0	0.0	0.0
I	I	4507	3167	5387	1691	452	82	I	2135	1501	2553	801	214	39	I	52.6	52.6	52.6	52.6
I	I	6979	4892	8321	2611	697	127	I	2691	1877	3192	1002	267	49	I	61.4	61.6	61.6	61.7
I	I	21795	15299	27449	8644	2255	426	I	14835	10527	18915	5957	1558	295	I	31.9	31.2	31.1	30.9



I	I	I	I	I	I	I	I	I	I	I													
I	I	I	I	I	I	I	I	I	I	I													
I	Summe/Mittel	I	70574	48258	85126	26781	6967	1301	I	32697	22689	40224	12658	3306	619	I	53.7	53.0	52.7	52.7	52.6	52.4	I
I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I

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 Niederschlagshoehe (mm/a) : 1346.60

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 \* A128-Kenngrößen \*  
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Bauwerk	Name	Typ	Bez.	V	Vmin	Qd	Qk	Qcrit	l/s	l/s	l/s	kg/a	kg/a	Ct	Cm	Ce	Mischungsverh
I	I	I	I	cbm	cbm	l/s	l/s	l/s	I	I	I	mg/l	mg/l	mg/l	mg/l	mg/l	I
I RÜB Schwangauer Straß	I B11	DLB H I		10	2	7	3	0	I	I	3	445	38	65	22	383.13	7.00
I RÜB Ziegelwies	I B10	SKO H I	I	52	17	7		2	I	I	453	447	39	76	43	44.36	7.00
I RÜB Zell	I B35	FGH H I	I	355	25	145		2	I	I	22	441	37	59	23	842.32	7.00
I RÜ Faulenbach	I R11	RUE I I	I			108	23	5	I	I	21	439	34	72	18	181.51	7.00
I RRB Luitpoldstrasse	I B26	RRB H I	I	550		350		3	I	I	7	455	42	69	30	1102.90	7.00
I PW-Lechbrücke	I B36	FGH H I	I	12	3	35		3	I	I	5	448	38	98	24	251.59	7.00
I RÜB Osterreuthen	I B34	SKO H I	I	646	60	35		7	I	I	1357	438	39	72	38	66.07	7.00
I RÜB Lechuferweg	I B12	SKO H I	I	483	46	351		7	I	I	12	442	39	80	36	776.02	7.00
I RÜB iVa ehem. Kurhaus	I B14	FGH N I	I	468	144	88		11	I	I	2376	457	43	69	45	84.62	7.00
I RÜB IVb ehem. Kurhaus	I B13	DLB N I	I	160	11	63	134	8	I	I	604	443	40	81	38	78.65	7.00
I RRB Niederried	I B19	RRB H I	I	229		35		15	I	I	0	438	43	355			7.00
I RRB Alterschrofen	I B22	RRB H I	I	0		0		18	I	I	0	440	37	115			7.00
I RÜB Füssen-Ost	I B16	SKO H I	I	1022	109	66		29	I	I	8330	447	42	91	56	24.70	7.00
I RÜB Hopfen	I B33	SKO H I	I	1645	94	103		64	I	I	1626	206	40	125	39	10.96	7.00
I RÜB Füssen-West	I B18	I	I	3673					I	I							
I PW-Ost	I B17	SKU H I	I	50	0	198	66	29	I	I	0	447	42	116			7.00
I RÜB Augsburgener Straße	I B15	SKO H I	I	573	122	129		10	I	I	771	442	41	71	36	136.90	7.00
I PW Hopfen I	I B31	SKU H I	I	5	0	103	103	64	I	I	0	206	40	135			7.00
I PW Hopfen RW	I B32	SKU H I	I	5	0	49	0	0	I	I	0	0	0	0			7.00
I RRB-West	I B180	RRB H I	I	6260	18			0	I	I	2553	0	39	40	33	-1.00	7.00
I RÜ Eschach	I R12	RUE I I	I		1203	47		5	I	I	0	442	40	65	24	1960.95	7.00

I	RÜB Waltenhofen	I	B23	I	SKU H I	2569	215	98	300	37	I	3192	3671	438	39	105	43	I	33.25	7.00	I
I		I		I	I					I								I			I
I	RÜB KA	I	B52	I	SKU H I	555	550	450	1537	232	I	18915	21752	342	40	155	64	I	10.45	7.00	I
I		I		I	I					I								I			I
I		I		I	I					I								I			I
I	Summe	I		I	I	12283	1399			I	40245	43561	343				52	I			I
I		I		I	I					I								I			I