

A_{E0} : 152.80 km²
 PNP : NHH+ 37.79 m
 Lage : 22.28 km



Pegel : Hopsten Nr. 344590000100
 Gewässer: Hopstener Aa
 Gebiet : Mittlere Ems

Tag	2013		2014												
	Nov	Dez	Jan	Feb	Mrz	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez	
1.	0.683	0.724	1.31	1.04	1.09	0.650	1.63	1.23	0.732	0.671	1.61	0.974	1.17	1.12	
2.	0.781	0.646	1.22	1.11	1.06	0.649	1.20	1.07	0.556	0.617	1.57	0.854	1.07	1.07	
3.	1.33	0.599	1.21	1.03	0.963	0.649	0.837	0.986	0.518	0.598	1.50	0.789	1.21	1.02	
4.	3.58	0.561	1.76	1.00	1.02	0.648	0.730	0.906	0.421	0.901	1.39	0.715	1.61	1.02	
5.	3.82	0.629	1.57	0.944	1.10	0.648	0.652	1.12	0.383	1.08	1.28	0.663	1.72	1.02	
6.	2.91	1.51	1.45	0.922	1.04	0.647	0.626	1.03	0.383	0.835	1.21	0.637	1.60	1.02	
7.	3.31	1.09	3.01	1.63	1.01	0.605	0.626	0.917	0.489	0.758	1.63	0.936	1.47	0.981	
8.	3.18	1.14	2.93	4.22	1.01	0.625	0.626	0.900	0.938	0.682	1.44	1.73	1.38	1.11	
9.	2.22	1.19	2.59	2.50	0.962	0.906	1.34	1.43	1.05	0.694	1.28	1.42	1.25	1.12	
10.	2.35	1.30	2.48	1.80	0.911	0.804	2.70	2.33	4.35	0.784	1.22	1.26	1.21	1.18	
11.	1.99	1.09	1.96	1.68	0.910	0.784	2.41	2.11	3.94	1.29	1.13	1.01	1.29	1.43	
12.	1.52	0.957	1.93	1.56	0.838	0.783	2.33	1.54	1.98	1.91	1.04	1.28	1.27	2.67	
13.	1.35	0.888	1.66	1.46	0.826	0.736	2.79	1.21	1.30	2.03	0.948	1.37	1.16	5.20	
14.	1.20	0.812	1.47	2.25	0.826	0.732	1.73	0.992	1.02	1.72	0.887	1.32	1.07	2.65	
15.	1.10	0.805	1.30	2.22	0.858	0.804	1.46	0.869	0.946	1.50	0.819	1.15	1.02	2.42	
16.	1.07	0.868	1.51	1.63	0.973	0.763	1.11	0.772	1.01	1.68	0.796	1.05	2.20	2.63	
17.	1.02	0.794	1.52	1.33	0.904	0.570	0.963	0.725	0.748	1.48	0.921	1.19	3.77	2.35	
18.	0.979	0.782	1.35	1.22	0.824	0.611	0.840	0.668	0.578	1.82	0.963	1.08	2.45	2.87	
19.	0.981	0.895	1.22	1.18	1.13	0.596	0.795	0.668	0.509	2.57	0.905	0.987	2.00	7.37	
20.	0.983	1.08	1.10	1.13	0.965	0.551	0.799	0.668	0.436	2.47	0.925	1.35	1.75	5.57	
21.	0.929	0.885	1.05	1.66	0.880	0.551	0.740	0.668	0.897	2.20	1.22	1.31	1.64	4.16	
22.	0.898	0.823	1.05	2.07	0.904	0.551	0.711	0.641	2.69	1.87	1.16	2.24	1.46	3.16	
23.	0.899	0.905	0.985	1.44	0.914	0.551	0.806	0.592	1.91	1.94	1.12	1.99	1.37	3.78	
24.	0.839	0.848	1.12	1.27	1.03	0.551	0.963	0.592	1.37	1.90	1.01	1.60	1.53	3.17	
25.	0.807	2.97	1.04	1.17	0.935	0.551	0.853	0.566	1.15	1.77	0.990	1.52	1.58	3.21	
26.	0.809	2.25	0.952	1.09	0.848	0.551	0.750	0.518	1.49	1.70	0.885	1.39	1.46	2.75	
27.	0.605	1.56	2.35	1.01	0.819	0.695	0.716	0.518	1.40	1.60	0.832	1.27	1.42	2.52	
28.	0.486	3.29	2.29	1.09	0.756	0.790	1.37	0.448	1.24	1.41	0.794	1.21	1.42	2.12	
29.	0.505	2.94	1.56		0.729	0.741	3.11	0.438	1.10	1.32	0.716	1.18	1.25	1.92	
30.	0.714	1.95	1.20		0.688	0.650	2.43	0.785	1.00	1.32	0.692	1.32	1.16	1.92	
31.		1.51	1.04		0.650		1.61		0.831	1.45		1.27		1.92	
Tag	28.	4.	26.	6.	31.	20.+	6.+	29.	5.+	3.	30.	6.	15.	7.	
NQ	0.486	0.561	0.952	0.922	0.650	0.551	0.626	0.438	0.383	0.598	0.692	0.637	1.02	0.981	
MQ	1.46	1.24	1.59	1.52	0.915	0.665	1.30	0.931	1.21	1.44	1.10	1.23	1.53	2.47	
HQ	5.64	5.07	4.24	5.77	1.27	0.958	3.39	2.97	6.05	2.66	2.02	2.49	5.43	11.3	
Tag	5.+	28.	7.	8.	19.	9.	10.	10.	10.	19.	7.	22.	17.	19.	
h _N mm	25	22	28	24	16	11	23	16	21	25	19	22	26	43	
h _A mm															
	1972/2013		1973/2014 42 Kalenderjahre												
Jahr	1972	1995	1996	1996	1996	1996	1993	1989	1976	1976	1976	1976	1976	1995	
NQ	0.055	0.245	0.283	0.438	0.378	0.190	0.167	0.129	0.013	0.013	0.026	0.067	0.159	0.245	
MNQ	0.608	0.780	1.08	1.09	1.05	0.758	0.477	0.330	0.252	0.251	0.291	0.419	0.631	0.792	
MQ	1.37	1.87	2.42	2.09	2.03	1.35	0.875	0.651	0.667	0.638	0.657	0.887	1.37	1.91	
MHQ	4.76	6.77	8.14	6.77	6.72	3.49	2.47	2.69	3.39	2.67	2.43	3.90	4.79	7.00	
HQ	14.1	16.7	16.5	13.7	16.0	12.7	6.69	24.2	25.3	19.1	9.74	22.2	14.1	16.7	
Jahr	1990	1986	1987	1984	1981	1994	2001	1981	1981	2010	1993	1998	1990	1986	
Mh _N mm															
Mh _A mm	23	33	42	33	36	23	15	11	12	11	11	16	23	33	
	Abflussjahr (*) 2014				Kalenderjahr 2014				Unterschnittene Abflüsse m³/s						
	Jahr	Datum	Winter	Sommer	Jahr	Datum	1973/2014 42 Kalenderjahre								
							Unterschnittungs- dauer in Tagen	Abfluss- jahr (*) 2014	Kalender- jahr 2014	Obere Hüllkurve			Mittlere Werte		Untere Hüllkurve
NQ	m³/s	0.383	am 05.07.2014	0.486	0.383	0.383	am 05.07.2014	364	4.35	7.38	22.0	0.19	4.11	4.11	
MQ	m³/s	1.21		1.23	1.20	1.32		363	4.23	5.57	19.8	7.70	3.89	3.89	
HQ	m³/s	6.05	am 10.07.2014 bei W = 72.9 cm	5.77	6.05	11.3	am 19.12.2014 bei W = 111 cm	362	3.94	5.20	15.0	7.06	3.48	3.48	
Nq	l/(skm²)	2.51		3.18	2.51	2.51		361	3.82	4.35	12.6	6.45	2.93	2.93	
Mq	l/(skm²)	7.95		8.04	7.86	8.67		360	3.58	4.23	10.7	6.03	2.88	2.88	
Hq	l/(skm²)	39.6		37.8	39.6	73.7		359	3.31	4.16	9.66	5.68	2.79	2.79	
h _N	mm							358	3.29	3.94	9.19	5.42	2.53	2.53	
h _A	mm	250		126	125	273		357	3.18	3.78	8.99	5.17	2.38	2.38	
								356	3.11	3.77	8.82	4.96	2.33	2.33	
								350	2.79	2.93	7.46	4.11	1.96	1.96	
								340	2.35	2.57	6.48	3.34	1.65	1.65	
								330	2.20	2.35	5.62	2.89	1.47	1.47	
								320	1.93	2.11	4.65	2.52	1.27	1.27	
								300	1.63	1.75	3.71	2.02	0.964	0.964	
								270	1.41	1.51	2.85	1.54	0.714	0.714	
								240	1.24	1.35	2.33	1.25	0.530	0.530	
								210	1.11	1.22	1.88	1.03	0.380	0.380	
NQ	m³/s	0.013	am 09.07.1976	0.055	0.013	0.013	am 09.07.1976	183	1.03	1.11	1.55	0.881	0.336	0.336	
MNQ	m³/s	0.173		0.486	0.174	0.174		150	0.938	1.02	1.35	0.699	0.248	0.248	
MQ	m³/s	1.29		1.86	0.730	1.29		130	0.898	0.963	1.22	0.599	0.189	0.189	
MHQ	m³/s	11.7		10.8	6.67	11.8		120	0.858	0.935	1.16	0.557	0.180	0.180	
HQ	m³/s	25.3	am 01.07.1981 bei W = 178 cm	16.7	25.3	25.3	am 01.07.1981 bei W = 178 cm	110	0.832	0.905	1.15	0.521	0.138	0.138	
HQ ₁	m³/s	11.1						100	0.807	0.858	1.09	0.489	0.136	0.136	
HQ ₅	m³/s	14.8						90	0.790	0.826	1.02	0.447	0.117	0.117	
								80	0.758	0.795	0.969	0.420	0.097	0.097	
								70	0.729	0.758	0.910	0.377	0.097	0.097	
MNq	l/(skm²)	1.13		3.18	1.14	1.14		60	0.692	0.729	0.910	0.349	0.079	0.079	
Mq	l/(skm²)	8.43		12.1	4.78	8.46		50	0.652	0.682	0.817	0.310	0.067	0.067	
MHQ	l/(skm²)	76.6		70.9	43.7	77.2		40	0.641	0.650	0.777	0.278	0.067	0.067	
Mh _N	mm							30	0.605	0.626	0.692	0.232	0.056	0.056	
Mh _A	mm	266		190	76	267		25	0.592	0.598	0.598	0.218	0.045	0.045	
								15	0.556	0.570	0.595	0.186	0.043	0.043	
								10	0.551	0.551	0.556	0.173	0.032	0.032	
								9	0.518	0.518	0.522	0.136	0.026	0.026	
								8	0.509	0.518	0.522	0.130	0.026	0.026	
								7	0.505	0.518	0.518	0.130	0.026	0.026	
								6	0.489	0.509	0.509	0.130	0.026	0.026	
								5	0.486	0.489	0.489	0.130	0.024	0.024	
								4	0.448	0.448	0.448	0.117	0.022	0.022	
								3	0.438	0.438	0.441	0.097	0.020	0.020	
								4	0.436	0.436	0.440	0.093	0.013	0.013	
								2	0.421	0.421	0.430	0.067	0.013	0.013	
								1	0.383	0.383	0.412	0.043	0.013	0.013	
								0	0.383	0.383	0.408	0.013	0.013	0.013	