A_{Eo} : 98.73 km²
PNP : NHN+ 84.53 m
Lage : 348.79 km oberhalb der Mündung rechts

Q
m³/s

Pegel : Steinhorst Nr. 3113000000100
Gewässer : Ems
Gebiet : Obere Ems

Tageswerte

Tag	2010 Nov	2010 Dez	2011 Jan	Feb	Mrz	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1.	0.554	1.09	1.19	1.05	1.26	0.958	0.639	0.595	0.431	0.467	0.716	0.473	0.553	0.754
2.	0.568	1.04	1.34	1.14	1.24	0.933	0.620	0.532	0.459	0.460	0.677	0.471	0.707	0.685
3.	0.597	1.00	1.36	1.27	1.19	1.01	0.585	0.501	0.461	0.441	0.641	0.482	0.823	0.765
4.	0.625	0.965	1.34	1.36	1.17	1.40	0.597	0.490	0.462	0.448	0.644	0.472	0.715	0.872
5.	0.661	1.07	1.29	1.44	1.13	1.27	0.650	0.470	0.464	0.484	0.839	0.473	0.615	0.890
6.	1.07	1.19	1.33	1.44	1.13	1.12	0.619	0.481	0.448	0.490	0.720	0.504	0.633	0.901
7.	1.31	1.14	2.33	1.36	1.13	1.03	0.604	0.500	0.423	0.482	0.721	0.464	0.843	1.06
8.	1.20	1.09	3.13	1.29	1.09	0.980	0.588	0.566	0.414	0.478	0.947	0.630	0.703	1.07
9.	1.29	1.05	4.15	1.23	1.09	0.916	0.561	0.567	0.403	0.482	1.11	0.751	0.548	1.13
10.	1.28	1.03	3.04	1.20	1.11	0.889	0.559	0.526	0.391	0.464	0.944	0.822	0.471	1.06
11.	1.92	1.78	2.28	1.45	1.12	0.882	0.556	0.499	0.392	0.441	0.857	0.852	0.383	0.996
12.	1.86	2.63	2.07	1.75	1.12	0.874	0.535	0.498	0.382	0.431	0.912	1.19	0.441	1.05
13.	3.42	2.16	3.80	1.99	1.12	0.827	0.517	0.470	0.395	0.445	0.807	1.40	0.520	1.18
14.	3.87	1.80	3.50	1.84	1.11	0.814	0.515	0.468	0.396	0.514	0.723	1.27	0.582	1.26
15.	3.07	1.59	4.03	1.97	1.16	0.783	0.512	0.468	0.410	0.651	0.681	1.12	0.632	1.28
16.	2.15	1.46	3.59	1.92	0.822	0.755	0.547	0.469	0.438	0.601	0.643	0.997	0.649	1.53
17.	1.81	1.42	2.41	1.65	0.811	0.749	0.617	0.458	0.480	0.563	0.639	0.913	0.654	1.99
18.	1.61	1.35	2.18	1.53	1.01	0.744	0.610	0.449	0.464	0.543	0.640	0.857	0.649	1.77
19.	1.45	1.27	2.30	1.46	1.03	0.741	0.575	0.470	0.454	0.896	0.640	0.857	0.653	1.60
20.	1.34	1.24	2.43	1.39	1.02	0.737	0.574	0.500	0.461	0.817	0.606	0.816	0.658	1.57
21.	1.28	1.19	2.13	1.33	0.962	0.690	0.548	0.499	0.484	0.719	0.574	0.771	0.663	1.86
22.	1.22	1.18	1.99	1.24	0.976	0.687	0.530	0.536	0.469	0.872	0.567	0.758	0.667	1.76
23.	1.17	1.24	1.94	1.20	0.967	0.684	0.534	0.613	0.456	0.921	0.564	0.713	0.672	1.91
24.	1.41	1.29	1.87	1.20	0.941	0.668	0.513	0.521	0.460	0.837	0.564	0.733	0.676	1.92
25.	1.48	1.22	1.90	1.20	0.958	0.636	0.481	0.505	0.524	0.778	0.541	0.714	0.688	1.92
26.	1.52	1.17	1.97	1.23	0.962	0.638	0.476	0.511	0.543	0.736	0.530	0.724	0.731	1.61
27.	1.37	1.15	1.79	1.26	0.922	0.684	0.484	0.511	0.538	1.14	1.25	0.716	0.735	1.46
28.	1.25	1.13	1.62	1.26	0.916	0.774	0.501	0.473	0.534	1.21	0.775	0.682	0.740	1.35
29.	1.18	1.11	1.51		0.910	0.756	0.530	0.436	0.490	0.993	0.568	0.673	0.721	1.29
30.	1.13	1.08	1.42		0.903	0.696	0.502	0.430	0.471	0.881	0.512	0.640	0.731	1.68
31.		1.09	1.21		0.948		0.521		0.469	0.788		0.554		1.59

Hauptwerte

	2010 Nov	2010 Dez	2011 Jan	Feb	Mrz	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
Tag	1.	4.	1.	1.	17.	25.	26.	30.	12.	12.	30.	7.	11.	2.
NQ	0.554	0.965	1.19	1.05	0.811	0.636	0.476	0.430	0.382	0.431	0.512	0.464	0.383	0.685
MQ	1.49	1.30	2.21	1.42	1.04	0.844	0.555	0.500	0.454	0.660	0.719	0.758	0.649	1.35
HQ	4.43	2.72	5.10	2.04	1.26	1.45	0.663	0.703	0.547	1.38	2.67	1.43	1.39	2.17
Tag	13.	12.	13.	13.+	1.	4.	1.	22.	25.	28.+	27.	13.+	7.	17.+
h_N mm														
h_A mm	39	35	60	35	28	22	15	13	12	18	19	21	17	37

	1974/2010		1975/2011 37 Kalenderjahre											
Jahr	1976	1999	2007	1996	2001	1997	1976	1986	1976	1976	1976	1976	2011	1999
NQ	0.417	0.391	0.417	0.598	0.340	0.516	0.394	0.311	0.093	0.099	0.165	0.348	0.383	0.391
MNQ	0.795	0.901	1.01	1.03	0.991	0.828	0.663	0.547	0.462	0.451	0.540	0.667	0.778	0.877
MQ	1.18	1.37	1.55	1.42	1.44	1.13	0.947	0.791	0.704	0.717	0.807	0.914	1.16	1.34
MHQ	2.49	2.85	3.17	2.69	2.90	2.03	1.88	1.69	1.71	1.75	1.83	1.86	2.46	2.80
HQ	5.29	5.06	7.09	5.06	6.24	4.65	5.26	5.20	6.00	5.09	5.68	5.09	5.29	5.06
Jahr	1998	1988	1982	1984	1987	1986	1984	1981	1981	2005	2007	1993	1998	1988
Mh_N mm														
Mh_A mm	31	37	42	35	39	30	26	21	19	19	21	25	30	36

	Abflussjahr (*) 2011 Jahr	Datum	Winter	Sommer	Kalenderjahr 2011 Jahr	Datum
NQ m³/s	0.382	am 12.07.2011	0.554	0.382	0.382	am 12.07.2011
MQ m³/s	0.993		1.38	0.608	0.928	
HQ m³/s	5.10	am 13.01.2011 bei W = 108 cm	5.10	2.67	5.10	am 13.01.2011 bei W = 108 cm
Nq l/(skm²)	3.87		5.61	3.87	3.87	
Mq l/(skm²)	10.1		14.0	6.15	9.40	
Hq l/(skm²)	51.6		51.6	27.1	51.6	
h_N mm						
h_A mm	317		219	98	296	

	1975/2011 (*) 37 Jahre			1975/2011	
NQ m³/s	0.093	am 13.07.1976	0.339	0.093	0.093 am 13.07.1976
MNQ m³/s	0.370		0.672	0.375	0.368
MQ m³/s	1.08		1.35	0.814	1.07
MHQ m³/s	4.55		4.23	3.14	4.51
HQ m³/s	7.09	am 31.01.1982 bei W = 132 cm	7.09	6.00	7.09 am 31.01.1982 bei W = 132 cm
HQ_1 m³/s					
HQ_5 m³/s					
MNq l/(skm²)	3.74		6.80	3.79	3.73
Mq l/(skm²)	10.9		13.7	8.24	10.9
MHq l/(skm²)	46.1		42.8	31.8	45.7
Mh_N mm					
Mh_A mm	345		214	131	344

Extremwerte

	Niedrigwasser (n) m³/s	l/(skm²)	Datum	Hochwasser m³/s	l/(skm²)	cm	Datum
1	0.093	0.942	13.07.1976	7.09	71.8	132	31.01.1982
2	0.216	2.19	20.08.1983	6.24	63.2	128	02.03.1987
3	0.237	2.40	05.09.1991	6.00	60.8	151	01.07.1981
4	0.249	2.52	22.08.1989	5.94	60.1	115	04.01.2003
5	0.253	2.56	12.07.1977	5.88	59.6	119	18.03.1987
6	0.258	2.61	02.07.1986	5.68	57.6	115	29.09.2007
7	0.265	2.68	13.08.1990	5.65	57.2	116	18.07.2002
8	0.266	2.70	11.08.1992	5.57	56.5	110	10.03.1981
9	0.272	2.76	21.07.2010	5.56	56.3	113	13.01.1993
10	0.276	2.79	04.08.1982	5.41	54.8	113	29.01.1982

Dauertabelle

Unterschreitungsdauer in Tagen	Unterschrittene Abflüsse m³/s: Abflussjahr (*) 2011	Kalenderjahr 2011	1975/2011 37 Kalenderjahre Obere Hüllkurve	Mittlere Werte	Untere Hüllkurve
364	4.15	4.15	5.66	3.76	2.43
363	4.04	4.04	5.16	3.40	2.19
362	3.87	3.80	5.05	3.23	2.06
361	3.80	3.59	4.91	3.06	2.03
360	3.59	3.50	4.81	2.87	2.03
359	3.50	3.13	4.25	2.74	1.96
358	3.42	3.04	4.14	2.63	1.89
357	3.13	2.43	3.90	2.54	1.85
356	3.07	2.41	3.82	2.46	1.75
350	2.30	2.07	3.09	2.16	1.56
340	1.97	1.91	2.60	1.91	1.37
330	1.79	1.65	2.31	1.74	1.24
320	1.48	1.46	2.12	1.63	1.18
300	1.34	1.27	1.89	1.45	1.10
270	1.20	1.12	1.66	1.27	0.898
240	1.11	0.948	1.43	1.14	0.835
210	0.958	0.823	1.32	1.04	0.751
183	0.822	0.733	1.22	0.956	0.665
150	0.690	0.654	1.16	0.868	0.555
130	0.638	0.619	1.13	0.817	0.492
120	0.604	0.588	1.10	0.793	0.472
110	0.568	0.564	1.08	0.767	0.438
100	0.556	0.547	1.06	0.746	0.414
90	0.535	0.530	1.05	0.724	0.396
80	0.521	0.514	1.04	0.702	0.384
70	0.504	0.501	1.01	0.679	0.373
60	0.490	0.484	0.990	0.649	0.320
50	0.480	0.473	0.964	0.618	0.277
40	0.470	0.469	0.928	0.586	0.240
30	0.464	0.462	0.886	0.550	0.180
25	0.460	0.459	0.814	0.531	0.165
20	0.454	0.448	0.739	0.508	0.148
15	0.441	0.441	0.688	0.482	0.135
10	0.431	0.430	0.671	0.454	0.126
9	0.430	0.423	0.662	0.449	0.123
8	0.423	0.414	0.662	0.445	0.120
7	0.414	0.410	0.646	0.440	0.119
6	0.410	0.403	0.642	0.435	0.115
5	0.403	0.396	0.637	0.429	0.111
4	0.396	0.395	0.636	0.420	0.108
3	0.395	0.392	0.633	0.414	0.107
2	0.392	0.391	0.631	0.406	0.106
1	0.391	0.383	0.625	0.396	0.105
0	0.382	0.382	0.606	0.368	0.093

(*) Abflussjahr: 1.11. des Vorjahres bis 31.10.
, Beeinflussung durch das HRB oh.

LANUV NRW