

Simulation has errors. See error log for details.

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Simulation Type

Type	Method
HD	Fully Dynamic
Rainfall Runoff	Time Area

File Overview

Working Directory

C:\Users\snorr\Documents\Skole\3.Klasse\2. semester\Bachelor\Mike

Main input file

File name	Last modified	Directory
Vannføring i kulverter 2.sqlite	11.05.2022 13:20:52	.

Main output files

File name	Last modified	Directory
Vannmengde i kulvertBaseDefault_Surface_runoff.res1d	11.05.2022 13:21:02	C:\Users\snorr\Documents\Skole\3.Klasse\2. semester\Bachelor\Mike\Vannføring i kulverter 2_m1d - Result Files
Vannmengde i kulvertBaseDefault_Network_HD.res1d	11.05.2022 13:21:02	C:\Users\snorr\Documents\Skole\3.Klasse\2. semester\Bachelor\Mike\Vannføring i kulverter 2_m1d - Result Files

Time Overview

Simulation Period

Simulation start date	Simulation end date	Duration of simulation [dd.HH:mm:ss]
05.05.2022 12:00:00	05.05.2022 12:12:50	00:00:12:50

Time Steps

Time step type	Minimum time step [sec]	Maximum time step [sec]	Save time step [HH:mm:ss]
Fixed	10	10	00:01:00

Simulation Run Time

Simulation start date	Simulation end date	Duration of simulation [dd.HH:mm:ss]
11.05.2022 13:21:01	01.01.0001 00:00:00	-738285.-13:-21:-01

HD Summary

Continuity Balance

	Volume [m^3]
(1) Start volume in reaches, manholes, and structures	0,463
(2) End volume in reaches, manholes, and structures	672,5
(3) Total inflow	959,5
- Internal nodes	952,8
- Reaches	6,792
(4) Total outflow	354,2
- Water Level boundaries	354,2
(5) Water generated in empty parts of the system	0,532

(2-1) - (3-4+5)	[m^3]	% of total inflow	Time of maximum
At end of simulation	66,12	6,9	

Rainfall Runoff Summary

Continuity Balance

	Volume [m^3]
(1) Start volume	0,000
(2) Total inflow	6 587,1
- Net rainfall	6 587,1
- Added inflow	0,000
(3) Total loss	2 066,5
(4) Runoff discharge	810,2
Catchment Discharge	0,000
(5) End volume	3 595,4

(1+2) - (3+4+5) [m^3]	% of total inflow
114,9	1,7

Note: Total loss includes infiltration and evaporation.

Boundary Connections

No located boundaries in network

Global Source Boundaries

Type
Rainfall

HD Results Summary

Nodes - Water level

Notes
G: Max level exceeds ground level
C: Max level exceeds critical level

Node ID	Minimum [m]	Maximum [m]	Ground Level [m]	Ground Level - Maximum [m]	Time of Minimum	Time of Maximum	Note
Node_1	116,21	116,92	117,60	0,68	05.05.2022 12:00:10	05.05.2022 12:12:40	
Node_10	96,91	97,65	98,30	0,65	05.05.2022 12:00:10	05.05.2022 12:12:40	
Node_11	96,01	96,61	97,40	0,79	05.05.2022 12:00:10	05.05.2022 12:12:40	
Node_12	93,31	94,69	94,70	0,01	05.05.2022 12:00:10	05.05.2022 12:12:40	
Node_13	92,21	92,90	93,60	0,70	05.05.2022 12:00:10	05.05.2022 12:12:40	
Node_14	87,91	89,19	89,30	0,11	05.05.2022 12:00:10	05.05.2022 12:12:40	
Node_15	87,41	88,23	88,80	0,57	05.05.2022 12:00:10	05.05.2022 12:12:40	
Node_16	87,01	87,41	87,01	-0,40	05.05.2022 12:00:10	05.05.2022 12:12:40	G
Node_2	112,01	112,70	113,40	0,70	05.05.2022 12:00:10	05.05.2022 12:12:40	
Node_3	111,01	111,59	112,40	0,81	05.05.2022 12:00:20	05.05.2022 12:12:40	
Node_4	104,01	104,79	105,40	0,61	05.05.2022 12:00:10	05.05.2022 12:12:40	
Node_5	103,11	103,80	104,50	0,70	05.05.2022 12:00:20	05.05.2022 12:12:40	
Node_6	101,01	102,08	102,40	0,32	05.05.2022 12:00:10	05.05.2022 12:12:40	
Node_7	100,61	101,17	102,00	0,83	05.05.2022 12:00:20	05.05.2022 12:12:40	
Node_8	98,71	99,53	100,10	0,57	05.05.2022 12:00:10	05.05.2022 12:12:40	
Node_9	98,01	98,70	99,40	0,70	05.05.2022 12:00:10	05.05.2022 12:12:40	

Number of Ground level exceedings: 1

Number of Critical level exceedings: 0

Nodes - Water volume spilled

No spilling nodes in network

Reaches - Result summary

Reach ID	From Node	To Node	Qfull [m^3/s]	Maximum water level [m]	Maximum discharge [m^3/s]	Max depth / diameter	Max discharge / Qf	Total discharge [m^3]	Time of max water level	Time of max discharge
Bekk 1	Node_1	Node_2	-1,000	116,56	1,575	0,50	-1,57	323,2	05.05.2022 12:12:40	05.05.2022 12:12:40
Bekk 2	Node_3	Node_4	-1,000	111,30	1,274	0,56	-1,27	238,3	05.05.2022	05.05.2022

									12:12:40	12:12:40
Bekk 3	Node_5	Node_6	-1,000	103,46	1,766	0,77	-1,77	334,3	05.05.2022 12:12:40	05.05.2022 12:12:40
Bekk 4	Node_7	Node_8	-1,000	100,89	1,473	0,59	-1,47	271,6	05.05.2022 12:12:40	05.05.2022 12:12:40
Bekk 5	Node_9	Node_10	-1,000	98,36	1,329	0,53	-1,33	240,0	05.05.2022 12:12:40	05.05.2022 12:12:40
Bekk 6	Node_11	Node_12	-1,000	96,31	1,186	0,99	-1,19	204,8	05.05.2022 12:12:40	05.05.2022 12:12:40
Bekk 7	Node_13	Node_14	-1,000	92,55	1,565	0,92	-1,57	277,2	05.05.2022 12:12:40	05.05.2022 12:12:40
Bekk 8	Node_15	Node_16	-1,000	87,82	2,016	0,30	-2,02	358,4	05.05.2022 12:12:40	05.05.2022 12:12:40
Kulvert 1	Node_2	Node_3	3,784	112,36	1,312	0,74	0,35	250,3	05.05.2022 12:12:40	05.05.2022 12:12:40
Kulvert 2	Node_4	Node_5	6,862	104,40	1,822	0,70	0,27	348,3	05.05.2022 12:12:40	05.05.2022 12:12:40
Kulvert 3	Node_6	Node_7	2,806	101,55	1,517	0,57	0,54	283,5	05.05.2022 12:12:40	05.05.2022 12:12:40
Kulvert 4	Node_8	Node_9	3,360	99,12	1,373	0,88	0,41	251,8	05.05.2022 12:12:40	05.05.2022 12:12:40
Kulvert 5	Node_10	Node_11	3,227	97,28	1,221	0,76	0,38	215,7	05.05.2022 12:12:40	05.05.2022 12:12:40
Kulvert 6	Node_12	Node_13	1,560	94,01	1,591	0,89	1,02	305,7	05.05.2022 12:12:40	05.05.2022 12:12:40
Kulvert 7	Node_14	Node_15	2,619	88,56	2,034	1,04	0,78	368,5	05.05.2022 12:12:40	05.05.2022 12:12:40

Reaches - Data from input

Reach ID	From Node	To Node	Upstream level [m]	Downstream level [m]	Length [m]	Height [m]	Slope	Qfull [m^3/s]
Bekk 1	Node_1	Node_2	116,2	112,0	173,6	1,400	0,024	-1,000
Bekk 2	Node_3	Node_4	111,0	104,0	192,4	1,400	0,036	-1,000
Bekk 3	Node_5	Node_6	103,1	101,0	41,51	1,400	0,051	-1,000
Bekk 4	Node_7	Node_8	100,6	98,70	25,43	1,400	0,075	-1,000
Bekk 5	Node_9	Node_10	98,00	96,90	38,02	1,400	0,029	-1,000
Bekk 6	Node_11	Node_12	96,00	93,30	92,97	1,400	0,029	-1,000
Bekk 7	Node_13	Node_14	92,20	87,90	162,4	1,400	0,026	-1,000
Bekk 8	Node_15	Node_16	87,40	87,00	19,59	1,400	0,020	-1,000
Kulvert 1	Node_2	Node_3	112,0	111,0	11,61	0,800	0,086	3,784
Kulvert 2	Node_4	Node_5	104,0	103,1	10,44	1,000	0,086	6,862
Kulvert 3	Node_6	Node_7	101,0	100,6	27,76	1,000	0,014	2,806
Kulvert 4	Node_8	Node_9	98,70	98,00	10,30	0,800	0,068	3,360
Kulvert 5	Node_10	Node_11	96,90	96,00	14,37	0,800	0,063	3,227
Kulvert 6	Node_12	Node_13	93,30	92,20	75,14	0,800	0,015	1,560
Kulvert 7	Node_14	Node_15	87,90	87,40	12,11	0,800	0,041	2,619

Reaches - Water level in h-grid points

Reach ID	From Node	To Node	Chainage [m]	Minimum [m]	Maximum [m]	Max depth / diameter	Time of Minimum	Time of Maximum
Bekk 1	Node_1	Node_2	0,000	116,2	116,6	0,258	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 1	Node_1	Node_2	57,86	114,8	115,2	0,255	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 1	Node_1	Node_2	115,7	113,4	113,8	0,264	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 1	Node_1	Node_2	173,6	112,0	112,7	0,503	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 2	Node_3	Node_4	0,000	111,0	111,3	0,213	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 2	Node_3	Node_4	64,12	108,7	109,0	0,209	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 2	Node_3	Node_4	128,2	106,3	106,6	0,214	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 2	Node_3	Node_4	192,4	104,0	104,8	0,563	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 3	Node_5	Node_6	0,000	103,1	103,5	0,254	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 3	Node_5	Node_6	41,51	101,0	102,1	0,773	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 4	Node_7	Node_8	0,000	100,6	100,9	0,208	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 4	Node_7	Node_8	25,43	98,71	99,53	0,592	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 5	Node_9	Node_10	0,000	98,01	98,36	0,254	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 5	Node_9	Node_10	38,02	96,91	97,65	0,534	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 6	Node_11	Node_12	0,000	96,01	96,31	0,220	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 6	Node_11	Node_12	46,49	94,66	95,03	0,275	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 6	Node_11	Node_12	92,97	93,31	94,69	0,993	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 7	Node_13	Node_14	0,000	92,21	92,55	0,250	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 7	Node_13	Node_14	54,14	90,77	91,12	0,251	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 7	Node_13	Node_14	108,3	89,34	89,75	0,294	05.05.2022 12:00:10	05.05.2022 12:12:40

Bekk 7	Node_13	Node_14	162,4	87,91	89,19	0,923	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 8	Node_15	Node_16	0,000	87,41	87,82	0,300	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 8	Node_15	Node_16	19,59	87,01	87,41	0,296	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 1	Node_2	Node_3	0,000	112,0	112,4	0,446	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 1	Node_2	Node_3	11,61	111,0	111,6	0,739	05.05.2022 12:00:30	05.05.2022 12:12:40
Kulvert 2	Node_4	Node_5	0,000	104,0	104,4	0,400	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 2	Node_4	Node_5	10,44	103,1	103,8	0,701	05.05.2022 12:00:20	05.05.2022 12:12:40
Kulvert 3	Node_6	Node_7	0,000	101,0	101,5	0,549	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 3	Node_6	Node_7	27,76	100,6	101,2	0,574	05.05.2022 12:00:20	05.05.2022 12:12:40
Kulvert 4	Node_8	Node_9	0,000	98,70	99,12	0,526	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 4	Node_8	Node_9	10,30	98,00	98,70	0,877	05.05.2022 12:00:20	05.05.2022 12:12:40
Kulvert 5	Node_10	Node_11	0,000	96,90	97,28	0,474	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 5	Node_10	Node_11	14,37	96,00	96,61	0,762	05.05.2022 12:00:30	05.05.2022 12:12:40
Kulvert 6	Node_12	Node_13	0,000	93,30	94,01	0,886	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 6	Node_12	Node_13	75,14	92,20	92,90	0,874	05.05.2022 12:00:20	05.05.2022 12:12:40
Kulvert 7	Node_14	Node_15	0,000	87,90	88,56	0,819	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 7	Node_14	Node_15	12,11	87,40	88,23	1,043	05.05.2022 12:00:20	05.05.2022 12:12:40

Reaches - Discharge in q-grid points

Reach ID	From Node	To Node	Chainage [m]	Minimum [m^3/s]	Maximum [m^3/s]	Max depth / diameter	Time of Minimum	Time of Maximum
Bekk 1	Node_1	Node_2	28,93	0,001	1,575	-1,575	05.05.2022 12:02:00	05.05.2022 12:12:40
Bekk 1	Node_1	Node_2	86,79	0,001	1,523	-1,523	05.05.2022 12:02:00	05.05.2022 12:12:40
Bekk 1	Node_1	Node_2	144,7	0,001	1,450	-1,450	05.05.2022 12:02:00	05.05.2022 12:12:40
Bekk 2	Node_3	Node_4	32,06	0,001	1,274	-1,274	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 2	Node_3	Node_4	96,18	0,001	1,216	-1,216	05.05.2022 12:00:40	05.05.2022 12:12:40
Bekk 2	Node_3	Node_4	160,3	0,001	1,138	-1,138	05.05.2022 12:00:40	05.05.2022 12:12:40
Bekk 3	Node_5	Node_6	20,75	0,001	1,766	-1,766	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 4	Node_7	Node_8	12,72	0,001	1,473	-1,473	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 5	Node_9	Node_10	19,01	0,001	1,329	-1,329	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 6	Node_11	Node_12	23,24	0,001	1,186	-1,186	05.05.2022 12:00:30	05.05.2022 12:12:40
Bekk 6	Node_11	Node_12	69,73	0,001	1,066	-1,066	05.05.2022 12:00:30	05.05.2022 12:12:40
Bekk 7	Node_13	Node_14	27,07	0,001	1,565	-1,565	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 7	Node_13	Node_14	81,21	0,001	1,529	-1,529	05.05.2022 12:00:40	05.05.2022 12:12:40
Bekk 7	Node_13	Node_14	135,3	0,001	1,418	-1,418	05.05.2022 12:00:50	05.05.2022 12:12:40
Bekk 8	Node_15	Node_16	9,797	0,001	2,016	-2,016	05.05.2022 12:00:20	05.05.2022 12:12:40
Kulvert 1	Node_2	Node_3	5,805	0,000	1,312	0,347	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 2	Node_4	Node_5	5,222	0,000	1,822	0,266	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 3	Node_6	Node_7	13,88	0,000	1,517	0,541	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 4	Node_8	Node_9	5,152	0,000	1,373	0,409	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 5	Node_10	Node_11	7,185	0,000	1,221	0,378	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 6	Node_12	Node_13	37,57	0,000	1,591	1,020	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 7	Node_14	Node_15	6,057	0,000	2,034	0,777	05.05.2022 12:00:10	05.05.2022 12:12:40

Links - Velocity

Reach ID	From Node	To Node	Chainage [m]	Minimum [m/s]	Maximum [m/s]	Time of Minimum	Time of Maximum
Bekk 1	Node_1	Node_2	28,93	0,253	4,380	05.05.2022 12:02:00	05.05.2022 12:12:40
Bekk 1	Node_1	Node_2	86,79	0,293	4,391	05.05.2022 12:02:00	05.05.2022 12:12:40
Bekk 1	Node_1	Node_2	144,7	0,341	3,983	05.05.2022 12:02:00	05.05.2022 12:12:40
Bekk 2	Node_3	Node_4	32,06	0,306	4,781	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 2	Node_3	Node_4	96,18	0,357	4,816	05.05.2022 12:00:30	05.05.2022 12:12:40
Bekk 2	Node_3	Node_4	160,3	0,417	4,397	05.05.2022 12:00:40	05.05.2022 12:12:40
Bekk 3	Node_5	Node_6	20,75	0,308	5,054	05.05.2022 12:00:10	05.05.2022 12:12:40

Bekk 4	Node_7	Node_8	12,72	0,238	5,759	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 5	Node_9	Node_10	19,01	0,271	3,797	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 6	Node_11	Node_12	23,24	0,275	4,240	05.05.2022 12:00:30	05.05.2022 12:12:40
Bekk 6	Node_11	Node_12	69,73	0,316	3,065	05.05.2022 12:00:30	05.05.2022 12:10:50
Bekk 7	Node_13	Node_14	27,07	0,263	4,571	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 7	Node_13	Node_14	81,21	0,307	4,501	05.05.2022 12:00:10	05.05.2022 12:12:40
Bekk 7	Node_13	Node_14	135,3	0,356	3,378	05.05.2022 12:00:40	05.05.2022 12:12:00
Bekk 8	Node_15	Node_16	9,797	0,232	4,393	05.05.2022 12:00:20	05.05.2022 12:12:40
Kulvert 1	Node_2	Node_3	5,805	0,154	6,044	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 2	Node_4	Node_5	5,222	0,252	6,213	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 3	Node_6	Node_7	13,88	0,139	3,433	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 4	Node_8	Node_9	5,152	0,144	5,121	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 5	Node_10	Node_11	7,185	0,143	5,209	05.05.2022 12:00:10	05.05.2022 12:12:40
Kulvert 6	Node_12	Node_13	37,57	0,079	3,431	05.05.2022 12:00:10	05.05.2022 12:12:20
Kulvert 7	Node_14	Node_15	6,057	0,132	4,614	05.05.2022 12:00:10	05.05.2022 12:12:40

Rainfall Runoff Results Summary

Catchments - rainfall runoff per catchment

Catchment ID	Rain Boundary ID	Minimum [m^3/s]	Maximum [m^3/s]	Time of minimum	Time of maximum	Accumulated flow [m^3]
Felt 1	Boundary med regn	0,000	1,743	05.05.2022 12:01:00	05.05.2022 12:13:00	368,8
Felt 2	Boundary med regn	0,000	0,512	05.05.2022 12:01:00	05.05.2022 12:13:00	108,4
Felt 3	Boundary med regn	0,000	0,447	05.05.2022 12:01:00	05.05.2022 12:13:00	94,52
Felt 4	Boundary med regn	0,000	0,525	05.05.2022 12:01:00	05.05.2022 12:13:00	111,2
Felt 5	Boundary med regn	0,000	0,602	05.05.2022 12:01:00	05.05.2022 12:13:00	127,3
Total						810,2

Catchments - continuity balance per catchment

Catchment ID	Start volume (1) [m^3]	Total inflow (2) [m^3]	Total losses (3) [m^3]	Total runoff (4) [m^3]	End volume (5) [m^3]	Balance [m^3]	% of total inflow
Felt 1	0,000	4 121,0	1 450,5	368,8	2 249,4	52,29	1,3
Felt 2	0,000	605,8	151,3	108,4	330,7	15,37	2,5
Felt 3	0,000	528,0	131,9	94,52	288,2	13,40	2,5
Felt 4	0,000	621,1	155,2	111,2	339,0	15,76	2,5
Felt 5	0,000	711,1	177,6	127,3	388,1	18,05	2,5
Total	0,000	6 587,1	2 066,5	810,2	3 595,4	114,9	1,7

Note: Balance is (1+2)-(3+4+5)

Note: Losses include infiltration and evaporation