

Existing Conditions

MGS Summary

Belfair 30784

6/28/07 sjs

Basin ID	Till-F	Till-P	Till-G	Out-F	Out-P	Out-G	Sat	Imp	Total Area	2-yr	25-yr	50-yr
10	15.38	15.38	0	9.84	9.84	0.92	0	0.92	52.28	3.17	6.04	6.18
20	76.66	76.66	0	28.07	28.07	1.09	0	2	212.55	14.212	25.98	26.51
30	59.43	59.43	0	32.28	32.28	0.37	0	0.49	184.28	10.86	20.68	21.11
40	10.17	10.17	0.01	29.06	29.06	5.17	0	11	94.64	6.76	12.58	12.7
50	10.17	10.17	1.04	14.58	14.58	4.14	0	9.31	63.99	5.85	9.71	9.88
60	0.87	0.87	0.2	27.11	27.11	2.68	0	9.84	68.68	4.59	8.84	9.13
70	124.49	124.49	0	41.05	41.05	1.18	5.2	6.67	344.13	25.07	43.75	45.05
80	50.15	50.15	0.35	5.01	5.01	1.92	0	12.82	125.41	12.98	20.38	22.14
90	78.14	78.14	0.06	41.51	41.51	2.14	0	9.55	251.05	17.61	31.53	31.61
100	9.74	9.74	0.66	29.35	29.35	5.42	164.33	18.99	267.58	42.06	65.96	68.56
110	4.59	4.59	1.68	0.66	0.66	2.15	9.07	21.63	45.03	11.39	15.52	15.88
120	60.45	60.45	5.16	54.29	54.29	4.05	44.39	29.92	313	32.17	47.5	47.82
130	30.37	30.37	1.67	8.84	8.84	0	6.3	1.67	88.06	7.38	11.92	12.35
140	15.78	15.78	1.31	67.71	67.71	3.25	17.86	14.5	203.9	13.42	24.41	25.15
150	10.6	10.6	4.52	11.5	11.5	3.95	0.02	48.03	100.72	21.63	29.24	30.96
160	67.76	67.76	7.19	116.37	116.37	9.05	11.05	36.52	432.07	30.02	56.13	56.29
200	50.65	50.65	0	2.65	2.65	0	0	0	106.6	8.53	14.24	15.66
210	22.14	22.14	0	37.45	37.45	0	0	0	119.18	4.41	11.48	11.86
220	3.09	3.09	0.61	0	0	0	0.02	3.43	10.24	1.88	2.69	2.92

Belfair UGA - Mason County

This Table assigns culverts to basins.
 Basin runoff equally distributed to multiple culverts when necessary.

Basin ID	Culvert No.	25yr Runoff (cfs)	
		Per Basin	Per Culvert
10	1	6.04	3.0
10	2		3.0
20	3	25.98	13.0
20	4		13.0
30	5	20.68	5.2
30	6		5.2
30	7		5.2
30	8		5.2
40	9	12.58	6.3
40	10		6.3
50	11	9.71	9.7
60	12	8.84	2.9
60	13		2.9
60	14		2.9
70	15	43.75	43.8
80	16	20.38	10.2
80	17		10.2
120	18	47.5	47.5
140	19	24.41	12.2
140	20		12.2

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MGS FLOOD
PROJECT REPORT

Program Version: 3.12

Run Date: 06/28/2007 2:29 PM

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Input File Name: Existing2007_0628.fld
Project Name: Belfair SWMP
Analysis Title: Existing Conditions
Comments:

***** Precipitation Input*****

Precipitation Station Data Selected
Climatic Region Number: 16
Full Period of Record Available used for Routing
Precipitation Station : 455549 Montesano 10/01/1954-10/01/1999
Evaporation Station : 456803 Puyallup
At Site 25-Year, 24-Hour Precipitation (inches): 4.80
Gage 25-Year, 24-Hour Precipitation (inches) : 5.46
Precipitation Scale Factor : 0.878
Evaporation Scale Factor : 0.750

HSPF Parameter Region Number: 1
HSPF Parameter Region Name : USGS Default

***** Default HSPF Parameters Used (Not Modified by User) *****

Subbasin 20

		-----Area (Acres) -----		

-----Developed-----		Predeveloped		To Node
Bypass Node				
Till Forest	76.660	0.100	0.000	
Till Pasture	76.660	0.000	0.000	
Till Grass	0.000	0.000	0.000	
Outwash Forest		28.070	0.000	0.000
Outwash Pasture		28.070	0.000	0.000
Outwash Grass	1.090	0.000	0.000	
Wetland	0.000	0.000	0.000	
Impervious		2.000	0.000	0.000
Subbasin Total	212.550	0.100	0.000	

*** Point of Compliance Flow Frequency Data ***
 Recurrence Interval Computed Using Gringorten Plotting Position

Predevelopment Runoff		Postdevelopment Runoff	
Tr (Years)	Discharge (cfs)	Tr (Years)	Discharge (cfs)
%%%			
2-Year	14.212	2-Year	6.804E-03
5-Year	19.074	5-Year	8.617E-03
10-Year	21.748	10-Year	9.745E-03
25-Year	25.980	25-Year	0.011
50-Year	26.511	50-Year	0.012
100-Year	**	100-Year	**
200-Year	**	200-Year	**

** Record too Short to Compute Peak Discharge for These Recurrence Intervals

Subbasin 30

		-----Area (Acres) -----		
-----Developed-----			Predeveloped	To Node
Bypass Node				
Till Forest	59.430	0.100	0.000	
Till Pasture	59.430	0.000	0.000	
Till Grass	0.000	0.000	0.000	
Outwash Forest		32.280	0.000	0.000
Outwash Pasture		32.280	0.000	0.000
Outwash Grass	0.370	0.000	0.000	
Wetland	0.000	0.000	0.000	
Impervious		0.490	0.000	0.000
Subbasin Total		184.280	0.100	0.000

*** Point of Compliance Flow Frequency Data ***
 Recurrence Interval Computed Using Gringorten Plotting Position

Predevelopment Runoff		Postdevelopment Runoff	
Tr (Years)	Discharge (cfs)	Tr (Years)	Discharge (cfs)
2-Year	10.857	2-Year	6.804E-03
5-Year	15.366	5-Year	8.617E-03
10-Year	17.344	10-Year	9.745E-03
25-Year	20.681	25-Year	0.011
50-Year	21.105	50-Year	0.012
100-Year	**	100-Year	**
200-Year	**	200-Year	**

** Record too Short to Compute Peak Discharge for These Recurrence Intervals

Subbasin 50

***** Subbasin Number: 1 *****
 ***Tributary to Node: 1
 ***Bypass to Node : None

		-----Area (Acres) ---	
-----Developed-----		Predeveloped	To Node
Bypass Node			
Till Forest	10.170	0.100	0.000
Till Pasture	10.170	0.000	0.000
Till Grass	1.040	0.000	0.000
Outwash Forest	14.580	0.000	0.000
Outwash Pasture	14.580	0.000	0.000
Outwash Grass	4.140	0.000	0.000
Wetland	0.000	0.000	0.000
Impervious	9.310	0.000	0.000
Subbasin Total	63.990	0.100	0.000

*** Point of Compliance Flow Frequency Data ***
 Recurrence Interval Computed Using Gringorten Plotting Position

Predevelopment Runoff		Postdevelopment Runoff	
Tr (Years)	Discharge (cfs)	Tr (Years)	Discharge (cfs)
2-Year	5.847	2-Year	6.804E-03
5-Year	7.976	5-Year	8.617E-03
10-Year	8.575	10-Year	9.745E-03
25-Year	9.706	25-Year	0.011
50-Year	9.878	50-Year	0.012
100-Year	**	100-Year	**
200-Year	**	200-Year	**

** Record too Short to Compute Peak Discharge for These Recurrence Intervals

Subbasin 60

		-----Area (Acres) -----			
-----Developed-----				Predeveloped	To Node
Bypass Node					
Till Forest	0.870	0.100	0.000		
Till Pasture	0.870	0.000	0.000		
Till Grass	0.200	0.000	0.000		
Outwash Forest		27.110	0.000	0.000	0.000
Outwash Pasture		27.110	0.000	0.000	0.000
Outwash Grass	2.680	0.000	0.000	0.000	
Wetland	0.000	0.000	0.000	0.000	
Impervious		9.840	0.000	0.000	
Subbasin Total	68.680	0.100	0.000	0.000	

*** Point of Compliance Flow Frequency Data ***
 Recurrence Interval Computed Using Gringorten Plotting Position

Predevelopment Runoff		Postdevelopment Runoff	
Tr (Years)	Discharge (cfs)	Tr (Years)	Discharge (cfs)
2-Year	4.590	2-Year	6.804E-03
5-Year	6.768	5-Year	8.617E-03
10-Year	7.349	10-Year	9.745E-03
25-Year	8.835	25-Year	0.011
50-Year	9.125	50-Year	0.012
100-Year	**	100-Year	**
200-Year	**	200-Year	**

** Record too Short to Compute Peak Discharge for These Recurrence Intervals

Subbasin 80

		-----Area (Acres) -----		
-----Developed-----			Predeveloped	To Node
Bypass Node				
Till Forest	50.150	0.100	0.000	
Till Pasture	50.150	0.000	0.000	
Till Grass	0.350	0.000	0.000	
Outwash Forest	5.010	0.000	0.000	0.000
Outwash Pasture	5.010	0.000	0.000	0.000
Outwash Grass	1.920	0.000	0.000	0.000
Wetland	0.000	0.000	0.000	0.000
Impervious	12.820	0.000	0.000	0.000
Subbasin Total	125.410	0.100	0.000	0.000

*** Point of Compliance Flow Frequency Data ***
 Recurrence Interval Computed Using Gringorten Plotting Position

Predevelopment Runoff		Postdevelopment Runoff	
Tr (Years)	Discharge (cfs)	Tr (Years)	Discharge (cfs)
2-Year	12.979	2-Year	6.804E-03
5-Year	16.863	5-Year	8.617E-03
10-Year	18.627	10-Year	9.745E-03
25-Year	20.377	25-Year	0.011
50-Year	22.137	50-Year	0.012
100-Year	**	100-Year	**
200-Year	**	200-Year	**

** Record too Short to Compute Peak Discharge for These Recurrence Intervals

Subbasin 100

		-----Area (Acres) -----			
-----Developed-----		Predeveloped		To Node	
Bypass Node					
Till Forest	9.740	0.100	0.000		
Till Pasture	9.740	0.000	0.000		
Till Grass	0.660	0.000	0.000		
Outwash Forest		29.350	0.000	0.000	0.000
Outwash Pasture		29.350	0.000	0.000	0.000
Outwash Grass	5.420	0.000	0.000		
Wetland	164.330	0.000	0.000		
Impervious		18.990	0.000	0.000	
Subbasin Total		267.580	0.100	0.000	

*** Point of Compliance Flow Frequency Data ***
 Recurrence Interval Computed Using Gringorten Plotting Position

Predevelopment Runoff		Postdevelopment Runoff	
Tr (Years)	Discharge (cfs)	Tr (Years)	Discharge (cfs)
2-Year	42.062	2-Year	6.804E-03
5-Year	51.631	5-Year	8.617E-03
10-Year	61.060	10-Year	9.745E-03
25-Year	65.964	25-Year	0.011
50-Year	68.557	50-Year	0.012
100-Year	**	100-Year	**
200-Year	**	200-Year	**

** Record too Short to Compute Peak Discharge for These Recurrence Intervals

Subbasin 110

		-----Area (Acres) -----		
-----Developed-----			Predeveloped	To Node
Bypass Node				
Till Forest	4.590	0.100	0.000	
Till Pasture	4.590	0.000	0.000	
Till Grass	1.680	0.000	0.000	
Outwash Forest		0.660	0.000	0.000
Outwash Pasture		0.660	0.000	0.000
Outwash Grass	2.150	0.000	0.000	
Wetland	9.070	0.000	0.000	
Impervious		21.630	0.000	0.000
Subbasin Total		45.030	0.100	0.000

*** Point of Compliance Flow Frequency Data ***
 Recurrence Interval Computed Using Gringorten Plotting Position

Predevelopment Runoff		Postdevelopment Runoff	
Tr (Years)	Discharge (cfs)	Tr (Years)	Discharge (cfs)
2-Year	11.386	2-Year	6.804E-03
5-Year	13.473	5-Year	8.617E-03
10-Year	14.269	10-Year	9.745E-03
25-Year	15.519	25-Year	0.011
50-Year	15.877	50-Year	0.012
100-Year	**	100-Year	**
200-Year	**	200-Year	**

** Record too Short to Compute Peak Discharge for These Recurrence Intervals

Subbasin 140

		-----Area (Acres) -----			
-----Developed-----		Predeveloped		To Node	
Bypass Node					
Till Forest	15.780	0.100	0.000		
Till Pasture	15.780	0.000	0.000		
Till Grass	1.310	0.000	0.000		
Outwash Forest		67.710	0.000	0.000	0.000
Outwash Pasture		67.710	0.000	0.000	0.000
Outwash Grass	3.250	0.000	0.000		
Wetland	17.860	0.000	0.000		
Impervious	14.500		0.000	0.000	
Subbasin Total	203.900	0.100	0.000	0.000	

*** Point of Compliance Flow Frequency Data ***
 Recurrence Interval Computed Using Gringorten Plotting Position

Predevelopment Runoff		Postdevelopment Runoff	
Tr (Years)	Discharge (cfs)	Tr (Years)	Discharge (cfs)
2-Year	13.421	2-Year	6.804E-03
5-Year	19.295	5-Year	8.617E-03
10-Year	20.985	10-Year	9.745E-03
25-Year	24.413	25-Year	0.011
50-Year	25.151	50-Year	0.012
100-Year	**	100-Year	**
200-Year	**	200-Year	**

** Record too Short to Compute Peak Discharge for These Recurrence Intervals

Subbasin 150

		-----Area (Acres) -----		
-----Developed-----			Predeveloped	To Node
Bypass Node				
Till Forest	10.600	0.100	0.000	
Till Pasture	10.600	0.000	0.000	
Till Grass	4.520	0.000	0.000	
Outwash Forest		11.500	0.000	0.000
Outwash Pasture		11.500	0.000	0.000
Outwash Grass	3.950	0.000	0.000	
Wetland	0.020	0.000	0.000	
Impervious		48.030	0.000	0.000
Subbasin Total		100.720	0.100	0.000

*** Point of Compliance Flow Frequency Data ***
 Recurrence Interval Computed Using Gringorten Plotting Position

Predevelopment Runoff		Postdevelopment Runoff	
Tr (Years)	Discharge (cfs)	Tr (Years)	Discharge (cfs)
2-Year	21.625	2-Year	6.804E-03
5-Year	25.613	5-Year	8.617E-03
10-Year	27.097	10-Year	9.745E-03
25-Year	29.238	25-Year	0.011
50-Year	30.963	50-Year	0.012
100-Year	**	100-Year	**
200-Year	**	200-Year	**

** Record too Short to Compute Peak Discharge for These Recurrence Intervals

Future Conditions