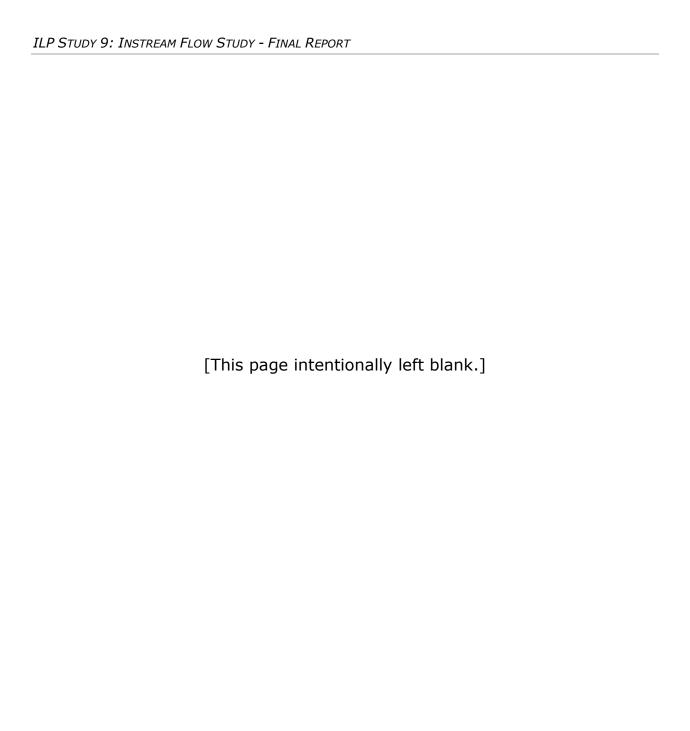
Appendix E Johnston Island 2D WUA and Suitability Maps Chase Island 2D WUA and Suitability Maps

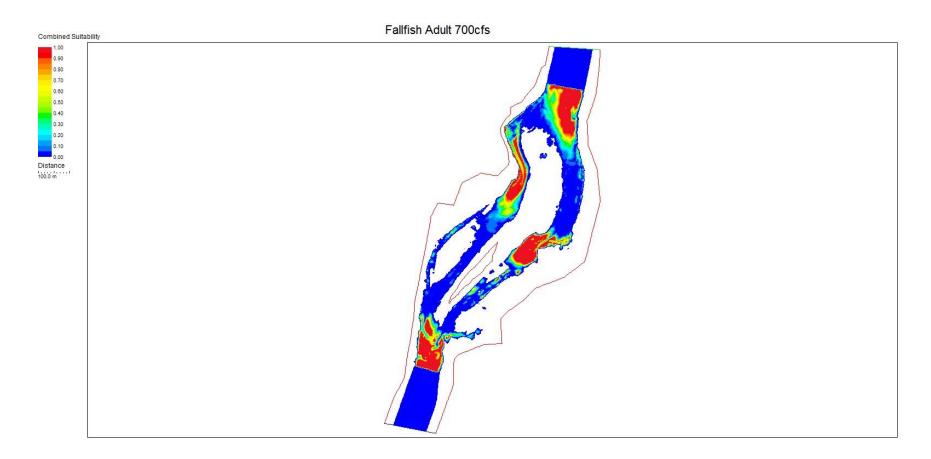


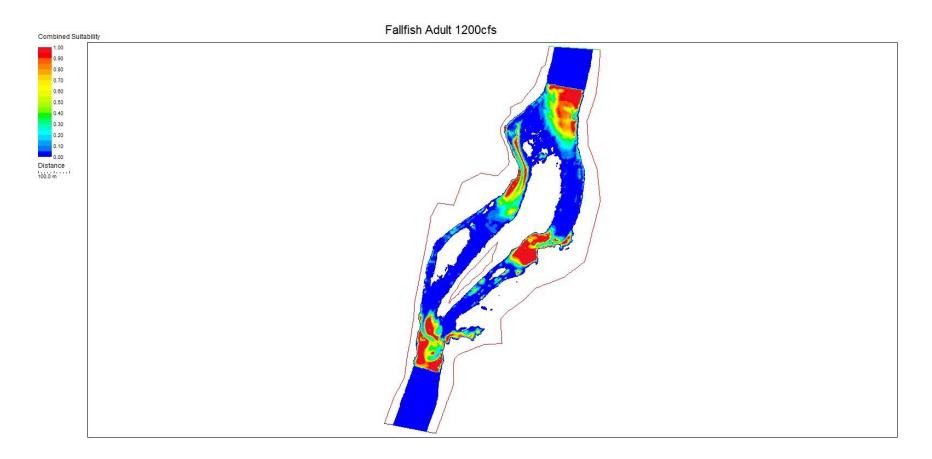
Johnston Island 2D Site WUA (m²)

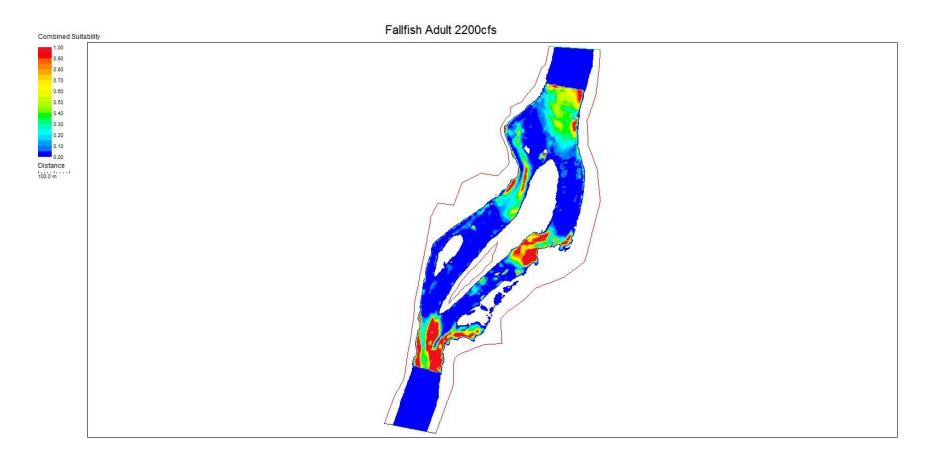
	Walleye				Fallfish				White Sucker		
Flow(cfs)	Fry	Juvenile	Adult	Spawning	Fry	Juvenile	Adult	Spawning	Fry	Adult/ Juvenile	Spawning
700	940	1,209	7,201	10,311	28,002	39,248	39,782	18,360	37,516	18,319	12,148
1200	1,242	1,012	4,580	18,011	26,870	41,365	38,530	19,208	25,782	13,281	12,781
2200	2,031	1,281	4,980	42,245	23,910	44,909	36,262	21,201	22,025	9,873	14,344
3200	3,609	1,579	5,083	58,950	19,105	36,806	29,835	17,221	21,243	6,565	10,654
4200	2,330	1,637	5,448	72,736	16,470	31,279	27,493	13,460	20,819	6,622	7,730
5200	1,872	1,461	4,732	78,892	13,800	26,641	25,651	10,369	19,241	7,299	5,120
6200	1,460	1,325	4,090	79,385	11,854	22,596	23,605	8,487	17,235	6,939	3,316
7200	1,949	1,533	4,590	75,934	10,276	19,167	22,187	7,236	16,585	6,406	2,372
8200	2,140	1,544	4,353	67,049	9,127	15,614	20,579	6,016	16,205	6,077	1,740
9200	2,197	1,547	4,238	61,169	8,573	13,667	20,234	5,312	15,950	6,280	1,474
10200	2,305	1,648	4,406	49,856	7,873	12,004	19,921	4,751	16,357	6,729	1,269
11200	2,550	1,823	4,820	42,808	7,089	10,781	19,964	4,250	16,519	7,219	1,091
13000	2,307	1,804	5,124	28,318	5,759	9,118	20,578	3,329	16,589	8,493	650
15000	2,032	1,918	5,949	22,498	4,372	7,493	21,431	2,283	16,356	9,833	520
20000	1,775	2,218	8,401	9,116	3,073	5,922	23,210	1,638	17,922	11,621	648
25000	1,309	1,947	9,095	3,778	2,370	4,781	24,168	1,328	19,081	13,248	638

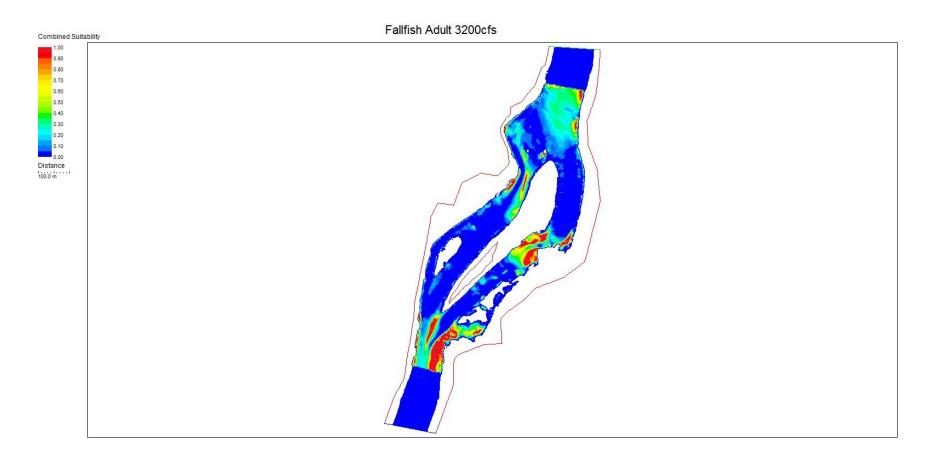
				Tessellated	Sea	Macro-				
	Longnose Dace			Darter	Lamprey	invertebrates	Smallmouth Bass			
Flow(cfs)	Fry	Juvenile	Adult	Adult	Spawning		Fry	Juvenile	Adult	Spawning
700	37,516	18,319	12,148	22,613	28,956	34,295	23,810	14,995	37,993	15,206
1200	25,782	13,281	12,781	21,206	38,581	36,764	25,089	21,497	54,769	9,360
2200	22,025	9,873	14,344	20,005	54,623	42,197	28,444	26,756	79,870	6,752
3200	21,243	6,565	10,654	15,006	57,264	33,325	22,255	24,285	85,056	5,965
4200	20,819	6,622	7,730	12,763	56,603	25,419	17,548	19,174	84,531	5,754
5200	19,241	7,299	5,120	10,624	53,968	18,461	13,189	13,503	82,065	5,218
6200	17,235	6,939	3,316	8,850	50,420	12,727	9,682	8,752	78,150	4,869
7200	16,585	6,406	2,372	7,427	46,558	8,786	7,276	5,538	73,594	4,455
8200	16,205	6,077	1,740	6,153	39,796	5,900	5,240	3,246	66,779	4,251
9200	15,950	6,280	1,474	5,318	35,401	4,253	4,084	1,950	61,027	4,175
10200	16,357	6,729	1,269	4,668	28,933	3,395	3,369	1,450	53,636	4,168
11200	16,519	7,219	1,091	4,031	24,916	2,709	2,774	1,138	48,256	4,005
13000	16,589	8,493	650	3,038	17,241	1,732	1,895	785	38,160	3,798
15000	16,356	9,833	520	2,207	13,376	1,126	1,260	421	31,466	3,266
20000	17,922	11,621	648	1,748	6,822	1,074	1,096	547	19,771	2,288
25000	19,081	13,248	638	1,569	4,163	1,223	1,135	542	14,098	1,734

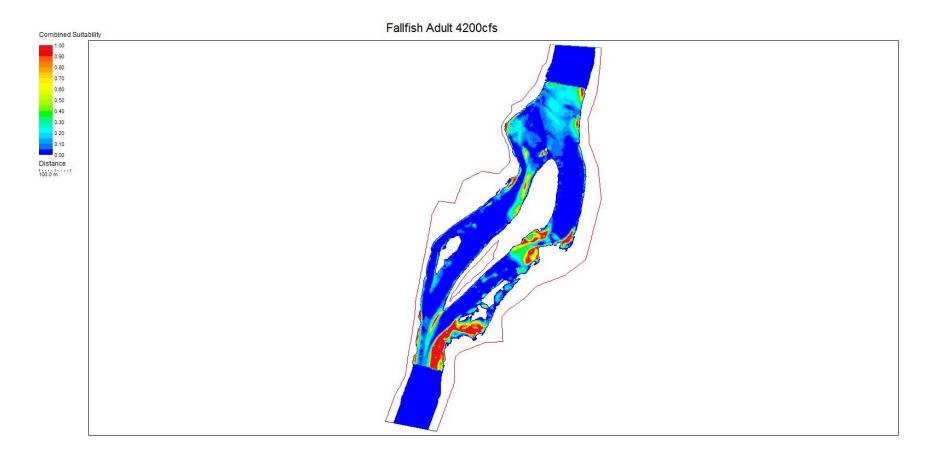
		Generalized H	Mussels			
		Shallow-	IVIU	33613		
Flow(cfs)	Shallow-Fast	Slow	Deep-Fast	Deep-Slow	DWM	Co-occurring
700	44,775	39,410	9,878	31,801	15106	31386
1200	60,805	35,842	24,476	25,998	16929	31586
2200	70,379	25,429	53,304	18,201	11358	18085
3200	60,682	21,040	78,091	14,639	8468	12537
4200	49,513	18,092	97,295	14,287	8918	11193
5200	37,328	15,544	116,129	13,885	9552	10338
6200	26,634	13,856	132,343	12,724	10025	9579
7200	15,879	12,256	147,272	12,361	8856	8733
8200	10,353	11,340	155,565	12,265	8836	8367
9200	6,711	10,363	161,592	12,702	8703	8075
10200	5,212	9,465	164,300	13,532	9345	8618
11200	4,026	8,477	166,869	14,412	9428	8494
13000	3,418	7,060	169,033	15,822	9963	9485
15000	2,729	5,615	172,652	16,912	11097	9659
20000	3,831	5,654	176,154	19,217	11541	10857
25000	4,462	5,232	179,230	21,085	4,462	5,232

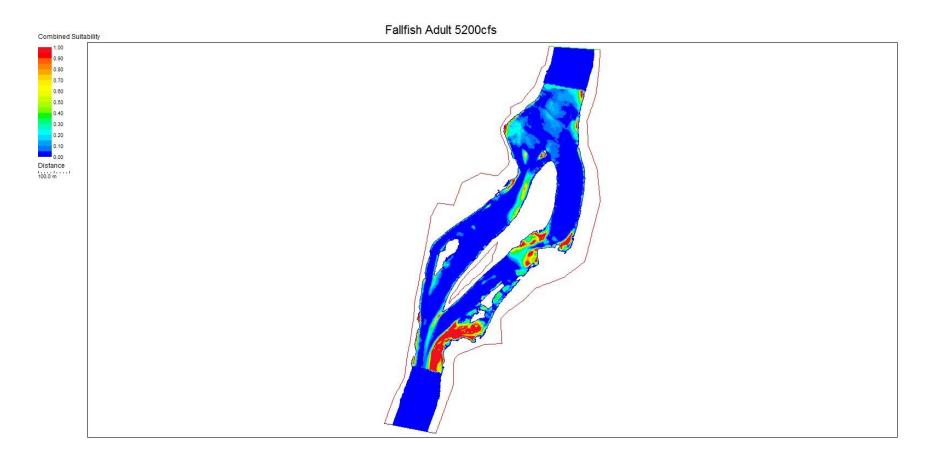


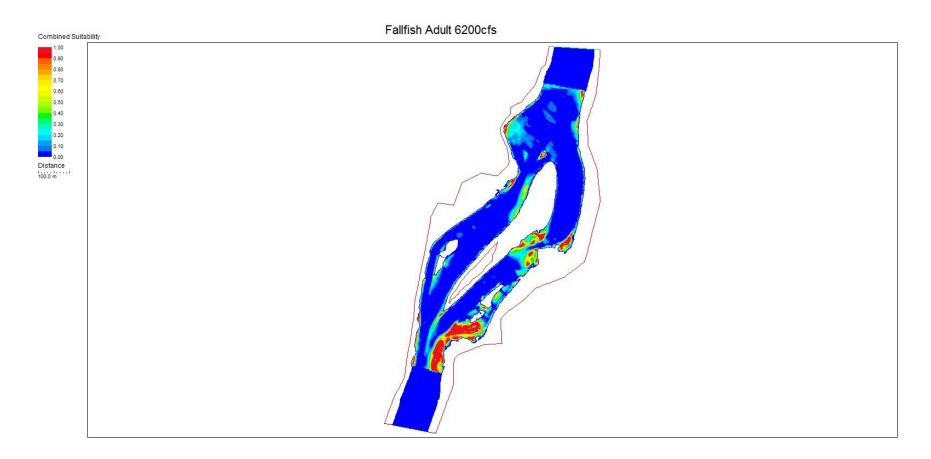


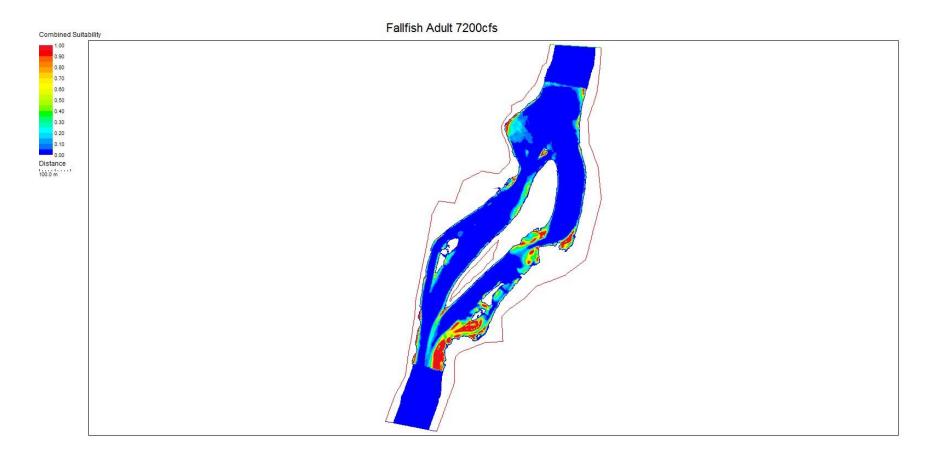


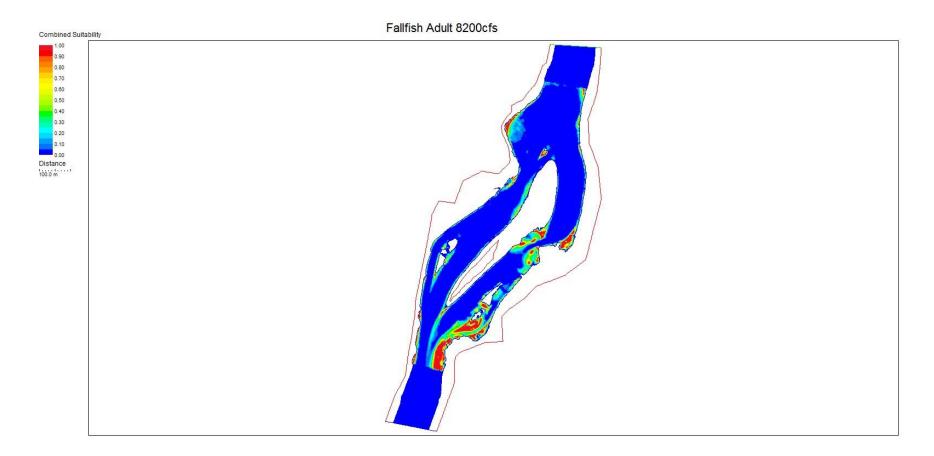


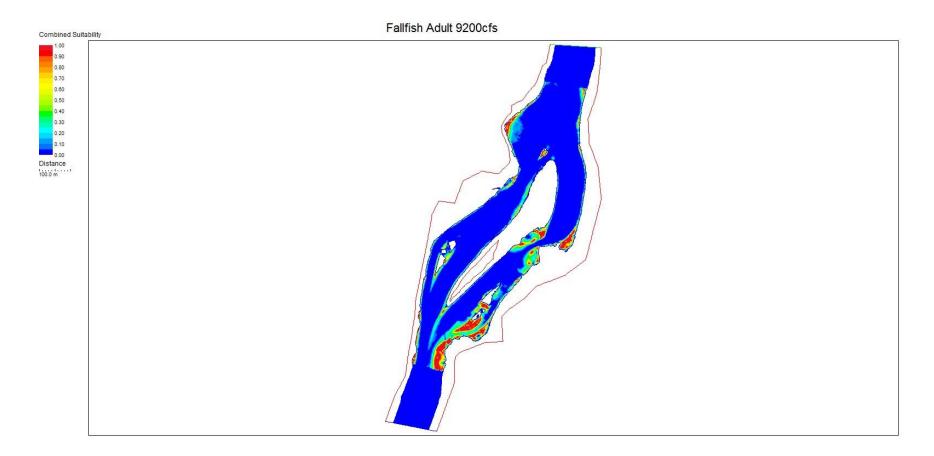


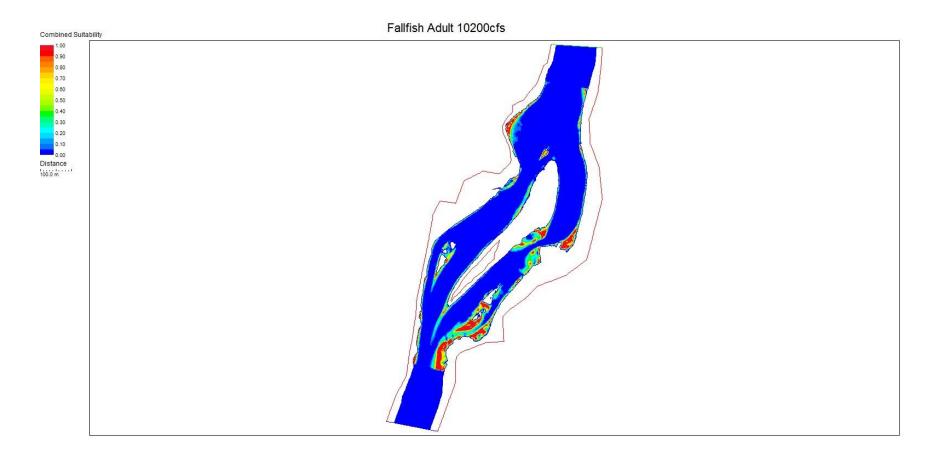


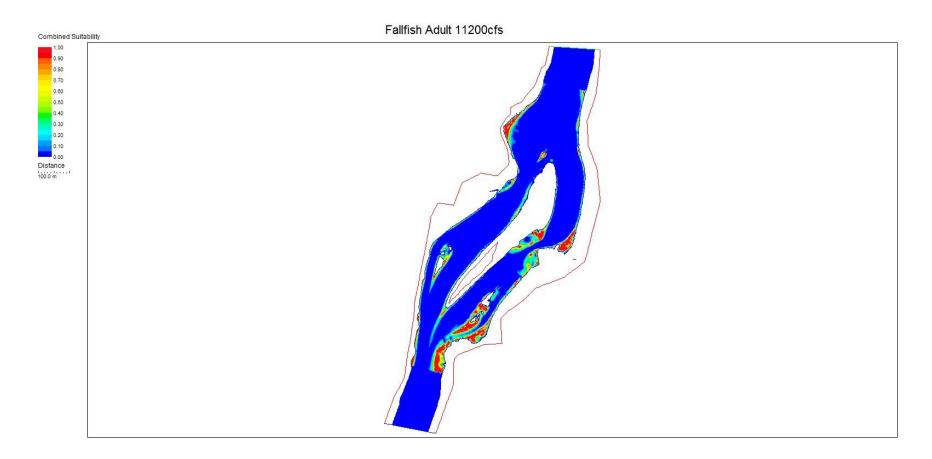


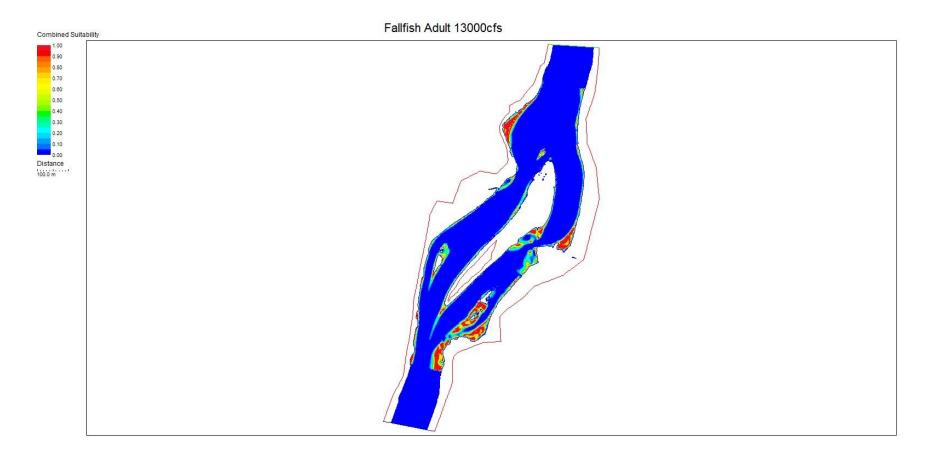


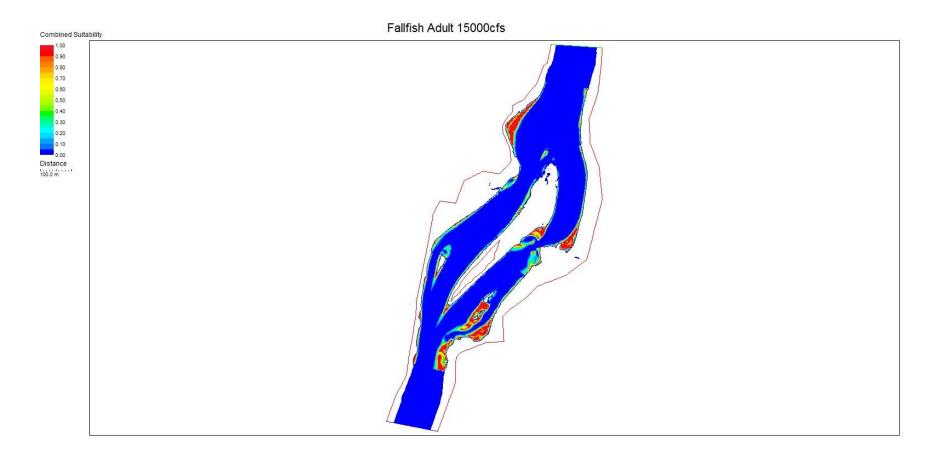


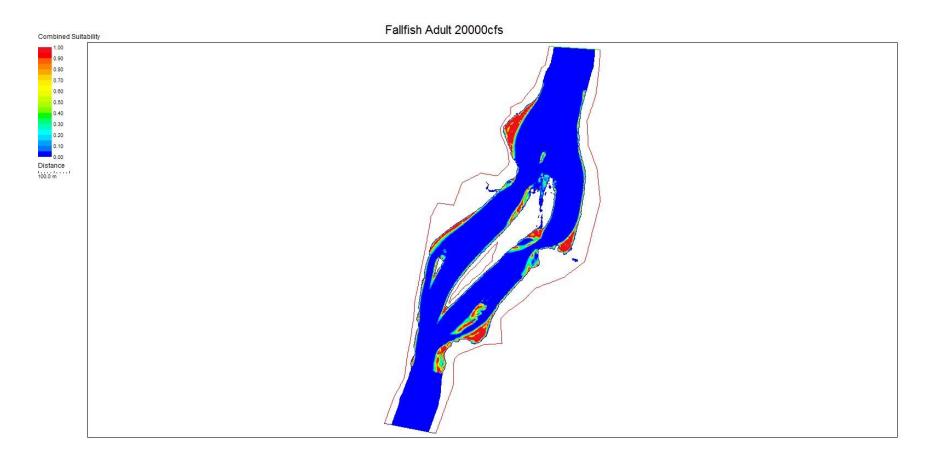


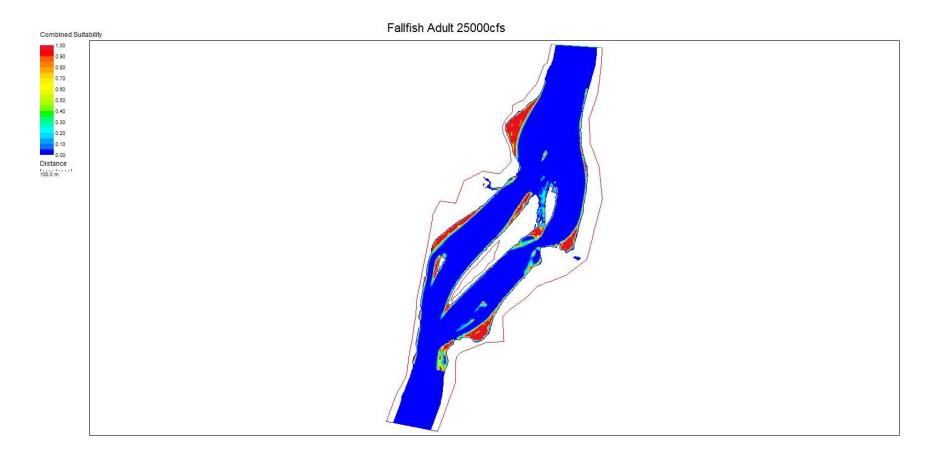


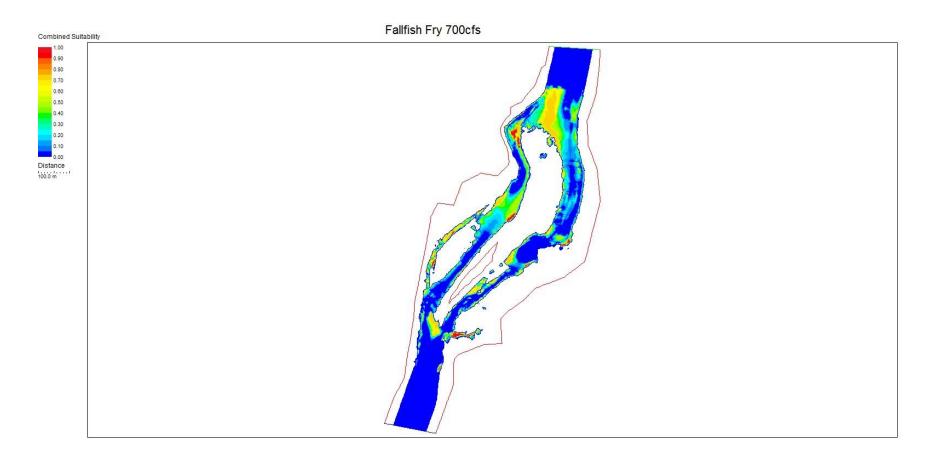


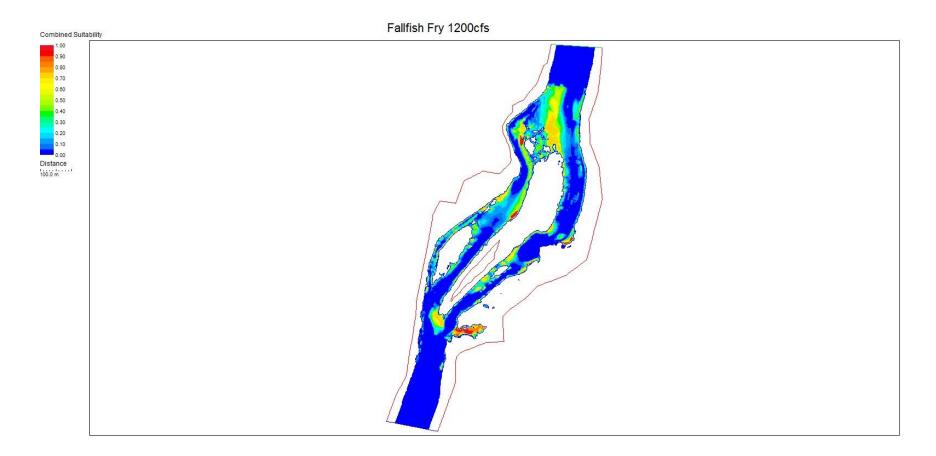


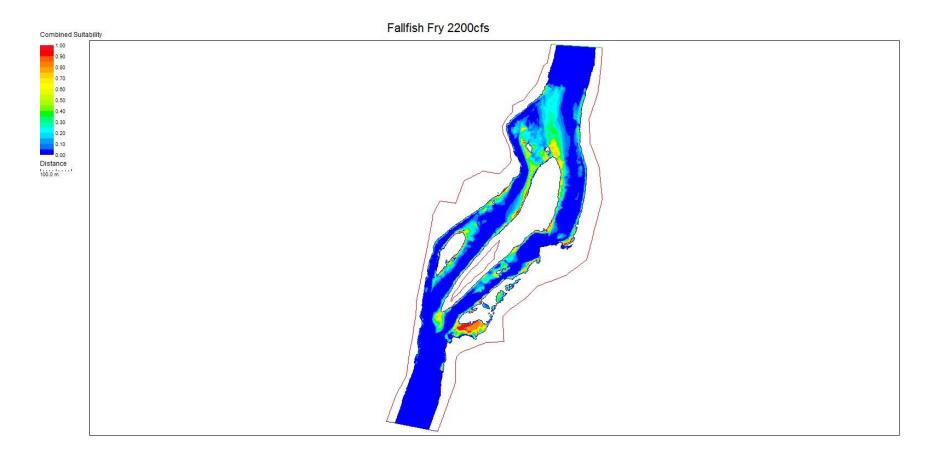


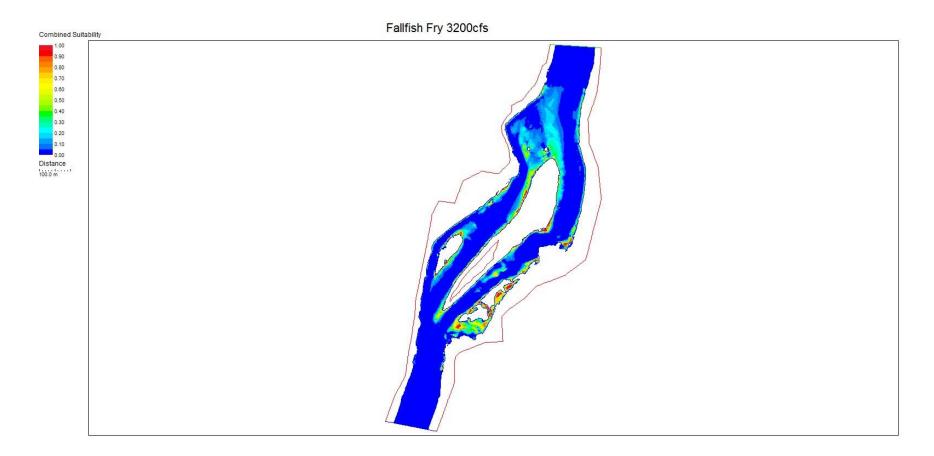


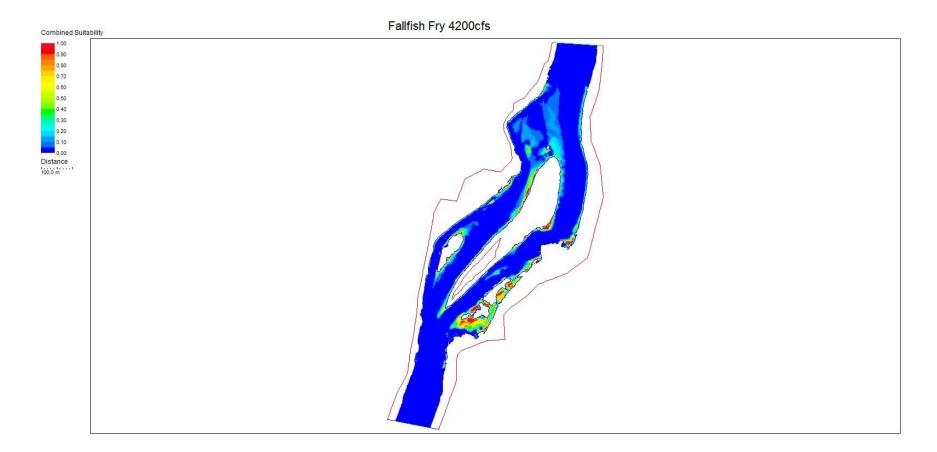


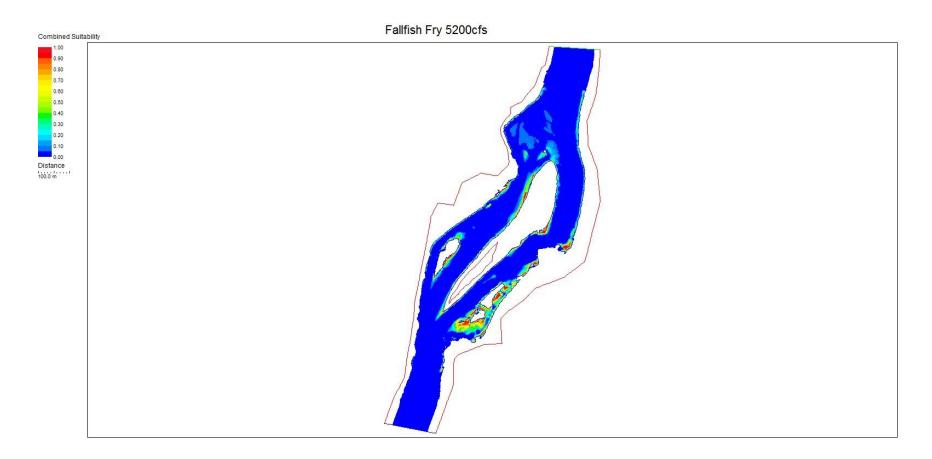


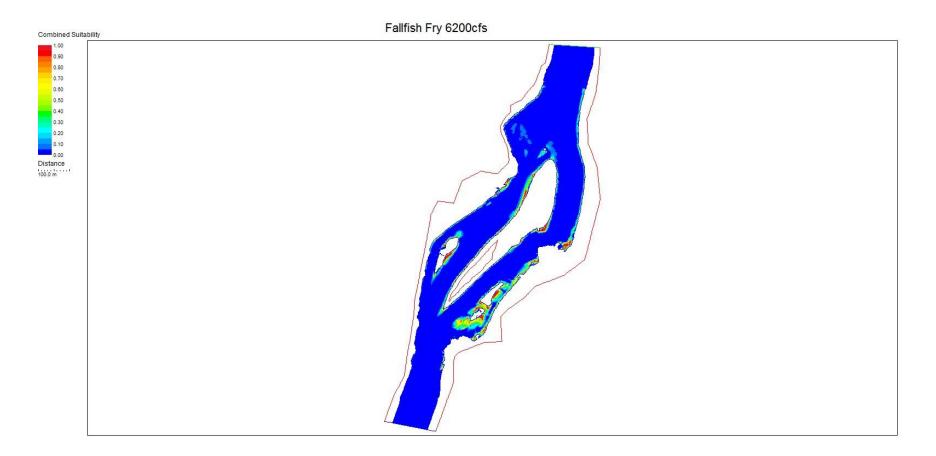


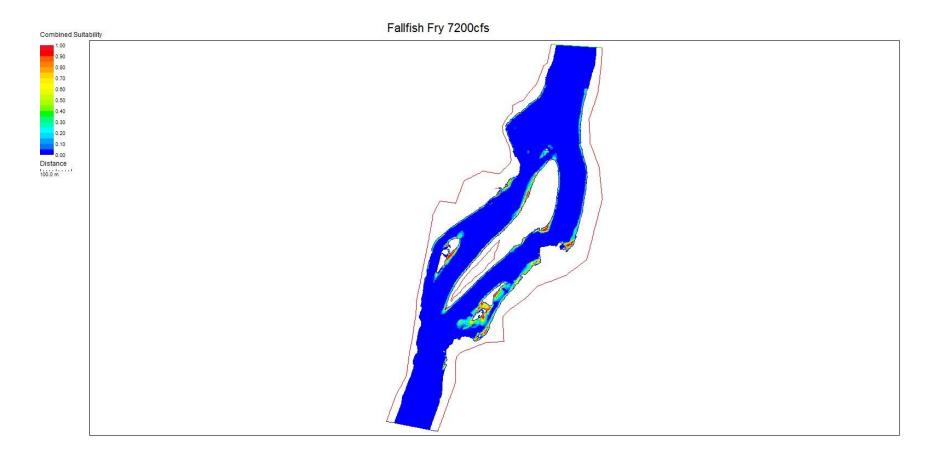


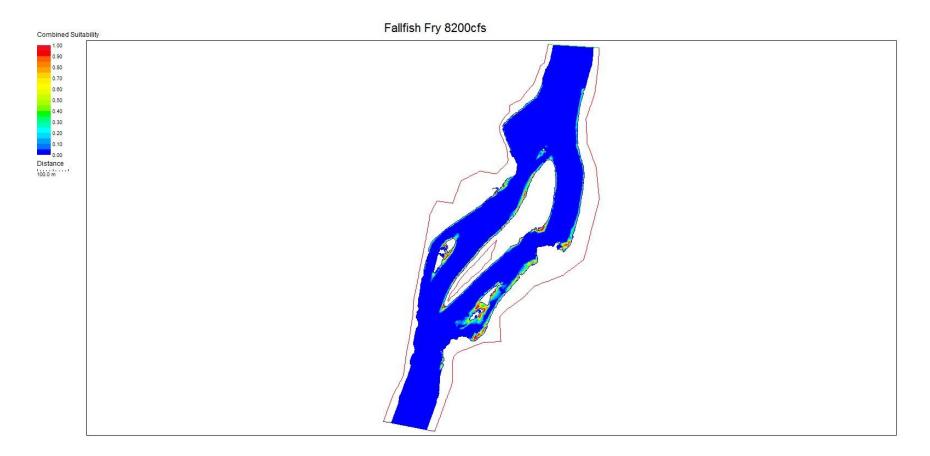


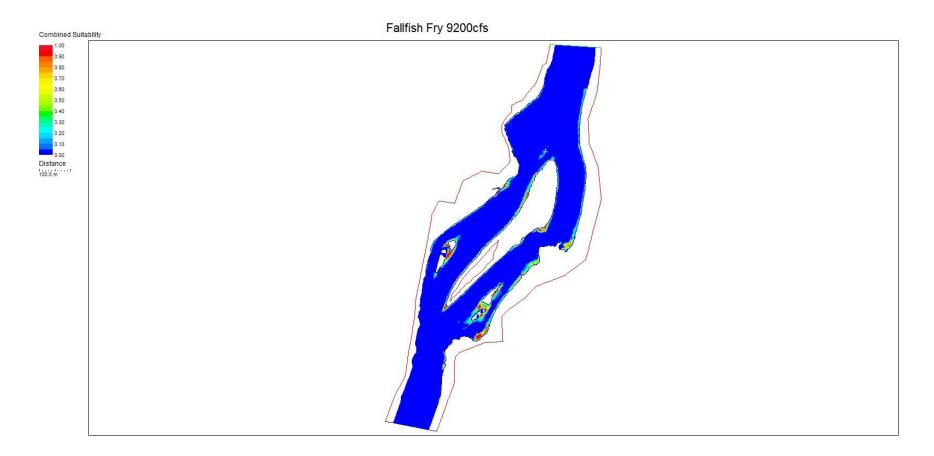


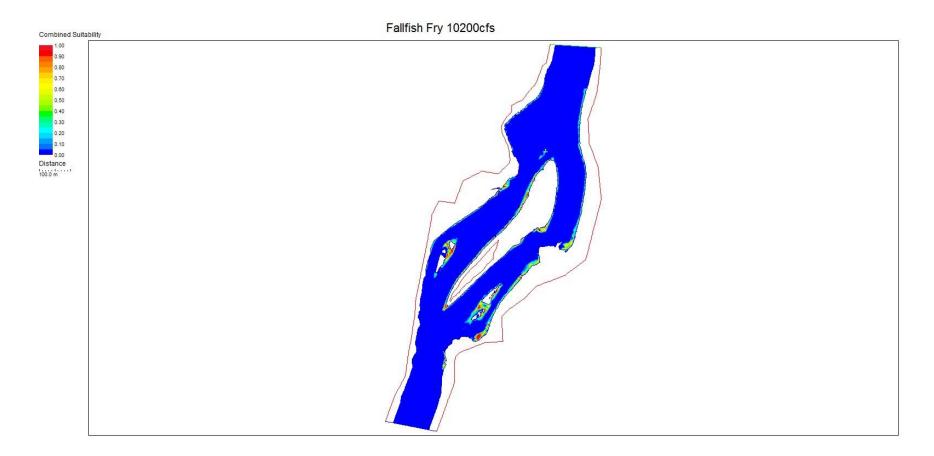


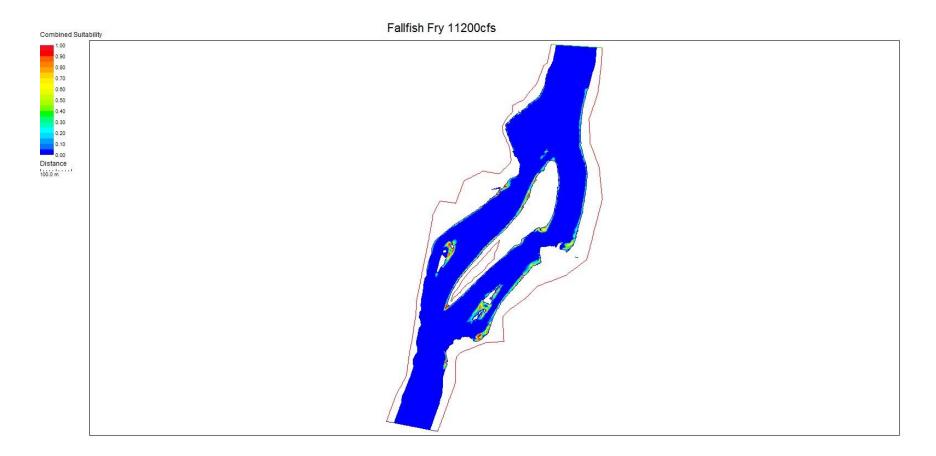


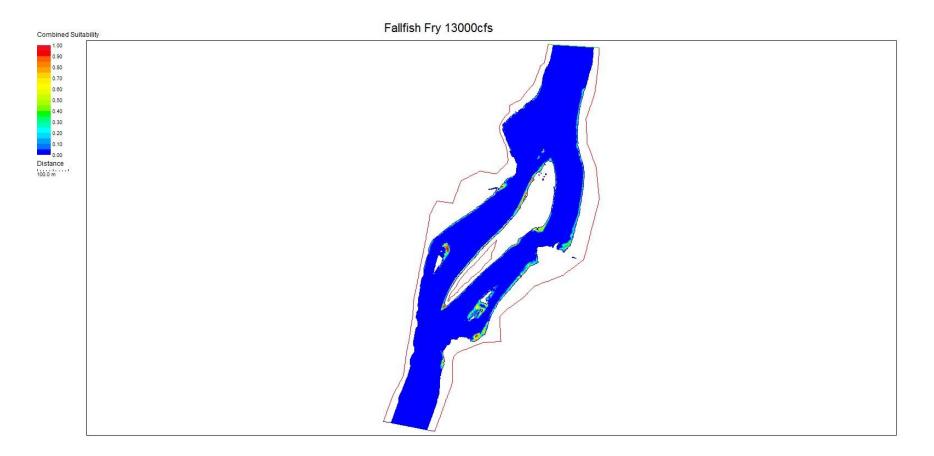


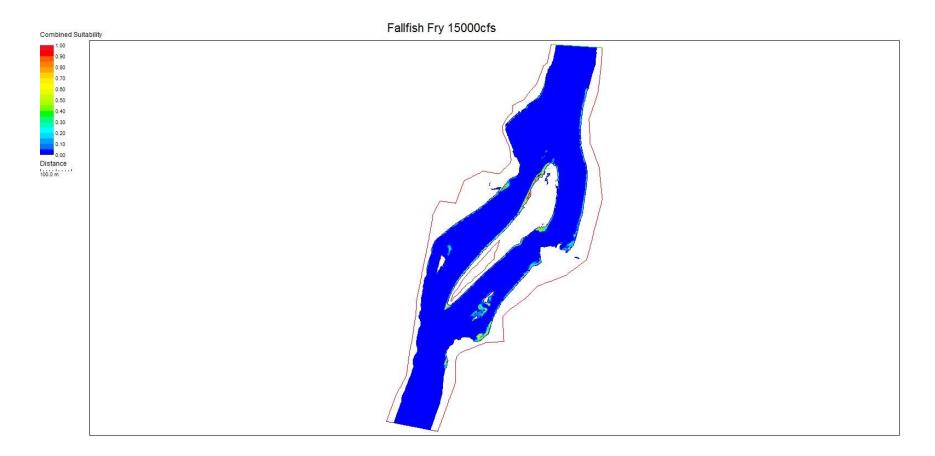


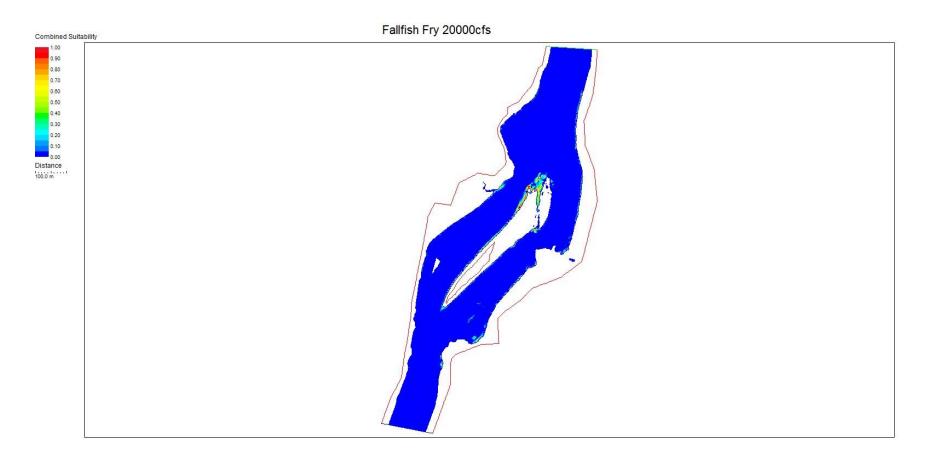


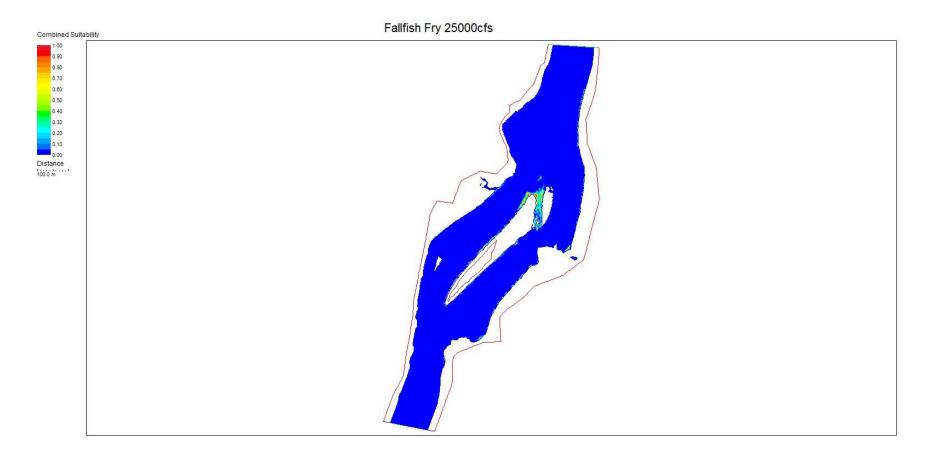


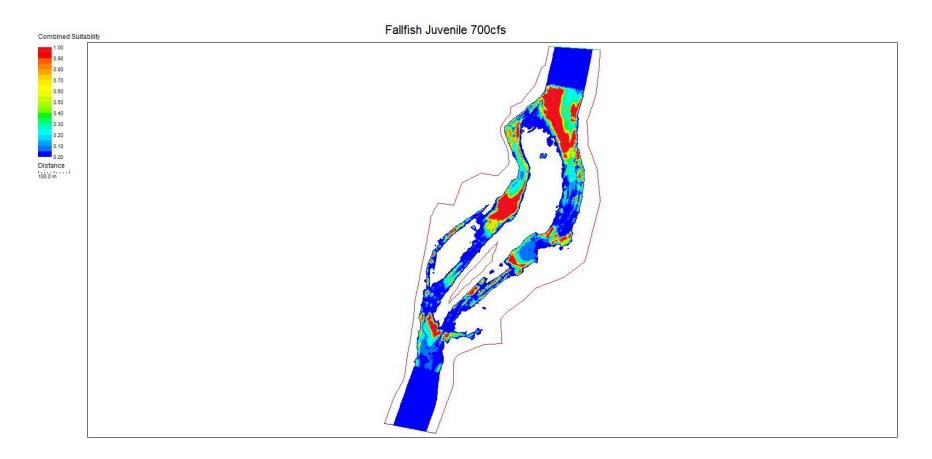


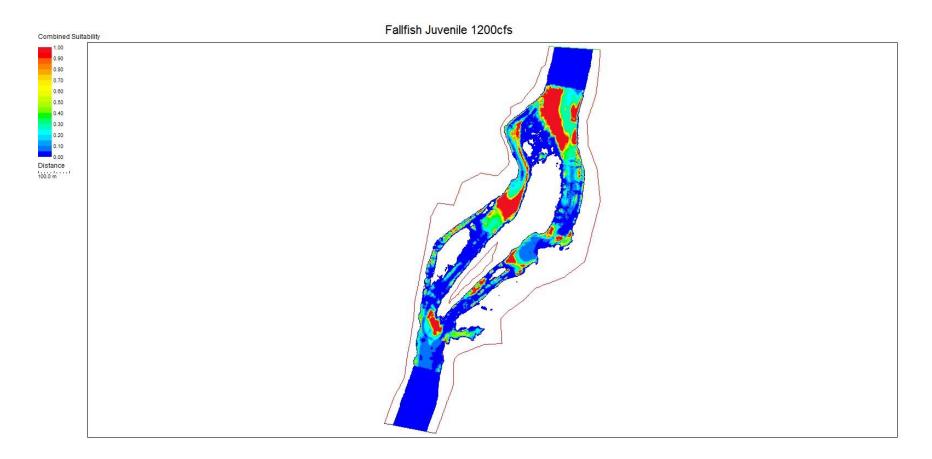


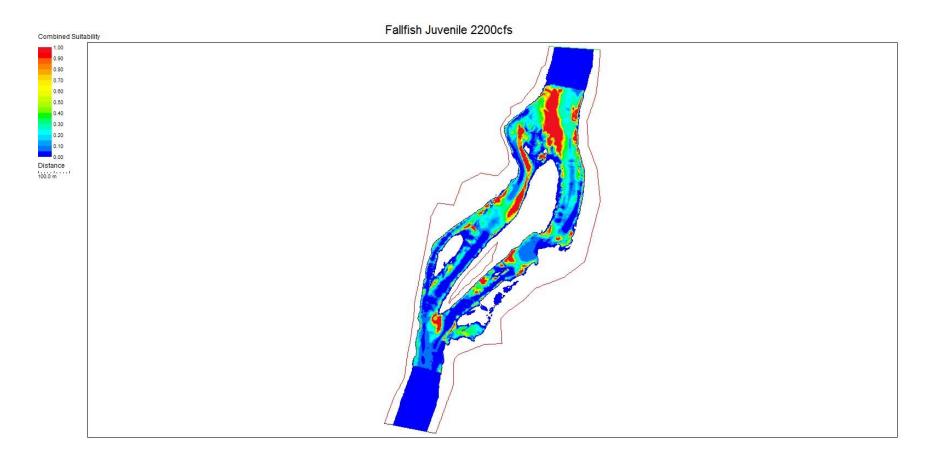


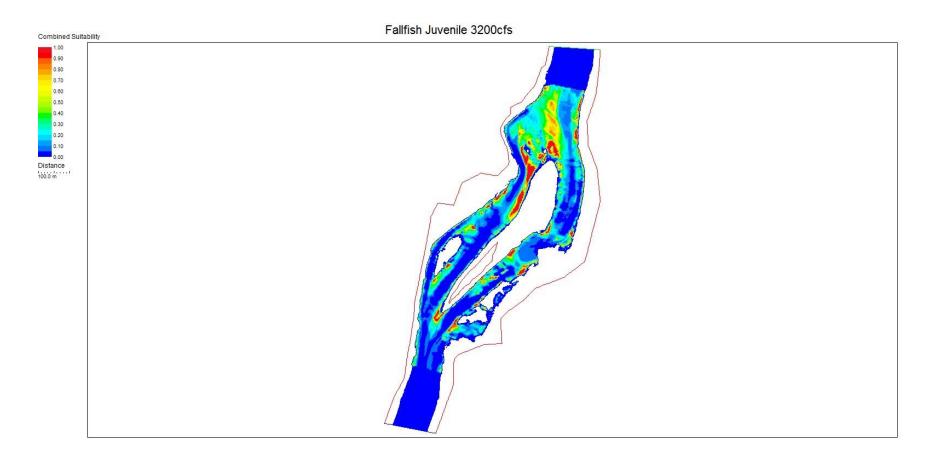


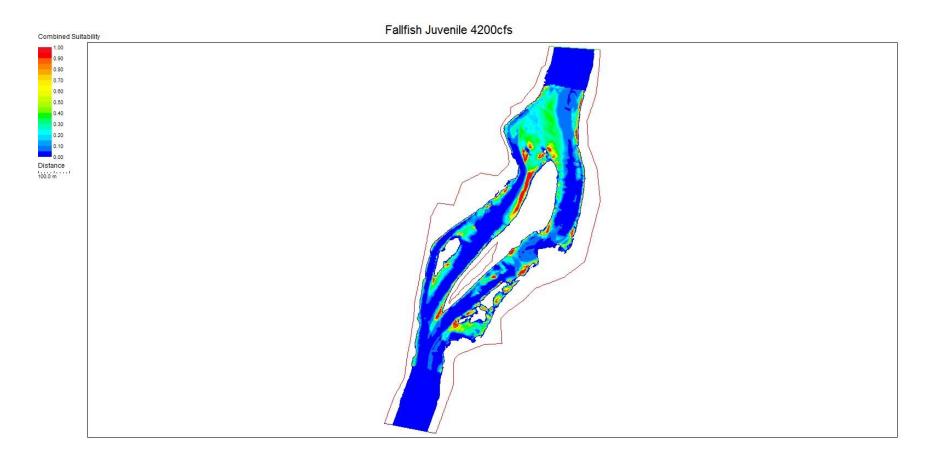


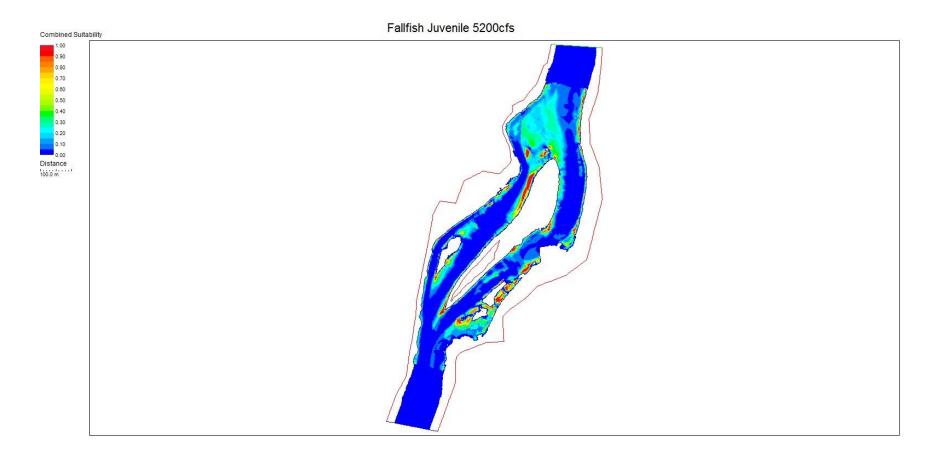


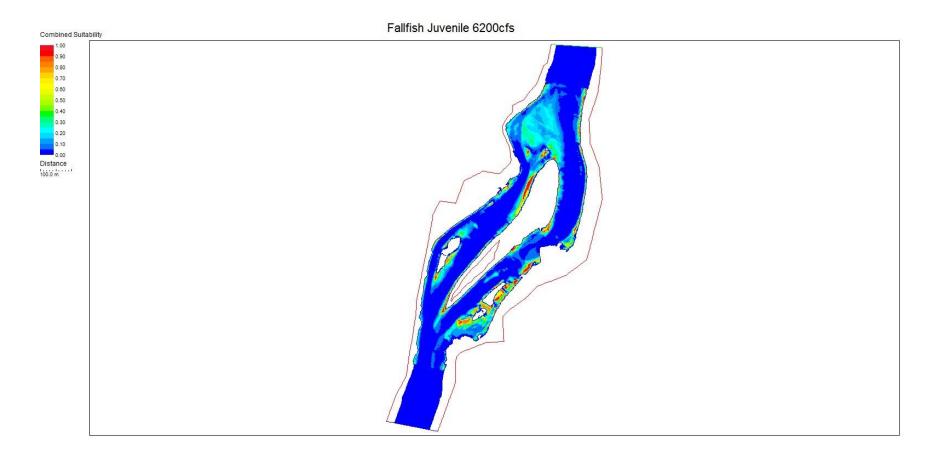


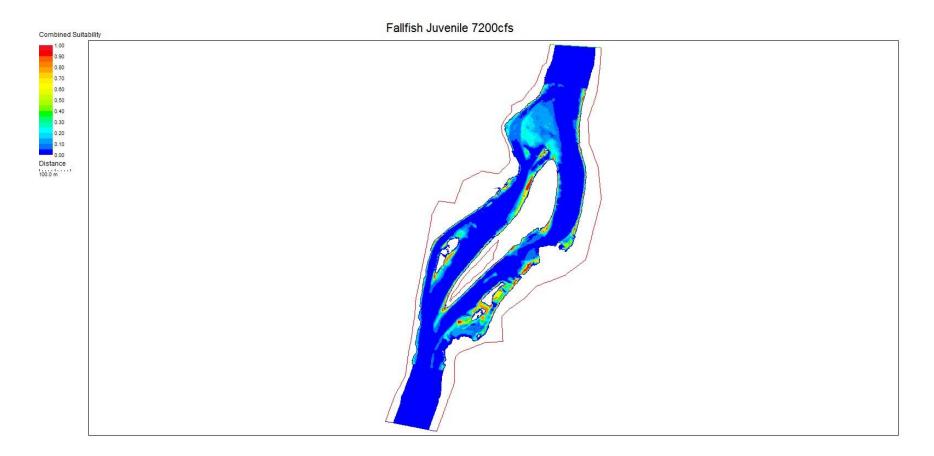


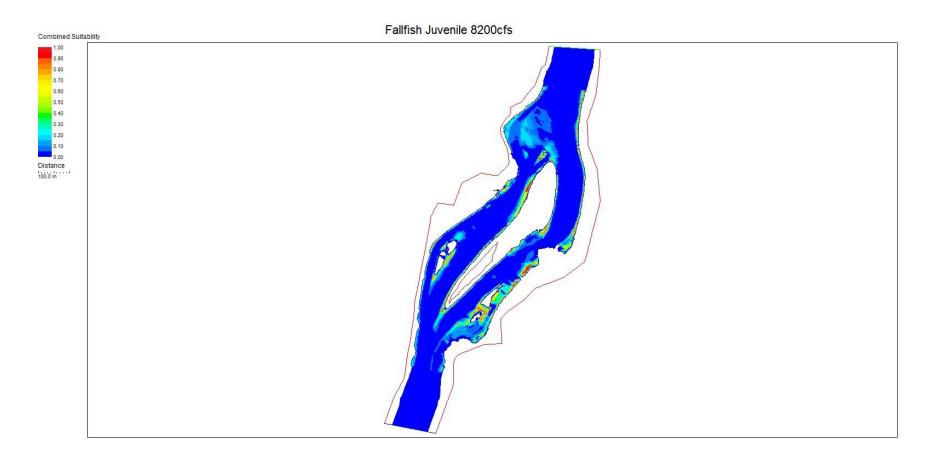


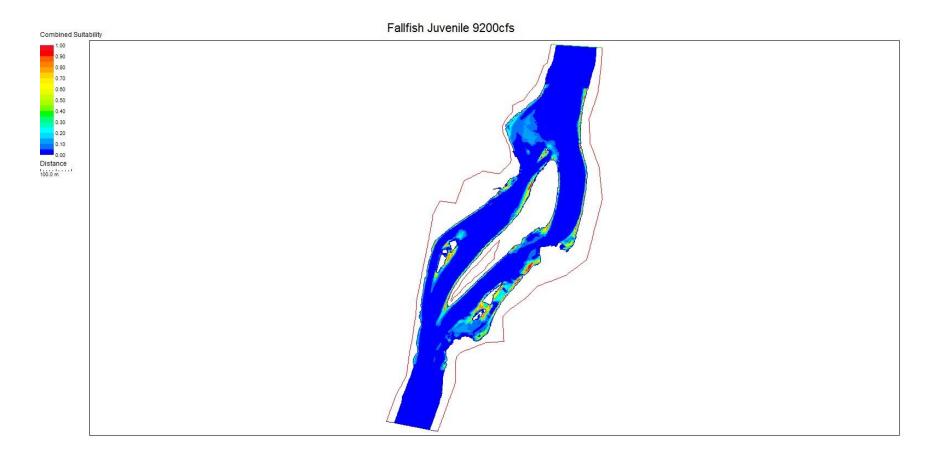


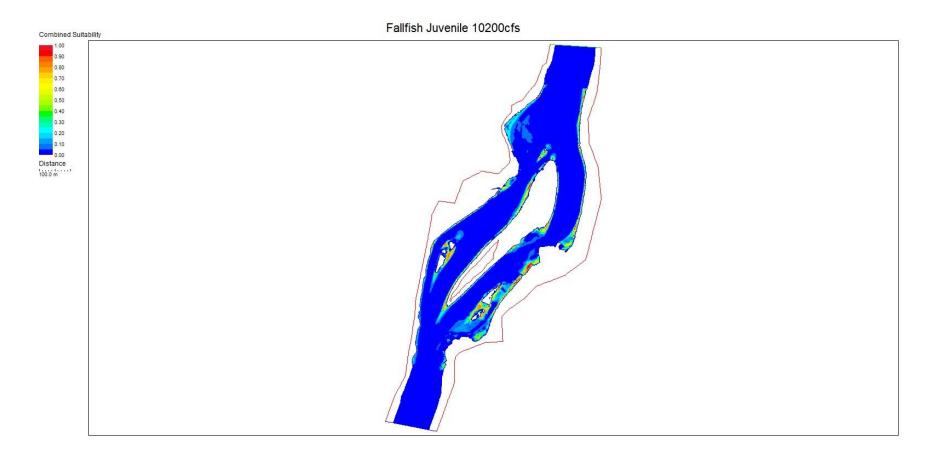


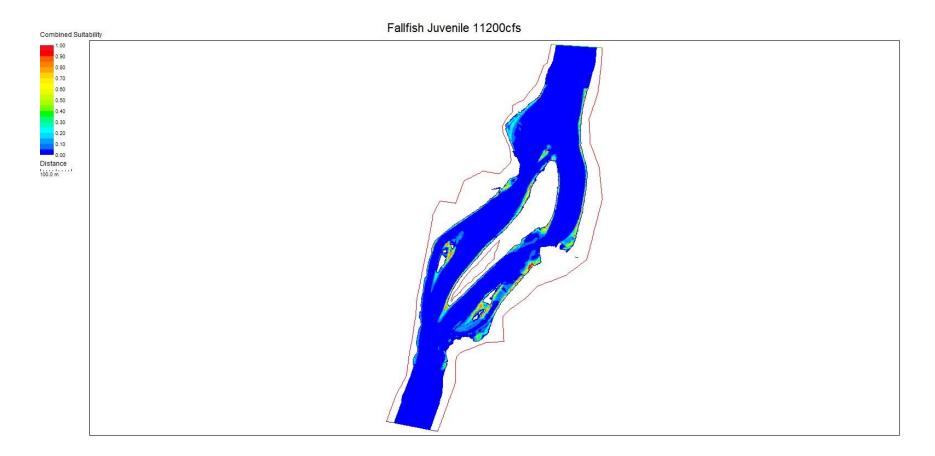


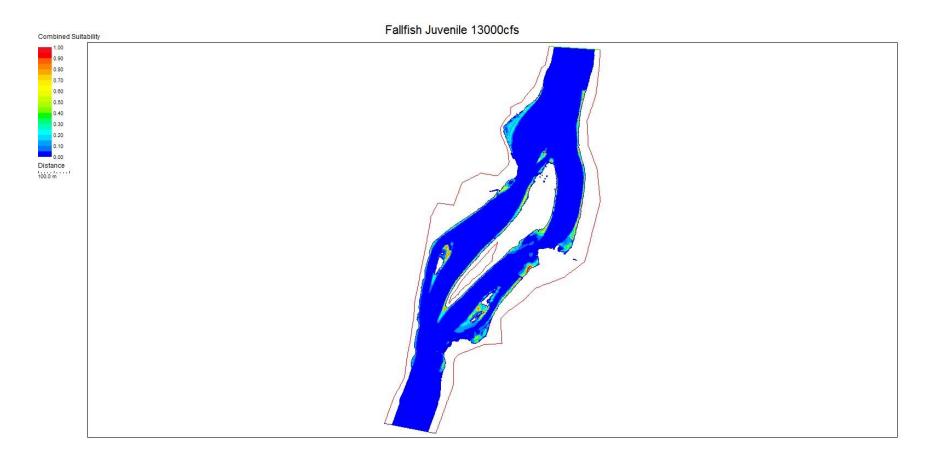


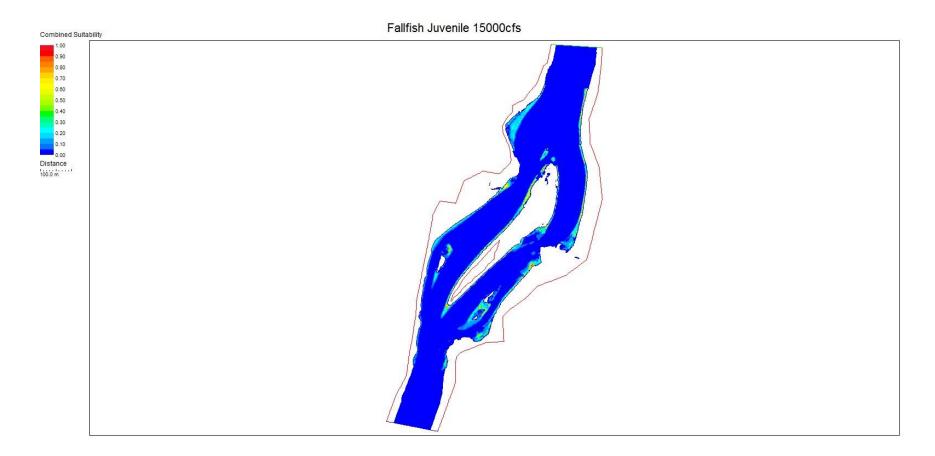


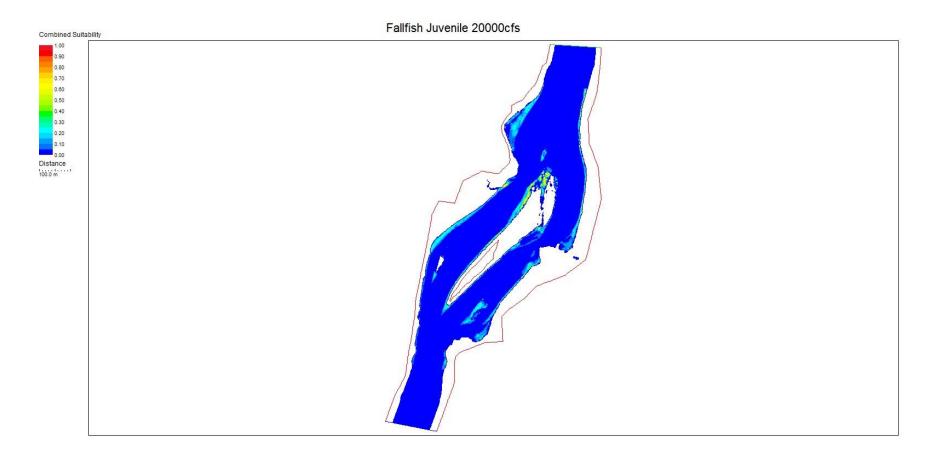


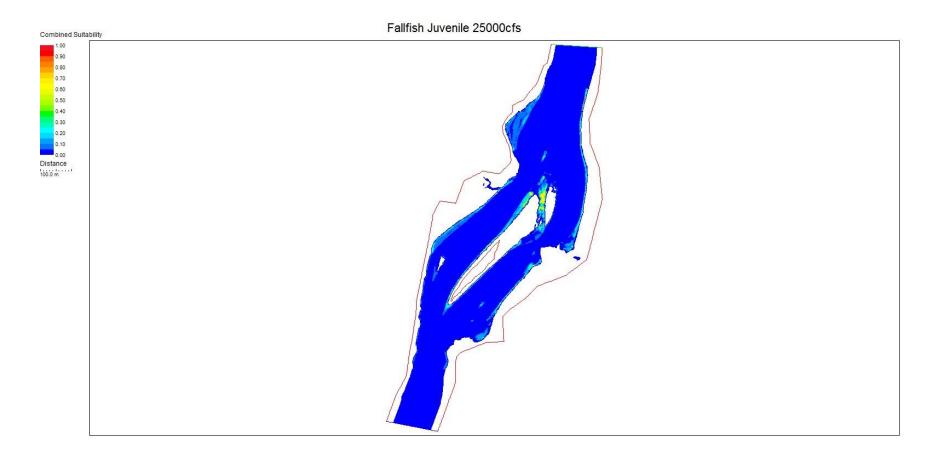


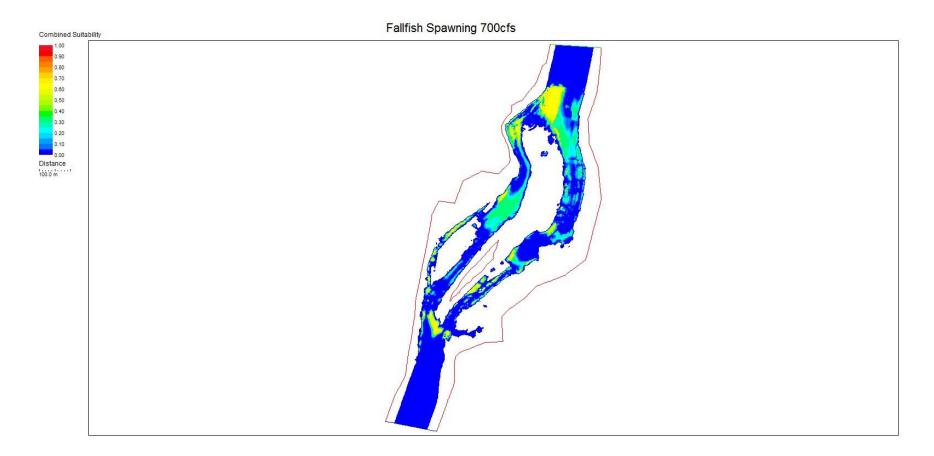


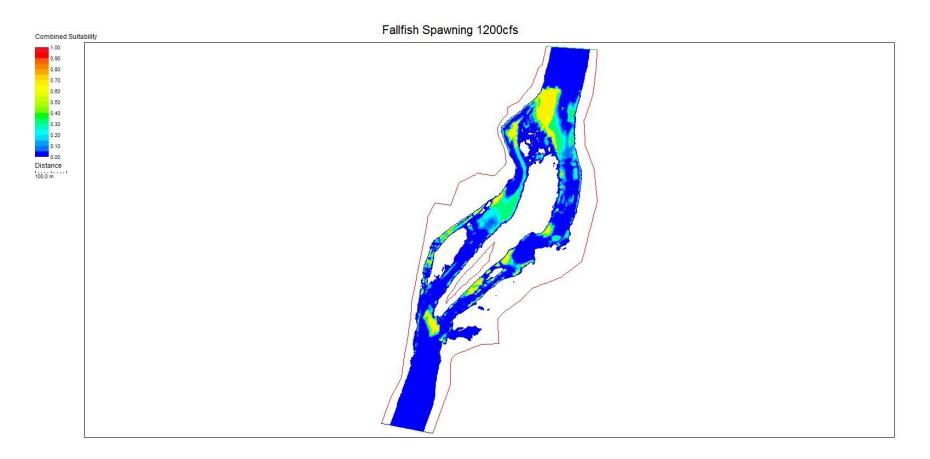


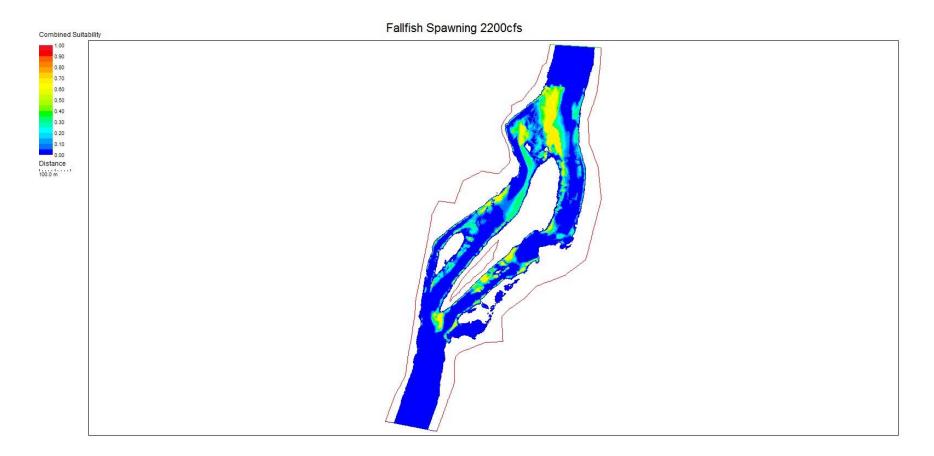


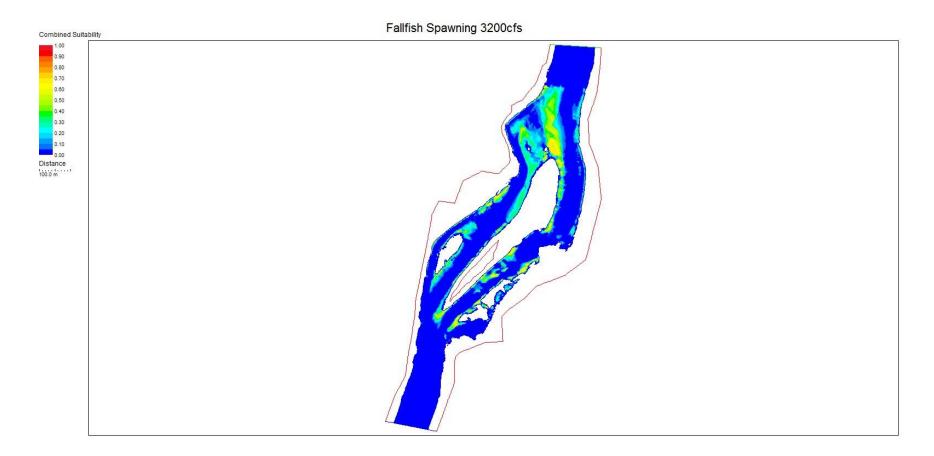


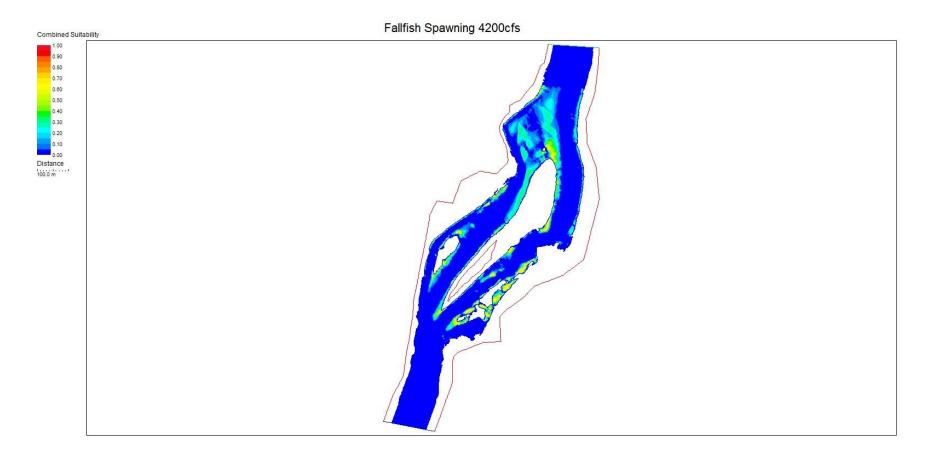


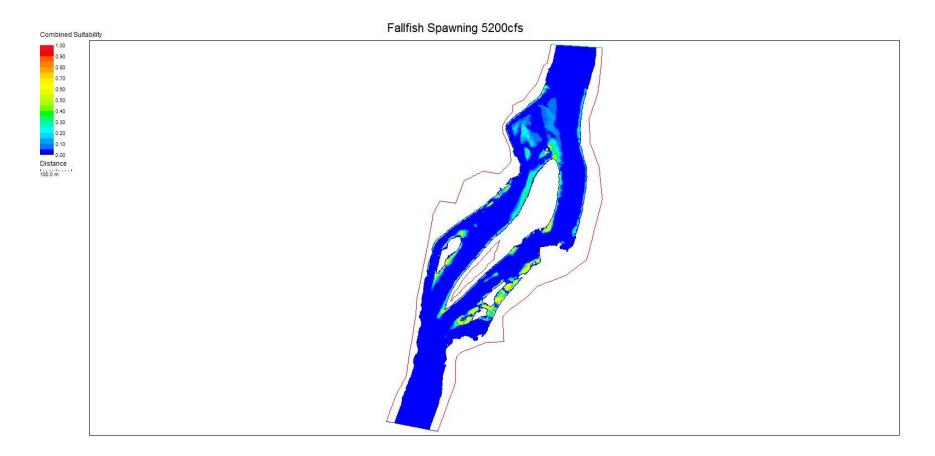


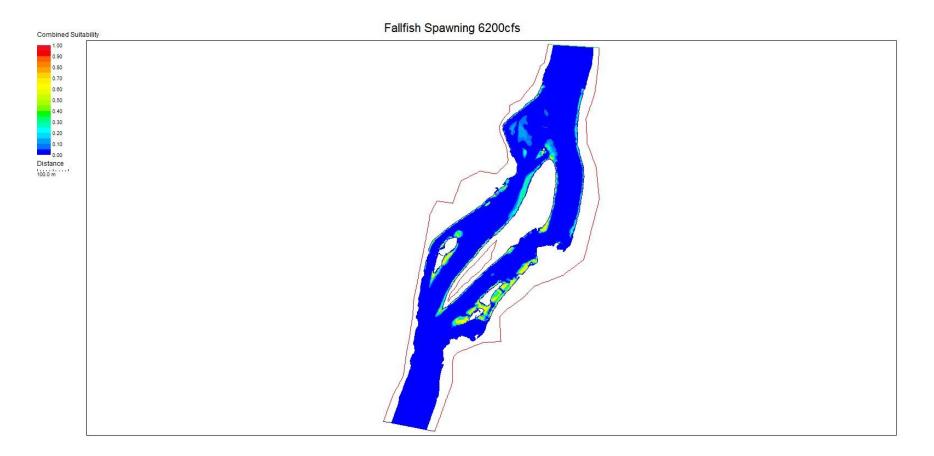


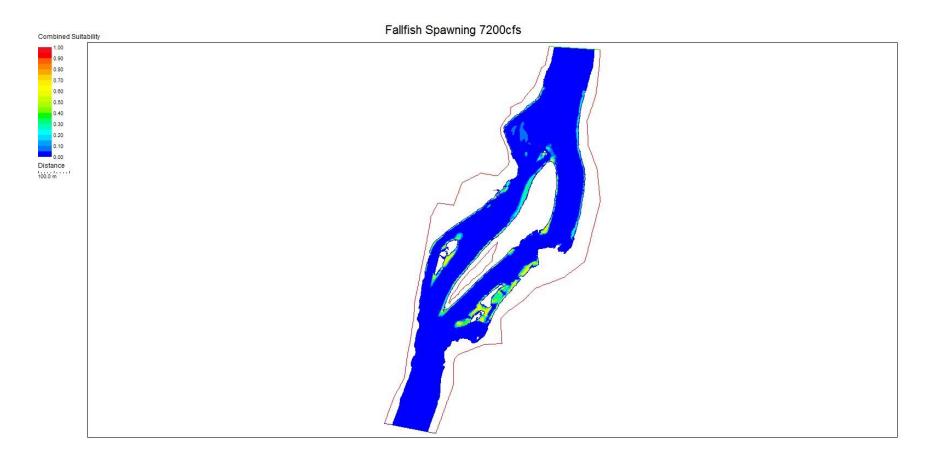


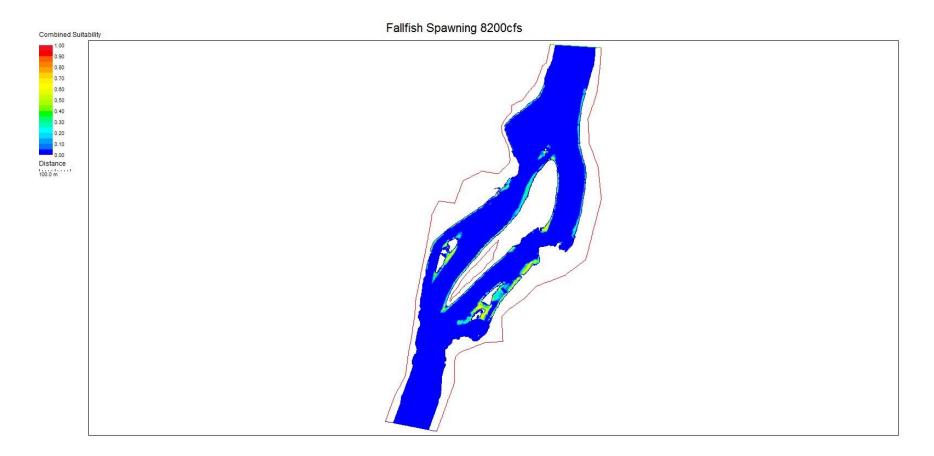


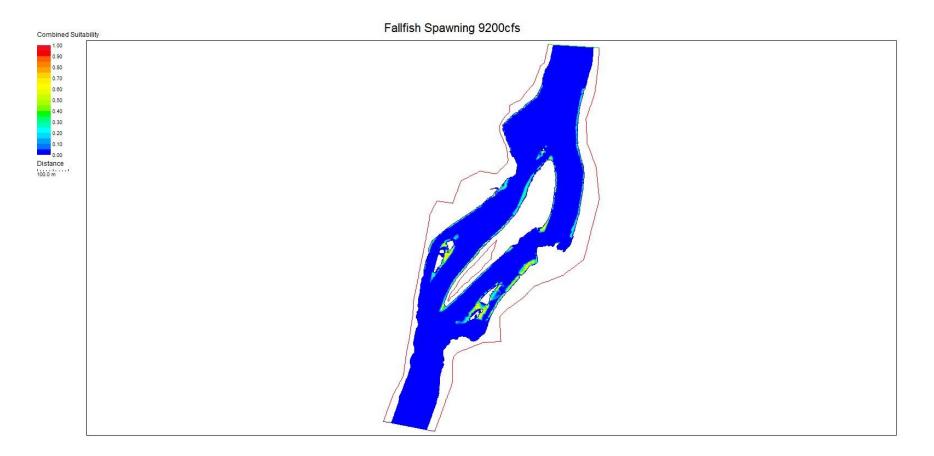


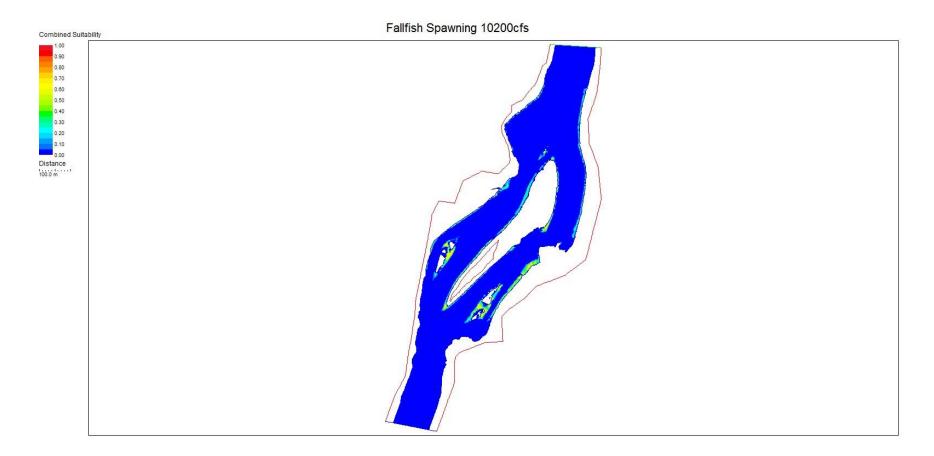


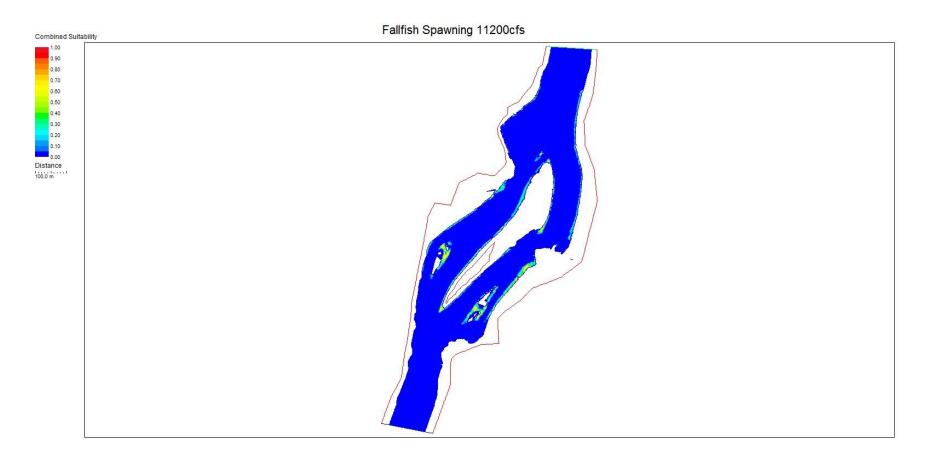


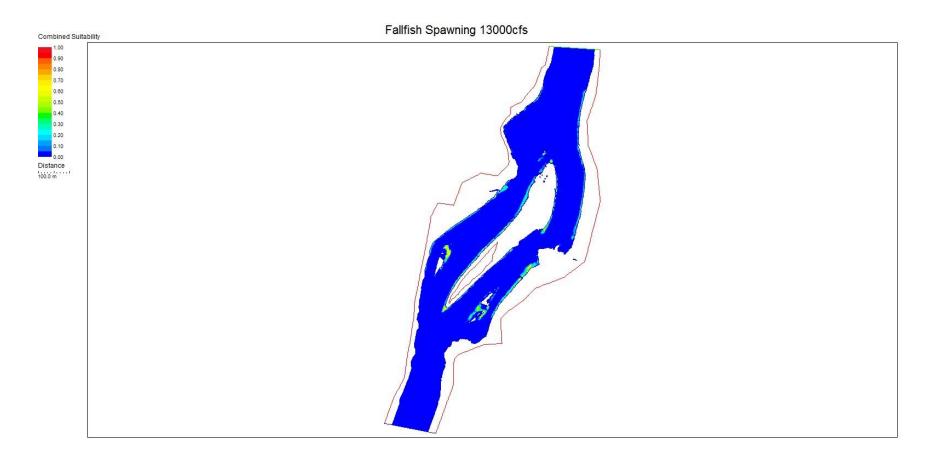


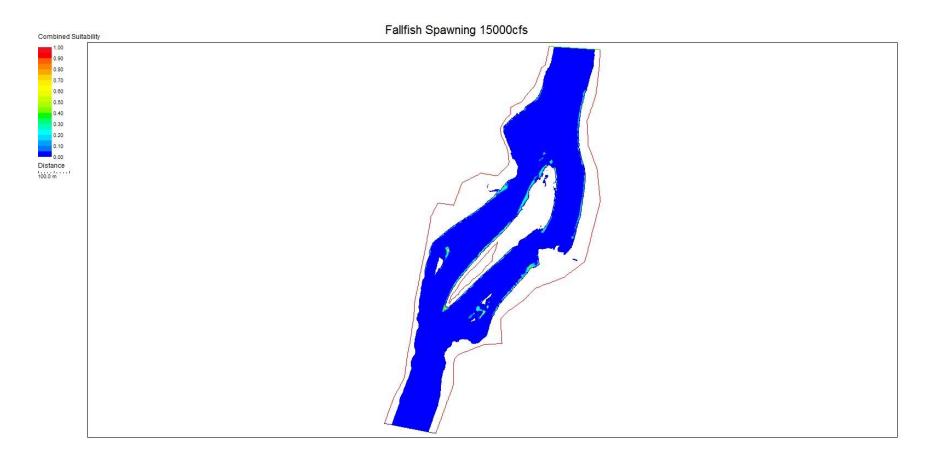


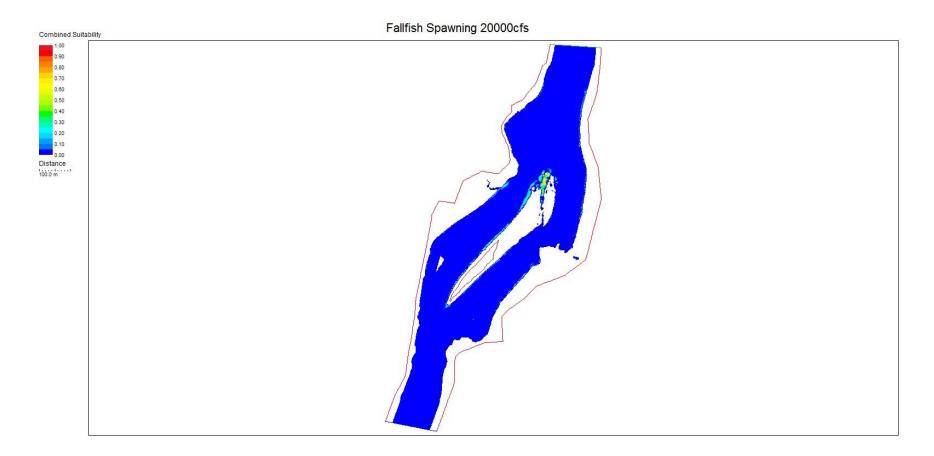


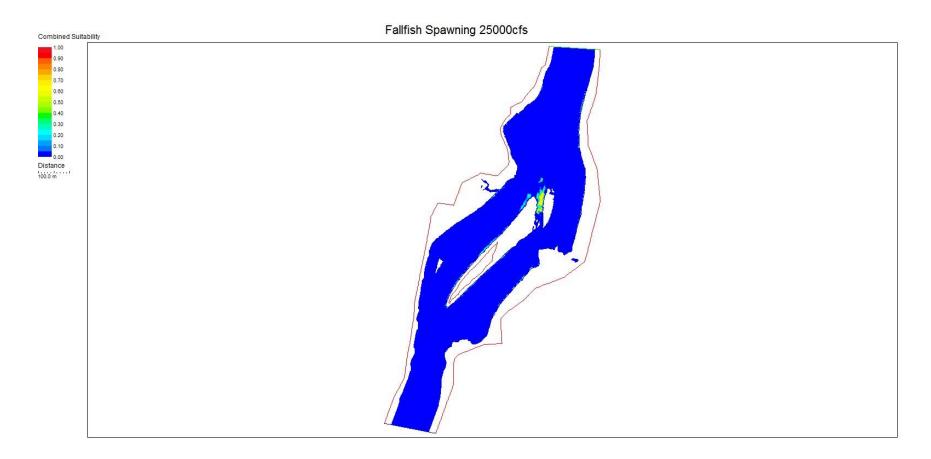


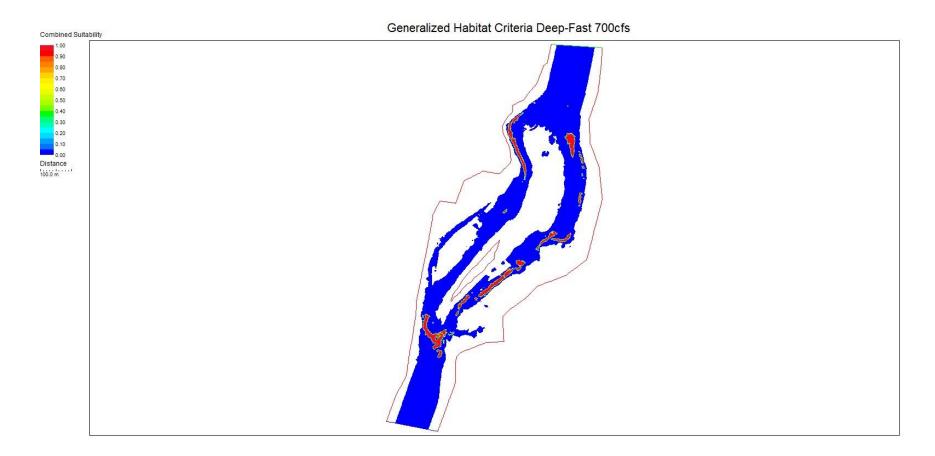


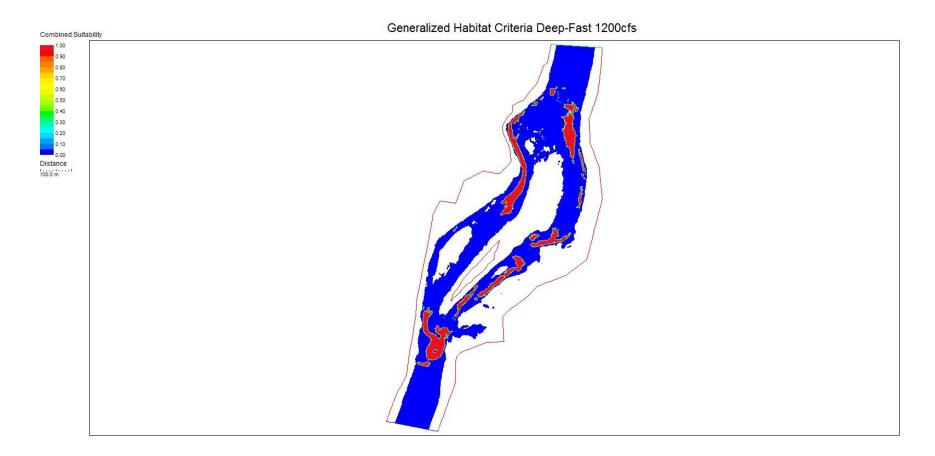


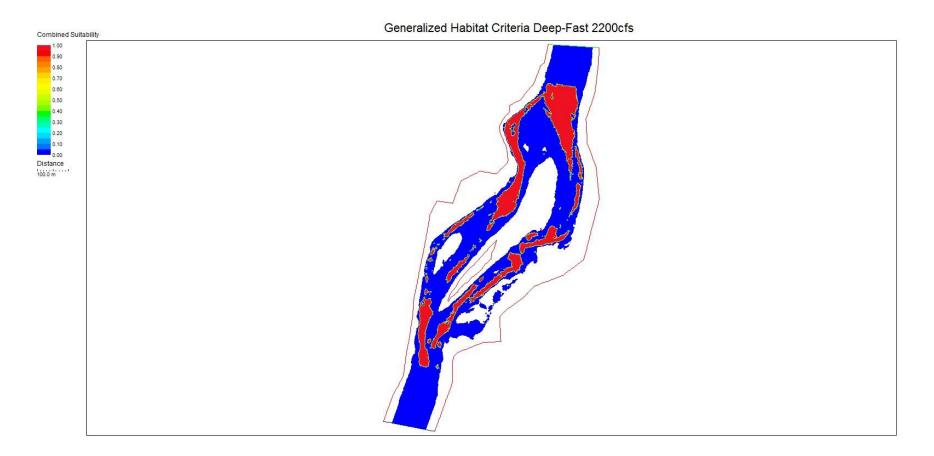


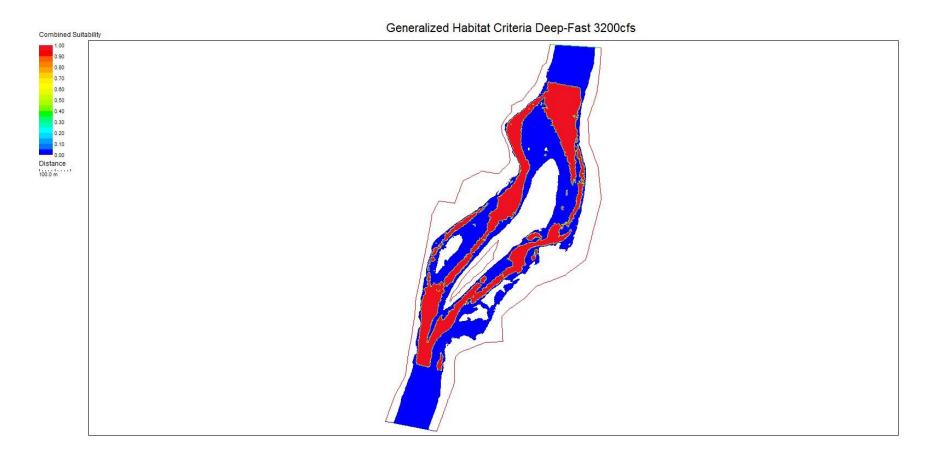


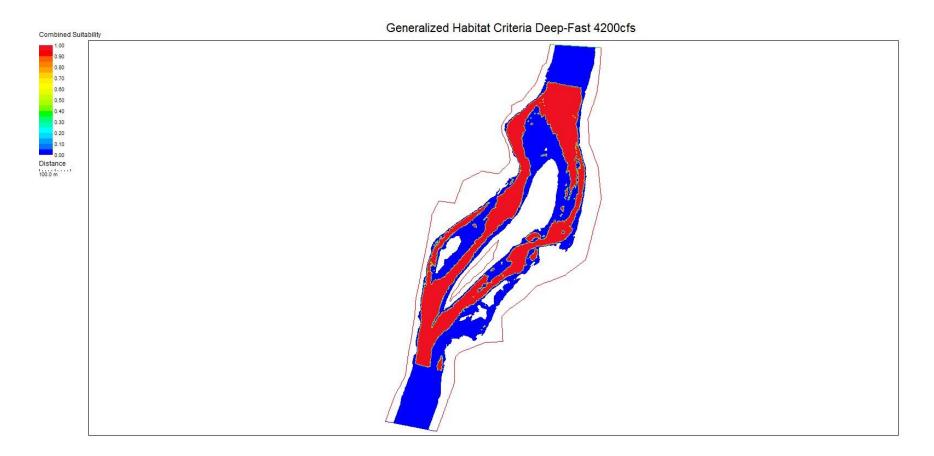


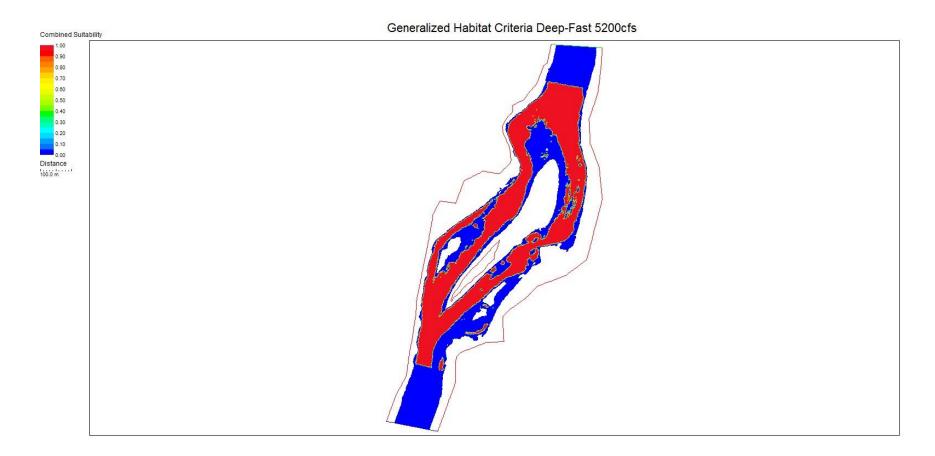


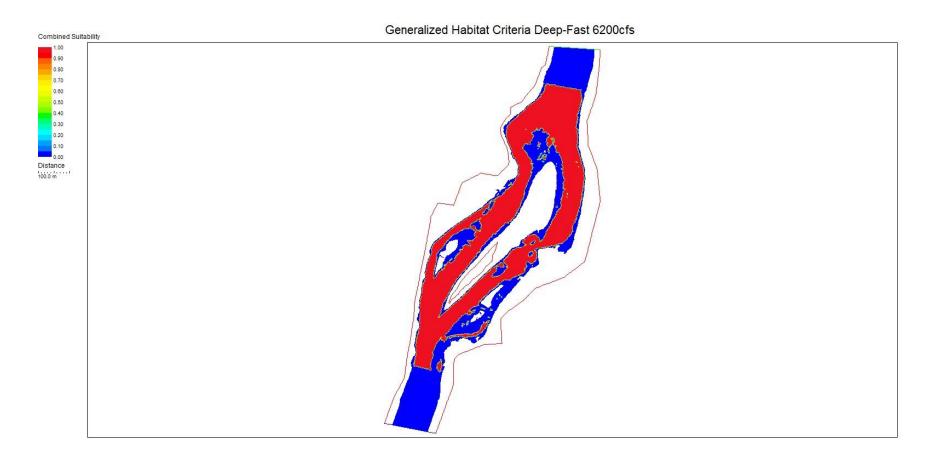


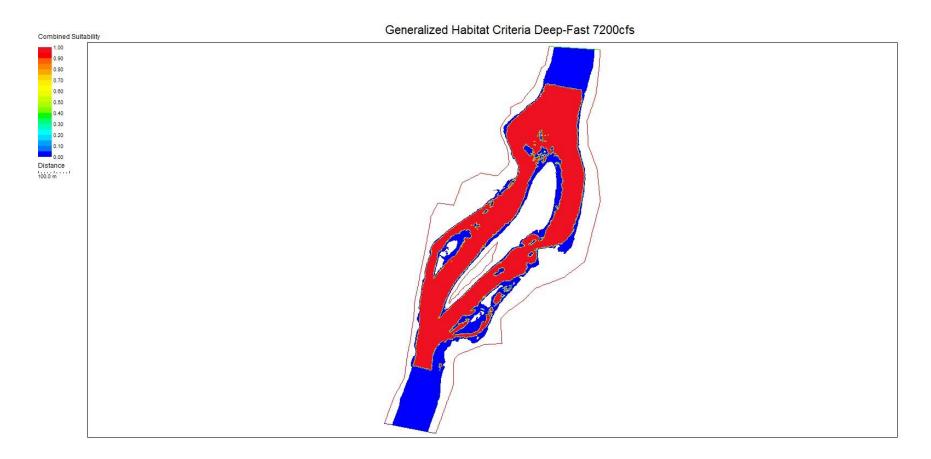


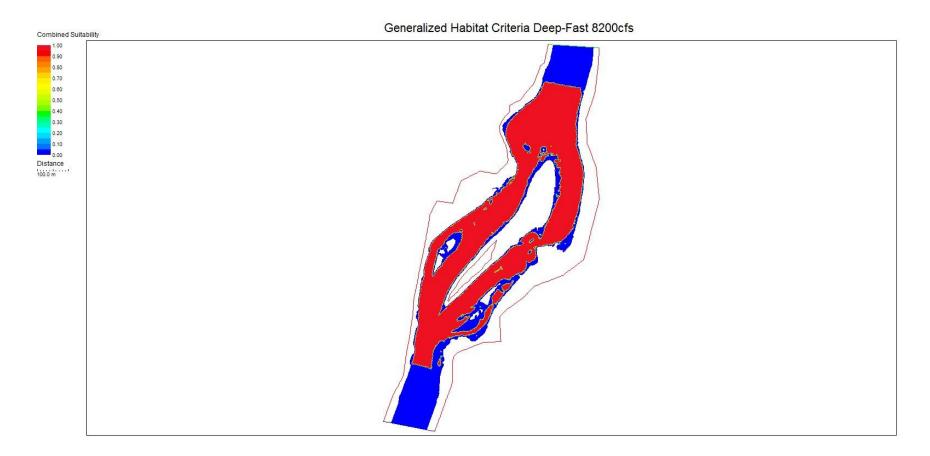


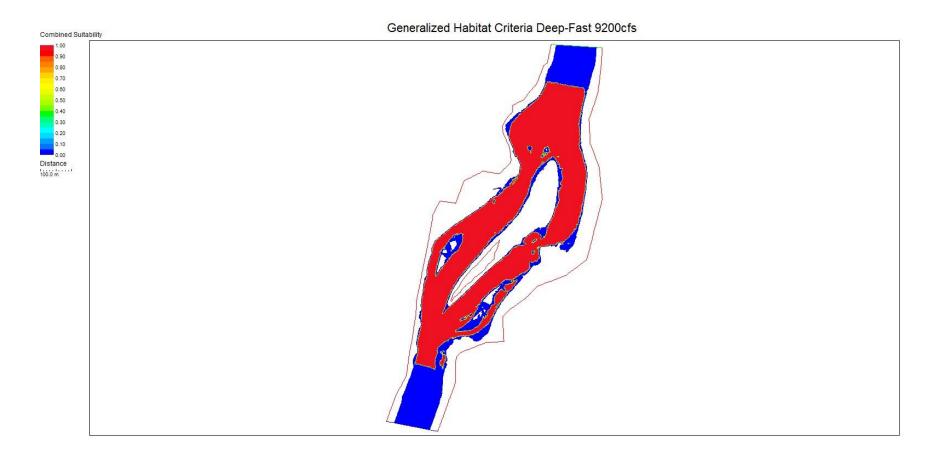


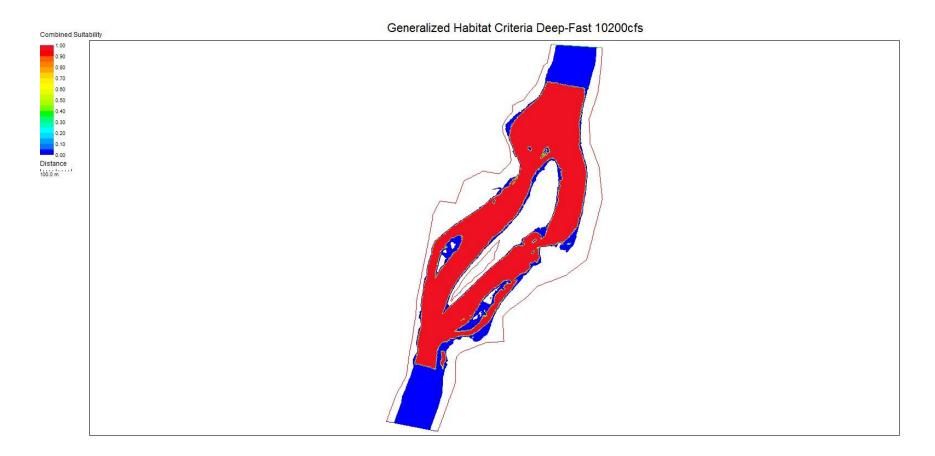


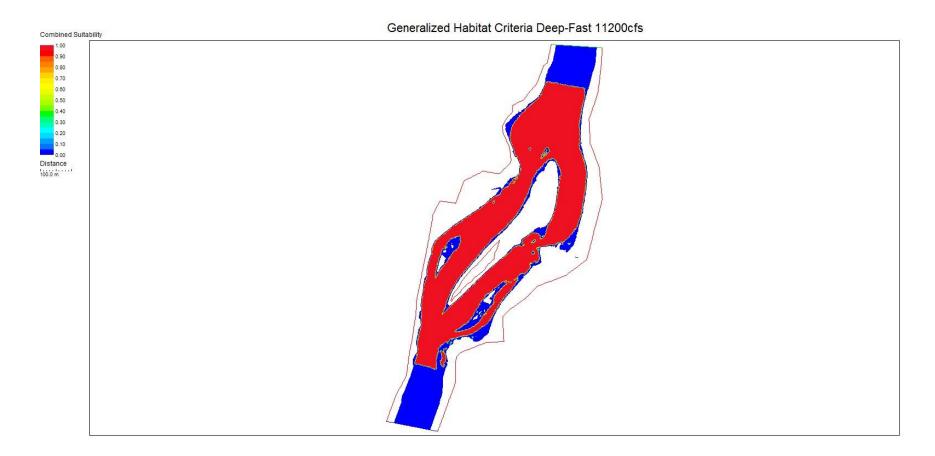


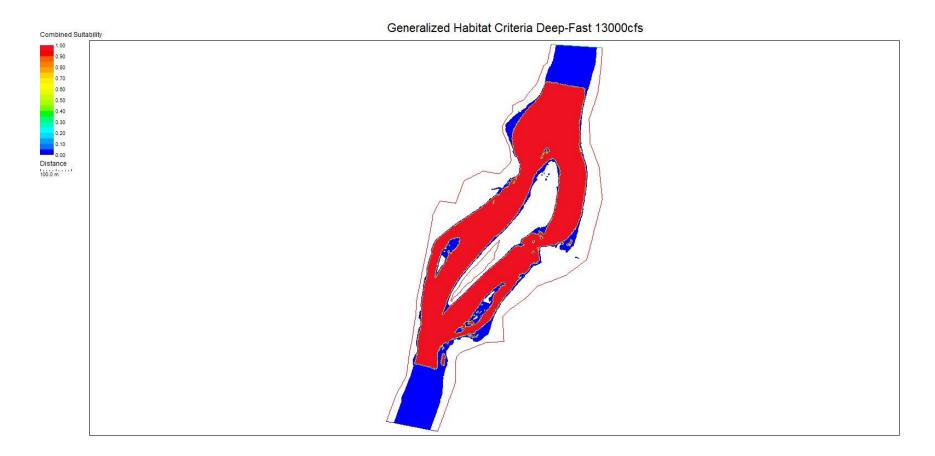


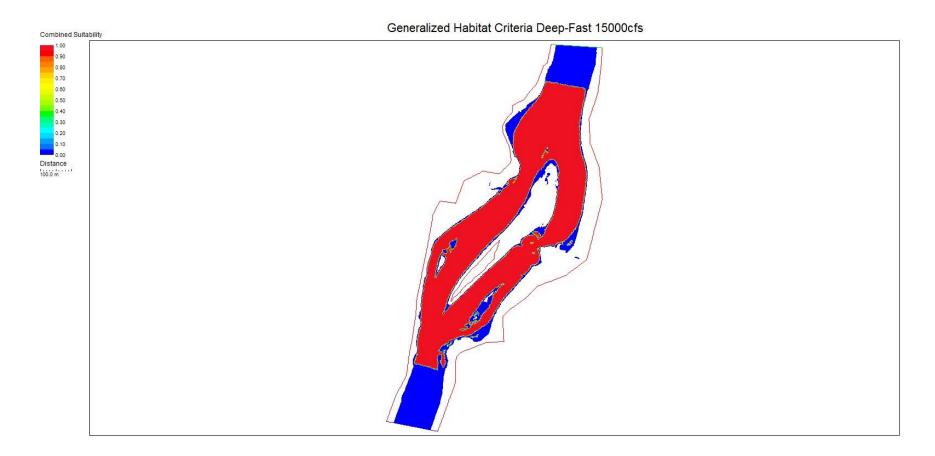


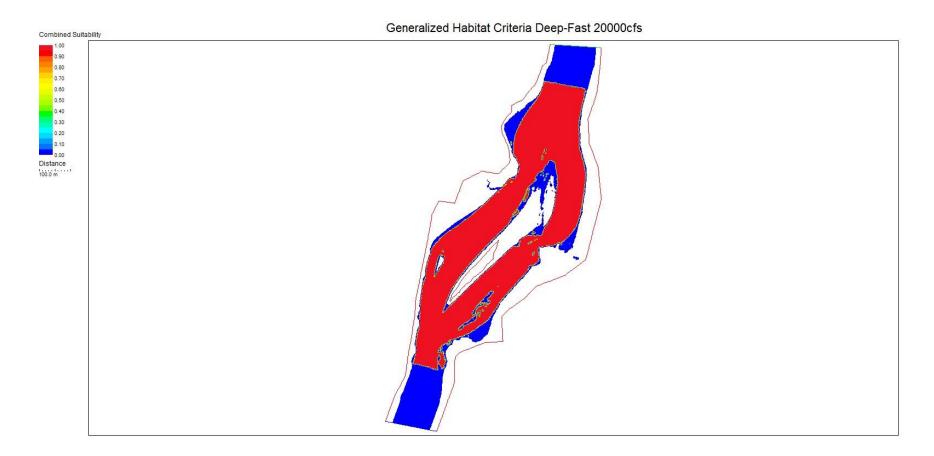


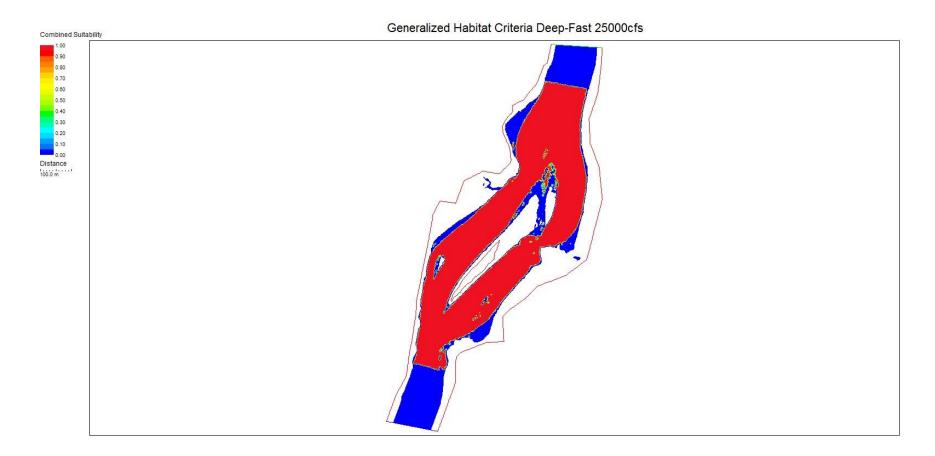


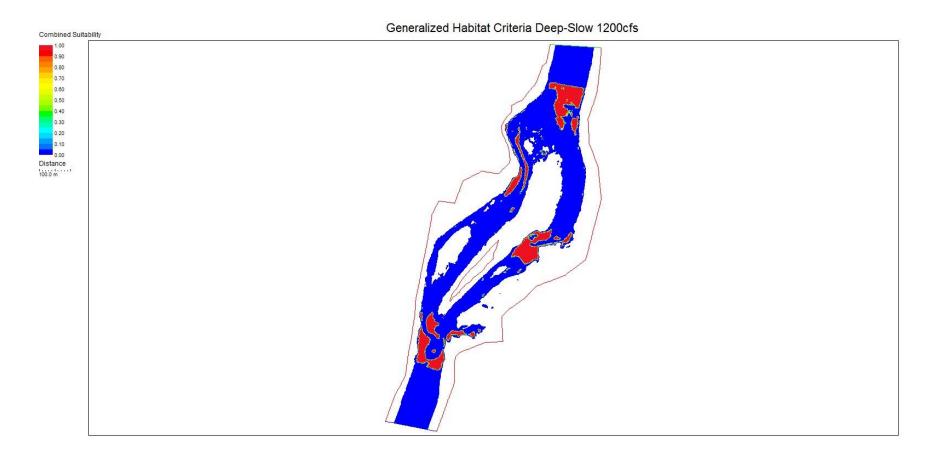


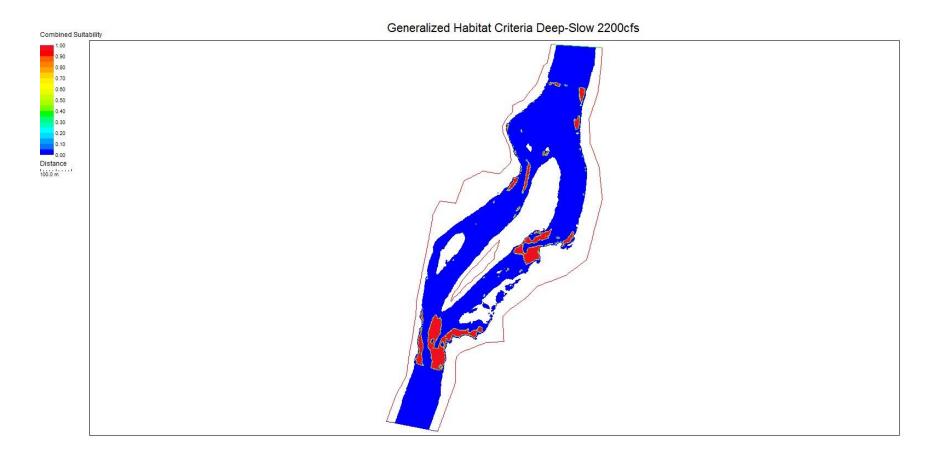


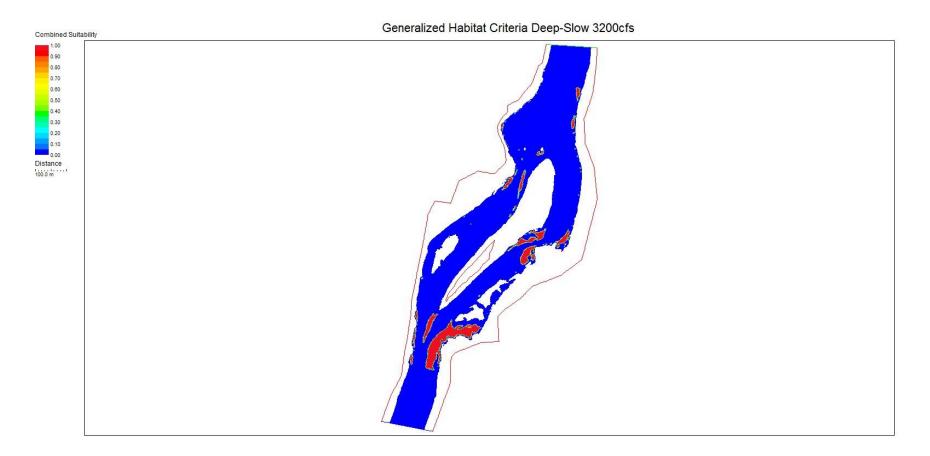


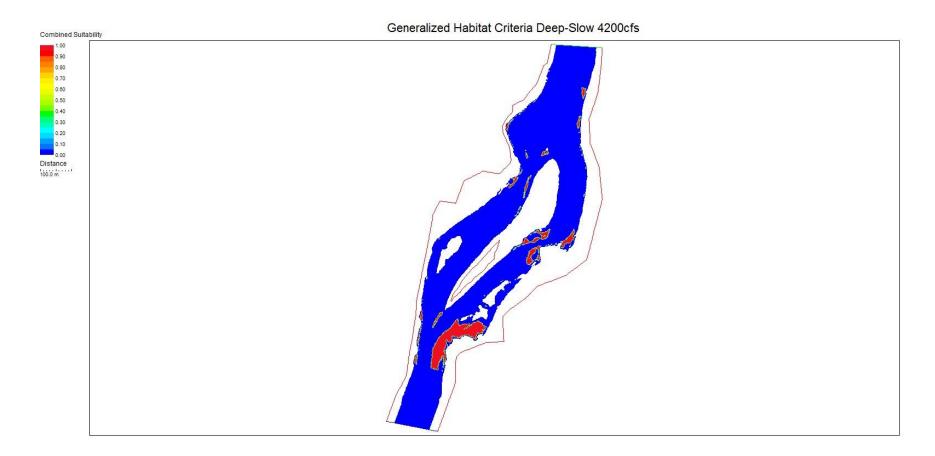


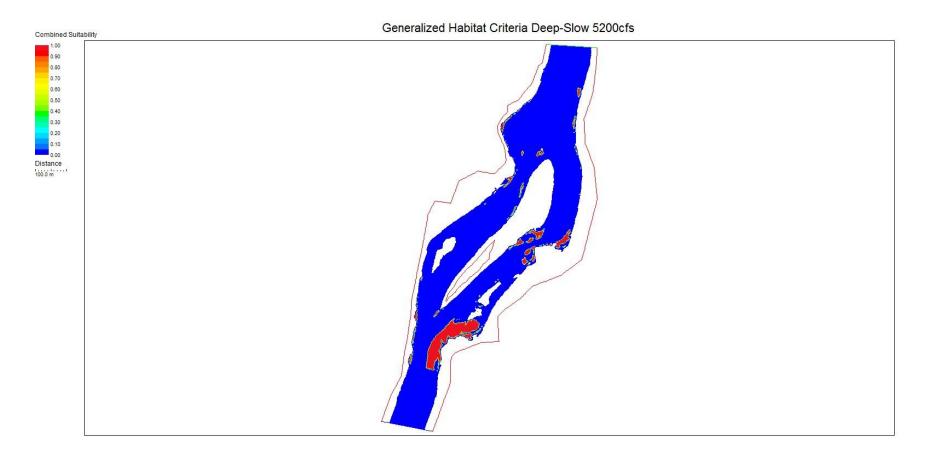


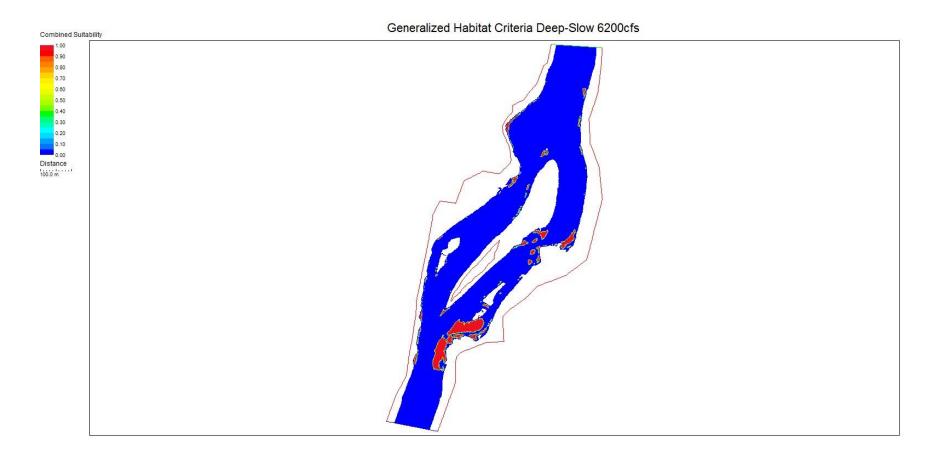


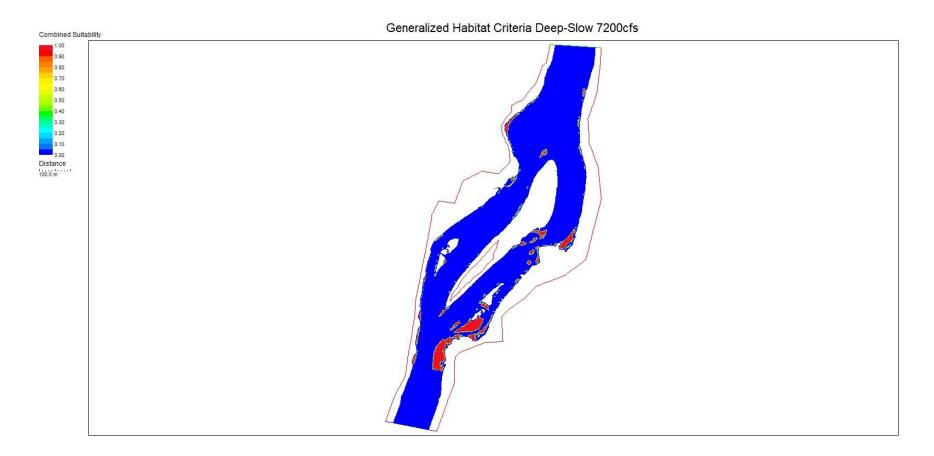


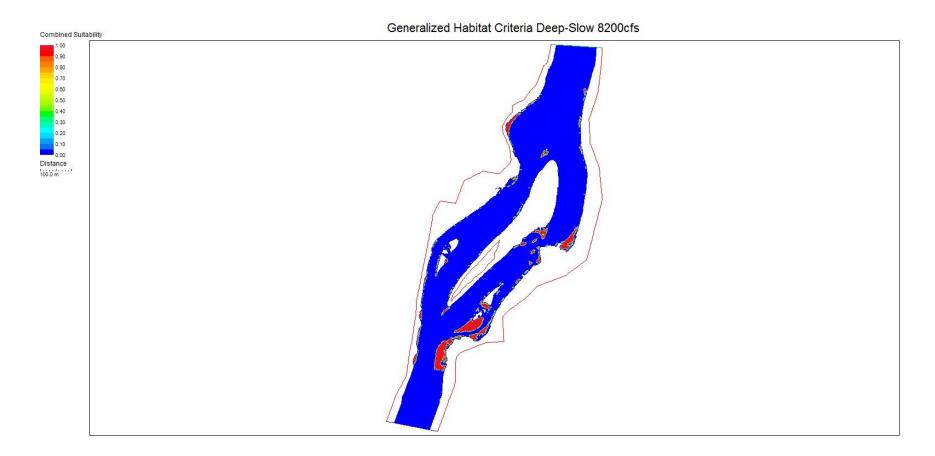


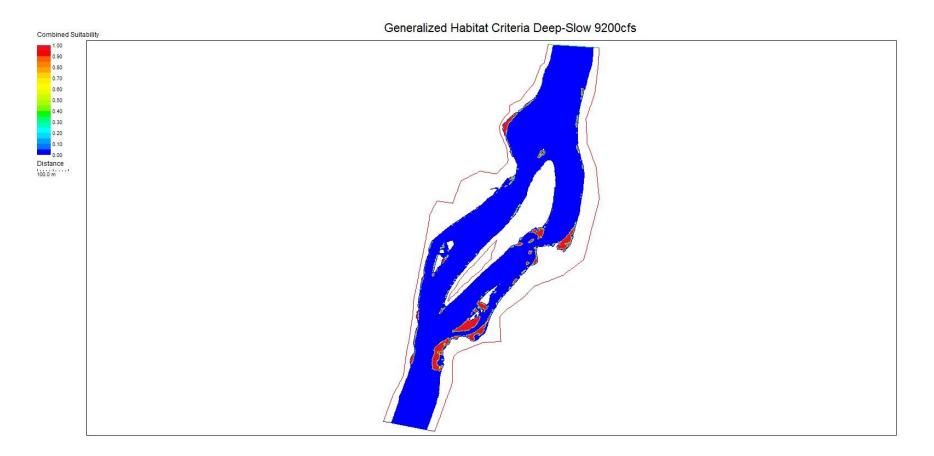


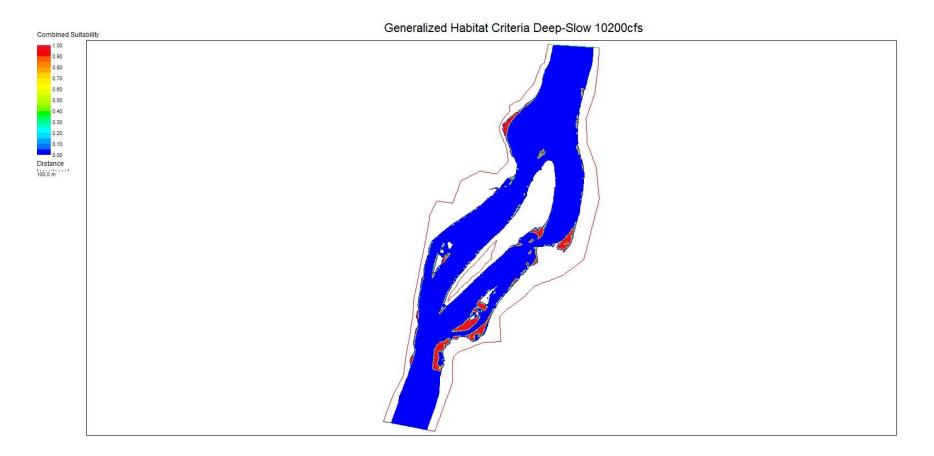


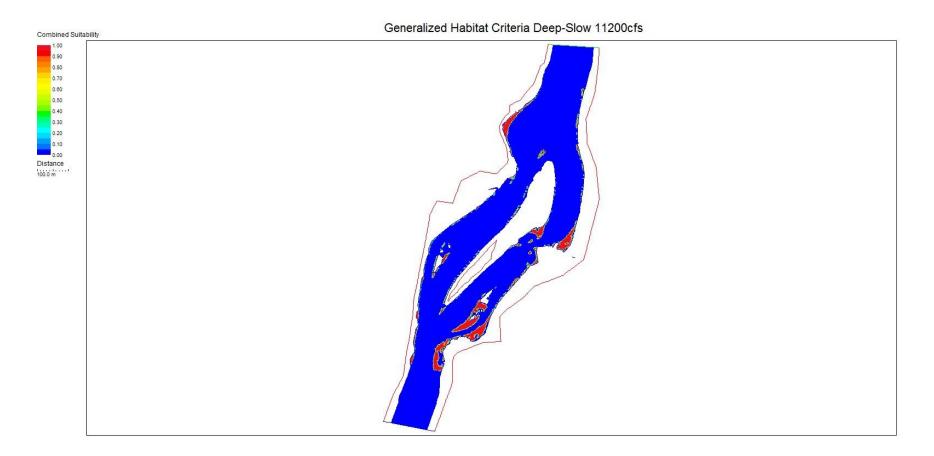


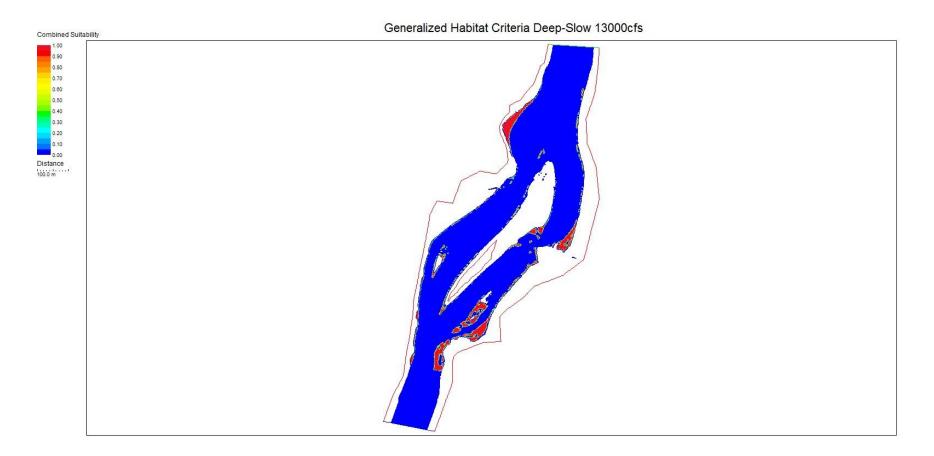


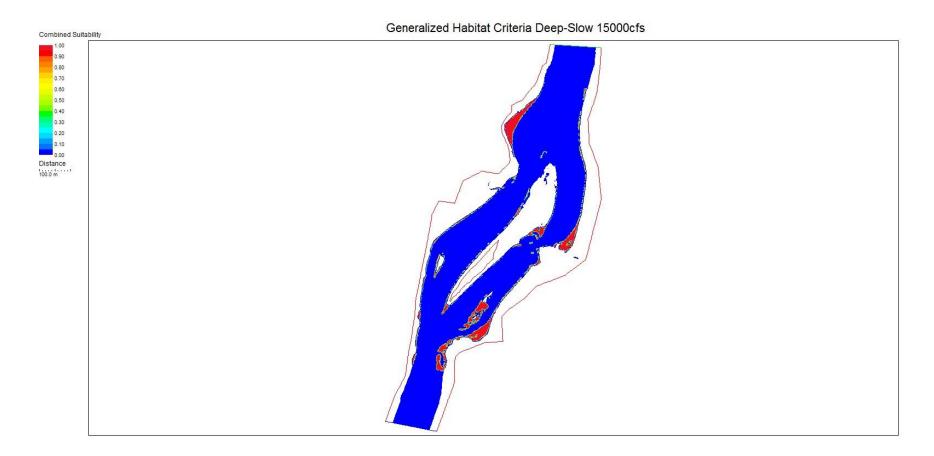


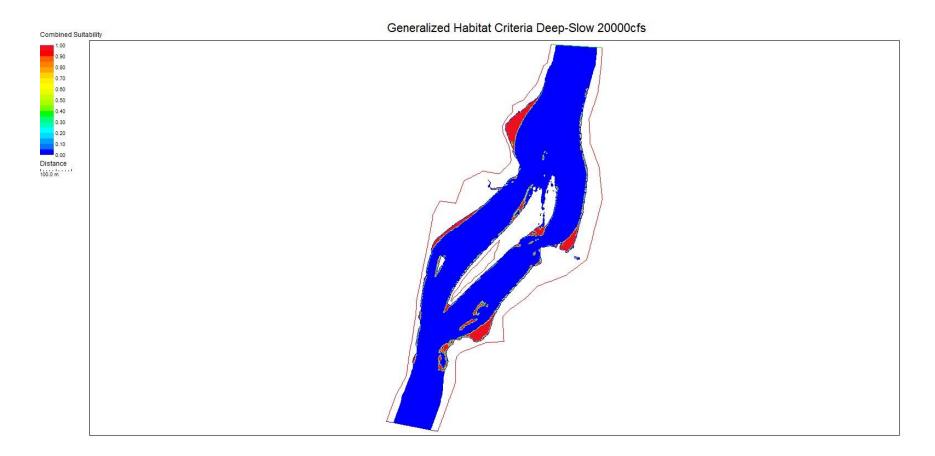


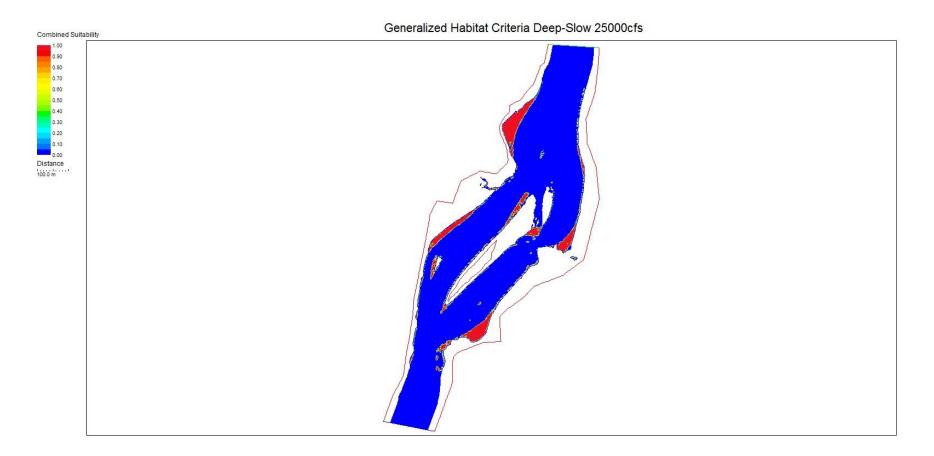


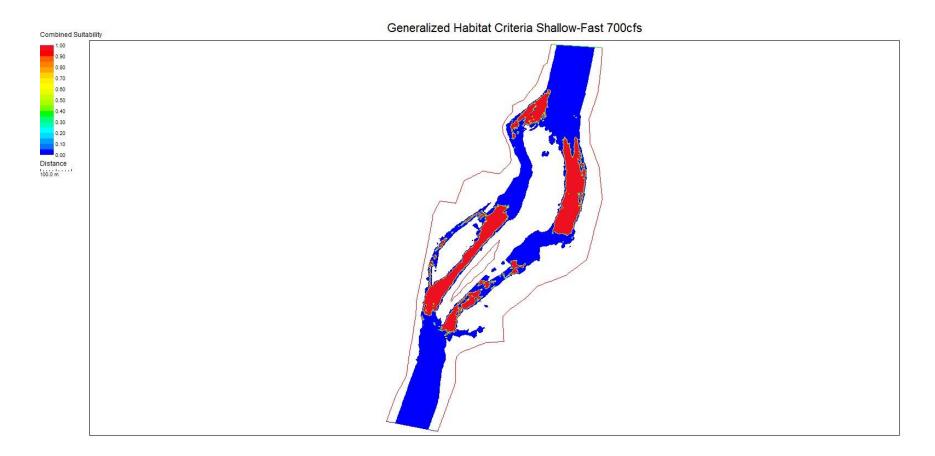


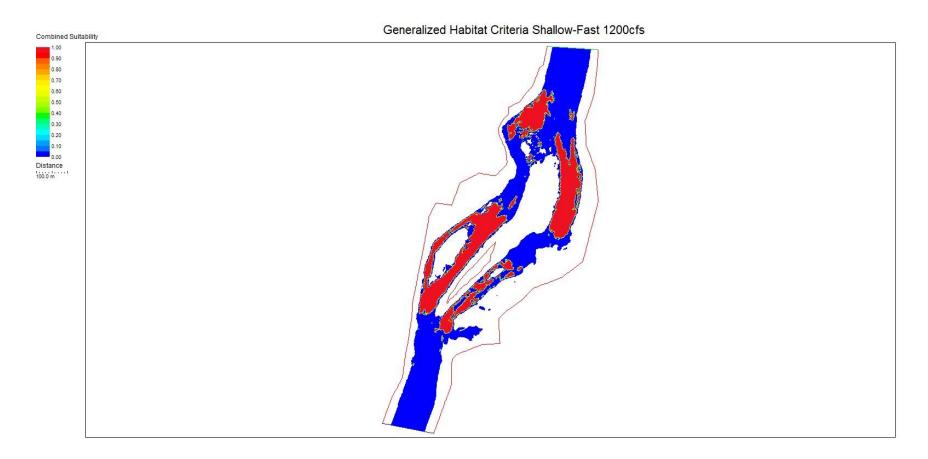


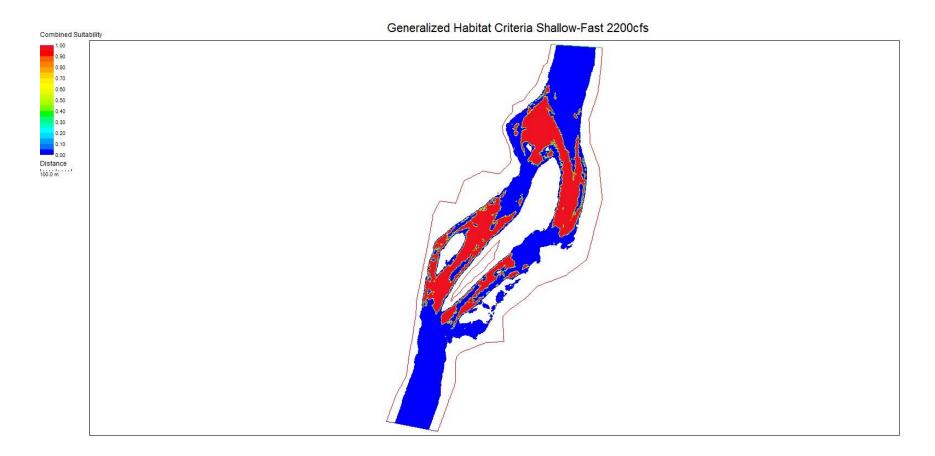


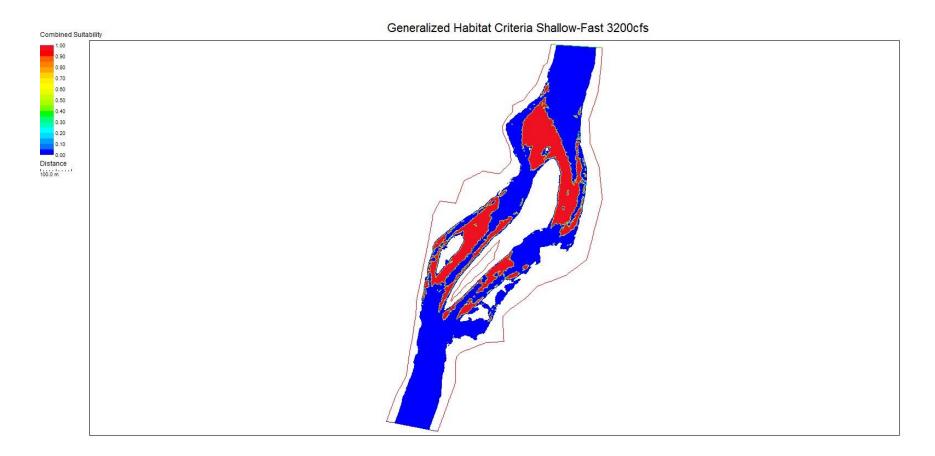


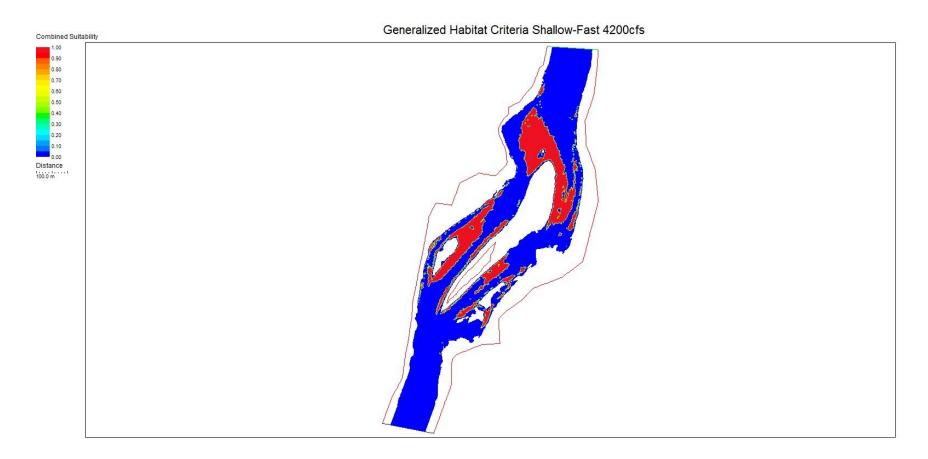


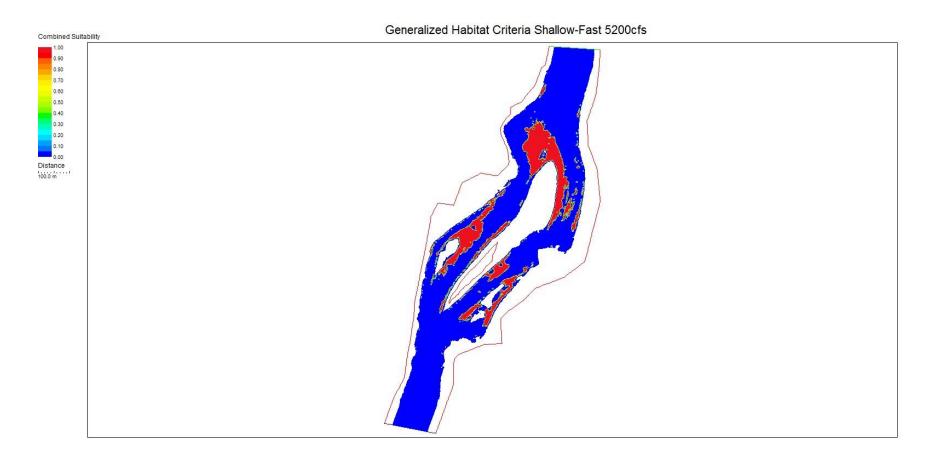


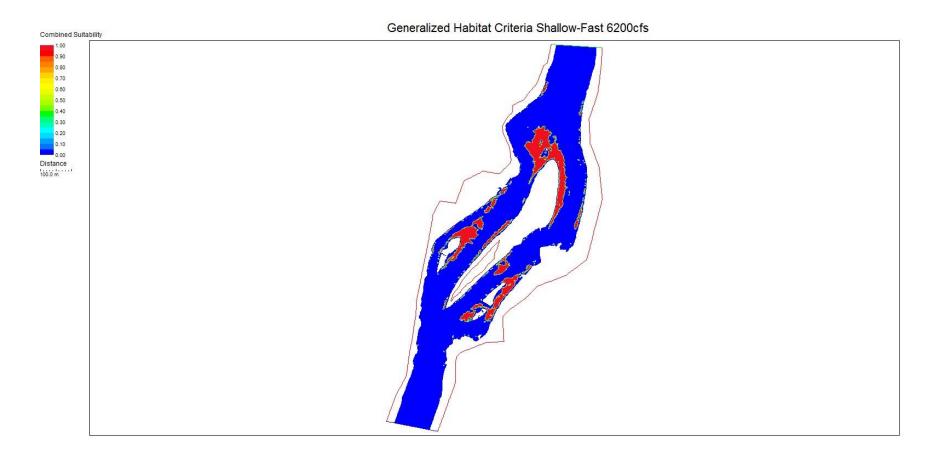


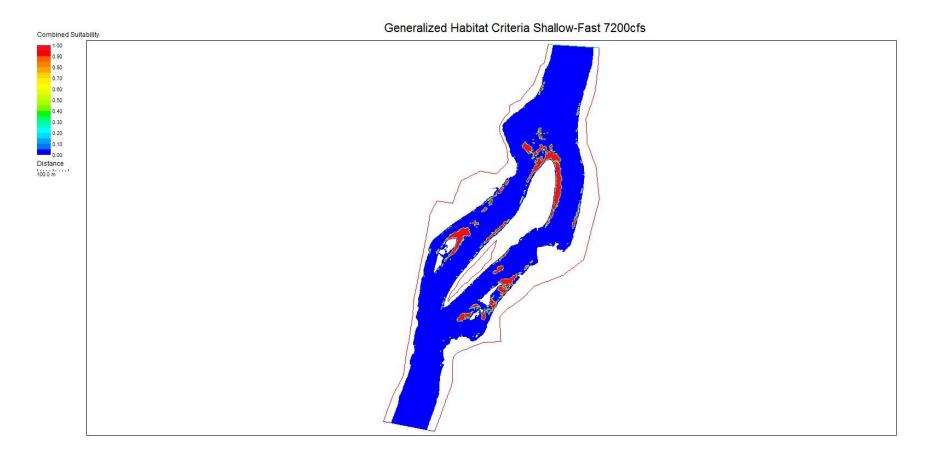


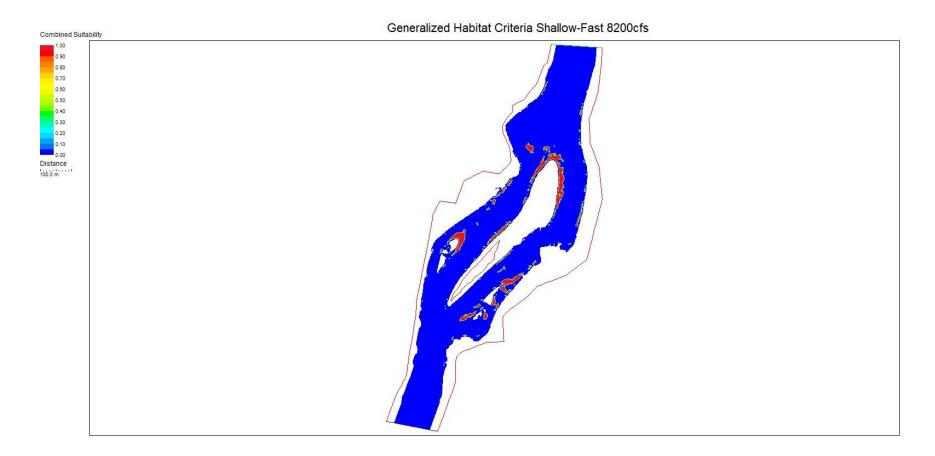


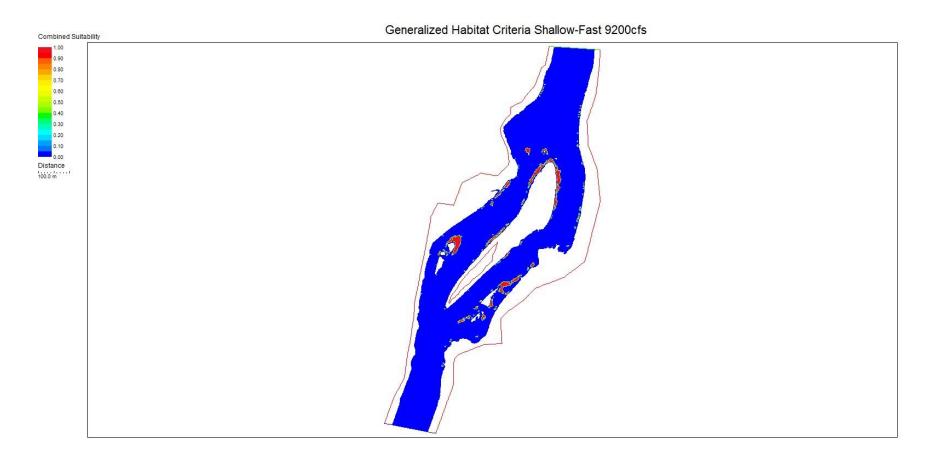


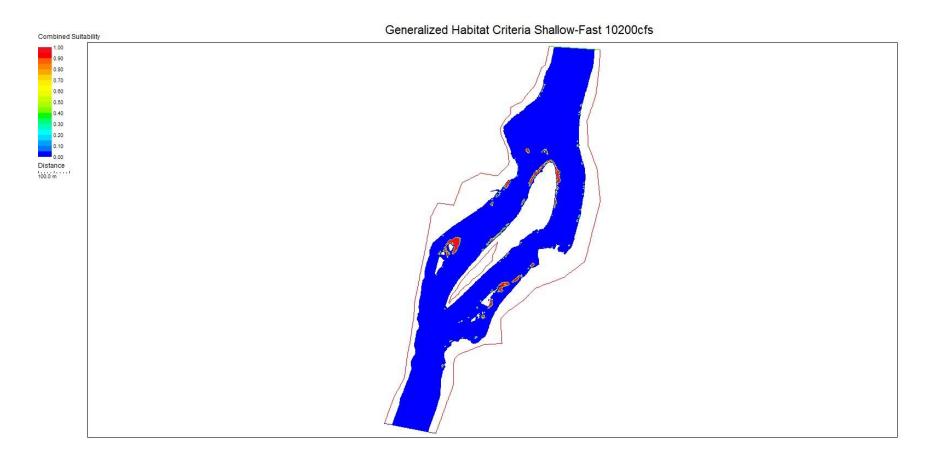


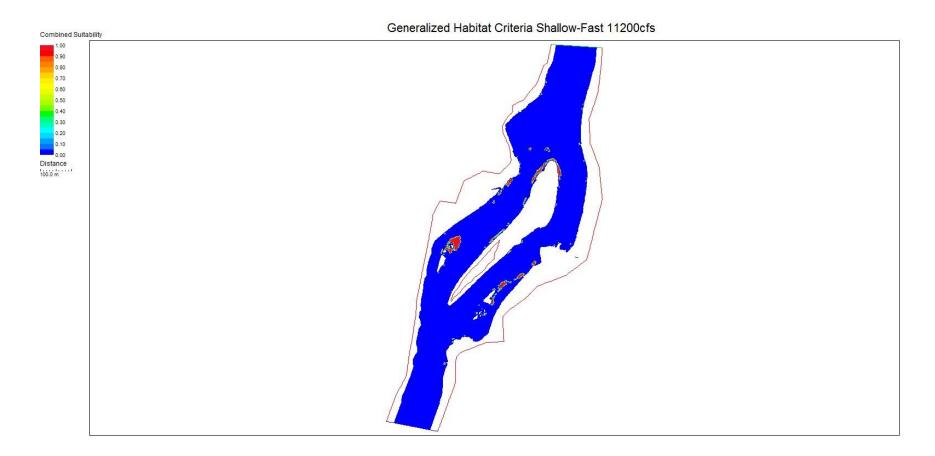


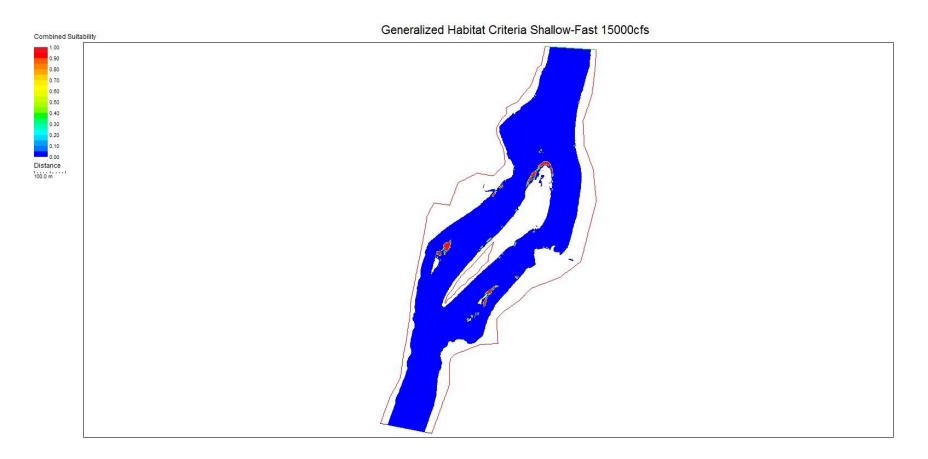


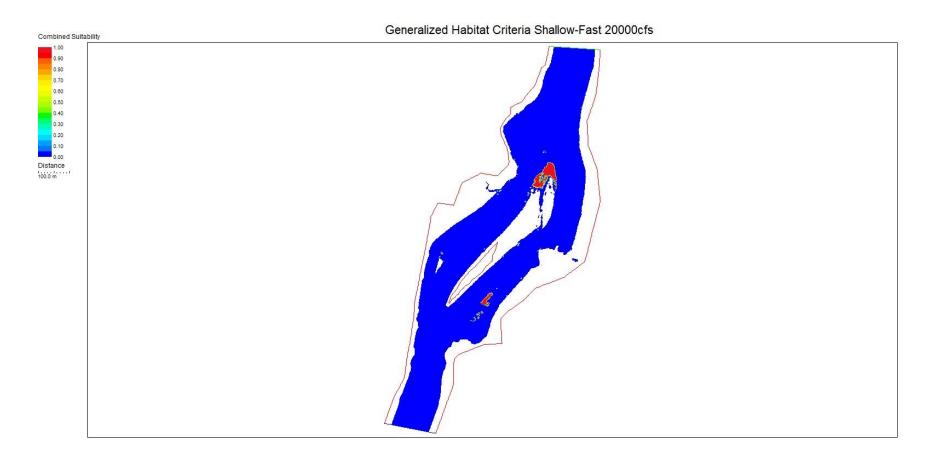


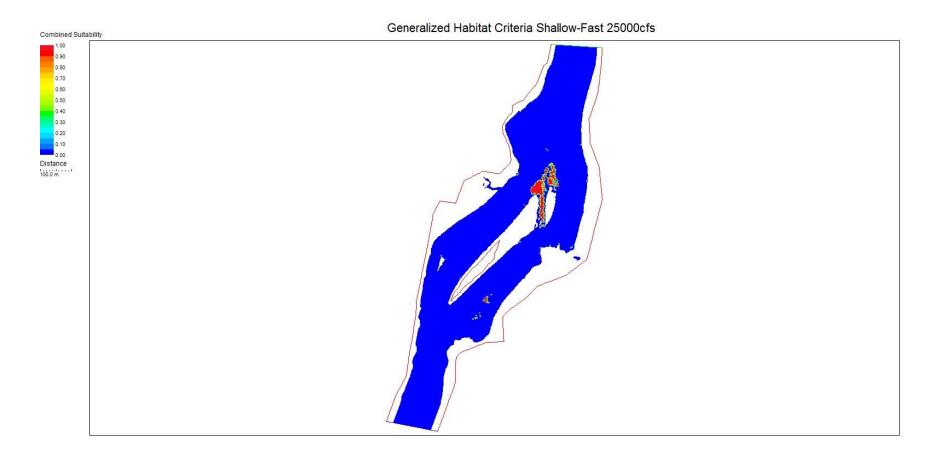


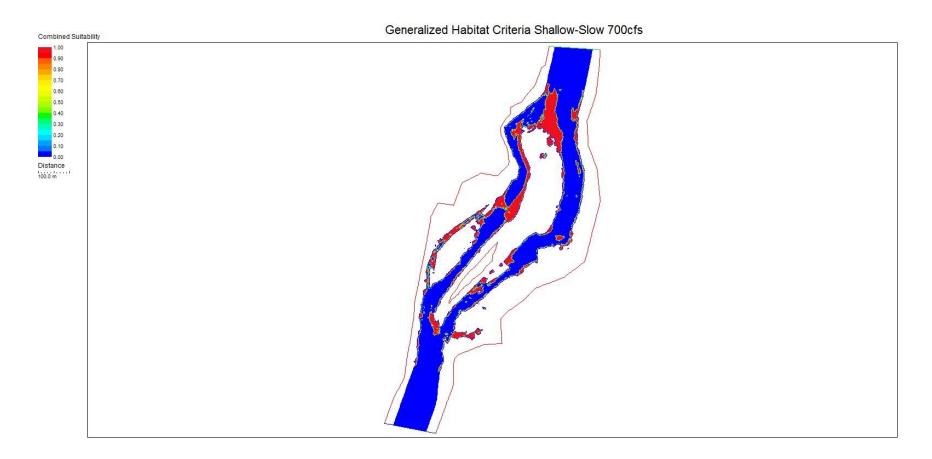


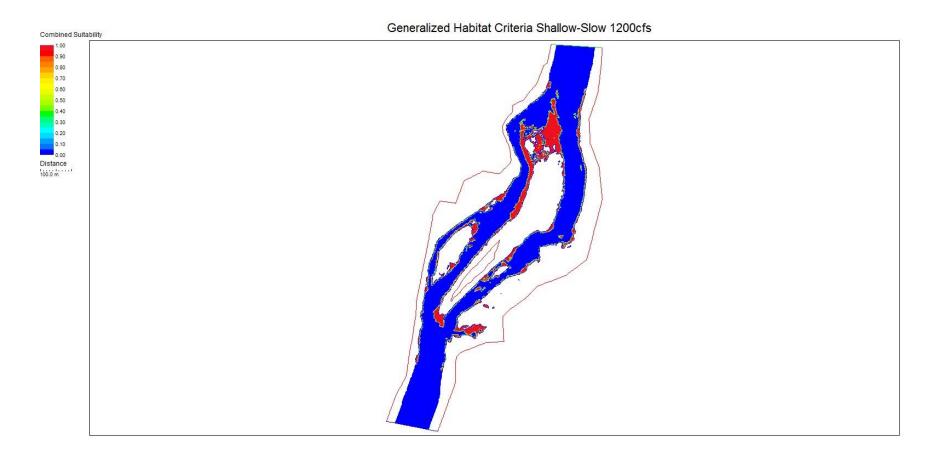


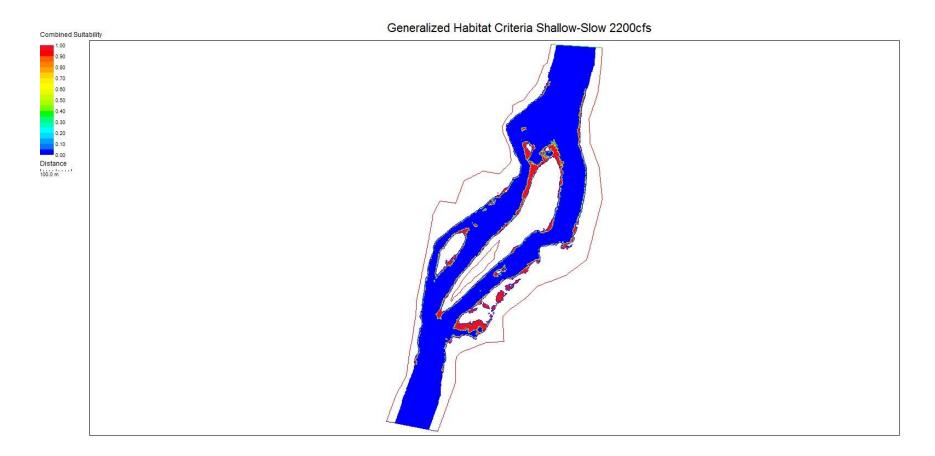


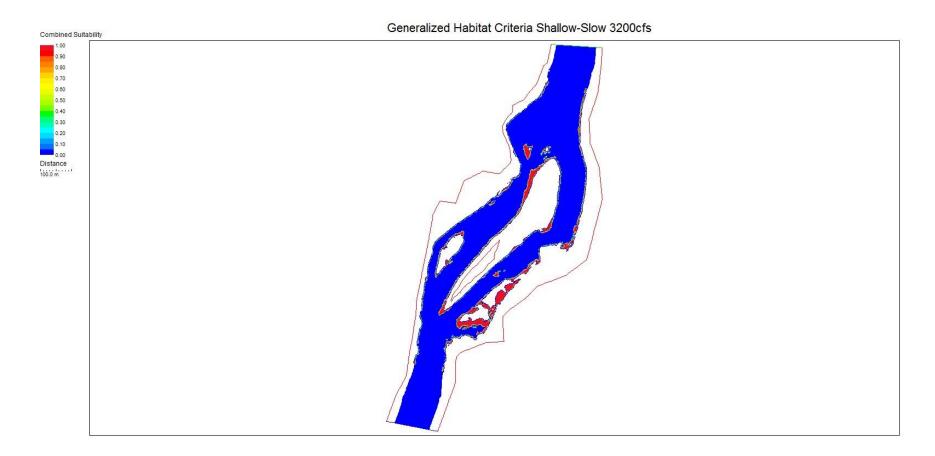


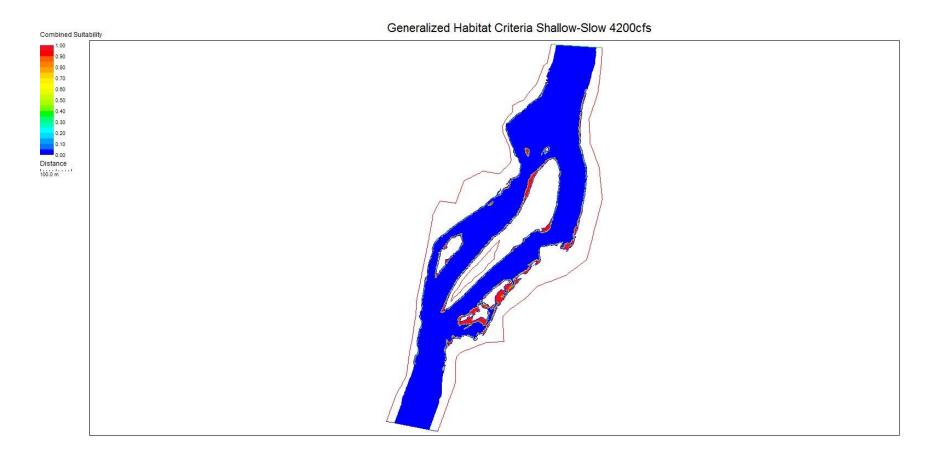


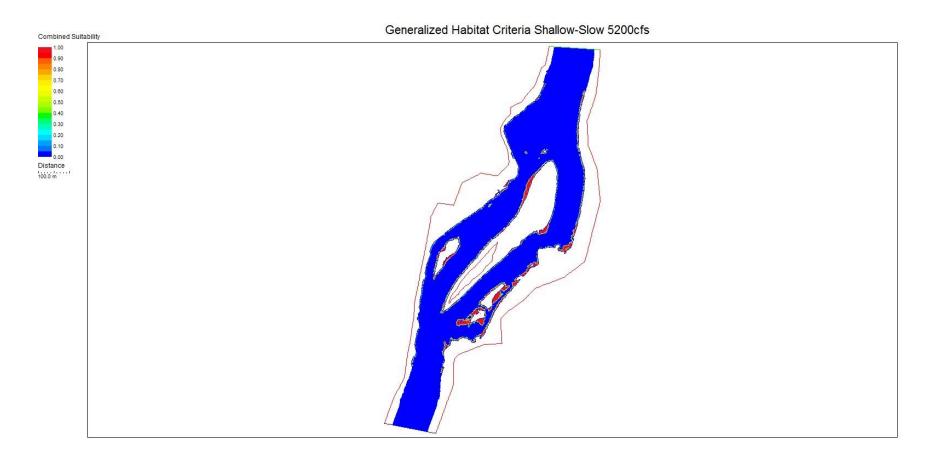


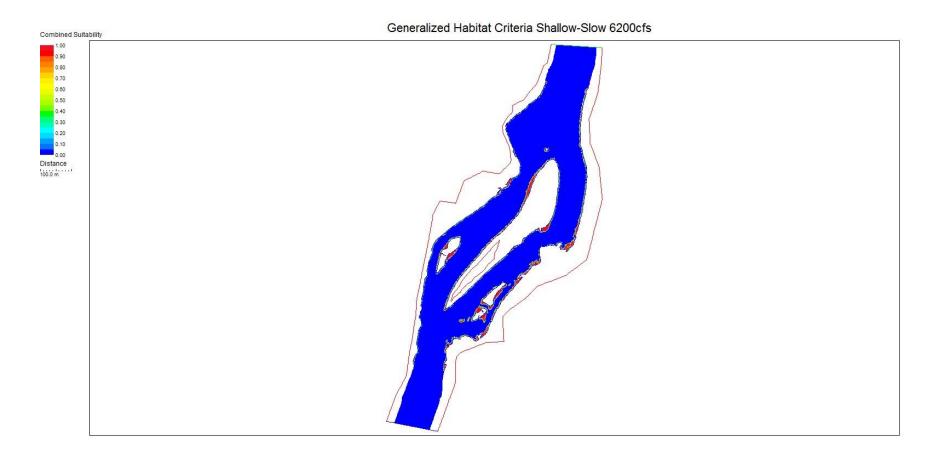


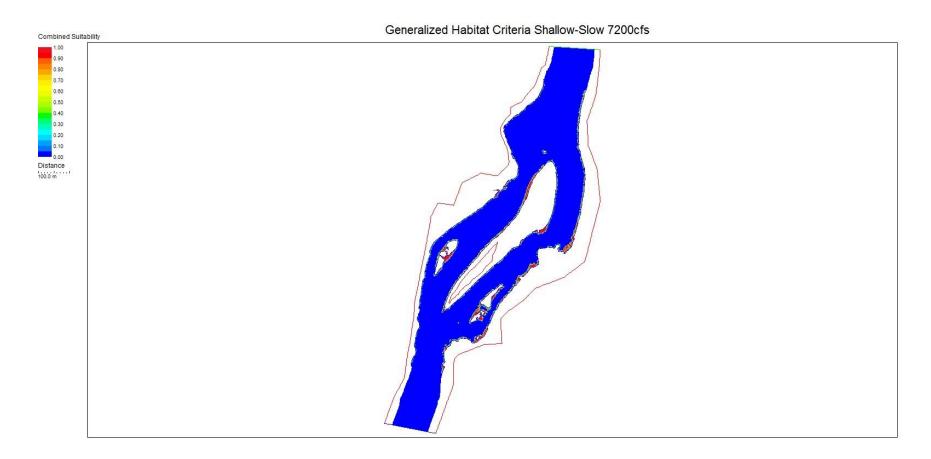


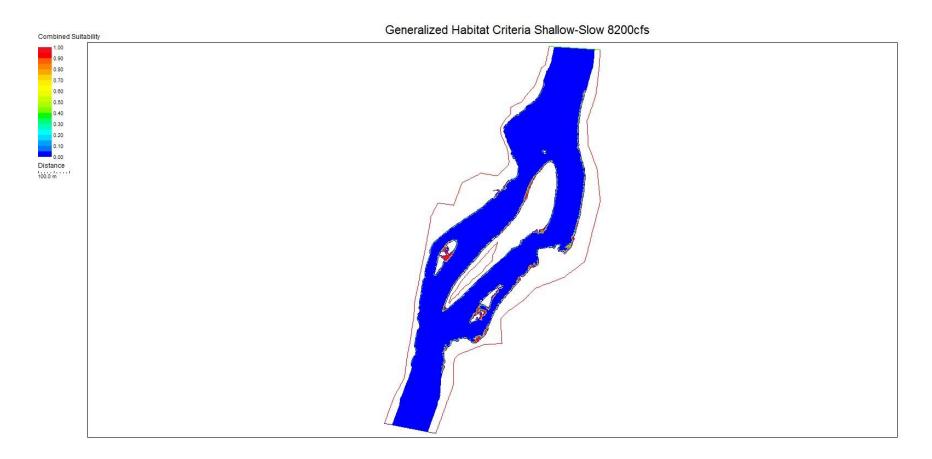


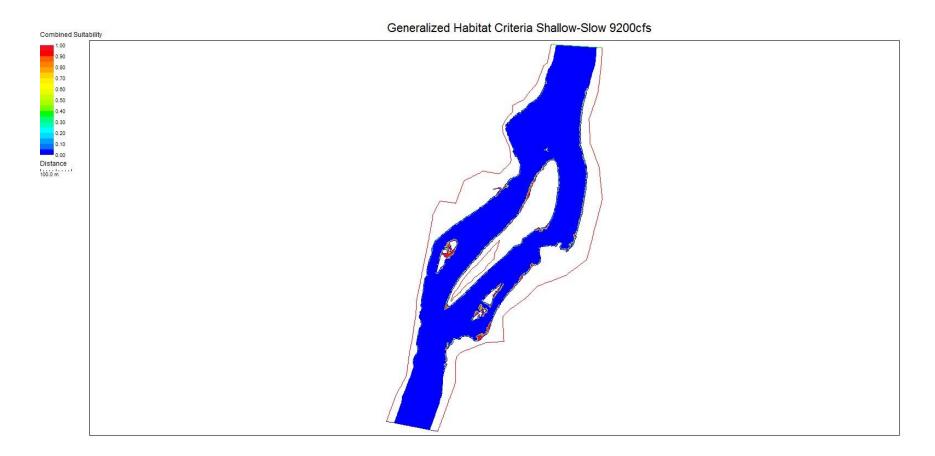


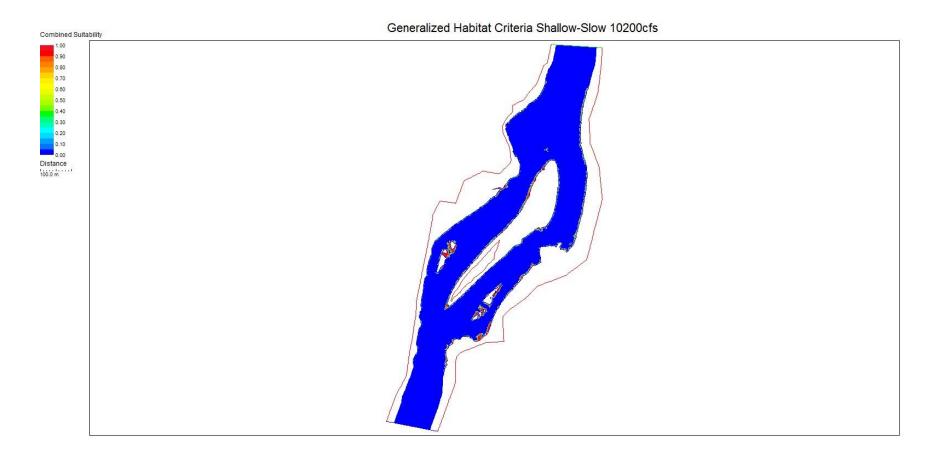


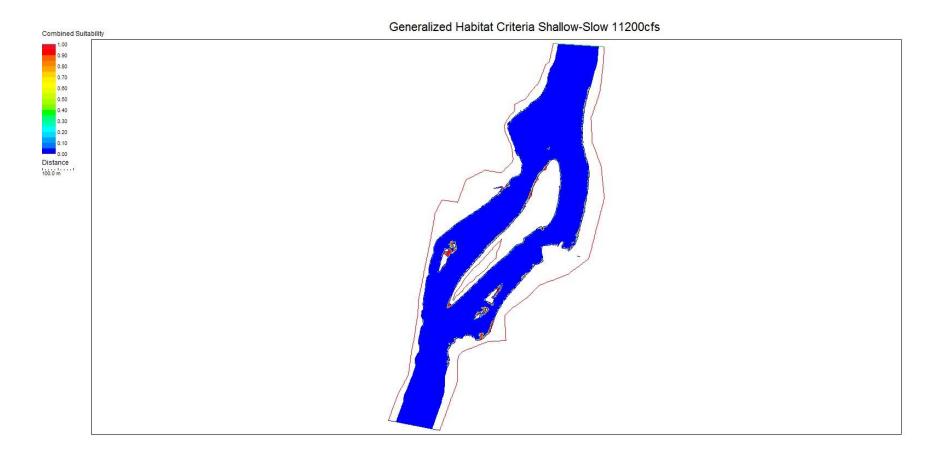


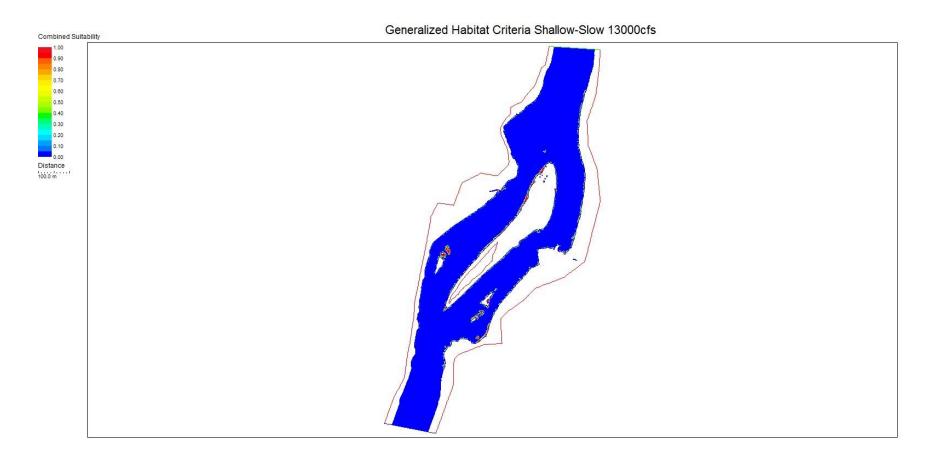


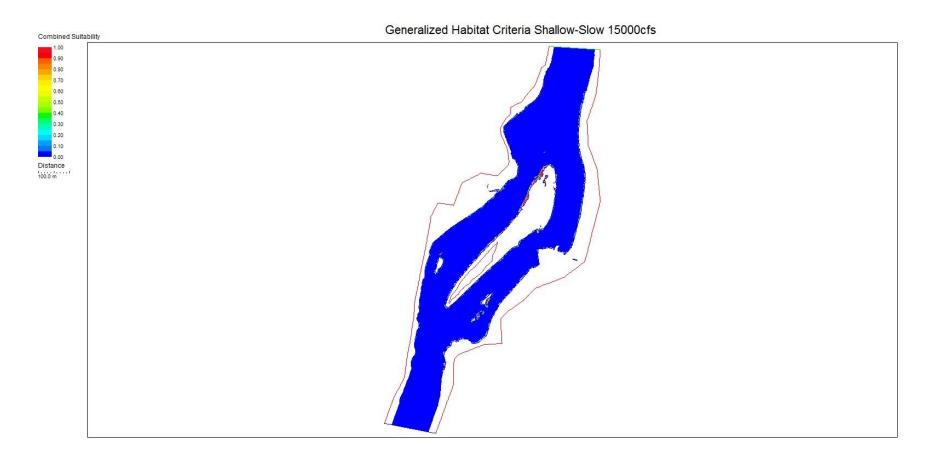


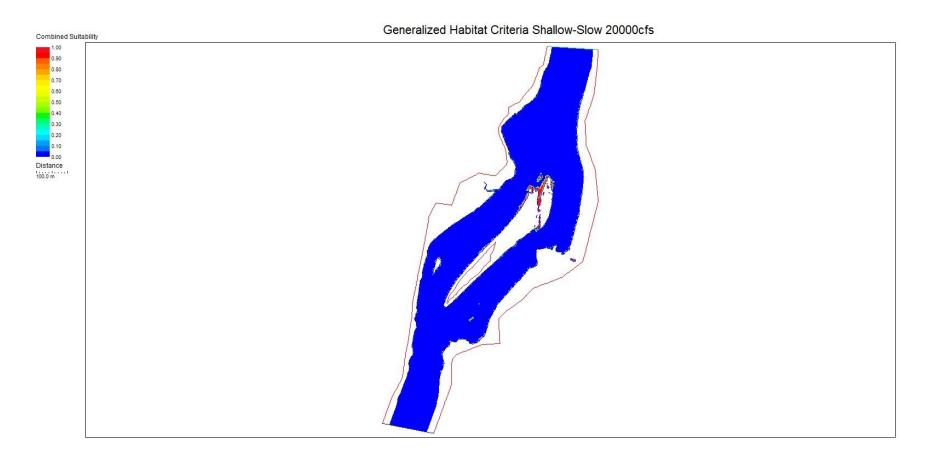


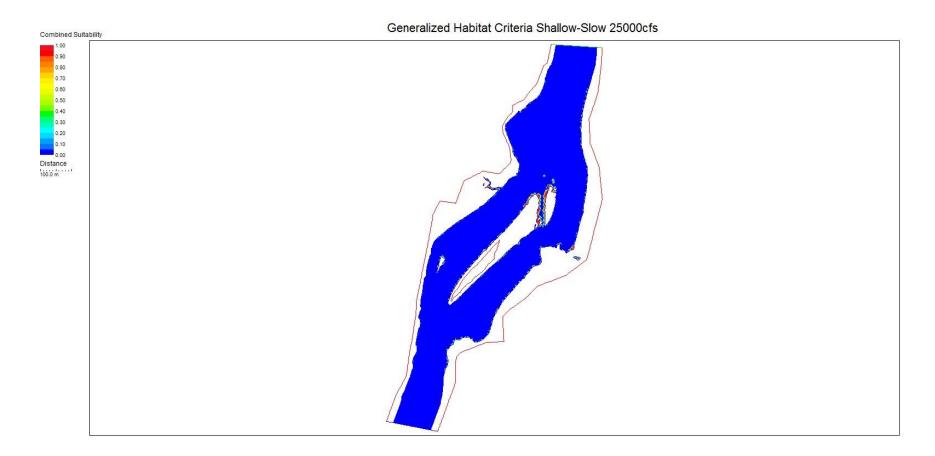


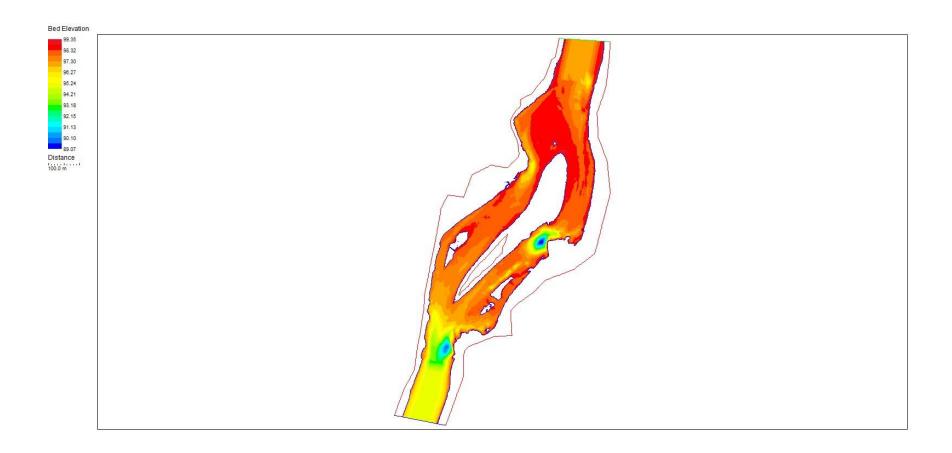


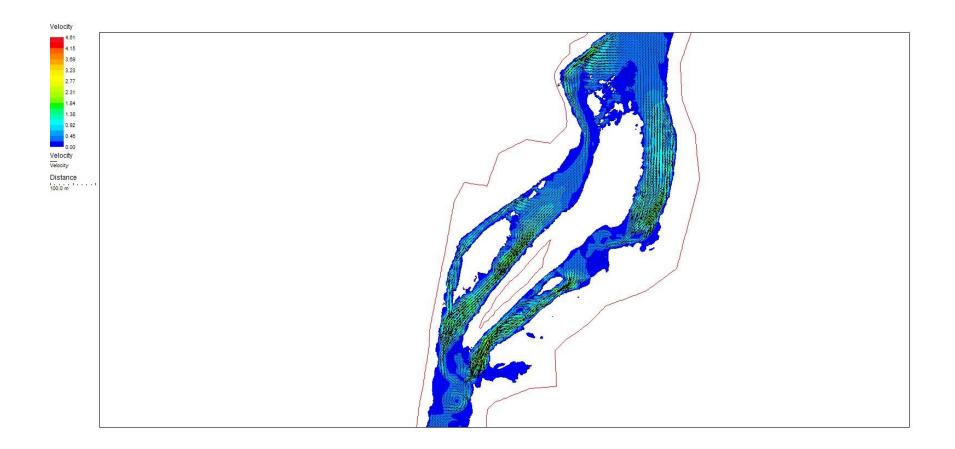


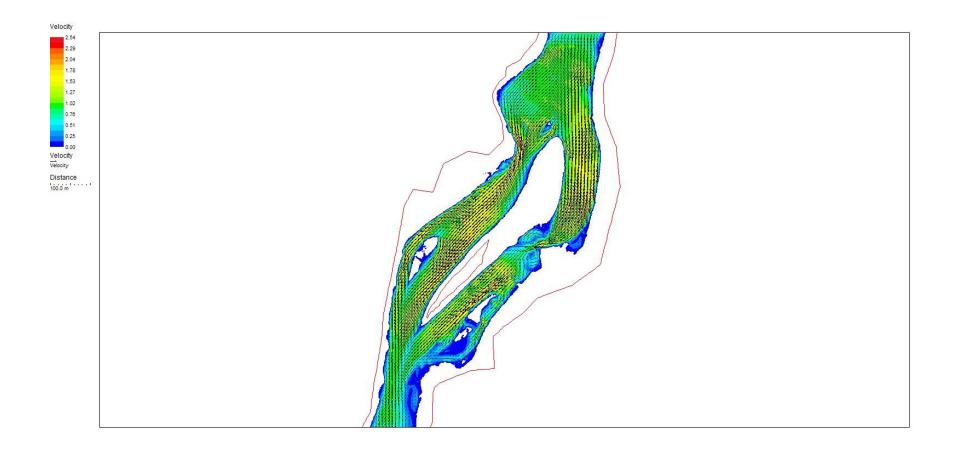


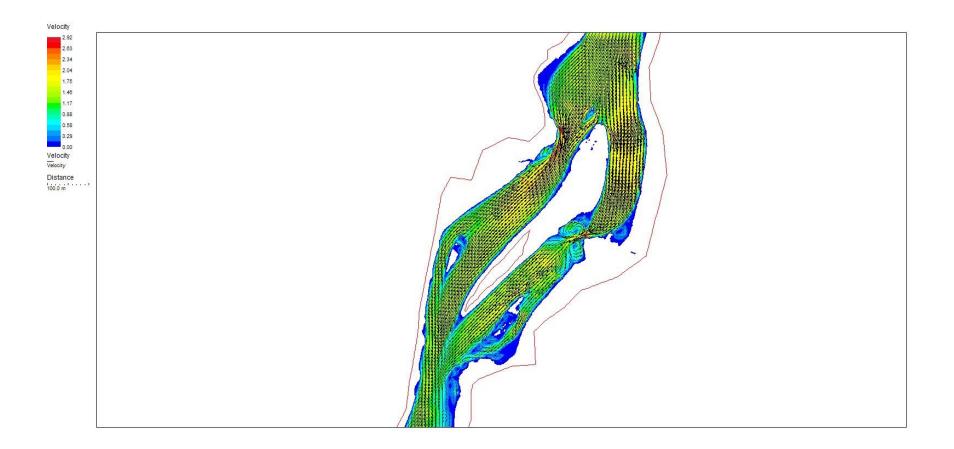


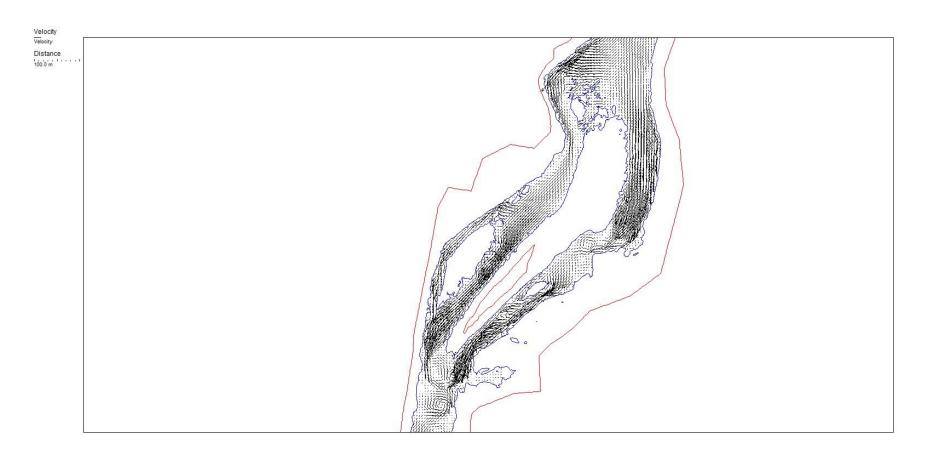




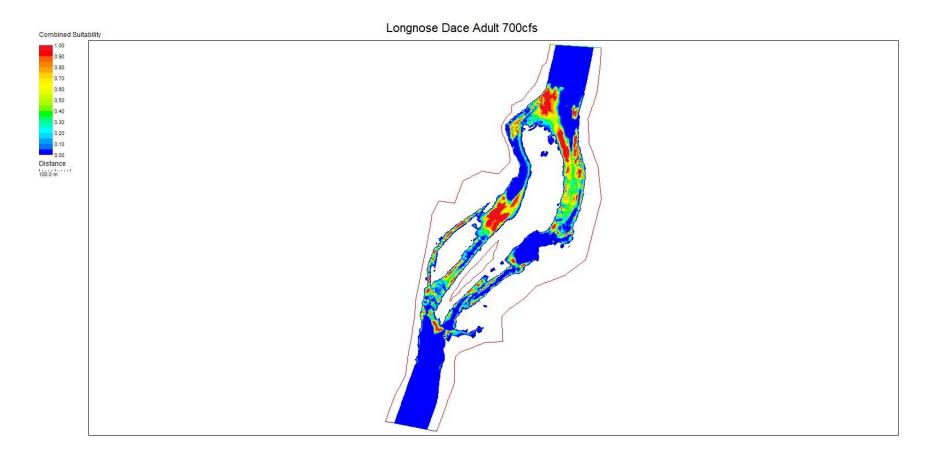


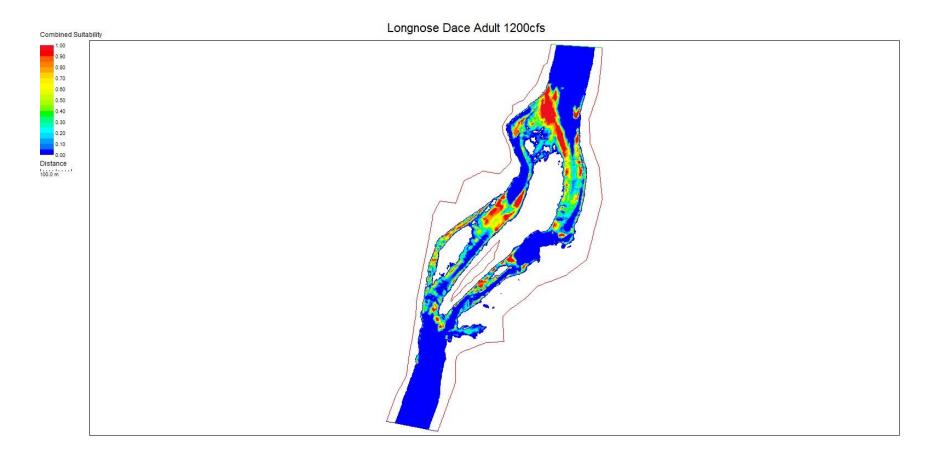


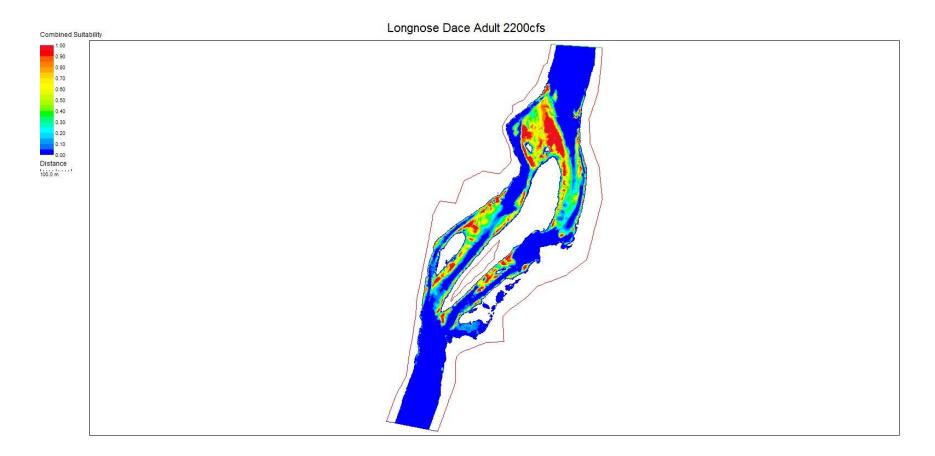


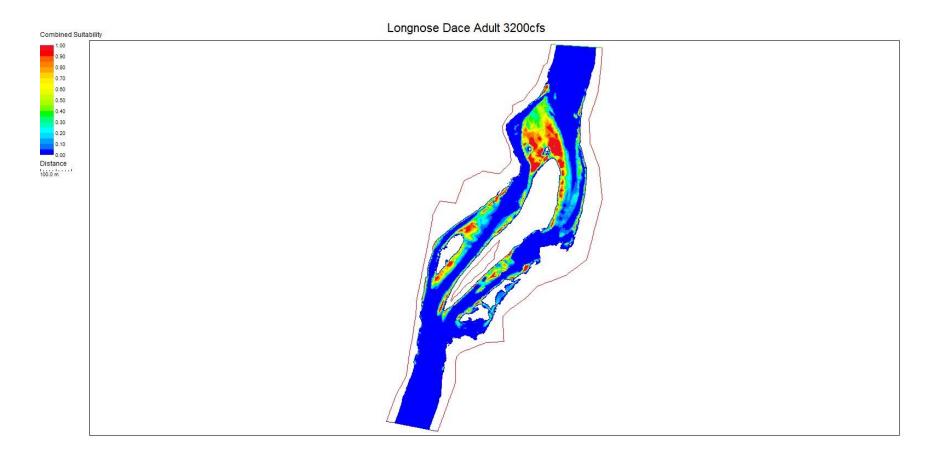


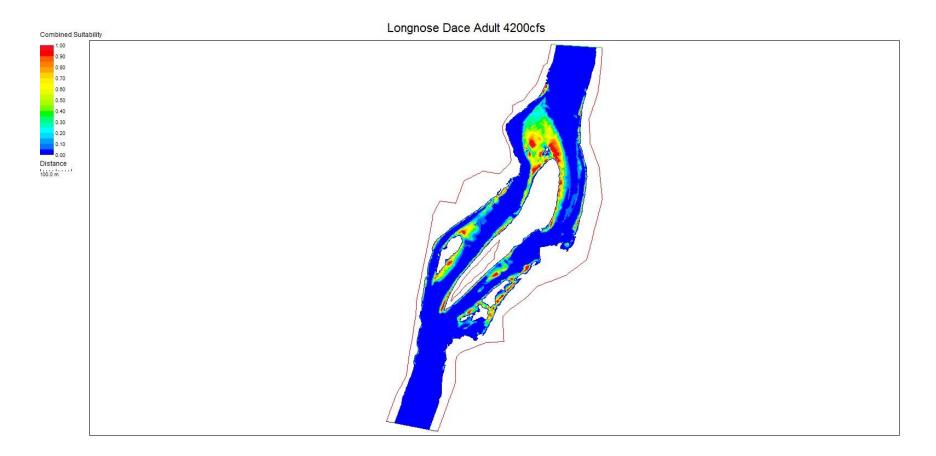


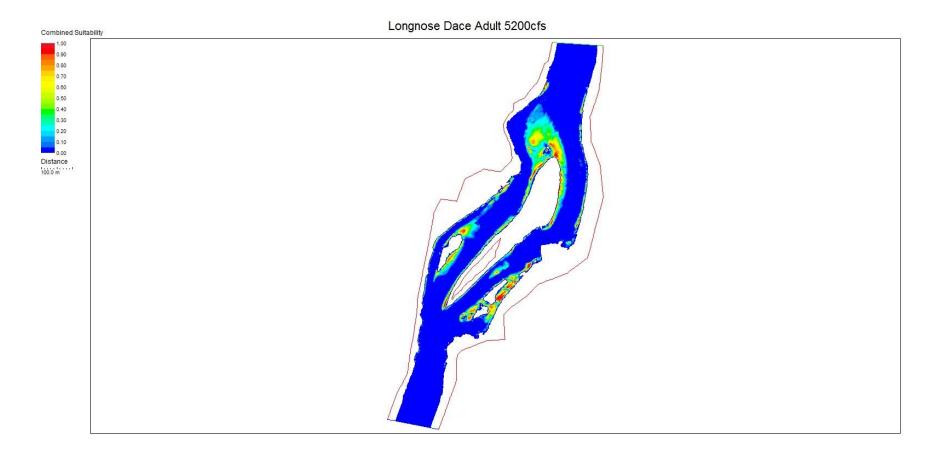


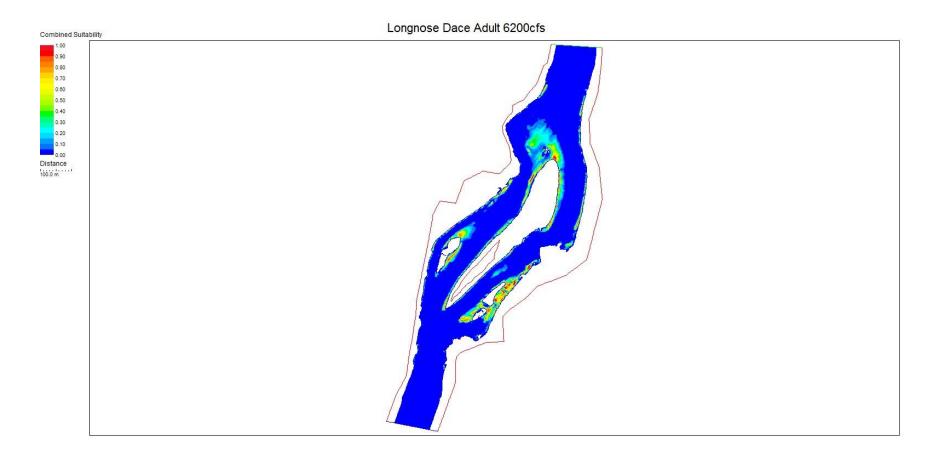


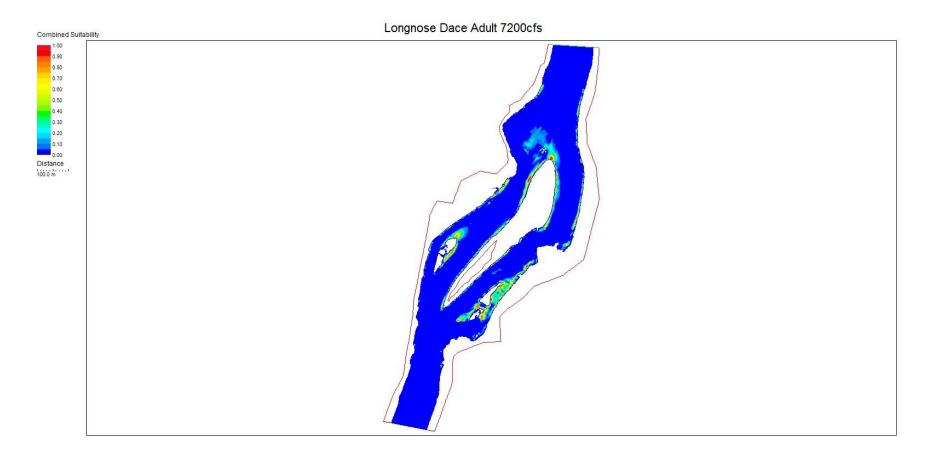


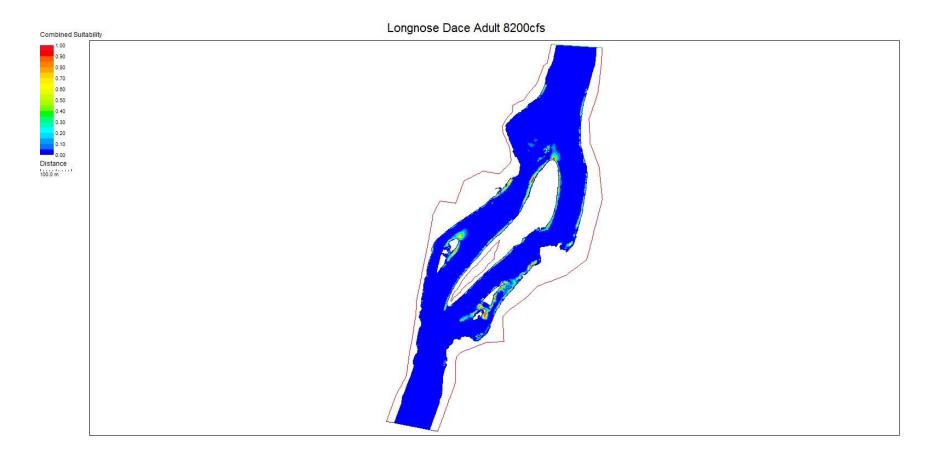


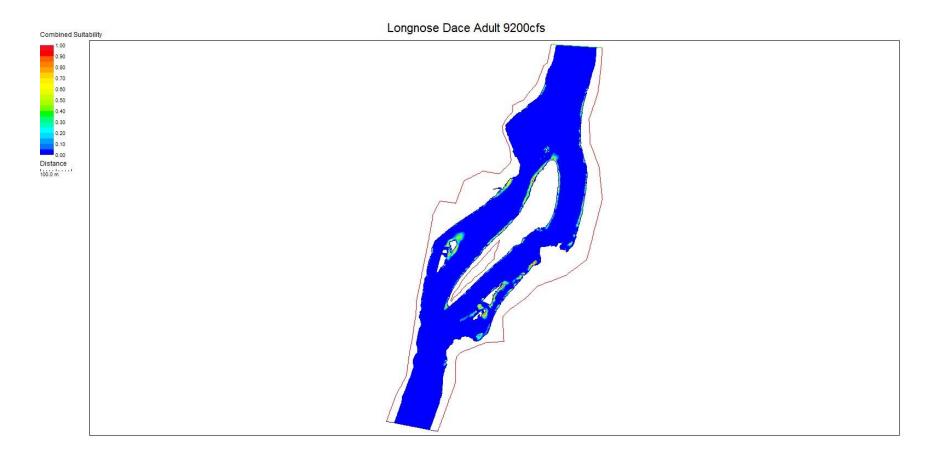


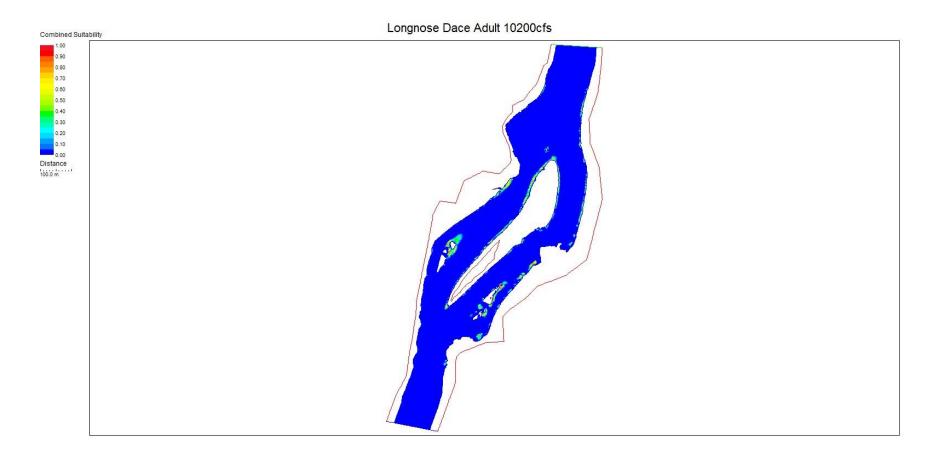


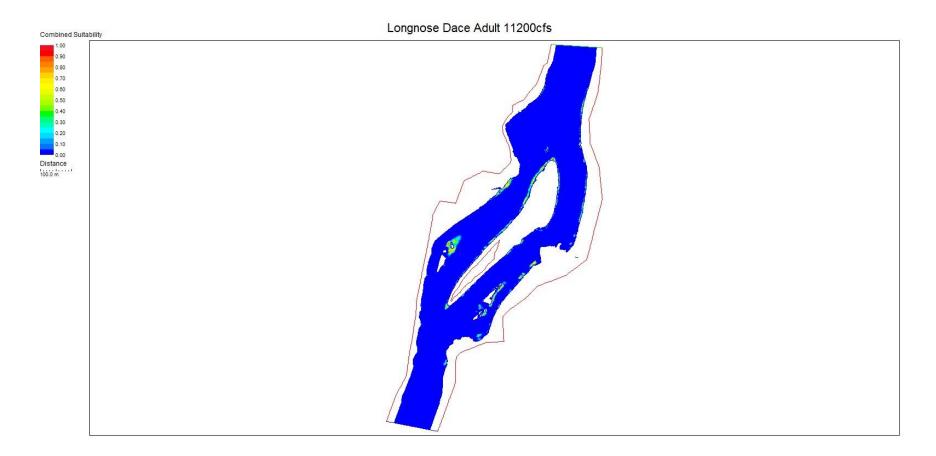


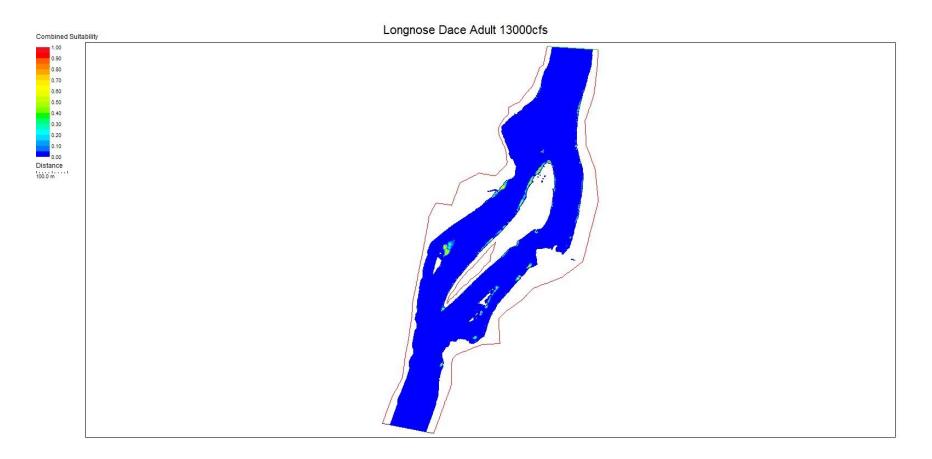


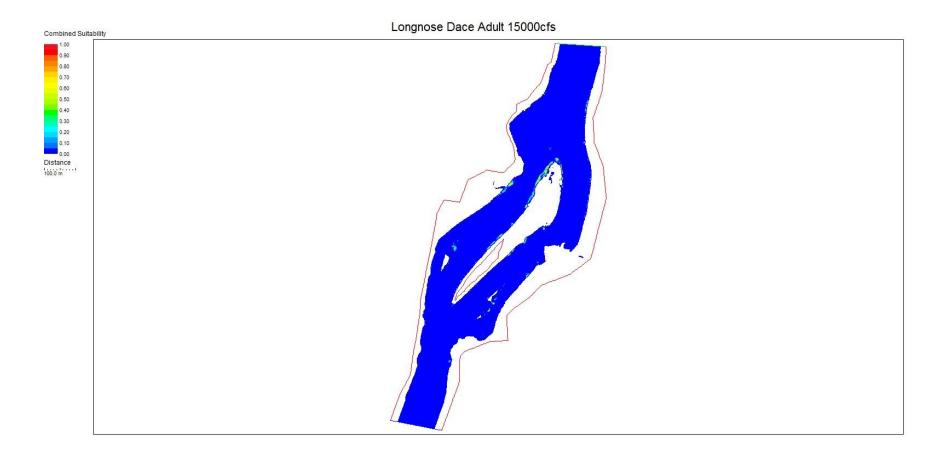


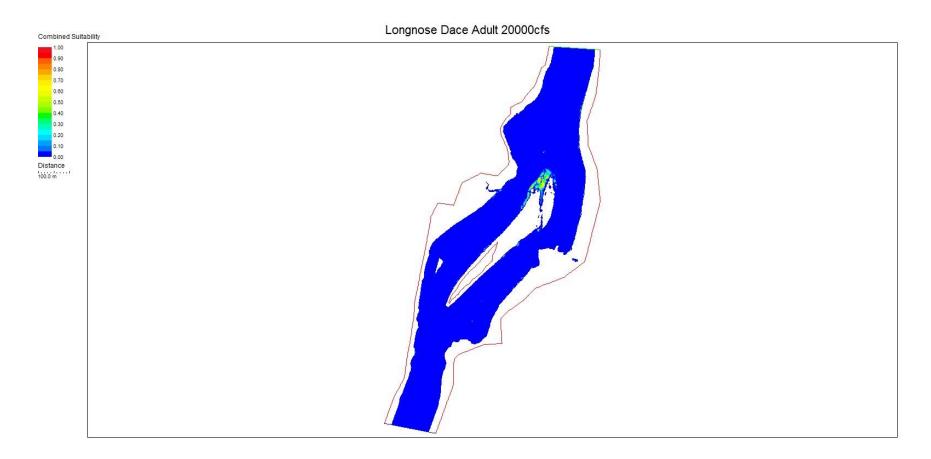


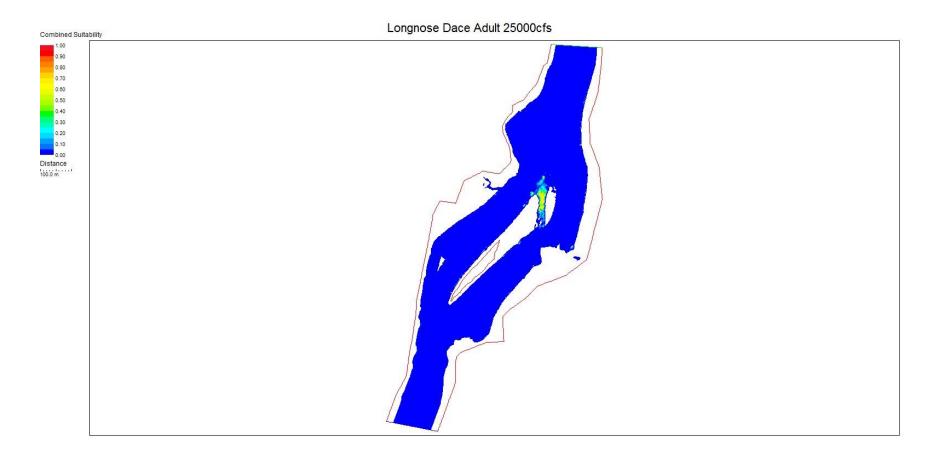


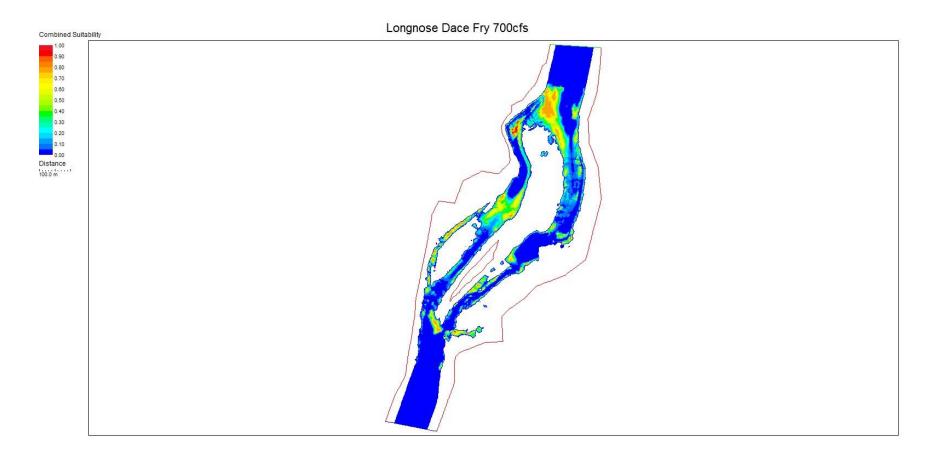


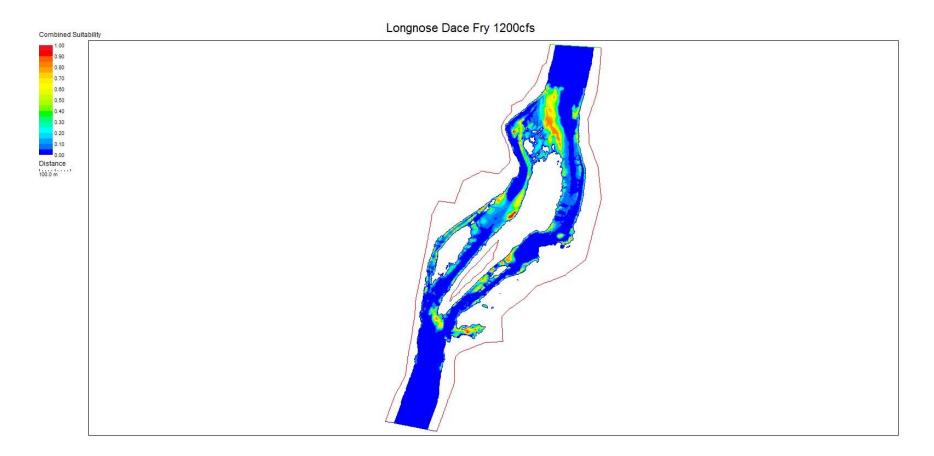


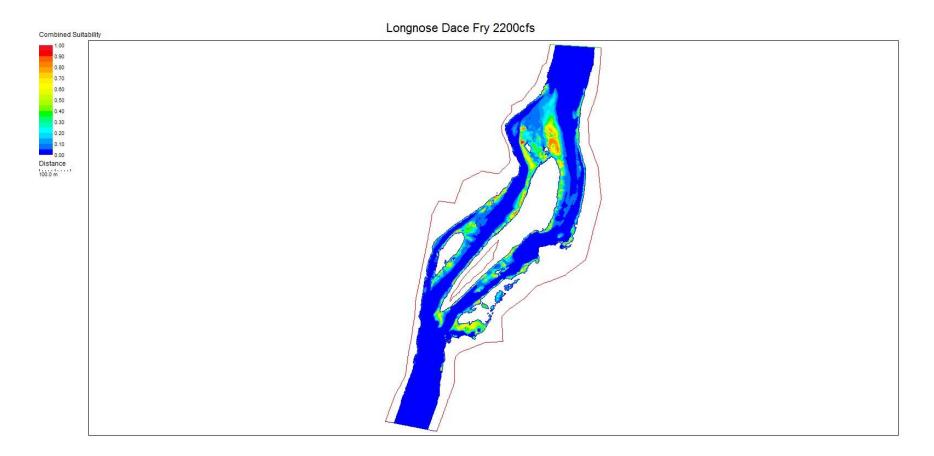


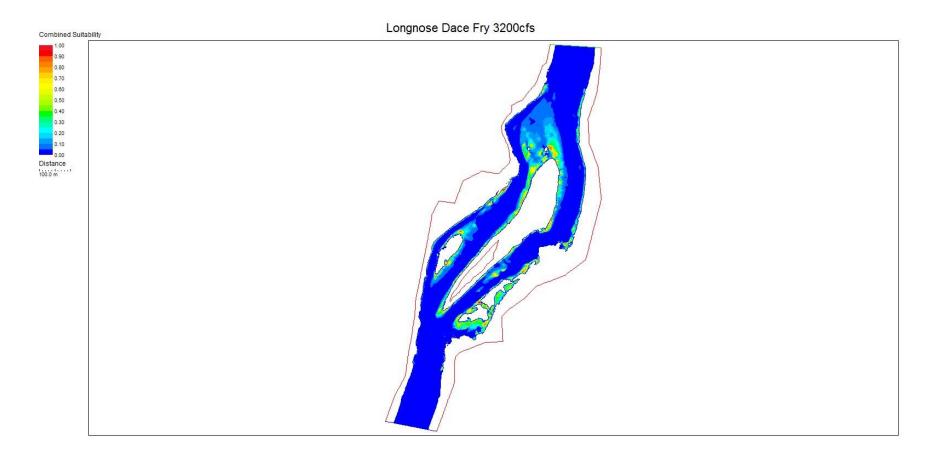


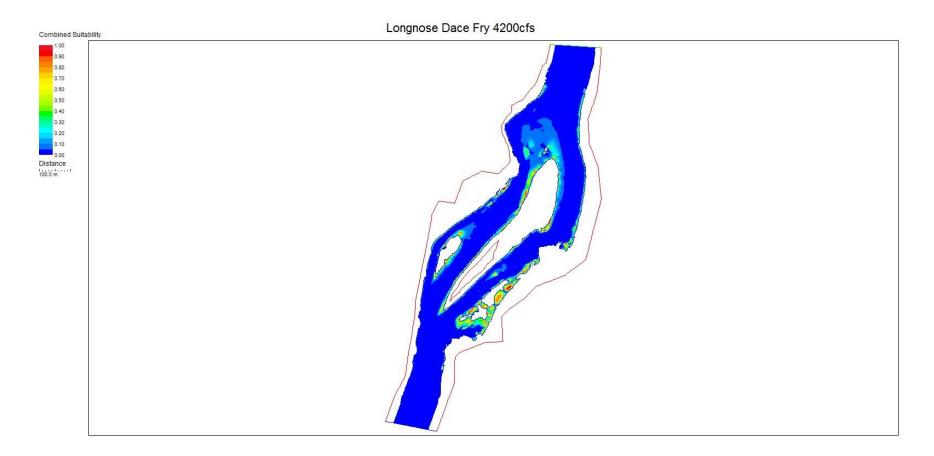


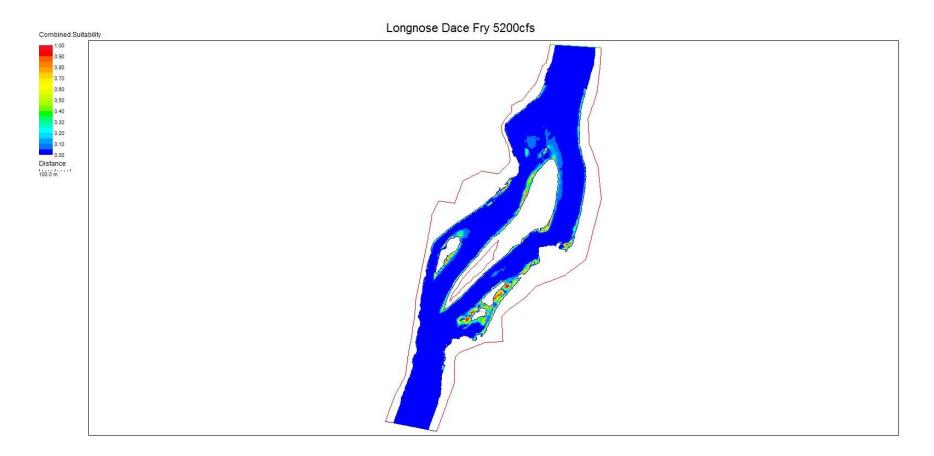


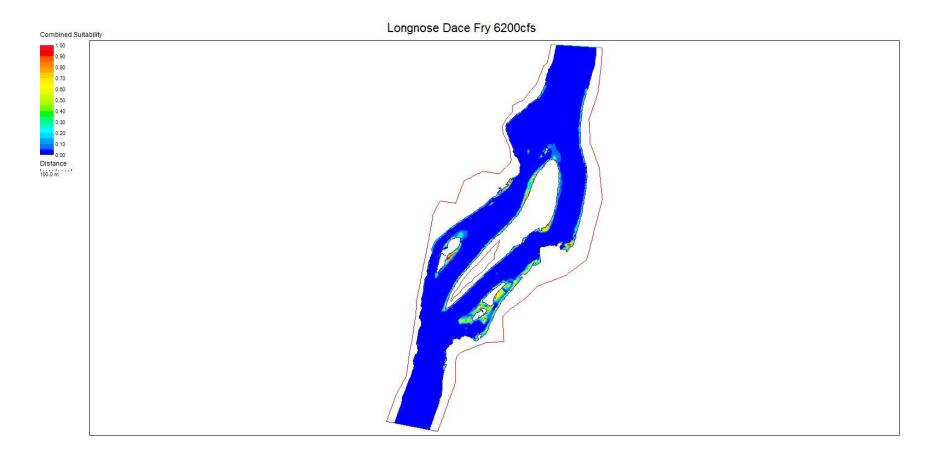


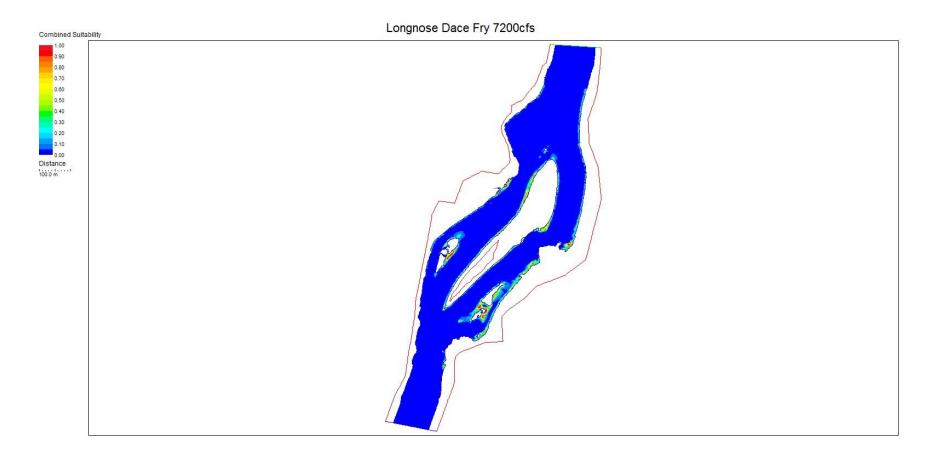


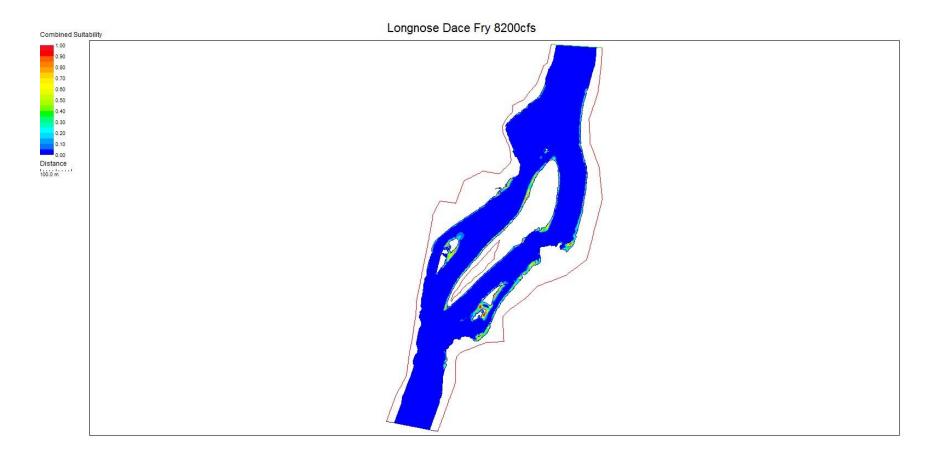


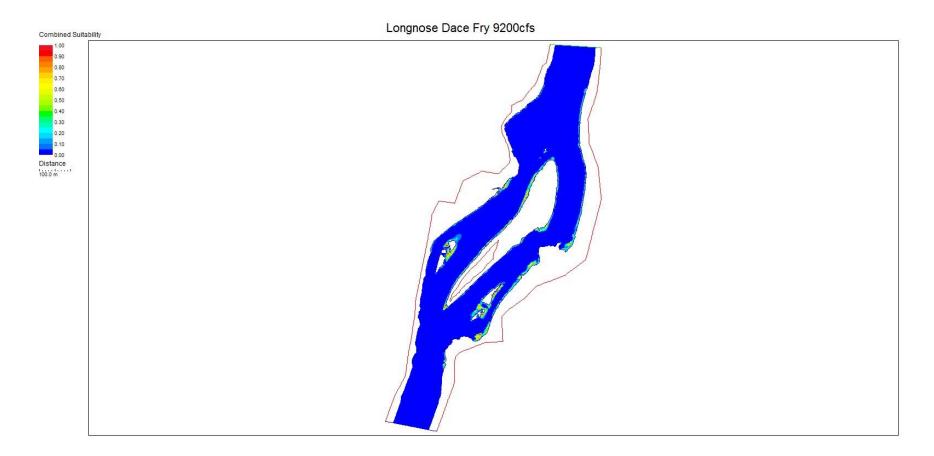


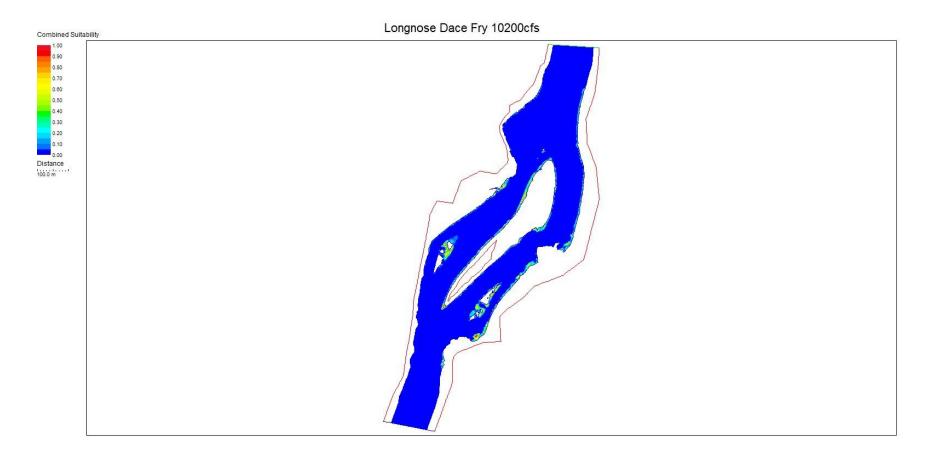


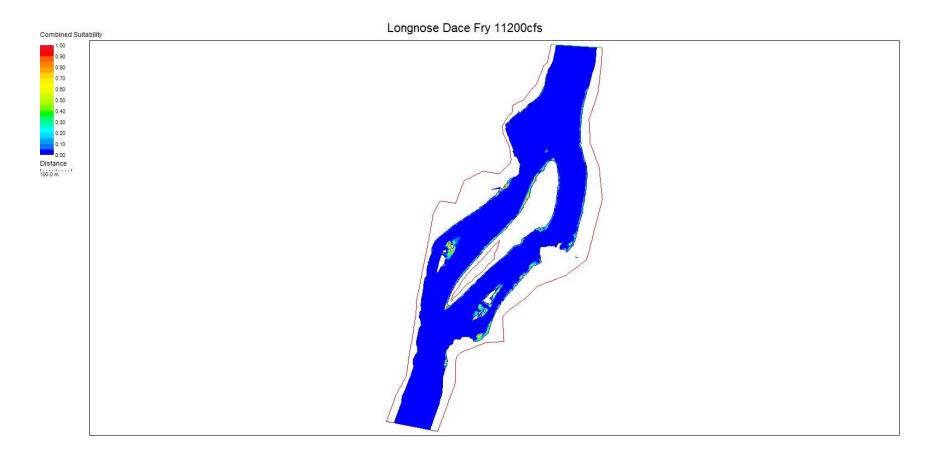


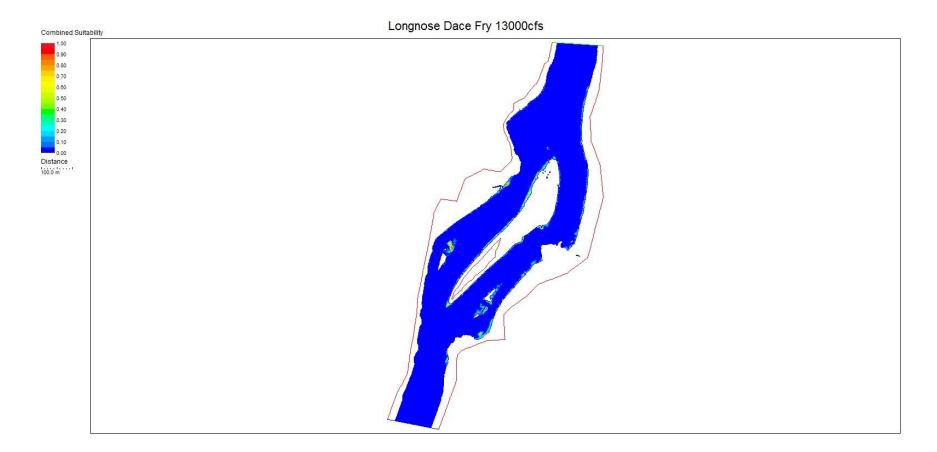


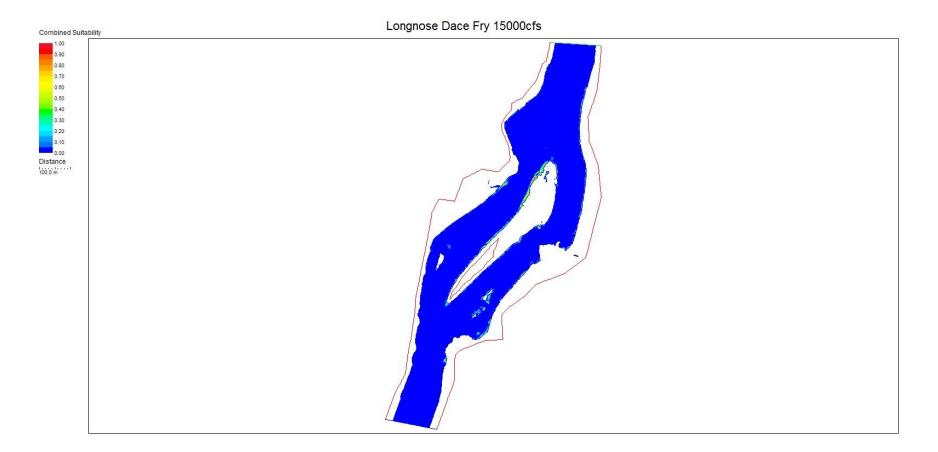


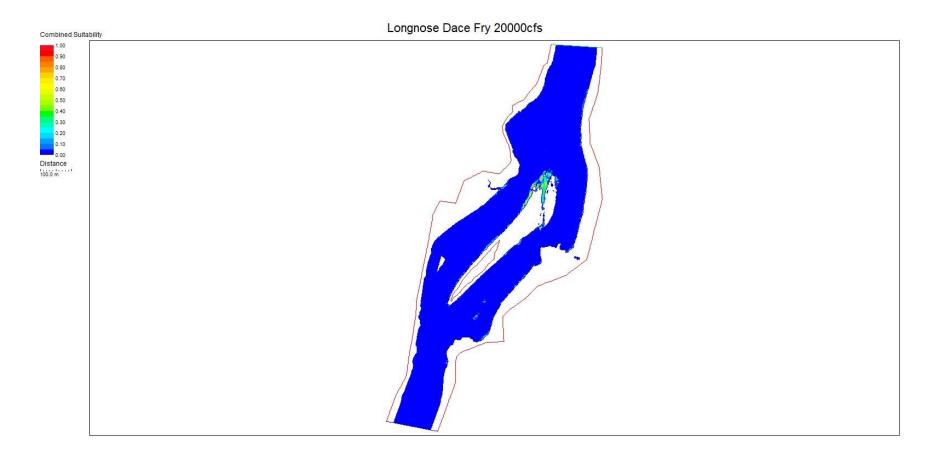


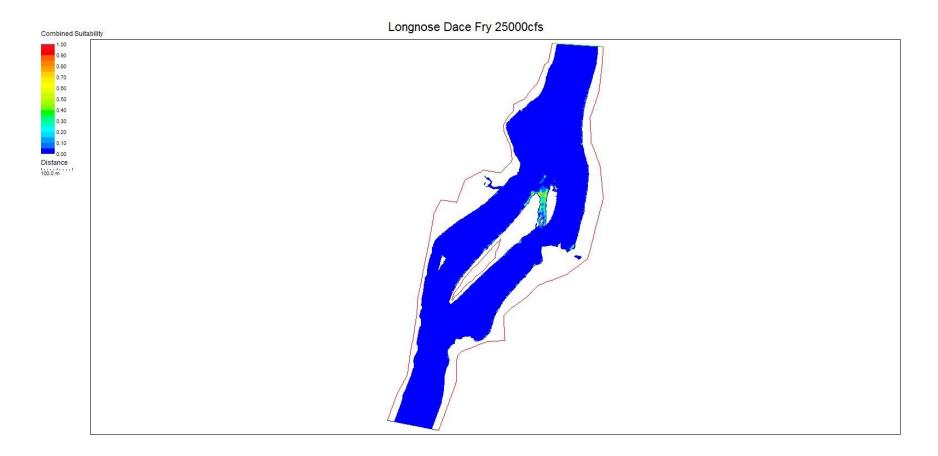


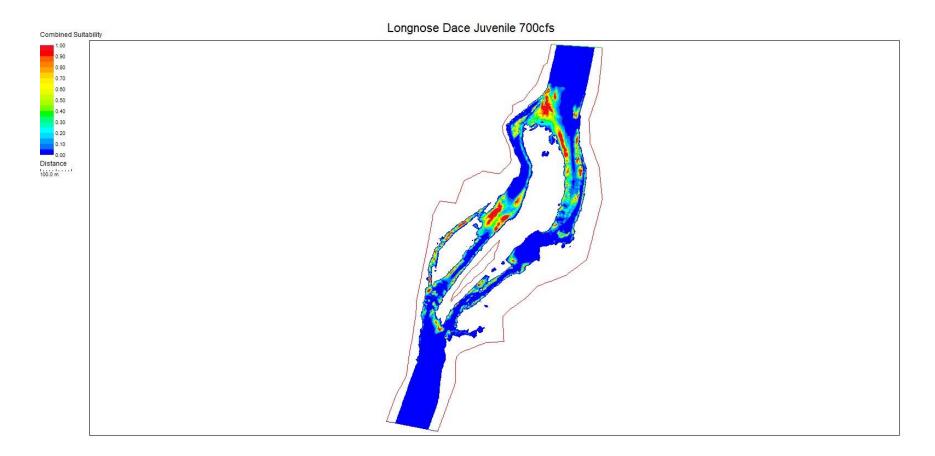


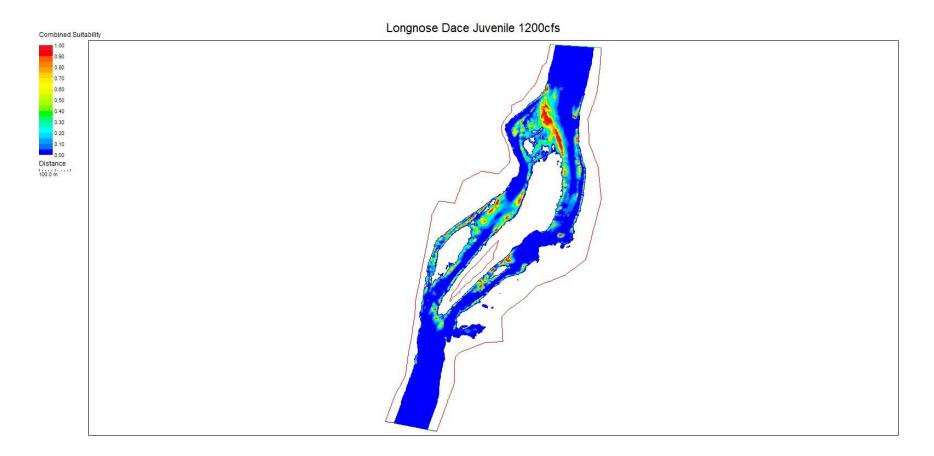


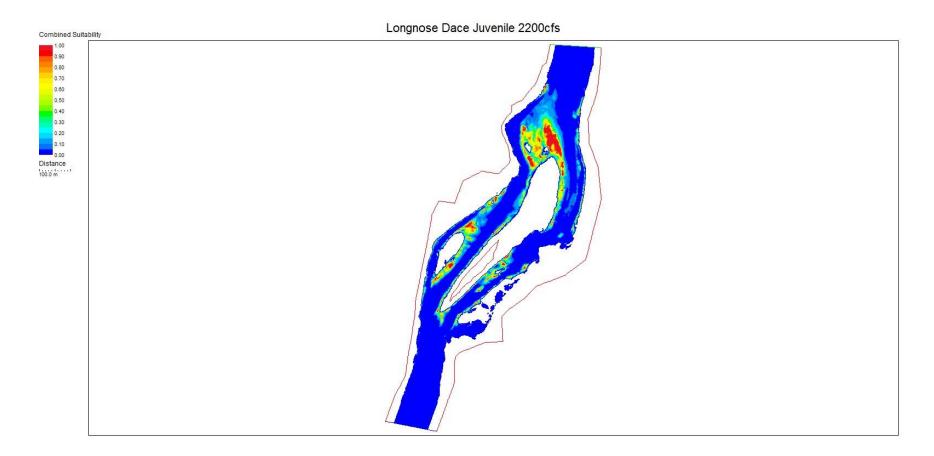


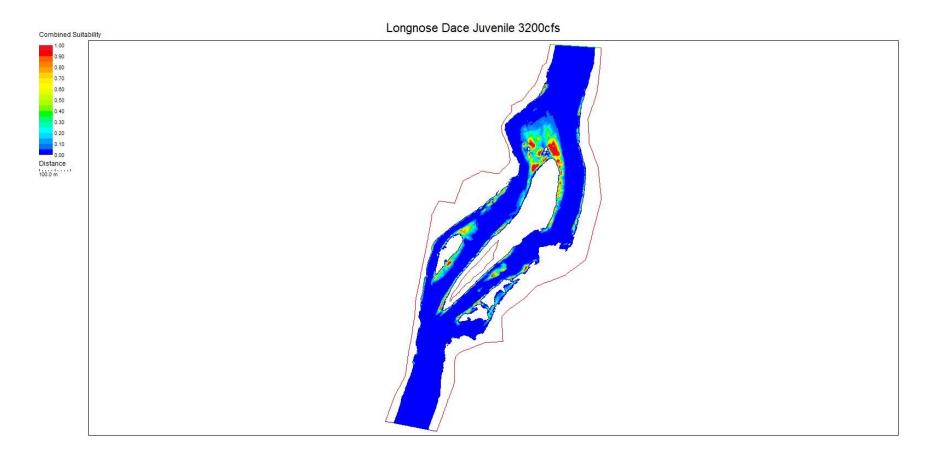


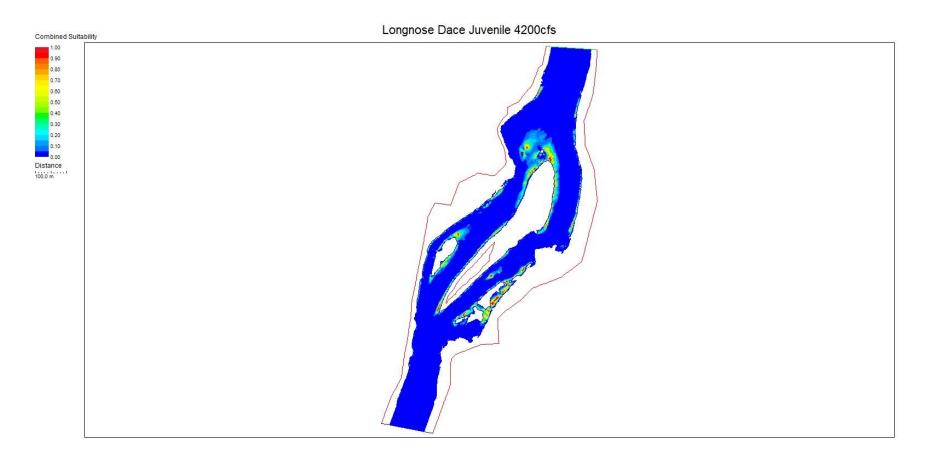


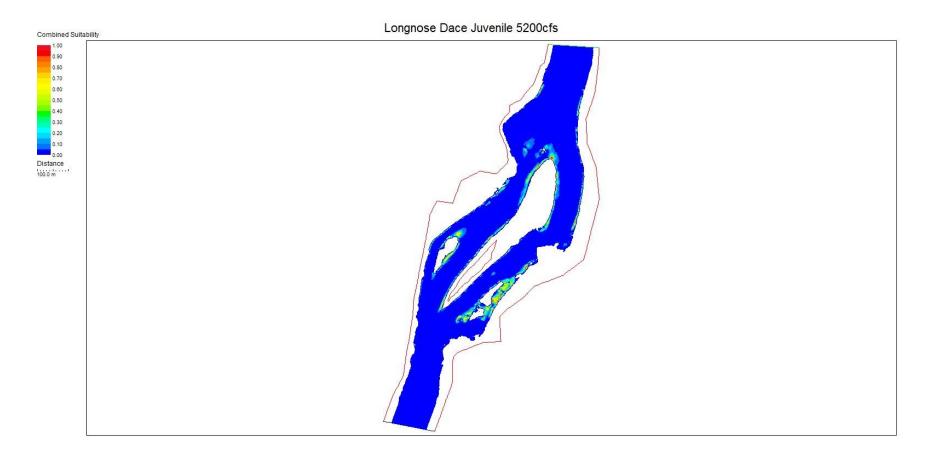


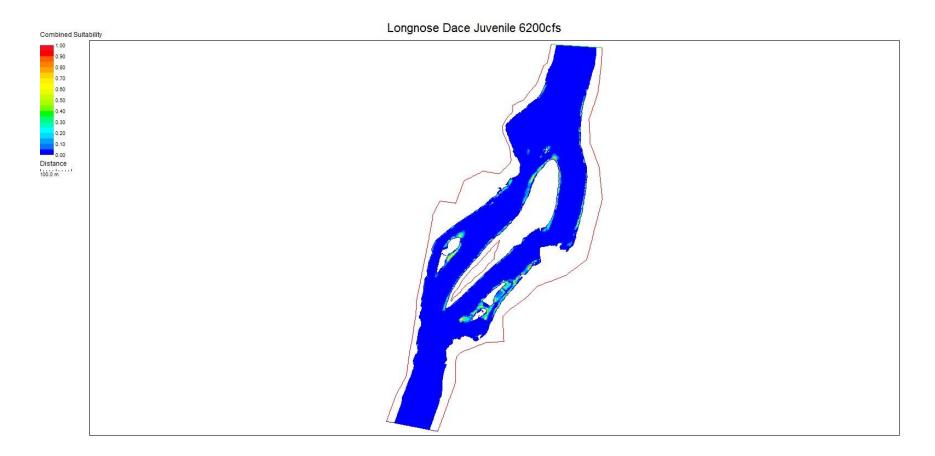


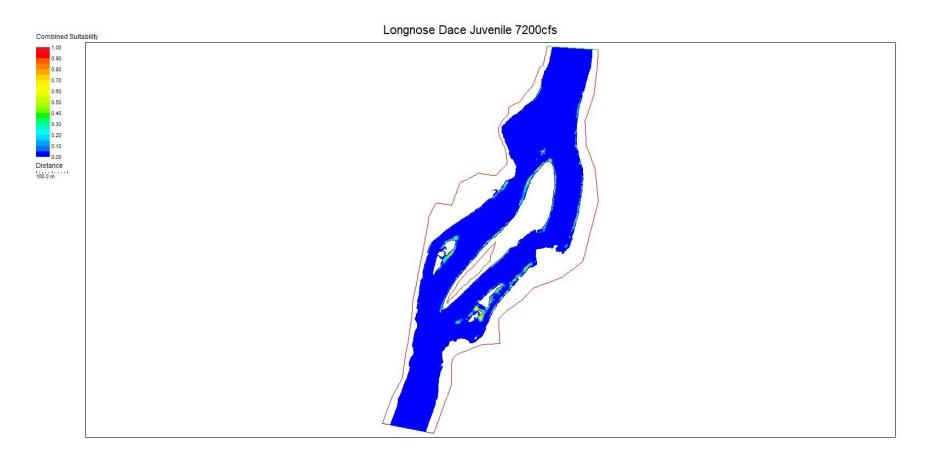


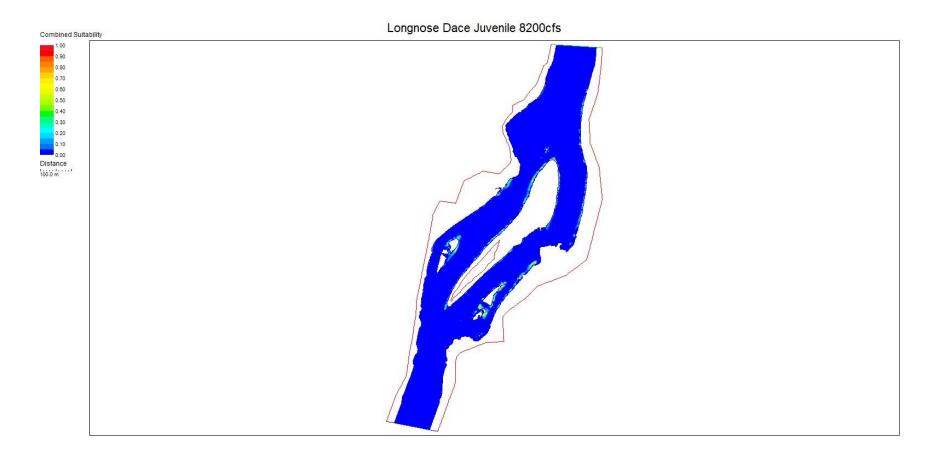


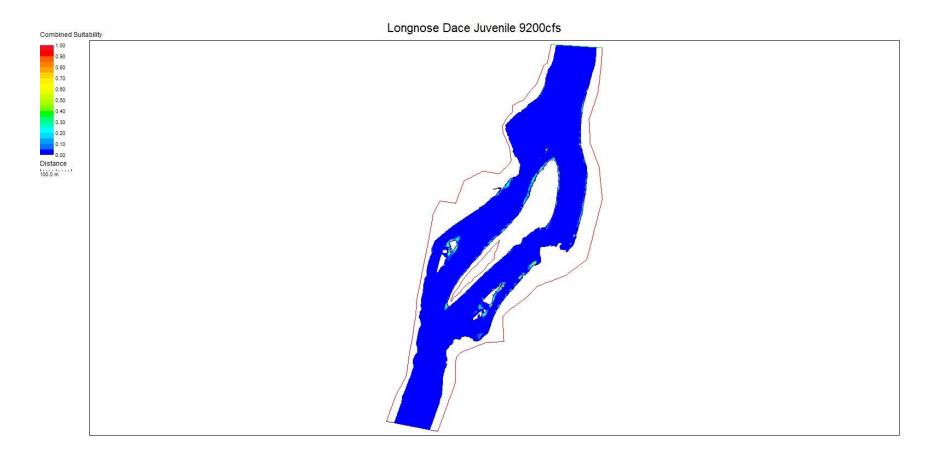


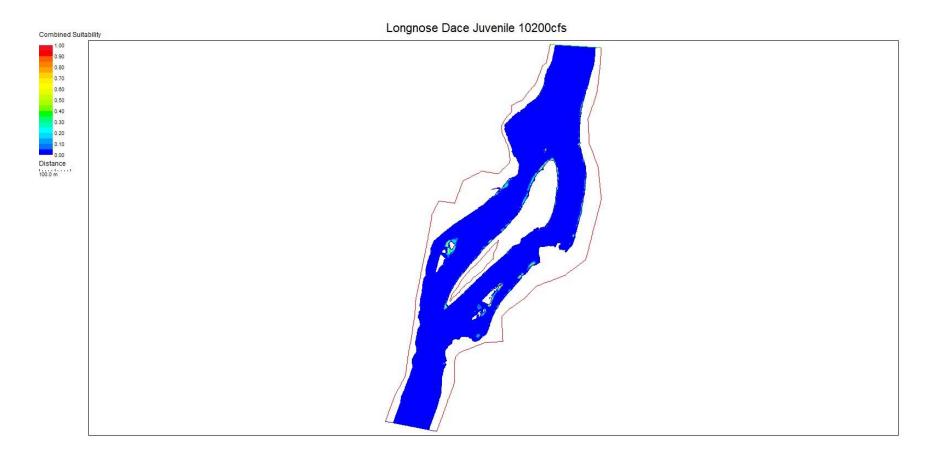


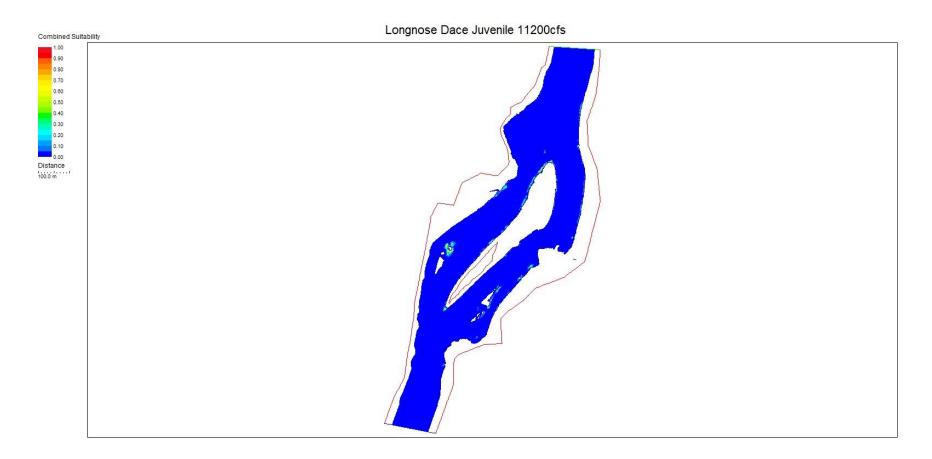


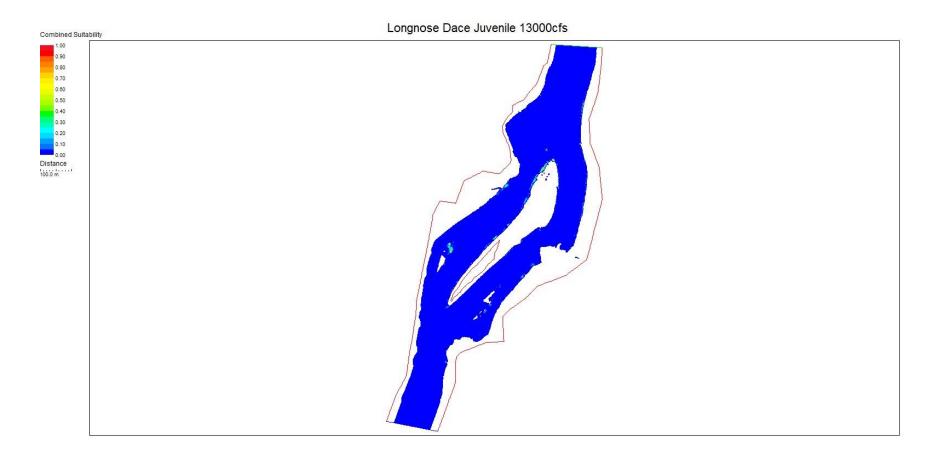


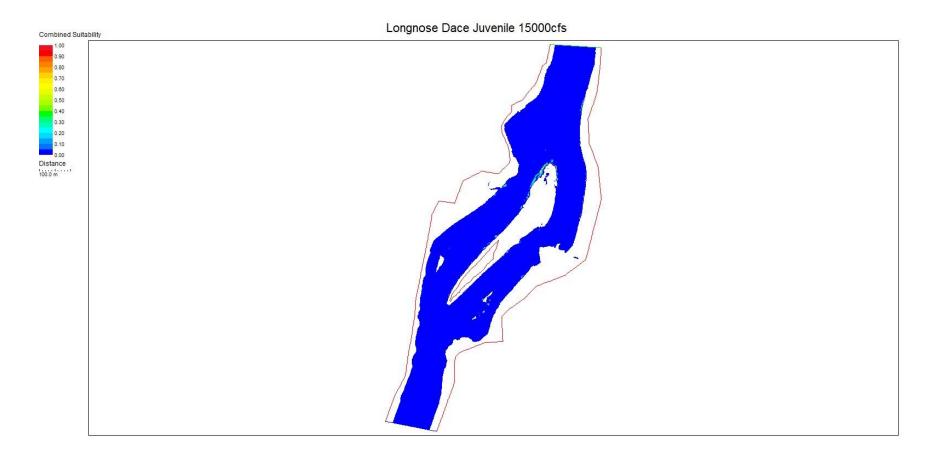


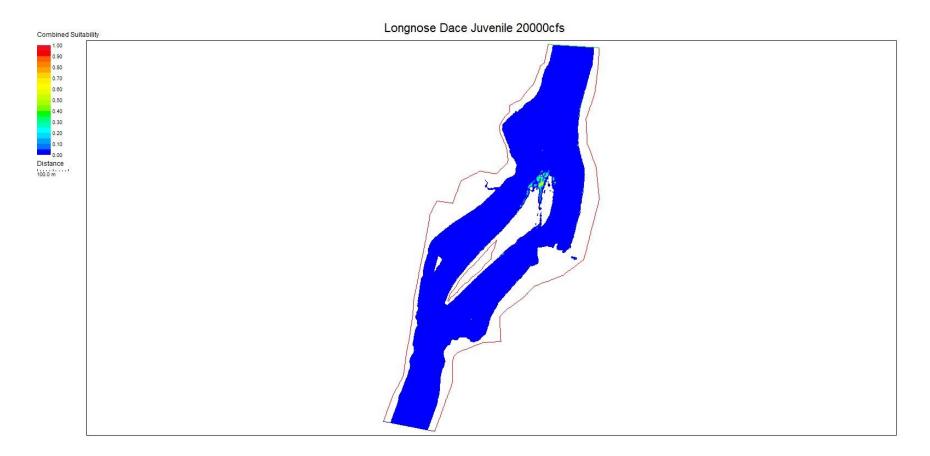


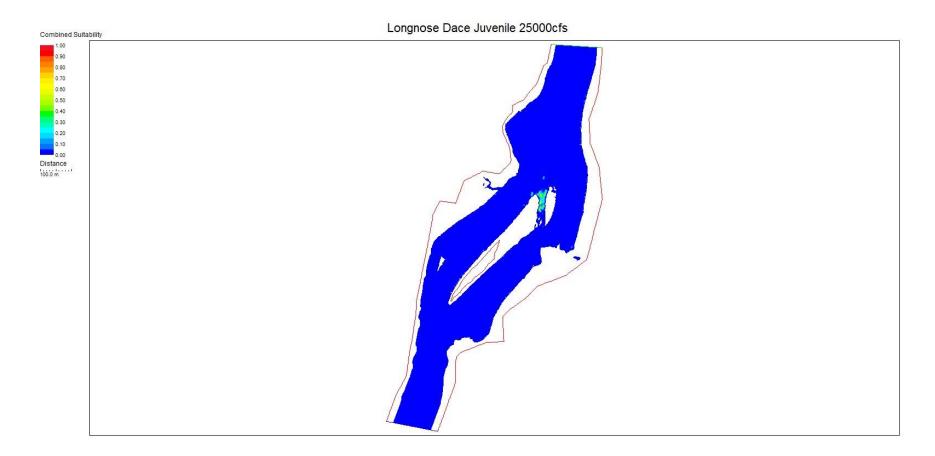


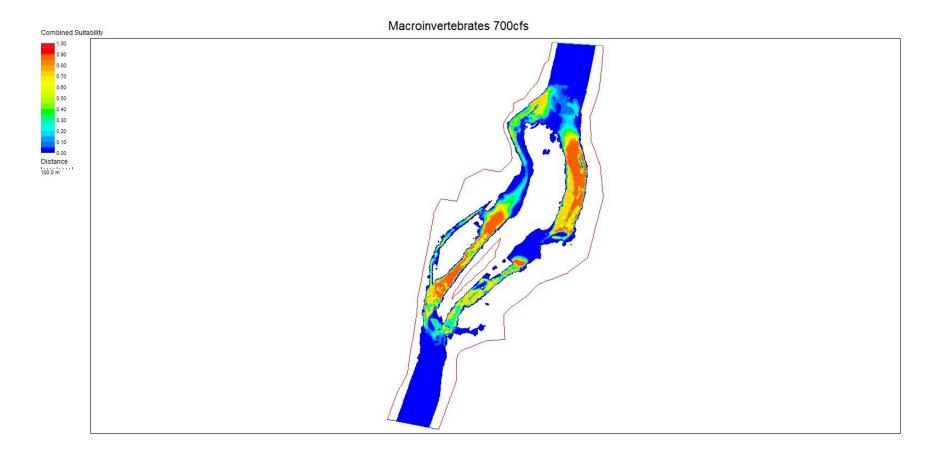


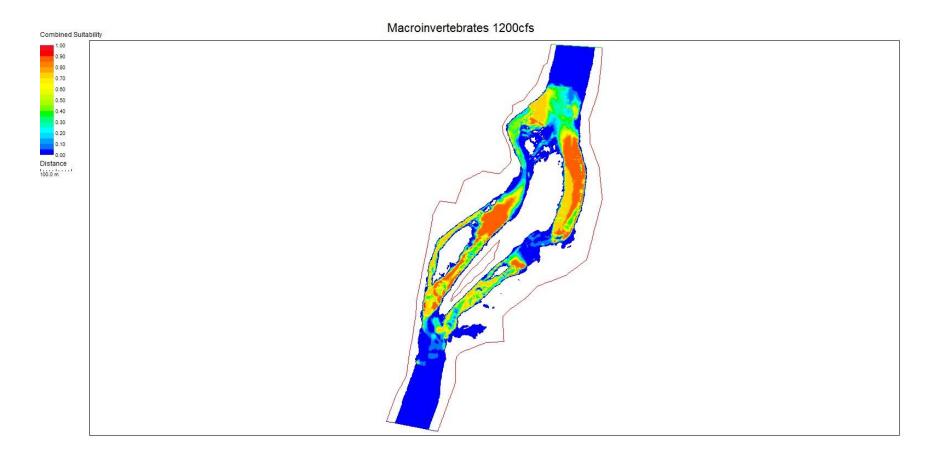


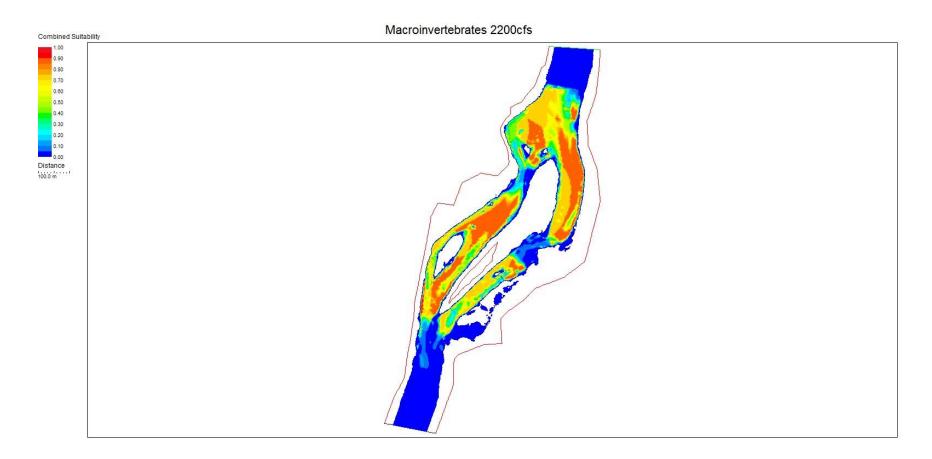


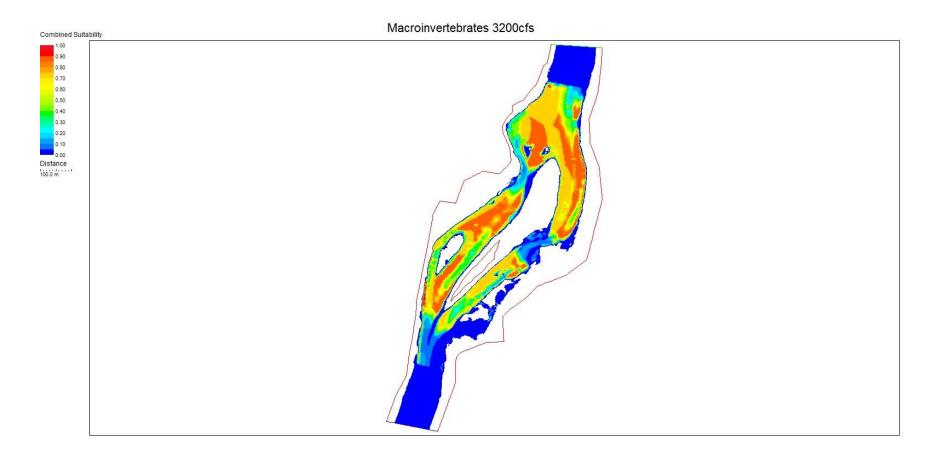


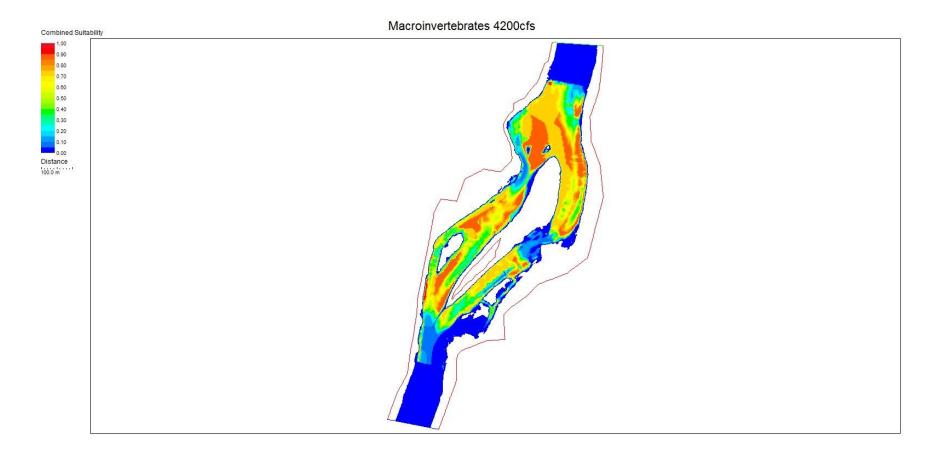


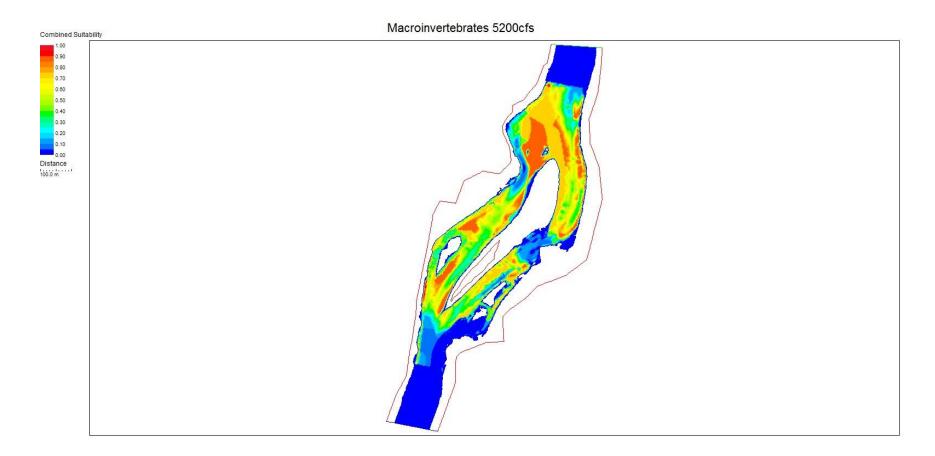


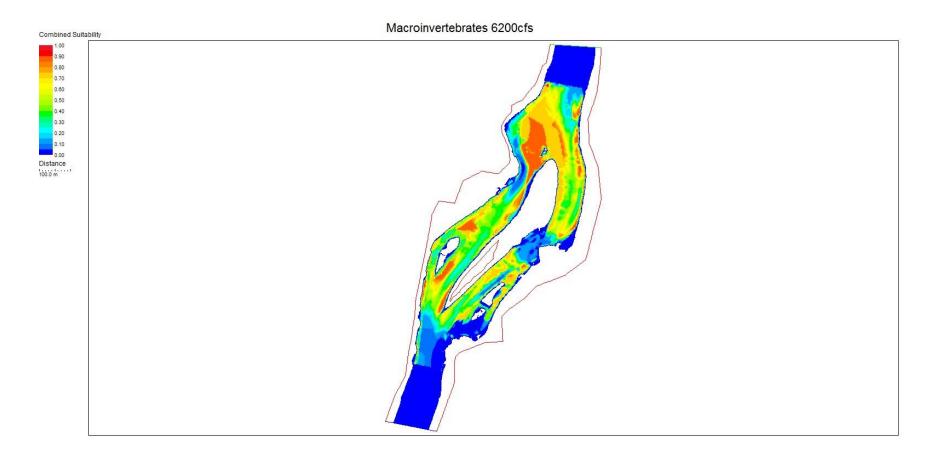


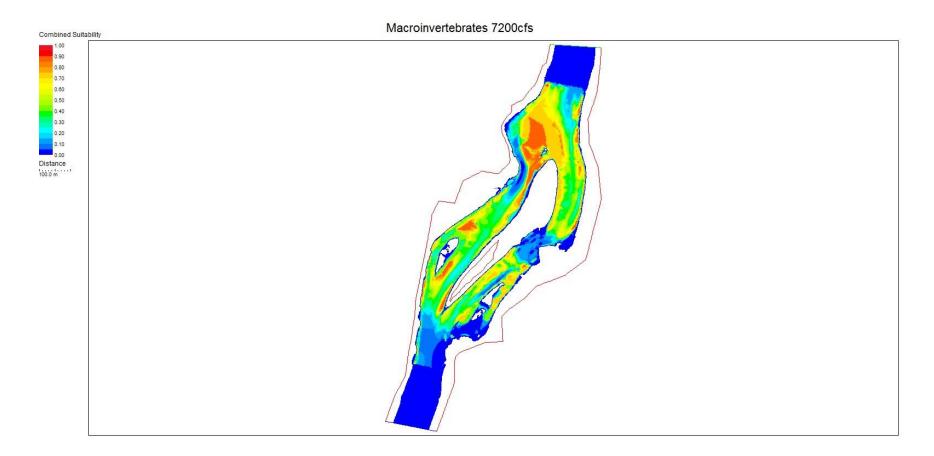


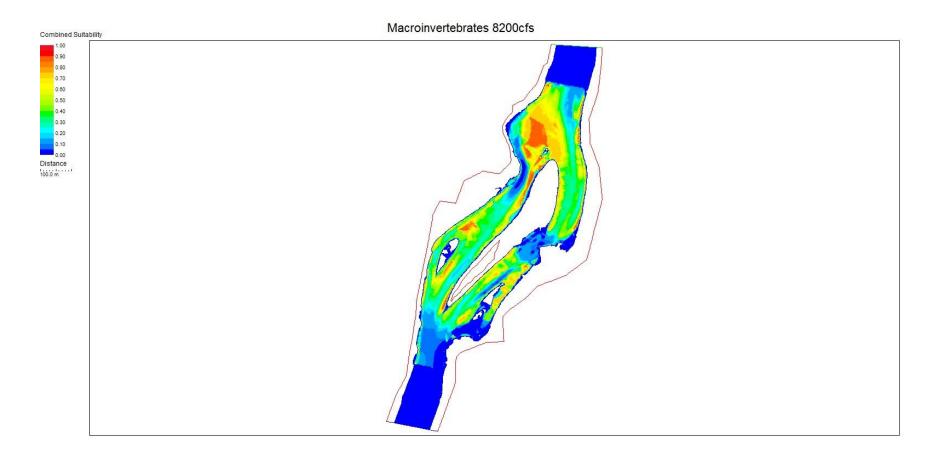


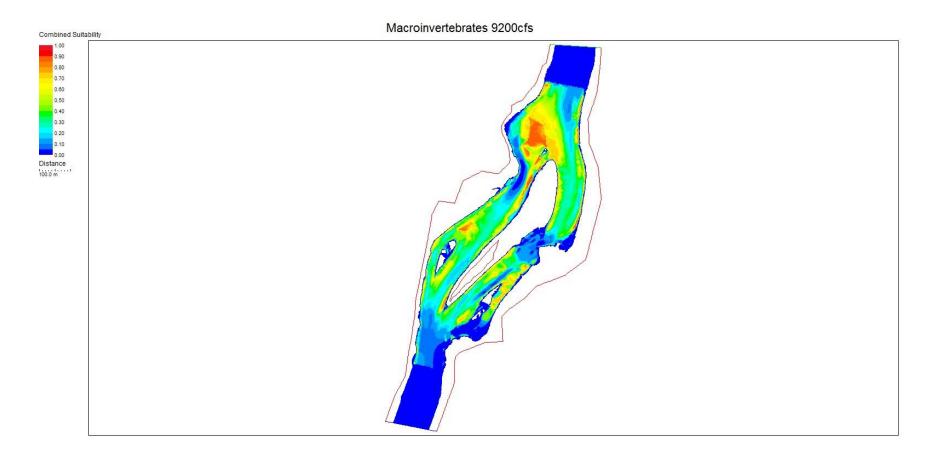


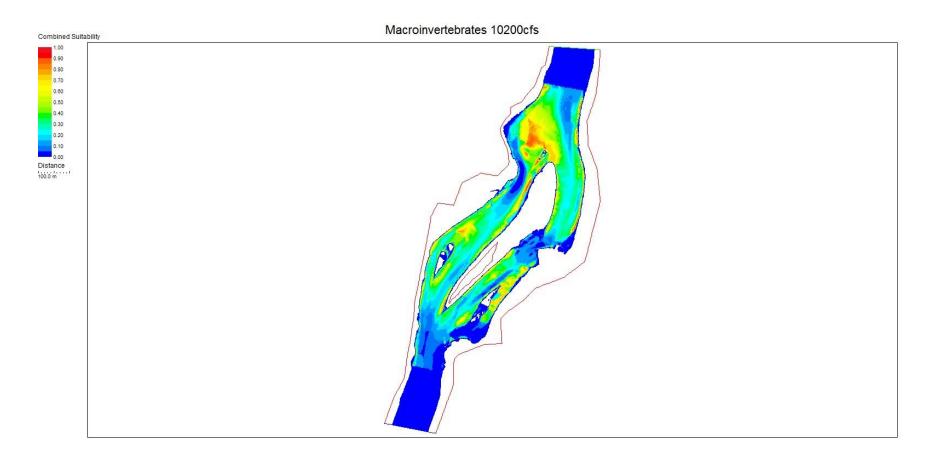


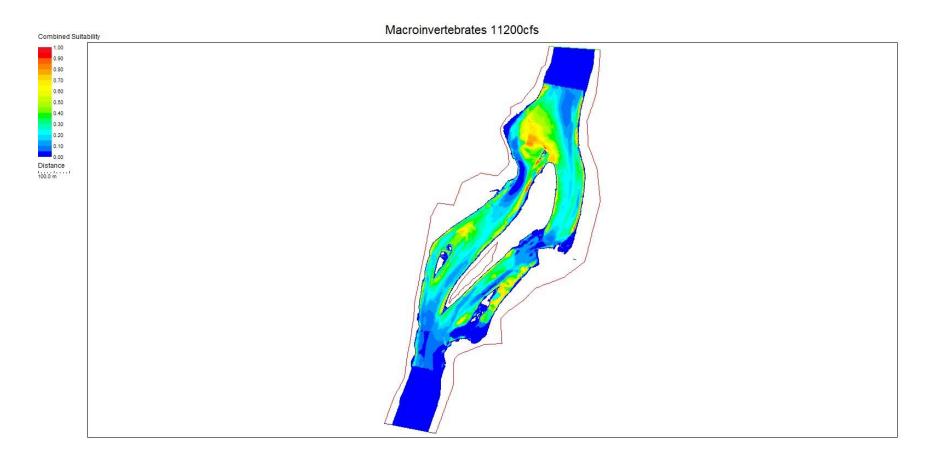


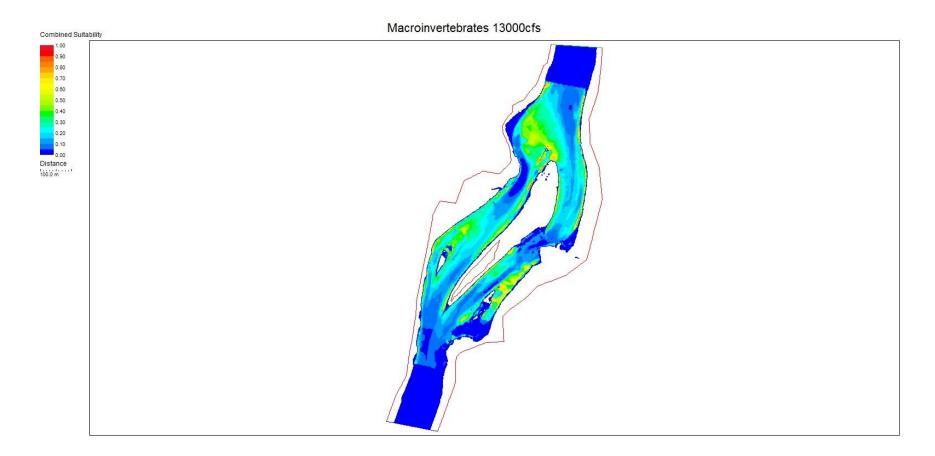


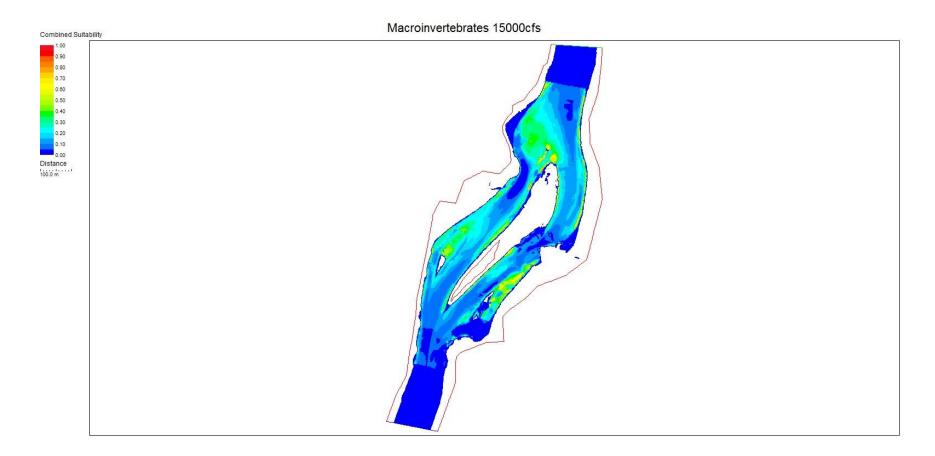


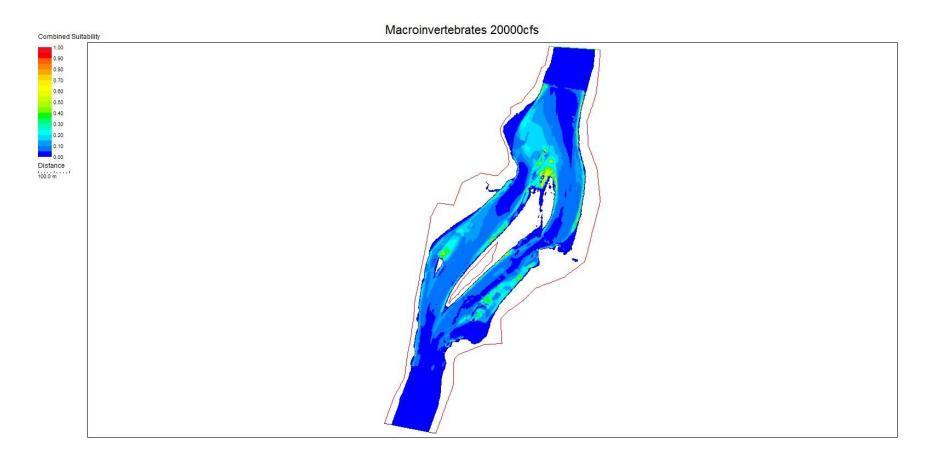


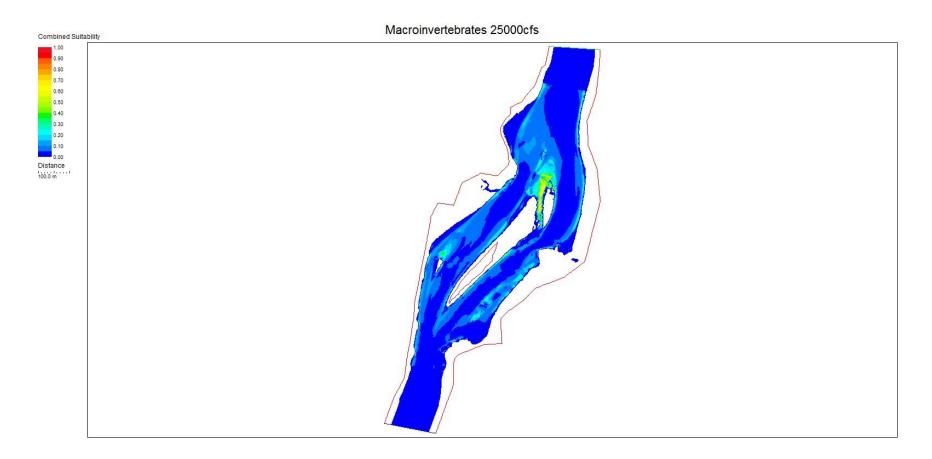


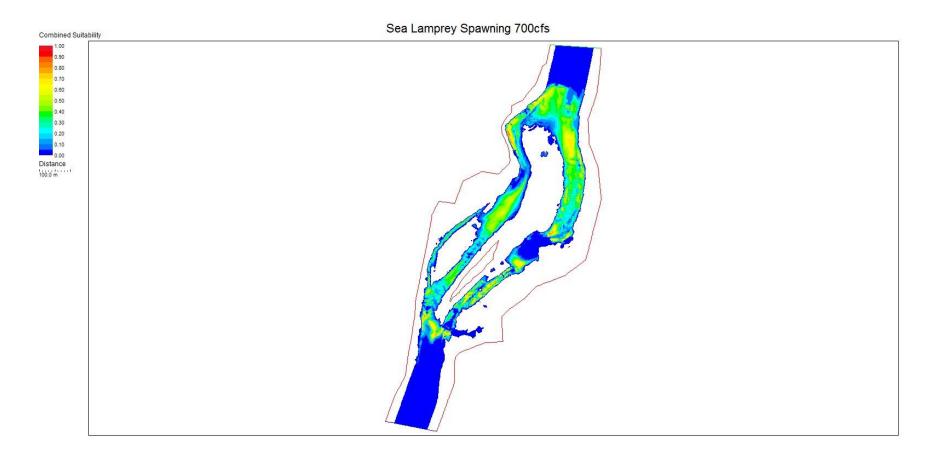


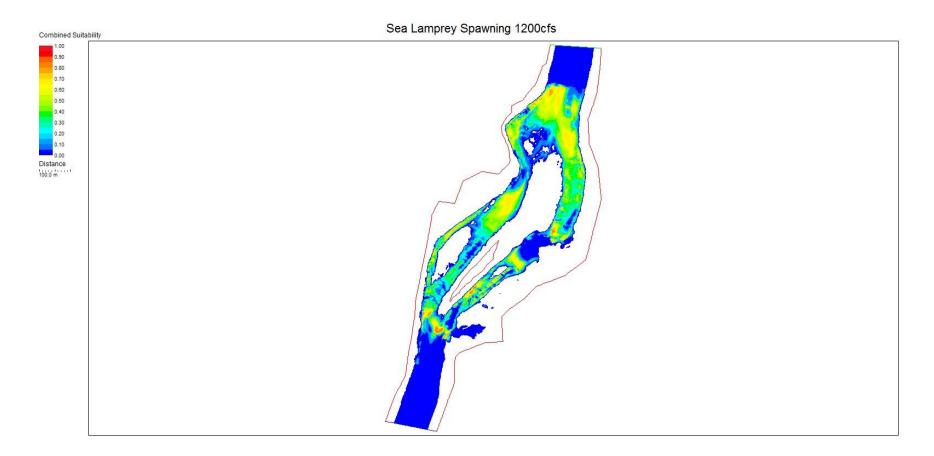


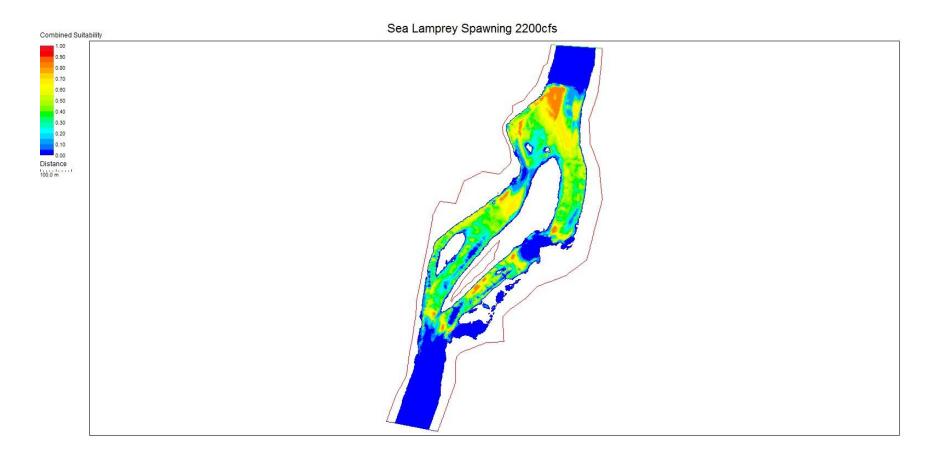


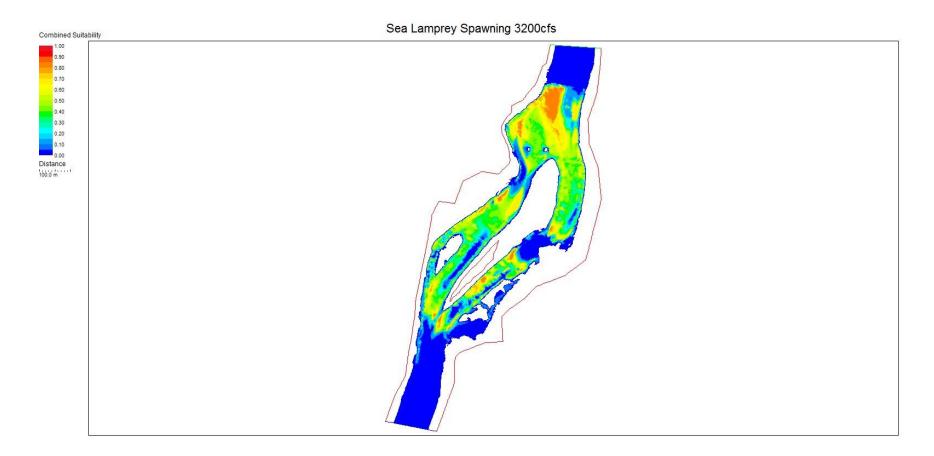


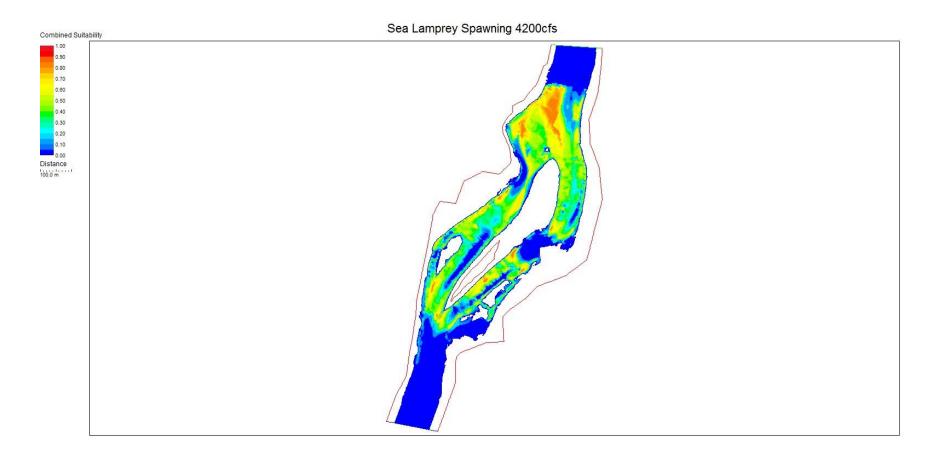


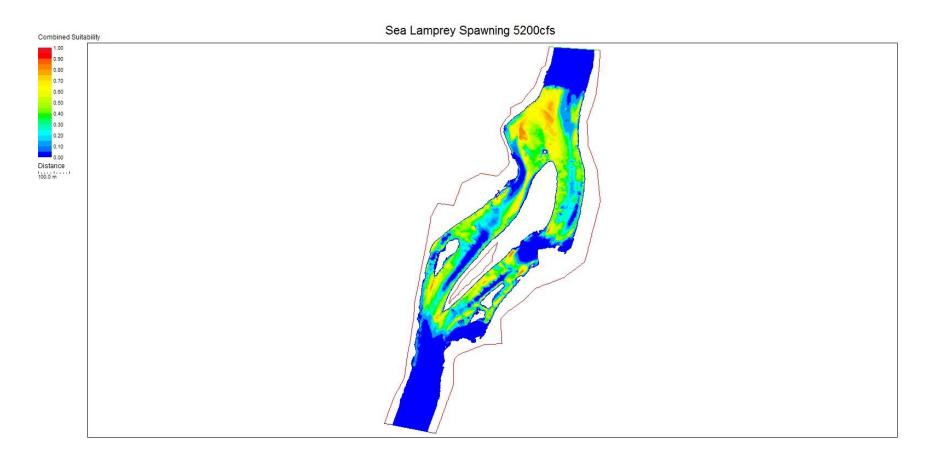


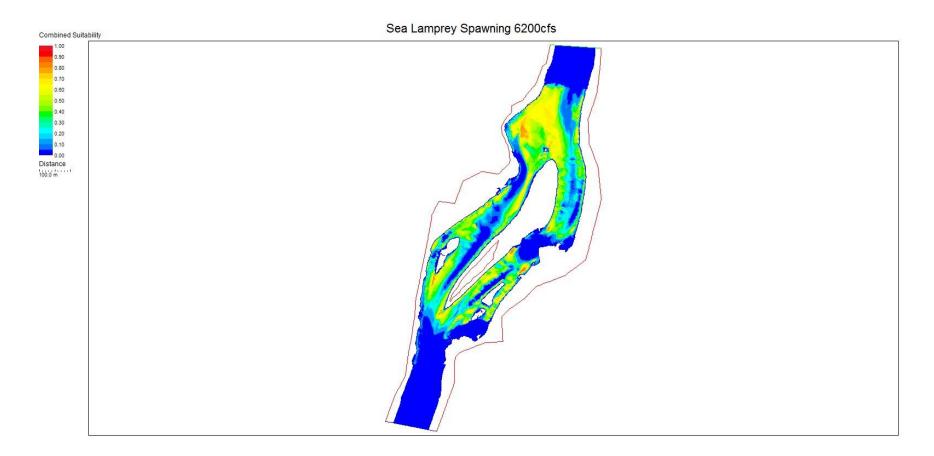


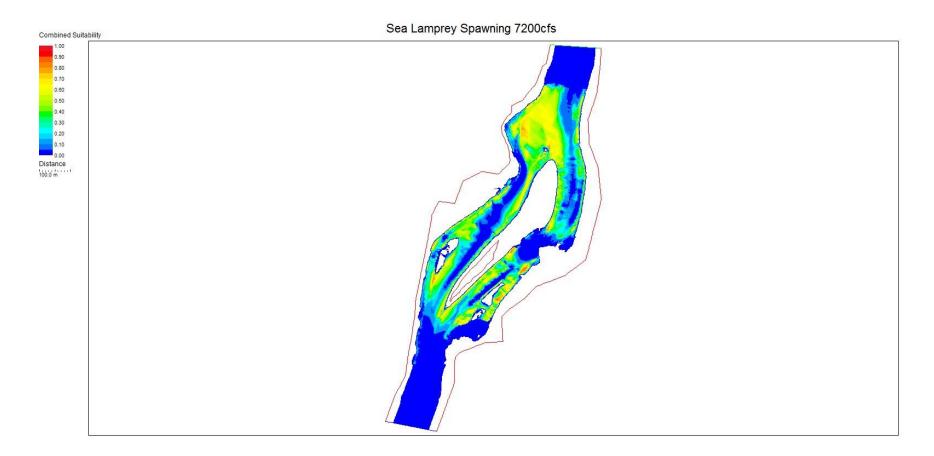


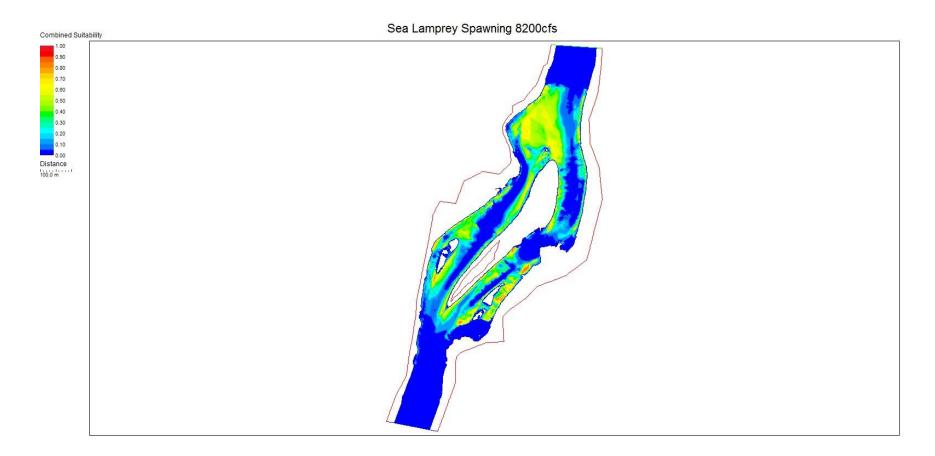


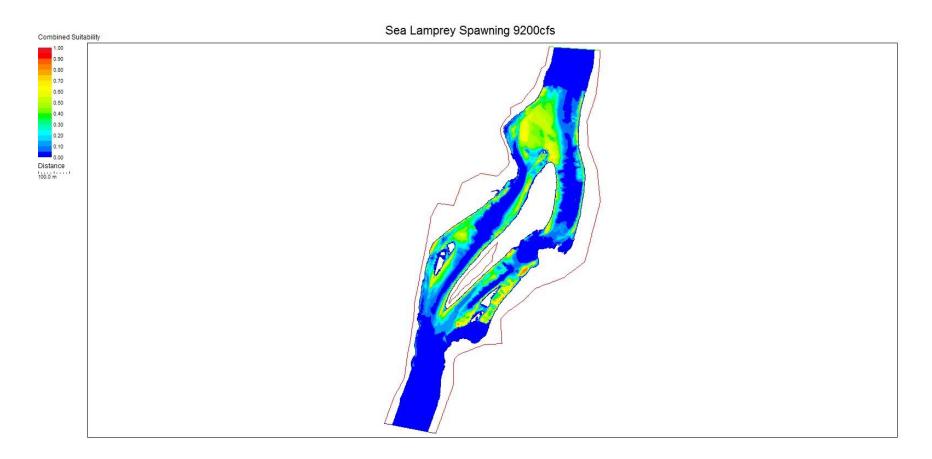


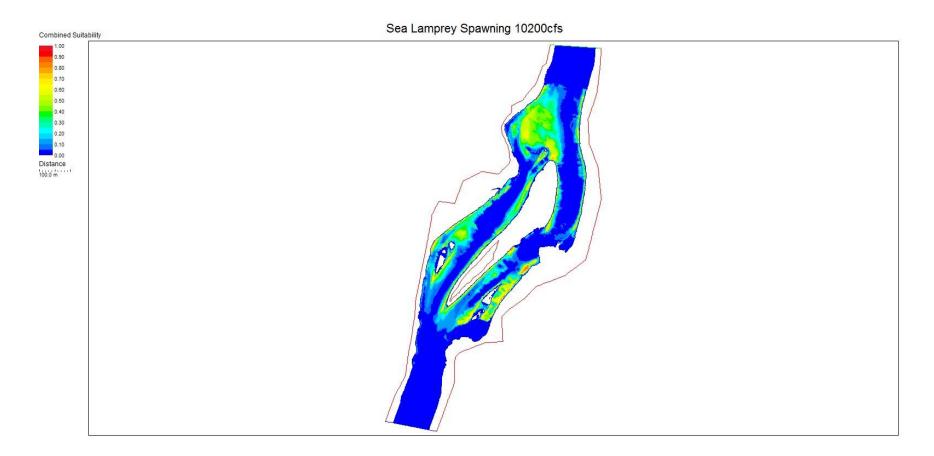


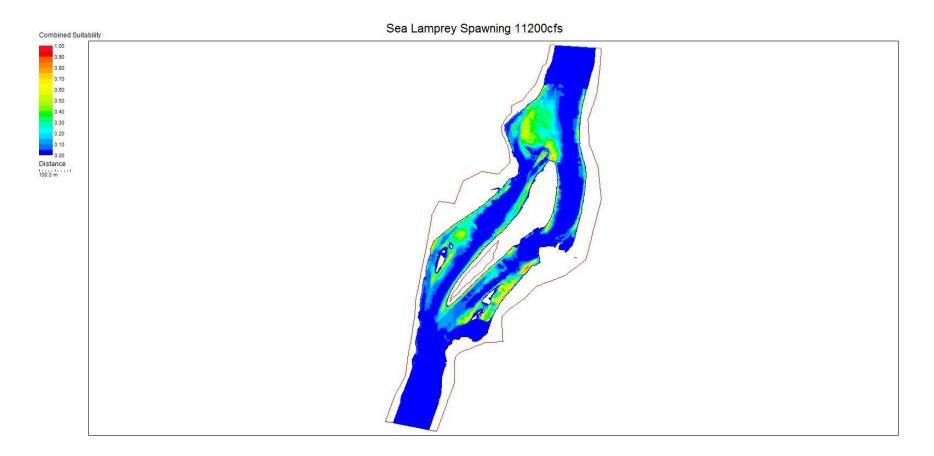


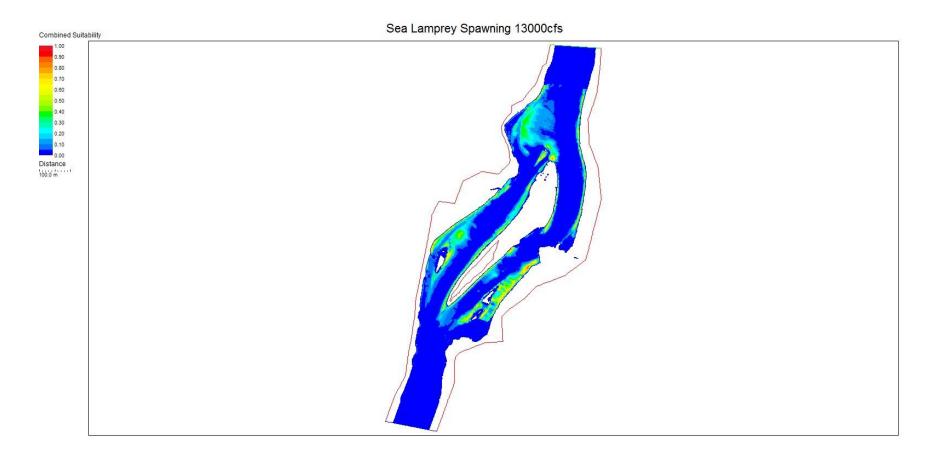


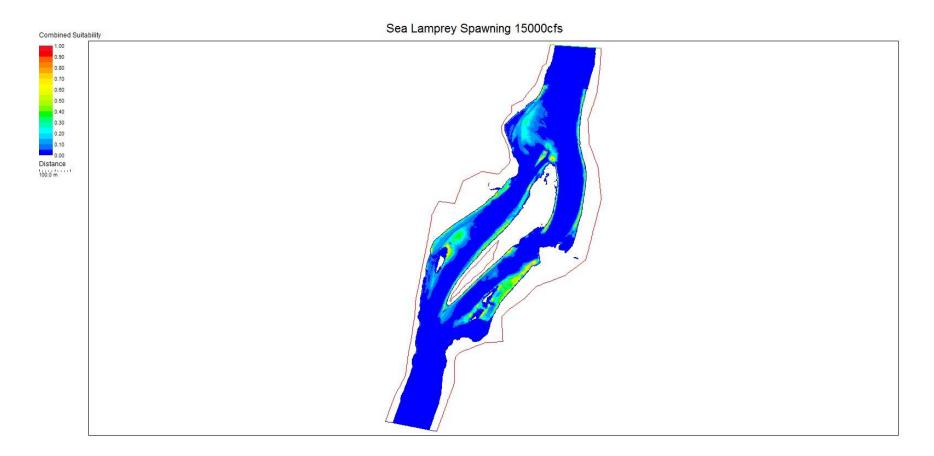


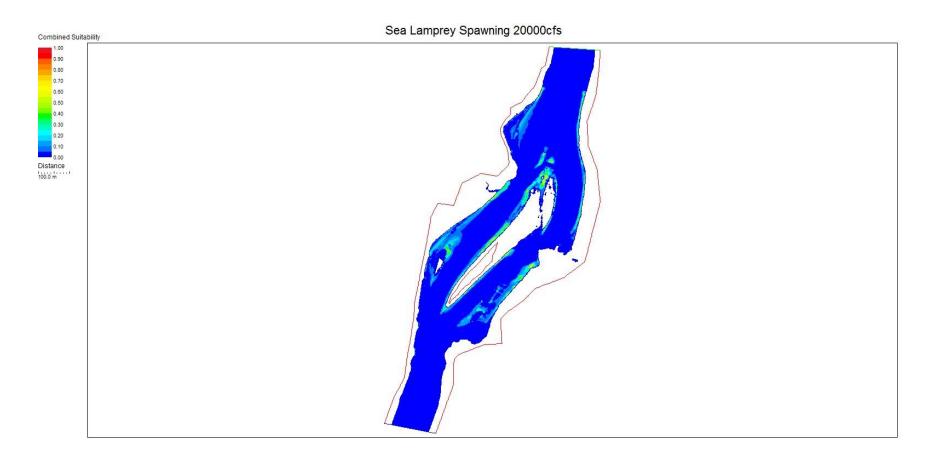


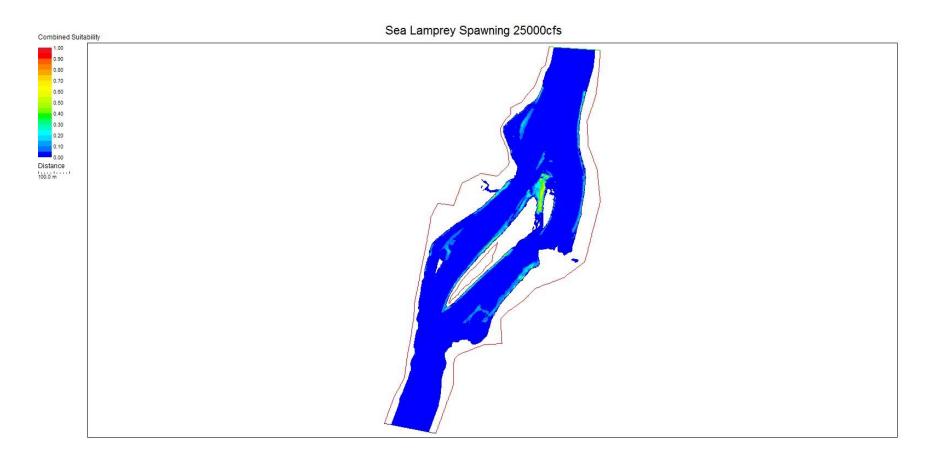


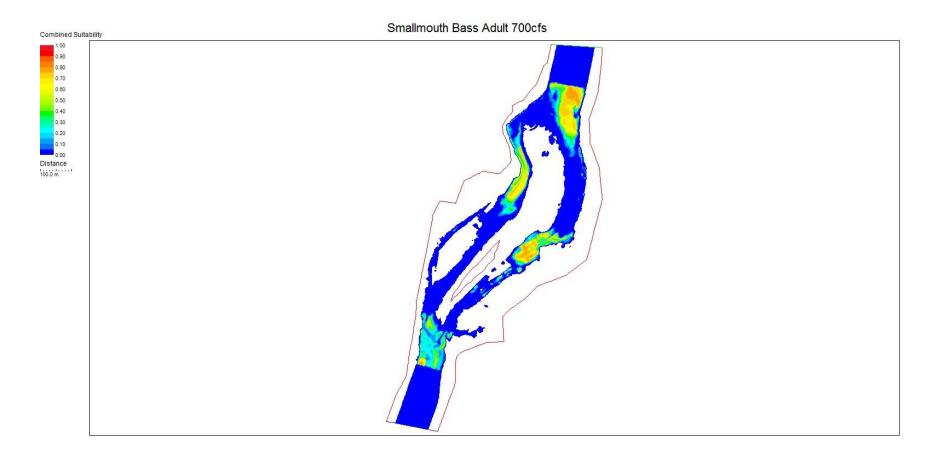


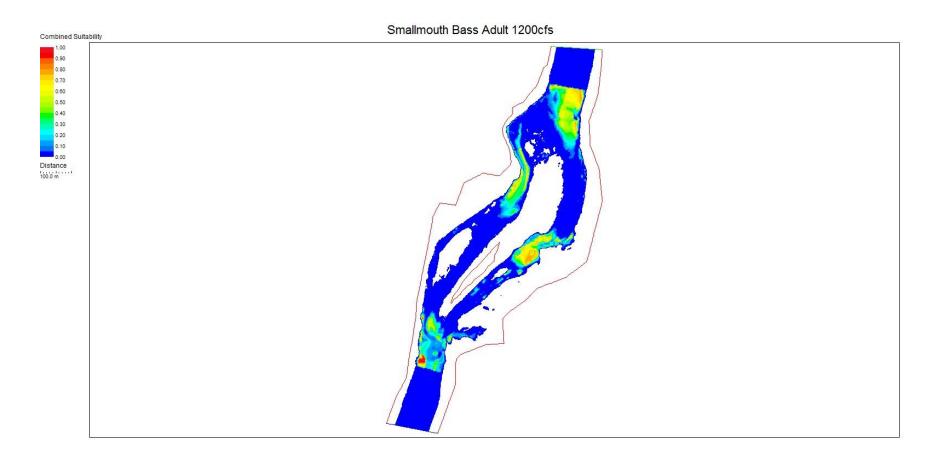


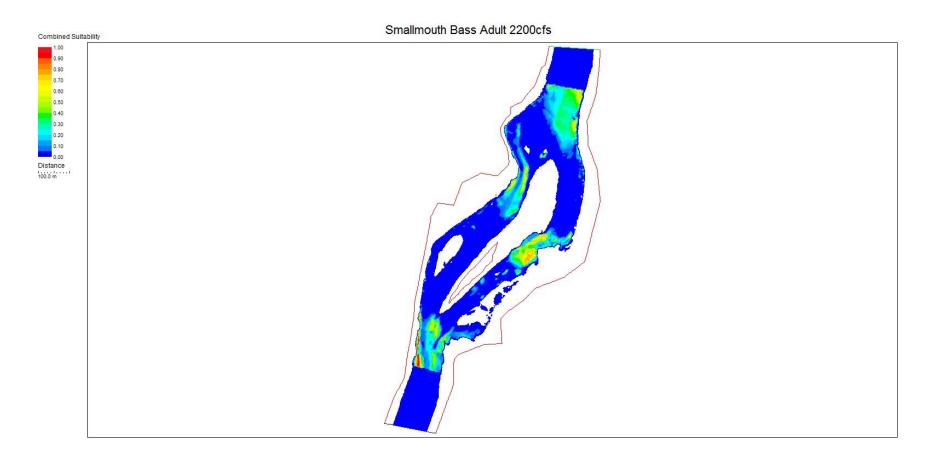


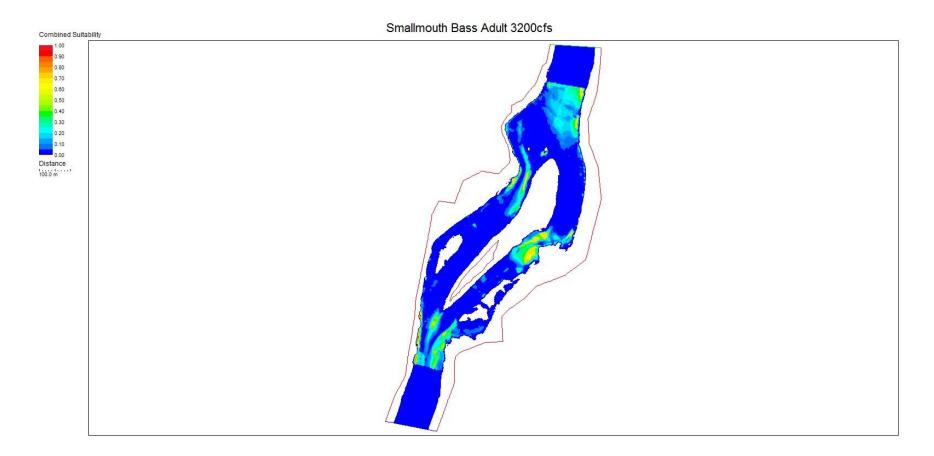


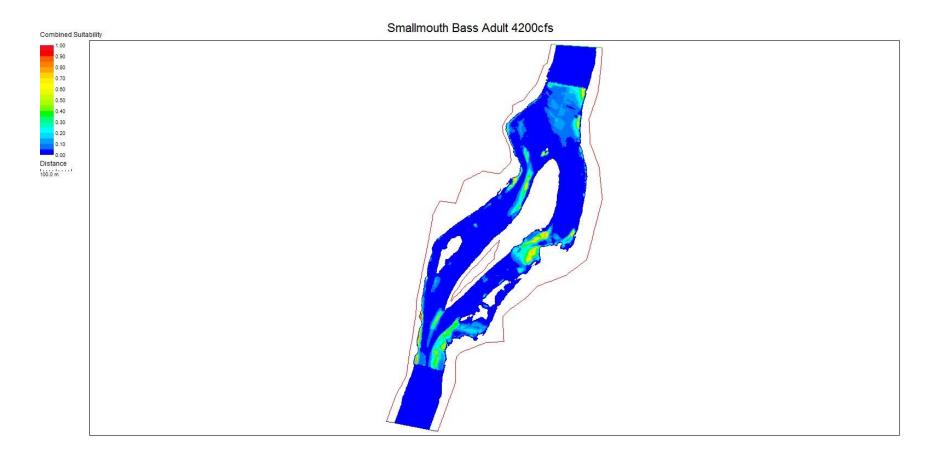


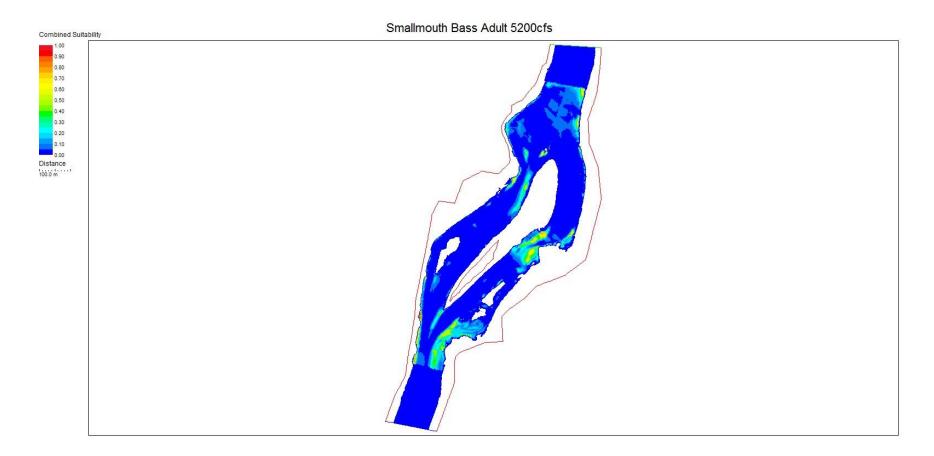


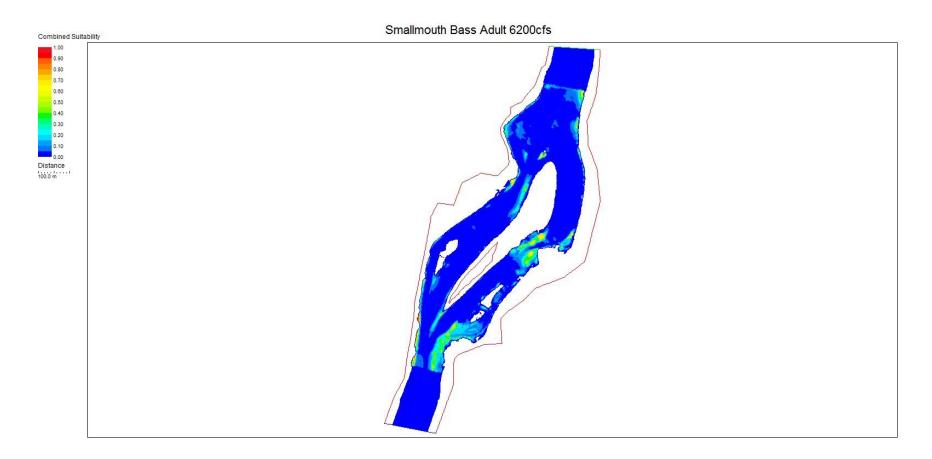


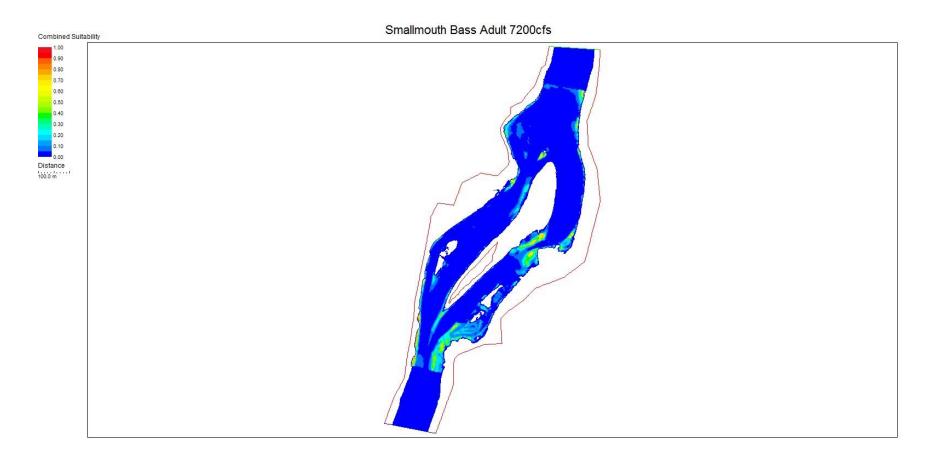


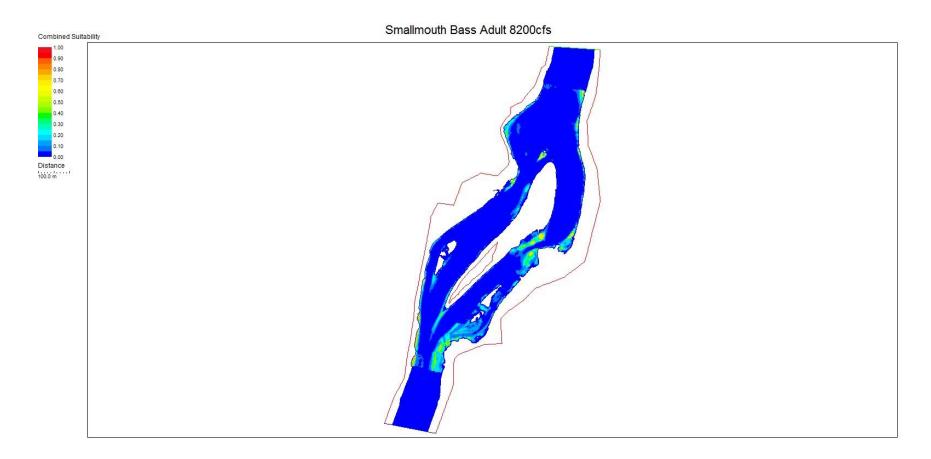


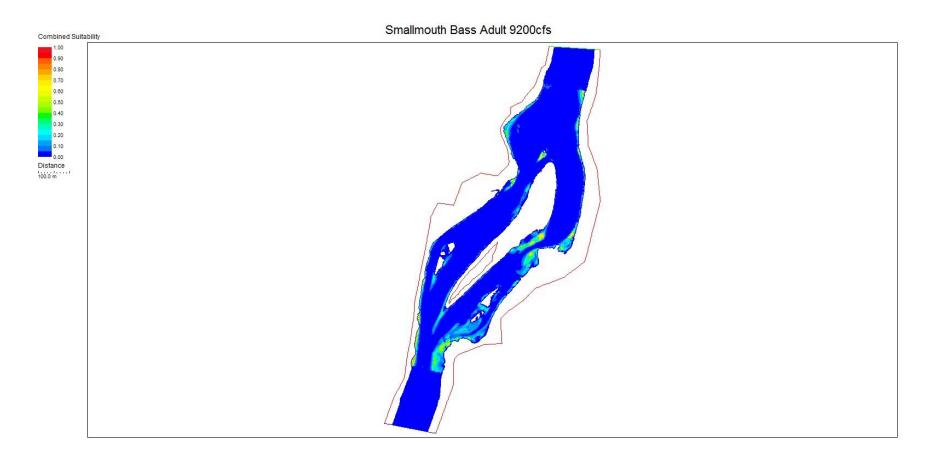


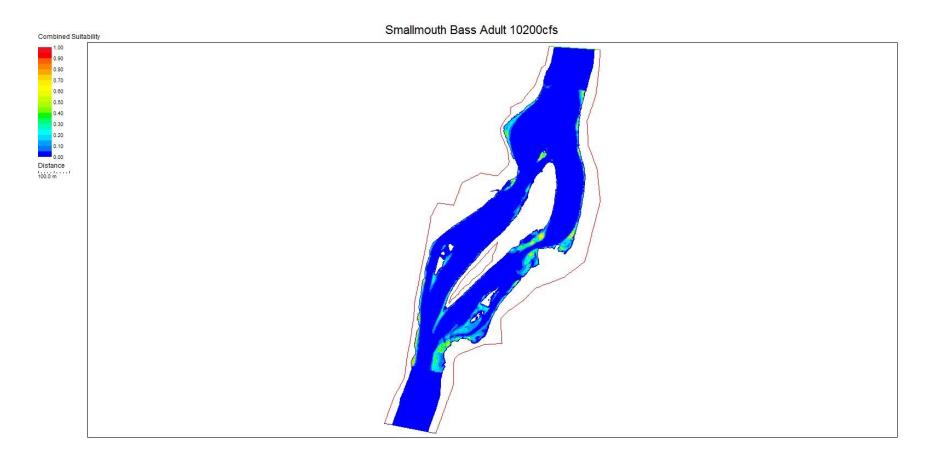


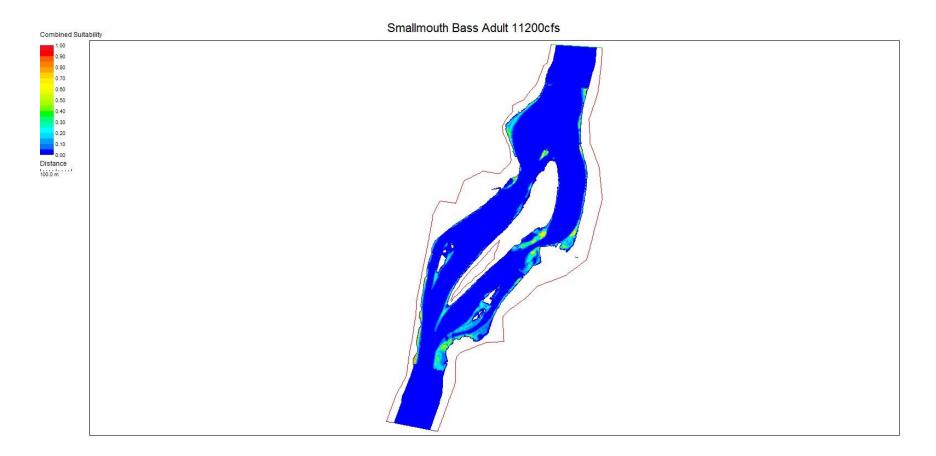


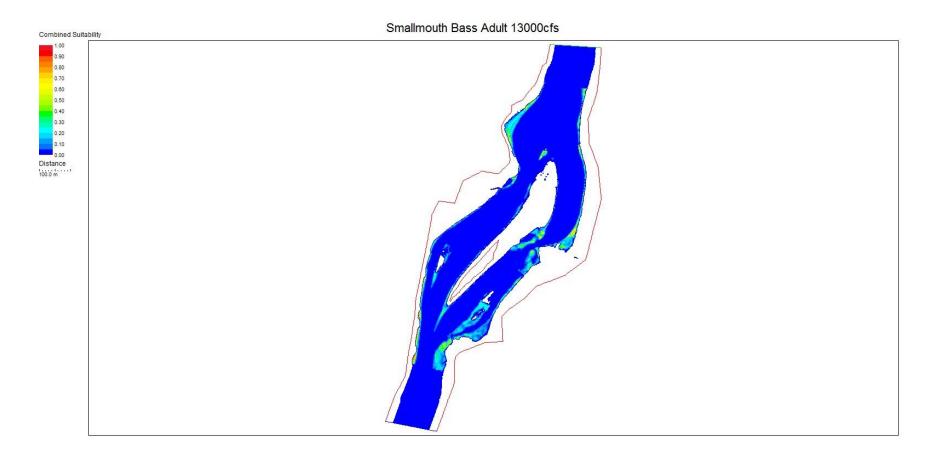


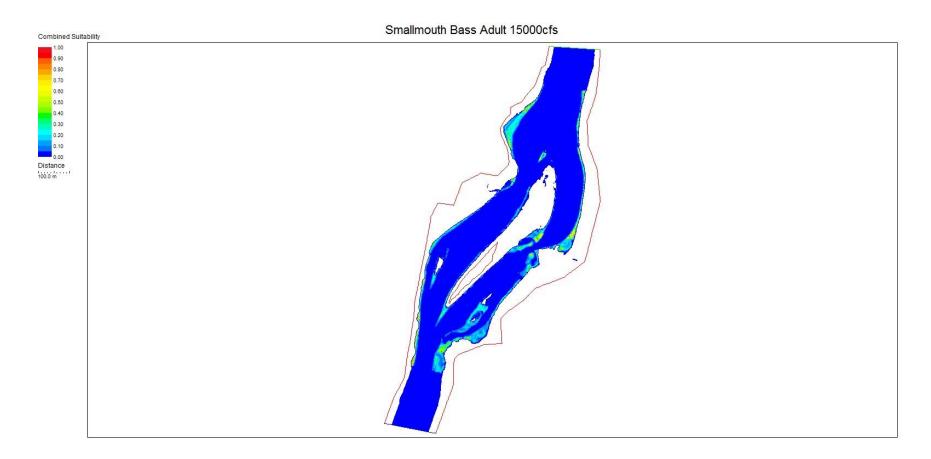


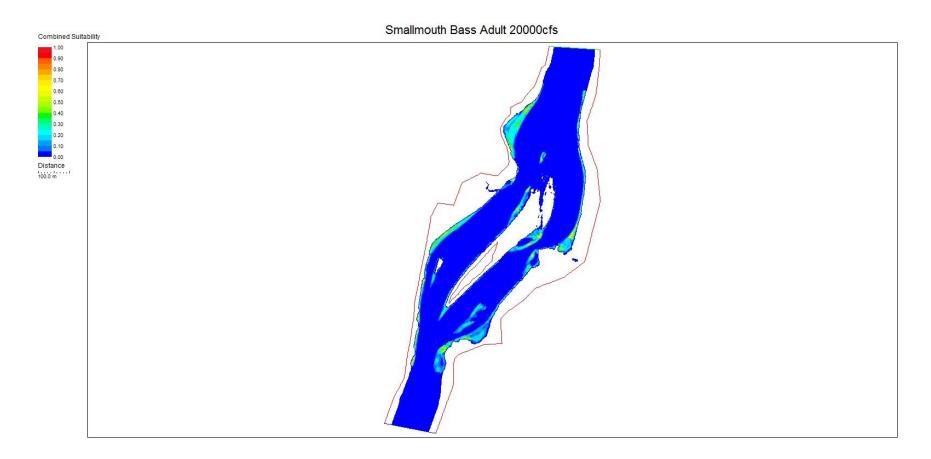


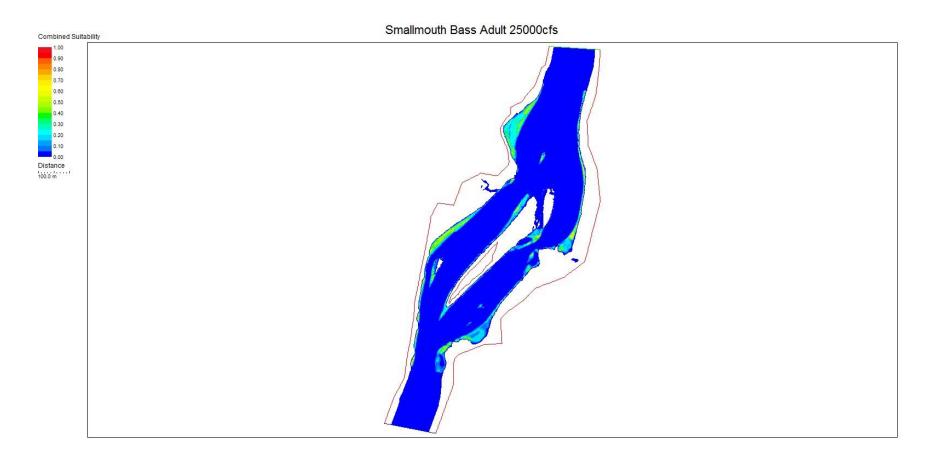


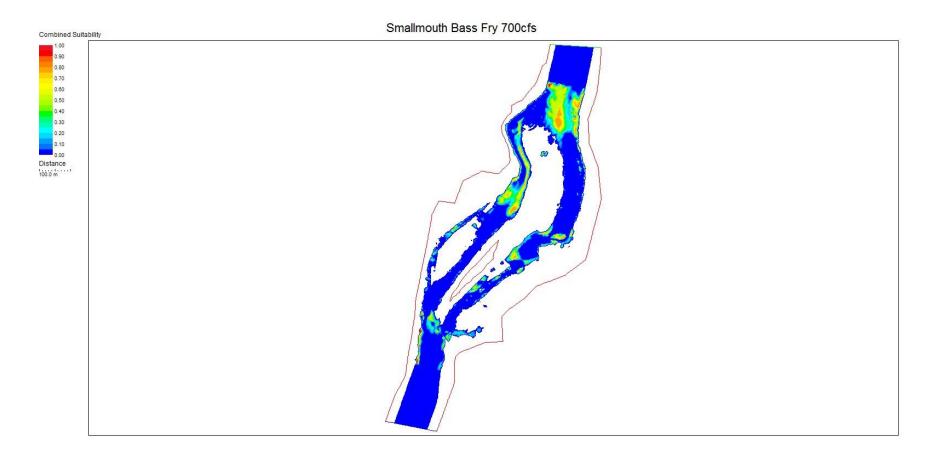


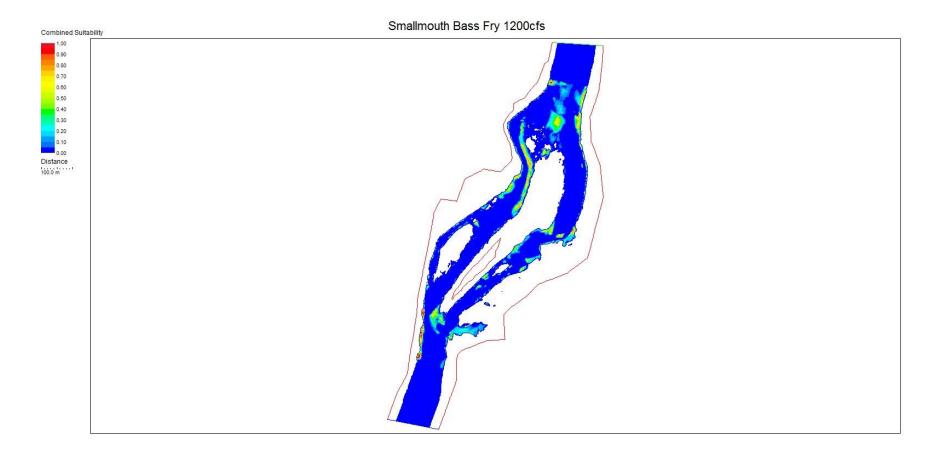


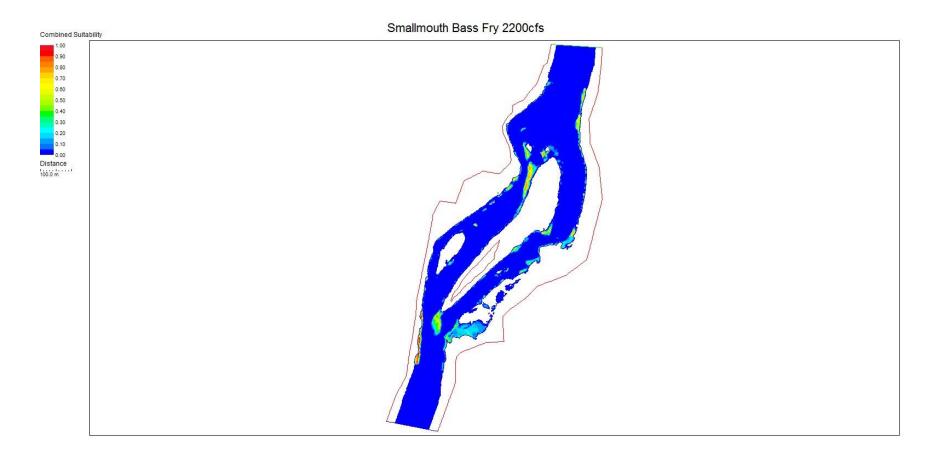


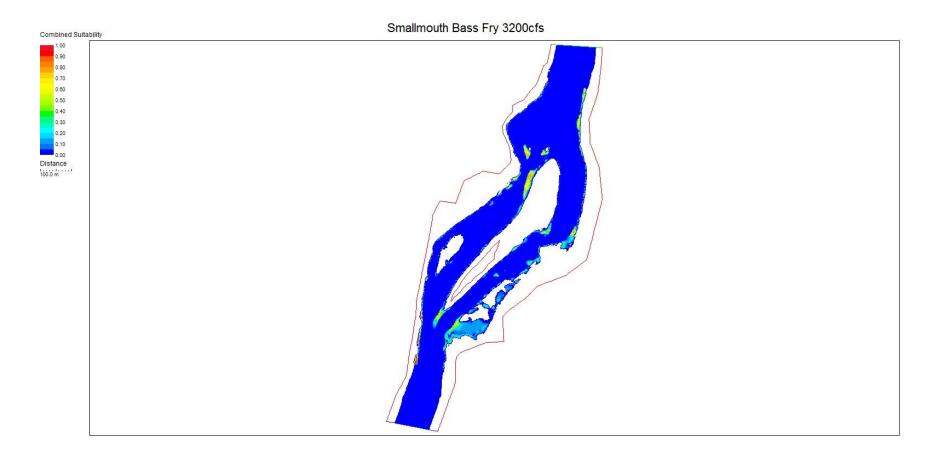


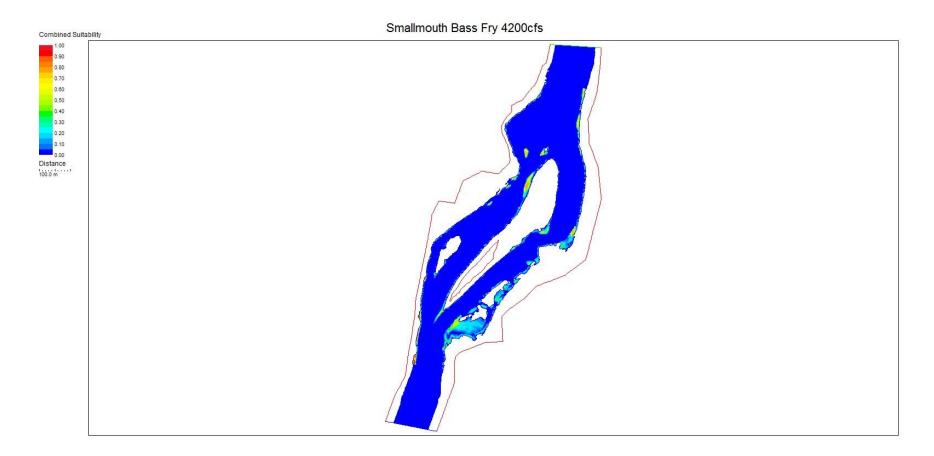


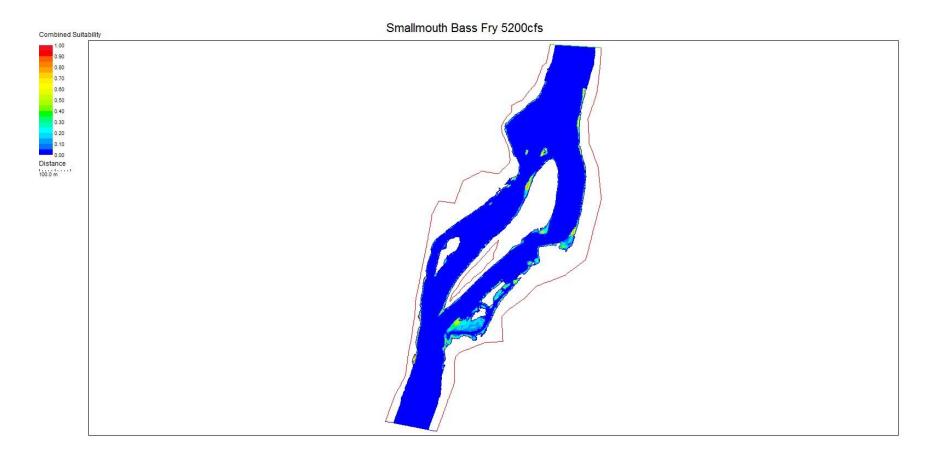


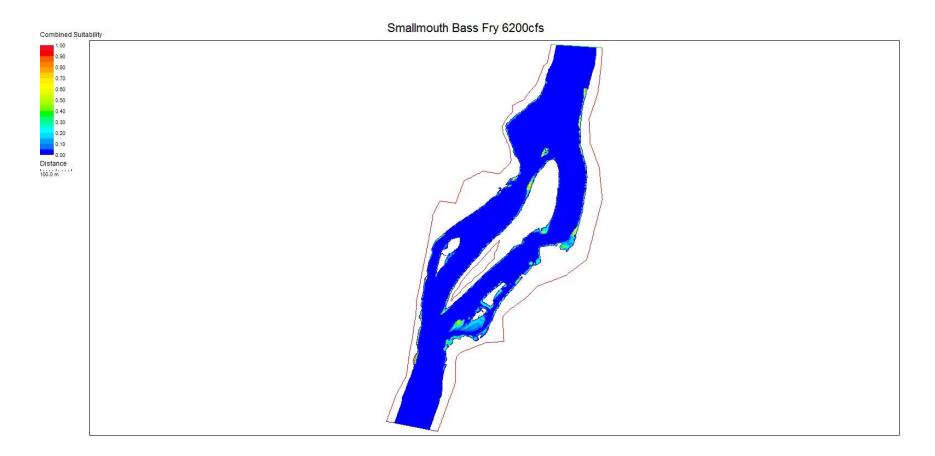


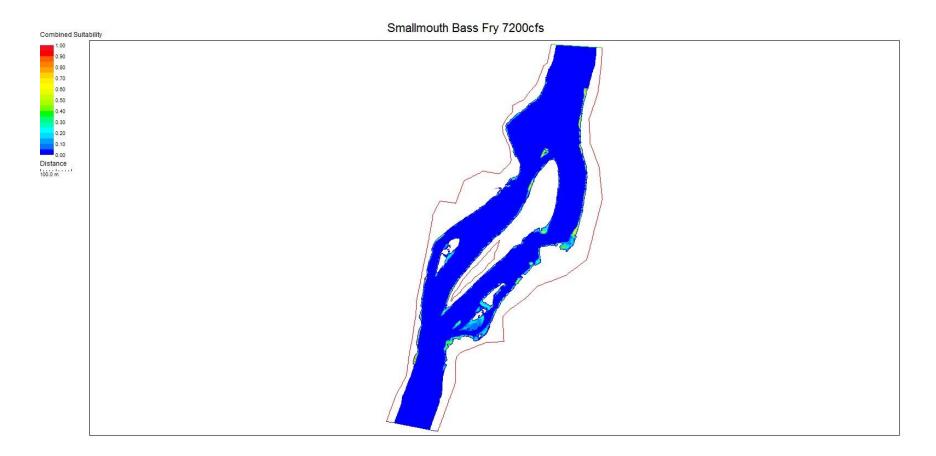


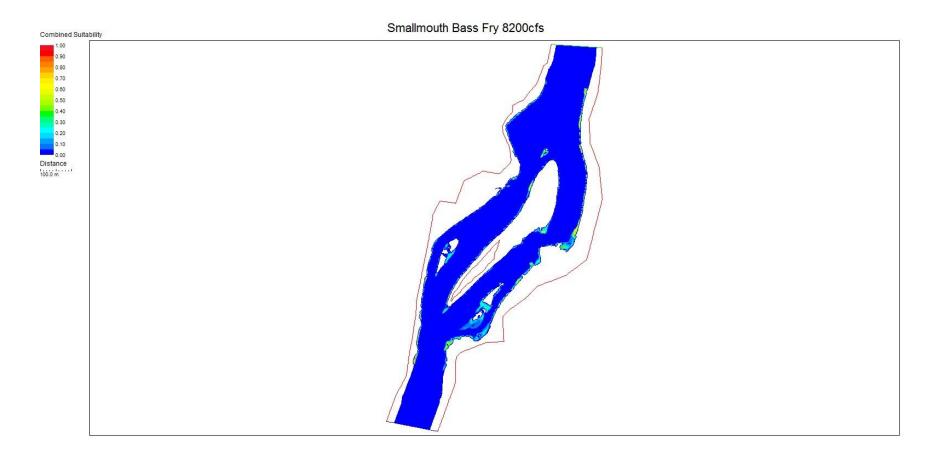


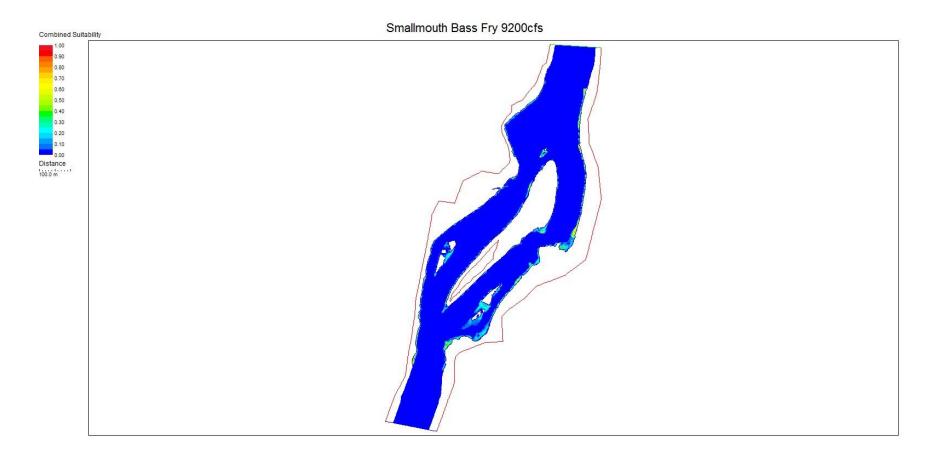


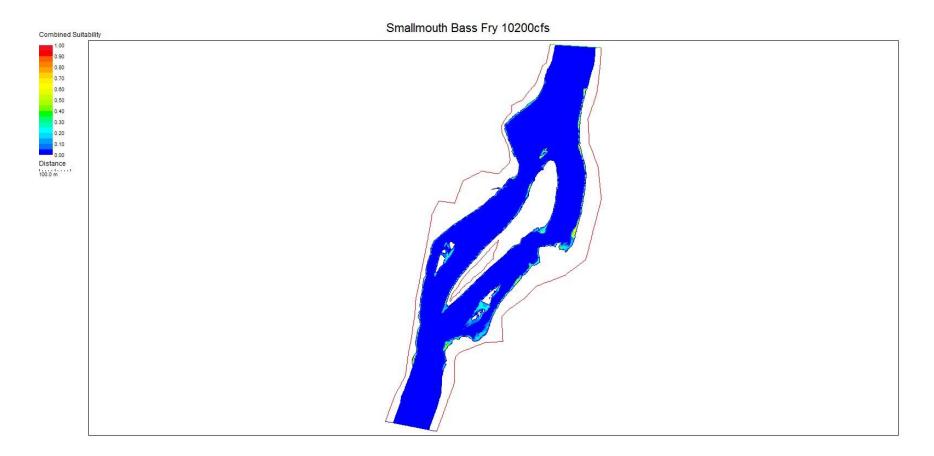


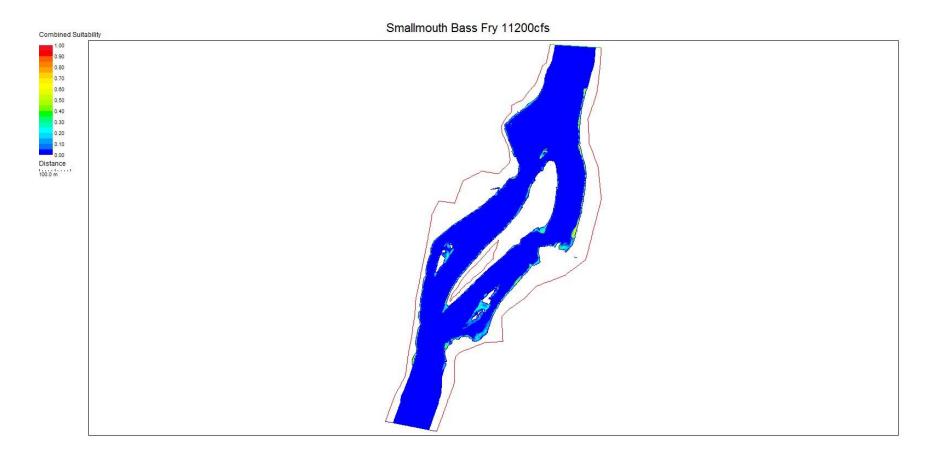


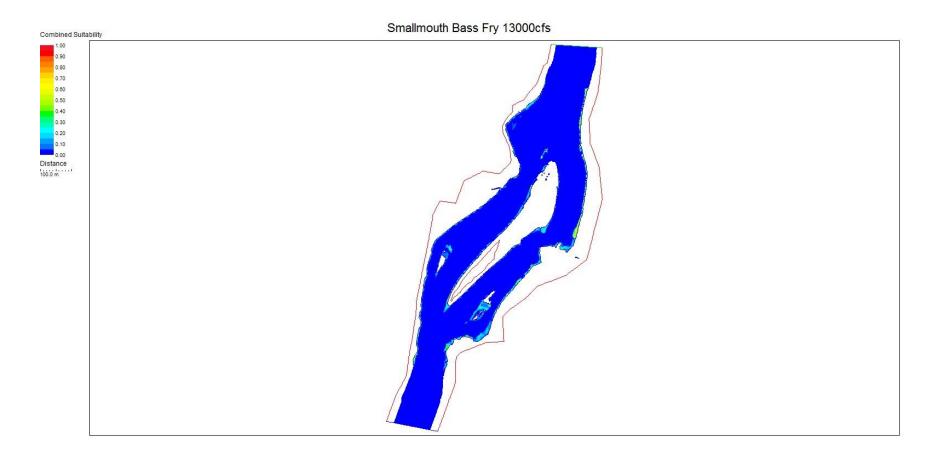


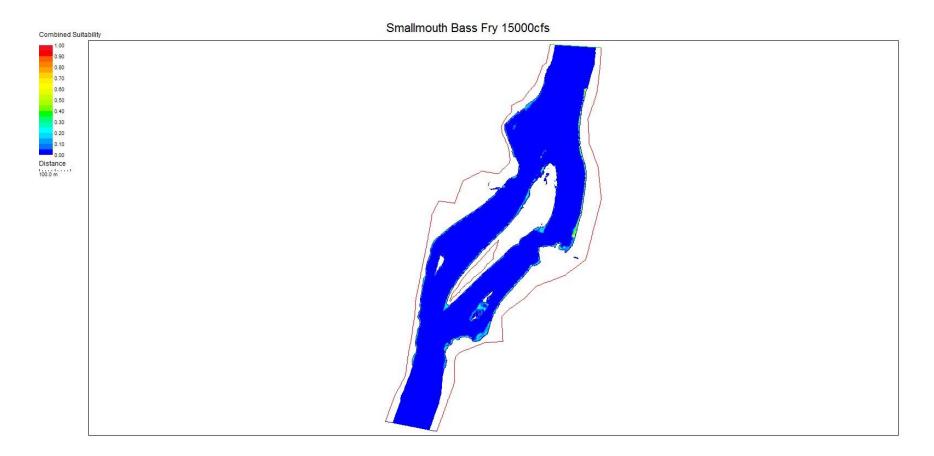


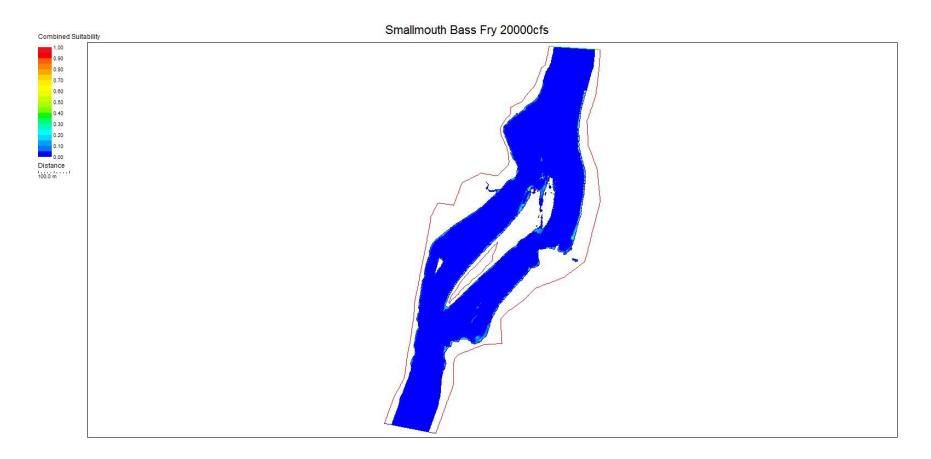


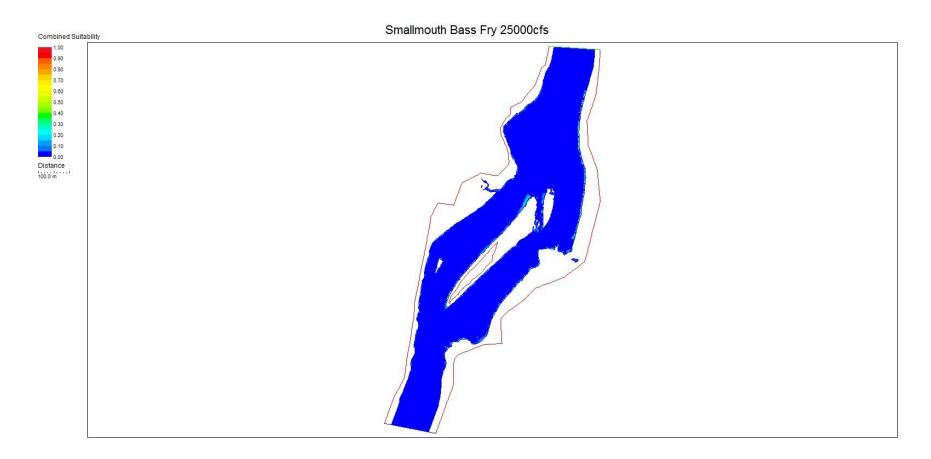


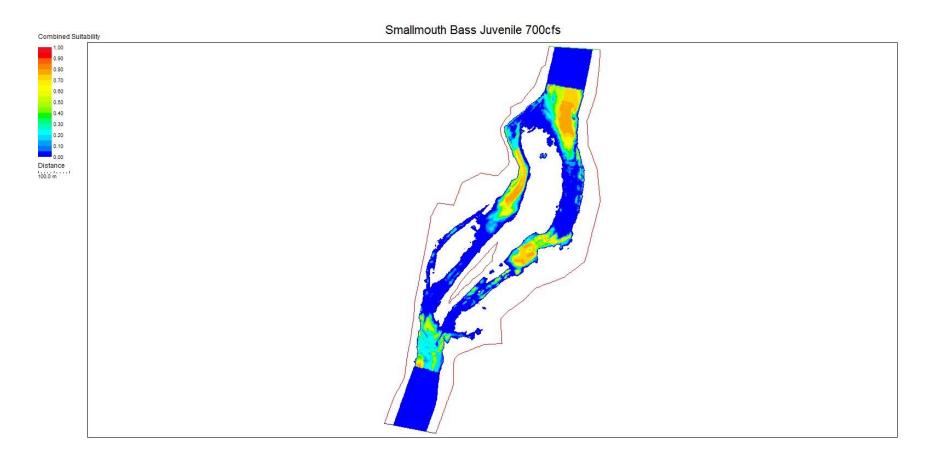


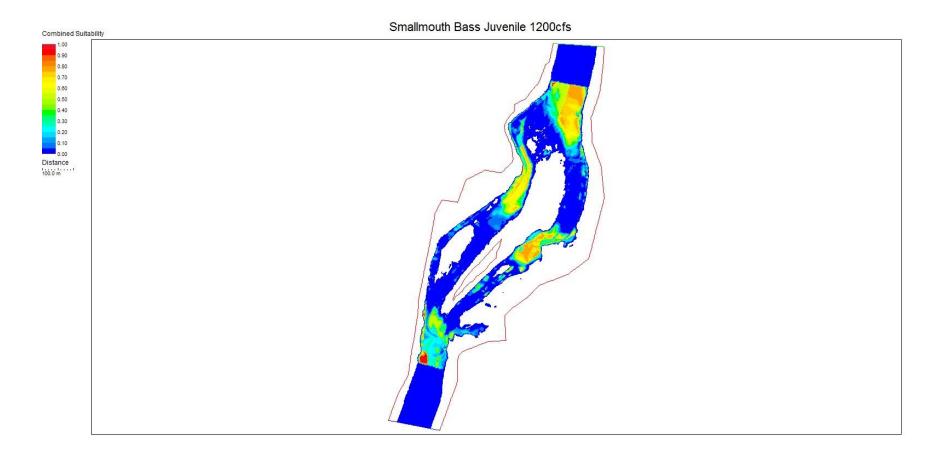


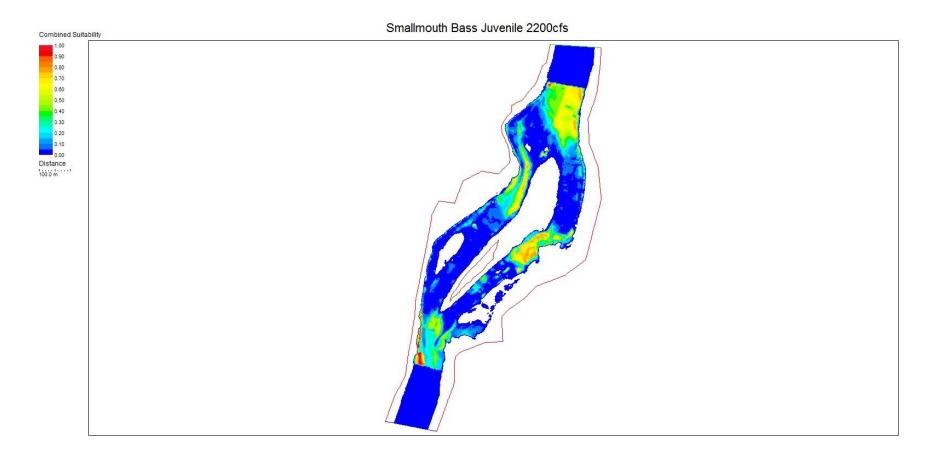


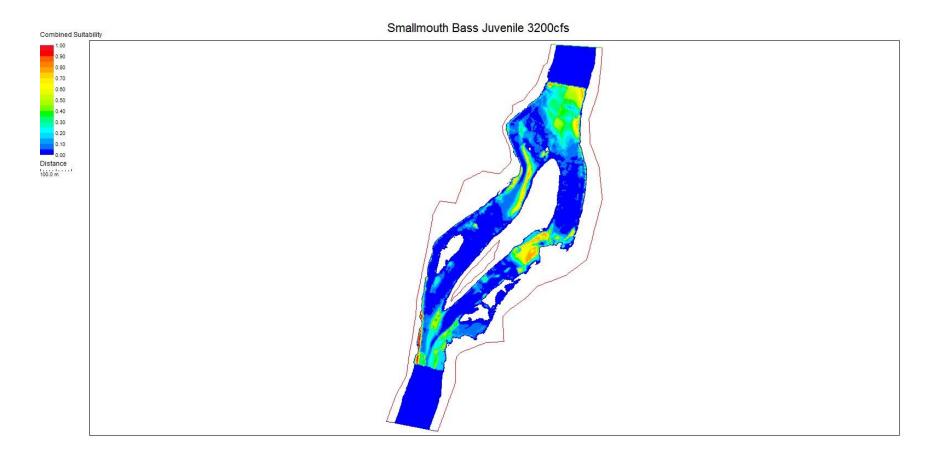


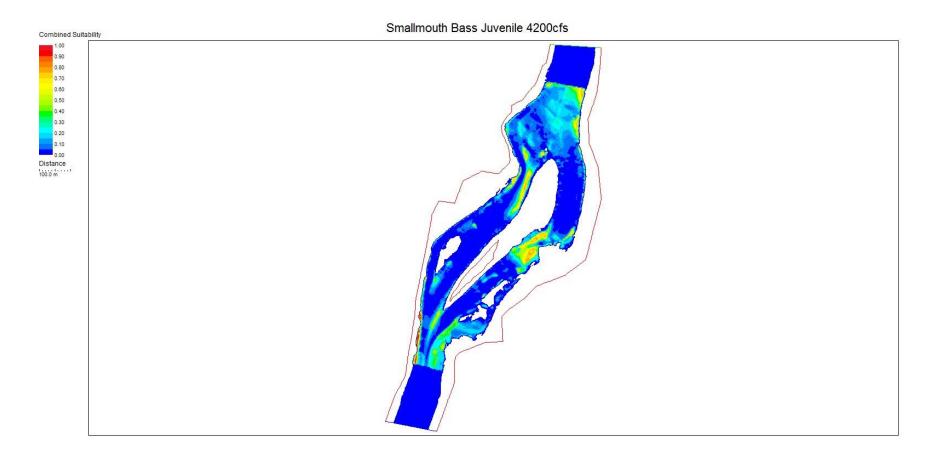


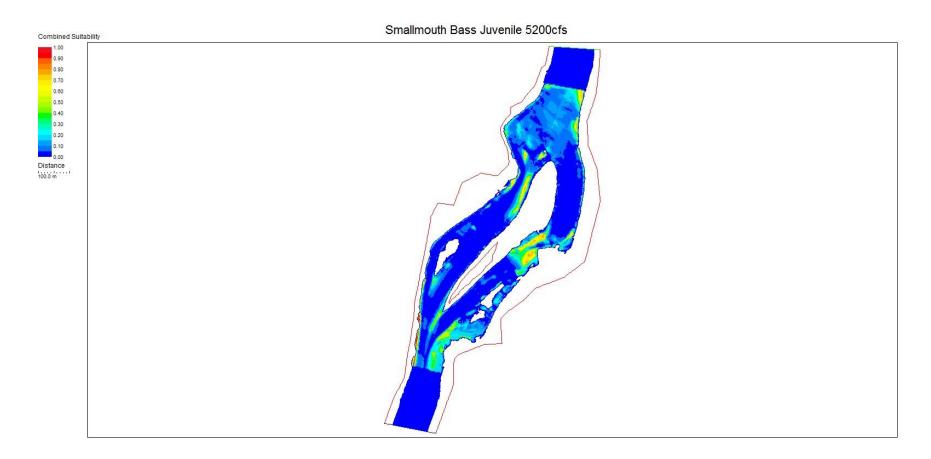


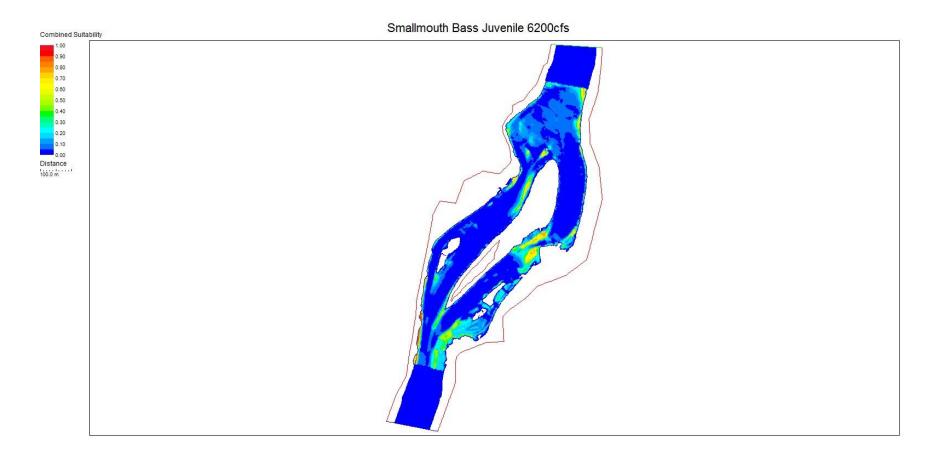


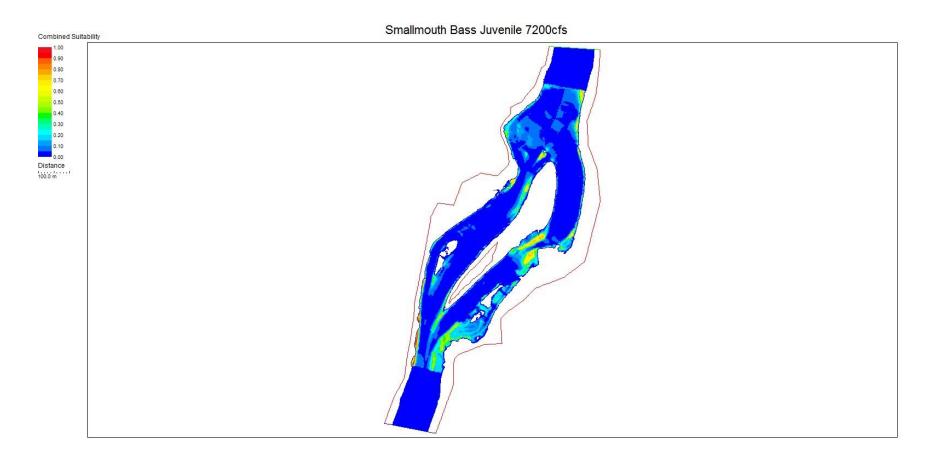


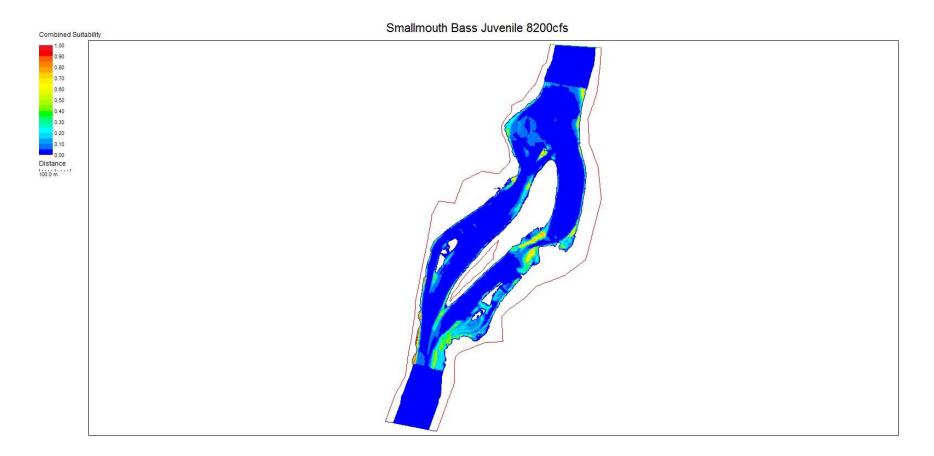


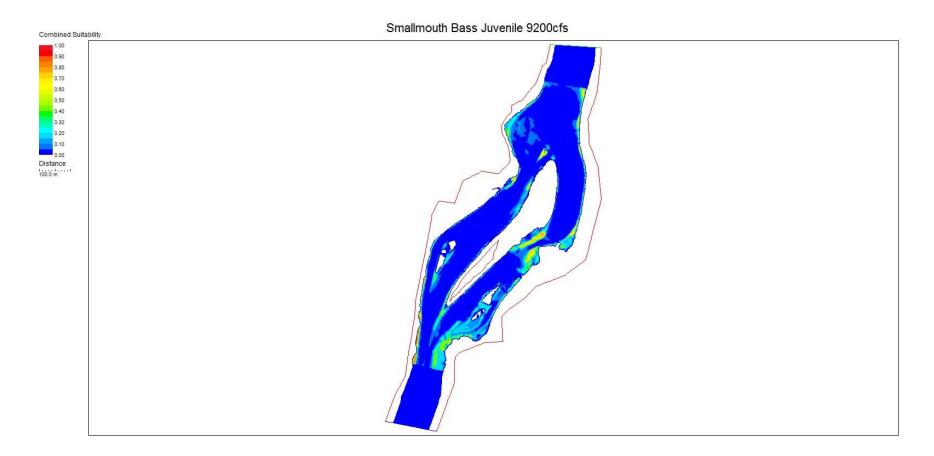


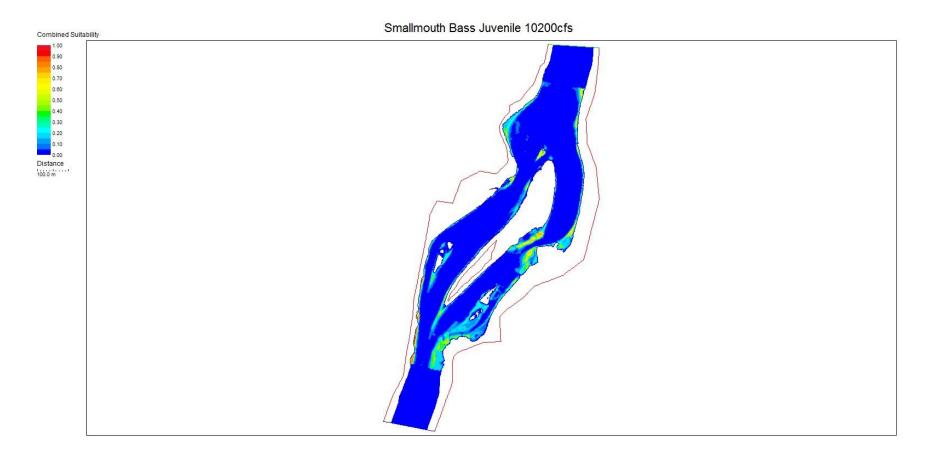


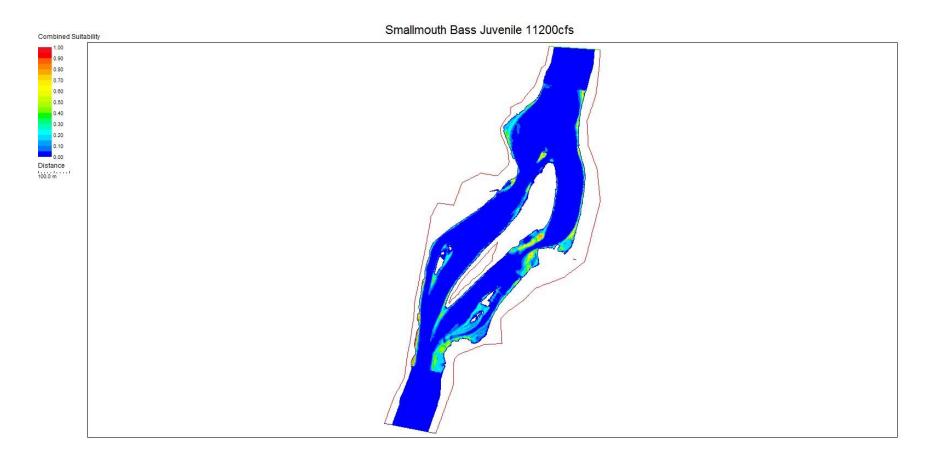


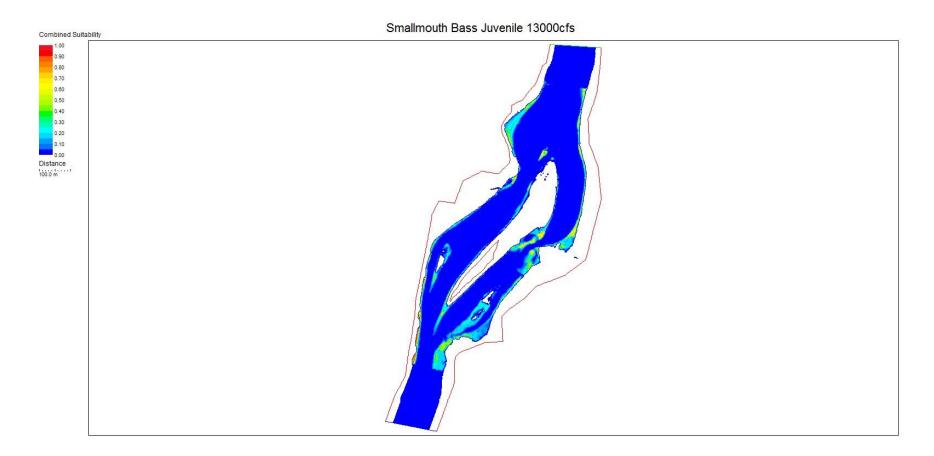


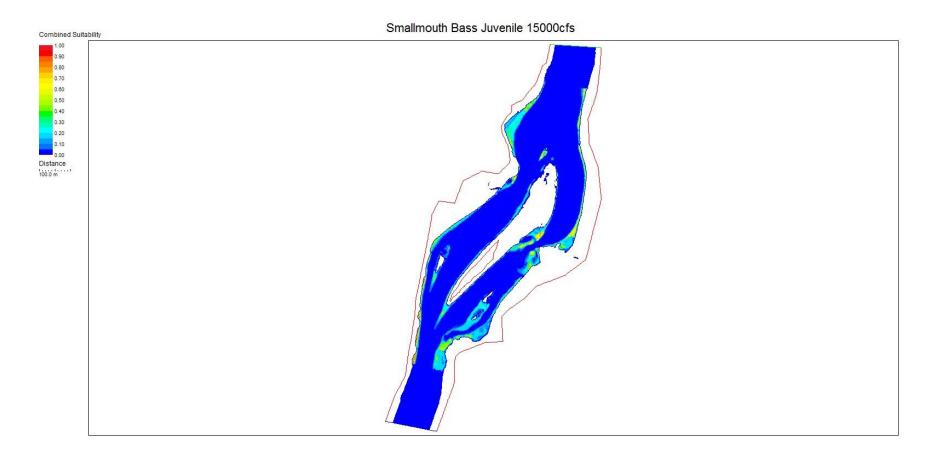


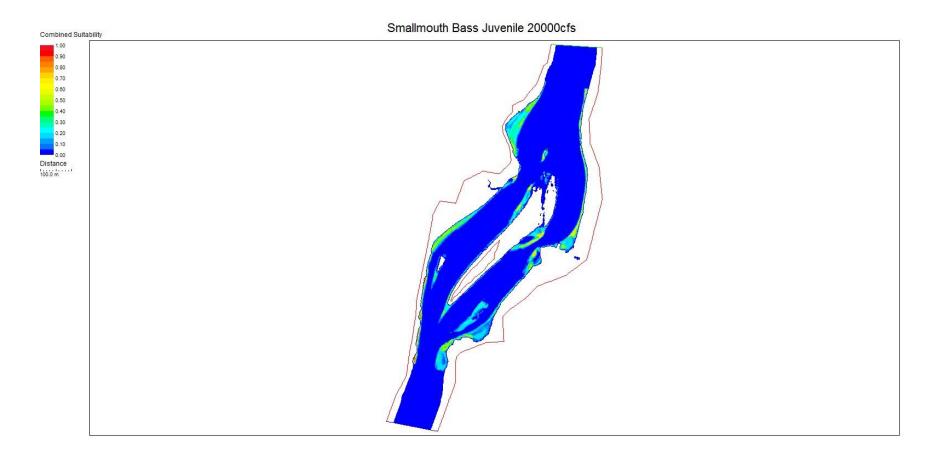


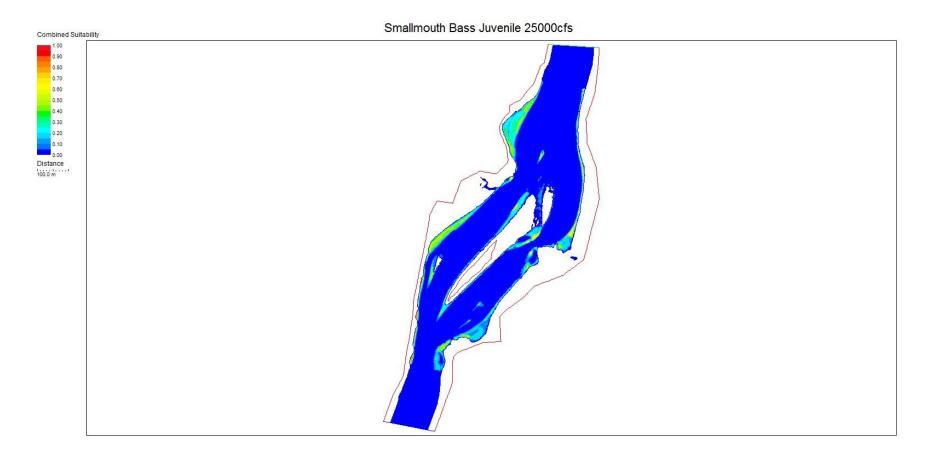


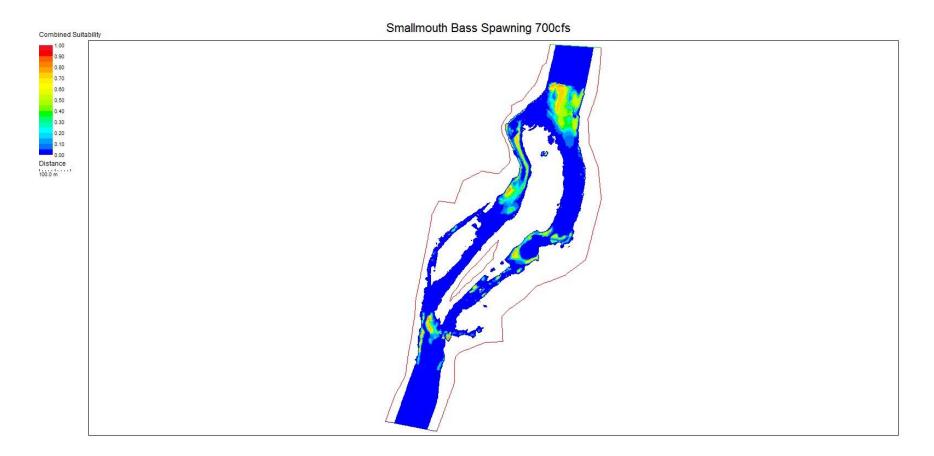


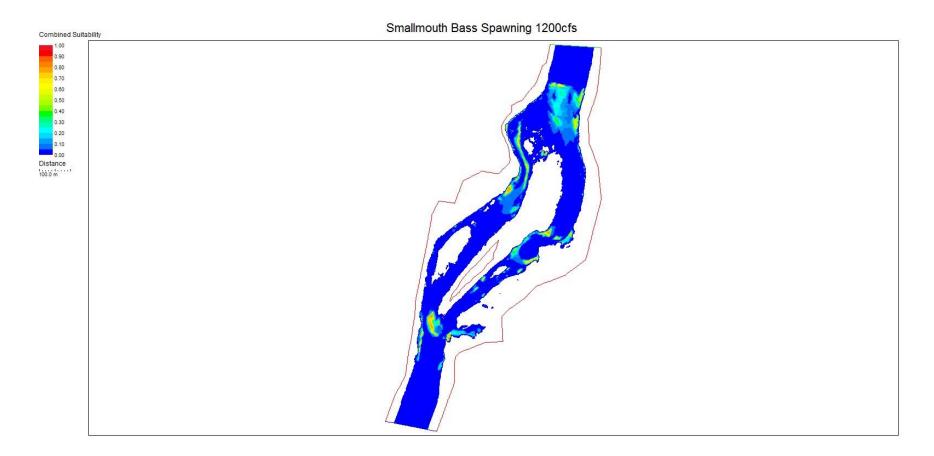


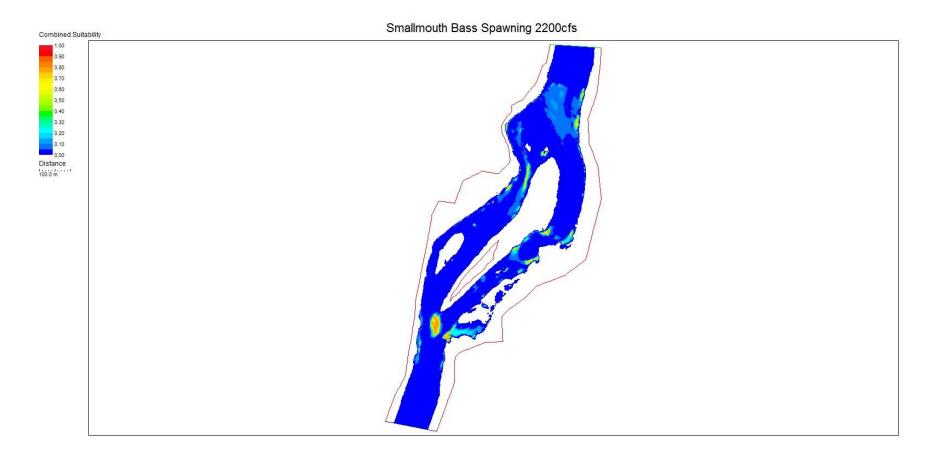


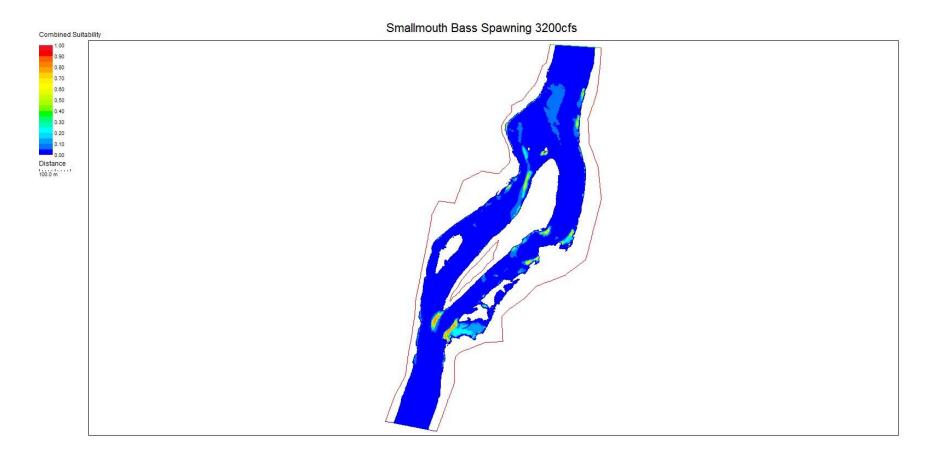


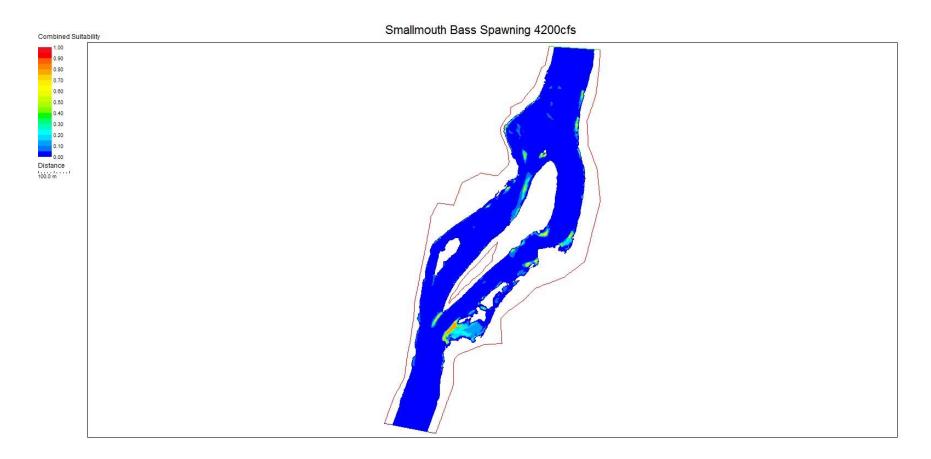


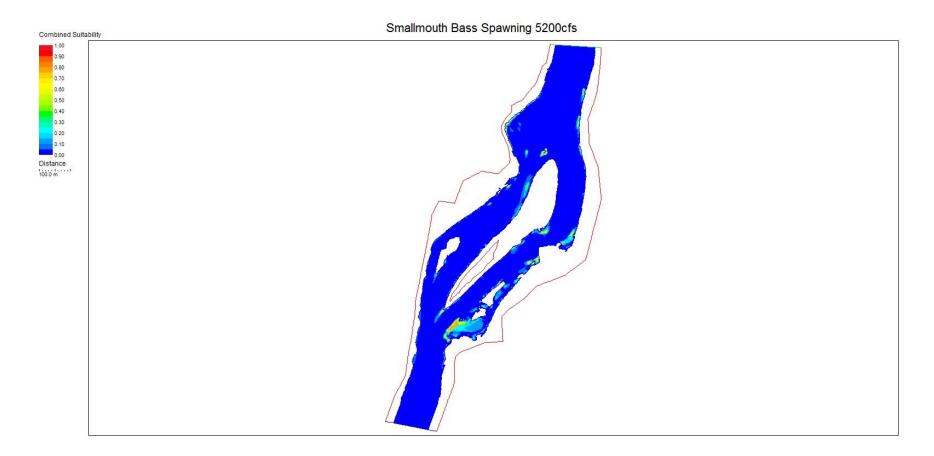


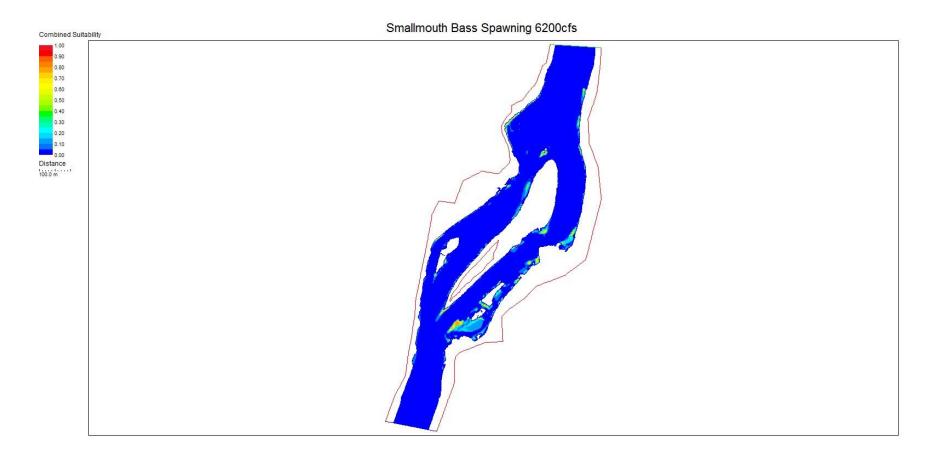


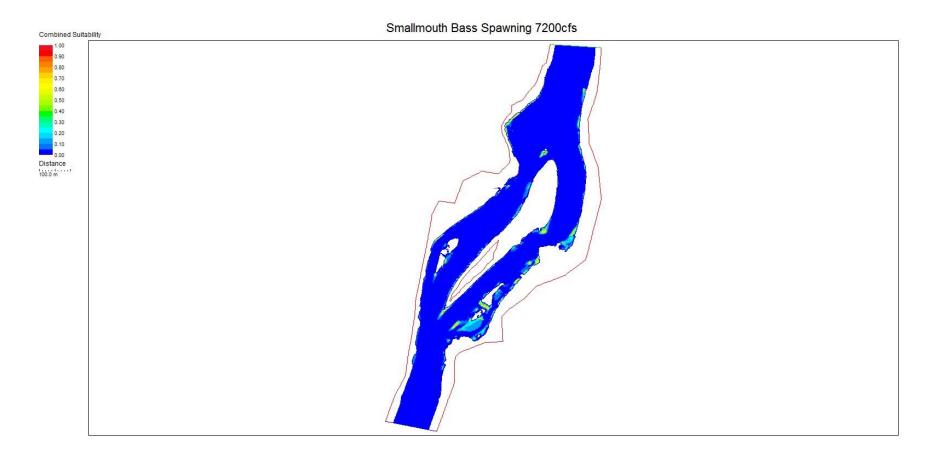


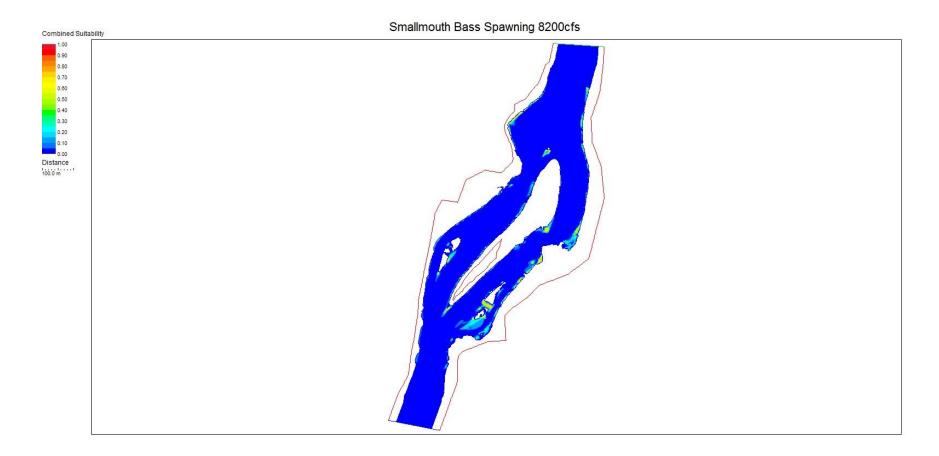


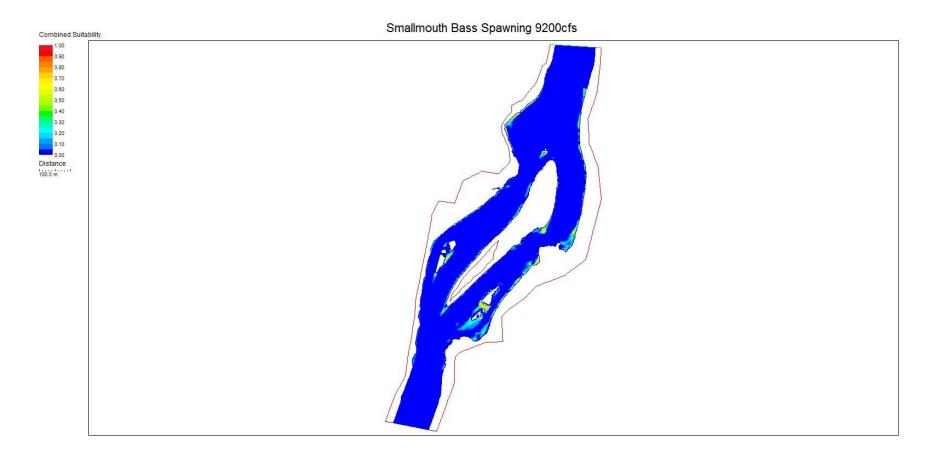


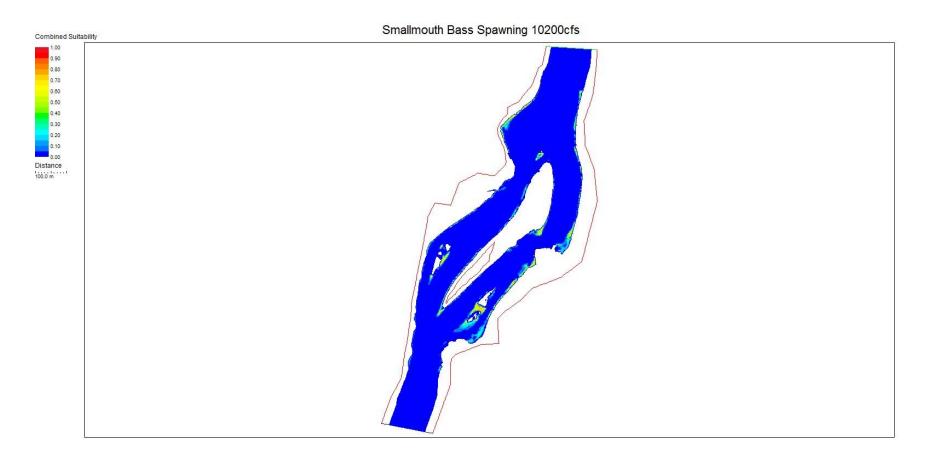


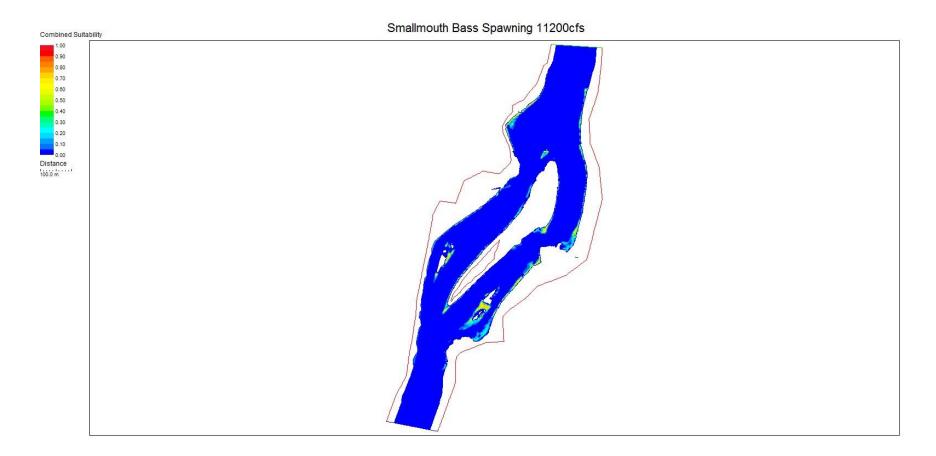


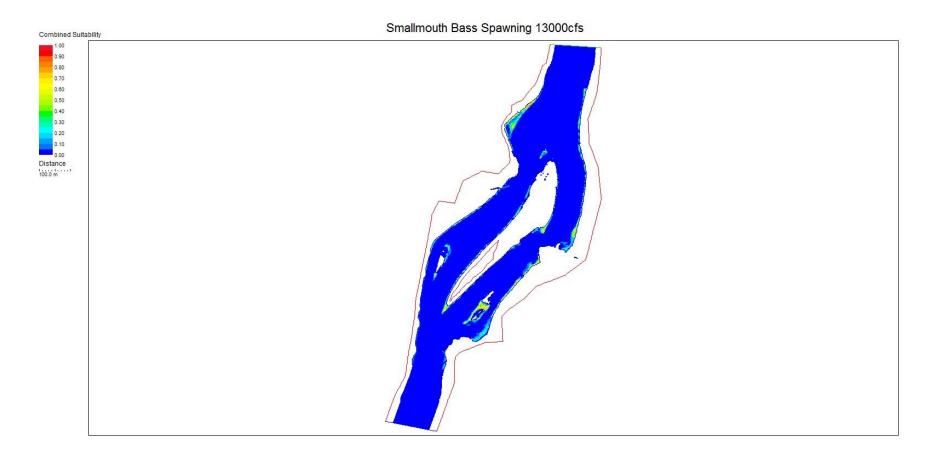


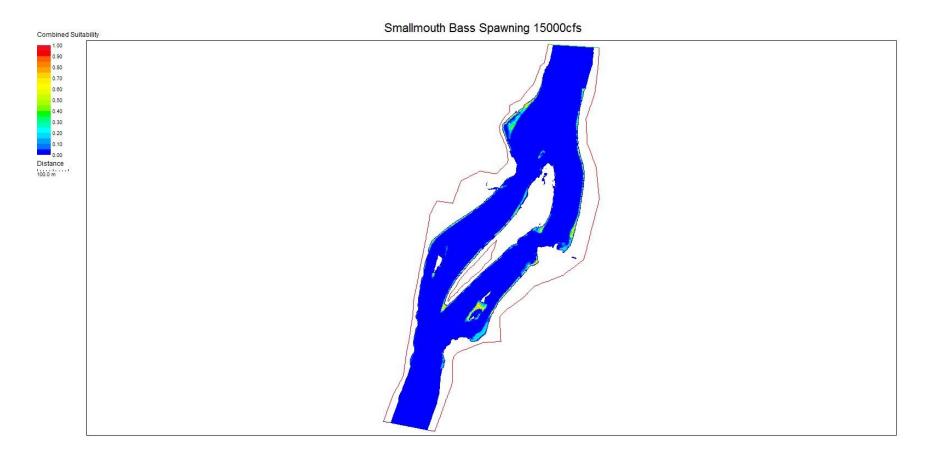


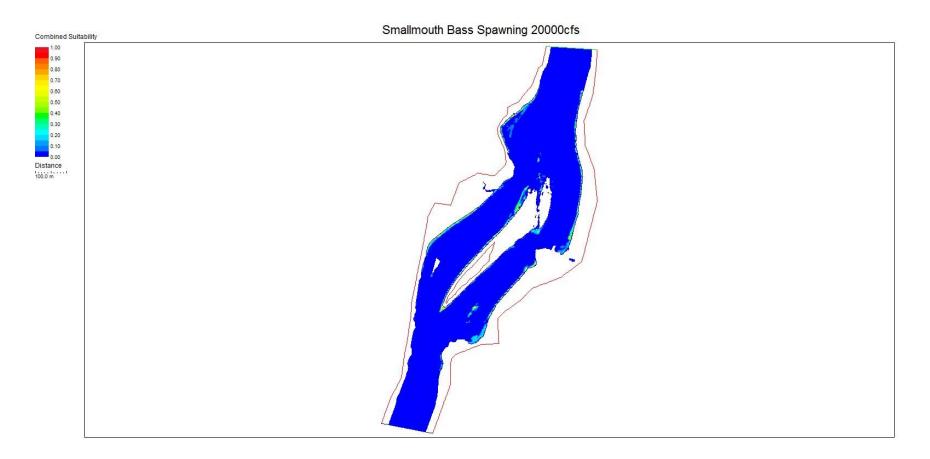


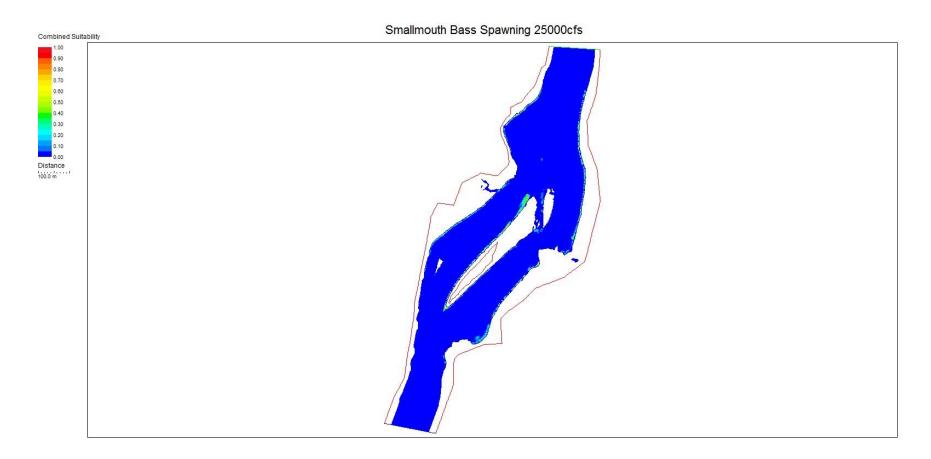


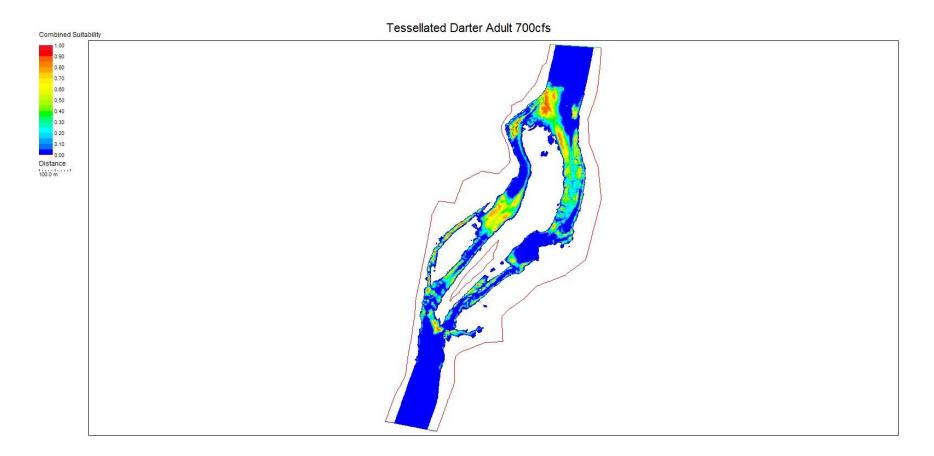


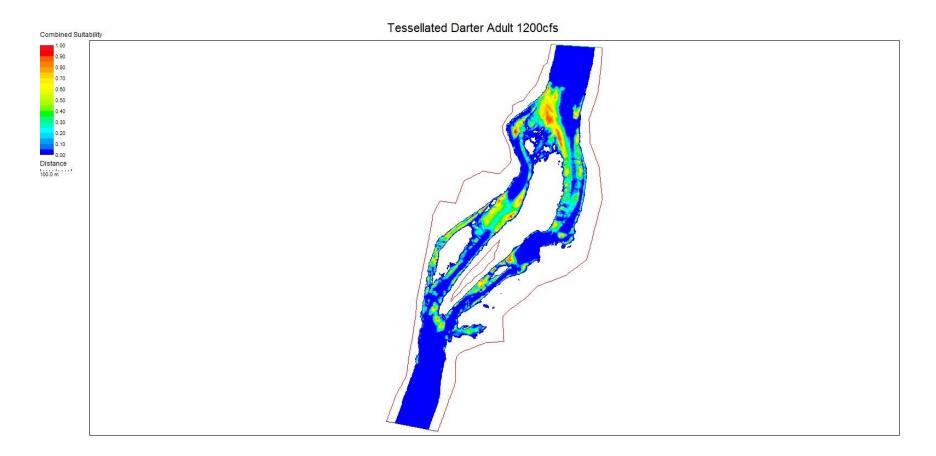


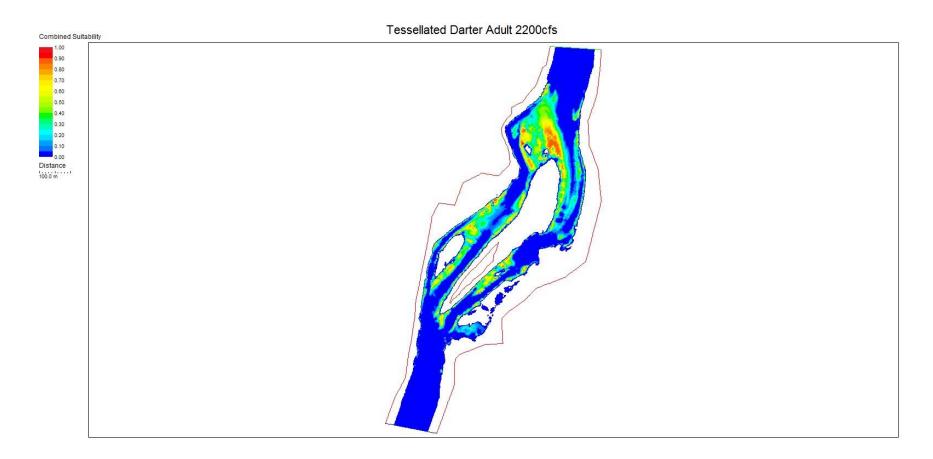


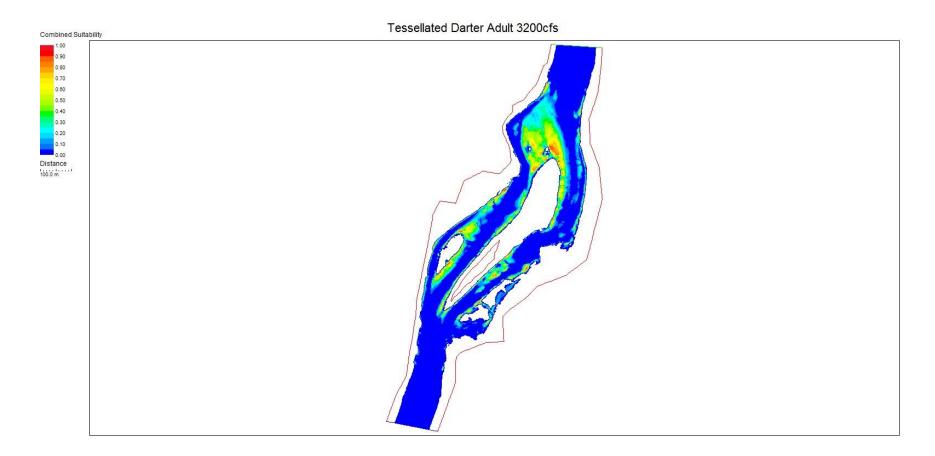


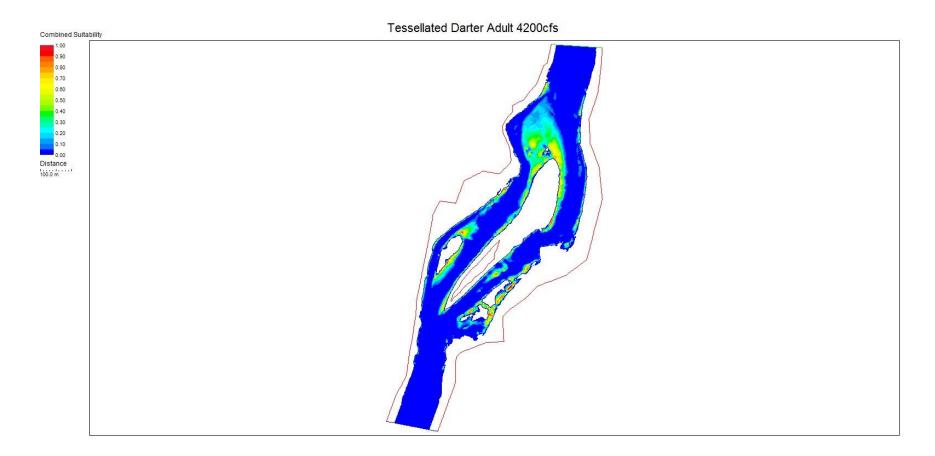


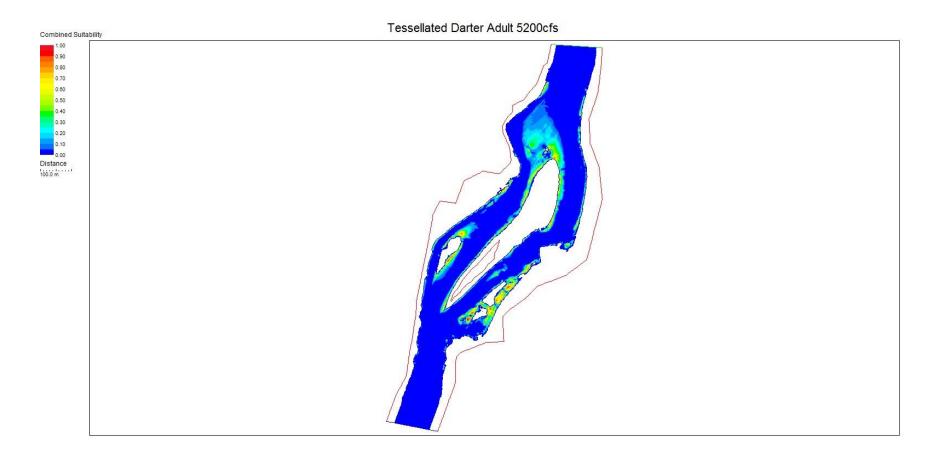


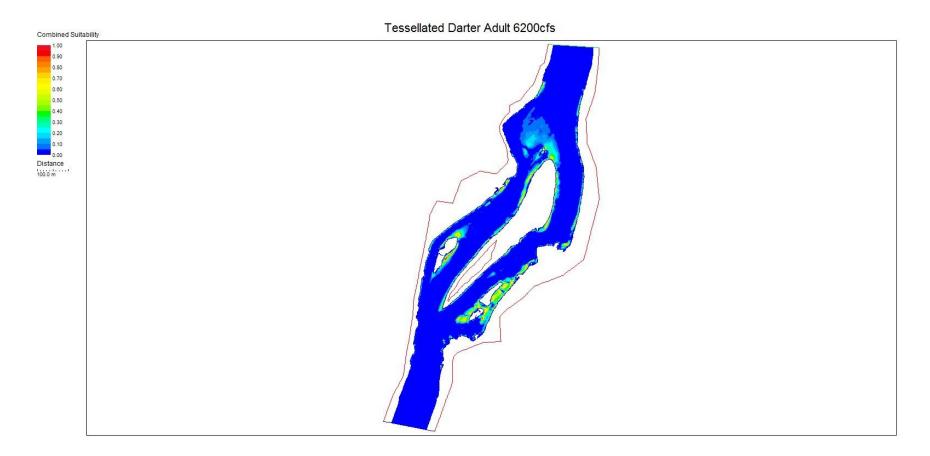


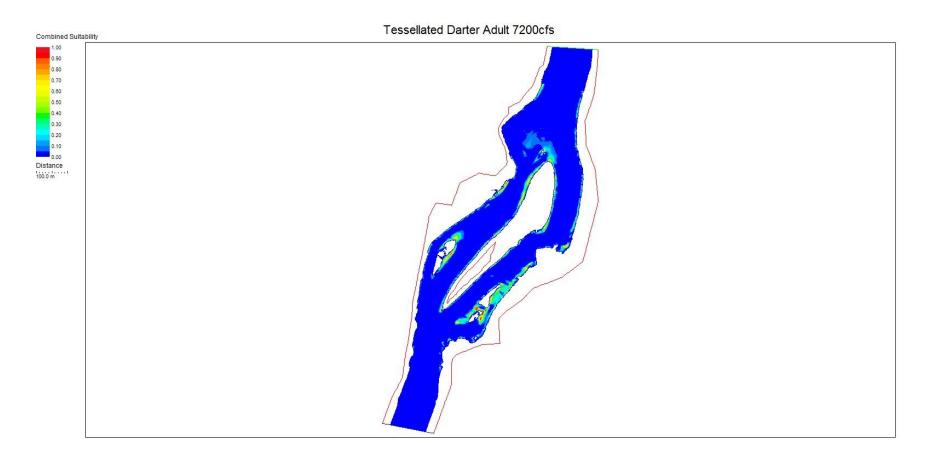


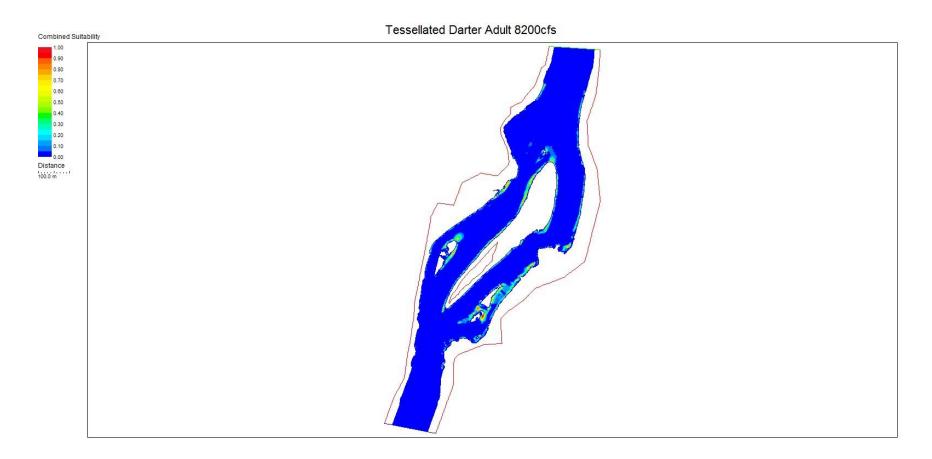


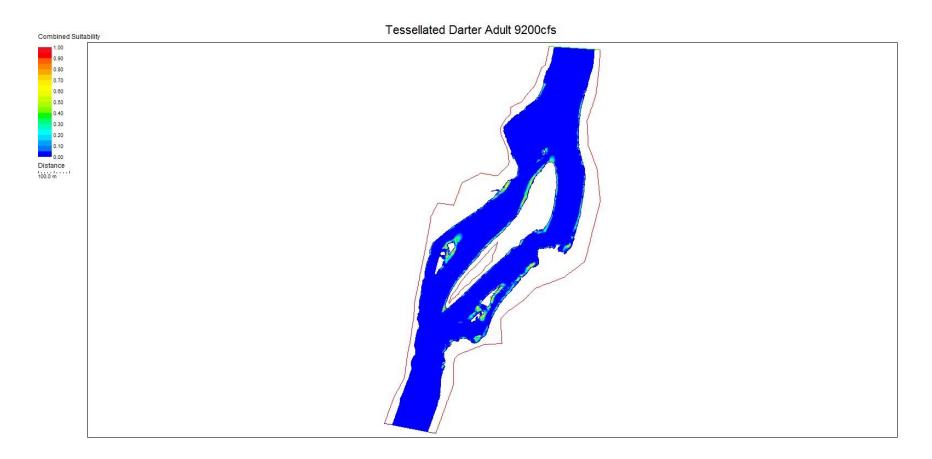


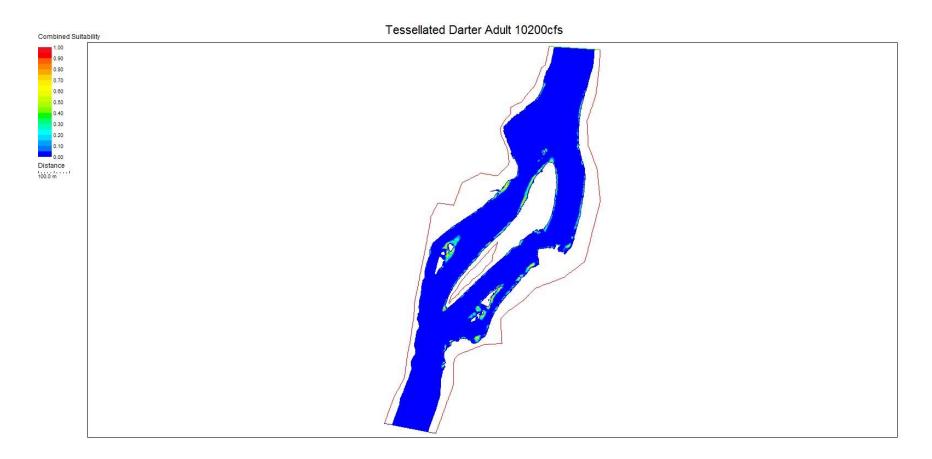


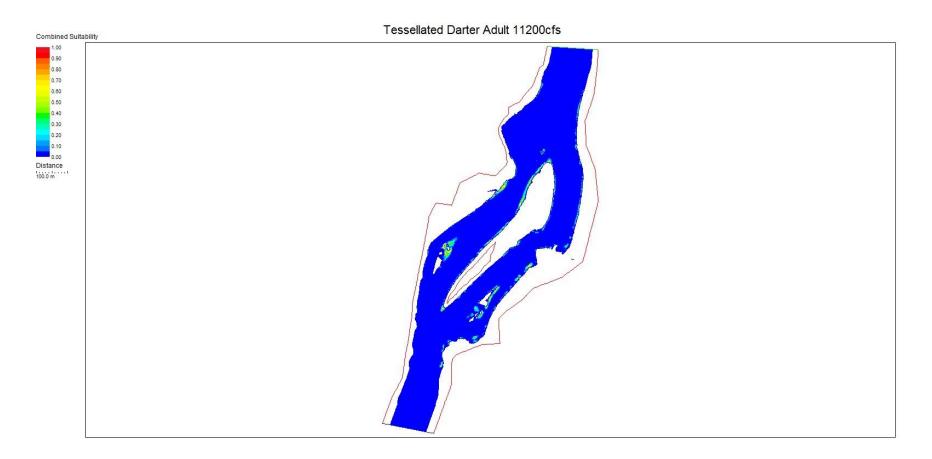


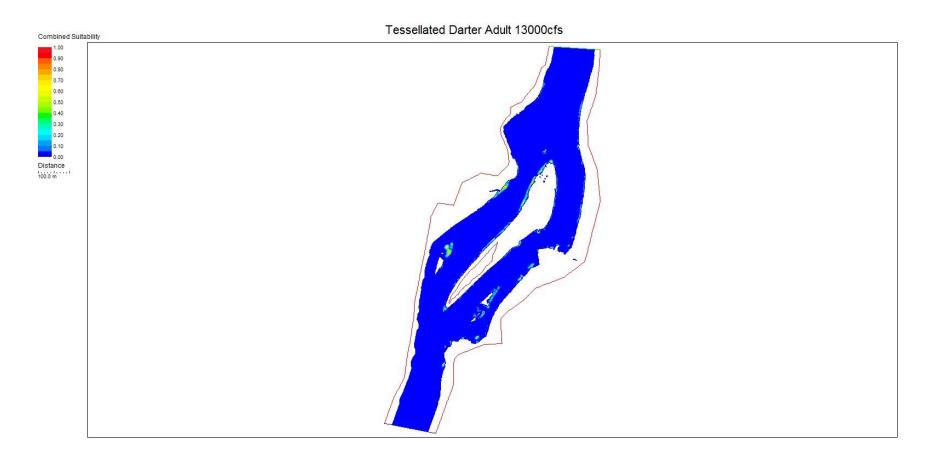


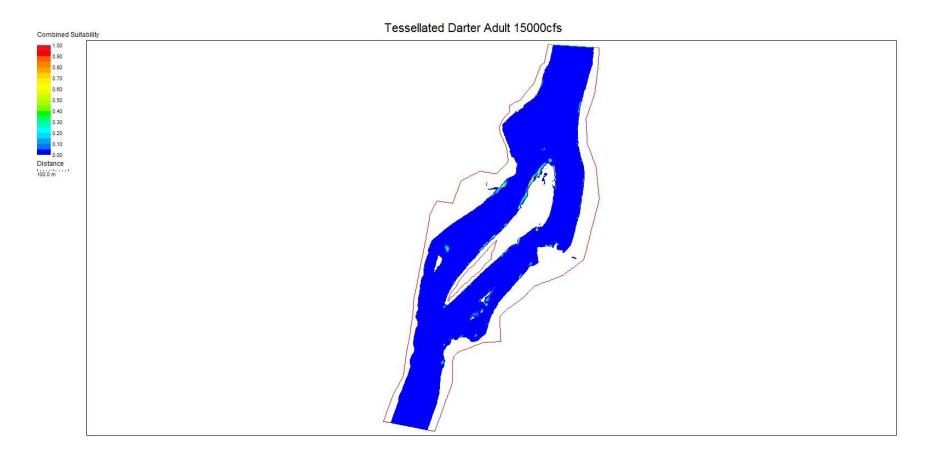


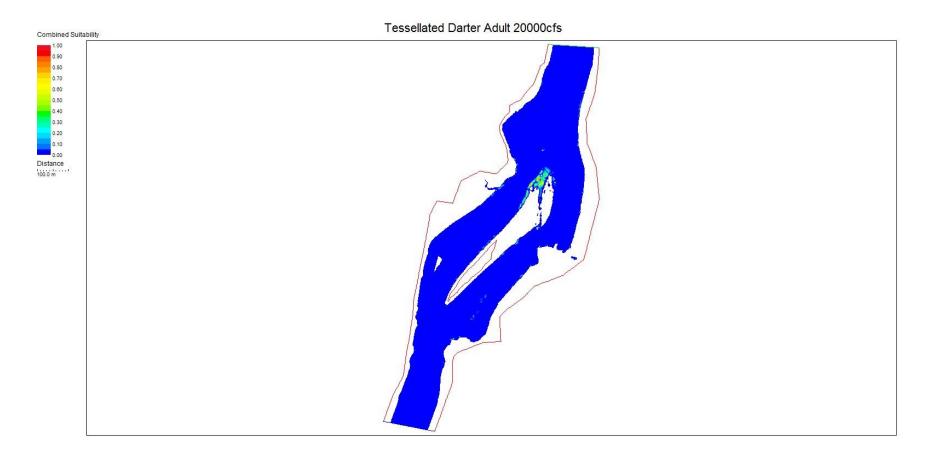


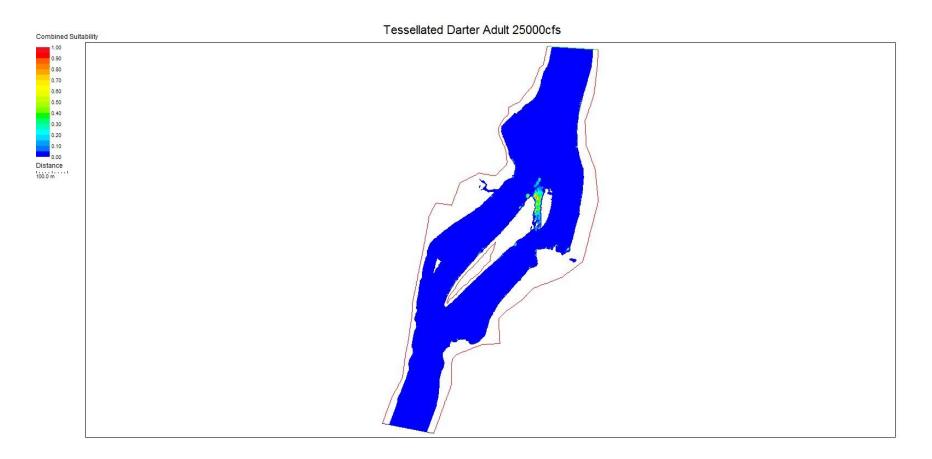


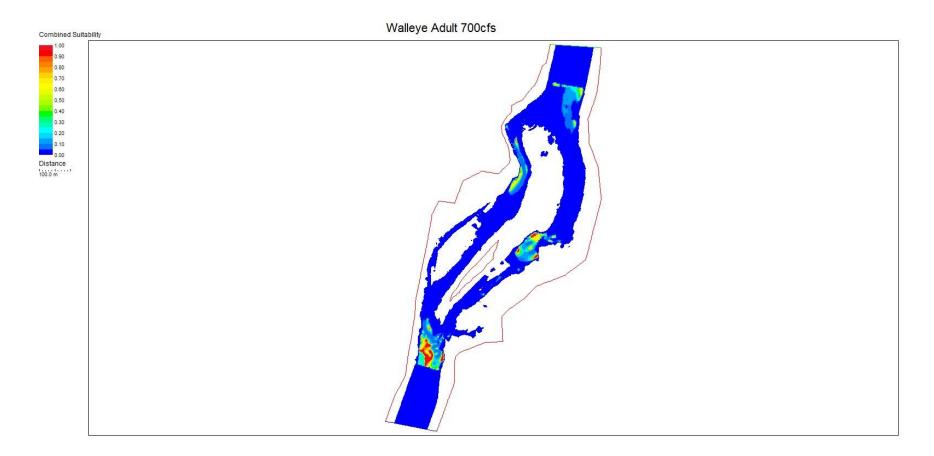


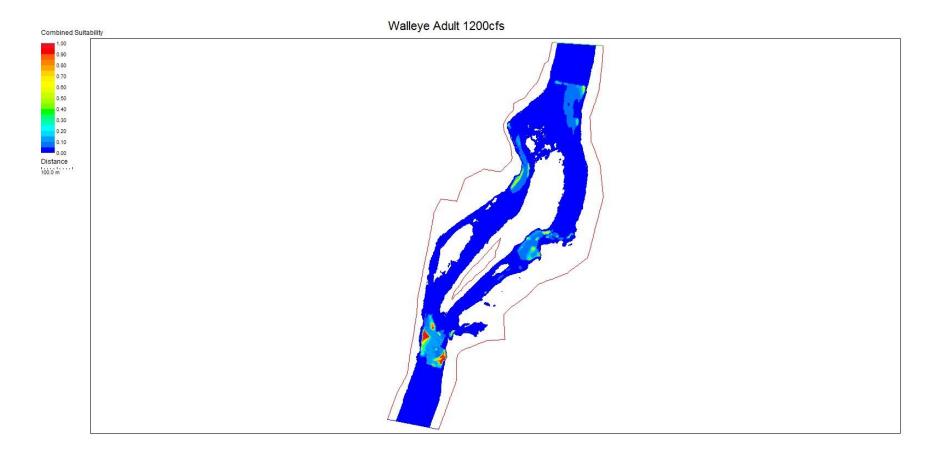


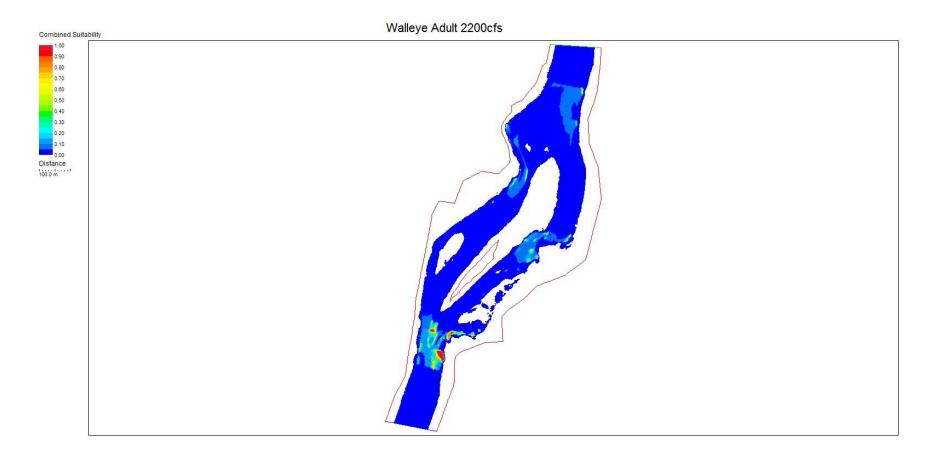


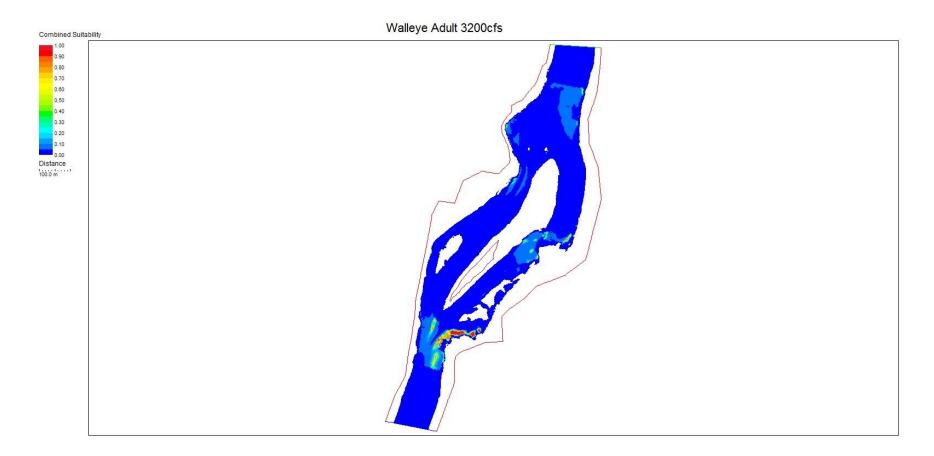


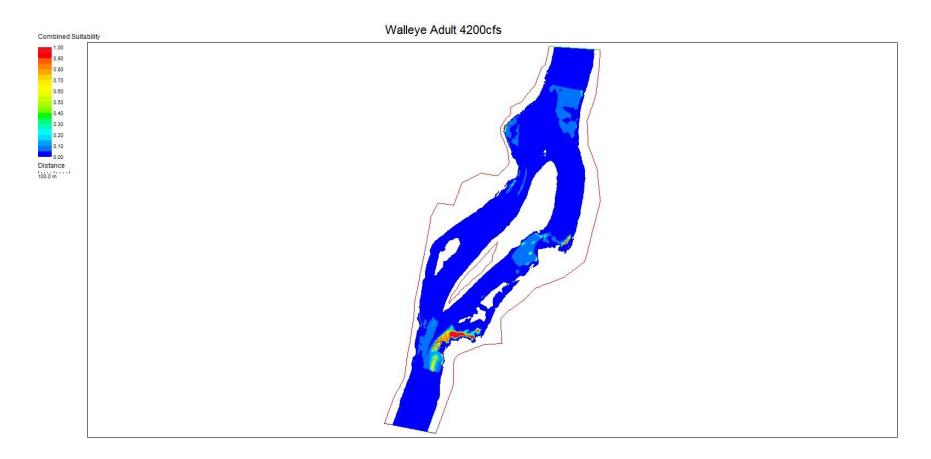


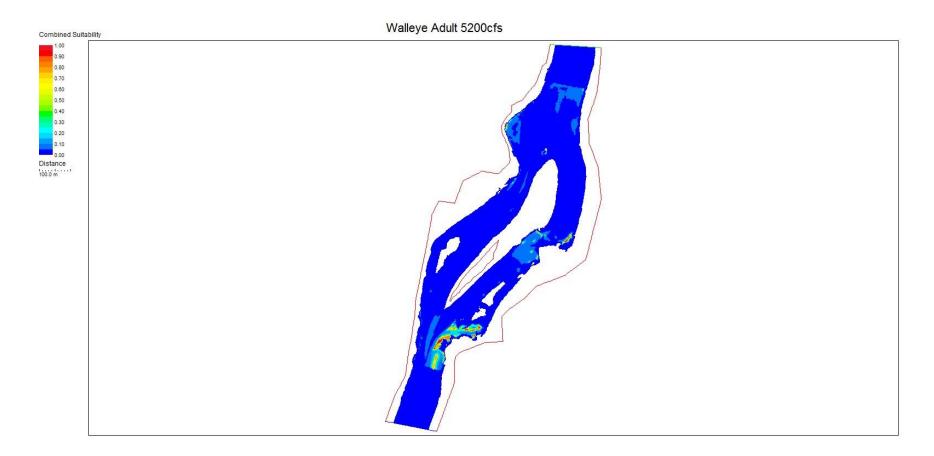


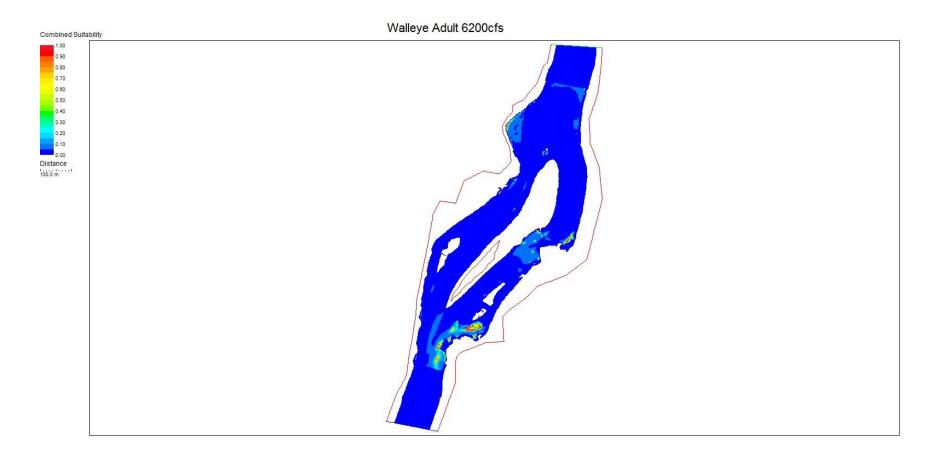


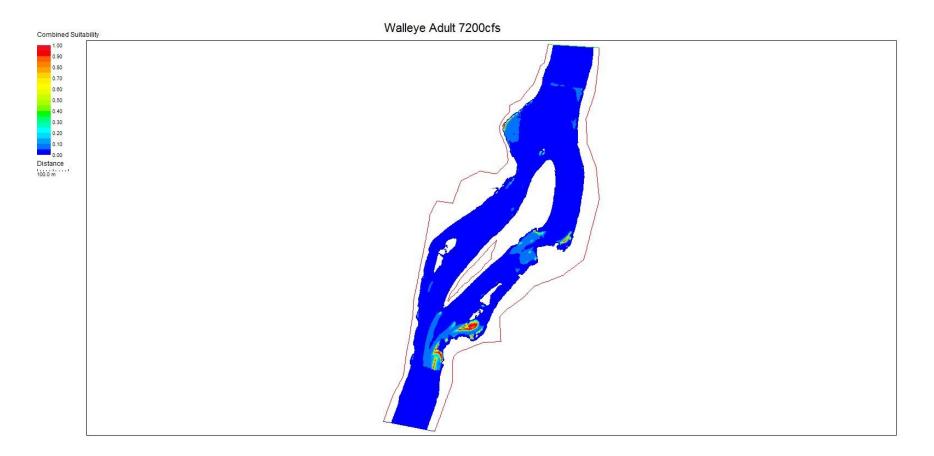


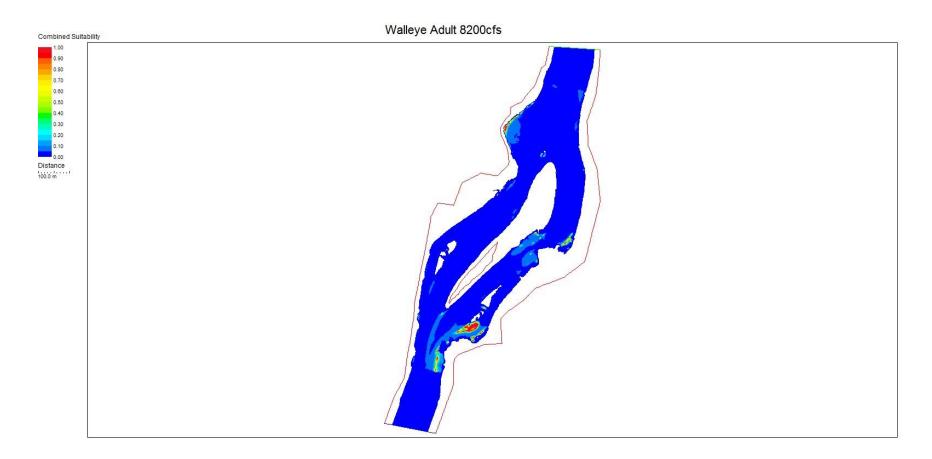


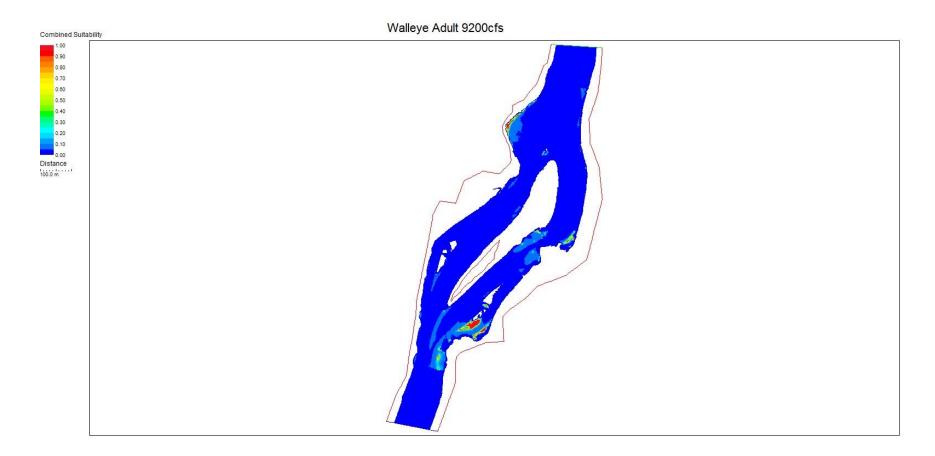


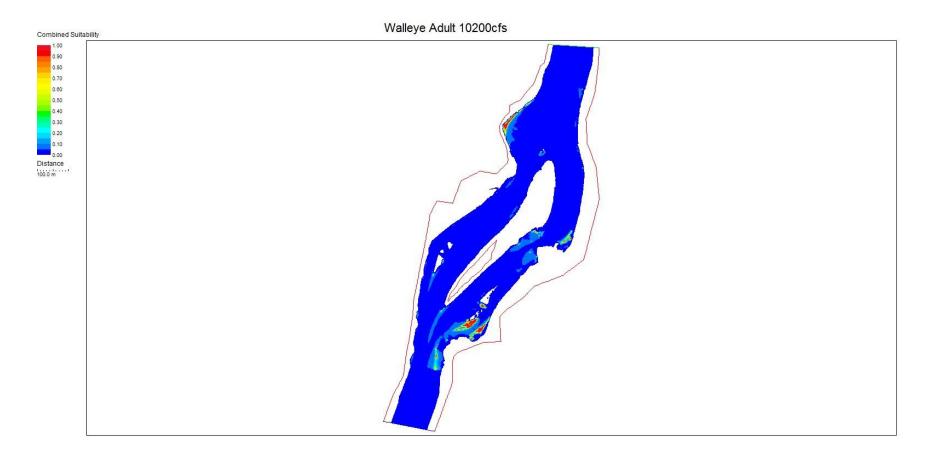


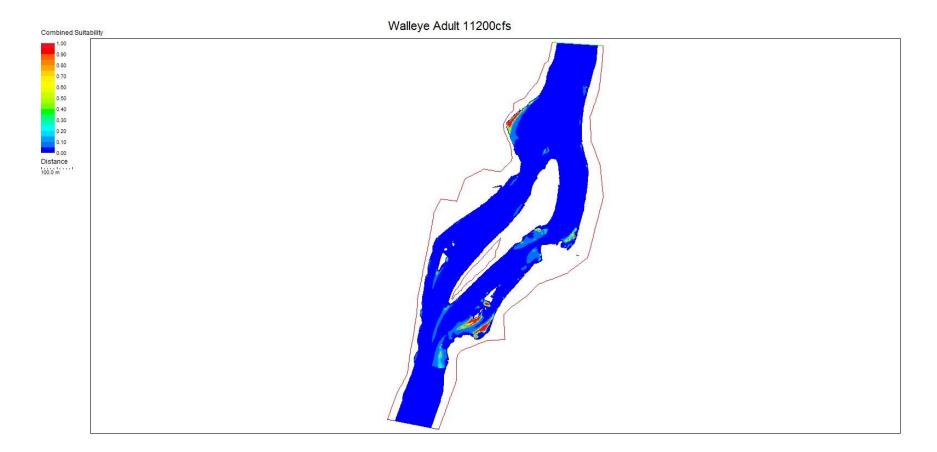


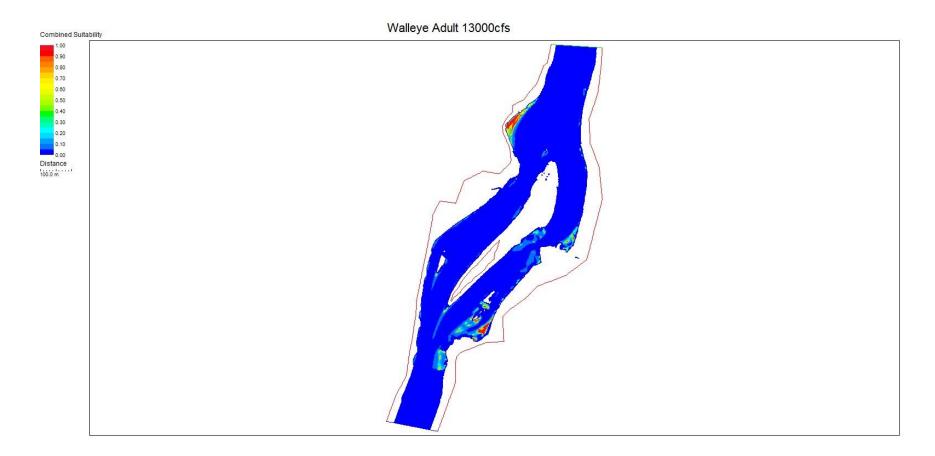


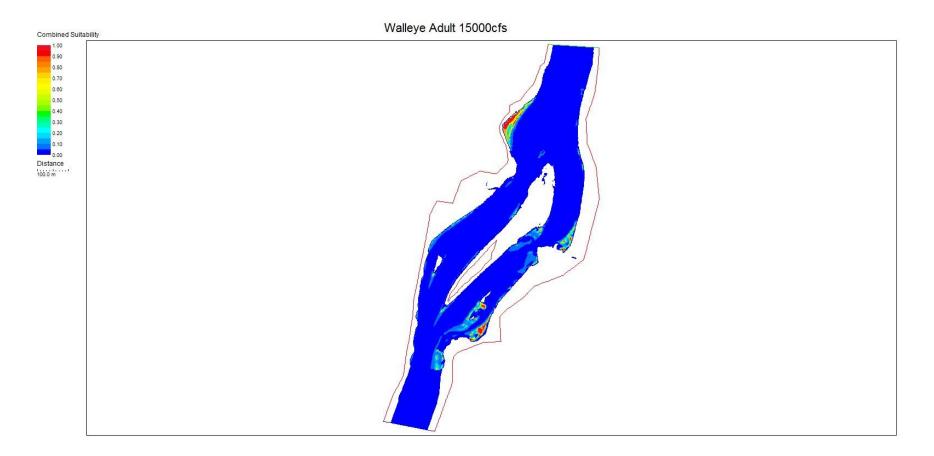


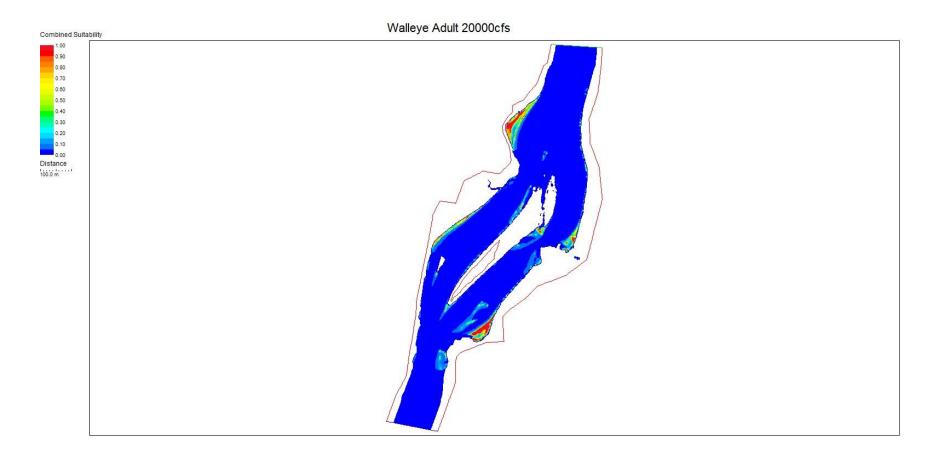


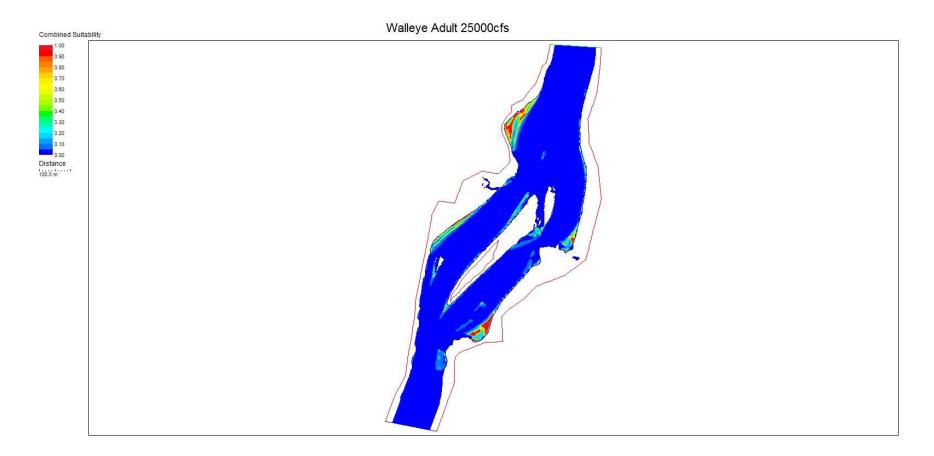


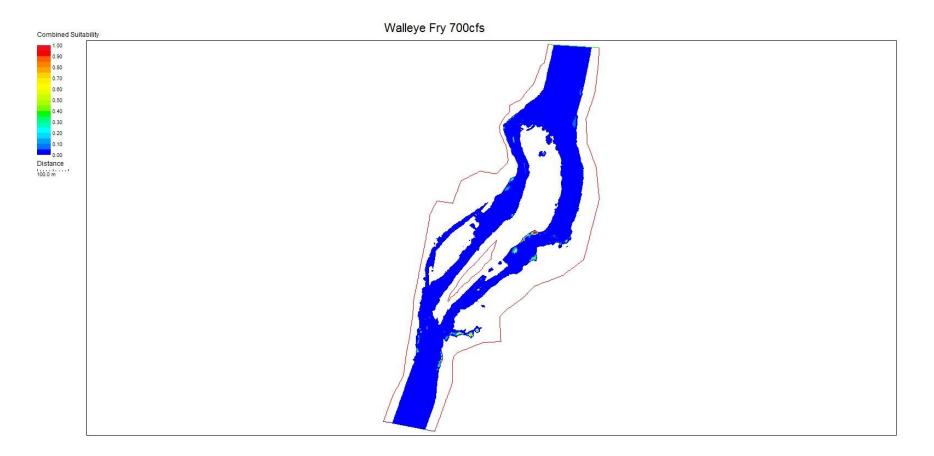


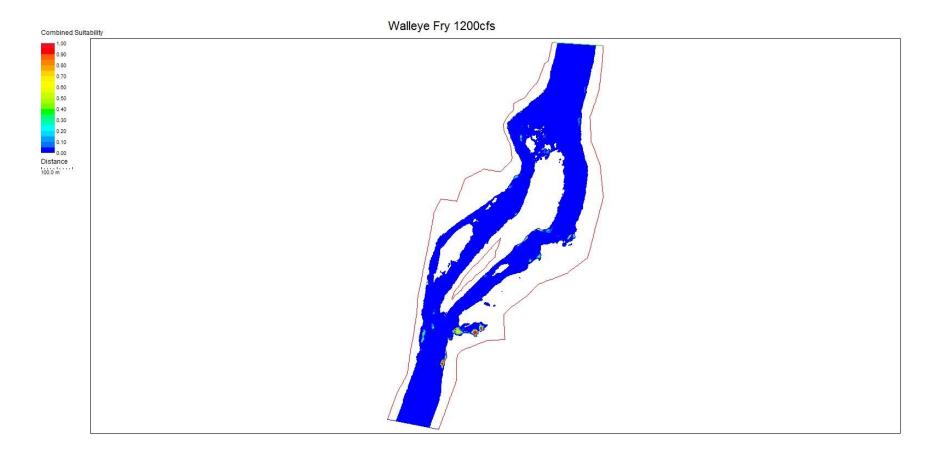


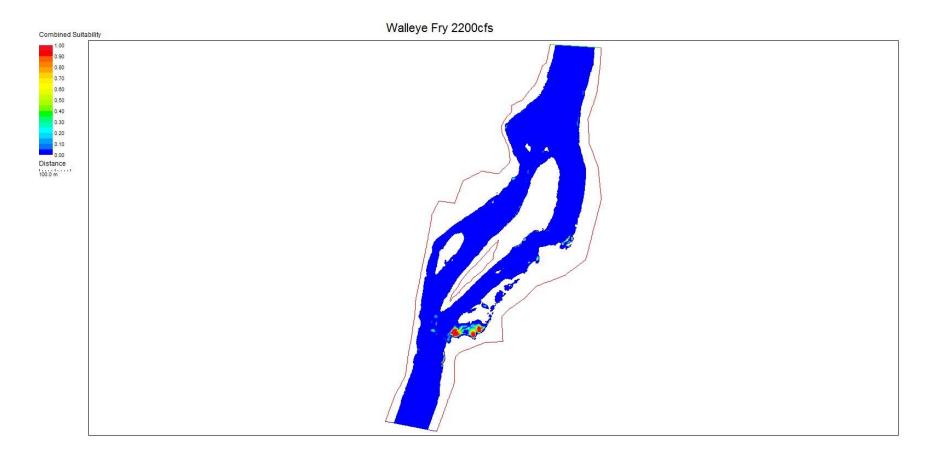


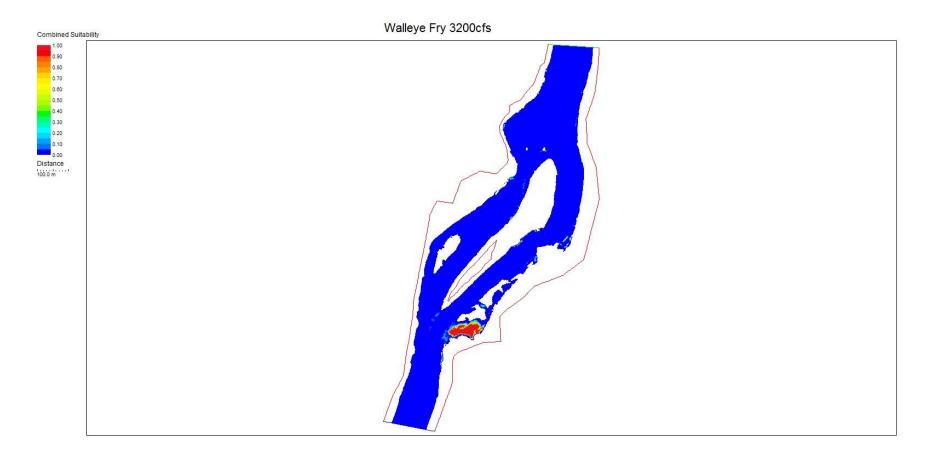


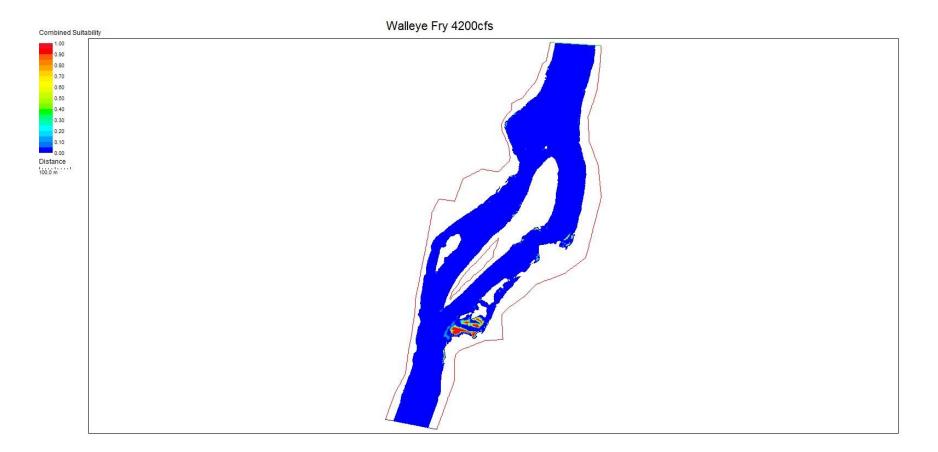


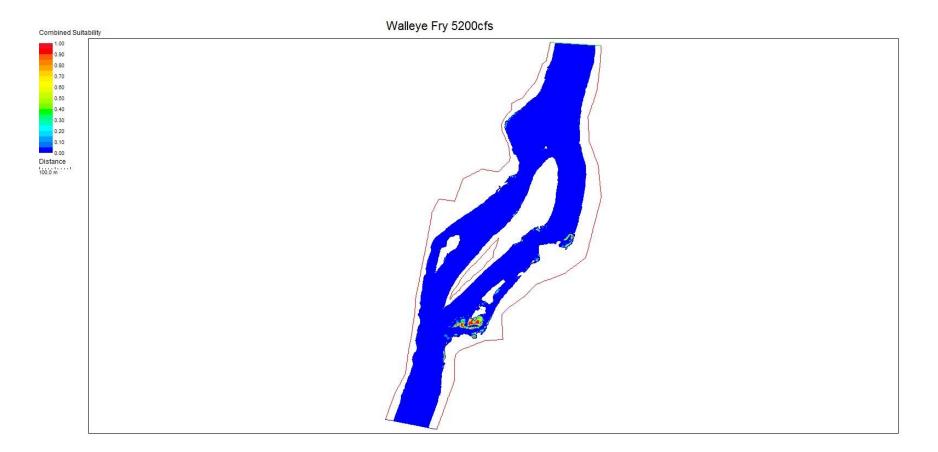


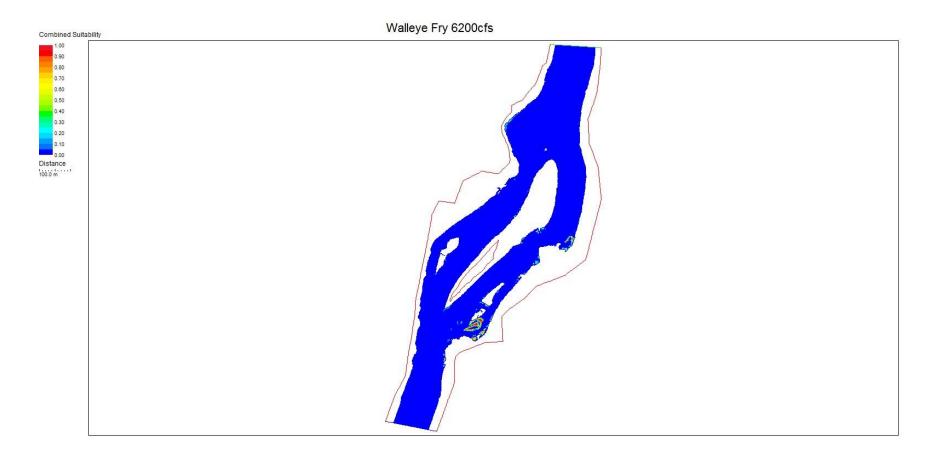


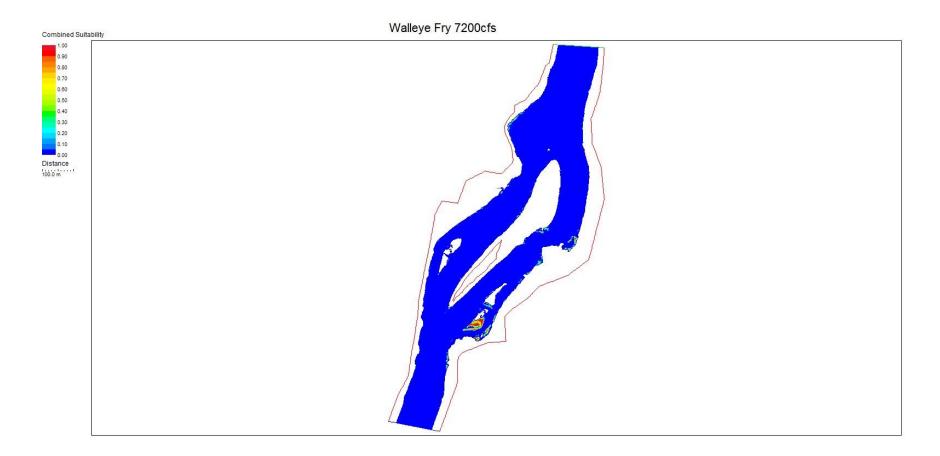


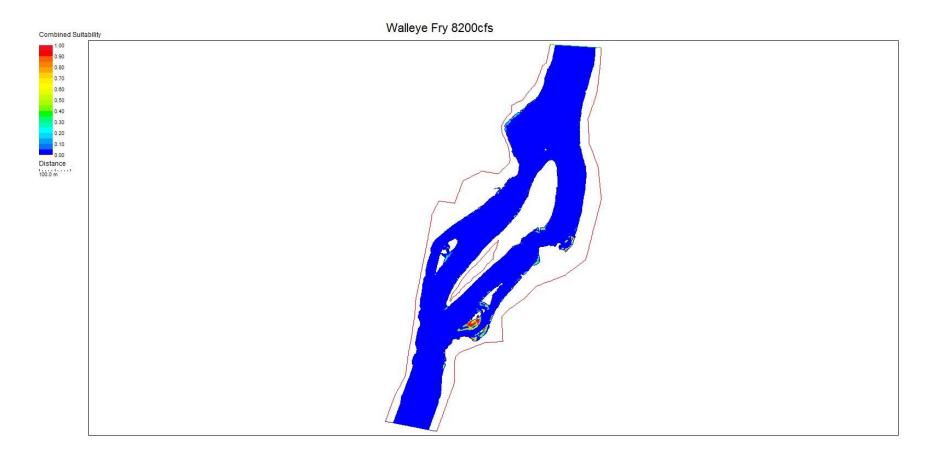


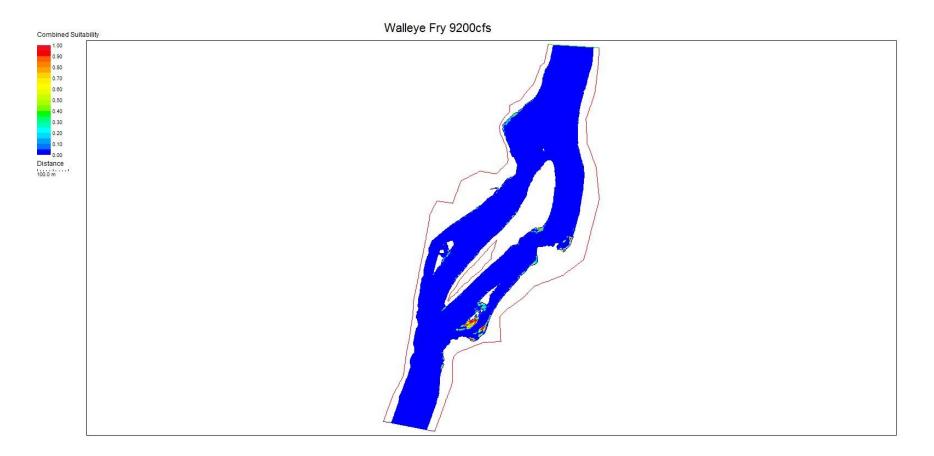


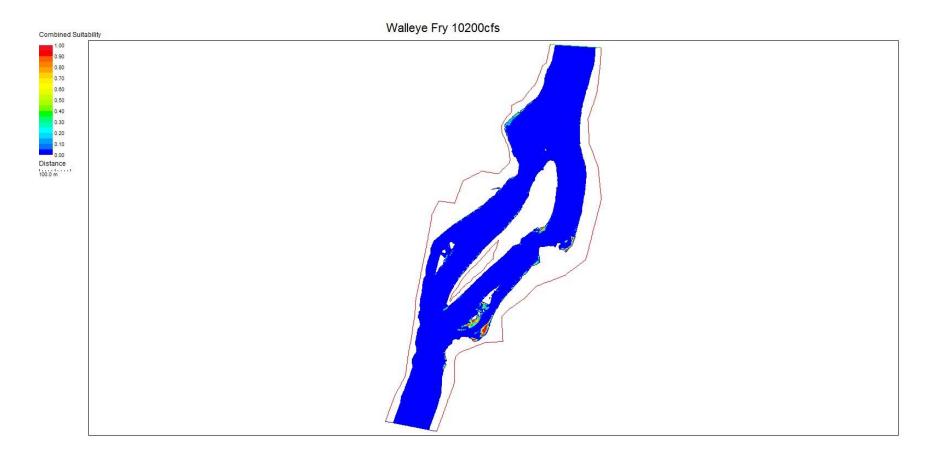


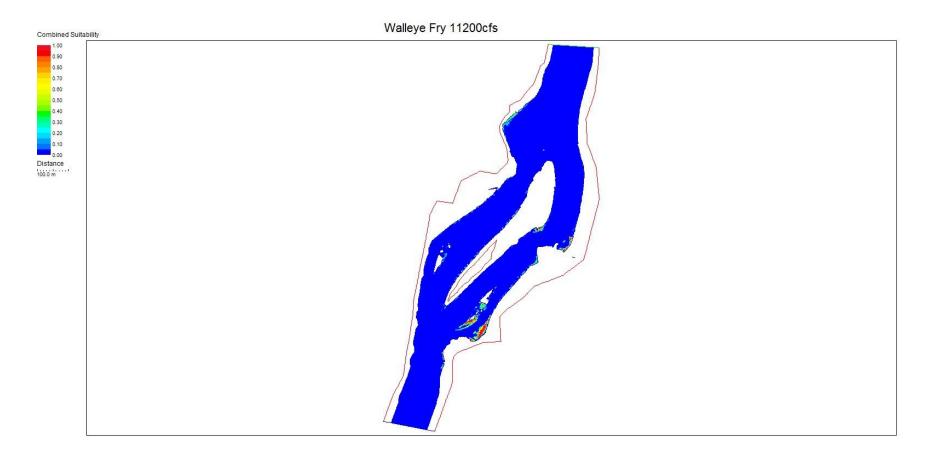


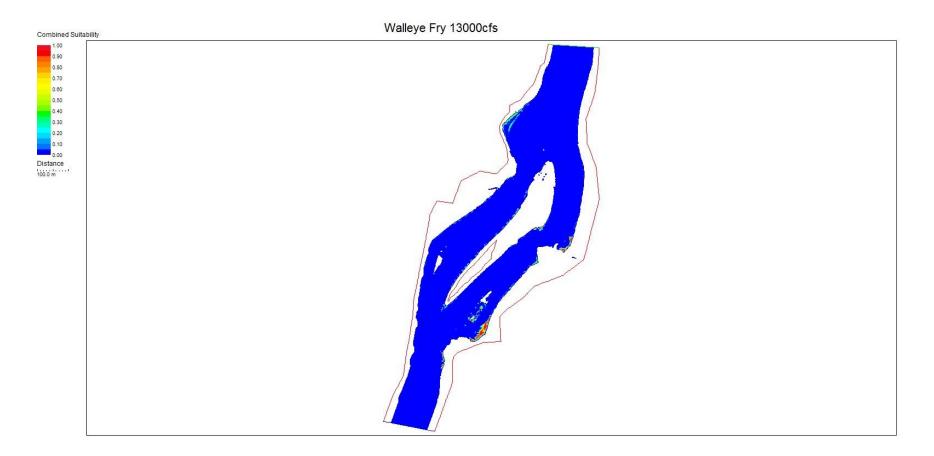


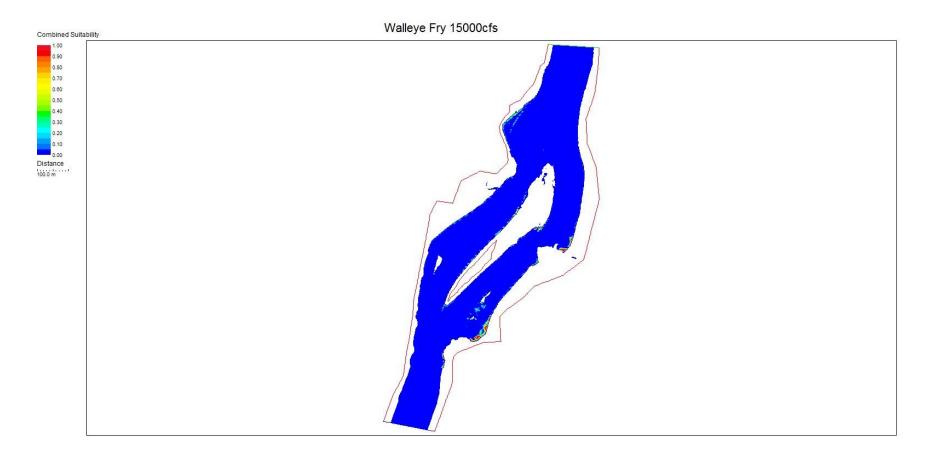


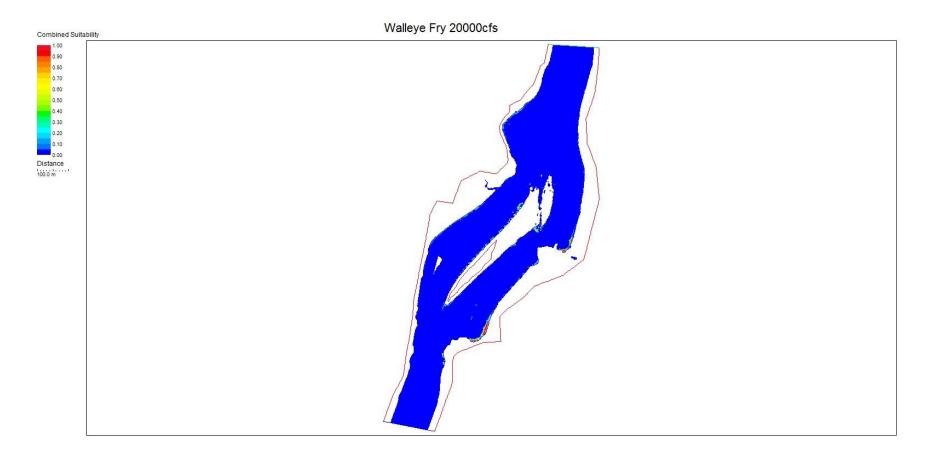


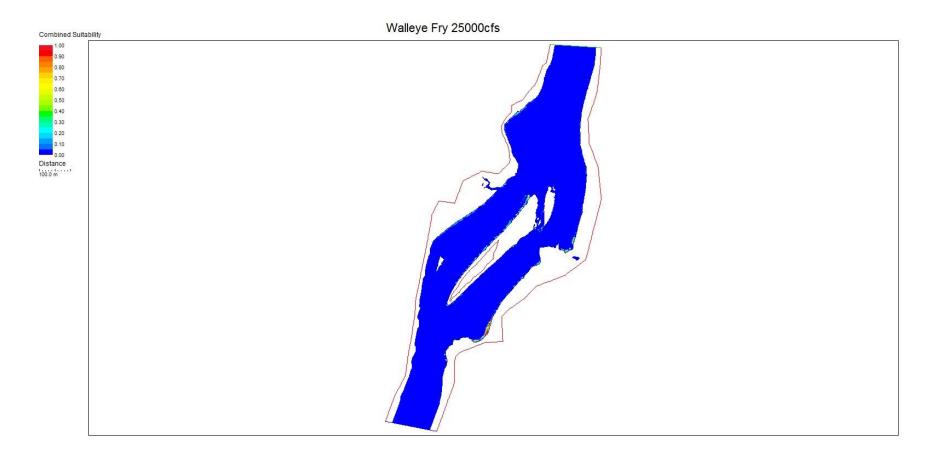


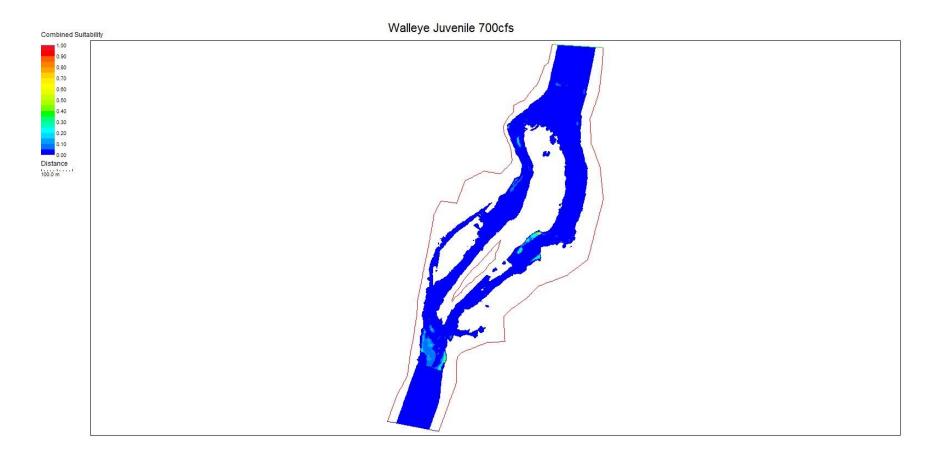


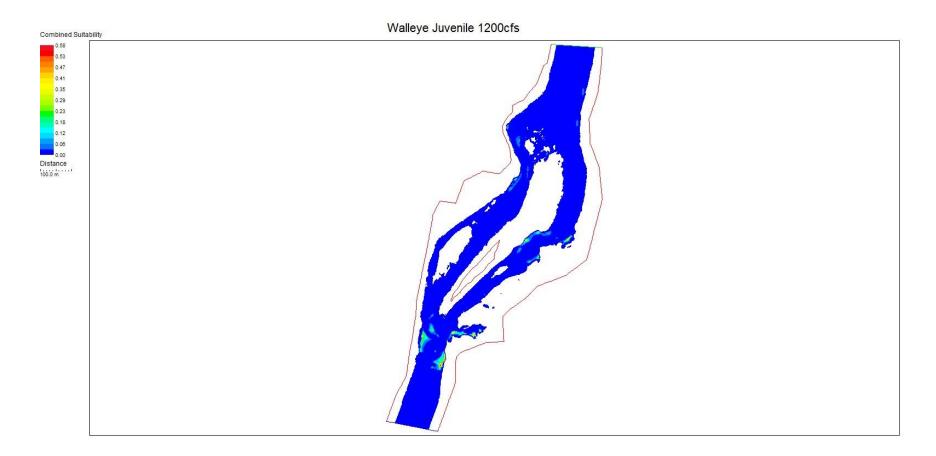


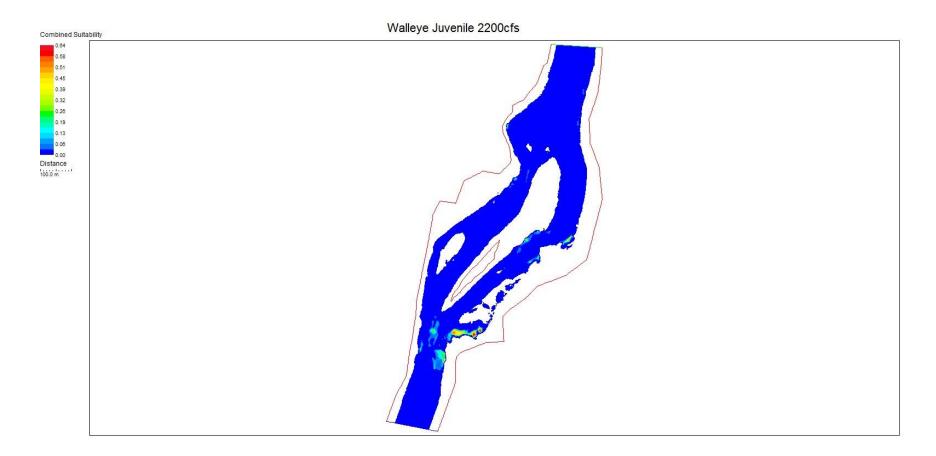


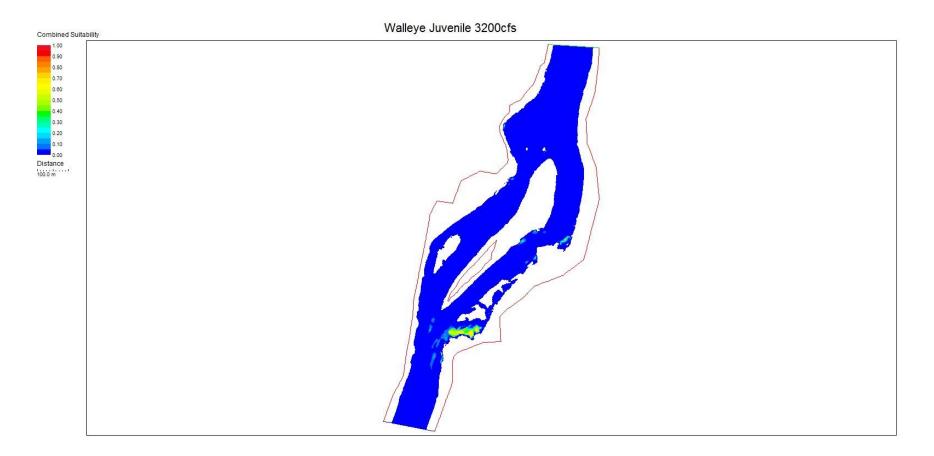


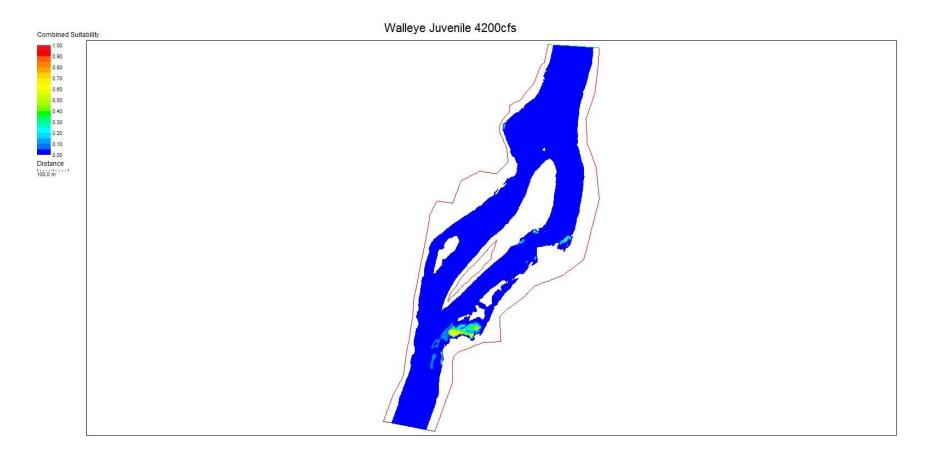


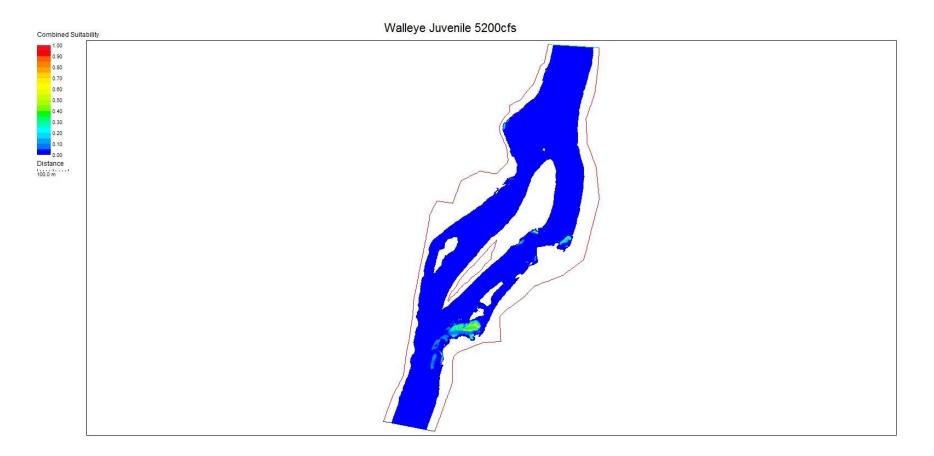


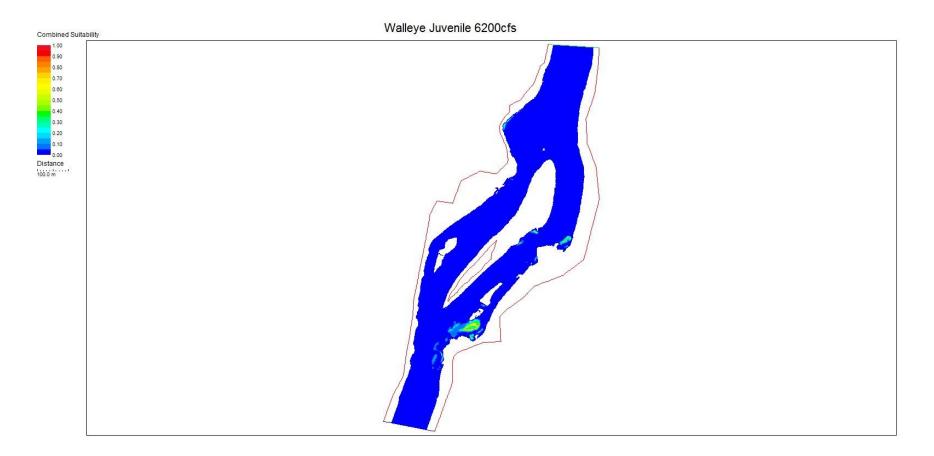


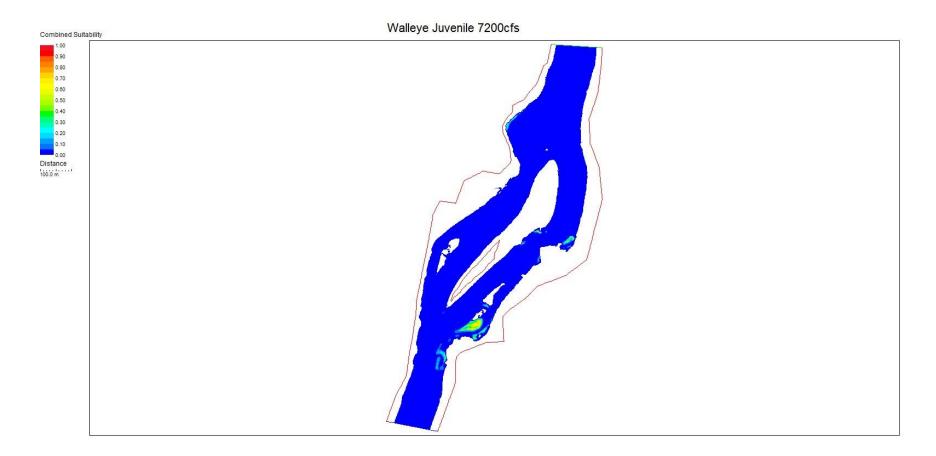


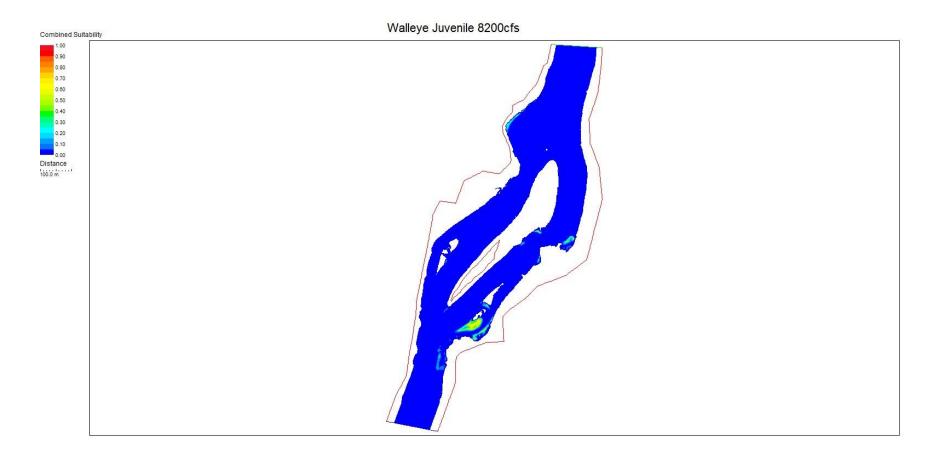


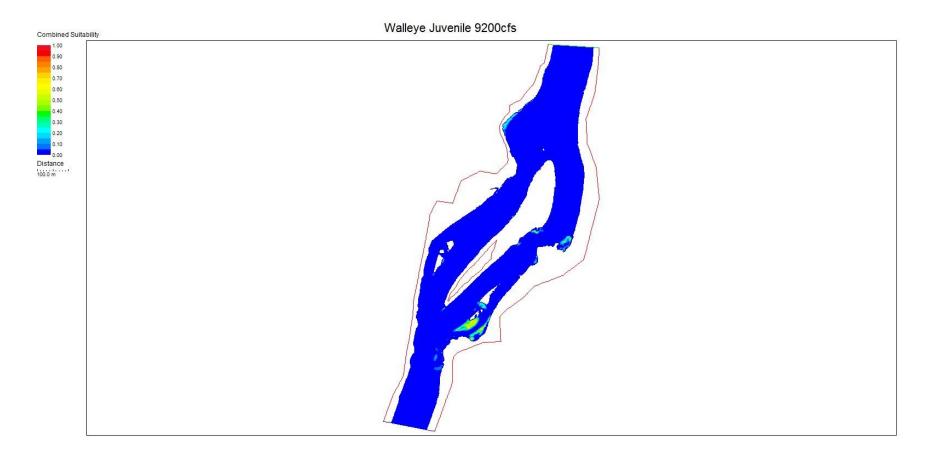


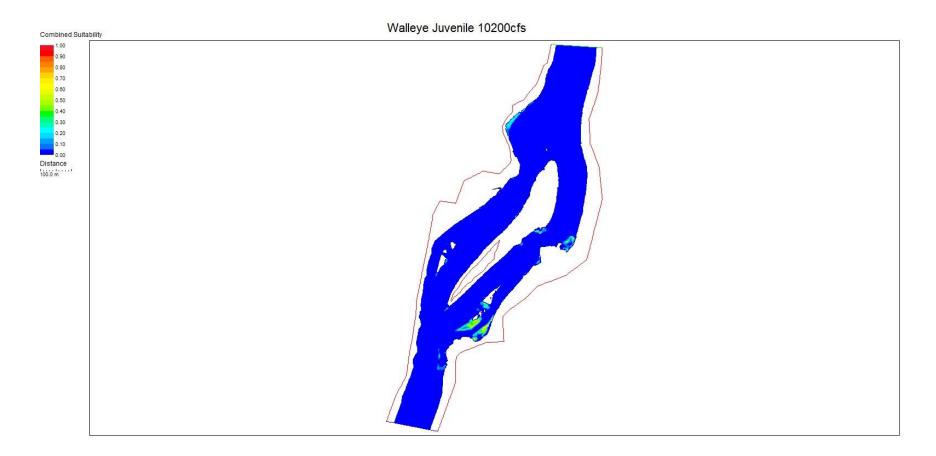


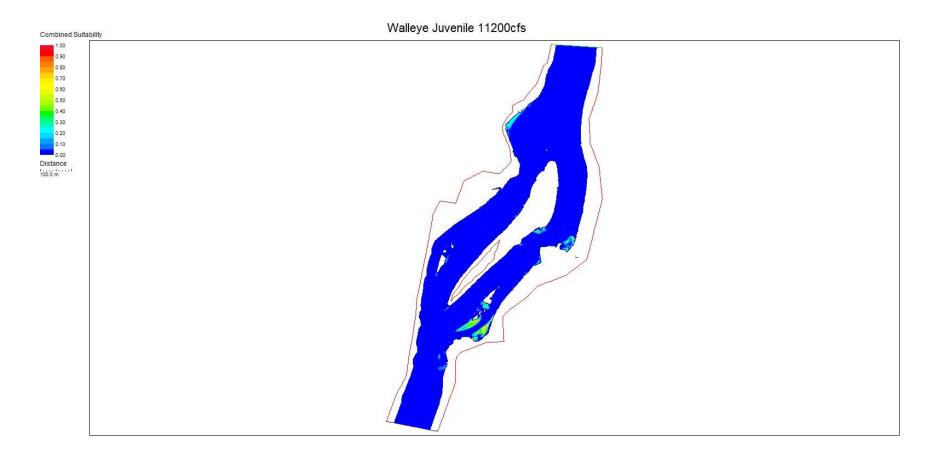


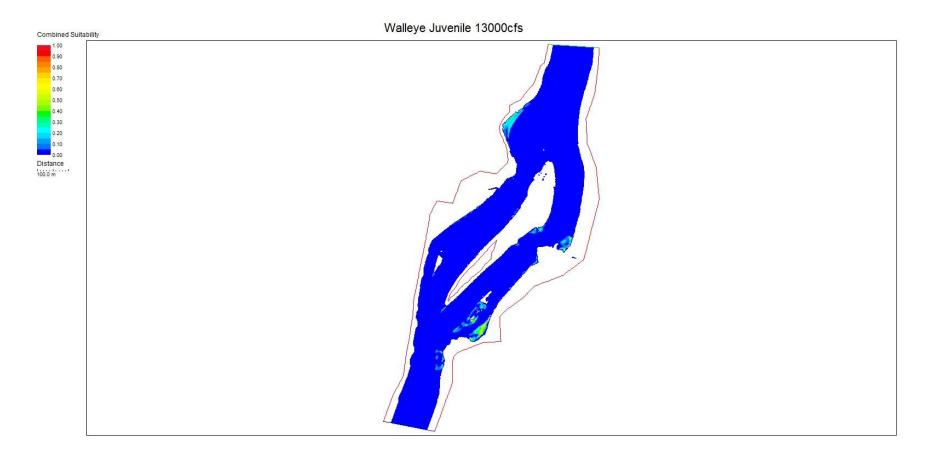


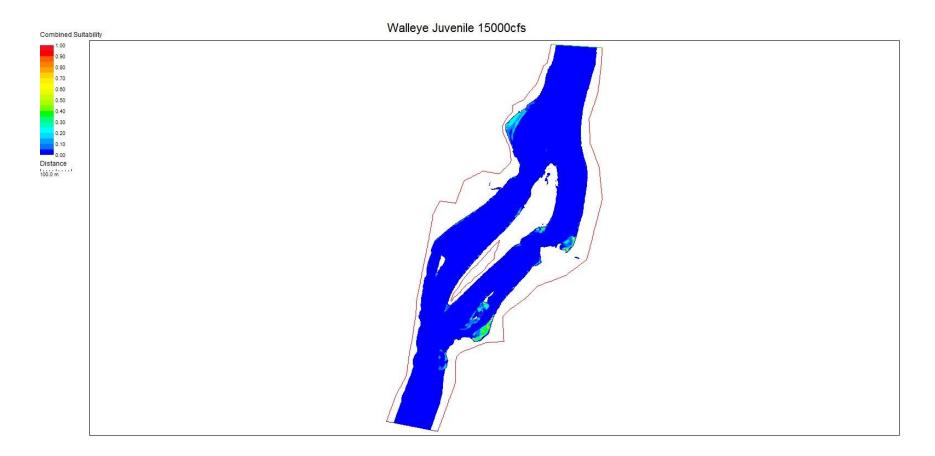


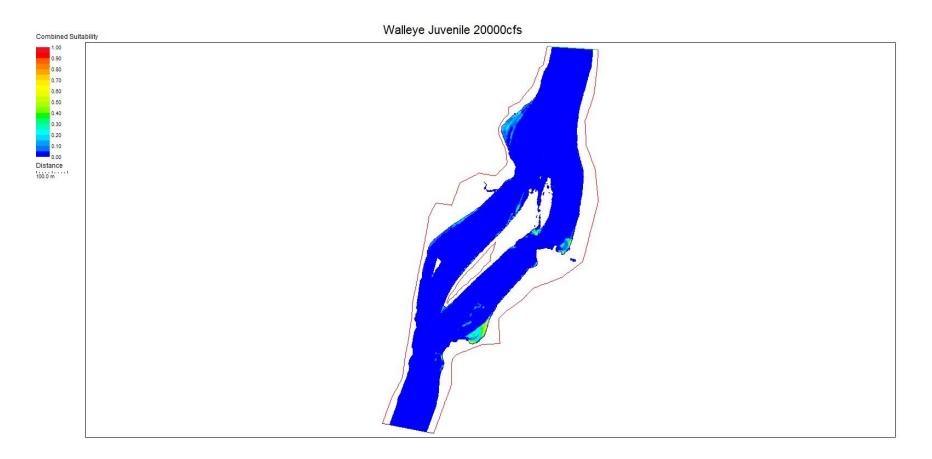


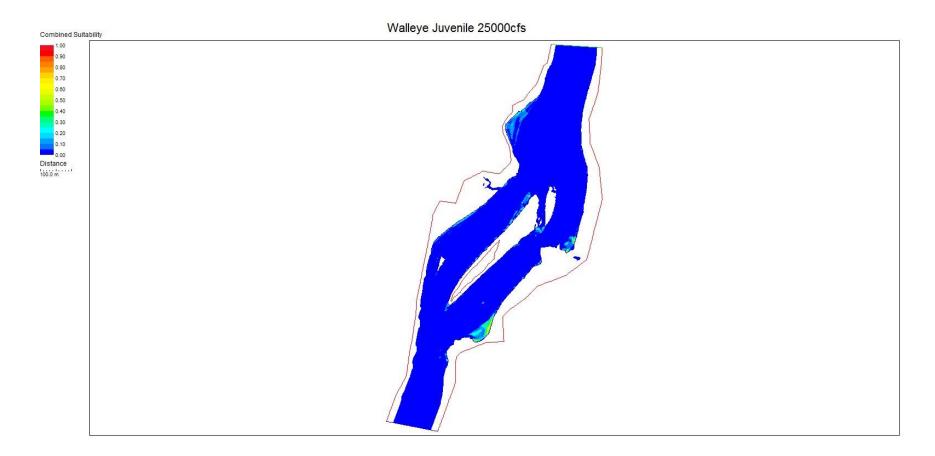


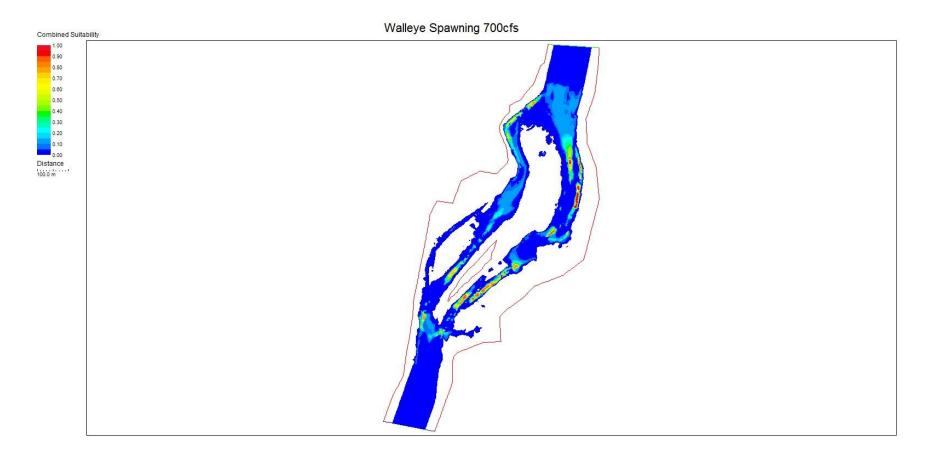


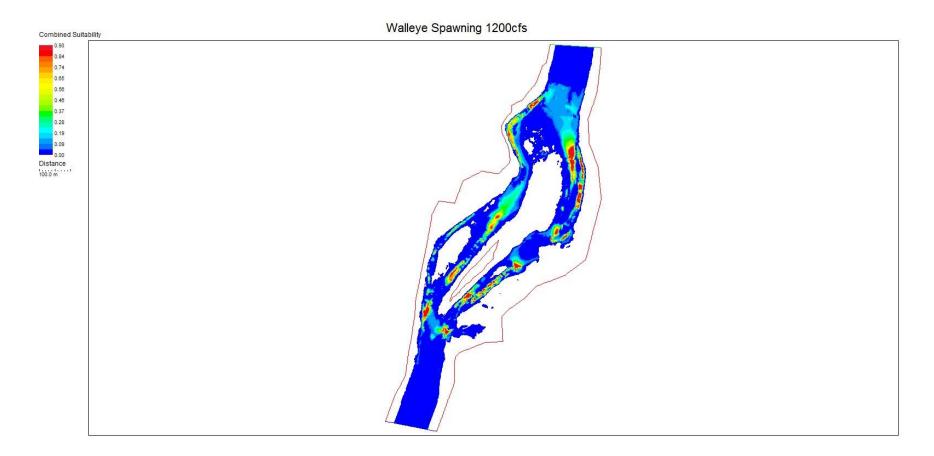


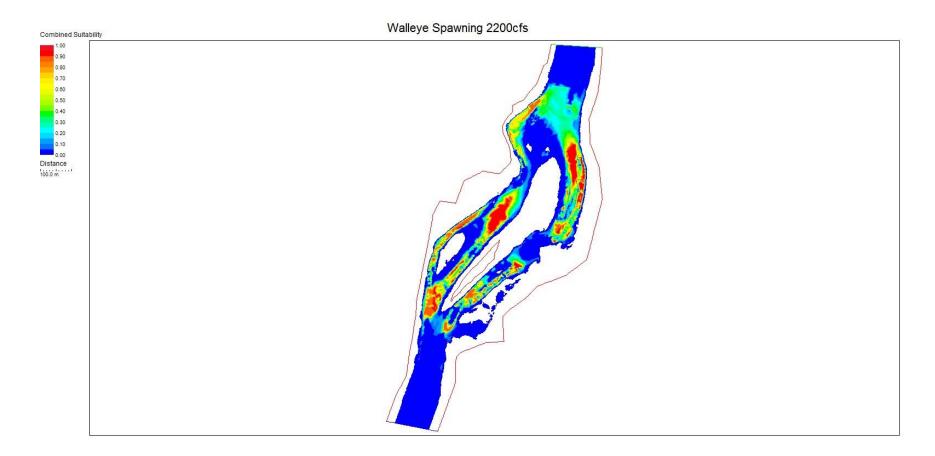


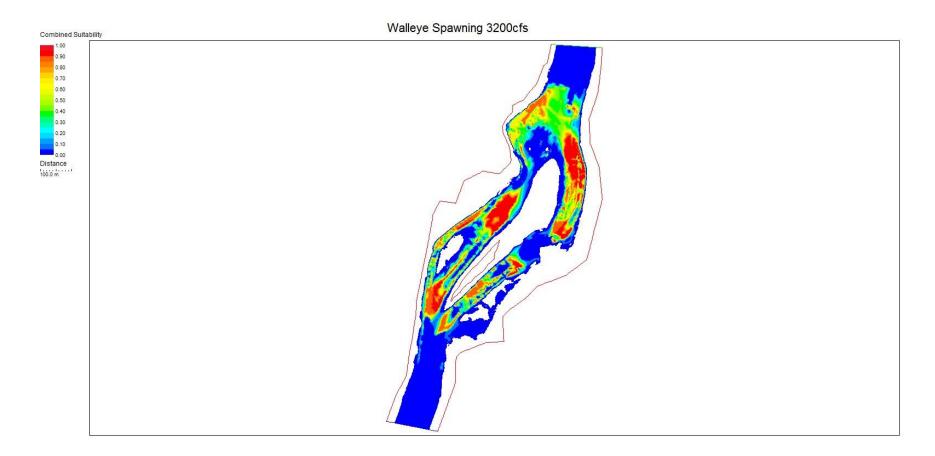


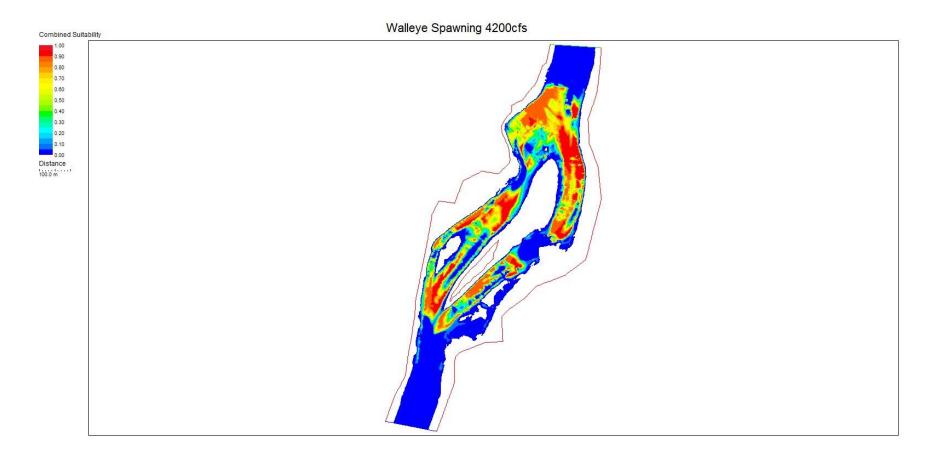


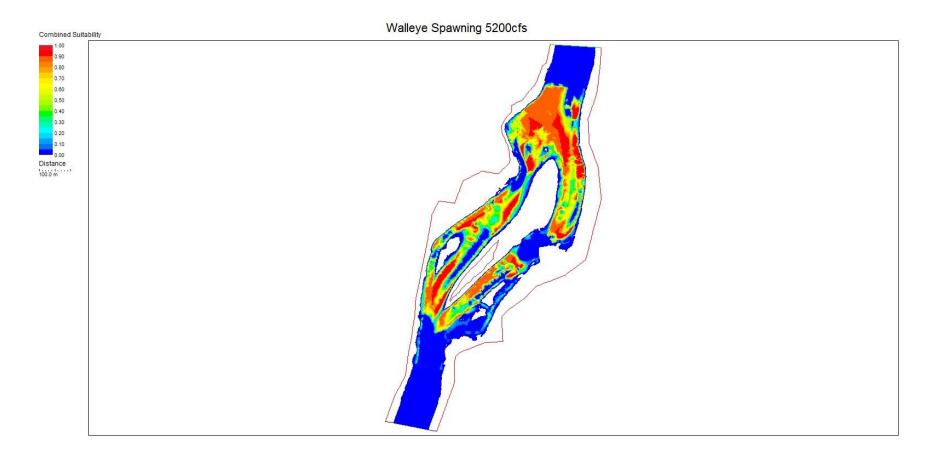


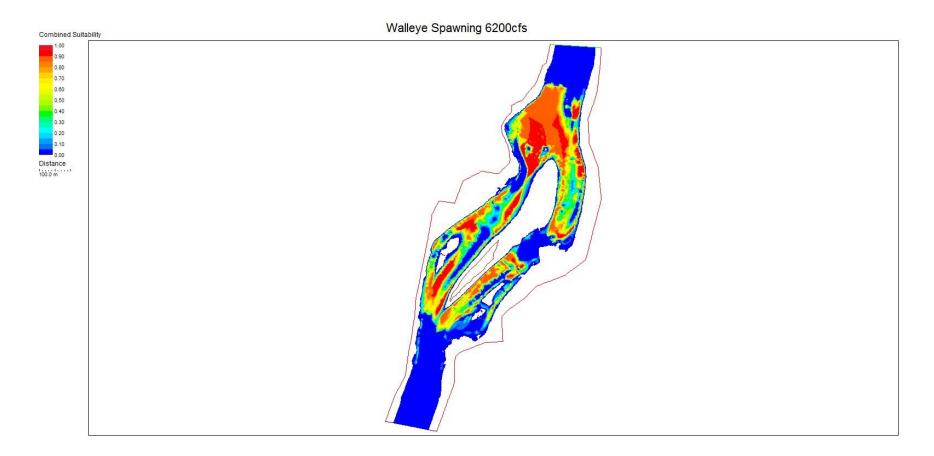


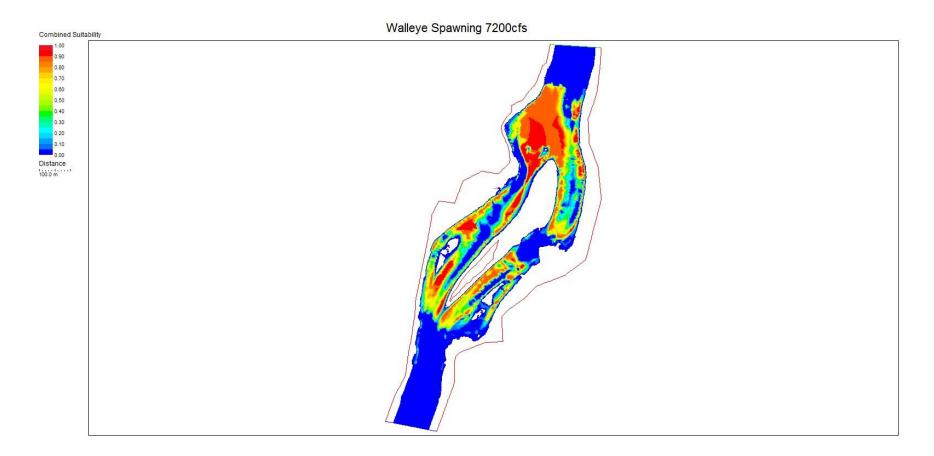


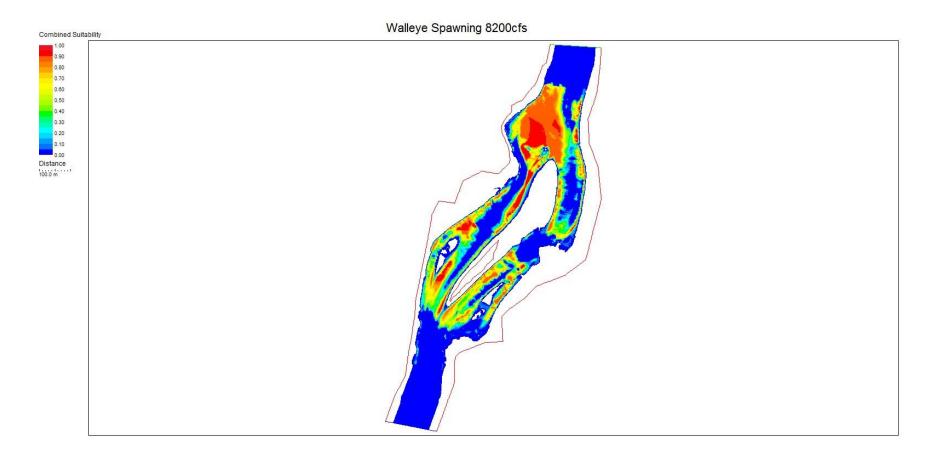


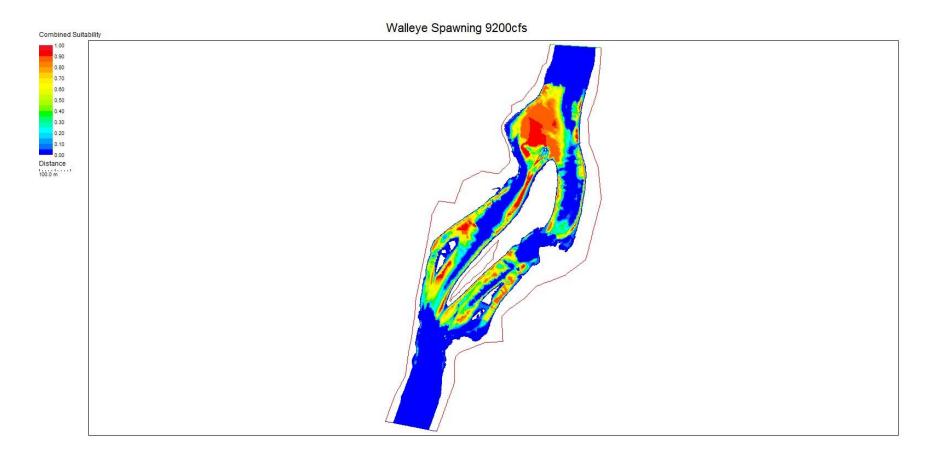


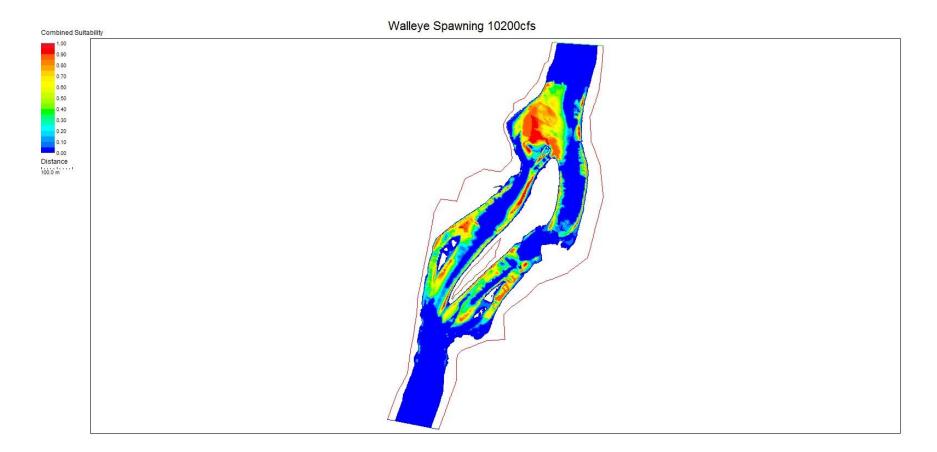


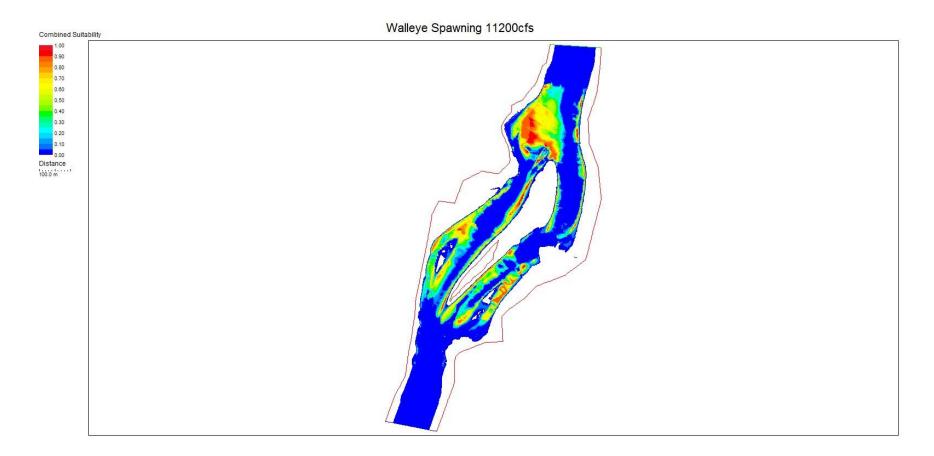


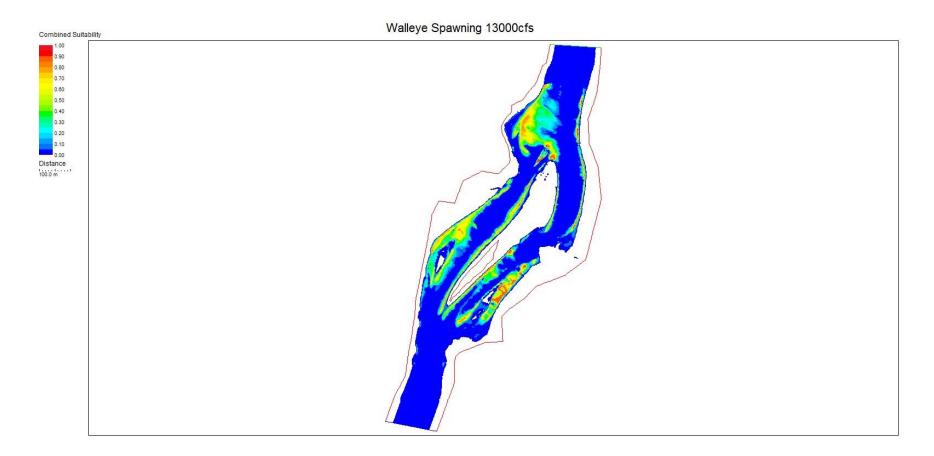


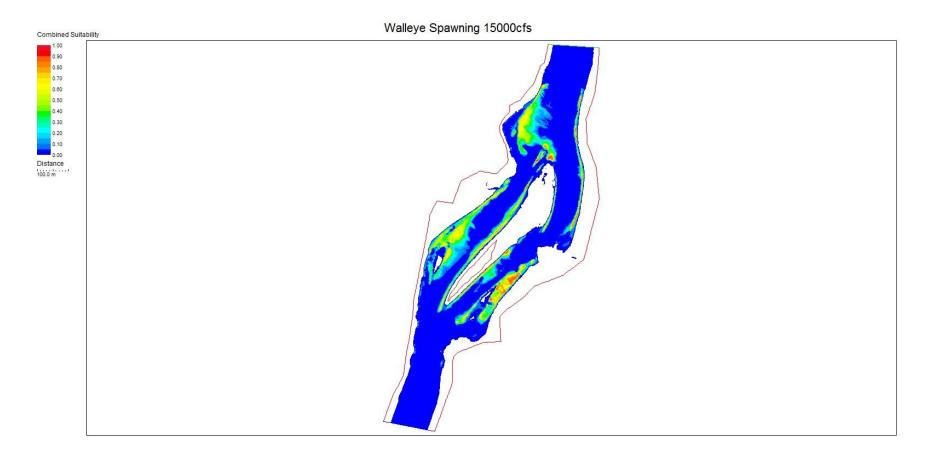


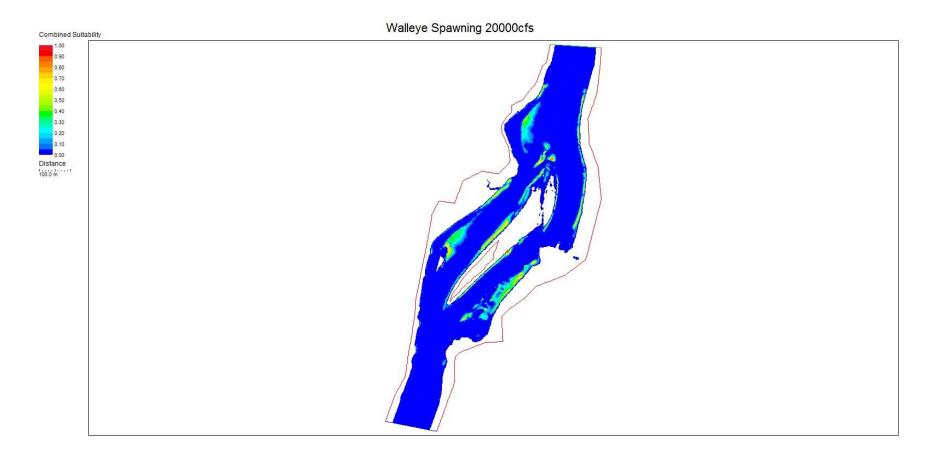


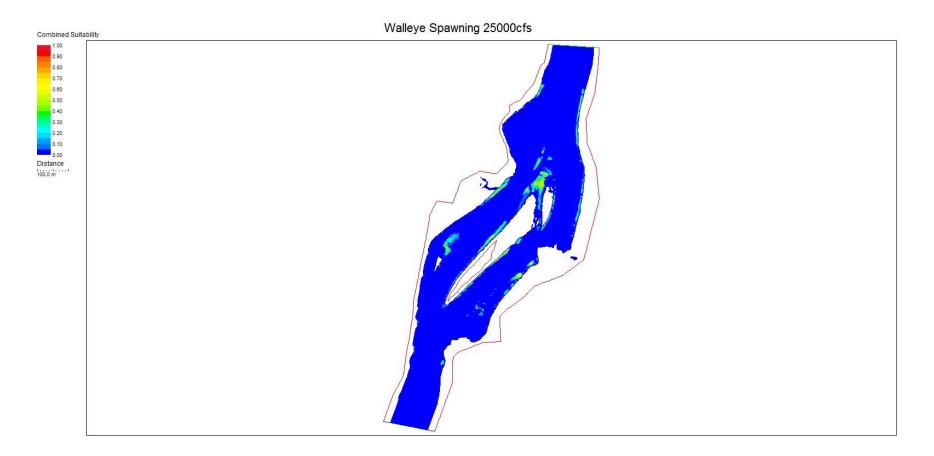








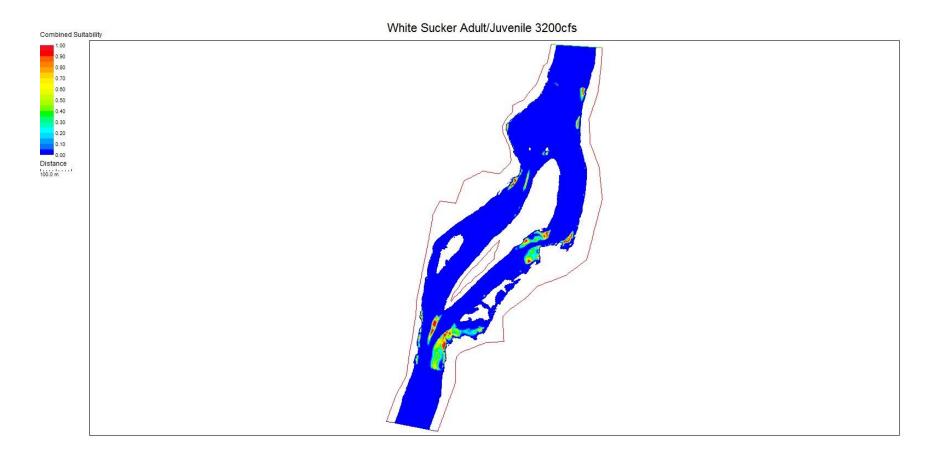


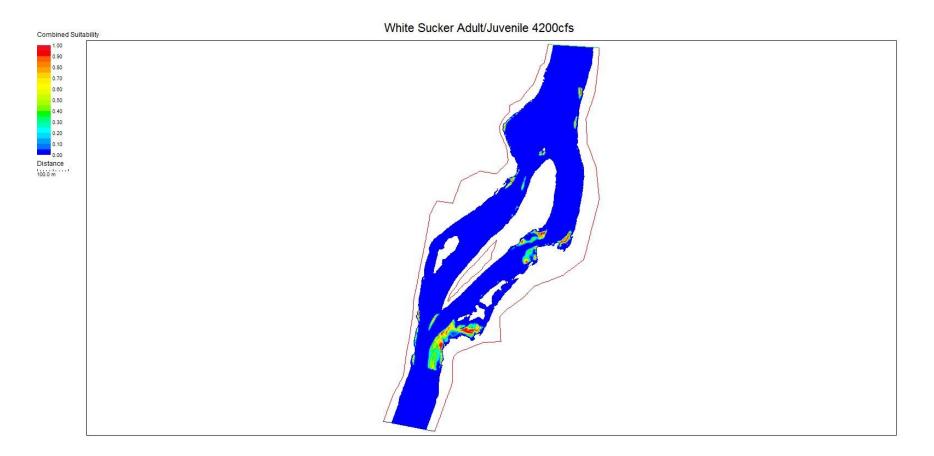


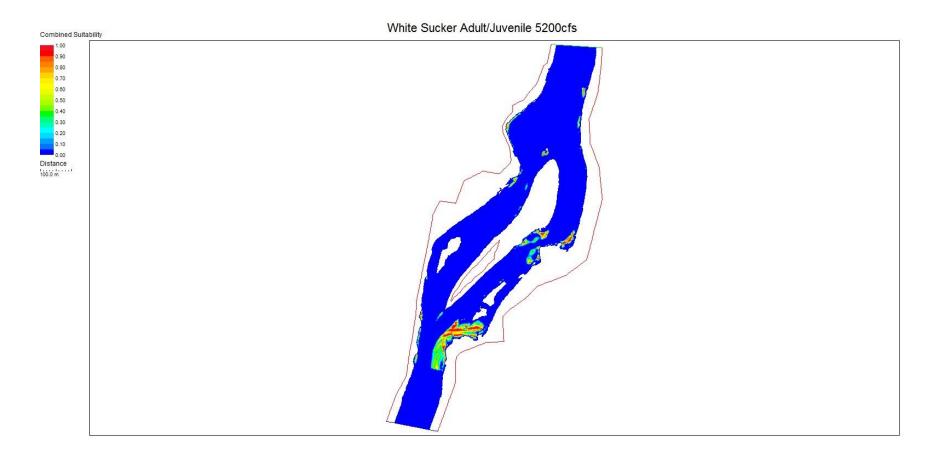




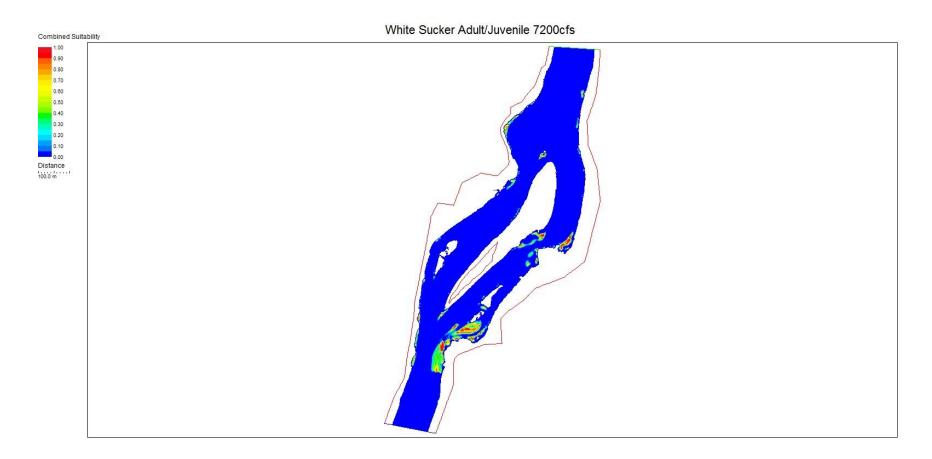




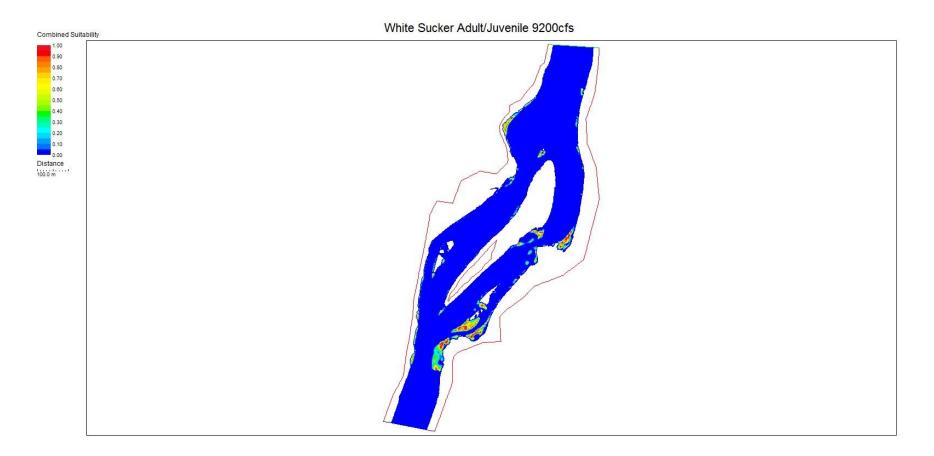


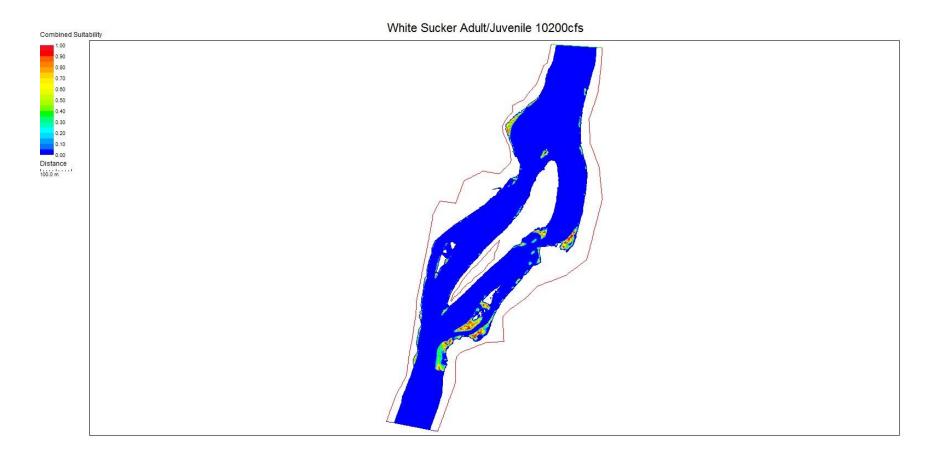


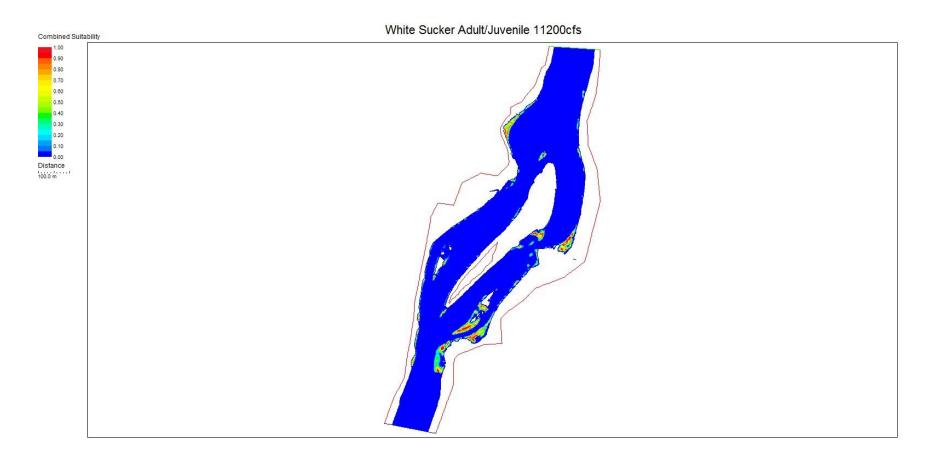


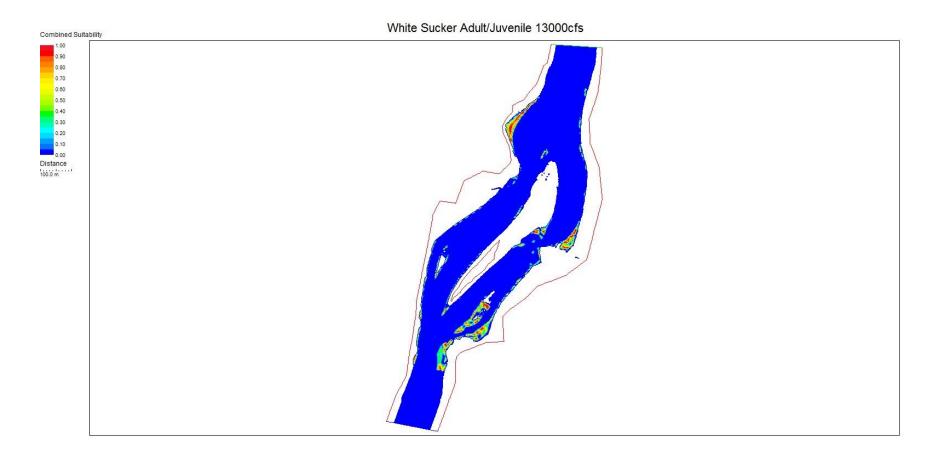


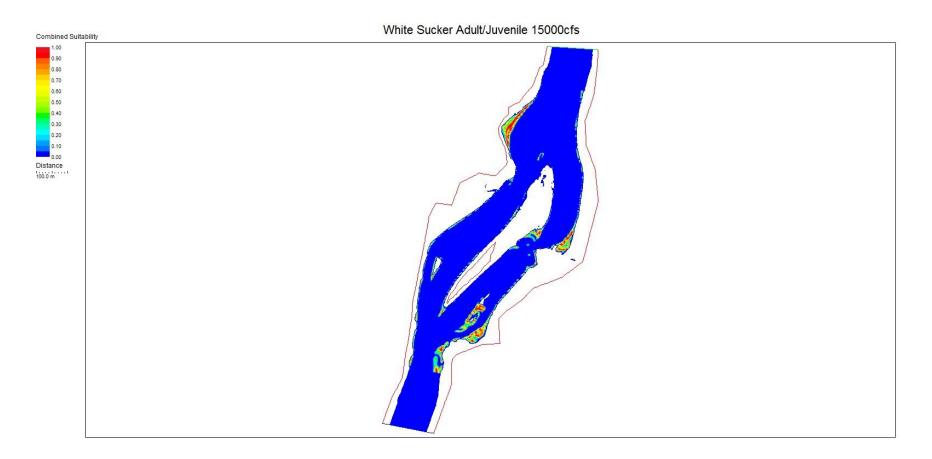


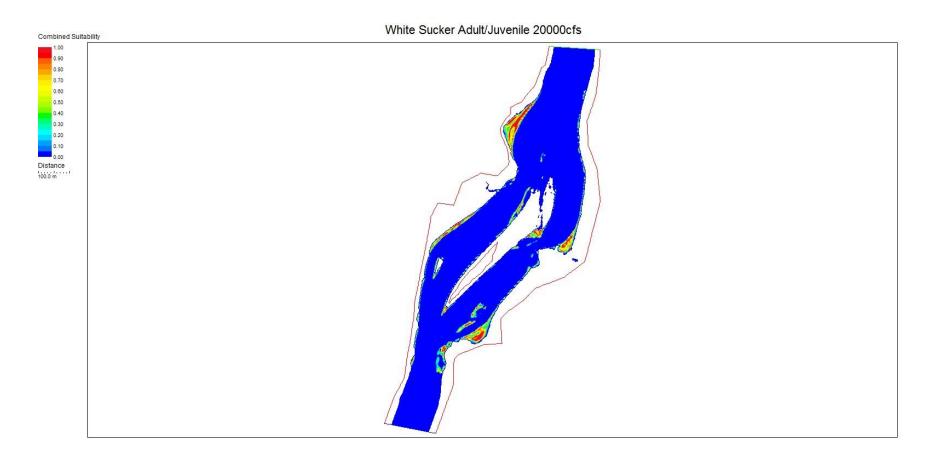


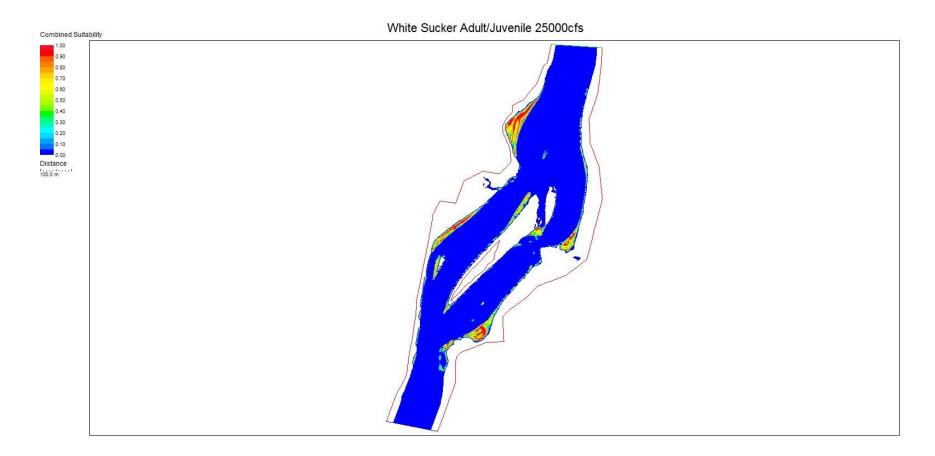


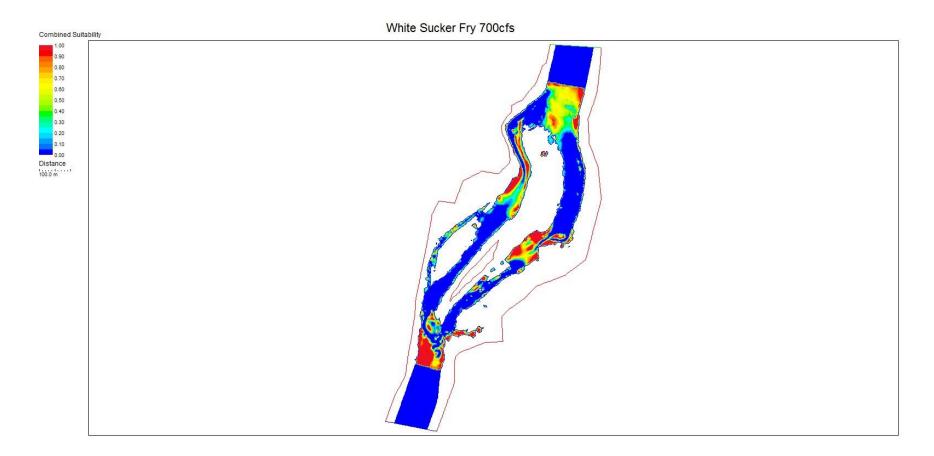




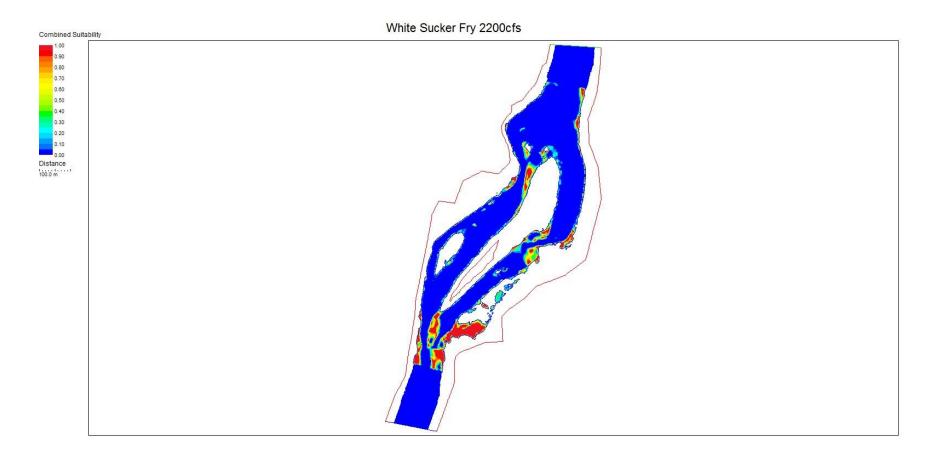


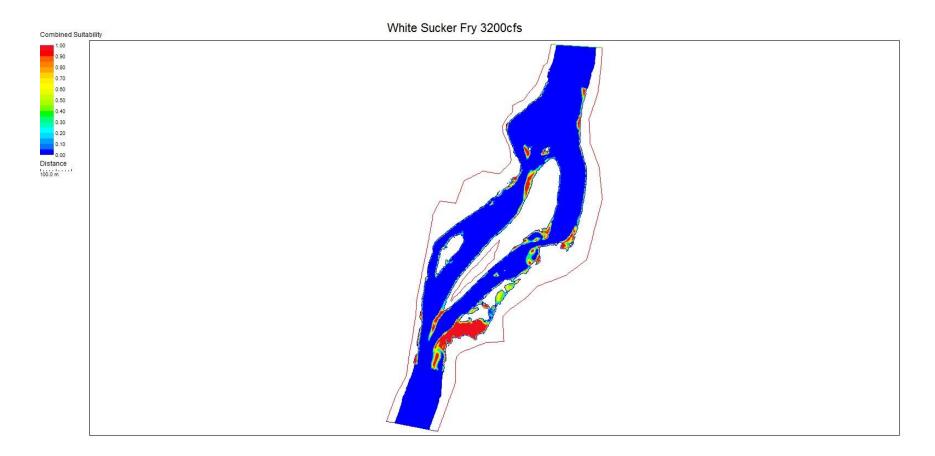


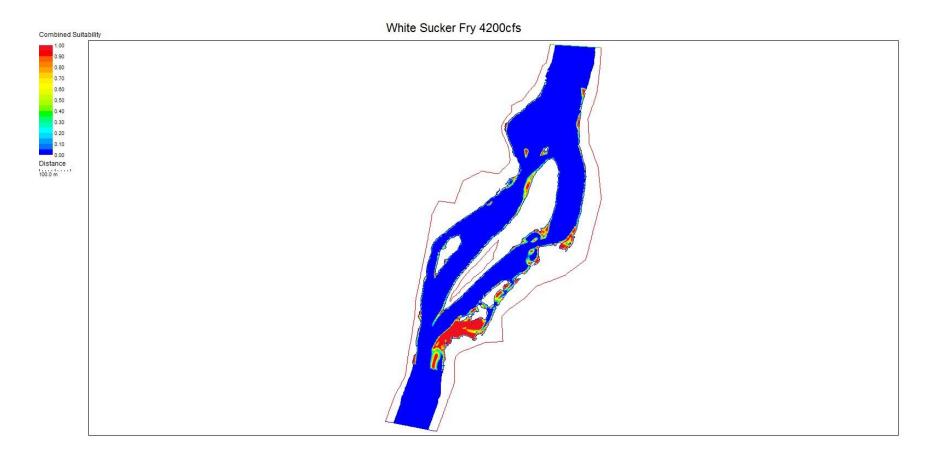


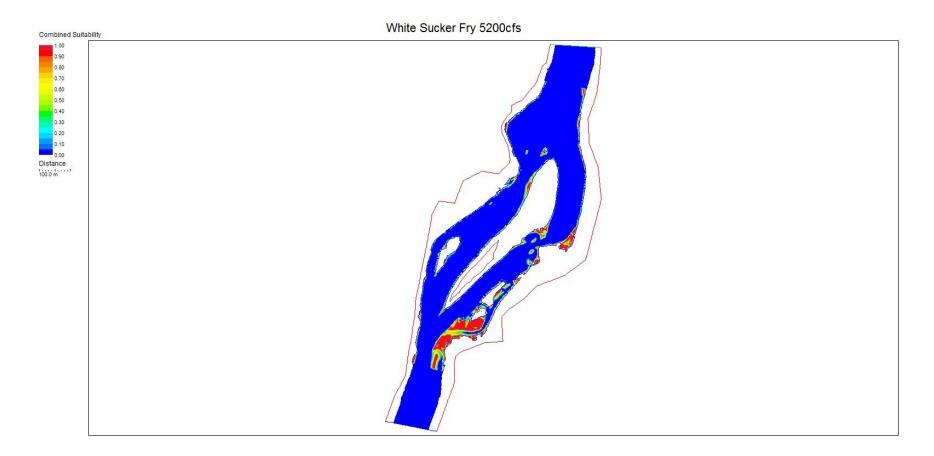


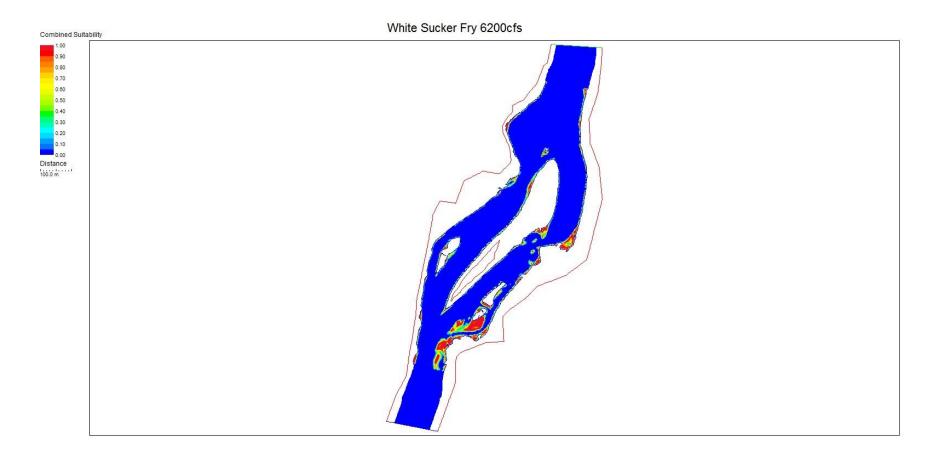


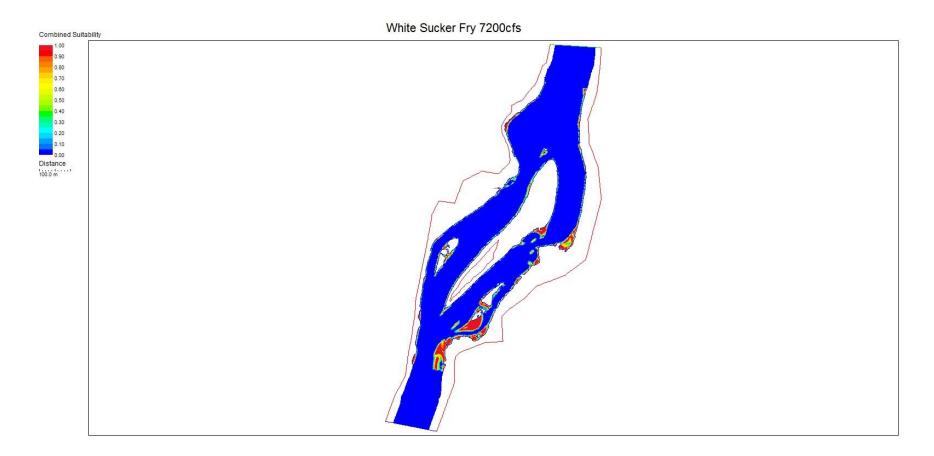




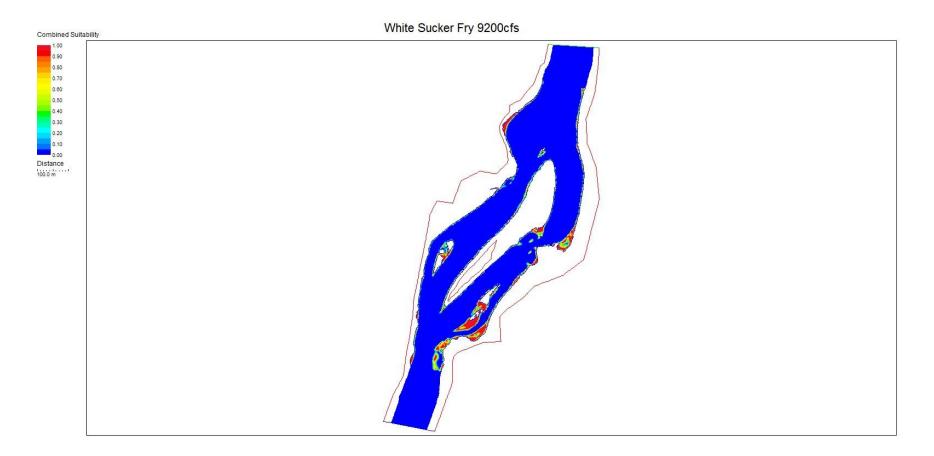


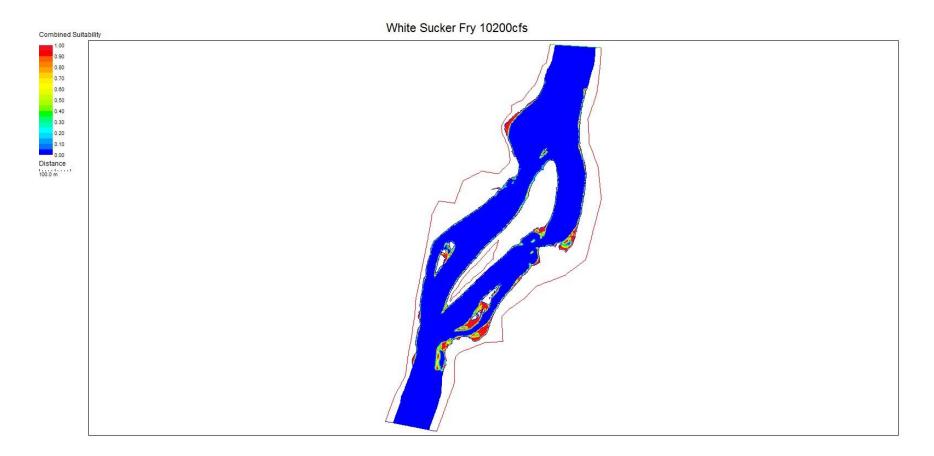


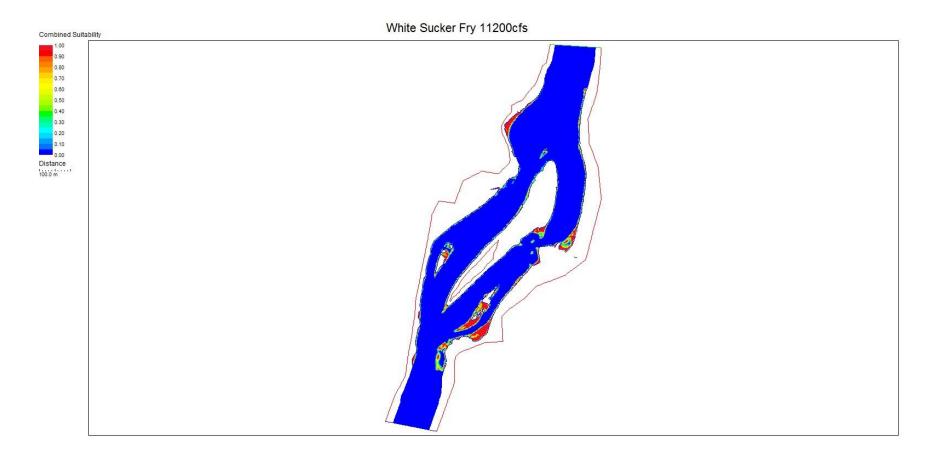


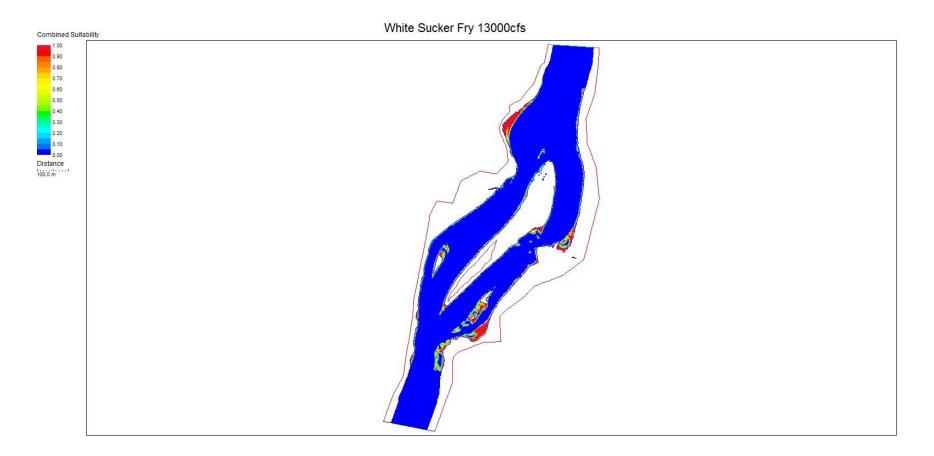


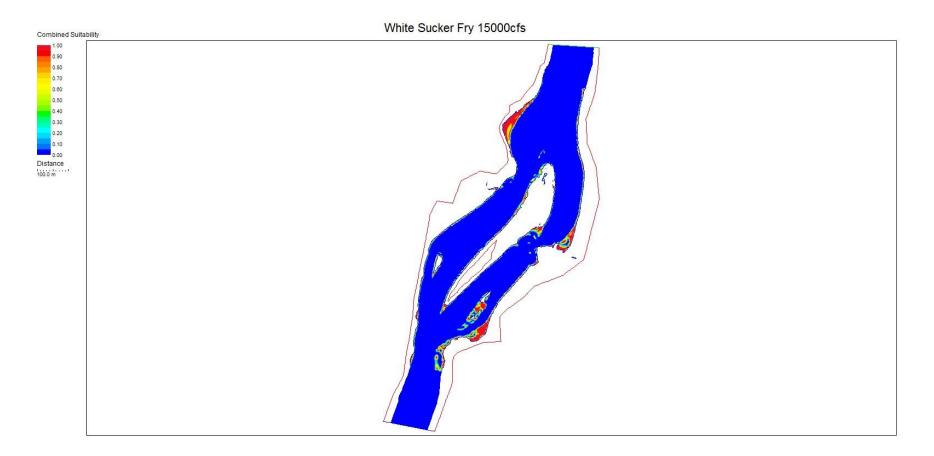


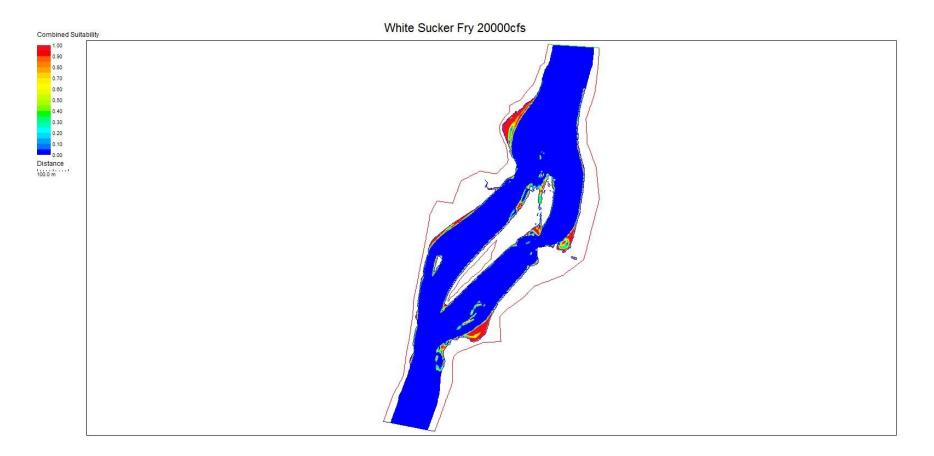




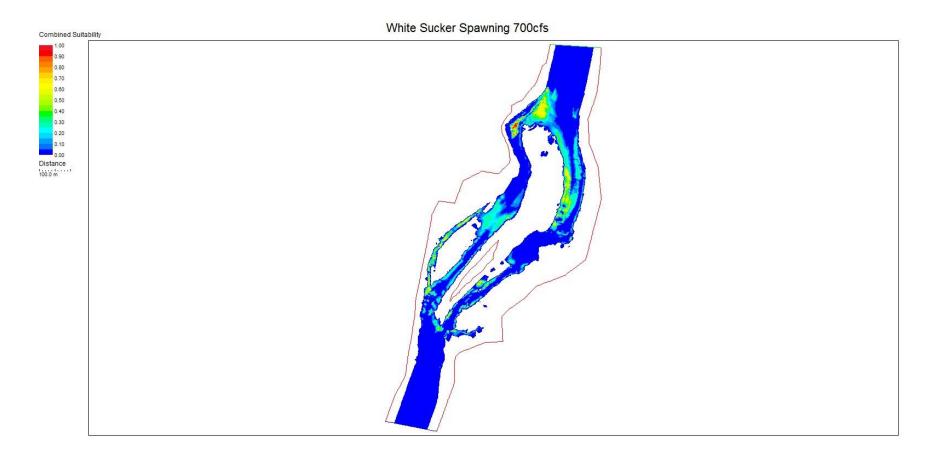


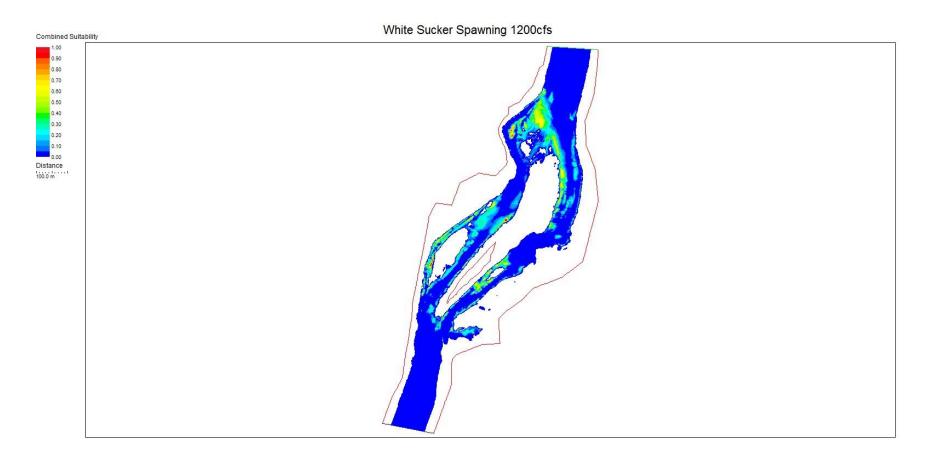


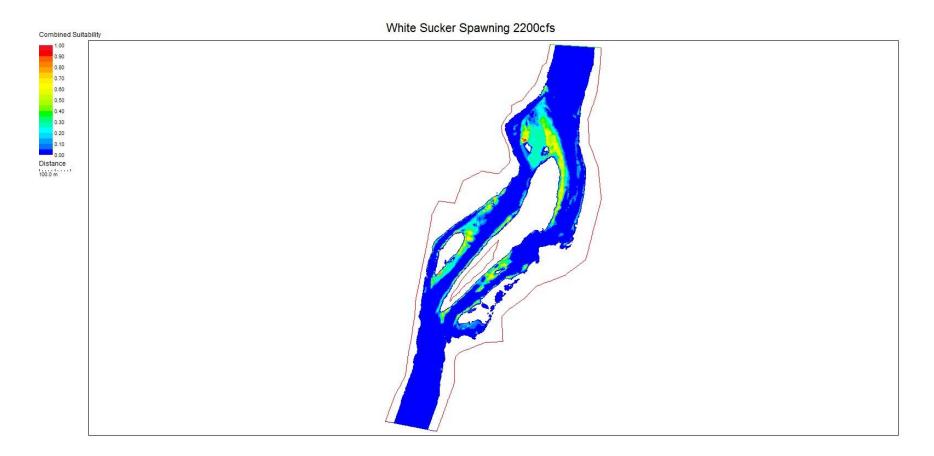


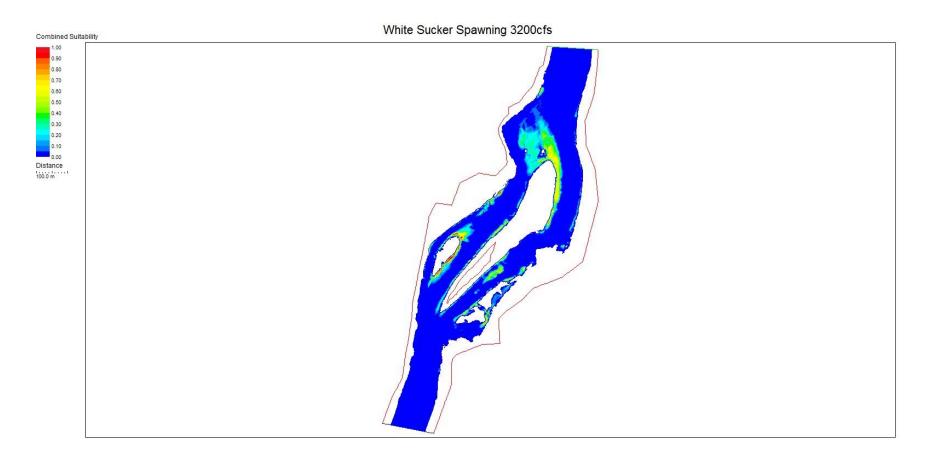


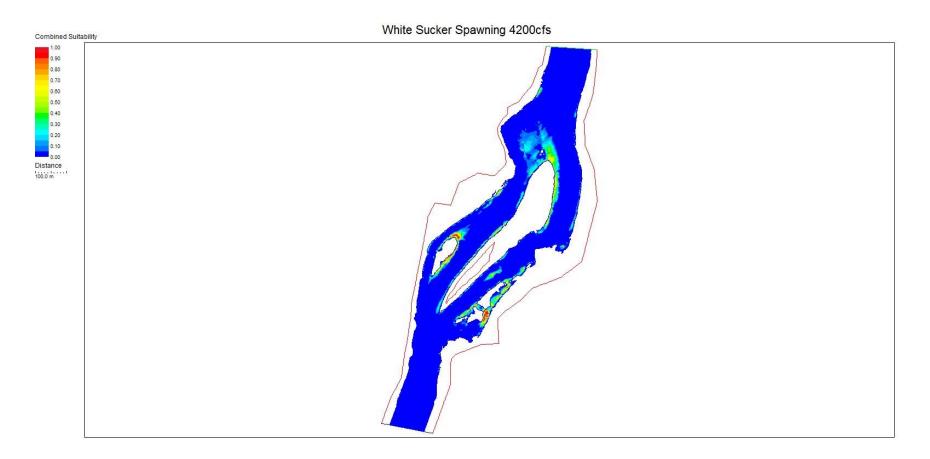


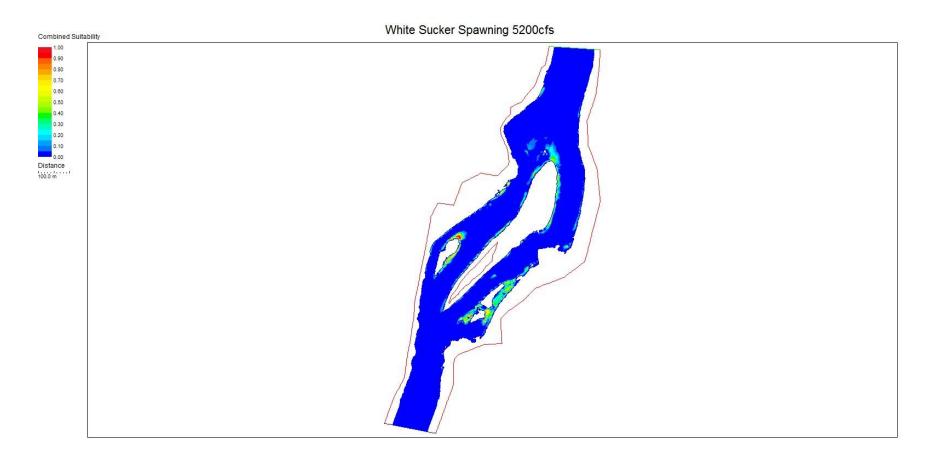


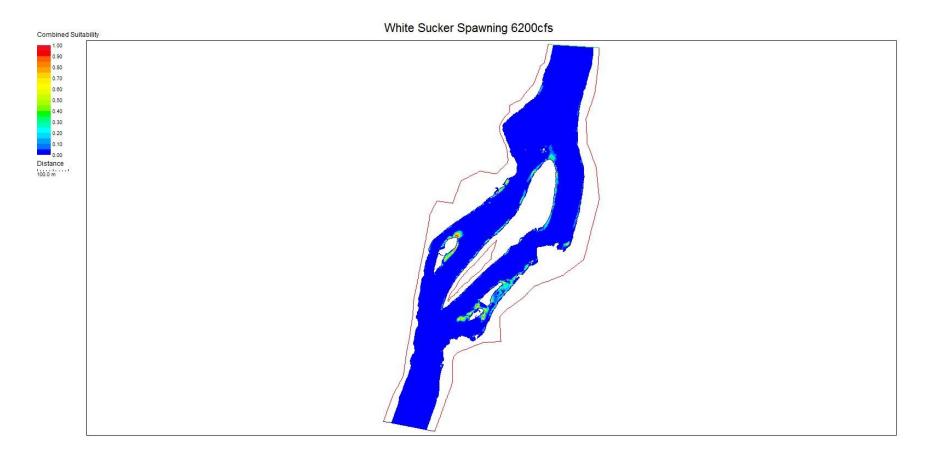


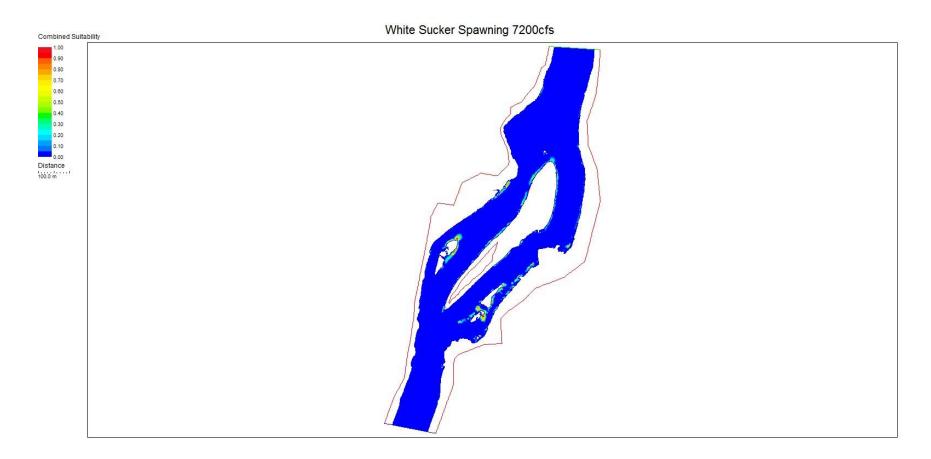


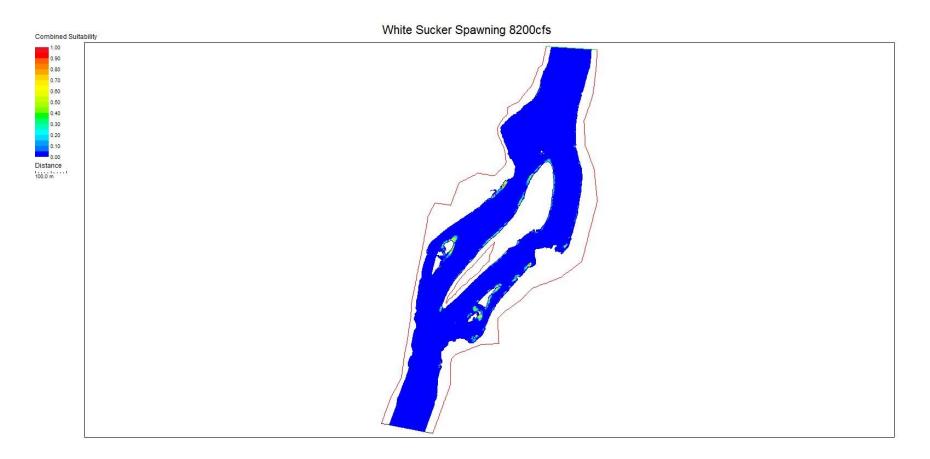




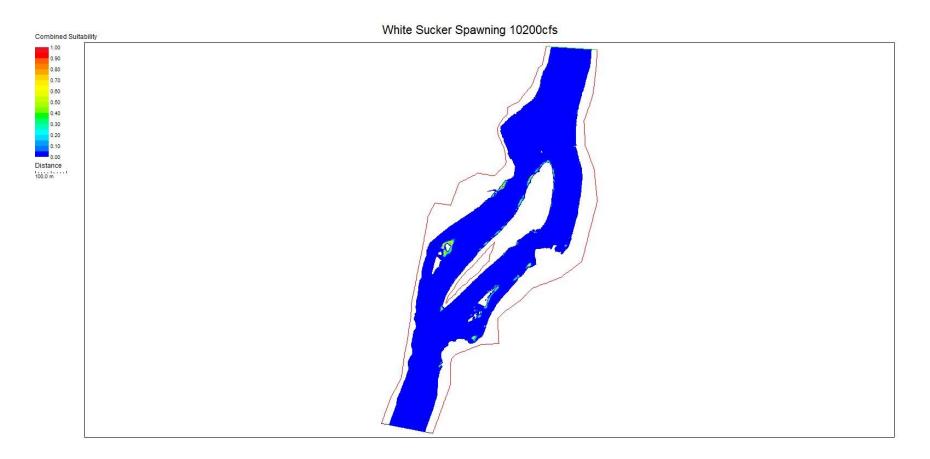


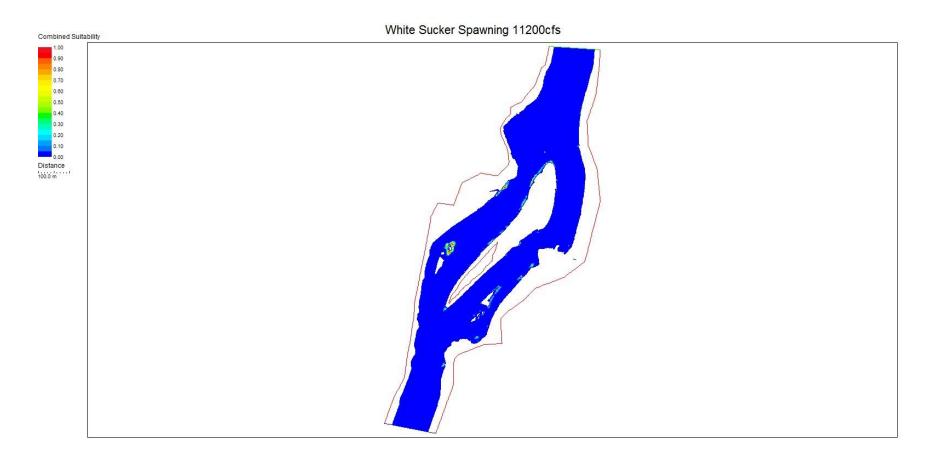


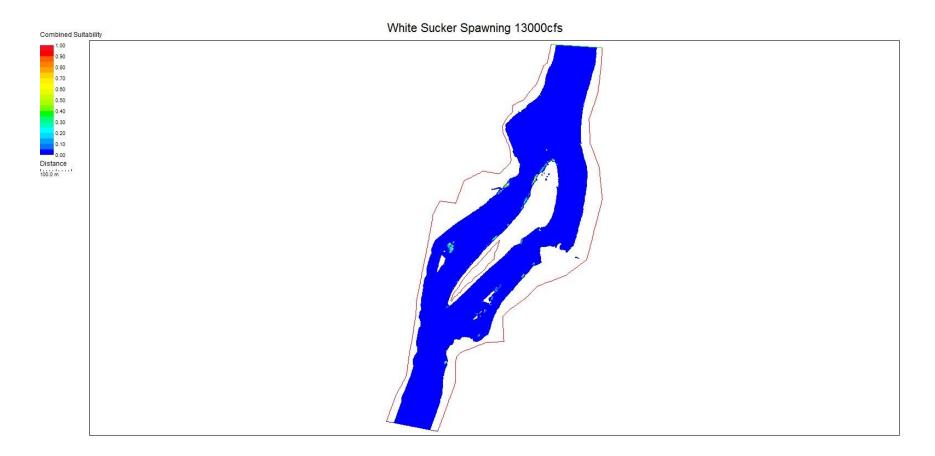


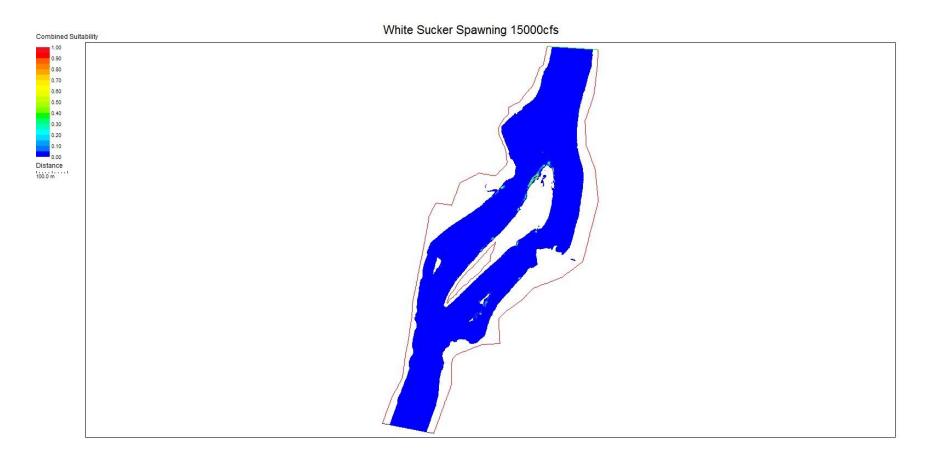


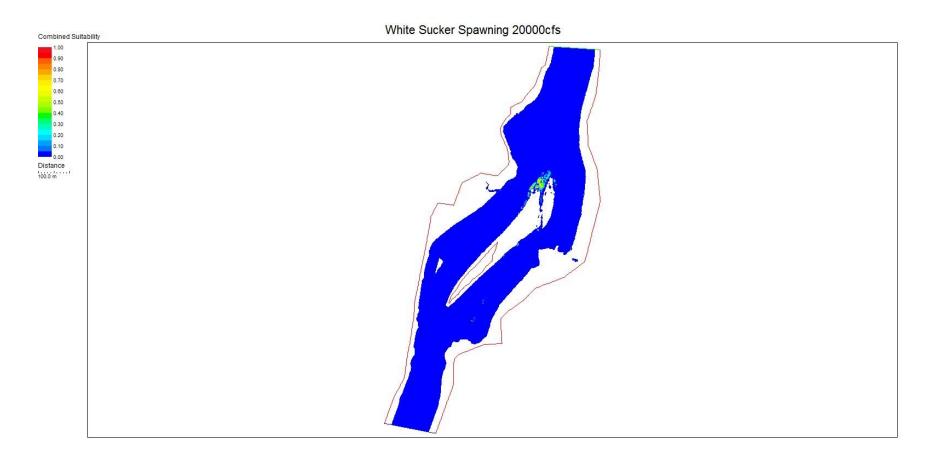


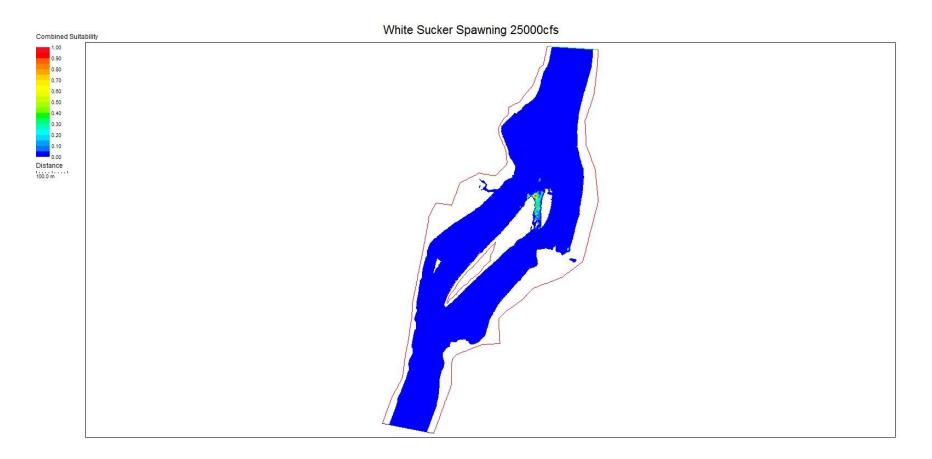












Chase Island 2D Site WUA (m²)

	Walleye				Fallfish				White Sucker		
Flow(cfs)	Fry	Juvenile	Adult	Spawning	Fry	Juvenile	Adult	Spawning	Fry	Adult/ Juvenile	Spawning
700	12,172	14,184	45,420	23,441	70,640	80,865	119,240	49,363	127,867	69,989	17,413
1000	10,230	11,432	34,118	31,720	67,508	82,128	122,514	48,964	110,014	69,790	18,307
2000	7,300	7,964	24,736	47,984	57,287	79,650	121,937	45,449	69,896	49,299	18,736
3000	6,871	6,793	22,388	60,853	44,264	70,839	104,667	37,818	52,007	31,969	14,225
4000	5,609	5,646	21,991	71,035	33,288	61,050	89,739	30,255	42,167	22,268	8,133
5000	5,198	5,078	22,057	78,028	26,559	50,817	79,891	23,371	37,099	19,014	4,538
6000	5,128	4,634	20,974	78,779	22,574	41,694	71,355	18,483	34,794	18,119	4,124
7000	3,734	4,263	20,831	75,895	18,696	36,521	67,810	15,040	31,575	18,993	3,797
8000	2,686	3,118	17,022	71,038	16,448	31,332	58,690	12,703	25,466	14,494	3,243
9000	1,562	2,317	14,764	65,680	14,808	26,988	52,076	11,113	24,968	13,430	3,161
10000	1,804	2,242	14,285	59,618	13,227	24,360	48,134	10,237	24,921	12,841	3,465
11000	1,741	2,082	12,712	54,276	11,037	21,894	43,596	9,483	22,248	11,630	3,600
13000	1,212	1,505	9,909	43,703	6,928	16,925	35,996	7,051	17,607	9,572	1,909
15000	974	1,199	8,201	30,067	4,214	11,871	31,568	3,874	15,474	9,252	668
20000	753	870	5,912	13,367	2,050	5,708	23,033	1,370	13,601	7,640	472
25000	488	595	4,776	6,261	1,395	3,731	21,451	491	13,324	7,532	343

				Tessellated	Sea	Macro-				
	Longnose Dace			Darter	Lamprey	invertebrates	Smallmouth Bass			
Flow(cfs)	Fry	Juvenile	Adult	Adult	Spawning		Fry	Juvenile	Adult	Spawning
700	44,533	22,444	40,750	34,350	51,562	35,793	24,510	42,841	32,631	49,273
1000	43,425	22,157	41,970	35,847	62,197	45,783	21,336	46,369	35,297	45,861
2000	36,612	19,644	38,187	33,250	79,577	65,397	14,579	49,233	33,552	32,480
3000	29,689	15,182	31,961	27,961	83,928	74,283	10,725	45,811	28,575	24,827
4000	22,046	9,760	23,251	20,434	81,939	76,565	8,290	42,025	25,354	19,985
5000	15,518	6,262	15,049	13,286	76,619	74,542	7,101	38,023	23,103	16,843
6000	12,385	5,057	11,240	9,949	69,572	70,826	6,563	33,502	20,961	14,912
7000	10,357	4,430	9,486	8,695	64,577	67,459	6,080	31,435	20,170	13,362
8000	9,336	3,875	8,123	7,576	58,492	64,317	5,220	28,544	18,218	11,043
9000	8,885	3,725	7,210	6,842	51,786	60,252	5,217	25,657	16,741	10,162
10000	8,762	4,139	7,271	7,060	46,175	56,705	4,573	23,955	15,869	8,975
11000	7,885	3,862	7,405	7,008	41,037	54,500	3,672	22,279	14,925	7,786
13000	4,789	2,021	4,844	4,778	32,767	50,104	2,338	18,886	13,095	4,948
15000	2,644	784	1,952	2,282	24,346	43,799	1,779	16,607	12,031	3,508
20000	1,626	393	834	1,272	11,748	33,015	1,145	11,670	9,709	1,917
25000	1,403	179	618	1,118	4,632	26,395	827	9,766	8,773	853

		Generalized H	Mussels			
Flow(cfs)	Shallow- Shallow- Shallow-Fast Slow		Deep-Fast Deep-Slow		DWM	Co-occurring
700	37,357	64,617	24,053	109,059	59711	72702
1200	42,942	60,678	39,261	109,432	70513	73289
2200	46,470	45,177	97,546	89,940	79391	72793
3200	42,895	35,155	160,734	52,650	72078	63358
4200	35,510	26,333	195,222	40,295	62181	52458
5200	25,741	22,000	219,995	36,186	48578	41538
6200	18,590	19,790	237,394	33,507	36847	33002
7200	11,559	18,574	254,377	32,142	33394	30055
8200	10,937	18,647	268,491	24,471	30071	26628
9200	10,949	18,899	276,370	21,873	26054	22987
10200	10,822	18,790	283,166	21,521	23464	20746
11200	13,579	15,139	289,248	20,411	22212	18637
13000	10,853	10,663	305,014	16,496	18353	13848
15000	4,646	7,899	319,119	15,670	16012	11091
20000	2,154	7,210	331,548	13,248	11033	7099
25000	2,621	7,011	338,692	13,011	10588	6570

