

## Estimate Peak Flows at Model Flow Change Locations

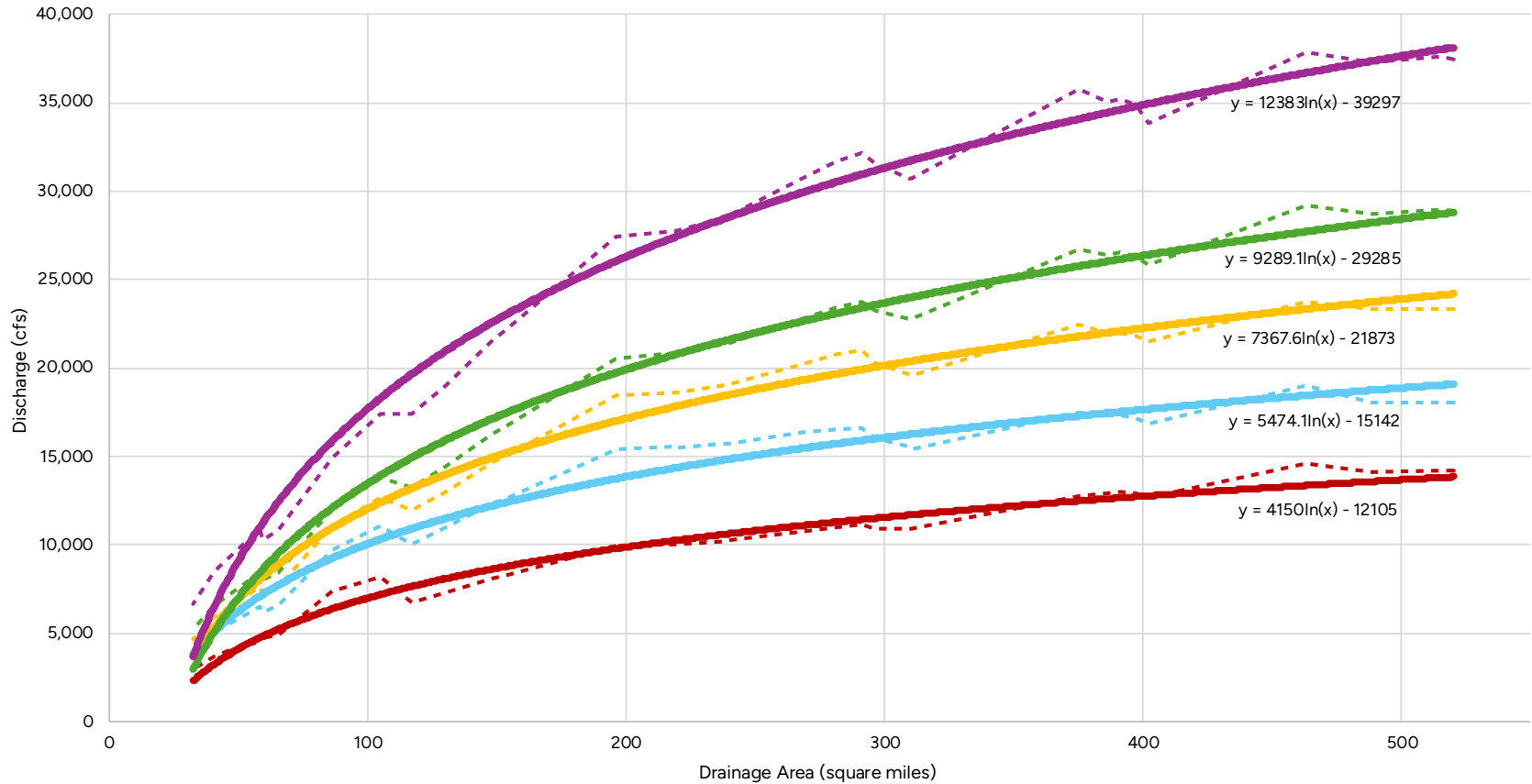
River	Model Station	Town	Drainage Area (mi <sup>2</sup> )	2-year (cfs)**	10-year (cfs)	25-year (cfs)	50-year (cfs)	100-year (cfs)	500-year (cfs)	July 2023 est. (cfs)	Dec 2023 est. (cfs)
Brewster	15.0	Cambridge	19	735	3211	4152	4952	5484	7180	5879	4683
Cooper Brook*	11667	Hardwick	1	54	398	458	574	655	884	702	542
Cooper Brook*	7253.146	Hardwick	16	631	2233	2859	3408	3799	4953	4073	3223
Cooper Brook*	661	Hardwick	17	666	2319	2975	3544	3948	5144	4233	3351
Gihon	20144	Johnson	55	1840	4655	6360	7420	8191	10689	8781	7016
Gihon	2066	Johnson	65	2046	4648	6479	7636	8525	11134	9139	7221
Mill Brook*	3393	Fairfax	20	769	2566	3312	3934	4377	5690	4692	3720
Seymour*	6163	Cambridge	22	837	2722	3527	4183	4650	6037	4985	3955
Stones Brook*	9181	Fairfax	10	415	1667	2096	2520	2820	3699	3023	2383
Wild Branch*	37685	Wolcott	19	735	2485	3202	3806	4237	5512	4542	3599
Wild Branch*	18717	Wolcott	35	1265	3634	4792	5637	6242	8057	6692	5331
Wild Branch*	15523	Wolcott	36	1297	3698	4882	5740	6355	8199	6812	5428
Wild Branch*	5609	Wolcott	39	1393	3887	5147	6043	6686	8618	7167	5715
Lamoille	11.94	Hardwick	32	1168	2999	3999	4692	5199	6650	5573	4437
Lamoille	11.895	Hardwick	40	1425	3721	5033	5907	6559	8485	7031	5586
Lamoille	11.79	Hardwick	58	1613	4764	6468	7607	8426	10877	9033	7193
Lamoille	11.47	Hardwick	86	2355	7368	9713	11087	12021	14966	12886	10484
Lamoille	11.29	Hardwick	105	2870	8198	11050	12693	13825	17429	14820	12003
Lamoille	11.2	Hardwick	117	3118	6781	10062	11923	13247	17404	14201	11275
Lamoille	10.556	Wolcott	130	3262	7337	10969	13014	14467	19050	15509	12306
Lamoille	10.429	Wolcott	148	3756	8121	12323	14647	16302	21549	17476	13850
Lamoille	10.32	Wolcott	153	3866	8304	12621	15016	16729	22146	17933	14199
Lamoille	10.21	Wolcott	196	4831	9954	15414	18419	20581	27455	22063	17417
Lamoille	9.47	Morristown	240	5558	10251	15757	19104	21457	28653	23002	18065
Lamoille	9.33	Morristown	268	5971	10721	16396	20220	22813	30767	24455	19120
Lamoille	9.2	Morristown	281	6403	11004	16565	20773	23464	31667	25153	19643
Lamoille	7.39	Johnson	310	6681	10890	15430	19546	22786	30717	24427	18483
Lamoille	7.261	Johnson	375	7278	12787	17472	22503	26713	35805	28636	21279
Lamoille	7.16	Johnson	386	8399	12914	17359	22014	26401	35100	28302	20817
Lamoille	7.11	Johnson	391	8585	13021	17355	22003	26545	35263	28456	20806
Lamoille	6.64	Cambridge	463	8669	14601	19008	23726	29224	37864	31328	22436
Lamoille	6.265	Cambridge	488	9887	14104	18081	23348	28732	37316	30801	22078
Lamoille	6.191	Cambridge	489	9989	14103	18079	23346	28731	37314	30800	22076
Lamoille	6.13	Cambridge	515	9989	14198	18064	23376	28926	37598	31009	22105
Lamoille	6.0104	Cambridge	520	10310	14189	18046	23366	28920	37438	31002	22095
Lamoille*	5.31	Fairfax	543	10767	14028	19329	24522	29209	38680	31312	23188
Lamoille*	5.23	Fairfax	555	10919	14119	19449	24683	29413	38951	31530	23340
Lamoille*	5.14	Fairfax	578	11241	14287	19671	24982	29790	39454	31934	23623
Lamoille*	5.10	Fairfax	671	11444	14906	20488	26081	31176	41301	33420	24663
Lamoille*	5.00	Georgia	679	11833	14956	20553	26168	31286	41448	33538	24745

\*Peak flows at these flow change locations were not included in the preliminary FEMA hydrology study and were determined using trends in the preliminary FEMA peak flows scaled by drainage area (see following pages)

\*\* Peak flows for the 2-year flood were estimated using a combination of steep stream regressions for smaller drainage areas (<50 mi<sup>2</sup>) and scaling of flows from USGS gauges in Johnson and East Georgia (>50 mi<sup>2</sup>)



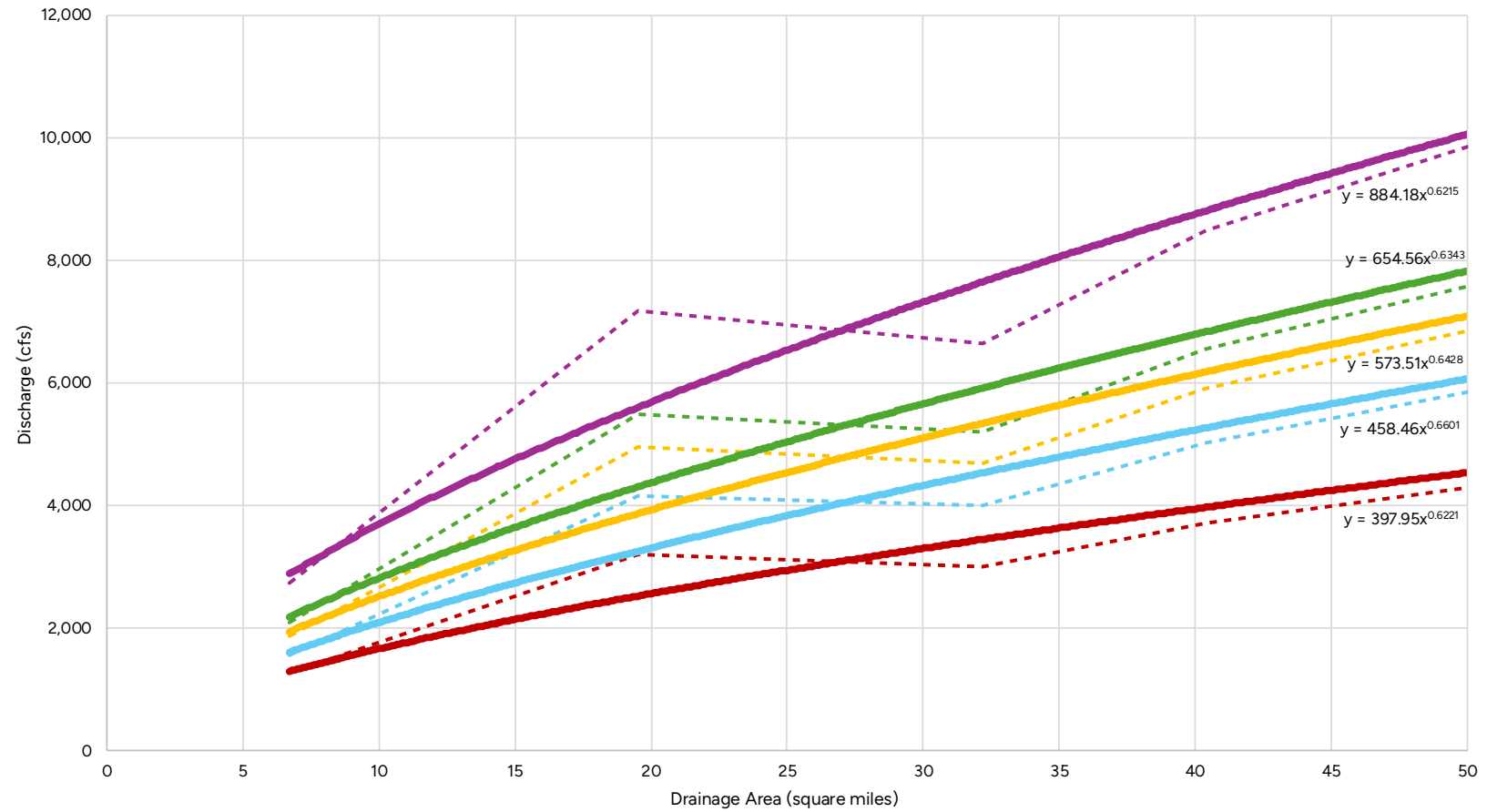
## Preliminary FEMA Flows on the Lamoille Mainstem with Logarithmic Trendlines



- FEMA 10-year
- FEMA 25-year
- FEMA 50-year
- FEMA 100-year
- FEMA 500-year
- Log. (FEMA 10-year)
- Log. (FEMA 25-year)
- Log. (FEMA 50-year)
- Log. (FEMA 100-year)
- Log. (FEMA 500-year)



# Preliminary FEMA Flows for Small Drainages on the Lamoille and Tributaries with Power Trendlines



- FEMA 10-year
- FEMA 25-year
- FEMA 50-year
- FEMA 100-year
- FEMA 500-year
- Power (FEMA 10-year)
- Power (FEMA 25-year)
- Power (FEMA 50-year)
- Power (FEMA 100-year)
- Power (FEMA 500-year)

$y = 884.18x^{0.6215}$

$y = 654.56x^{0.6343}$

$y = 573.51x^{0.6428}$

$y = 458.46x^{0.6601}$

$y = 397.95x^{0.6221}$