

## Appendix C

### Reliability-Diagram Tables for CFS-conditioned and Unconditioned ESP for INFORM Reservoir Inflows

## **Description of Tables**

The following tables contain reliability diagram information for forecasts of N-day reservoir inflow volumes being in the upper and lower terciles of the observed distribution. Both CFS-conditioned and unconditioned ensemble streamflow prediction (ESP) forecasts are validated for the historical period 1981-1999, and for the wet season (October-April). The results are for all major INFORM reservoirs as indicated in the table headings.

FOLSOM RESERVOIR - CFS-CONDITIONED

**30-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.16	0.05	76
0.125 - 0.250:	0.50	0.15	24
0.250 - 0.375:	0.62	0.31	8
0.375 - 0.500:	0.80	0.30	10
0.500 - 0.625:	0.50	0.33	8
0.625 - 0.750:	0.00	0.88	1
0.750 - 0.875:	1.00	0.74	1
0.875 - 1.000:	0.50	0.33	2

Brier Score: 0.0466

**30-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.12	0.09	26
0.125 - 0.250:	0.11	0.14	28
0.250 - 0.375:	0.00	0.36	6
0.375 - 0.500:	0.28	0.19	25
0.500 - 0.625:	0.65	0.23	17
0.625 - 0.750:	0.17	0.36	6
0.750 - 0.875:	0.86	0.28	7
0.875 - 1.000:	0.87	0.12	15

Brier Score: 0.0254

**60-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.16	0.05	73
0.125 - 0.250:	0.40	0.17	20
0.250 - 0.375:	0.44	0.29	9
0.375 - 0.500:	0.50	0.27	12
0.500 - 0.625:	0.80	0.30	10
0.625 - 0.750:	1.00	0.88	1
0.750 - 0.875:	0.75	0.37	4
0.875 - 1.000:	1.00	0.46	1

Brier Score: 0.0196

**60-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.17	0.09	24
0.125 - 0.250:	0.23	0.13	35
0.250 - 0.375:	0.14	0.33	7
0.375 - 0.500:	0.28	0.17	32
0.500 - 0.625:	0.42	0.27	12
0.625 - 0.750:	0.33	0.51	3
0.750 - 0.875:	1.00	0.25	9
0.875 - 1.000:	0.88	0.16	8

Brier Score: 0.0175

**90-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.19	0.05	73
0.125 - 0.250:	0.40	0.17	20
0.250 - 0.375:	0.50	0.36	6
0.375 - 0.500:	0.38	0.24	16
0.500 - 0.625:	0.78	0.31	9
0.625 - 0.750:	0.50	0.62	2
0.750 - 0.875:	1.00	0.43	3
0.875 - 1.000:	1.00	0.46	1

Brier Score: 0.0230

**90-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.07	0.09	28
0.125 - 0.250:	0.35	0.13	34
0.250 - 0.375:	0.62	0.31	8
0.375 - 0.500:	0.20	0.17	30
0.500 - 0.625:	0.27	0.28	11
0.625 - 0.750:	0.75	0.44	4
0.750 - 0.875:	0.83	0.30	6
0.875 - 1.000:	0.89	0.15	9

Brier Score: 0.0336

NEW BULLARDS BAR RESERVOIR - CFS-CONDITIONED

**30-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.11	0.06	55
0.125 - 0.250:	0.35	0.17	20
0.250 - 0.375:	0.38	0.31	8
0.375 - 0.500:	0.61	0.20	23
0.500 - 0.625:	0.18	0.28	11
0.625 - 0.750:	1.00	0.44	4
0.750 - 0.875:	0.80	0.33	5
0.875 - 1.000:	0.75	0.23	4

Brier Score: 0.0268

**30-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.13	0.10	23
0.125 - 0.250:	0.17	0.13	35
0.250 - 0.375:	0.43	0.33	7
0.375 - 0.500:	0.36	0.18	28
0.500 - 0.625:	0.38	0.26	13
0.625 - 0.750:	0.20	0.39	5
0.750 - 0.875:	0.69	0.21	13
0.875 - 1.000:	1.00	0.19	6

Brier Score: 0.0169

**60-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.15	0.06	59
0.125 - 0.250:	0.38	0.13	32
0.250 - 0.375:	0.57	0.33	7
0.375 - 0.500:	0.53	0.23	17
0.500 - 0.625:	0.58	0.27	12
0.625 - 0.750:	1.00	0.88	1
0.750 - 0.875:	0.00	0.74	1
0.875 - 1.000:	1.00	0.46	1

Brier Score: 0.0229

**60-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.00	0.15	9
0.125 - 0.250:	0.26	0.11	42
0.250 - 0.375:	0.18	0.27	11
0.375 - 0.500:	0.40	0.17	30
0.500 - 0.625:	0.25	0.24	16
0.625 - 0.750:	0.60	0.39	5
0.750 - 0.875:	0.50	0.26	8
0.875 - 1.000:	0.89	0.15	9

Brier Score: 0.0223

**90-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.24	0.06	62
0.125 - 0.250:	0.38	0.13	32
0.250 - 0.375:	0.17	0.36	6
0.375 - 0.500:	0.45	0.21	20
0.500 - 0.625:	0.62	0.33	8
0.625 - 0.750:	0.00	0.88	1
0.750 - 0.875:	****	****	0
0.875 - 1.000:	1.00	0.46	1

Brier Score: 0.0289

**90-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.23	0.13	13
0.125 - 0.250:	0.24	0.12	41
0.250 - 0.375:	0.50	0.36	6
0.375 - 0.500:	0.27	0.15	37
0.500 - 0.625:	0.18	0.28	11
0.625 - 0.750:	0.86	0.33	7
0.750 - 0.875:	0.38	0.26	8
0.875 - 1.000:	1.00	0.17	7

Brier Score: 0.0392

OROVILLE RESERVOIR - CFS-CONDITIONED

**30-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.07	0.06	58
0.125 - 0.250:	0.58	0.15	24
0.250 - 0.375:	0.50	0.36	6
0.375 - 0.500:	0.75	0.33	8
0.500 - 0.625:	0.38	0.33	8
0.625 - 0.750:	0.80	0.39	5
0.750 - 0.875:	0.80	0.33	5
0.875 - 1.000:	0.50	0.33	2

Brier Score: 0.0473

**30-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.05	0.10	21
0.125 - 0.250:	0.11	0.14	27
0.250 - 0.375:	0.00	0.29	9
0.375 - 0.500:	0.48	0.21	21
0.500 - 0.625:	0.31	0.26	13
0.625 - 0.750:	0.80	0.39	5
0.750 - 0.875:	0.60	0.33	5
0.875 - 1.000:	0.93	0.12	15

Brier Score: 0.0190

**60-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.17	0.06	64
0.125 - 0.250:	0.47	0.17	19
0.250 - 0.375:	0.43	0.33	7
0.375 - 0.500:	0.50	0.25	14
0.500 - 0.625:	0.88	0.33	8
0.625 - 0.750:	0.50	0.62	2
0.750 - 0.875:	****	****	0
0.875 - 1.000:	0.50	0.33	2

Brier Score: 0.0319

**60-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.00	0.14	11
0.125 - 0.250:	0.19	0.14	27
0.250 - 0.375:	0.25	0.31	8
0.375 - 0.500:	0.36	0.18	28
0.500 - 0.625:	0.33	0.22	18
0.625 - 0.750:	0.33	0.36	6
0.750 - 0.875:	0.50	0.30	6
0.875 - 1.000:	0.92	0.13	12

Brier Score: 0.0219

**90-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.19	0.06	67
0.125 - 0.250:	0.59	0.16	22
0.250 - 0.375:	0.56	0.29	9
0.375 - 0.500:	0.30	0.30	10
0.500 - 0.625:	0.60	0.42	5
0.625 - 0.750:	0.50	0.62	2
0.750 - 0.875:	****	****	0
0.875 - 1.000:	1.00	0.46	1

Brier Score: 0.0478

**90-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.20	0.09	25
0.125 - 0.250:	0.31	0.12	36
0.250 - 0.375:	0.40	0.39	5
0.375 - 0.500:	0.27	0.18	26
0.500 - 0.625:	0.42	0.27	12
0.625 - 0.750:	0.75	0.44	4
0.750 - 0.875:	0.67	0.43	3
0.875 - 1.000:	1.00	0.21	5

Brier Score: 0.0181

SHASTA RESERVOIR - CFS-CONDITIONED

**30-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.14	0.08	37
0.125 - 0.250:	0.18	0.22	11
0.250 - 0.375:	0.75	0.31	8
0.375 - 0.500:	0.67	0.31	9
0.500 - 0.625:	0.44	0.31	9
0.625 - 0.750:	0.50	0.44	4
0.750 - 0.875:	0.50	0.52	2
0.875 - 1.000:	1.00	0.46	1

Brier Score: 0.0329

**30-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.10	0.15	10
0.125 - 0.250:	0.19	0.15	26
0.250 - 0.375:	0.33	0.51	3
0.375 - 0.500:	0.18	0.28	11
0.500 - 0.625:	0.50	0.27	12
0.625 - 0.750:	0.60	0.39	5
0.750 - 0.875:	0.60	0.33	5
0.875 - 1.000:	0.78	0.15	9

Brier Score: 0.0157

**60-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.16	0.08	31
0.125 - 0.250:	0.45	0.17	20
0.250 - 0.375:	0.50	0.31	8
0.375 - 0.500:	0.40	0.30	10
0.500 - 0.625:	0.30	0.30	10
0.625 - 0.750:	****	****	0
0.750 - 0.875:	1.00	0.52	2
0.875 - 1.000:	****	****	0

Brier Score: 0.0338

**60-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.00	0.23	4
0.125 - 0.250:	0.20	0.23	10
0.250 - 0.375:	0.12	0.31	8
0.375 - 0.500:	0.35	0.23	17
0.500 - 0.625:	0.33	0.22	18
0.625 - 0.750:	0.00	0.51	3
0.750 - 0.875:	0.58	0.21	12
0.875 - 1.000:	0.67	0.15	9

Brier Score: 0.0503

**90-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.24	0.08	34
0.125 - 0.250:	0.48	0.16	21
0.250 - 0.375:	0.57	0.33	7
0.375 - 0.500:	0.23	0.26	13
0.500 - 0.625:	0.40	0.42	5
0.625 - 0.750:	0.00	0.88	1
0.750 - 0.875:	****	****	0
0.875 - 1.000:	****	****	0

Brier Score: 0.0543

**90-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.00	0.23	4
0.125 - 0.250:	0.17	0.30	6
0.250 - 0.375:	0.00	0.51	3
0.375 - 0.500:	0.28	0.22	18
0.500 - 0.625:	0.30	0.20	23
0.625 - 0.750:	0.00	0.51	3
0.750 - 0.875:	0.58	0.21	12
0.875 - 1.000:	0.67	0.13	12

Brier Score: 0.0646

TRINITY RESERVOIR – CFS CONDITIONED

**30-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.16	0.06	63
0.125 - 0.250:	0.50	0.19	16
0.250 - 0.375:	0.36	0.27	11
0.375 - 0.500:	0.60	0.24	15
0.500 - 0.625:	0.43	0.25	14
0.625 - 0.750:	0.60	0.39	5
0.750 - 0.875:	0.40	0.33	5
0.875 - 1.000:	1.00	0.46	1

Brier Score: 0.0286

**30-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.23	0.13	13
0.125 - 0.250:	0.20	0.13	35
0.250 - 0.375:	0.41	0.21	17
0.375 - 0.500:	0.31	0.18	26
0.500 - 0.625:	0.44	0.31	9
0.625 - 0.750:	0.38	0.31	8
0.750 - 0.875:	0.45	0.22	11
0.875 - 1.000:	0.64	0.14	11

Brier Score: 0.0330

**60-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.25	0.06	61
0.125 - 0.250:	0.23	0.16	22
0.250 - 0.375:	0.55	0.27	11
0.375 - 0.500:	0.43	0.21	21
0.500 - 0.625:	0.50	0.30	10
0.625 - 0.750:	0.50	0.62	2
0.750 - 0.875:	0.67	0.43	3
0.875 - 1.000:	****	****	0

Brier Score: 0.0220

**60-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.05	0.11	19
0.125 - 0.250:	0.27	0.14	30
0.250 - 0.375:	0.33	0.51	3
0.375 - 0.500:	0.31	0.15	39
0.500 - 0.625:	0.47	0.23	17
0.625 - 0.750:	0.33	0.51	3
0.750 - 0.875:	0.60	0.23	10
0.875 - 1.000:	0.67	0.15	9

Brier Score: 0.0191

**90-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.19	0.07	47
0.125 - 0.250:	0.39	0.14	28
0.250 - 0.375:	0.55	0.27	11
0.375 - 0.500:	0.38	0.19	24
0.500 - 0.625:	0.18	0.28	11
0.625 - 0.750:	0.80	0.39	5
0.750 - 0.875:	0.50	0.37	4
0.875 - 1.000:	****	****	0

Brier Score: 0.0362

**90-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.17	0.11	18
0.125 - 0.250:	0.27	0.14	30
0.250 - 0.375:	0.22	0.29	9
0.375 - 0.500:	0.29	0.16	35
0.500 - 0.625:	0.57	0.21	21
0.625 - 0.750:	0.20	0.39	5
0.750 - 0.875:	0.67	0.43	3
0.875 - 1.000:	0.67	0.15	9

Brier Score: 0.0244

FOLSOM RESERVOIR – ESP (15 RANDOMLY SELECTED TRACES)

**30-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.14	0.05	71
0.125 - 0.250:	0.45	0.16	22
0.250 - 0.375:	0.50	0.28	10
0.375 - 0.500:	0.71	0.36	7
0.500 - 0.625:	0.38	0.33	8
0.625 - 0.750:	1.00	0.62	2
0.750 - 0.875:	0.86	0.28	7
0.875 - 1.000:	0.67	0.27	3

Brier Score: 0.0277

**30-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
UPPER			
0.000 - 0.125:	0.19	0.09	27
0.125 - 0.250:	0.20	0.13	35
0.250 - 0.375:	0.38	0.24	13
0.375 - 0.500:	0.25	0.21	20
0.500 - 0.625:	0.38	0.26	13
0.625 - 0.750:	0.67	0.51	3
0.750 - 0.875:	0.69	0.21	13
0.875 - 1.000:	1.00	0.19	6

Brier Score: 0.0139

**60-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.14	0.06	64
0.125 - 0.250:	0.28	0.14	29
0.250 - 0.375:	0.71	0.33	7
0.375 - 0.500:	0.60	0.24	15
0.500 - 0.625:	0.86	0.36	7
0.625 - 0.750:	1.00	0.88	1
0.750 - 0.875:	0.80	0.33	5
0.875 - 1.000:	0.50	0.33	2

Brier Score: 0.0249

**60-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.15	0.08	33
0.125 - 0.250:	0.19	0.12	36
0.250 - 0.375:	0.33	0.36	6
0.375 - 0.500:	0.45	0.17	31
0.500 - 0.625:	0.57	0.25	14
0.625 - 0.750:	0.60	0.39	5
0.750 - 0.875:	1.00	0.52	2
0.875 - 1.000:	1.00	0.27	3

Brier Score: 0.0030

**90-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.11	0.06	56
0.125 - 0.250:	0.35	0.15	23
0.250 - 0.375:	0.46	0.24	13
0.375 - 0.500:	0.59	0.23	17
0.500 - 0.625:	0.29	0.36	7
0.625 - 0.750:	0.75	0.44	4
0.750 - 0.875:	0.71	0.28	7
0.875 - 1.000:	1.00	0.27	3

Brier Score: 0.0155

**90-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.12	0.07	41
0.125 - 0.250:	0.30	0.12	37
0.250 - 0.375:	0.45	0.27	11
0.375 - 0.500:	0.45	0.20	22
0.500 - 0.625:	0.50	0.30	10
0.625 - 0.750:	1.00	0.51	3
0.750 - 0.875:	0.67	0.43	3
0.875 - 1.000:	1.00	0.27	3

Brier Score: 0.0094

NEW BULLARDS BAR RESERVOIR – ESP (15 RANDOMLY SELECTED TRACES)

**30-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.12	0.07	50
0.125 - 0.250:	0.39	0.17	18
0.250 - 0.375:	0.44	0.29	9
0.375 - 0.500:	0.43	0.21	21
0.500 - 0.625:	0.56	0.22	18
0.625 - 0.750:	0.40	0.39	5
0.750 - 0.875:	0.57	0.28	7
0.875 - 1.000:	0.50	0.33	2
Brier Score: 0.0174			

**30-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.29	0.09	24
0.125 - 0.250:	0.18	0.12	39
0.250 - 0.375:	0.29	0.33	7
0.375 - 0.500:	0.26	0.17	31
0.500 - 0.625:	0.42	0.27	12
0.625 - 0.750:	0.80	0.39	5
0.750 - 0.875:	0.80	0.33	5
0.875 - 1.000:	0.86	0.17	7
Brier Score: 0.0202			

**60-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.09	0.06	58
0.125 - 0.250:	0.41	0.13	34
0.250 - 0.375:	0.70	0.28	10
0.375 - 0.500:	0.57	0.21	21
0.500 - 0.625:	0.80	0.42	5
0.625 - 0.750:	0.00	0.88	1
0.750 - 0.875:	1.00	0.74	1
0.875 - 1.000:	****	****	0

**60-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.15	0.13	13
0.125 - 0.250:	0.18	0.13	33
0.250 - 0.375:	0.50	0.28	10
0.375 - 0.500:	0.34	0.15	38
0.500 - 0.625:	0.45	0.20	22
0.625 - 0.750:	0.50	0.44	4
0.750 - 0.875:	0.40	0.33	5
0.875 - 1.000:	0.80	0.21	5
Brier Score: 0.0165			

**90-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.20	0.06	55
0.125 - 0.250:	0.37	0.13	35
0.250 - 0.375:	0.43	0.24	14
0.375 - 0.500:	0.53	0.24	15
0.500 - 0.625:	0.33	0.31	9
0.625 - 0.750:	1.00	0.88	1
0.750 - 0.875:	1.00	0.74	1
0.875 - 1.000:	****	****	0

Brier Score: 0.0243

**90-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.26	0.10	23
0.125 - 0.250:	0.27	0.12	37
0.250 - 0.375:	0.36	0.24	14
0.375 - 0.500:	0.31	0.18	29
0.500 - 0.625:	0.47	0.22	19
0.625 - 0.750:	0.00	0.62	2
0.750 - 0.875:	0.67	0.43	3
0.875 - 1.000:	1.00	0.27	3

Brier Score: 0.0217

OROVILLE RESERVOIR – ESP (15 RANDOMLY SELECTED TRACES)

**30-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.06	0.06	54
0.125 - 0.250:	0.56	0.19	16
0.250 - 0.375:	0.62	0.24	13
0.375 - 0.500:	0.50	0.33	8
0.500 - 0.625:	0.50	0.30	10
0.625 - 0.750:	0.40	0.39	5
0.750 - 0.875:	0.83	0.30	6
0.875 - 1.000:	0.75	0.23	4

Brier Score: 0.0351

**30-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.24	0.09	25
0.125 - 0.250:	0.07	0.14	28
0.250 - 0.375:	0.60	0.28	10
0.375 - 0.500:	0.14	0.20	22
0.500 - 0.625:	0.44	0.31	9
0.625 - 0.750:	0.75	0.44	4
0.750 - 0.875:	0.60	0.33	5
0.875 - 1.000:	0.92	0.13	13

Brier Score: 0.0376

**60-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.12	0.06	60
0.125 - 0.250:	0.40	0.17	20
0.250 - 0.375:	0.70	0.28	10
0.375 - 0.500:	0.62	0.26	13
0.500 - 0.625:	0.88	0.33	8
0.625 - 0.750:	0.00	0.88	1
0.750 - 0.875:	0.67	0.43	3
0.875 - 1.000:	0.00	0.46	1

Brier Score: 0.0447

**60-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.22	0.11	18
0.125 - 0.250:	0.00	0.15	23
0.250 - 0.375:	0.50	0.31	8
0.375 - 0.500:	0.34	0.18	29
0.500 - 0.625:	0.47	0.23	17
0.625 - 0.750:	0.67	0.36	6
0.750 - 0.875:	0.38	0.26	8
0.875 - 1.000:	0.86	0.17	7

Brier Score: 0.0304

**90-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.17	0.06	63
0.125 - 0.250:	0.61	0.17	18
0.250 - 0.375:	0.50	0.28	10
0.375 - 0.500:	0.50	0.27	12
0.500 - 0.625:	0.42	0.27	12
0.625 - 0.750:	****	****	0
0.750 - 0.875:	1.00	0.74	1
0.875 - 1.000:	****	****	0

Brier Score: 0.0406

**90-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.18	0.07	38
0.125 - 0.250:	0.32	0.12	38
0.250 - 0.375:	0.50	0.36	6
0.375 - 0.500:	0.40	0.21	20
0.500 - 0.625:	0.60	0.30	10
0.625 - 0.750:	****	****	0
0.750 - 0.875:	1.00	0.74	1
0.875 - 1.000:	1.00	0.27	3

Brier Score: 0.0128

SHASTA RESERVOIR – ESP (15 RANDOMLY SELECTED TRACES)

**30-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.11	0.08	36
0.125 - 0.250:	0.36	0.22	11
0.250 - 0.375:	0.20	0.39	5
0.375 - 0.500:	0.45	0.28	11
0.500 - 0.625:	0.62	0.33	8
0.625 - 0.750:	0.60	0.39	5
0.750 - 0.875:	1.00	0.37	4
0.875 - 1.000:	1.00	0.46	1

Brier Score: 0.0087

**30-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.20	0.12	15
0.125 - 0.250:	0.20	0.19	15
0.250 - 0.375:	0.29	0.33	7
0.375 - 0.500:	0.08	0.26	13
0.500 - 0.625:	0.50	0.27	12
0.625 - 0.750:	0.67	0.51	3
0.750 - 0.875:	0.50	0.26	8
0.875 - 1.000:	0.88	0.16	8

Brier Score: 0.0351

**60-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.16	0.08	37
0.125 - 0.250:	0.33	0.17	18
0.250 - 0.375:	0.14	0.33	7
0.375 - 0.500:	0.67	0.31	9
0.500 - 0.625:	0.80	0.42	5
0.625 - 0.750:	1.00	0.51	3
0.750 - 0.875:	0.50	0.52	2
0.875 - 1.000:	****	****	0

Brier Score: 0.0271

**60-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.17	0.19	6
0.125 - 0.250:	0.00	0.37	4
0.250 - 0.375:	0.00	0.36	6
0.375 - 0.500:	0.26	0.20	23
0.500 - 0.625:	0.44	0.19	25
0.625 - 0.750:	0.00	0.88	1
0.750 - 0.875:	0.57	0.28	7
0.875 - 1.000:	0.67	0.15	9

Brier Score: 0.0423

**90-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.26	0.08	34
0.125 - 0.250:	0.43	0.16	21
0.250 - 0.375:	0.60	0.39	5
0.375 - 0.500:	0.29	0.25	14
0.500 - 0.625:	0.20	0.42	5
0.625 - 0.750:	****	****	0
0.750 - 0.875:	0.50	0.52	2
0.875 - 1.000:	****	****	0

Brier Score: 0.0518

**90-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.00	0.27	3
0.125 - 0.250:	0.00	0.25	9
0.250 - 0.375:	0.00	0.44	4
0.375 - 0.500:	0.44	0.24	16
0.500 - 0.625:	0.25	0.21	20
0.625 - 0.750:	0.40	0.39	5
0.750 - 0.875:	0.53	0.19	15
0.875 - 1.000:	0.67	0.15	9

Brier Score: 0.0607

TRINITY RESERVOIR – ESP (15 RANDOMLY SELECTED TRACES)

**30-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.18	0.06	57
0.125 - 0.250:	0.32	0.16	22
0.250 - 0.375:	0.33	0.36	6
0.375 - 0.500:	0.45	0.28	11
0.500 - 0.625:	0.41	0.23	17
0.625 - 0.750:	0.50	0.31	8
0.750 - 0.875:	0.75	0.37	4
0.875 - 1.000:	1.00	0.21	5

Brier Score: 0.0139

**30-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.12	0.09	26
0.125 - 0.250:	0.29	0.13	34
0.250 - 0.375:	0.27	0.27	11
0.375 - 0.500:	0.39	0.18	28
0.500 - 0.625:	0.33	0.27	12
0.625 - 0.750:	0.75	0.44	4
0.750 - 0.875:	0.71	0.28	7
0.875 - 1.000:	0.62	0.16	8

Brier Score: 0.0156

**60-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.15	0.06	62
0.125 - 0.250:	0.48	0.16	21
0.250 - 0.375:	0.33	0.29	9
0.375 - 0.500:	0.50	0.24	16
0.500 - 0.625:	0.67	0.31	9
0.625 - 0.750:	0.25	0.44	4
0.750 - 0.875:	0.71	0.28	7
0.875 - 1.000:	0.50	0.33	2

Brier Score: 0.0273

**60-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.13	0.10	23
0.125 - 0.250:	0.24	0.11	42
0.250 - 0.375:	0.33	0.29	9
0.375 - 0.500:	0.47	0.17	30
0.500 - 0.625:	0.38	0.24	16
0.625 - 0.750:	0.33	0.51	3
0.750 - 0.875:	1.00	0.52	2
0.875 - 1.000:	0.80	0.21	5

Brier Score: 0.0104

**90-day Volumes in Lower Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.19	0.08	36
0.125 - 0.250:	0.37	0.13	35
0.250 - 0.375:	0.23	0.24	13
0.375 - 0.500:	0.43	0.21	21
0.500 - 0.625:	0.47	0.24	15
0.625 - 0.750:	0.00	0.62	2
0.750 - 0.875:	0.50	0.26	8
0.875 - 1.000:	****	****	0

Brier Score: 0.0290

**90-day Volumes in Upper Tercile**

Ensemble Frequency Range	Observed Frequency	Error Bound	Count
0.000 - 0.125:	0.23	0.08	31
0.125 - 0.250:	0.29	0.11	49
0.250 - 0.375:	0.86	0.33	7
0.375 - 0.500:	0.23	0.20	22
0.500 - 0.625:	0.50	0.30	10
0.625 - 0.750:	0.00	0.88	1
0.750 - 0.875:	0.25	0.37	4
0.875 - 1.000:	1.00	0.19	6

Brier Score: 0.0473