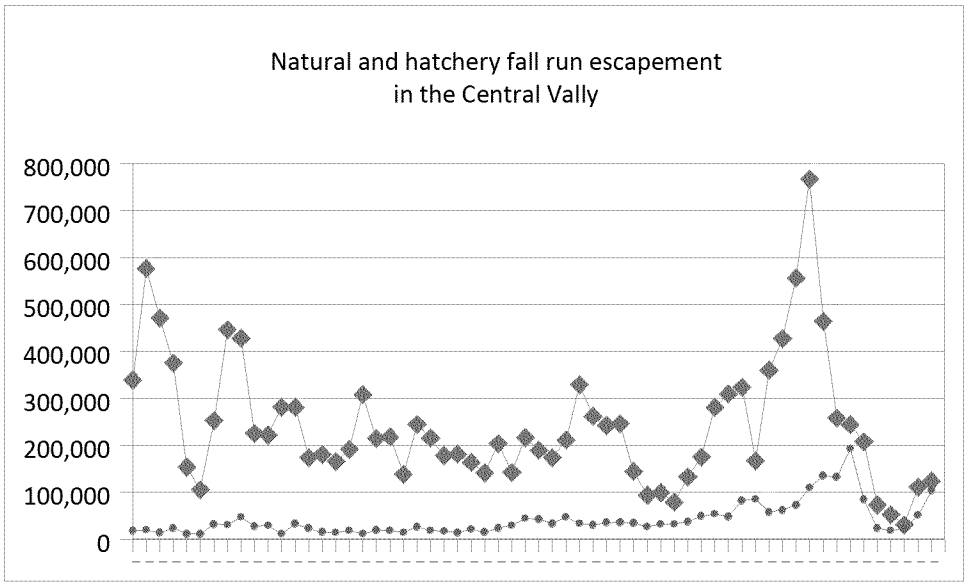
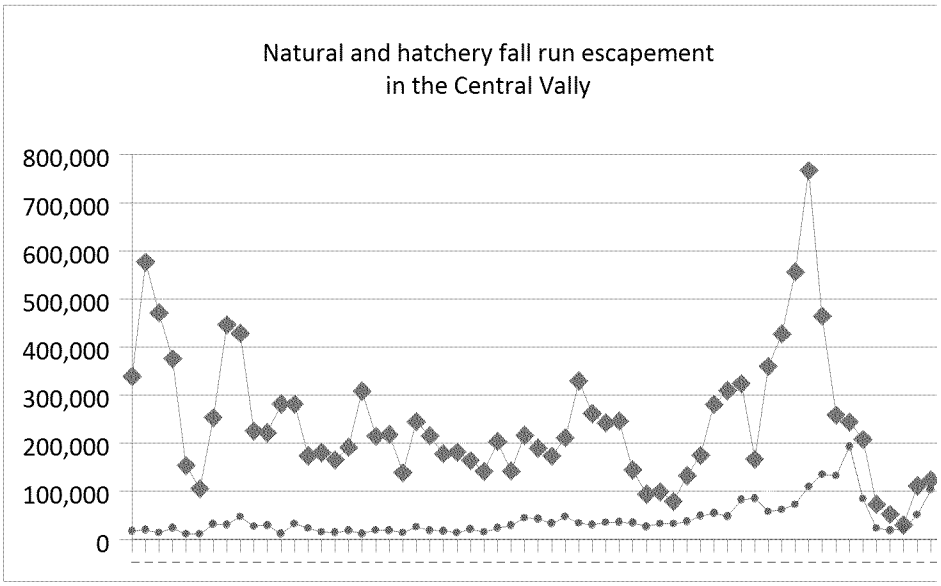

Natural and hatchery fall run escapement
in the Central Vally
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0

Year	E(run,n,cv)	E(run,h,cv)	E(run,t,cv)	H(run,i,cv)	P(run,i,cv)	P(run,t,cv)/I	H(run,o,cv)
1952	339,000.00	18,000.00	357,000.00	43,450.00	400,450.00	1	296,766.00
1953	576,300.00	20,000.00	596,300.00	68,230.00	664,530.00	1	270,051.00
1954	471,000.00	14,000.00	485,000.00	62,150.00	547,150.00	1	398,011.00
1955	375,700.00	24,000.00	399,700.00	53,170.00	452,870.00	1	336,629.00
1956	153,633.00	11,636.00	165,269.00	20,075.00	185,344.00	1	355,687.00
1957	105,721.00	11,609.00	117,330.00	14,873.00	132,203.00	1	163,234.00
1958	253,199.00	32,067.00	285,266.00	39,461.00	324,727.00	1	197,255.00
1959	446,223.00	31,176.00	477,399.00	64,125.00	541,524.00	1	352,091.00
1960	428,305.00	47,711.00	476,016.00	72,277.00	548,293.00	0.9783	299,678.00
1961	225,676.00	27,946.00	253,622.00	38,538.00	292,160.00	0.984	381,569.00
1962	221,789.00	29,847.00	251,636.00	36,506.00	288,142.00	0.987	297,510.00
1963	281,746.00	12,006.00	293,752.00	47,107.00	340,859.00	0.9696	390,497.00
1964	281,283.00	32,944.00	314,227.00	55,676.00	369,903.00	0.9853	356,918.00
1965	173,843.00	23,547.00	197,390.00	35,286.00	232,676.00	0.9953	385,498.00
1966	180,526.00	15,307.00	195,833.00	30,611.00	226,444.00	0.9996	230,191.00
1967	165,735.00	14,839.00	180,574.00	26,405.00	206,979.00	0.5934	90,930.00
1968	191,828.00	18,702.00	210,530.00	33,114.00	243,644.00	0.6019	225,779.00
1969	308,414.00	12,388.00	320,802.00	52,436.00	373,238.00	0.6295	257,224.00
1970	214,489.00	19,583.00	234,072.00	41,017.00	275,089.00	0.7666	259,086.00
1971	218,032.00	19,210.00	237,242.00	44,738.00	281,980.00	0.7528	238,657.00
1972	138,692.00	14,627.00	153,319.00	28,014.00	181,333.00	0.6609	275,852.00
1973	244,945.00	26,540.00	271,485.00	67,479.00	338,964.00	0.8294	500,624.00
1974	215,704.00	19,300.00	235,004.00	51,548.00	286,552.00	0.8665	367,630.00
1975	178,301.00	17,779.00	196,080.00	37,558.00	233,638.00	0.7515	245,782.00
1976	181,592.00	14,346.00	195,938.00	35,586.00	231,524.00	0.7133	218,572.00
1977	163,852.00	21,409.00	185,261.00	40,109.00	225,370.00	0.8212	279,569.00
1978	141,575.00	15,589.00	157,164.00	26,796.00	183,960.00	0.7781	277,699.00
1979	203,732.00	23,954.00	227,686.00	42,536.00	270,222.00	0.9382	321,449.00
1980	142,607.00	29,654.00	172,261.00	38,015.00	210,276.00	0.8911	330,968.00
1981	216,395.00	44,877.00	261,272.00	52,612.00	313,884.00	0.8517	309,791.00
1982	189,679.00	42,997.00	232,676.00	43,855.00	276,531.00	0.8841	478,241.00
1983	173,672.00	33,435.00	207,107.00	34,610.00	241,717.00	0.9076	209,832.00
1984	211,698.00	47,591.00	259,289.00	42,474.00	301,763.00	0.9344	280,628.00
1985	329,442.00	34,290.00	363,732.00	61,476.00	425,208.00	0.9381	313,390.00
1986	261,800.00	30,673.00	292,473.00	53,231.00	345,704.00	0.9095	561,406.00
1987	242,287.00	35,727.00	278,014.00	43,261.00	321,275.00	0.9031	541,582.00
1988	246,295.00	36,102.00	282,397.00	42,474.00	324,871.00	0.9163	880,716.00
1989	144,557.00	34,544.00	179,101.00	31,388.00	210,489.00	0.9054	447,882.00
1990	93,917.00	27,040.00	120,957.00	19,354.00	140,311.00	0.9016	404,669.00
1991	99,288.00	32,513.00	131,801.00	26,248.00	158,049.00	0.9389	297,353.00
1992	79,164.00	32,746.00	111,910.00	19,655.00	131,565.00	0.8968	203,591.00
1993	132,616.00	37,479.00	170,095.00	36,216.00	206,311.00	0.9836	353,092.00

1994	175,045.00	49,263.00	224,308.00	42,655.00	266,963.00	0.9847	449,197.00
1995	280,919.00	54,663.00	335,582.00	68,078.00	403,660.00	0.9704	994,806.00
1996	309,591.00	48,341.00	357,932.00	69,600.00	427,532.00	0.987	471,913.00
1997	323,909.00	82,541.00	406,450.00	65,254.00	471,704.00	0.9835	679,221.00
1998	167,108.00	85,664.00	252,772.00	48,822.00	301,594.00	0.7902	265,499.00
1999	359,815.00	58,175.00	417,990.00	65,382.00	483,372.00	0.9435	317,073.00
2000	427,320.00	62,018.00	489,338.00	99,818.00	589,156.00	0.9629	571,950.00
2001	555,922.00	72,844.00	628,766.00	133,806.00	762,572.00	0.94	218,517.00
2002	766,668.00	110,190.00	876,858.00	146,313.00	1,023,171.00	0.936	418,919.00
2003	464,229.00	135,425.00	599,654.00	133,287.00	732,941.00	0.963	297,294.00
2004	258,573.00	132,487.00	391,060.00	90,529.00	481,589.00	0.9316	501,202.00
2005	244,282.00	193,411.00	437,693.00	80,463.00	518,156.00	0.9108	356,550.00
2006	208,071.00	84,883.00	292,954.00	49,781.00	342,735.00	0.8859	110,551.00
2007	73,527.00	23,641.00	97,168.00	17,614.00	114,782.00	0.7792	87,520.00
2008	52,650.00	19,220.00	71,870.00	0.00	71,870.00	0.7978	0.00
2009	30,426.00	22,703.00	53,129.00	0.00	53,129.00	0.752	0.00
2010	111,462.00	51,727.00	163,189.00	0.00	163,189.00	0.9208	13,762.00
2011	123,917.00	103,972.00	227,889.00	43,979.00	271,868.00	0.9518	57,224.00

P(run,t,cv)	P(run,n,cv)
697,216.00	429,317.00
934,608.00	627,633.00
945,161.00	675,177.00
789,566.00	546,190.00
541,031.00	342,960.00
295,421.00	200,326.00
522,002.00	350,447.00
893,622.00	616,937.00
847,971.00	601,393.00
673,728.00	440,737.00
585,563.00	396,300.00
731,355.00	497,403.00
726,785.00	495,256.00
618,173.00	409,145.00
456,589.00	310,440.00
297,927.00	207,057.00
469,445.00	316,322.00
630,461.00	466,334.00
534,174.00	349,679.00
520,638.00	340,144.00
457,157.00	292,787.00
839,538.00	524,120.00
654,256.00	408,559.00
479,395.00	292,332.00
450,074.00	270,667.00
504,967.00	300,626.00
461,631.00	283,034.00
591,671.00	354,695.00
541,244.00	322,102.00
623,712.00	388,067.00
754,724.00	472,691.00
451,612.00	292,682.00
582,335.00	368,879.00
738,642.00	465,363.00
907,110.00	543,149.00
862,965.00	532,145.00
1,205,490.00	639,923.00
658,430.00	363,262.00
545,020.00	290,756.00
455,432.00	265,851.00
335,217.00	193,447.00
559,367.00	320,533.00



716,204.00	385,842.00
1,398,366.00	714,930.00
899,398.00	490,236.00
1,150,857.00	604,049.00
567,067.00	278,730.00
800,445.00	403,023.00
1,161,163.00	661,554.00
981,089.00	530,504.00
1,442,131.00	542,633.00
1,030,235.00	528,336.00
982,790.00	512,629.00
874,670.00	397,755.00
453,274.00	227,985.00
202,311.00	107,253.00
71,870.00	39,778.00
53,129.00	30,604.00
176,953.00	102,821.00
329,092.00	170,508.00