Table 12. Snake River spring/summer chinook hypothesis test results for differences in means between two brood year periods for spawner index SP2, Sm/SP2, ln(Sm/SP2) and ln(observed/expected), where u1 = mean for brood years 1962-1974, and u2 = mean for brood years 1975-1982, 1990-1993. t-tests are based on t adjusted for positi autocorrelation. 1/

		Sm/SP2		ln(Sm/SP2)		ln(Obs./Exp.)	
Test	**SP2**	**FGE 0.56**	**FGE 0.40**	**FGE 0.56**	**FGE 0.40**	**FGE 0.56**	**FGE 0.40**
u1	38999	69.5	69.5	4.19	4.19	0.0668	0.0556
Var	1.13E+08	631.7	631.7	0.11	0.11	0.0449	0.0370
Stdev	10624	25.1	25.1	0.32	0.32	0.2119	0.1922
n	13	13	13	13	13	13	13
u2	14752	88.6	99.4	4.40	4.51	-0.0724	-0.0602
Var	9.14E+07	1531.3	1974.6	0.19	0.20	0.1603	0.1453
Stdev	9559	39.1	44.4	0.44	0.44	0.4003	0.3812
n	12	12	12	12	12	12	12
u1-u2	24247	-19.1	-29.9	-0.21	-0.32	0.1392	0.1157
Sp^2	1.03E+08	1062.0	1273.9	0.15	0.15	0.1001	0.0888
R	0.79	-0.06	-0.04	-0.10	0.01	-0.24	-0.34
K	3.11	1.00	1.00	1.00	1.01	1.00	1.00
SE	4055	13.0	14.3	0.15	0.15	0.1266	0.1193
df	23	23	23	23	23	23	23
t unadjusted	5.980	-1.464	-2.093	-1.350	-2.067	1.099	0.970
t adjusted	1.925	-1.464	-2.093	-1.350	-2.039	1.099	0.970
Two tailed test 2/							
Ho: u1-u2=0 p=0.01	fail to reject	fail to reject	fail to reject	fail to reject	fail to reject	fail to reject	fail to reject
Ho: u1-u2=0 p=0.05	fail to reject	fail to reject	reject	fail to reject	fail to reject	fail to reject	fail to reject
Ho: u1-u2=0 p=0.10	reject	fail to reject	reject	fail to reject	reject	fail to reject	fail to reject
Ha: u1-u2 not equal to 0 (Parameter value changed from period 1 to period 2)							
One tailed test 3/							
Ho: u1-u2<=0 p=0.01	fail to reject	fail to reject	fail to reject	fail to reject	fail to reject	fail to reject	fail to reject
Ho: u1-u2<=0 p=0.05	reject	fail to reject	fail to reject	fail to reject	fail to reject	fail to reject	fail to reject
Ho: u1-u2<=0 p=0.10	reject	fail to reject	fail to reject	fail to reject	fail to reject	fail to reject	fail to reject
Ha: u1-u2 > 0 (Parameter value decreased from period 1 to period 2)							

1/ R = autocorrelation coefficient (Bence 1995; eq. 1)
K = standard error correction factor for positive autocorrelation (Bence 1995; eq 6).
2/ critical t values for two tail test and p=0.01, 0.05 and 0.10: 2.807, 2.069 and 1.714, respectively.
3/ critical t values for one tail test and p=0.01, 0.05 and 0.10: 2.500, 1.714 and 1.319, respectively.