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Evaluation of municipal water demand and related parameters

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NON-DOMESTIC RESULTS

User Category: BUSINESS COMMERCIAL

Multi Variable Regression

Descriptive Statistics					
	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Stand Area	29475	29	89220000	13586.38	739205.570
Stand Value	26903	21000	850000000	1515084.73	10548856.191
Valid N (listwise)	26777				

Descriptive Statistics					
	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Stand Area	26392	30	49636	2980.24	5510.600
Stand Value	26392	21000	96000000	1200885.92	3210962.510
Valid N (listwise)	26392				

Regression

Variables Entered/Removed(a)			
Model	**Variables Entered**	**Variables Removed**	**Method**
1	LN(Stand Value)	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	LN(Stand Area)	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Geographic Location	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
4	Stand Value	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
5	Development Level	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
6	Ave Max Temp	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
7	Stand Area	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
8	Ave Min Temp	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
a Dependent Variable: LN(Water Demand)			

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.479(a)	.230	.230	.89009

2	.532(b)	.283	.283	.85863
3	.551(c)	.303	.303	.84656
4	.557(d)	.310	.310	.84217
5	.563(e)	.317	.317	.83808
6	.571(f)	.326	.326	.83244
7	.575(g)	.330	.330	.83005
8	.577(h)	.332	.332	.82867

a Predictors: (Constant), LN(Stand Value)

b Predictors: (Constant), LN(Stand Value), LN(Stand Area)

c Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location

d Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value

e Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level

f Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level, Ave Max Temp

g Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level, Ave Max Temp, Stand Area

h Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level, Ave Max Temp, Stand Area, Ave Min Temp

ANOVA(i)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	5855.623	1	5855.623	7391.084	.000(a)
	Residual	19655.053	24809	.792		
	Total	25510.676	24810			
2	**Regression**	7221.029	2	3610.514	4897.287	.000(b)
	Residual	18289.647	24808	.737		
	Total	25510.676	24810			
3	**Regression**	7732.453	3	2577.484	3596.516	.000(c)
	Residual	17778.223	24807	.717		
	Total	25510.676	24810			
4	**Regression**	7916.871	4	1979.218	2790.555	.000(d)
	Residual	17593.805	24806	.709		
	Total	25510.676	24810			
5	**Regression**	8088.114	5	1617.623	2303.056	.000(e)
	Residual	17422.561	24805	.702		
	Total	25510.676	24810			
6	**Regression**	8322.669	6	1387.111	2001.739	.000(f)
	Residual	17188.007	24804	.693		
	Total	25510.676	24810			
7	**Regression**	8421.978	7	1203.140	1746.270	.000(g)
	Residual	17088.698	24803	.689		
	Total	25510.676	24810			

8	**Regression**	8479.278	8	1059.910	1543.495	.000(h)
	Residual	17031.398	24802	.687		
	Total	25510.676	24810			

a Predictors: (Constant), LN(Stand Value)

b Predictors: (Constant), LN(Stand Value), LN(Stand Area)

c Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location

d Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value

e Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level

f Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level, Ave Max Temp

g Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level, Ave Max Temp, Stand Area

h Predictors: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level, Ave Max Temp, Stand Area, Ave Min Temp

i Dependent Variable: LN(Water Demand)

Coefficients(a)

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	**(Constant)**	-4.1610324389	.058		-71.219	.000
	LN(Stand Value)	.3816762694	.004	.479	85.971	.000
2	**(Constant)**	-4.2540753583	.056		-75.423	.000
	LN(Stand Value)	.2424713500	.005	.304	45.178	.000
	LN(Stand Area)	.2644593860	.006	.290	43.035	.000
3	**(Constant)**	-5.1965880465	.066		-78.906	.000
	LN(Stand Value)	.2677265643	.005	.336	49.807	.000
	LN(Stand Area)	.2454137649	.006	.269	40.228	.000
	Geographic Location	.4057877295	.015	.144	26.714	.000
4	**(Constant)**	-4.5815511899	.076		-60.434	.000
	LN(Stand Value)	.2194774308	.006	.275	35.817	.000
	LN(Stand Area)	.2447547479	.006	.268	40.328	.000
	Geographic Location	.3960947391	.015	.140	26.191	.000
	Stand Value	.0000000322	.000	.104	16.125	.000
5	**(Constant)**	-4.0608089454	.082		-49.231	.000
	LN(Stand Value)	.2173665869	.006	.273	35.637	.000
	LN(Stand Area)	.2507502365	.006	.275	41.434	.000
	Geographic Location	.2710618035	.017	.096	15.900	.000
	Stand Value	.0000000315	.000	.102	15.858	.000
	Development Level	-.2652656013	.017	-.093	-15.614	.000
6	**(Constant)**	-5.4934315707	.113		-48.601	.000
	LN(Stand Value)	.2212186595	.006	.278	36.493	.000

	LN(Stand Area)	.2393627125	.006	.262	39.611	.000
	Geographic Location	.1346934590	.018	.048	7.287	.000
	Stand Value	.0000000298	.000	.097	15.082	.000
	Development Level	-.3667915298	.018	-.129	-20.660	.000
	Ave Max Temp	.0784938108	.004	.107	18.398	.000
7	**(Constant)**	-5.3164733007	.114		-46.773	.000
	LN(Stand Value)	.2393247618	.006	.300	38.416	.000
	LN(Stand Area)	.1590413567	.009	.174	17.664	.000
	Geographic Location	.1231944034	.018	.044	6.675	.000
	Stand Value	.0000000241	.000	.078	11.882	.000
	Development Level	-.3645139507	.018	-.128	-20.590	.000
	Ave Max Temp	.0843408913	.004	.115	19.697	.000
	Stand Area	.0000190772	.000	.103	12.006	.000
8	**(Constant)**	-5.3819055691	.114		-47.333	.000
	LN(Stand Value)	.2342960660	.006	.294	37.524	.000
	LN(Stand Area)	.1603371910	.009	.176	17.835	.000
	Geographic Location	.2222116725	.021	.079	10.395	.000
	Stand Value	.0000000234	.000	.076	11.527	.000
	Development Level	-.3846296798	.018	-.135	-21.595	.000
	Ave Max Temp	.0669582771	.005	.091	14.310	.000
	Stand Area	.0000199306	.000	.108	12.542	.000
	Ave Min Temp	.0356686712	.004	.063	9.135	.000

a Dependent Variable: LN(Water Demand)

Excluded Variables(i)

Model		**Beta In**	**t**	**Sig.**	**Partial Correlation**	**Collinearity Statistics**
						Tolerance
1	**LN(Stand Area)**	.290(a)	43.035	.000	.264	.637
	Stand Area	.243(a)	41.423	.000	.254	.847
	Stand Value	.114(a)	16.824	.000	.106	.664
	Mean Annual Precipitation	.047(a)	8.483	.000	.054	1.000
	Ave Max Temp	.140(a)	25.477	.000	.160	1.000
	Ave Min Temp	-.037(a)	-6.600	.000	-.042	.972
	Mean Annual Evaporation	.038(a)	6.808	.000	.043	.972
	Development Level	-.141(a)	-25.506	.000	-.160	.996
	Geographic Location	.169(a)	30.648	.000	.191	.982
2	**Stand Area**	.126(b)	14.728	.000	.093	.392
	Stand Value	.111(b)	16.947	.000	.107	.664
	Mean Annual Precipitation	.051(b)	9.461	.000	.060	1.000

	Ave Max Temp	.109(b)	20.144	.000	.127	.978
	Ave Min Temp	-.019(b)	-3.516	.000	-.022	.966
	Mean Annual Evaporation	.039(b)	7.240	.000	.046	.972
	Development Level	-.141(b)	-26.511	.000	-.166	.996
	Geographic Location	.144(b)	26.714	.000	.167	.969
3	**Stand Area**	.117(c)	13.832	.000	.087	.391
	Stand Value	.104(c)	16.125	.000	.102	.663
	Mean Annual Precipitation	-.007(c)	-1.151	.250	-.007	.841
	Ave Max Temp	.073(c)	13.034	.000	.082	.894
	Ave Min Temp	.070(c)	11.310	.000	.072	.725
	Mean Annual Evaporation	-.026(c)	-4.417	.000	-.028	.797
	Development Level	-.095(c)	-15.886	.000	-.100	.775
4	**Stand Area**	.090(d)	10.450	.000	.066	.370
	Mean Annual Precipitation	-.006(d)	-1.075	.282	-.007	.841
	Ave Max Temp	.070(d)	12.494	.000	.079	.893
	Ave Min Temp	.067(d)	10.774	.000	.068	.724
	Mean Annual Evaporation	-.025(d)	-4.196	.000	-.027	.797
	Development Level	-.093(d)	-15.614	.000	-.099	.775
5	**Stand Area**	.084(e)	9.754	.000	.062	.369
	Mean Annual Precipitation	-.036(e)	-5.954	.000	-.038	.768
	Ave Max Temp	.107(e)	18.398	.000	.116	.806
	Ave Min Temp	.096(e)	15.198	.000	.096	.680
	Mean Annual Evaporation	-.058(e)	-9.475	.000	-.060	.722
6	**Stand Area**	.103(f)	12.006	.000	.076	.365
	Mean Annual Precipitation	.014(f)	2.096	.036	.013	.627
	Ave Min Temp	.058(f)	8.386	.000	.053	.564
	Mean Annual Evaporation	-.014(f)	-2.087	.037	-.013	.598
7	**Mean Annual Precipitation**	.017(g)	2.624	.009	.017	.626
	Ave Min Temp	.063(g)	9.135	.000	.058	.562
	Mean Annual Evaporation	-.018(g)	-2.685	.007	-.017	.597
8	**Mean Annual Precipitation**	.012(h)	1.894	.058	.012	.622
	Mean Annual Evaporation	-.009(h)	-1.318	.187	-.008	.583

a Predictors in the Model: (Constant), LN(Stand Value)

b Predictors in the Model: (Constant), LN(Stand Value), LN(Stand Area)
c Predictors in the Model: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location
d Predictors in the Model: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value
e Predictors in the Model: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level
f Predictors in the Model: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level, Ave Max Temp
g Predictors in the Model: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level, Ave Max Temp, Stand Area
h Predictors in the Model: (Constant), LN(Stand Value), LN(Stand Area), Geographic Location, Stand Value, Development Level, Ave Max Temp, Stand Area, Ave Min Temp
i Dependent Variable: LN(Water Demand)

Single Variable Regression

Descriptive Statistics			
	N	**Mean**	**Variance**
LN(Water Demand)	26392	.8255	1.021
LN(Stand Area)	26392	7.2467	1.228
LN(Stand Value)	26392	13.0809	1.597
Valid N (listwise)	26392		

Regression

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.469(a)	.220	.220	.89248
a Predictors: (Constant), LN(Stand Area)				

ANOVA(b)						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	**Regression**	5932.371	1	5932.371	7447.857	.000(a)
	Residual	21020.175	26390	.797		
	Total	26952.546	26391			
a Predictors: (Constant), LN(Stand Area)						
b Dependent Variable: LN(Water Demand)						

Coefficients(a)								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
		B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**

1	**(Constant)**	-2.275	.036		-62.594	.000	-2.346	-2.203
	LN(Stand Area)	.428	.005	.469	86.301	.000	.418	.438
a Dependent Variable: LN(Water Demand)								

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.482(a)	.232	.232	.88558
a Predictors: (Constant), LN(Stand Value)				

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	6256.349	1	6256.349	7977.556	.000(a)
	Residual	20696.197	26390	.784		
	Total	26952.546	26391			
a Predictors: (Constant), LN(Stand Value)						
b Dependent Variable: LN(Water Demand)						

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	**(Constant)**	-4.214	.057		-74.342	.000	-4.326	-4.103
	LN(Stand Value)	.385	.004	.482	89.317	.000	.377	.394
a Dependent Variable: LN(Water Demand)								

Descriptives

Descriptive Statistics

Development Level	Geographic Location		N	Mean	Variance
Metro/City	**Coastal**	**LN(Water Demand)**	2193	.7653	.930
		LN(Stand Area)	2193	7.0760	.905
		LN(Stand Value)	2193	13.2474	1.496
		Valid N (listwise)	2193		
	Inland	**LN(Water Demand)**	19611	.8963	1.067

		LN(Stand Area)	19611	7.2477	1.327
		LN(Stand Value)	19611	13.0316	1.666
		Valid N (listwise)	19611		
Rural	**Coastal**	**LN(Water Demand)**	2614	.4872	.710
		LN(Stand Area)	2614	7.3214	.868
		LN(Stand Value)	2614	13.4775	1.251
		Valid N (listwise)	2614		
	Inland	**LN(Water Demand)**	1974	.6371	.837
		LN(Stand Area)	1974	7.3284	1.035
		LN(Stand Value)	1974	12.8599	1.167
		Valid N (listwise)	1974		

Regression

Model Summary

Development Level	**Geographic Location**	**Model**	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
Metro/City	**Coastal**	**1**	.494(a)	.244	.244	.83863
	Inland	**1**	.486(a)	.236	.236	.90320
Rural	**Coastal**	**1**	.376(a)	.141	.141	.78097
	Inland	**1**	.458(a)	.210	.209	.81365

a Predictors: (Constant), LN(Stand Area)

ANOVA(b)

Development Level	**Geographic Location**	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Metro/City	**Coastal**	**1**	**Regression**	497.222	1	497.222	706.984	.000(a)
			Residual	1540.930	2191	.703		
			Total	2038.153	2192			
	Inland	**1**	**Regression**	4935.643	1	4935.643	6050.350	.000(a)
			Residual	15996.269	19609	.816		
			Total	20931.912	19610			
Rural	**Coastal**	**1**	**Regression**	261.967	1	261.967	429.517	.000(a)
			Residual	1593.086	2612	.610		
			Total	1855.053	2613			
	Inland	**1**	**Regression**	346.462	1	346.462	523.332	.000(a)
			Residual	1305.525	1972	.662		
			Total	1651.987	1973			

a Predictors: (Constant), LN(Stand Area)

b Dependent Variable: LN(Water Demand)

Coefficients(a)

Development Level	Geographic Location	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
				B	Std. Error	Beta			Lower Bound	Upper Bound
Metro/City	Coastal	1	(Constant)	-2.778	.134		-20.661	.000	-3.042	-2.514
			LN(Stand Area)	.501	.019	.494	26.589	.000	.464	.538
	Inland	1	(Constant)	-2.260	.041		-55.003	.000	-2.340	-2.179
			LN(Stand Area)	.435	.006	.486	77.784	.000	.424	.446
Rural	Coastal	1	(Constant)	-2.002	.121		-16.535	.000	-2.239	-1.764
			LN(Stand Area)	.340	.016	.376	20.725	.000	.308	.372
	Inland	1	(Constant)	-2.382	.133		-17.877	.000	-2.643	-2.120
			LN(Stand Area)	.412	.018	.458	22.876	.000	.377	.447
a Dependent Variable: LN(Water Demand)										

Regression

Model Summary						
Development Level	Geographic Location	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Metro/City	Coastal	1	.509(a)	.259	.258	.83041
	Inland	1	.510(a)	.261	.260	.88845
Rural	Coastal	1	.424(a)	.179	.179	.76338
	Inland	1	.456(a)	.208	.207	.81461
a Predictors: (Constant), LN(Stand Value)						

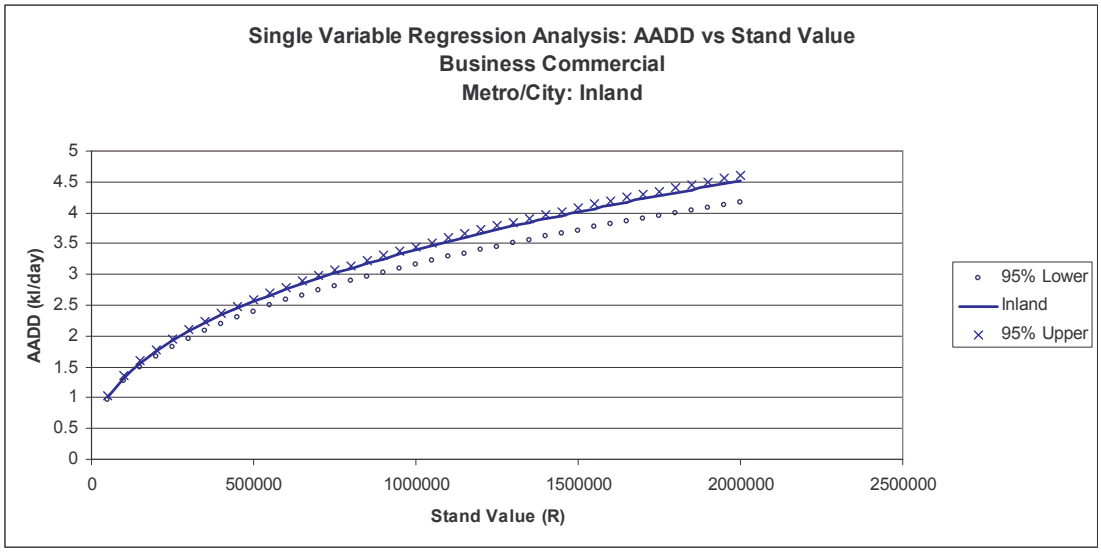
ANOVA(b)								
Development Level	Geographic Location	Model		Sum of Squares	df	Mean Square	F	Sig.
Metro/City	Coastal	1	Regression	527.268	1	527.268	764.615	.000(a)
			Residual	1510.884	2191	.690		
			Total	2038.153	2192			
	Inland	1	Regression	5453.520	1	5453.520	6908.861	.000(a)
			Residual	15478.392	19609	.789		
			Total	20931.912	19610			
Rural	Coastal	1	Regression	332.926	1	332.926	571.307	.000(a)
			Residual	1522.127	2612	.583		

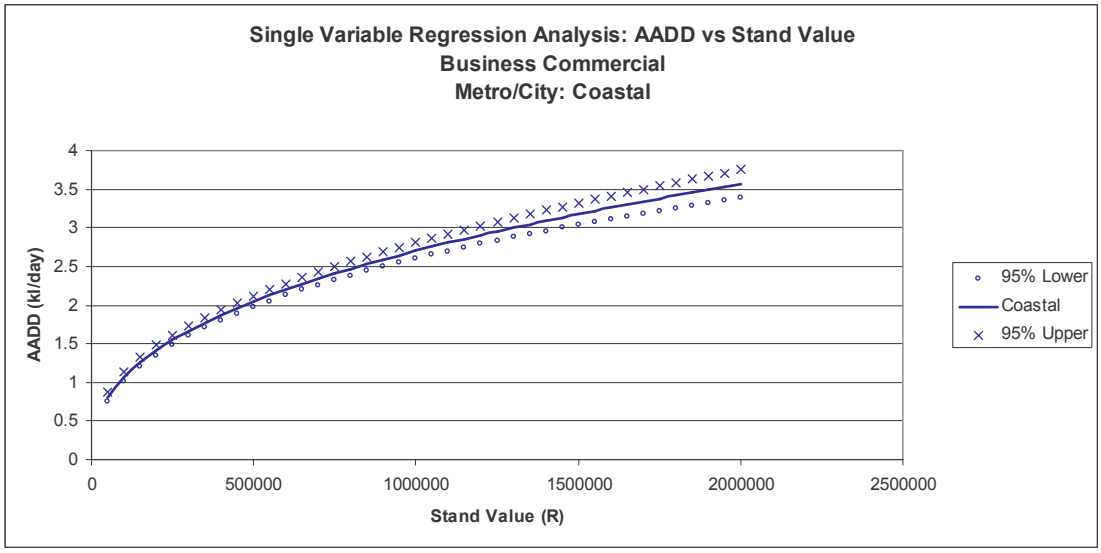
			Total	1855.053	2613			
	Inland	**1**	**Regression**	343.395	1	343.395	517.484	.000(a)
			Residual	1308.591	1972	.664		
			Total	1651.987	1973			
a Predictors: (Constant), LN(Stand Value)								
b Dependent Variable: LN(Water Demand)								

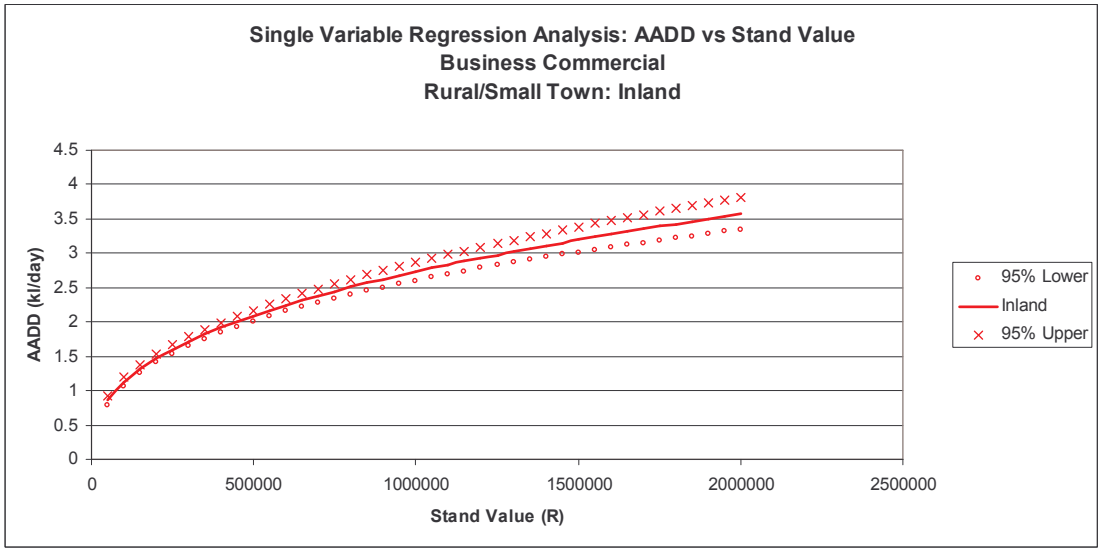
Coefficients(a)

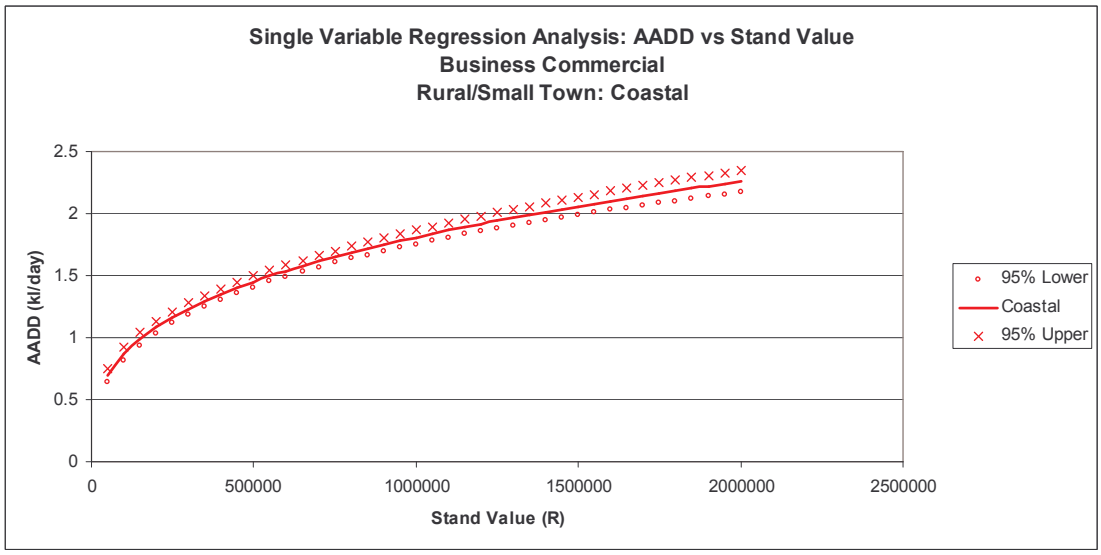
Development Level	**Geographic Location**	**Model**		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
				B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
Metro/City	**Coastal**	**1**	**(Constant)**	-4.547	.193		-23.568	.000	-4.925	-4.169
			LN(Stand Value)	.401	.015	.509	27.652	.000	.373	.429
	Inland	**1**	**(Constant)**	-4.427	.064		-68.789	.000	-4.554	-4.301
			LN(Stand Value)	.409	.005	.510	83.120	.000	.399	.418
Rural	**Coastal**	**1**	**(Constant)**	-3.814	.181		-21.122	.000	-4.168	-3.460
			LN(Stand Value)	.319	.013	.424	23.902	.000	.293	.345
	Inland	**1**	**(Constant)**	-4.328	.219		-19.760	.000	-4.758	-3.899
			LN(Stand Value)	.386	.017	.456	22.748	.000	.353	.419
a Dependent Variable: LN(Water Demand)										

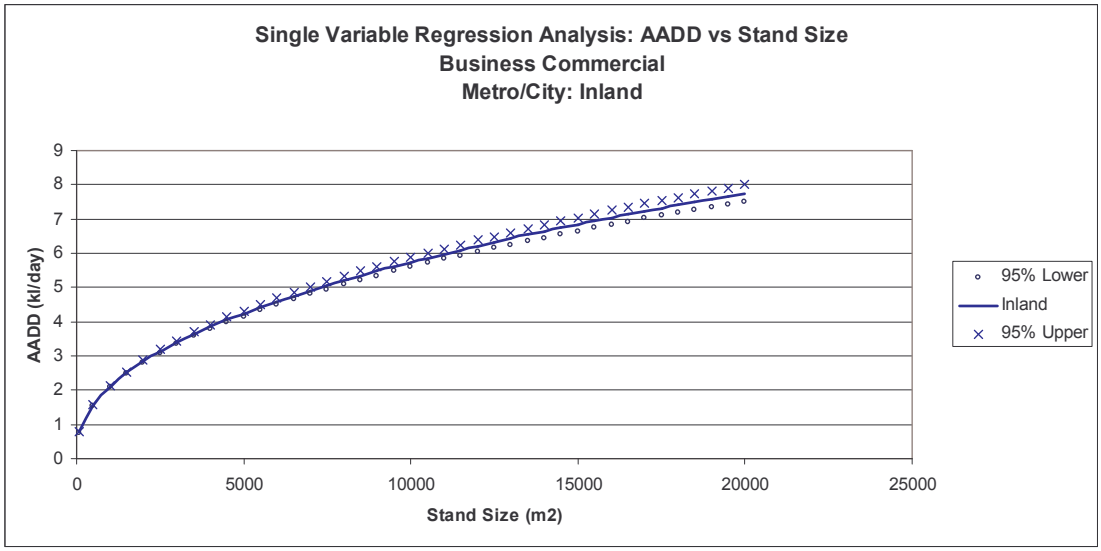
Graphs

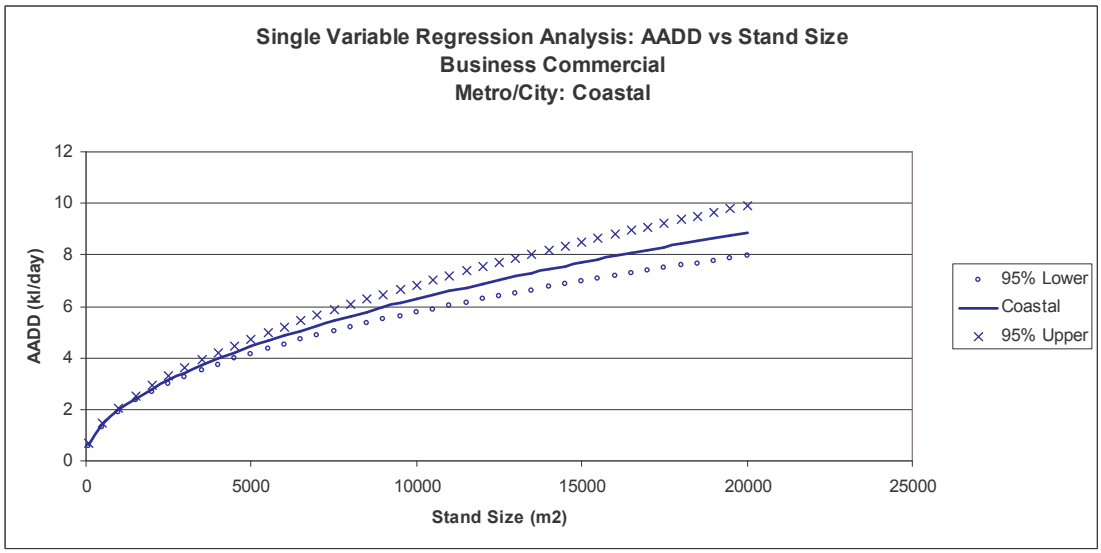


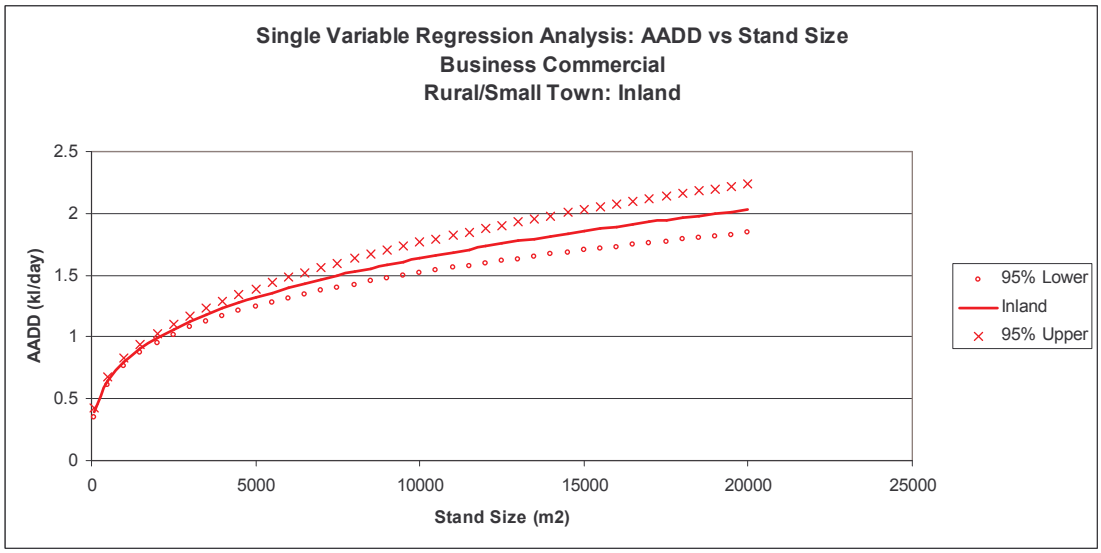

Single Variable Regression Analysis: AADD vs Stand Value
Business Commercial
Metro/City: Coastal
AADD (kl/day)
Stand Value (R)
0
0.5
1
1.5
2
2.5
3
3.5
4
0
500000
1000000
1500000
2000000
2500000
95% Lower
Coastal
95% Upper

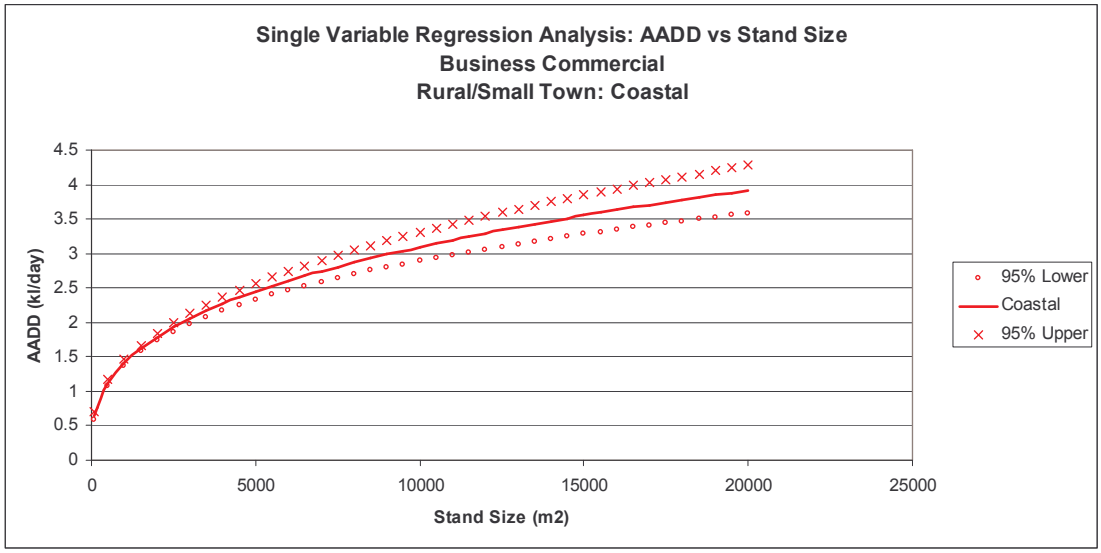

Single Variable Regression Analysis: AADD vs Stand Value
Business Commercial
Rural/Small Town: Inland
AADD (kl/day)
Stand Value (R)
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0
500000
1000000
1500000
2000000
2500000
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Value
Business Commercial
Rural/Small Town: Coastal
AADD (kl/day)
Stand Value (R)
0
0.5
1
1.5
2
2.5
0
500000
1000000
1500000
2000000
2500000
95% Lower
Coastal
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Business Commercial
Metro/City: Inland
AADD (kl/day)
Stand Size (m2)
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Business Commercial
Metro/City: Coastal
AADD (kl/day)
Stand Size (m2)
95% Lower
Coastal
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Business Commercial
Rural/Small Town: Inland
AADD (kl/day)
Stand Size (m2)
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Business Commercial
Rural/Small Town: Coastal
AADD (kl/day)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0
5000
10000
15000
20000
25000
Stand Size (m2)
95% Lower
Coastal
95% Upper

User Category: EDUCATION

Multi Variable Regression

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	2146	0	27637694	37096.84	601677.382
Stand Value	2132	0	105800000	1873610.90	4902857.631
Valid N (listwise)	2132				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	2013	105	27637694	39547.81	621167.574
Stand Value	1587	10000	105800000	2517016.80	5538753.662
Valid N (listwise)	1563				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	1472	105	74947	15370.59	17484.801
Stand Value	1472	10000	19600000	1789630.98	2576136.191
Valid N (listwise)	1472				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	1472	105	74947	15370.59	17484.801
Water Demand	1472	.00	165.19	8.7237	14.75985
Stand Value	1472	10000	19600000	1789630.98	2576136.191
Precipitation	1472	237.5	882.1	646.052	166.6119
Ave Max Temp	1448	22.03403664631	26.38518518519	23.5781090814832	1.54158153990961
Ave Min Temp	1448	7.43025568182	13.77161862528	10.8101746102779	1.69081391852599
Evaporation	1472	1361	2346	2023.78	266.910
Development Level	1472	1	2	1.24	.425
Geographic Location	1472	1	2	1.20	.402
Valid N (listwise)	1448				

Regression

Variables Entered/Removed(b)			
Model	Variables Entered	Variables	Method

		Removed	
1	Geographic Location, Development Level, Stand Area, Precipitation, Ave Min Temp, Stand Value, Evaporation, Ave Max Temp(a)	.	Enter

a All requested variables entered.

b Dependent Variable: Water Demand

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.519(a)	.269	.265	12.72577

a Predictors: (Constant), Geographic Location, Development Level, Stand Area, Precipitation, Ave Min Temp, Stand Value, Evaporation, Ave Max Temp

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	85720.191	8	10715.024	66.164	.000(a)
	Residual	233039.241	1439	161.945		
	Total	318759.432	1447			

a Predictors: (Constant), Geographic Location, Development Level, Stand Area, Precipitation, Ave Min Temp, Stand Value, Evaporation, Ave Max Temp

b Dependent Variable: Water Demand

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	**(Constant)**	-29.2942313668	15.767		-1.858	.063
	Stand Area	.0002172695	.000	.257	8.624	.000
	Stand Value	.0000015893	.000	.277	9.294	.000
	Precipitation	-.0013873354	.003	-.016	-.425	.671
	Ave Max Temp	1.8385728375	.411	.191	4.474	.000
	Ave Min Temp	-.6788964213	.317	-.077	-2.139	.033
	Evaporation	-.0001471603	.002	-.003	-.064	.949
	Development Level	-5.6359868730	.974	-.161	-5.787	.000
	Geographic Location	3.3410193760	1.821	.090	1.834	.067

a Dependent Variable: Water Demand

Regression

Variables Entered/Removed(a)

Model	Variables Entered	Variables Removed	Method
1	Ln(Stand Area)	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

2	Development Level	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Stand Value	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
4	Ave Max Temp	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
5	Ln(Stand Value)	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
a Dependent Variable: Ln(Water Demand)			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.639(a)	.408	.408	.96448
2	.651(b)	.423	.422	.95246
3	.662(c)	.438	.437	.94059
4	.676(d)	.457	.455	.92494
5	.678(e)	.460	.458	.92243

a Predictors: (Constant), Ln(Stand Area)

b Predictors: (Constant), Ln(Stand Area), Development Level

c Predictors: (Constant), Ln(Stand Area), Development Level, Stand Value

d Predictors: (Constant), Ln(Stand Area), Development Level, Stand Value, Ave Max Temp

e Predictors: (Constant), Ln(Stand Area), Development Level, Stand Value, Ave Max Temp, Ln(Stand Value)

ANOVA(f)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	927.921	1	927.921	997.529	.000(a)
	Residual	1345.097	1446	.930		
	Total	2273.017	1447			
2	**Regression**	962.149	2	481.074	530.299	.000(b)
	Residual	1310.869	1445	.907		
	Total	2273.017	1447			
3	**Regression**	995.498	3	331.833	375.075	.000(c)
	Residual	1277.520	1444	.885		
	Total	2273.017	1447			
4	**Regression**	1038.507	4	259.627	303.474	.000(d)
	Residual	1234.511	1443	.856		
	Total	2273.017	1447			
5	**Regression**	1046.053	5	209.211	245.876	.000(e)
	Residual	1226.965	1442	.851		
	Total	2273.017	1447			

a Predictors: (Constant), Ln(Stand Area)

b Predictors: (Constant), Ln(Stand Area), Development Level

c Predictors: (Constant), Ln(Stand Area), Development Level, Stand Value

d Predictors: (Constant), Ln(Stand Area), Development Level, Stand Value, Ave Max Temp
e Predictors: (Constant), Ln(Stand Area), Development Level, Stand Value, Ave Max Temp, Ln(Stand Value)
f Dependent Variable: Ln(Water Demand)

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.8168668068	.136		-20.648	.000
	Ln(Stand Area)	.4893735666	.015	.639	31.584	.000
2	(Constant)	-2.3515697625	.155		-15.215	.000
	Ln(Stand Area)	.4873491977	.015	.636	31.843	.000
	Development Level	-.3624316334	.059	-.123	-6.143	.000
3	(Constant)	-1.8868427605	.170		-11.075	.000
	Ln(Stand Area)	.4247613744	.018	.555	23.299	.000
	Development Level	-.4038025588	.059	-.137	-6.884	.000
	Stand Value	.0000000709	.000	.147	6.140	.000
4	(Constant)	-4.3565804157	.387		-11.271	.000
	Ln(Stand Area)	.4039001825	.018	.527	22.232	.000
	Development Level	-.5174812203	.060	-.175	-8.644	.000
	Stand Value	.0000000839	.000	.174	7.296	.000
	Ave Max Temp	.1173620205	.017	.144	7.090	.000
5	(Constant)	-5.3022597787	.499		-10.617	.000
	Ln(Stand Area)	.3636502194	.023	.475	16.088	.000
	Development Level	-.4980680708	.060	-.169	-8.293	.000
	Stand Value	.0000000553	.000	.114	3.697	.000
	Ave Max Temp	.1190301711	.017	.146	7.207	.000
	Ln(Stand Value)	.0951934583	.032	.114	2.978	.003

a Dependent Variable: Ln(Water Demand)

Excluded Variables(f)

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Stand Area	.011(a)	.291	.771	.008	.263
	Stand Value	.128(a)	5.300	.000	.138	.692
	Precipitation	-.003(a)	-.129	.898	-.003	.974
	Ave Max Temp	.082(a)	4.082	.000	.107	.994
	Ave Min Temp	.015(a)	.722	.470	.019	.997
	Evaporation	.024(a)	1.199	.231	.032	.987
	Development Level	-.123(a)	-6.143	.000	-.160	1.000
	Geographic Location	-.036(a)	-1.717	.086	-.045	.947

	Ln(Stand Value)	.183(a)	6.064	.000	.158	.441
2	**Stand Area**	.036(b)	.915	.360	.024	.260
	Stand Value	.147(b)	6.140	.000	.160	.683
	Precipitation	-.041(b)	-1.945	.052	-.051	.896
	Ave Max Temp	.121(b)	5.896	.000	.153	.932
	Ave Min Temp	.056(b)	2.673	.008	.070	.910
	Evaporation	-.043(b)	-1.873	.061	-.049	.771
	Geographic Location	-.011(b)	-.505	.614	-.013	.908
	Ln(Stand Value)	.179(b)	6.023	.000	.157	.441
3	**Stand Area**	-.039(c)	-.974	.330	-.026	.237
	Precipitation	-.038(c)	-1.830	.067	-.048	.896
	Ave Max Temp	.144(c)	7.090	.000	.183	.908
	Ave Min Temp	.035(c)	1.661	.097	.044	.882
	Evaporation	-.022(c)	-.948	.343	-.025	.753
	Geographic Location	-.043(c)	-2.029	.043	-.053	.857
	Ln(Stand Value)	.105(c)	2.688	.007	.071	.255
4	**Stand Area**	-.024(d)	-.595	.552	-.016	.236
	Precipitation	-.008(d)	-.358	.720	-.009	.855
	Ave Min Temp	-.021(d)	-.949	.343	-.025	.766
	Evaporation	.002(d)	.069	.945	.002	.737
	Geographic Location	.031(d)	1.335	.182	.035	.677
	Ln(Stand Value)	.114(d)	2.978	.003	.078	.255
5	**Stand Area**	.010(e)	.249	.803	.007	.217
	Precipitation	-.002(e)	-.100	.920	-.003	.848
	Ave Min Temp	-.028(e)	-1.239	.216	-.033	.759
	Evaporation	-.001(e)	-.028	.978	-.001	.736
	Geographic Location	.030(e)	1.258	.209	.033	.677

a Predictors in the Model: (Constant), Ln(Stand Area)

b Predictors in the Model: (Constant), Ln(Stand Area), Development Level

c Predictors in the Model: (Constant), Ln(Stand Area), Development Level, Stand Value

d Predictors in the Model: (Constant), Ln(Stand Area), Development Level, Stand Value, Ave Max Temp

e Predictors in the Model: (Constant), Ln(Stand Area), Development Level, Stand Value, Ave Max Temp, Ln(Stand Value)

f Dependent Variable: Ln(Water Demand)

Single Variable Regression

Descriptive Statistics

	N	**Mean**	**Variance**
Ln(Water Demand)	1472	1.4154	1.567
Ln(Stand Area)	1472	8.6585	2.665
Ln(Stand Value)	1472	13.4650	2.248

Valid N (listwise)	1472		

Regression

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.636(a)	.404	.404	.96653
a Predictors: (Constant), Ln(Stand Area)				

ANOVA(b)						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	**Regression**	932.227	1	932.227	997.906	.000(a)
	Residual	1373.248	1470	.934		
	Total	2305.475	1471			
a Predictors: (Constant), Ln(Stand Area)						
b Dependent Variable: Ln(Water Demand)						

Coefficients(a)								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
		B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
1	**(Constant)**	-2.807	.136		-20.636	.000	-3.073	-2.540
	Ln(Stand Area)	.488	.015	.636	31.590	.000	.457	.518
a Dependent Variable: Ln(Water Demand)								

Regression

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.560(a)	.314	.313	1.03742
a Predictors: (Constant), Ln(Stand Value)				

ANOVA(b)						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	**Regression**	723.387	1	723.387	672.136	.000(a)
	Residual	1582.088	1470	1.076		
	Total	2305.475	1471			
a Predictors: (Constant), Ln(Stand Value)						

b Dependent Variable: Ln(Water Demand)

Coefficients(a)								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
		B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
1	**(Constant)**	-4.883	.244		-19.976	.000	-5.362	-4.403
	Ln(Stand Value)	.468	.018	.560	25.926	.000	.432	.503
a Dependent Variable: Ln(Water Demand)								

Descriptive Statistics					
Development Level	**Geographic Location**		**N**	**Mean**	**Variance**
Metro/City	**Inland**	**Ln(Water Demand)**	943	1.4240	1.445
		Ln(Stand Area)	943	8.5406	2.438
		Ln(Stand Value)	943	13.3340	1.698
		Valid N (listwise)	943		
	Coastal	**Ln(Water Demand)**	182	1.9462	1.658
		Ln(Stand Area)	182	9.3956	1.851
		Ln(Stand Value)	182	14.2923	2.072
		Valid N (listwise)	182		
Rural	**Inland**	**Ln(Water Demand)**	230	1.0144	1.641
		Ln(Stand Area)	230	8.1906	3.241
		Ln(Stand Value)	230	12.9188	3.165
		Valid N (listwise)	230		
	Coastal	**Ln(Water Demand)**	117	1.3088	1.538
		Ln(Stand Area)	117	9.3815	2.788
		Ln(Stand Value)	117	14.3080	2.713
		Valid N (listwise)	117		

Regression

Model Summary						
Development Level	**Geographic Location**	**Model**	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
Metro/City	**Inland**	**1**	.633(a)	.401	.400	.93109
	Coastal	**1**	.530(a)	.281	.277	1.09513
Rural	**Inland**	**1**	.747(a)	.557	.556	.85409
	Coastal	**1**	.523(a)	.274	.267	1.06165
a Predictors: (Constant), Ln(Stand Area)						

ANOVA(b)

Development Level	Geographic Location	Model		Sum of Squares	df	Mean Square	F	Sig.
Metro/City	Inland	1	Regression	545.582	1	545.582	629.334	.000(a)
			Residual	815.771	941	.867		
			Total	1361.353	942			
	Coastal	1	Regression	84.278	1	84.278	70.272	.000(a)
			Residual	215.877	180	1.199		
			Total	300.155	181			
Rural	Inland	1	Regression	209.537	1	209.537	287.246	.000(a)
			Residual	166.319	228	.729		
			Total	375.856	229			
	Coastal	1	Regression	48.838	1	48.838	43.331	.000(a)
			Residual	129.616	115	1.127		
			Total	178.455	116			

a Predictors: (Constant), Ln(Stand Area)

b Dependent Variable: Ln(Water Demand)

Coefficients(a)

Development Level	Geographic Location	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
				B	Std. Error	Beta			Lower Bound	Upper Bound
Metro/City	Inland	1	(Constant)	-2.739	.169		-16.236	.000	-3.070	-2.408
			Ln(Stand Area)	.487	.019	.633	25.087	.000	.449	.526
	Coastal	1	(Constant)	-2.766	.568		-4.870	.000	-3.887	-1.646
			Ln(Stand Area)	.502	.060	.530	8.383	.000	.384	.620
Rural	Inland	1	(Constant)	-3.338	.263		-12.696	.000	-3.856	-2.820
			Ln(Stand Area)	.531	.031	.747	16.948	.000	.470	.593
	Coastal	1	(Constant)	-2.337	.562		-4.155	.000	-3.451	-1.223
			Ln(Stand Area)	.389	.059	.523	6.583	.000	.272	.505

a Dependent Variable: Ln(Water Demand)

Regression

Model Summary

Development Level	Geographic Location	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Metro/City	Inland	1	.505(a)	.255	.254	1.03832
	Coastal	1	.524(a)	.274	.270	1.10009
Rural	Inland	1	.754(a)	.569	.567	.84337
	Coastal	1	.480(a)	.230	.224	1.09276
a Predictors: (Constant), Ln(Stand Value)						

ANOVA(b)

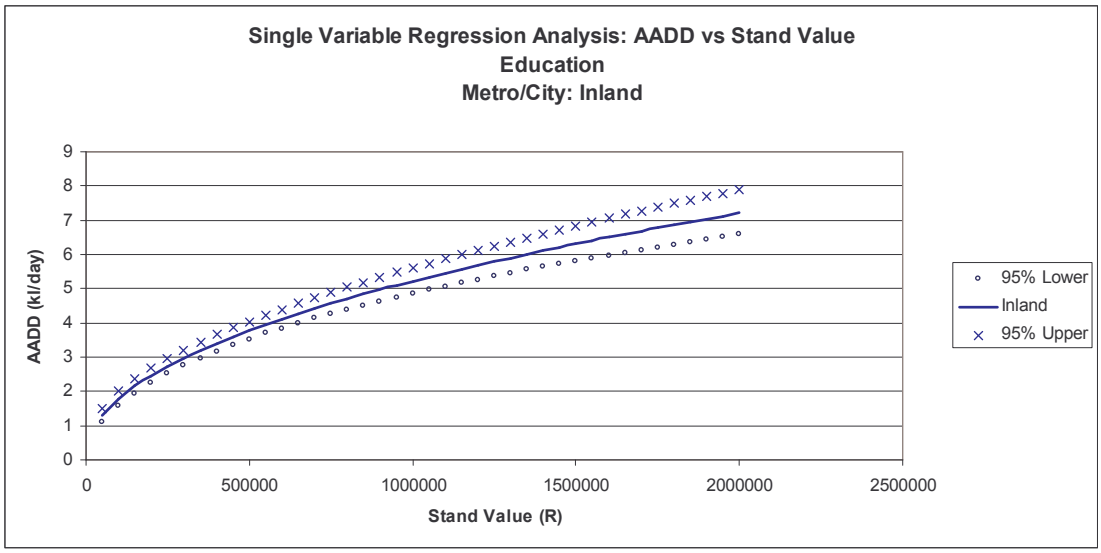
Development Level	Geographic Location	Model		Sum of Squares	df	Mean Square	F	Sig.
Metro/City	Inland	1	Regression	346.855	1	346.855	321.726	.000(a)
			Residual	1014.499	941	1.078		
			Total	1361.353	942			
	Coastal	1	Regression	82.319	1	82.319	68.022	.000(a)
			Residual	217.835	180	1.210		
			Total	300.155	181			
Rural	Inland	1	Regression	213.688	1	213.688	300.433	.000(a)
			Residual	162.168	228	.711		
			Total	375.856	229			
	Coastal	1	Regression	41.129	1	41.129	34.443	.000(a)
			Residual	137.325	115	1.194		
			Total	178.455	116			
a Predictors: (Constant), Ln(Stand Value)								
b Dependent Variable: Ln(Water Demand)								

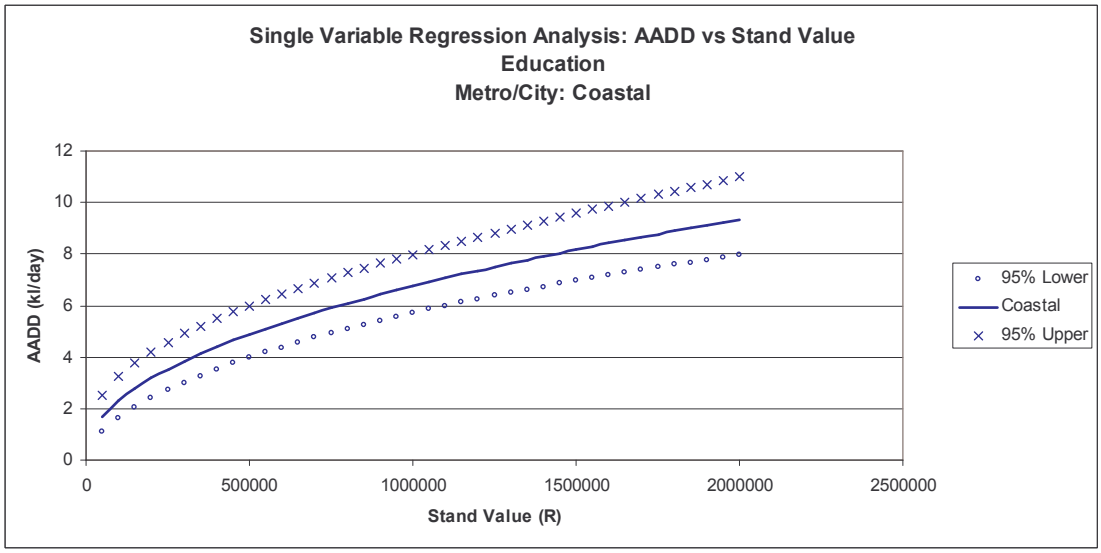
Coefficients(a)

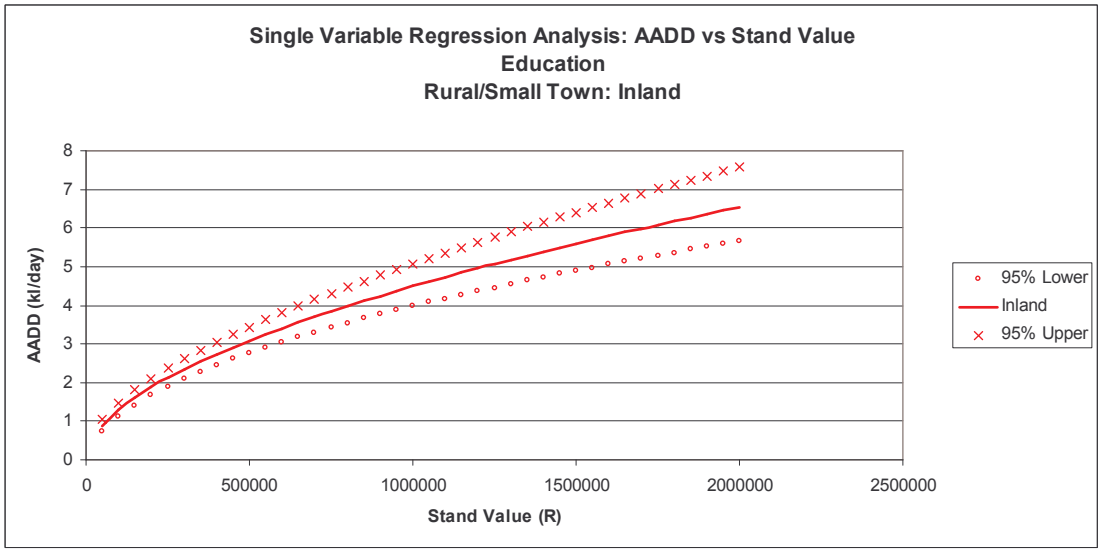
Development Level	Geographic Location	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
				B	Std. Error	Beta			Lower Bound	Upper Bound
Metro/City	Inland	1	(Constant)	-4.786	.348		-13.758	.000	-5.468	-4.103
			Ln(Stand Value)	.466	.026	.505	17.937	.000	.415	.517
	Coastal	1	(Constant)	-4.750	.816		-5.821	.000	-6.360	-3.140
			Ln(Stand Value)	.469	.057	.524	8.248	.000	.356	.581
Rural	Inland	1	(Constant)	-6.000	.408		-14.688	.000	-6.805	-5.195
			Ln(Stand Value)	.543	.031	.754	17.333	.000	.481	.605
	Coastal	1	(Constant)	-3.864	.887		-4.355	.000	-5.621	-2.106
			Ln(Stand	.362	.062	.480	5.869	.000	.239	.484

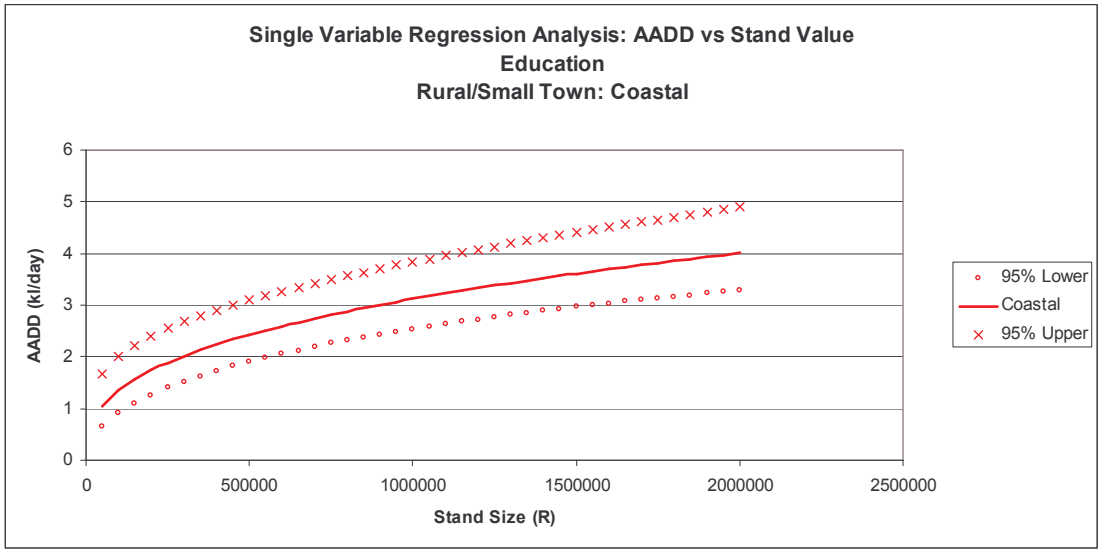
			Value)							
a Dependent Variable: Ln(Water Demand)										

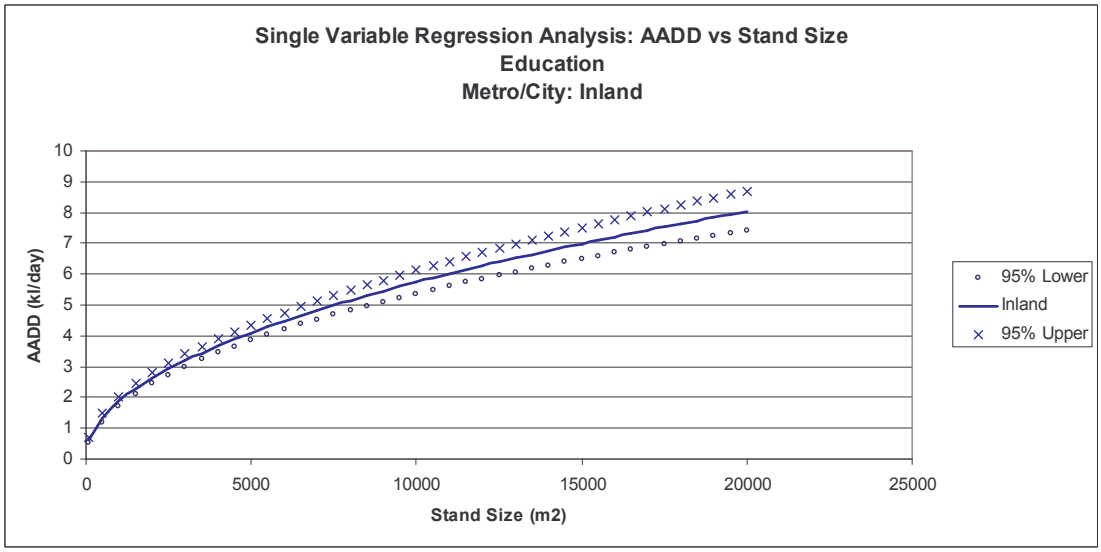
Graphs

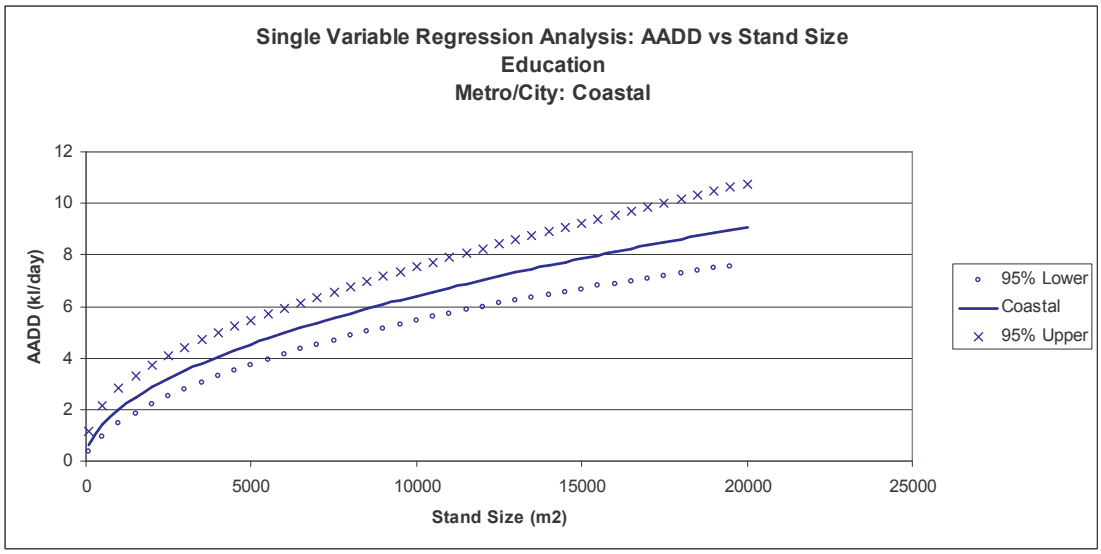

Single Variable Regression Analysis: AADD vs Stand Value
Education
Metro/City: Inland
AADD (kl/day)
0
1
2
3
4
5
6
7
8
9
0
500000
1000000
1500000
2000000
2500000
Stand Value (R)
95% Lower
Inland
95% Upper

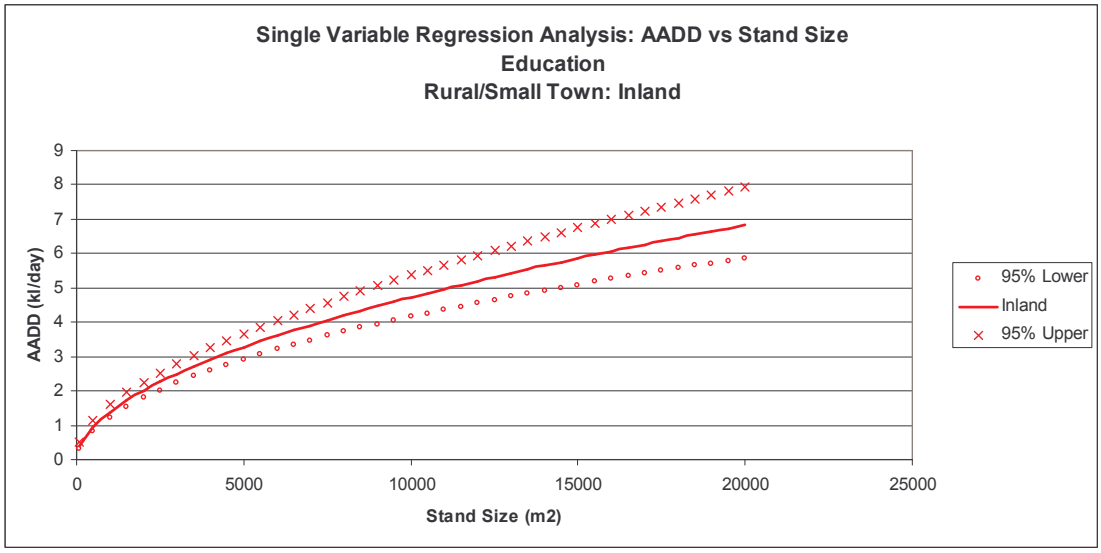

Single Variable Regression Analysis: AADD vs Stand Value
Education
Metro/City: Coastal
AADD (kl/day)
0
2
4
6
8
10
12
0
500000
1000000
1500000
2000000
2500000
Stand Value (R)
95% Lower
Coastal
95% Upper

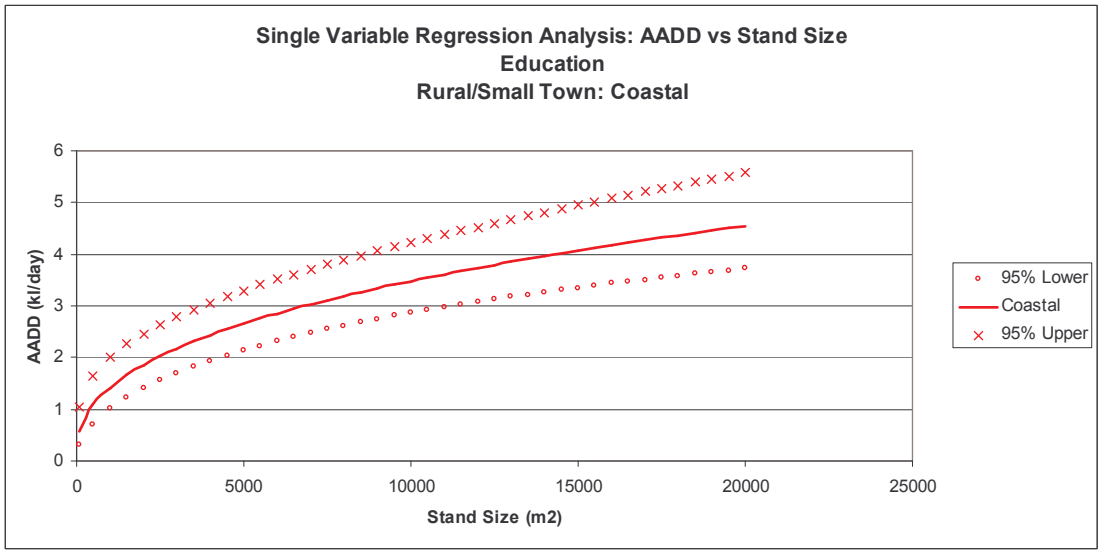

Single Variable Regression Analysis: AADD vs Stand Value
Education
Rural/Small Town: Inland
AADD (kl/day)
0
1
2
3
4
5
6
7
8
0
500000
1000000
1500000
2000000
2500000
Stand Value (R)
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Value
Education
Rural/Small Town: Coastal
AADD (kl/day)
0
1
2
3
4
5
6
0
500000
1000000
1500000
2000000
2500000
Stand Size (R)
95% Lower
Coastal
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Education
Metro/City: Inland
AADD (kl/day)
0
1
2
3
4
5
6
7
8
9
10
0
5000
10000
15000
20000
25000
Stand Size (m2)
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Education
Metro/City: Coastal
AADD (kl/day)
0
2
4
6
8
10
12
0
5000
10000
15000
20000
25000
Stand Size (m2)
95% Lower
Coastal
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Education
Rural/Small Town: Inland
AADD (kl/day)
Stand Size (m2)
0
1
2
3
4
5
6
7
8
9
0
5000
10000
15000
20000
25000
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Education
Rural/Small Town: Coastal
AADD (kl/day)
Stand Size (m2)
0
1
2
3
4
5
6
0
5000
10000
15000
20000
25000
95% Lower
Coastal
95% Upper

User Category: FARMS

Multi Variable Regression

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	9385	66	18366286	96789.12	720844.420
Stand Value	8940	21000	961600000	506429.77	10180568.069
Valid N (listwise)	8912				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	8907	100	12343852	90226.25	693349.037
Stand Value	8935	21000	10000000	393465.25	481878.026
Valid N (listwise)	8907				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	8907	100	12343852	90226.25	693349.037
Annual Average Daily Water Demand	8935	.002	448.757	2.92749	10.261639
Stand Value	8935	21000	10000000	393465.25	481878.026
Mean Annual Precipitation	8934	149.9	856.9	637.370	85.3174
Ave Max Temp	8918	21.01	27.05	24.0268	1.46362
Ave Min Temp	8918	9.33	13.82	10.6415	1.34879
Mean Annual Evaporation	8934	1437.171	2566.000	2009.93378	312.568361
Development Level	8935	1	2	1.06	.239
Geographic Location	8935	1	2	1.92	.272
Valid N (listwise)	8891				

Regression

Variables Entered/Removed(a)			
Model	**Variables Entered**	**Variables Removed**	**Method**
1	LN(Stand Value)	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Ave Min Temp	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Stand Area	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
4	Stand Value	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050,

			Probability-of-F-to-remove >= .100).
5	Mean Annual Evaporation	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
6	Mean Annual Precipitation	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
a Dependent Variable: LN(Water Demand)			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.309(a)	.096	.096	.73563
2	.337(b)	.114	.113	.72831
3	.343(c)	.118	.118	.72659
4	.349(d)	.122	.121	.72502
5	.350(e)	.122	.122	.72480
6	.351(f)	.123	.122	.72462

a Predictors: (Constant), LN(Stand Value)

b Predictors: (Constant), LN(Stand Value), Ave Min Temp

c Predictors: (Constant), LN(Stand Value), Ave Min Temp, Stand Area

d Predictors: (Constant), LN(Stand Value), Ave Min Temp, Stand Area, Stand Value

e Predictors: (Constant), LN(Stand Value), Ave Min Temp, Stand Area, Stand Value, Mean Annual Evaporation

f Predictors: (Constant), LN(Stand Value), Ave Min Temp, Stand Area, Stand Value, Mean Annual Evaporation, Mean Annual Precipitation

ANOVA(g)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	508.926	1	508.926	940.446	.000(a)
	Residual	4813.021	8894	.541		
	Total	5321.947	8895			
2	**Regression**	604.790	2	302.395	570.089	.000(b)
	Residual	4717.157	8893	.530		
	Total	5321.947	8895			
3	**Regression**	627.522	3	209.174	396.209	.000(c)
	Residual	4694.425	8892	.528		
	Total	5321.947	8895			
4	**Regression**	648.352	4	162.088	308.355	.000(d)
	Residual	4673.595	8891	.526		
	Total	5321.947	8895			
5	**Regression**	651.661	5	130.332	248.090	.000(e)
	Residual	4670.287	8890	.525		
	Total	5321.947	8895			
6	**Regression**	654.529	6	109.088	207.756	.000(f)
	Residual	4667.419	8889	.525		
	Total	5321.947	8895			

a Predictors: (Constant), LN(Stand Value)
b Predictors: (Constant), LN(Stand Value), Ave Min Temp
c Predictors: (Constant), LN(Stand Value), Ave Min Temp, Stand Area
d Predictors: (Constant), LN(Stand Value), Ave Min Temp, Stand Area, Stand Value
e Predictors: (Constant), LN(Stand Value), Ave Min Temp, Stand Area, Stand Value, Mean Annual Evaporation
f Predictors: (Constant), LN(Stand Value), Ave Min Temp, Stand Area, Stand Value, Mean Annual Evaporation, Mean Annual Precipitation
g Dependent Variable: LN(Water Demand)

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.7493251310	.116		-23.770	.000
	LN(Stand Value)	.2825933659	.009	.309	30.667	.000
2	(Constant)	-3.3234160316	.122		-27.193	.000
	LN(Stand Value)	.2621079820	.009	.287	28.337	.000
	Ave Min Temp	.0780741583	.006	.136	13.444	.000
3	(Constant)	-3.2133535939	.123		-26.109	.000
	LN(Stand Value)	.2544766408	.009	.278	27.361	.000
	Ave Min Temp	.0760850734	.006	.133	13.114	.000
	Stand Area	.0000000735	.000	.066	6.562	.000
4	(Constant)	-3.1177854134	.124		-25.196	.000
	LN(Stand Value)	.2464755829	.009	.270	26.312	.000
	Ave Min Temp	.0762960446	.006	.133	13.179	.000
	Stand Area	.0000000730	.000	.066	6.538	.000
	Stand Value	.0000000048	.000	.063	6.295	.000
5	(Constant)	-3.1306508672	.124		-25.285	.000
	LN(Stand Value)	.2537887098	.010	.278	25.877	.000
	Ave Min Temp	.0822941751	.006	.143	13.142	.000
	Stand Area	.0000000723	.000	.065	6.477	.000
	Stand Value	.0000000047	.000	.062	6.136	.000
	Mean Annual Evaporation	-.0000708413	.000	-.029	-2.510	.012
6	(Constant)	-3.2283187685	.131		-24.711	.000
	LN(Stand Value)	.2500855814	.010	.274	25.179	.000
	Ave Min Temp	.0824190192	.006	.144	13.165	.000

	Stand Area	.0000000816	.000	.073	6.887	.000
	Stand Value	.0000000048	.000	.063	6.245	.000
	Mean Annual Evaporation	-.0000728607	.000	-.029	-2.581	.010
	Mean Annual Precipitation	.0002287641	.000	.025	2.337	.019
a Dependent Variable: LN(Water Demand)						

Excluded Variables(g)						
Model		**Beta In**	**t**	**Sig.**	**Partial Correlation**	**Collinearity Statistics**
						Tolerance
1	**LN(Stand Area)**	.039(a)	3.815	.000	.040	.970
	Stand Area	.073(a)	7.188	.000	.076	.982
	Stand Value	.063(a)	6.183	.000	.065	.981
	Mean Annual Precipitation	-.006(a)	-.567	.571	-.006	.985
	Ave Max Temp	.087(a)	8.462	.000	.089	.955
	Ave Min Temp	.136(a)	13.444	.000	.141	.973
	Mean Annual Evaporation	.025(a)	2.295	.022	.024	.891
	Development Level	.030(a)	2.937	.003	.031	.988
	Geographic Location	-.056(a)	-5.597	.000	-.059	.999
2	**LN(Stand Area)**	.049(b)	4.784	.000	.051	.966
	Stand Area	.066(b)	6.562	.000	.069	.979
	Stand Value	.064(b)	6.319	.000	.067	.981
	Mean Annual Precipitation	-.004(b)	-.383	.701	-.004	.985
	Ave Max Temp	.021(b)	1.752	.080	.019	.695
	Mean Annual Evaporation	-.035(b)	-3.030	.002	-.032	.762
	Development Level	.006(b)	.603	.546	.006	.957
	Geographic Location	-.014(b)	-1.279	.201	-.014	.891
3	**LN(Stand Area)**	.013(c)	1.027	.305	.011	.612
	Stand Value	.063(c)	6.295	.000	.067	.981
	Mean Annual Precipitation	.021(c)	1.930	.054	.020	.874
	Ave Max Temp	.021(c)	1.765	.078	.019	.695
	Mean Annual Evaporation	-.033(c)	-2.875	.004	-.030	.762
	Development Level	-.018(c)	-1.639	.101	-.017	.854
	Geographic Location	.009(c)	.829	.407	.009	.802
4	**LN(Stand Area)**	.010(d)	.780	.435	.008	.611
	Mean Annual Precipitation	.024(d)	2.258	.024	.024	.872

	Ave Max Temp	.020(d)	1.661	.097	.018	.695
	Mean Annual Evaporation	-.029(d)	-2.510	.012	-.027	.759
	Development Level	-.017(d)	-1.555	.120	-.016	.854
	Geographic Location	.013(d)	1.127	.260	.012	.800
5	**LN(Stand Area)**	.000(e)	-.018	.986	.000	.549
	Mean Annual Precipitation	.025(e)	2.337	.019	.025	.871
	Ave Max Temp	.002(e)	.139	.890	.001	.429
	Development Level	-.019(e)	-1.767	.077	-.019	.848
	Geographic Location	.014(e)	1.302	.193	.014	.797
6	**LN(Stand Area)**	.006(f)	.469	.639	.005	.526
	Ave Max Temp	-.009(f)	-.556	.578	-.006	.394
	Development Level	-.004(f)	-.304	.761	-.003	.481
	Geographic Location	-.013(f)	-.757	.449	-.008	.330

a Predictors in the Model: (Constant), LN(Stand Value)

b Predictors in the Model: (Constant), LN(Stand Value), Ave Min Temp

c Predictors in the Model: (Constant), LN(Stand Value), Ave Min Temp, Stand Area

d Predictors in the Model: (Constant), LN(Stand Value), Ave Min Temp, Stand Area, Stand Value

e Predictors in the Model: (Constant), LN(Stand Value), Ave Min Temp, Stand Area, Stand Value, Mean Annual Evaporation

f Predictors in the Model: (Constant), LN(Stand Value), Ave Min Temp, Stand Area, Stand Value, Mean Annual Evaporation, Mean Annual Precipitation

g Dependent Variable: LN(Water Demand)

Single Variable Regression

Descriptive Statistics

	N	**Mean**	**Variance**
LN(Water Demand)	8935	.7888	.594
LN(Stand Area)	8907	9.8764	.890
LN(Stand Value)	8935	12.5208	.705
Valid N (listwise)	8907		

Regression

Model Summary

Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.086(a)	.007	.007	.76715

a Predictors: (Constant), LN(Stand Area)

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.781	1	38.781	65.895	.000(a)
	Residual	5240.786	8905	.589		
	Total	5279.567	8906			
a Predictors: (Constant), LN(Stand Area)						
b Dependent Variable: LN(Water Demand)						

Coefficients(a)								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.098	.086		1.143	.253	-.070	.265
	LN(Stand Area)	.070	.009	.086	8.118	.000	.053	.087
a Dependent Variable: LN(Water Demand)								

Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.301(a)	.091	.091	.73519
a Predictors: (Constant), LN(Stand Value)				

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	481.681	1	481.681	891.176	.000(a)
	Residual	4828.292	8933	.541		
	Total	5309.973	8934			
a Predictors: (Constant), LN(Stand Value)						
b Dependent Variable: LN(Water Demand)						

Coefficients(a)								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-2.673	.116		-22.999	.000	-2.901	-2.445
	LN(Stand Value)	.276	.009	.301	29.853	.000	.258	.295
a Dependent Variable: LN(Water Demand)								

Descriptives

Descriptive Statistics					
Development Level	**Geographic Location**		**N**	**Mean**	**Variance**
Metro/City	**Coastal**	**LN(Water Demand)**	304	.9502	1.117
		LN(Stand Area)	299	9.8152	2.213
		LN(Stand Value)	304	11.9057	.729
		Valid N (listwise)	299		
	Inland	**LN(Water Demand)**	8086	.7701	.523
		LN(Stand Area)	8076	9.7867	.441
		LN(Stand Value)	8086	12.5196	.666
		Valid N (listwise)	8076		
Rural	**Coastal**	**LN(Water Demand)**	412	.8590	1.064
		LN(Stand Area)	403	11.5682	5.179
		LN(Stand Value)	412	12.8165	.845
		Valid N (listwise)	403		
	Inland	**LN(Water Demand)**	133	1.3414	1.908
		LN(Stand Area)	129	10.3489	2.926
		LN(Stand Value)	133	13.0813	1.181
		Valid N (listwise)	129		

Regression

Model Summary						
Development Level	**Geographic Location**	**Model**	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
Metro/City	**Coastal**	**1**	.500(a)	.250	.247	.92261
	Inland	**1**	.060(a)	.004	.003	.72061
Rural	**Coastal**	**1**	.327(a)	.107	.105	.97980
	Inland	**1**	.459(a)	.210	.204	1.24281
a Predictors: (Constant), LN(Stand Area)						

ANOVA(b)								
Development Level	**Geographic Location**	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Metro/City	**Coastal**	**1**	**Regression**	84.076	1	84.076	98.773	.000(a)
			Residual	252.808	297	.851		
			Total	336.885	298			
	Inland	**1**	**Regression**	14.947	1	14.947	28.784	.000(a)
			Residual	4192.667	8074	.519		
			Total	4207.615	8075			

Rural	**Coastal**	**1**	**Regression**	46.137	1	46.137	48.059	.000(a)
			Residual	384.966	401	.960		
			Total	431.103	402			
	Inland	**1**	**Regression**	52.225	1	52.225	33.812	.000(a)
			Residual	196.160	127	1.545		
			Total	248.385	128			
a Predictors: (Constant), LN(Stand Area)								
b Dependent Variable: LN(Water Demand)								

Coefficients(a)

Development Level	**Geographic Location**	**Model**		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
				B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
Metro/City	**Coastal**	**1**	**(Constant)**	-2.559	.357		-7.175	.000	-3.260	-1.857
			LN(Stand Area)	.357	.036	.500	9.938	.000	.286	.428
	Inland	**1**	**(Constant)**	1.404	.119		11.849	.000	1.172	1.637
			LN(Stand Area)	-.065	.012	-.060	-5.365	.000	-.088	-.041
Rural	**Coastal**	**1**	**(Constant)**	-.855	.253		-3.376	.001	-1.352	-.357
			LN(Stand Area)	.149	.021	.327	6.932	.000	.107	.191
	Inland	**1**	**(Constant)**	-2.499	.674		-3.711	.000	-3.832	-1.166
			LN(Stand Area)	.373	.064	.459	5.815	.000	.246	.500
a Dependent Variable: LN(Water Demand)										

Regression

Model Summary

Development Level	**Geographic Location**	**Model**	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
Metro/City	**Coastal**	**1**	.573(a)	.329	.327	.86733
	Inland	**1**	.277(a)	.076	.076	.69505
Rural	**Coastal**	**1**	.390(a)	.152	.150	.95139
	Inland	**1**	.475(a)	.226	.220	1.21995
a Predictors: (Constant), LN(Stand Value)						

ANOVA(b)

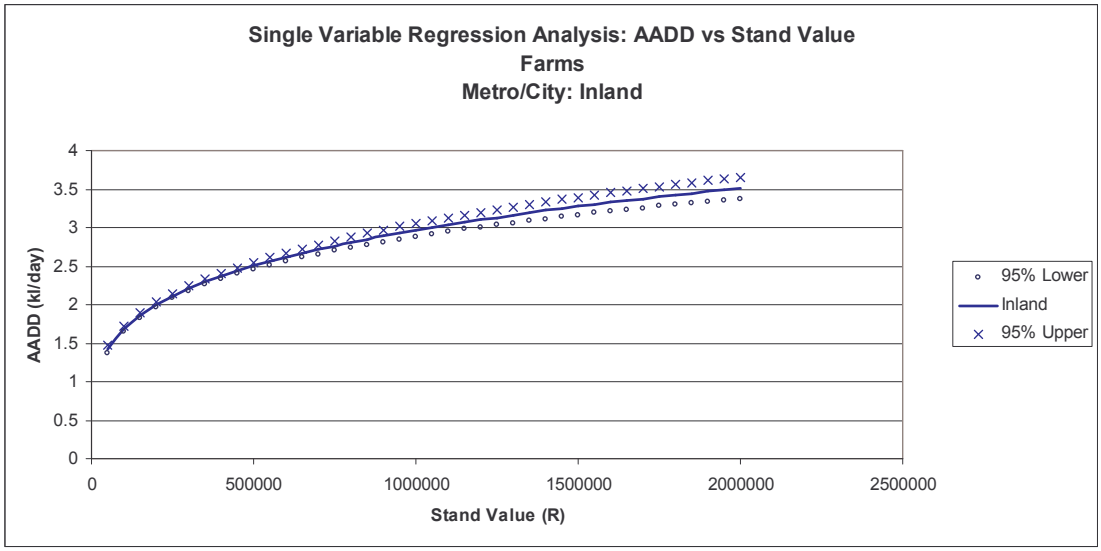
Development Level	**Geographic Location**	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Metro/City	**Coastal**	**1**	**Regression**	111.305	1	111.305	147.960	.000(a)

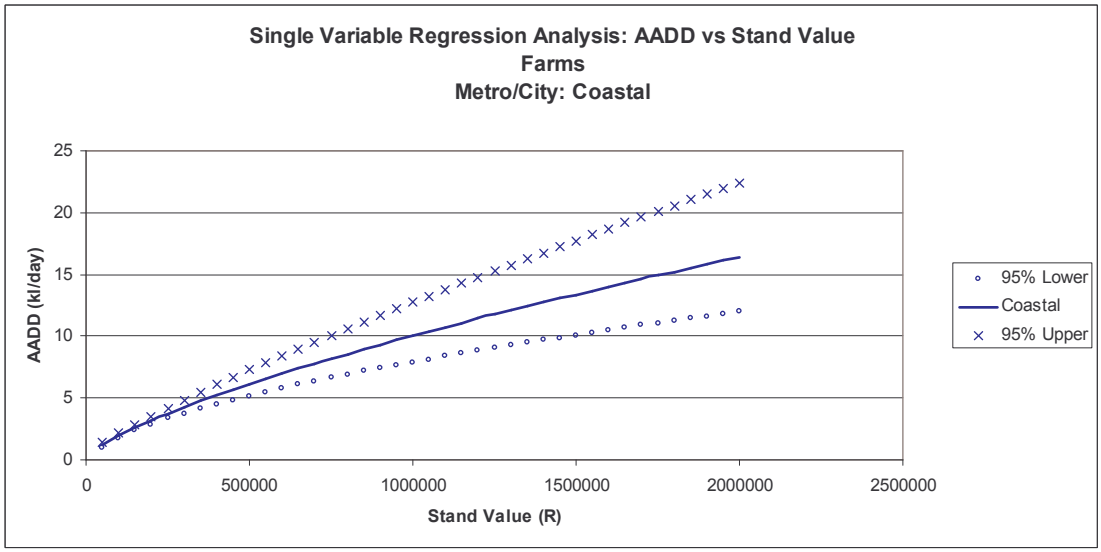
			Residual	227.183	302	.752		
			Total	338.488	303			
	Inland	**1**	**Regression**	323.439	1	323.439	669.516	.000(a)
			Residual	3905.326	8084	.483		
			Total	4228.765	8085			
Rural	**Coastal**	**1**	**Regression**	66.370	1	66.370	73.326	.000(a)
			Residual	371.106	410	.905		
			Total	437.477	411			
	Inland	**1**	**Regression**	56.899	1	56.899	38.232	.000(a)
			Residual	194.963	131	1.488		
			Total	251.863	132			
a Predictors: (Constant), LN(Stand Value)								
b Dependent Variable: LN(Water Demand)								

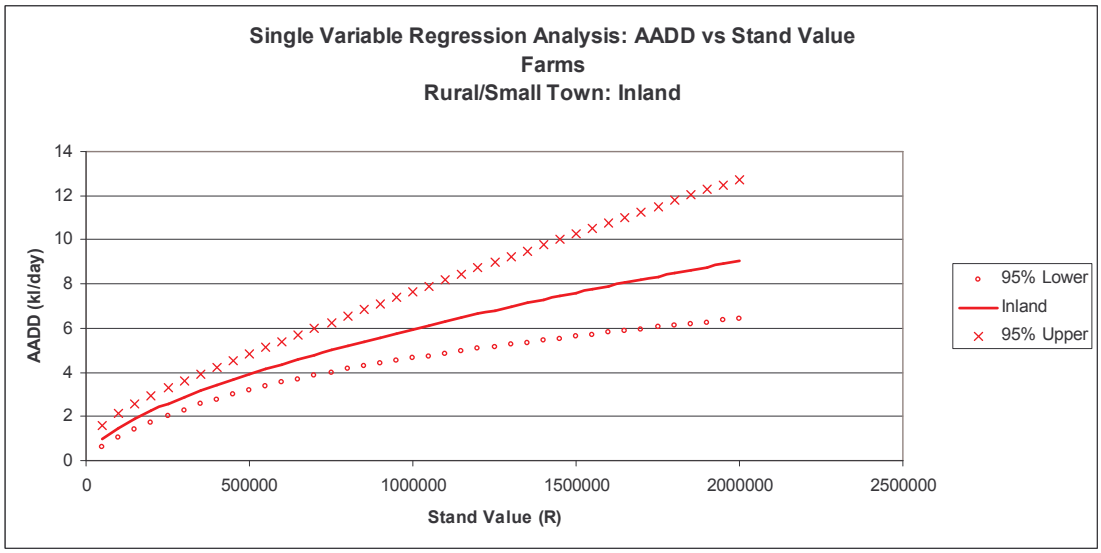
Coefficients(a)

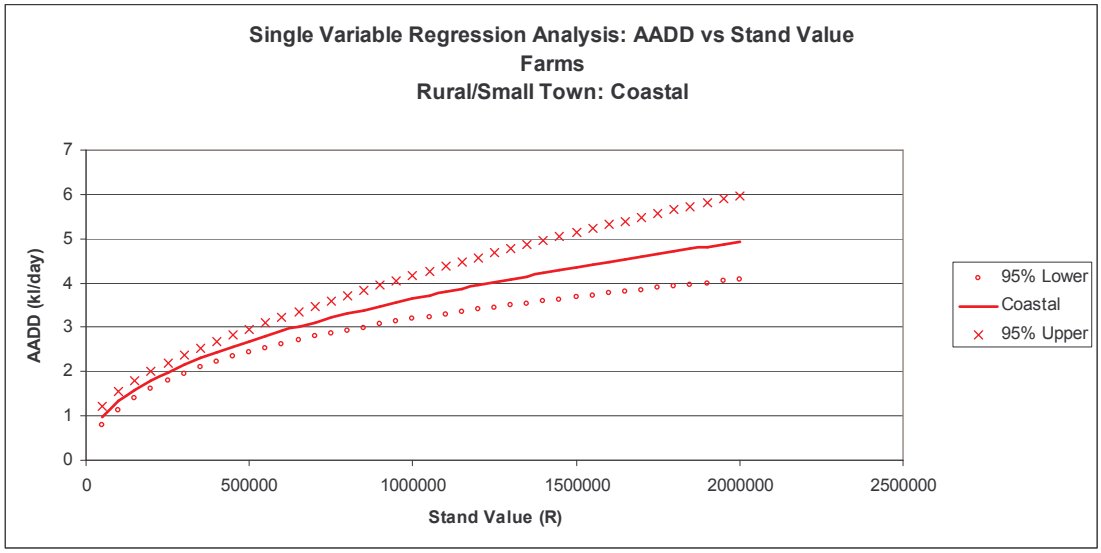
Development Level	**Geographic Location**	**Model**		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
				B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
Metro/City	**Coastal**	**1**	**(Constant)**	-7.504	.697		-10.769	.000	-8.875	-6.133
			LN(Stand Value)	.710	.058	.573	12.164	.000	.595	.825
	Inland	**1**	**(Constant)**	-2.298	.119		-19.340	.000	-2.531	-2.065
			LN(Stand Value)	.245	.009	.277	25.875	.000	.227	.264
Rural	**Coastal**	**1**	**(Constant)**	-4.745	.656		-7.232	.000	-6.035	-3.455
			LN(Stand Value)	.437	.051	.390	8.563	.000	.337	.538
	Inland	**1**	**(Constant)**	-6.562	1.283		-5.116	.000	-9.099	-4.025
			LN(Stand Value)	.604	.098	.475	6.183	.000	.411	.797
a Dependent Variable: LN(Water Demand)										

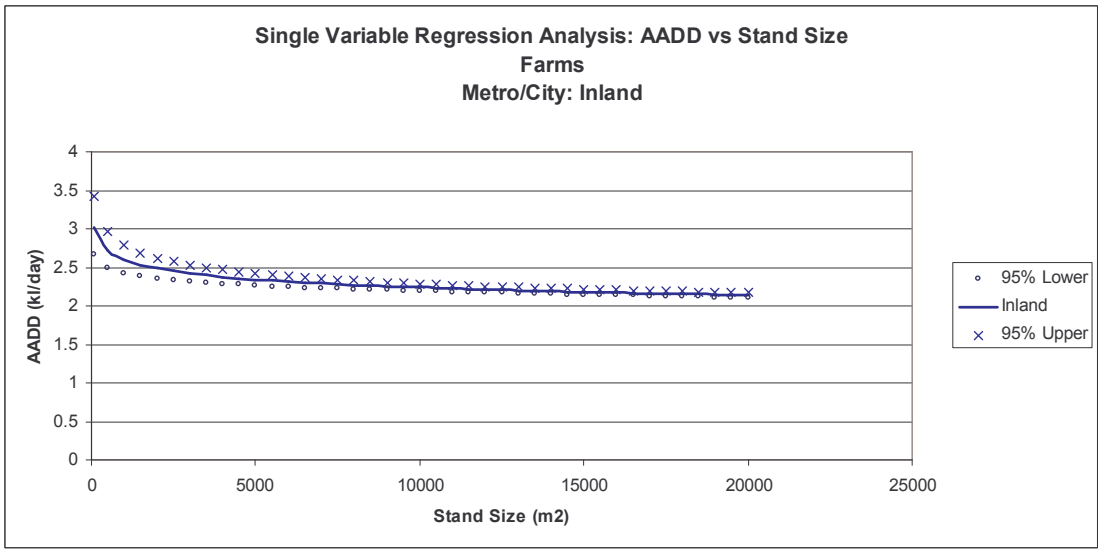
Graphs

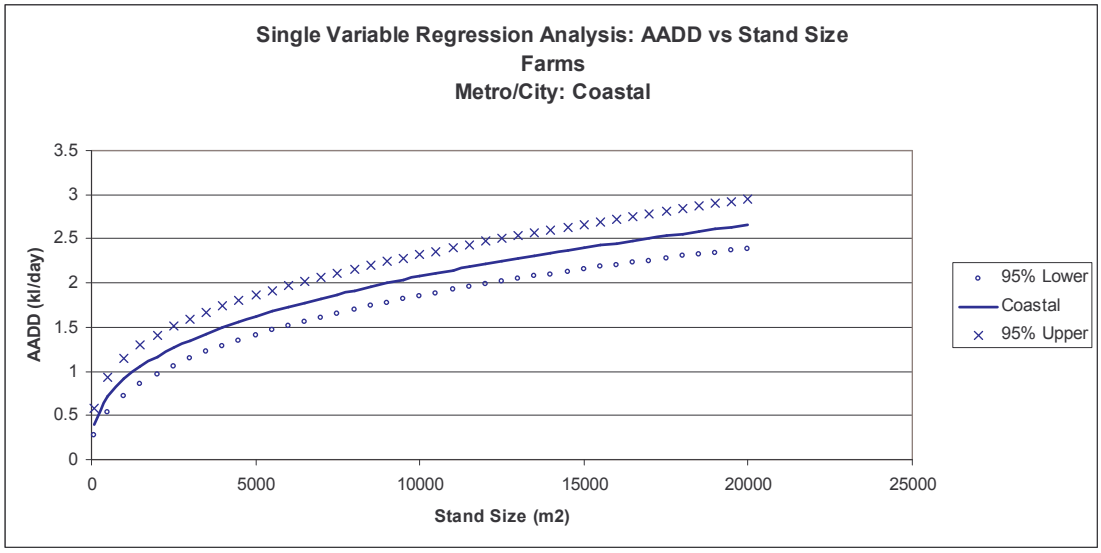

Single Variable Regression Analysis: AADD vs Stand Value
Farms
Metro/City: Inland
AADD (kl/day)
Stand Value (R)
0
0.5
1
1.5
2
2.5
3
3.5
4
0
500000
1000000
1500000
2000000
2500000
95% Lower
Inland
95% Upper

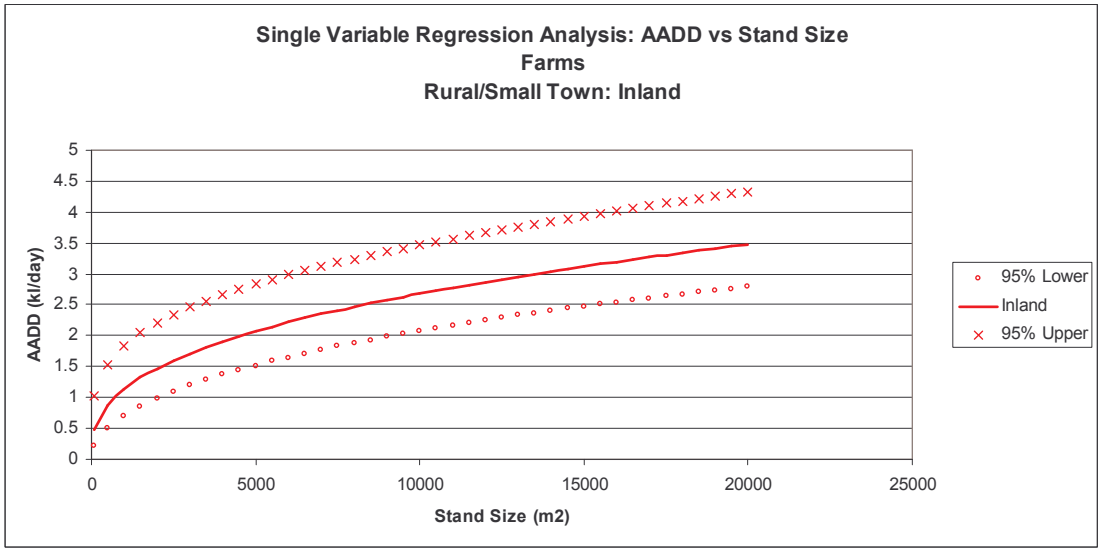

Single Variable Regression Analysis: AADD vs Stand Value
Farms
Metro/City: Coastal
AADD (kl/day)
Stand Value (R)
0
5
10
15
20
25
0
500000
1000000
1500000
2000000
2500000
95% Lower
Coastal
95% Upper

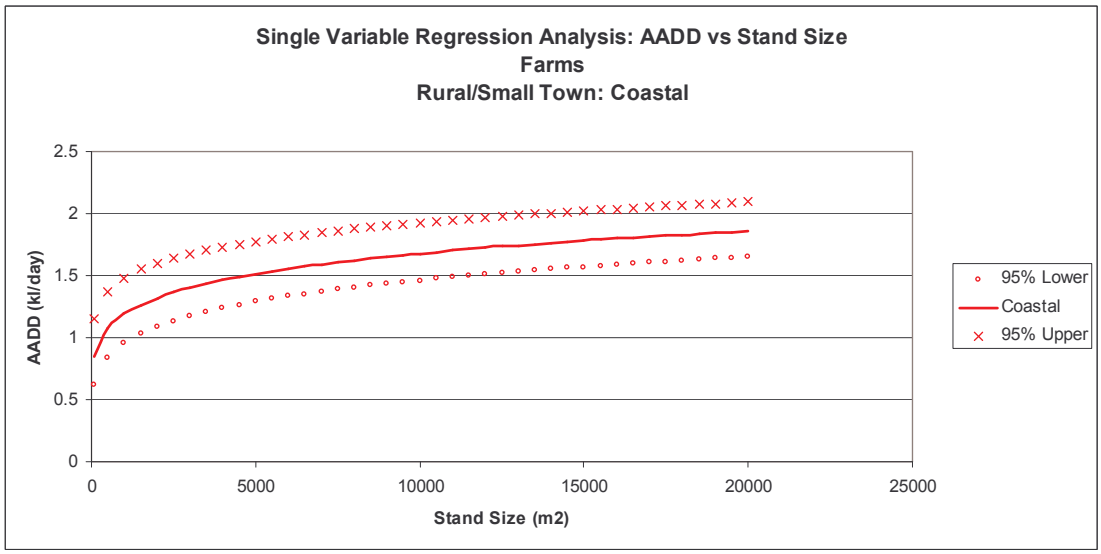

Single Variable Regression Analysis: AADD vs Stand Value
Farms
Rural/Small Town: Inland
AADD (kl/day)
Stand Value (R)
0
2
4
6
8
10
12
14
0
500000
1000000
1500000
2000000
2500000
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Value
Farms
Rural/Small Town: Coastal
AADD (kl/day)
Stand Value (R)
0
1
2
3
4
5
6
7
0
500000
1000000
1500000
2000000
2500000
95% Lower
Coastal
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Farms
Metro/City: Inland
AADD (kl/day)
Stand Size (m2)
0
0.5
1
1.5
2
2.5
3
3.5
4
0
5000
10000
15000
20000
25000
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Farms
Metro/City: Coastal
AADD (kl/day)
Stand Size (m2)
95% Lower
Coastal
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Farms
Rural/Small Town: Inland
AADD (kl/day)
Stand Size (m2)
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Farms
Rural/Small Town: Coastal
AADD (kl/day)
Stand Size (m2)
95% Lower
Coastal
95% Upper

User Category: GOVERNMENT AND INSTITUTIONAL

Multi Variable Regression

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	12729	0	48462751	135659.82	2052159.488
Stand Value	12708	0	640000000	491874.86	7339592.750
Valid N (listwise)	12706				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	9063	112	49956	2438.74	6388.999
Stand Value	9063	10000	20000000	333475.01	1003695.466
Valid N (listwise)	9063				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	9063	112	49956	2438.74	6388.999
Water Demand	9063	.001	6830.820	3.01583	74.105869
Stand Value	9063	10000	20000000	333475.01	1003695.466
Precipitation	9063	109.0	882.1	760.890	151.3307
Ave Max Temp	8262	.00000000000	27.04828060523	23.8325935176025	.91806067259814
Ave Min Temp	8262	.00000000000	13.64375866852	10.0641335587950	.85149598414958
Evaporation	9063	1361	2690	1843.14	258.564
Development Level	9063	1	2	1.69	.462
Geographic Location	9063	1	2	1.09	.289
Valid N (listwise)	8262				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	9063	112	49956	2438.74	6388.999
Water Demand	9063	.001	6830.820	3.01583	74.105869
Stand Value	9063	10000	20000000	333475.01	1003695.466
Precipitation	9063	109.0	882.1	760.890	151.3307
Ave Max Temp	8260	20.76907073509	27.04828060523	23.8383641213599	.83991731146614
Ave Min Temp	8260	7.43025568182	13.64375866852	10.0665703950078	.83707074648910
Evaporation	9063	1361	2690	1843.14	258.564
Development Level	9063	1	2	1.69	.462

Geographic Location	9063	1	2	1.09	.289
Valid N (listwise)	8260				

Regression

Variables Entered/Removed(a)			
Model	**Variables Entered**	**Variables Removed**	**Method**
1	Ln(Stand Area)	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	LN(Stand Value)	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Stand Value	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
4	Geographic Location	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
5	Development Level	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
6	Stand Area	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
7	Ave Max Temp	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
8	Precipitation	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
a Dependent Variable: LN(Water Demand)			

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.579(a)	.336	.336	.59290
2	.611(b)	.373	.373	.57615
3	.622(c)	.387	.387	.56971
4	.626(d)	.392	.392	.56718
5	.633(e)	.400	.400	.56353
6	.633(f)	.401	.401	.56313
7	.634(g)	.401	.401	.56300
8	.634(h)	.402	.401	.56286
a Predictors: (Constant), Ln(Stand Area)				
b Predictors: (Constant), Ln(Stand Area), LN(Stand Value)				
c Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value				
d Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location				
e Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location, Development Level				
f Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location, Development Level, Stand Area				
g Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location,				

Development Level, Stand Area, Ave Max Temp
h Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location, Development Level, Stand Area, Ave Max Temp, Precipitation

ANOVA(i)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1466.908	1	1466.908	4172.917	.000(a)
	Residual	2902.939	8258	.352		
	Total	4369.846	8259			
2	Regression	1628.960	2	814.480	2453.645	.000(b)
	Residual	2740.886	8257	.332		
	Total	4369.846	8259			
3	Regression	1690.247	3	563.416	1735.917	.000(c)
	Residual	2679.599	8256	.325		
	Total	4369.846	8259			
4	Regression	1714.311	4	428.578	1332.277	.000(d)
	Residual	2655.535	8255	.322		
	Total	4369.846	8259			
5	Regression	1748.694	5	349.739	1101.327	.000(e)
	Residual	2621.152	8254	.318		
	Total	4369.846	8259			
6	Regression	1752.652	6	292.109	921.129	.000(f)
	Residual	2617.194	8253	.317		
	Total	4369.846	8259			
7	Regression	1754.210	7	250.601	790.616	.000(g)
	Residual	2615.636	8252	.317		
	Total	4369.846	8259			
8	Regression	1755.823	8	219.478	692.768	.000(h)
	Residual	2614.024	8251	.317		
	Total	4369.846	8259			

a Predictors: (Constant), Ln(Stand Area)
b Predictors: (Constant), Ln(Stand Area), LN(Stand Value)
c Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value
d Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location
e Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location, Development Level
f Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location, Development Level, Stand Area
g Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location, Development Level, Stand Area, Ave Max Temp
h Predictors: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location, Development Level, Stand Area, Ave Max Temp, Precipitation
i Dependent Variable: LN(Water Demand)

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.9688914735	.036		-54.553	.000
	Ln(Stand Area)	.3539444820	.005	.579	64.598	.000
2	(Constant)	-3.2220797616	.067		-48.317	.000
	Ln(Stand Area)	.2215447327	.008	.363	27.638	.000
	LN(Stand Value)	.1810030601	.008	.290	22.095	.000
3	(Constant)	-2.5743346418	.081		-31.760	.000
	Ln(Stand Area)	.2128613311	.008	.348	26.770	.000
	LN(Stand Value)	.1272010401	.009	.204	14.138	.000
	Stand Value	.0000001152	.000	.153	13.742	.000
4	(Constant)	-2.3901852714	.083		-28.640	.000
	Ln(Stand Area)	.2062525378	.008	.338	25.934	.000
	LN(Stand Value)	.1360527187	.009	.218	15.091	.000
	Stand Value	.0000001215	.000	.162	14.502	.000
	Geographic Location	-.2326987180	.027	-.076	-8.649	.000
5	(Constant)	-2.0030613872	.091		-22.040	.000
	Ln(Stand Area)	.1801855834	.008	.295	21.737	.000
	LN(Stand Value)	.1495912674	.009	.240	16.527	.000
	Stand Value	.0000001184	.000	.157	14.211	.000
	Geographic Location	-.3278101189	.028	-.107	-11.603	.000
	Development Level	-.1598193461	.015	-.099	-10.405	.000
6	(Constant)	-1.9427514117	.092		-21.023	.000
	Ln(Stand Area)	.1488169854	.012	.244	12.255	.000
	LN(Stand Value)	.1611391791	.010	.258	16.755	.000
	Stand Value	.0000001078	.000	.143	12.178	.000
	Geographic Location	-.3287910882	.028	-.107	-11.646	.000
	Development Level	-.1609801844	.015	-.100	-10.486	.000
	Stand Area	.0000067241	.000	.055	3.533	.000
7	(Constant)	-2.4477918538	.246		-9.957	.000
	Ln(Stand Area)	.1420453088	.013	.233	11.347	.000
	LN(Stand Value)	.1640973978	.010	.263	16.904	.000
	Stand Value	.0000001077	.000	.143	12.173	.000
	Geographic Location	-.3097913650	.029	-.101	-10.502	.000
	Development Level	-.1858187407	.019	-.115	-9.779	.000
	Stand Area	.0000068628	.000	.056	3.605	.000
	Ave Max Temp	.0225119594	.010	.026	2.217	.027
8	(Constant)	-2.8691196400	.309		-9.295	.000
	Ln(Stand Area)	.1414009760	.013	.231	11.295	.000
	LN(Stand Value)	.1647014683	.010	.264	16.964	.000

	Stand Value	.0000001075	.000	.143	12.149	.000
	Geographic Location	-.2625670382	.036	-.085	-7.260	.000
	Development Level	-.2245282684	.026	-.139	-8.771	.000
	Stand Area	.0000071266	.000	.059	3.737	.000
	Ave Max Temp	.0353999986	.012	.041	3.039	.002
	Precipitation	.0001638742	.000	.032	2.256	.024
a Dependent Variable: LN(Water Demand)						

Excluded Variables(i)

Model		**Beta In**	**t**	**Sig.**	**Partial Correlation**	**Collinearity Statistics**
						Tolerance
1	**Stand Area**	.041(a)	2.730	.006	.030	.351
	Stand Value	.222(a)	21.835	.000	.234	.737
	Precipitation	.001(a)	.118	.906	.001	.898
	Ave Max Temp	-.031(a)	-3.489	.000	-.038	.996
	Ave Min Temp	-.002(a)	-.200	.841	-.002	.998
	Evaporation	.059(a)	6.408	.000	.070	.938
	Development Level	-.054(a)	-5.717	.000	-.063	.907
	Geographic Location	-.031(a)	-3.434	.001	-.038	.997
	LN(Stand Value)	.290(a)	22.095	.000	.236	.441
2	**Stand Area**	.115(b)	7.666	.000	.084	.335
	Stand Value	.153(b)	13.742	.000	.150	.597
	Precipitation	-.003(b)	-.361	.718	-.004	.897
	Ave Max Temp	-.011(b)	-1.214	.225	-.013	.984
	Ave Min Temp	-.041(b)	-4.665	.000	-.051	.959
	Evaporation	.069(b)	7.649	.000	.084	.936
	Development Level	-.071(b)	-7.736	.000	-.085	.900
	Geographic Location	-.065(b)	-7.326	.000	-.080	.970
3	**Stand Area**	.051(c)	3.246	.001	.036	.296
	Precipitation	.005(c)	.536	.592	.006	.893
	Ave Max Temp	-.003(c)	-.380	.704	-.004	.981
	Ave Min Temp	-.052(c)	-5.874	.000	-.065	.953
	Evaporation	.062(c)	7.014	.000	.077	.933
	Development Level	-.063(c)	-6.973	.000	-.077	.897
	Geographic Location	-.076(c)	-8.649	.000	-.095	.962
4	**Stand Area**	.052(d)	3.288	.001	.036	.296
	Precipitation	-.051(d)	-4.795	.000	-.053	.641
	Ave Max Temp	-.042(d)	-4.411	.000	-.048	.809
	Ave Min Temp	-.012(d)	-1.110	.267	-.012	.637
	Evaporation	.069(d)	7.814	.000	.086	.927
	Development Level	-.099(d)	-10.405	.000	-.114	.803

5	**Stand Area**	.055(e)	3.533	.000	.039	.296
	Precipitation	.009(e)	.745	.456	.008	.465
	Ave Max Temp	.025(e)	2.098	.036	.023	.528
	Ave Min Temp	-.006(e)	-.557	.578	-.006	.635
	Evaporation	-.007(e)	-.474	.636	-.005	.361
6	**Precipitation**	.011(f)	.878	.380	.010	.464
	Ave Max Temp	.026(f)	2.217	.027	.024	.528
	Ave Min Temp	-.006(f)	-.518	.604	-.006	.635
	Evaporation	-.013(f)	-.887	.375	-.010	.356
7	**Precipitation**	.032(g)	2.256	.024	.025	.353
	Ave Min Temp	-.019(g)	-1.638	.101	-.018	.516
	Evaporation	-.006(g)	-.423	.672	-.005	.340
8	**Ave Min Temp**	-.014(h)	-1.155	.248	-.013	.489
	Evaporation	.024(h)	1.266	.206	.014	.207

a Predictors in the Model: (Constant), Ln(Stand Area)

b Predictors in the Model: (Constant), Ln(Stand Area), LN(Stand Value)

c Predictors in the Model: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value

d Predictors in the Model: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location

e Predictors in the Model: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location, Development Level

f Predictors in the Model: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location, Development Level, Stand Area

g Predictors in the Model: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location, Development Level, Stand Area, Ave Max Temp

h Predictors in the Model: (Constant), Ln(Stand Area), LN(Stand Value), Stand Value, Geographic Location, Development Level, Stand Area, Ave Max Temp, Precipitation

i Dependent Variable: LN(Water Demand)

Single Variable Regression

Descriptive Statistics

	N	Mean	Variance
LN(Water Demand)	9063	.3458	.577
Ln(Stand Area)	9063	6.5707	1.541
LN(Stand Value)	9063	11.7119	1.413
Valid N (listwise)	9063		

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.579(a)	.335	.335	.61938

a Predictors: (Constant), Ln(Stand Area)

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1753.601	1	1753.601	4571.087	.000(a)
	Residual	3476.061	9061	.384		
	Total	5229.662	9062			

a Predictors: (Constant), Ln(Stand Area)

b Dependent Variable: LN(Water Demand)

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-1.983	.035		-56.570	.000	-2.052	-1.914
	Ln(Stand Area)	.354	.005	.579	67.610	.000	.344	.365

a Dependent Variable: LN(Water Demand)

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.560(a)	.314	.314	.62930

a Predictors: (Constant), LN(Stand Value)

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1641.335	1	1641.335	4144.588	.000(a)
	Residual	3588.327	9061	.396		
	Total	5229.662	9062			

a Predictors: (Constant), LN(Stand Value)

b Dependent Variable: LN(Water Demand)

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-3.847	.065		-58.767	.000	-3.975	-3.718

	LN(Stand Value)	.358	.006	.560	64.378	.000	.347	.369
a Dependent Variable: LN(Water Demand)								

Descriptive Statistics					
Development Level	**Geographic Location**		**N**	**Mean**	**Variance**
Metro/City	**Inland**	**LN(Water Demand)**	2082	.6418	1.151
		Ln(Stand Area)	2082	7.2073	2.475
		LN(Stand Value)	2082	11.9545	1.846
		Valid N (listwise)	2082		
	Coastal	**LN(Water Demand)**	721	.4306	.934
		Ln(Stand Area)	721	7.0000	2.228
		LN(Stand Value)	721	12.1292	1.862
		Valid N (listwise)	721		
Rural	**Inland**	**LN(Water Demand)**	6150	.2301	.287
		Ln(Stand Area)	6150	6.2810	.863
		LN(Stand Value)	6150	11.5527	1.095
		Valid N (listwise)	6150		
	Coastal	**LN(Water Demand)**	110	.6530	1.081
		Ln(Stand Area)	110	7.9070	1.963
		LN(Stand Value)	110	13.2826	1.997
		Valid N (listwise)	110		

Regression

Model Summary						
Development Level	**Geographic Location**	**Model**	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
Metro/City	**Inland**	**1**	.506(a)	.256	.255	.92600
	Coastal	**1**	.609(a)	.371	.370	.76660
Rural	**Inland**	**1**	.583(a)	.340	.340	.43515
	Coastal	**1**	.545(a)	.298	.291	.87537
a Predictors: (Constant), Ln(Stand Area)						

ANOVA(b)								
Development Level	**Geographic Location**	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Metro/City	**Inland**	**1**	**Regression**	612.342	1	612.342	714.114	.000(a)
			Residual	1783.568	2080	.857		
			Total	2395.910	2081			
	Coastal	**1**	**Regression**	249.581	1	249.581	424.688	.000(a)
			Residual	422.543	719	.588		

			Total	672.123	720			
Rural	**Inland**	**1**	**Regression**	599.416	1	599.416	3165.499	.000(a)
			Residual	1164.180	6148	.189		
			Total	1763.596	6149			
	Coastal	**1**	**Regression**	35.055	1	35.055	45.748	.000(a)
			Residual	82.757	108	.766		
			Total	117.812	109			
a Predictors: (Constant), Ln(Stand Area)								
b Dependent Variable: LN(Water Demand)								

Coefficients(a)

Development Level	**Geographic Location**	**Model**		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
				B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
Metro/City	**Inland**	**1**	**(Constant)**	-1.843	.095		-19.366	.000	-2.030	-1.657
			Ln(Stand Area)	.345	.013	.506	26.723	.000	.319	.370
	Coastal	**1**	**(Constant)**	-2.331	.137		-17.012	.000	-2.599	-2.062
			Ln(Stand Area)	.394	.019	.609	20.608	.000	.357	.432
Rural	**Inland**	**1**	**(Constant)**	-1.881	.038		-49.591	.000	-1.956	-1.807
			Ln(Stand Area)	.336	.006	.583	56.263	.000	.324	.348
	Coastal	**1**	**(Constant)**	-2.548	.481		-5.302	.000	-3.500	-1.595
			Ln(Stand Area)	.405	.060	.545	6.764	.000	.286	.523
a Dependent Variable: LN(Water Demand)										

Regression

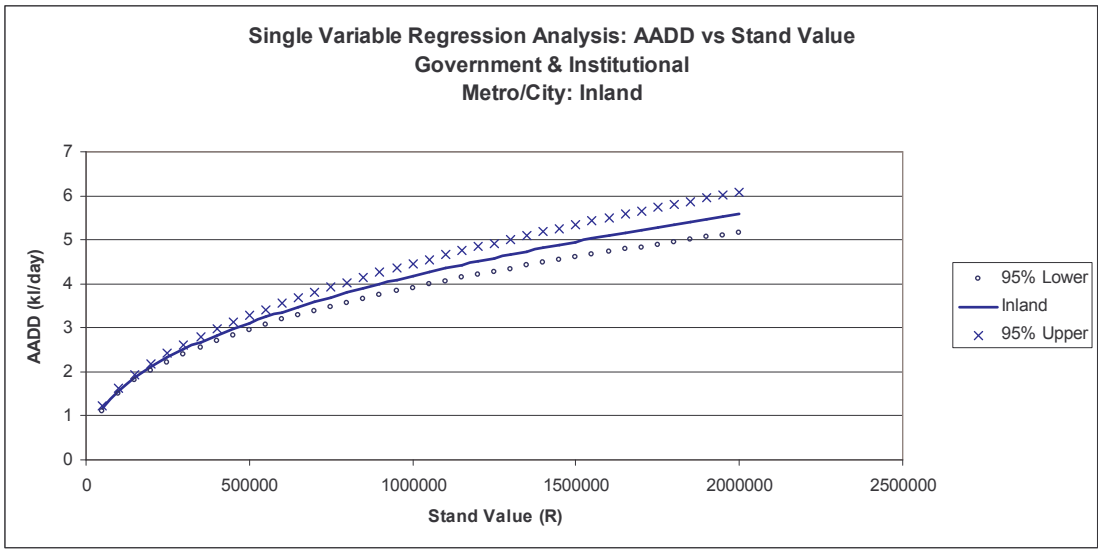
Model Summary

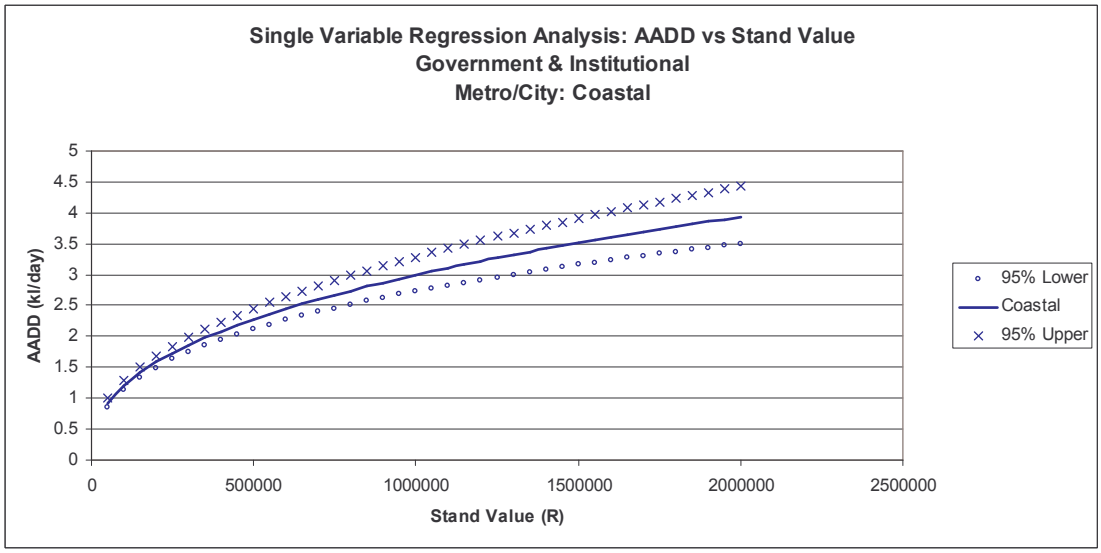
Development Level	**Geographic Location**	**Model**	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
Metro/City	**Inland**	**1**	.537(a)	.288	.288	.90537
	Coastal	**1**	.558(a)	.311	.310	.80236
Rural	**Inland**	**1**	.585(a)	.343	.343	.43423
	Coastal	**1**	.423(a)	.179	.171	.94664
a Predictors: (Constant), LN(Stand Value)						

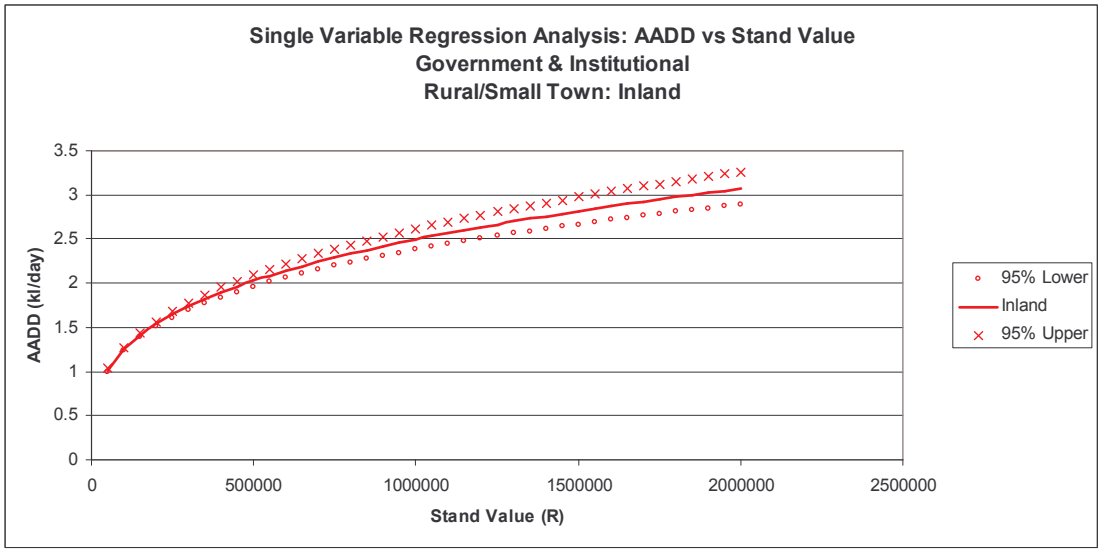
ANOVA(b)								
Development Level	**Geographic Location**	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Metro/City	**Inland**	**1**	**Regression**	690.955	1	690.955	842.947	.000(a)
			Residual	1704.955	2080	.820		
			Total	2395.910	2081			
	Coastal	**1**	**Regression**	209.249	1	209.249	325.035	.000(a)
			Residual	462.874	719	.644		
			Total	672.123	720			
Rural	**Inland**	**1**	**Regression**	604.373	1	604.373	3205.325	.000(a)
			Residual	1159.223	6148	.189		
			Total	1763.596	6149			
	Coastal	**1**	**Regression**	21.031	1	21.031	23.469	.000(a)
			Residual	96.781	108	.896		
			Total	117.812	109			
a Predictors: (Constant), LN(Stand Value)								
b Dependent Variable: LN(Water Demand)								

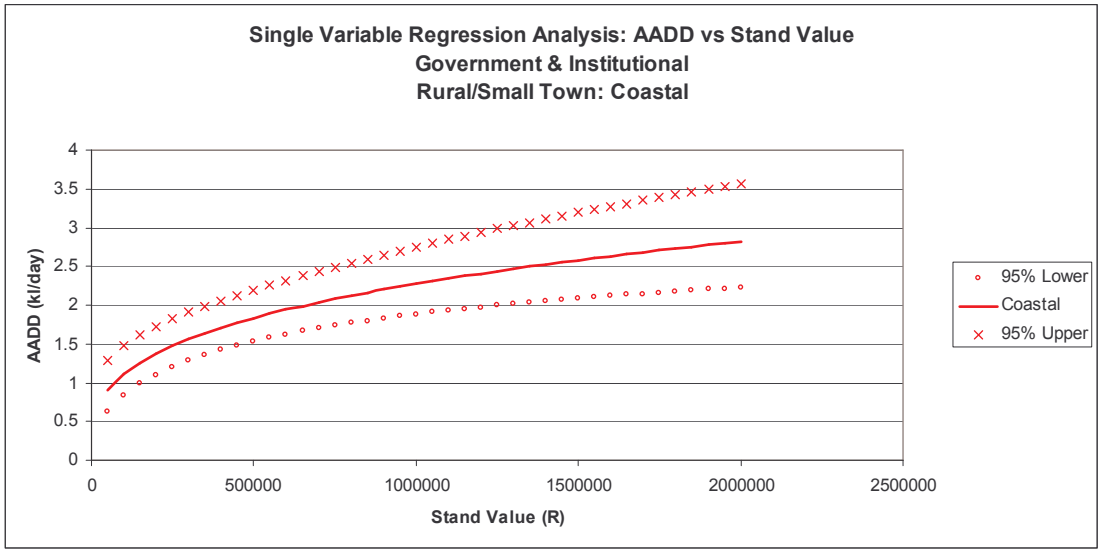
Coefficients(a)										
Development Level	**Geographic Location**	**Model**		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
				B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
Metro/City	**Inland**	**1**	**(Constant)**	-4.429	.176		-25.197	.000	-4.773	-4.084
			LN(Stand Value)	.424	.015	.537	29.034	.000	.395	.453
	Coastal	**1**	**(Constant)**	-4.361	.267		-16.306	.000	-4.886	-3.836
			LN(Stand Value)	.395	.022	.558	18.029	.000	.352	.438
Rural	**Inland**	**1**	**(Constant)**	-3.231	.061		-52.635	.000	-3.351	-3.111
			LN(Stand Value)	.300	.005	.585	56.616	.000	.289	.310
	Coastal	**1**	**(Constant)**	-3.475	.857		-4.055	.000	-5.174	-1.777
			LN(Stand Value)	.311	.064	.423	4.844	.000	.184	.438
a Dependent Variable: LN(Water Demand)										

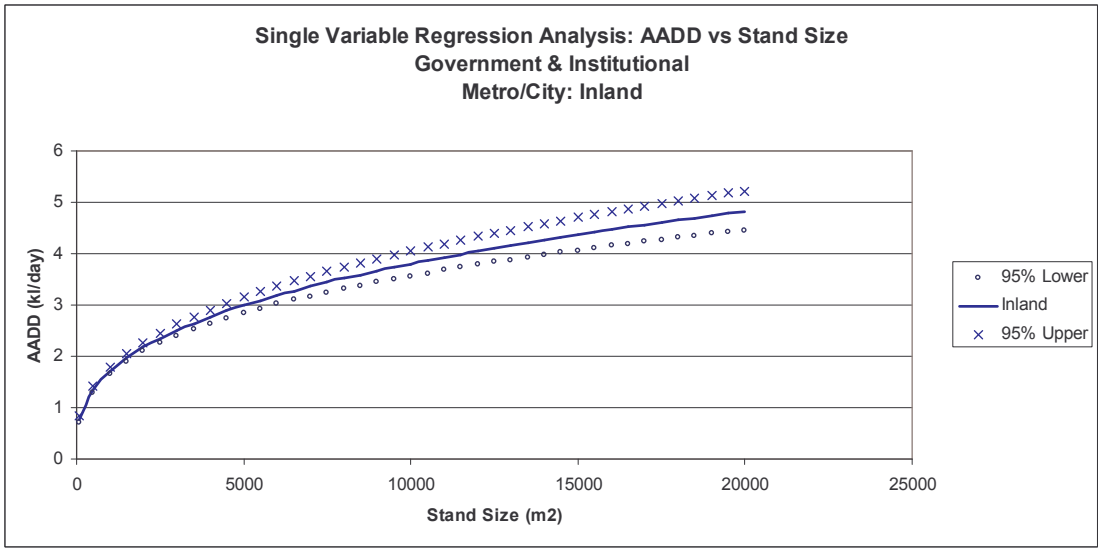
Graphs

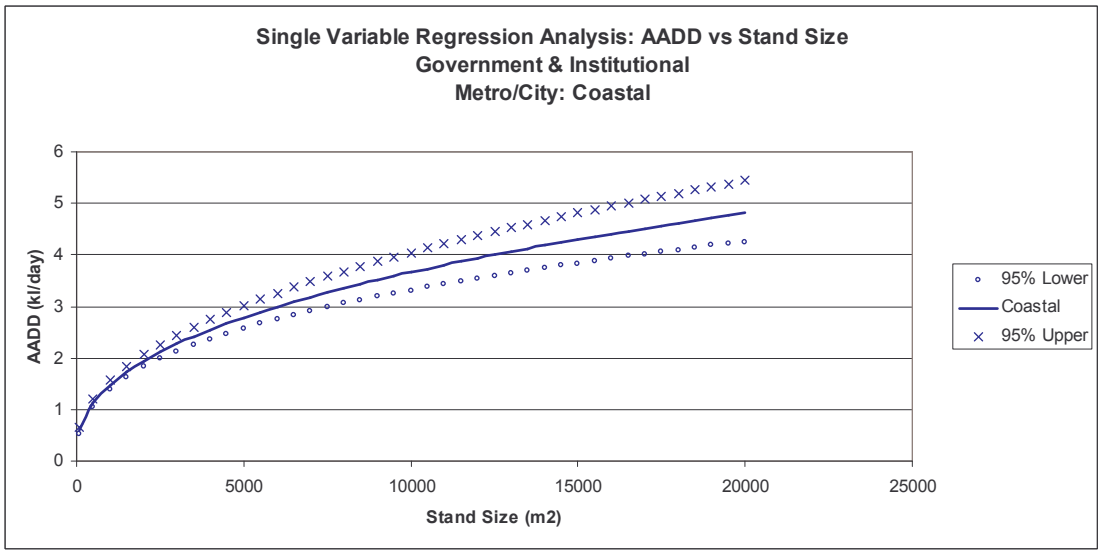

Single Variable Regression Analysis: AADD vs Stand Value
Government & Institutional
Metro/City: Inland
AADD (kl/day)
Stand Value (R)
0
1
2
3
4
5
6
7
0
500000
1000000
1500000
2000000
2500000
95% Lower
Inland
95% Upper

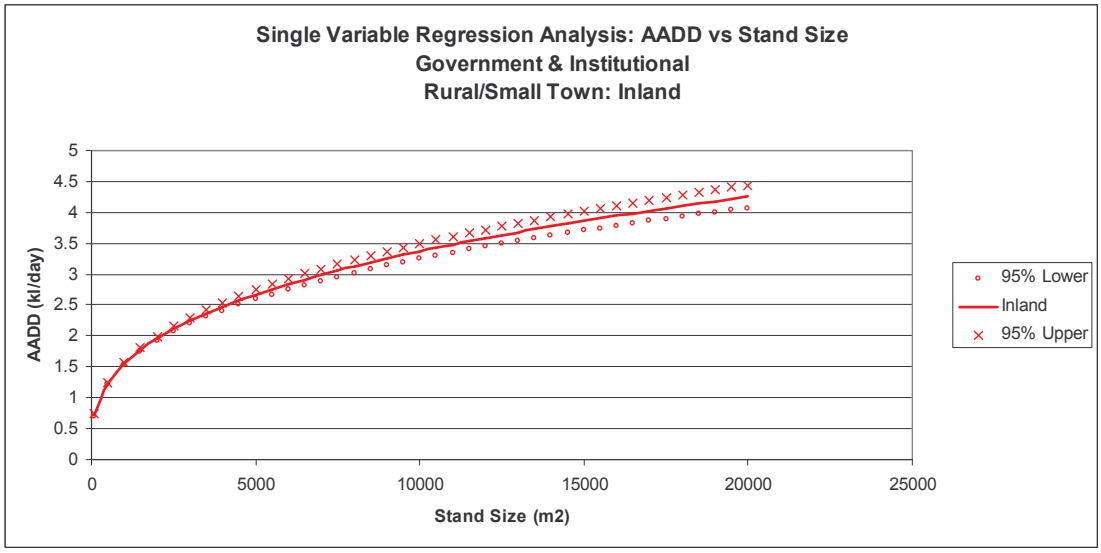

Single Variable Regression Analysis: AADD vs Stand Value
Government & Institutional
Metro/City: Coastal
AADD (kl/day)
Stand Value (R)
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0
500000
1000000
1500000
2000000
2500000
95% Lower
Coastal
95% Upper

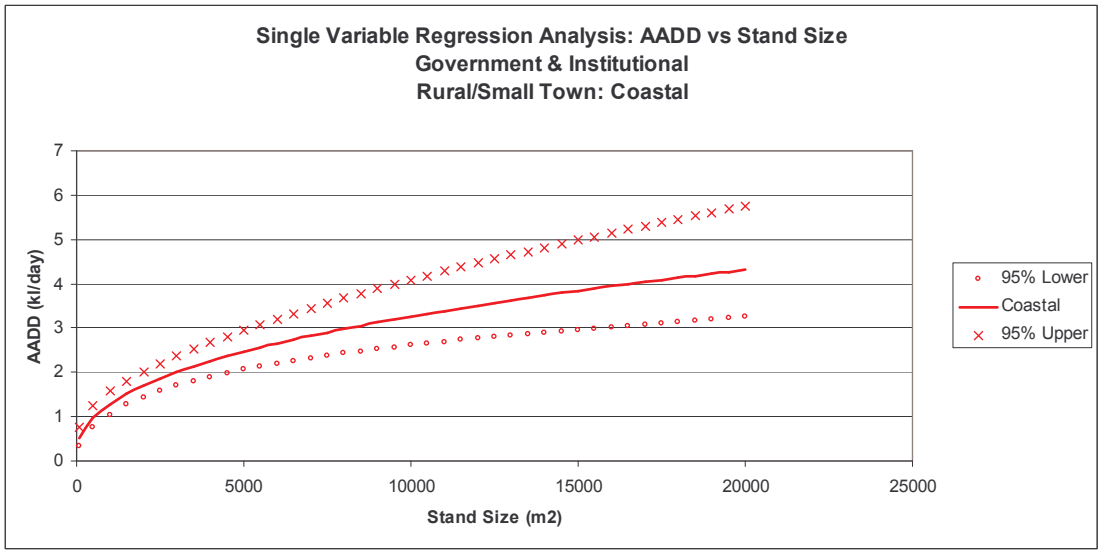

Single Variable Regression Analysis: AADD vs Stand Value
Government & Institutional
Rural/Small Town: Inland
AADD (kl/day)
Stand Value (R)
0
0.5
1
1.5
2
2.5
3
3.5
0
500000
1000000
1500000
2000000
2500000
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Value
Government & Institutional
Rural/Small Town: Coastal
AADD (kl/day)
Stand Value (R)
0
0.5
1
1.5
2
2.5
3
3.5
4
0
500000
1000000
1500000
2000000
2500000
95% Lower
Coastal
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Government & Institutional
Metro/City: Inland
AADD (kl/day)
Stand Size (m2)
0
1
2
3
4
5
6
0
5000
10000
15000
20000
25000
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Government & Institutional
Metro/City: Coastal
AADD (kl/day)
Stand Size (m2)
0
1
2
3
4
5
6
0
5000
10000
15000
20000
25000
95% Lower
Coastal
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Government & Institutional
Rural/Small Town: Inland
AADD (kl/day)
Stand Size (m2)
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Government & Institutional
Rural/Small Town: Coastal
AADD (kl/day)
Stand Size (m2)
95% Lower
Coastal
95% Upper

User Category: INDUSTRIAL

Multi Variable Regression

Variables Entered/Removed(a)			
Model	**Variables Entered**	**Variables Removed**	**Method**
1	LnArea	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Stand value	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Geographic Location	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
4	Mean Annual Precipitation	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
5	Stand Area	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
6	LnValue	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
7	Ave Max Temp	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
8	Level of Development	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
a Dependent Variable: Ln(Water Demand)			

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.559(a)	.313	.313	.92158
2	.575(b)	.330	.330	.90984
3	.587(c)	.345	.345	.89997
4	.591(d)	.350	.350	.89663
5	.595(e)	.354	.354	.89387
6	.601(f)	.361	.360	.88912
7	.602(g)	.363	.362	.88784
8	.604(h)	.365	.364	.88668
a Predictors: (Constant), LnArea				
b Predictors: (Constant), LnArea, Stand value				
c Predictors: (Constant), LnArea, Stand value, Geographic Location				
d Predictors: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation				
e Predictors: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area				
f Predictors: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area, LnValue				
g Predictors: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area, LnValue, Ave Max Temp				
h Predictors: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area, LnValue, Ave Max Temp, Level of Development				

ANOVA(i)						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	**Regression**	3093.999	1	3093.999	3642.991	.000(a)
	Residual	6793.564	7999	.849		
	Total	9887.563	8000			
2	**Regression**	3266.763	2	1633.381	1973.143	.000(b)
	Residual	6620.800	7998	.828		
	Total	9887.563	8000			
3	**Regression**	3410.456	3	1136.819	1403.580	.000(c)
	Residual	6477.107	7997	.810		
	Total	9887.563	8000			
4	**Regression**	3459.215	4	864.804	1075.700	.000(d)
	Residual	6428.348	7996	.804		
	Total	9887.563	8000			
5	**Regression**	3499.551	5	699.910	875.982	.000(e)
	Residual	6388.012	7995	.799		
	Total	9887.563	8000			
6	**Regression**	3568.002	6	594.667	752.231	.000(f)
	Residual	6319.561	7994	.791		
	Total	9887.563	8000			
7	**Regression**	3587.064	7	512.438	650.094	.000(g)
	Residual	6300.500	7993	.788		
	Total	9887.563	8000			
8	**Regression**	3604.232	8	450.529	573.044	.000(h)
	Residual	6283.331	7992	.786		
	Total	9887.563	8000			

a Predictors: (Constant), LnArea

b Predictors: (Constant), LnArea, Stand value

c Predictors: (Constant), LnArea, Stand value, Geographic Location

d Predictors: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation

e Predictors: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area

f Predictors: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area, LnValue

g Predictors: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area, LnValue, Ave Max Temp

h Predictors: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area, LnValue, Ave Max Temp, Level of Development

i Dependent Variable: Ln(Water Demand)

Coefficients(a)						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		

1	**(Constant)**	-3.174	.070		-45.336	.000
	LnArea	.535	.009	.559	60.357	.000
2	**(Constant)**	-2.706	.076		-35.448	.000
	LnArea	.462	.010	.483	45.720	.000
	Stand value	8.03E-008	.000	.153	14.446	.000
3	**(Constant)**	-3.075	.080		-38.231	.000
	LnArea	.445	.010	.465	44.120	.000
	Stand value	8.69E-008	.000	.165	15.741	.000
	Geographic Location	.293	.022	.122	13.320	.000
4	**(Constant)**	-2.832	.086		-32.941	.000
	LnArea	.445	.010	.466	44.358	.000
	Stand value	8.32E-008	.000	.158	15.069	.000
	Geographic Location	.403	.026	.167	15.455	.000
	Mean Annual Precipitation	-.001	.000	-.084	-7.788	.000
5	**(Constant)**	-2.310	.113		-20.472	.000
	LnArea	.372	.014	.389	25.852	.000
	Stand value	7.19E-008	.000	.137	12.561	.000
	Geographic Location	.402	.026	.167	15.460	.000
	Mean Annual Precipitation	-.001	.000	-.087	-8.055	.000
	Stand Area	1.65E-005	.000	.110	7.105	.000
6	**(Constant)**	-3.204	.148		-21.686	.000
	LnArea	.275	.018	.288	15.550	.000
	Stand value	3.26E-008	.000	.062	4.598	.000
	Geographic Location	.385	.026	.160	14.856	.000
	Mean Annual Precipitation	-.001	.000	-.073	-6.707	.000
	Stand Area	2.53E-005	.000	.169	10.139	.000
	LnValue	.121	.013	.141	9.305	.000
7	**(Constant)**	-3.958	.213		-18.605	.000
	LnArea	.259	.018	.271	14.422	.000
	Stand value	3.52E-008	.000	.067	4.964	.000
	Geographic Location	.306	.031	.127	10.029	.000
	Mean Annual Precipitation	-.001	.000	-.064	-5.802	.000
	Stand Area	2.56E-005	.000	.171	10.270	.000
	LnValue	.123	.013	.143	9.433	.000

	Ave Max Temp	.040	.008	.055	4.918	.000
8	**(Constant)**	-3.611	.225		-16.039	.000
	LnArea	.250	.018	.262	13.865	.000
	Stand value	3.60E-008	.000	.068	5.078	.000
	Geographic Location	.215	.036	.089	5.963	.000
	Mean Annual Precipitation	.000	.000	-.036	-2.854	.004
	Stand Area	2.70E-005	.000	.180	10.753	.000
	LnValue	.115	.013	.134	8.811	.000
	Ave Max Temp	.041	.008	.057	5.069	.000
	Level of Development	-.183	.039	-.054	-4.673	.000

a Dependent Variable: Ln(Water Demand)

Excluded Variables(i)

Model		**Beta In**	**t**	**Sig.**	**Partial Correlation**	**Collinearity Statistics**
						Tolerance
1	**Stand Area**	.163(a)	10.711	.000	.119	.365
	Stand value	.153(a)	14.446	.000	.159	.750
	Mean Annual Precipitation	-.010(a)	-1.028	.304	-.011	1.000
	Ave Max Temp	.092(a)	9.632	.000	.107	.930
	Ave Min Temp	-.039(a)	-4.185	.000	-.047	.990
	Mean Annual Evaporation	.081(a)	8.742	.000	.097	1.000
	Level of Development	-.114(a)	-12.245	.000	-.136	.968
	Geographic Location	.109(a)	11.775	.000	.131	.991
	LnValue	.159(a)	13.137	.000	.145	.573
2	**Stand Area**	.112(b)	7.118	.000	.079	.338
	Mean Annual Precipitation	.007(b)	.712	.476	.008	.985
	Ave Max Temp	.113(b)	11.891	.000	.132	.913
	Ave Min Temp	-.042(b)	-4.522	.000	-.051	.990
	Mean Annual Evaporation	.081(b)	8.924	.000	.099	1.000
	Level of Development	-.112(b)	-12.150	.000	-.135	.968
	Geographic Location	.122(b)	13.320	.000	.147	.983
	LnValue	.093(b)	6.569	.000	.073	.415
3	**Stand Area**	.106(c)	6.801	.000	.076	.338
	Mean Annual Precipitation	-.084(c)	-7.788	.000	-.087	.694
	Ave Max Temp	.064(c)	5.750	.000	.064	.657
	Ave Min Temp	.030(c)	2.781	.005	.031	.721
	Mean Annual	.011(c)	.944	.345	.011	.618

	Evaporation					
	Level of Development	-.075(c)	-7.544	.000	-.084	.816
	LnValue	.097(c)	6.901	.000	.077	.415
4	**Stand Area**	.110(d)	7.105	.000	.079	.337
	Ave Max Temp	.051(d)	4.537	.000	.051	.639
	Ave Min Temp	.026(d)	2.452	.014	.027	.720
	Mean Annual Evaporation	-.007(d)	-.599	.549	-.007	.594
	Level of Development	-.049(d)	-4.267	.000	-.048	.618
	LnValue	.083(d)	5.862	.000	.065	.406
5	**Ave Max Temp**	.052(e)	4.670	.000	.052	.639
	Ave Min Temp	.022(e)	2.039	.042	.023	.717
	Mean Annual Evaporation	-.001(e)	-.125	.900	-.001	.591
	Level of Development	-.065(e)	-5.582	.000	-.062	.600
	LnValue	.141(e)	9.305	.000	.104	.348
6	**Ave Max Temp**	.055(f)	4.918	.000	.055	.639
	Ave Min Temp	.031(f)	2.910	.004	.033	.711
	Mean Annual Evaporation	.002(f)	.145	.884	.002	.591
	Level of Development	-.052(f)	-4.508	.000	-.050	.591
7	**Ave Min Temp**	-.007(g)	-.487	.626	-.005	.396
	Mean Annual Evaporation	.033(g)	2.580	.010	.029	.476
	Level of Development	-.054(g)	-4.673	.000	-.052	.591
8	**Ave Min Temp**	.006(h)	.387	.699	.004	.382
	Mean Annual Evaporation	.012(h)	.845	.398	.009	.405

a Predictors in the Model: (Constant), LnArea

b Predictors in the Model: (Constant), LnArea, Stand value

c Predictors in the Model: (Constant), LnArea, Stand value, Geographic Location

d Predictors in the Model: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation

e Predictors in the Model: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area

f Predictors in the Model: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area, LnValue

g Predictors in the Model: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area, LnValue, Ave Max Temp

h Predictors in the Model: (Constant), LnArea, Stand value, Geographic Location, Mean Annual Precipitation, Stand Area, LnValue, Ave Max Temp, Level of Development

i Dependent Variable: Ln(Water Demand)

Single Variable Regression

Descriptive Statistics

	N	Mean	Variance
LN(Water Demand)	8139	1.0025	1.250
LN(Stand Area)	8139	7.8192	1.355
LN(Stand Value)	8139	13.3027	1.667
Valid N (listwise)	8139		

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.553(a)	.306	.306	.93158

a Predictors: (Constant), LN(Stand Area)

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	3114.069	1	3114.069	3588.290	.000(a)
	Residual	7061.632	8137	.868		
	Total	10175.702	8138			

a Predictors: (Constant), LN(Stand Area)

b Dependent Variable: LN(Water Demand)

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	**(Constant)**	-3.153	.070		-44.955	.000	-3.290	-3.015
	LN(Stand Area)	.531	.009	.553	59.902	.000	.514	.549

a Dependent Variable: LN(Water Demand)

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.456(a)	.208	.208	.99525

a Predictors: (Constant), LN(Stand Value)

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2115.849	1	2115.849	2136.102	.000(a)
	Residual	8059.852	8137	.991		
	Total	10175.702	8138			
a Predictors: (Constant), LN(Stand Value)						
b Dependent Variable: LN(Water Demand)						

Coefficients(a)								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-4.252	.114		-37.224	.000	-4.475	-4.028
	LN(Stand Value)	.395	.009	.456	46.218	.000	.378	.412
a Dependent Variable: LN(Water Demand)								

Descriptive Statistics					
Level of Development	Geographic Location		N	Mean	Variance
Metro/City	Coastal	LN(Water Demand)	1721	.9665	1.241
		LN(Stand Area)	1721	7.9077	.958
		LN(Stand Value)	1721	13.7121	1.481
		Valid N (listwise)	1721		
	Inland	LN(Water Demand)	5348	1.1327	1.200
		LN(Stand Area)	5348	7.8922	1.312
		LN(Stand Value)	5348	13.3357	1.415
		Valid N (listwise)	5348		
Rural	Coastal	LN(Water Demand)	800	.2669	.749
		LN(Stand Area)	800	7.1303	1.785
		LN(Stand Value)	800	12.3385	2.383
		Valid N (listwise)	800		
	Inland	LN(Water Demand)	270	.8330	1.833
		LN(Stand Area)	270	7.8490	1.910
		LN(Stand Value)	270	12.8945	1.718
		Valid N (listwise)	270		

Regression

Model Summary						
Level of Development	Geographic Location	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

Metro/City	**Coastal**	**1**	.569(a)	.324	.324	.91612
	Inland	**1**	.532(a)	.283	.283	.92757
Rural	**Coastal**	**1**	.510(a)	.260	.259	.74495
	Inland	**1**	.599(a)	.359	.357	1.08574
a Predictors: (Constant), LN(Stand Area)						

ANOVA(b)

Level of Development	Geographic Location	Model		Sum of Squares	df	Mean Square	F	Sig.
Metro/City	**Coastal**	**1**	**Regression**	692.283	1	692.283	824.866	.000(a)
			Residual	1442.701	1719	.839		
			Total	2134.984	1720			
	Inland	**1**	**Regression**	1816.055	1	1816.055	2110.731	.000(a)
			Residual	4599.654	5346	.860		
			Total	6415.709	5347			
Rural	**Coastal**	**1**	**Regression**	155.568	1	155.568	280.326	.000(a)
			Residual	442.852	798	.555		
			Total	598.420	799			
	Inland	**1**	**Regression**	177.050	1	177.050	150.192	.000(a)
			Residual	315.925	268	1.179		
			Total	492.975	269			
a Predictors: (Constant), LN(Stand Area)								
b Dependent Variable: LN(Water Demand)								

Coefficients(a)

Level of Development	Geographic Location	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
				B	Std. Error	Beta			Lower Bound	Upper Bound
Metro/City	**Coastal**	**1**	**(Constant)**	-4.159	.180		-23.129	.000	-4.512	-3.807
			LN(Stand Area)	.648	.023	.569	28.720	.000	.604	.692
	Inland	**1**	**(Constant)**	-2.882	.088		-32.640	.000	-3.056	-2.709
			LN(Stand Area)	.509	.011	.532	45.943	.000	.487	.530
Rural	**Coastal**	**1**	**(Constant)**	-2.088	.143		-14.592	.000	-2.369	-1.807
			LN(Stand Area)	.330	.020	.510	16.743	.000	.292	.369
	Inland	**1**	**(Constant)**	-3.775	.382		-9.888	.000	-4.526	-3.023
			LN(Stand Area)	.587	.048	.599	12.255	.000	.493	.681

a Dependent Variable: LN(Water Demand)

Regression

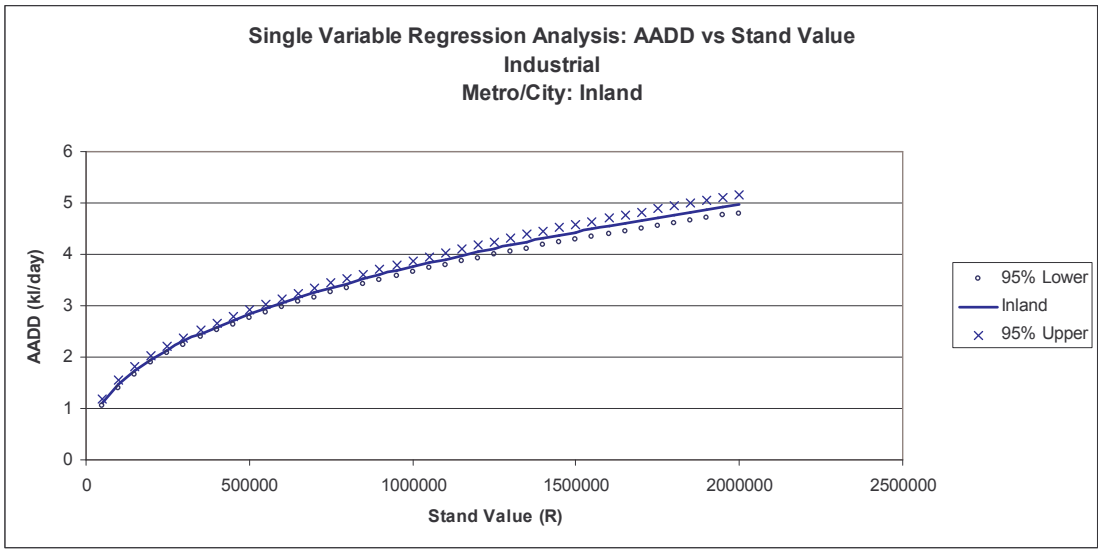
Model Summary						
Level of Development	**Geographic Location**	**Model**	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
Metro/City	**Coastal**	**1**	.367(a)	.135	.134	1.03658
	Inland	**1**	.441(a)	.195	.194	.98312
Rural	**Coastal**	**1**	.506(a)	.256	.255	.74698
	Inland	**1**	.635(a)	.403	.401	1.04779
a Predictors: (Constant), LN(Stand Value)						

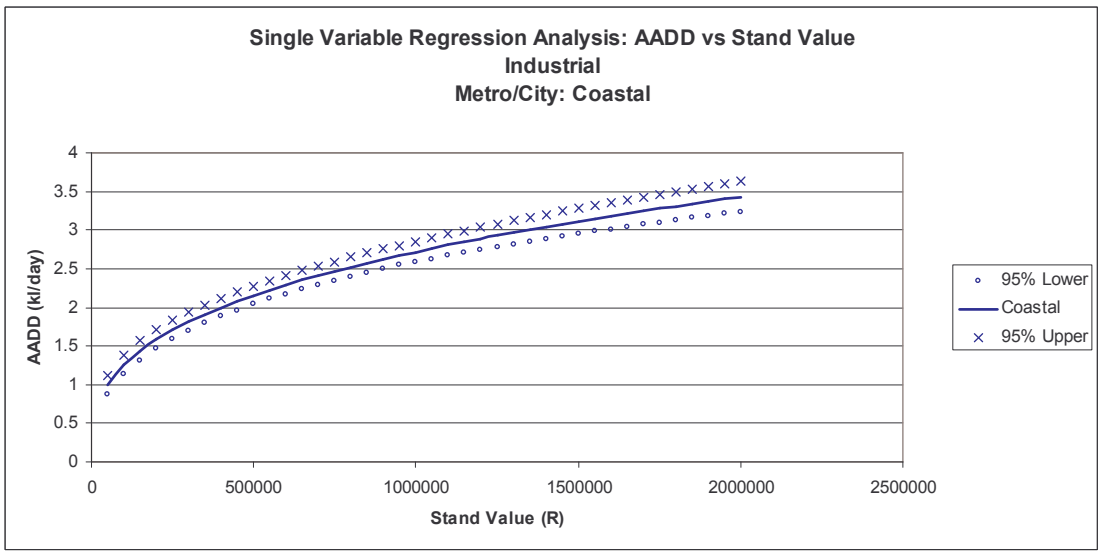
ANOVA(b)								
Level of Development	**Geographic Location**	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Metro/City	**Coastal**	**1**	**Regression**	287.937	1	287.937	267.976	.000(a)
			Residual	1847.047	1719	1.074		
			Total	2134.984	1720			
	Inland	**1**	**Regression**	1248.695	1	1248.695	1291.950	.000(a)
			Residual	5167.014	5346	.967		
			Total	6415.709	5347			
Rural	**Coastal**	**1**	**Regression**	153.153	1	153.153	274.479	.000(a)
			Residual	445.266	798	.558		
			Total	598.420	799			
	Inland	**1**	**Regression**	198.748	1	198.748	181.032	.000(a)
			Residual	294.227	268	1.098		
			Total	492.975	269			
a Predictors: (Constant), LN(Stand Value)								
b Dependent Variable: LN(Water Demand)								

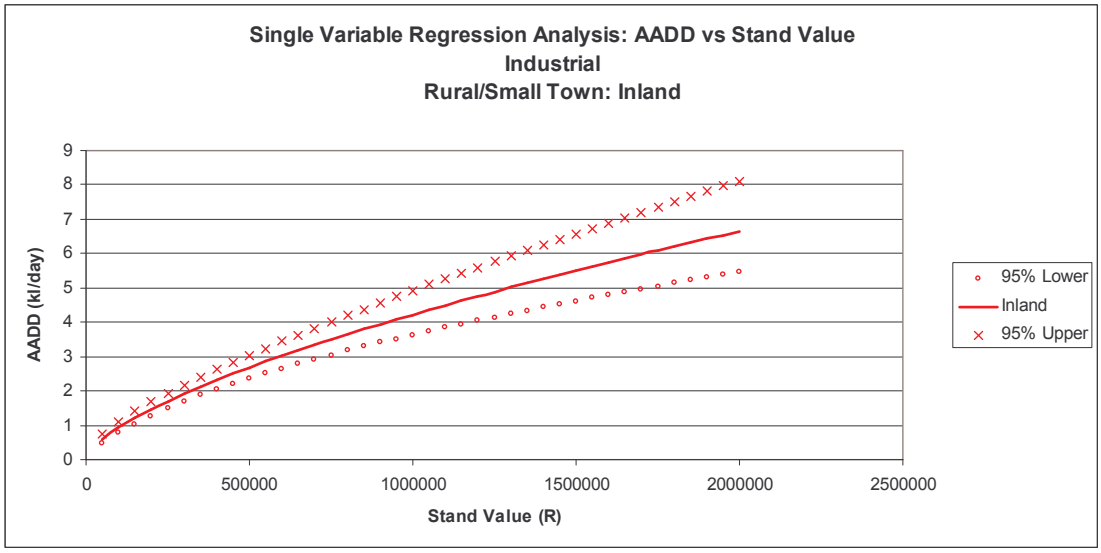
Coefficients(a)										
Level of Development	**Geographic Location**	**Model**		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
				B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
Metro/City	**Coastal**	**1**	**(Constant)**	-3.643	.283		-12.887	.000	-4.198	-3.089
			LN(Stand Value)	.336	.021	.367	16.370	.000	.296	.376
	Inland	**1**	**(Constant)**	-4.285	.151		-28.316	.000	-4.582	-3.988

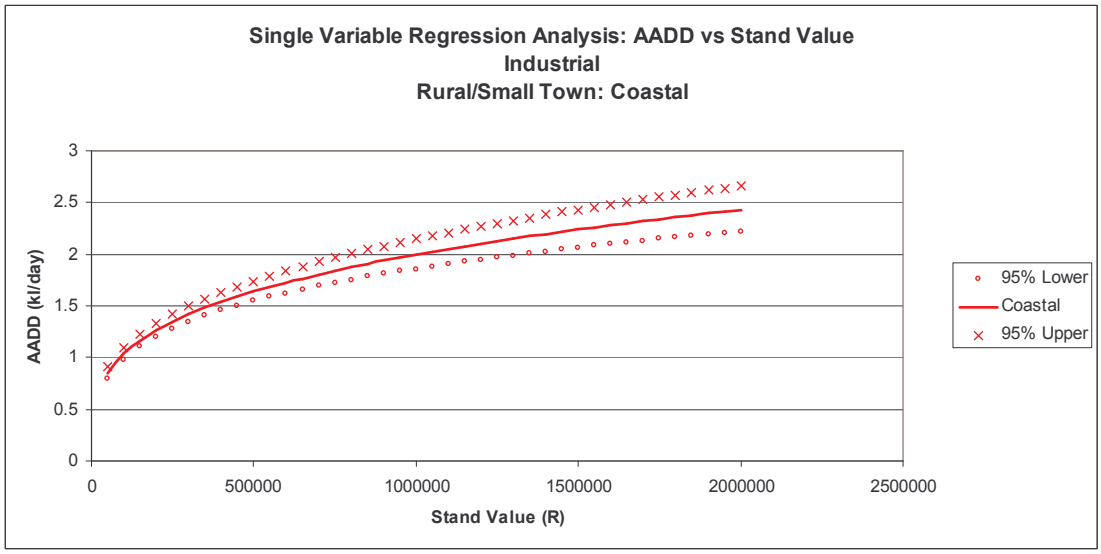
			LN(Stand Value)	.406	.011	.441	35.944	.000	.384	.428
Rural	**Coastal**	**1**	**(Constant)**	-3.232	.213		-15.186	.000	-3.650	-2.815
			LN(Stand Value)	.284	.017	.506	16.567	.000	.250	.317
	Inland	**1**	**(Constant)**	-7.623	.632		-12.067	.000	-8.867	-6.379
			LN(Stand Value)	.656	.049	.635	13.455	.000	.560	.752
a Dependent Variable: LN(Water Demand)										

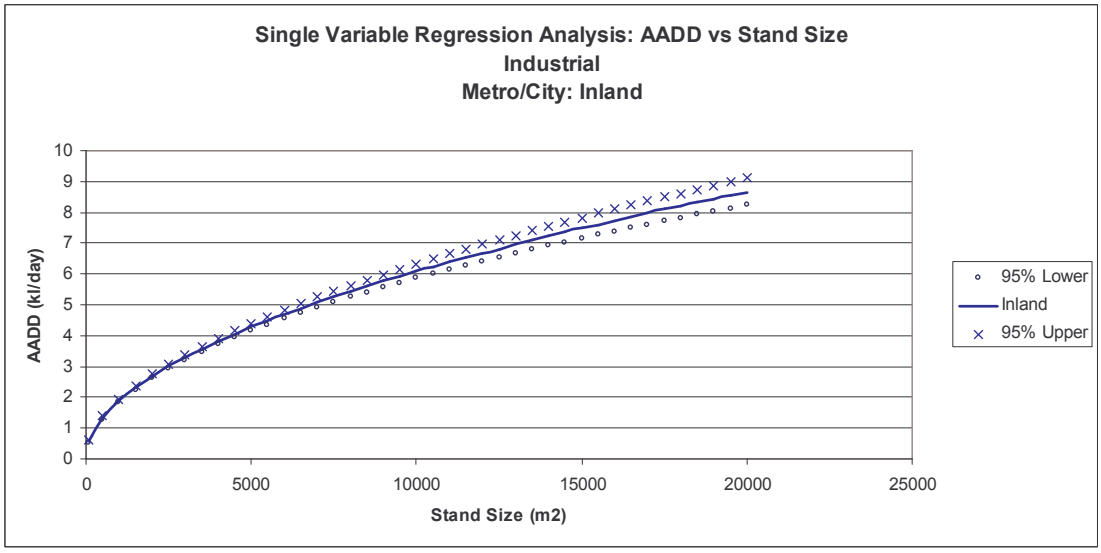
Graphs

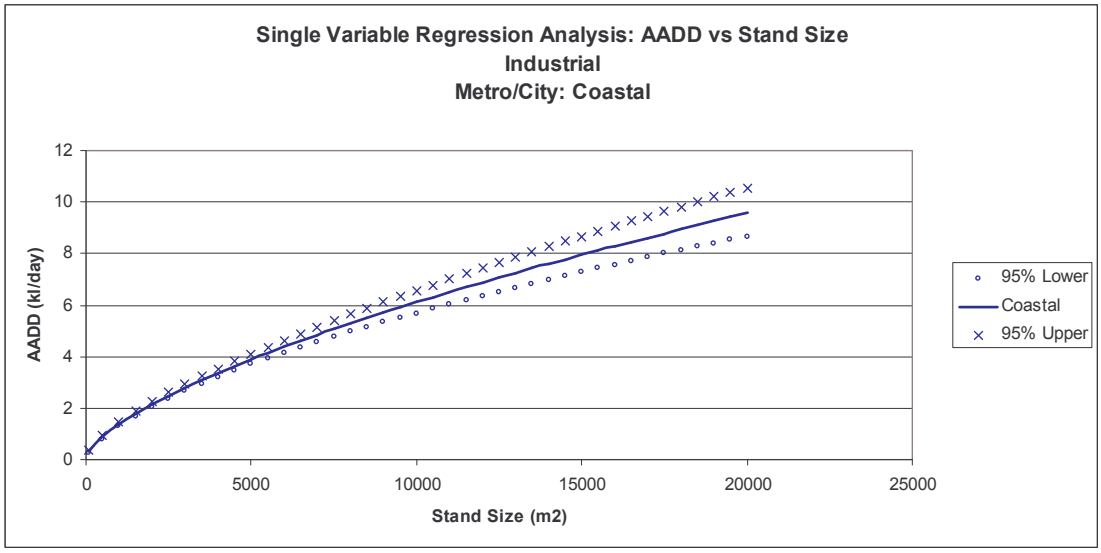


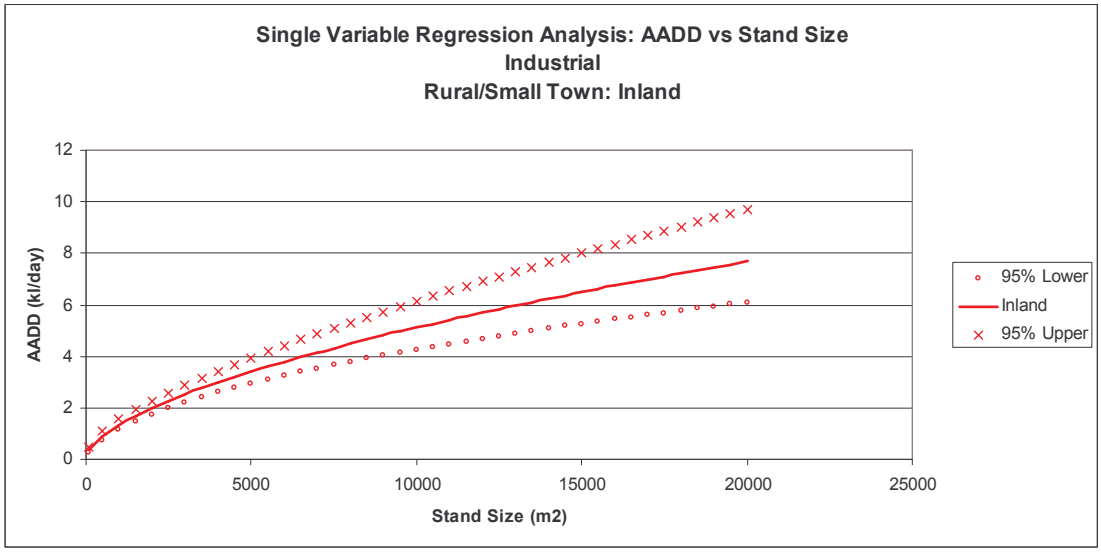


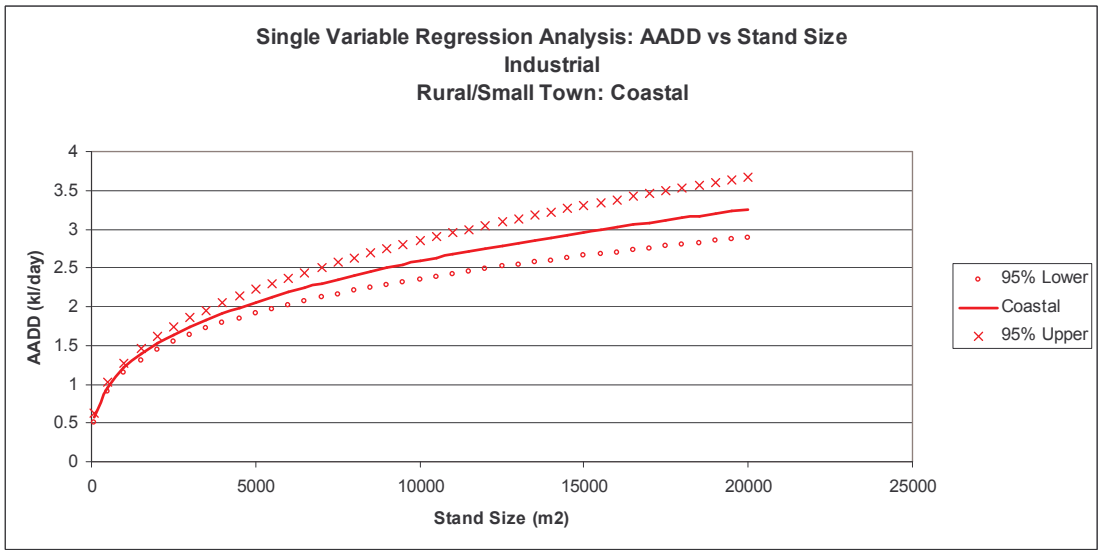

Single Variable Regression Analysis: AADD vs Stand Value
Industrial
Rural/Small Town: Inland
AADD (kl/day)
Stand Value (R)
0
1
2
3
4
5
6
7
8
9
0
500000
1000000
1500000
2000000
2500000
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Value
Industrial
Rural/Small Town: Coastal
AADD (kl/day)
Stand Value (R)
0
0.5
1
1.5
2
2.5
3
0
500000
1000000
1500000
2000000
2500000
95% Lower
Coastal
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Industrial
Metro/City: Inland
AADD (kl/day)
Stand Size (m2)
0
1
2
3
4
5
6
7
8
9
10
0
5000
10000
15000
20000
25000
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Industrial
Metro/City: Coastal
AADD (kl/day)
Stand Size (m2)
95% Lower
Coastal
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Industrial
Rural/Small Town: Inland
AADD (kl/day)
Stand Size (m2)
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Industrial
Rural/Small Town: Coastal
AADD (kl/day)
Stand Size (m2)
95% Lower
Coastal
95% Upper

User Category: PARKS

Multi Variable Regression

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	920	0	19050000	42799.40	652262.601
Stand Value	890	0	184100000	836324.46	7946654.486
Valid N (listwise)	890				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	629	511	19050000	62550.60	788259.345
Stand Value	459	10200	184100000	1621112.70	11013686.101
Valid N (listwise)	386				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	379	513	1713885	24760.51	109940.075
Stand Value	452	10200	11388000	622919.76	1332508.826
Valid N (listwise)	379				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	379	513	1713885	24760.51	109940.075
Water Demand	452	.001	150.929	5.60890	12.158032
Stand Value	452	10200	11388000	622919.76	1332508.826
Precipitation	452	149.9	882.1	592.818	162.6328
Ave Max Temp	441	21.009060955519	27.048280605227	23.67752829685250	1.642289846323975
Ave Min Temp	441	9.905020920503	13.824986271280	11.59387038348655	1.078904542309180
Evaporation	452	1361.0000	2346.0000	1931.393967	274.0496550
Development Level	452	1	2	1.13	.340
Geographic Location	452	1	2	1.38	.487
Valid N (listwise)	368				

Regression

Variables Entered/Removed(a)

Model	Variables Entered	Variables Removed	Method
1	Ln(Stand Area)	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Ave Min Temp	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Development Level	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
4	Stand Value	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
a Dependent Variable: LNwater			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.373(a)	.139	.137	1.12101
2	.425(b)	.181	.176	1.09497
3	.445(c)	.198	.191	1.08509
4	.464(d)	.215	.207	1.07444
a Predictors: (Constant), Ln(Stand Area)				
b Predictors: (Constant), Ln(Stand Area), Ave Min Temp				
c Predictors: (Constant), Ln(Stand Area), Ave Min Temp, Development Level				
d Predictors: (Constant), Ln(Stand Area), Ave Min Temp, Development Level, Stand Value				

ANOVA(e)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74.173	1	74.173	59.024	.000(a)
	Residual	459.937	366	1.257		
	Total	534.110	367			
2	Regression	96.492	2	48.246	40.240	.000(b)
	Residual	437.618	365	1.199		
	Total	534.110	367			
3	Regression	105.531	3	35.177	29.876	.000(c)
	Residual	428.580	364	1.177		
	Total	534.110	367			
4	Regression	115.057	4	28.764	24.917	.000(d)
	Residual	419.053	363	1.154		
	Total	534.110	367			
a Predictors: (Constant), Ln(Stand Area)						
b Predictors: (Constant), Ln(Stand Area), Ave Min Temp						
c Predictors: (Constant), Ln(Stand Area), Ave Min Temp, Development Level						
d Predictors: (Constant), Ln(Stand Area), Ave Min Temp, Development Level, Stand Value						
e Dependent Variable: LNwater						

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.6322334185	.359		-4.550	.000
	Ln(Stand Area)	.3128179598	.041	.373	7.683	.000
2	(Constant)	-4.0298876277	.657		-6.134	.000
	Ln(Stand Area)	.2715333318	.041	.323	6.638	.000
	Ave Min Temp	.2365799370	.055	.210	4.315	.000
3	(Constant)	-3.0083662838	.748		-4.021	.000
	Ln(Stand Area)	.2696534889	.041	.321	6.651	.000
	Ave Min Temp	.1954099269	.056	.174	3.469	.001
	Development Level	-.4571531416	.165	-.135	-2.771	.006
4	(Constant)	-2.5908699508	.755		-3.432	.001
	Ln(Stand Area)	.1953045534	.048	.233	4.089	.000
	Ave Min Temp	.2110456098	.056	.188	3.766	.000
	Development Level	-.4994263881	.164	-.148	-3.045	.003
	Stand Value	.0000001384	.000	.159	2.873	.004
a Dependent Variable: LNwater						

Excluded Variables(e)						
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Stand Area	-.006(a)	-.114	.909	-.006	.746
	Stand Value	.112(a)	1.966	.050	.102	.720
	Precipitation	-.098(a)	-2.015	.045	-.105	.994
	Ave Max Temp	.027(a)	.542	.588	.028	.957
	Ave Min Temp	.210(a)	4.315	.000	.220	.945
	Evaporation	-.107(a)	-2.205	.028	-.115	.996
	Development Level	-.180(a)	-3.764	.000	-.193	.994
	Geographic Location	.095(a)	1.963	.050	.102	.993
	Ln(Stand Value)	.082(a)	1.392	.165	.073	.679
2	Stand Area	.046(b)	.827	.409	.043	.712
	Stand Value	.144(b)	2.581	.010	.134	.709
	Precipitation	-.019(b)	-.367	.714	-.019	.836
	Ave Max Temp	-.088(b)	-1.618	.107	-.084	.754
	Evaporation	-.033(b)	-.650	.516	-.034	.851
	Development Level	-.135(b)	-2.771	.006	-.144	.924
	Geographic Location	.028(b)	.557	.578	.029	.876
	Ln(Stand Value)	.127(b)	2.191	.029	.114	.660
3	Stand Area	.042(c)	.752	.452	.039	.711
	Stand Value	.159(c)	2.873	.004	.149	.703
	Precipitation	-.020(c)	-.381	.703	-.020	.836

	Ave Max Temp	-.025(c)	-.417	.677	-.022	.599
	Evaporation	-.121(c)	-2.134	.033	-.111	.680
	Geographic Location	.002(c)	.036	.971	.002	.845
	Ln(Stand Value)	.130(c)	2.268	.024	.118	.659
4	**Stand Area**	-.033(d)	-.541	.589	-.028	.577
	Precipitation	-.010(d)	-.200	.842	-.010	.833
	Ave Max Temp	.031(d)	.489	.625	.026	.542
	Evaporation	-.110(d)	-1.962	.051	-.103	.677
	Geographic Location	-.034(d)	-.646	.519	-.034	.799
	Ln(Stand Value)	.055(d)	.792	.429	.042	.449

a Predictors in the Model: (Constant), Ln(Stand Area)

b Predictors in the Model: (Constant), Ln(Stand Area), Ave Min Temp

c Predictors in the Model: (Constant), Ln(Stand Area), Ave Min Temp, Development Level

d Predictors in the Model: (Constant), Ln(Stand Area), Ave Min Temp, Development Level, Stand Value

e Dependent Variable: LNwater

Single Variable Regression

Descriptive Statistics

	N	Mean	Variance
LNwater	452	.9954	1.402
Ln(Stand Area)	379	8.6910	2.064
Ln(Stand Value)	452	12.2174	2.158
Valid N (listwise)	379		

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.378(a)	.143	.141	1.11350

a Predictors: (Constant), Ln(Stand Area)

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	77.997	1	77.997	62.907	.000(a)
	Residual	467.433	377	1.240		
	Total	545.430	378			

a Predictors: (Constant), Ln(Stand Area)

b Dependent Variable: LNwater

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-1.667	.351		-4.746	.000	-2.357	-.976
	Ln(Stand Area)	.316	.040	.378	7.931	.000	.238	.395
a Dependent Variable: LNwater								

Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.264(a)	.069	.067	1.14345
a Predictors: (Constant), Ln(Stand Value)				

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.932	1	43.932	33.601	.000(a)
	Residual	588.363	450	1.307		
	Total	632.295	451			
a Predictors: (Constant), Ln(Stand Value)						
b Dependent Variable: LNwater						

Coefficients(a)								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-1.600	.451		-3.548	.000	-2.487	-.714
	Ln(Stand Value)	.212	.037	.264	5.797	.000	.140	.284
a Dependent Variable: LNwater								

Descriptive Statistics					
Development Level	Geographic Location		N	Mean	Variance
Metro/City	Inland	LNwater	224	1.1288	1.562
		Ln(Stand Area)	191	8.9298	2.211
		Ln(Stand Value)	224	12.2621	2.099
		Valid N (listwise)	191		
	Coastal	LNwater	168	1.0086	1.275

		Ln(Stand Area)	132	8.4621	1.571
		Ln(Stand Value)	168	12.0628	2.156
		Valid N (listwise)	132		
Rural	**Inland**	**LNwater**	54	.3419	.583
		Ln(Stand Area)	52	8.2116	1.779
		Ln(Stand Value)	54	12.1568	1.361
		Valid N (listwise)	52		
	Coastal	**LNwater**	6	1.5241	2.277
		Ln(Stand Area)	4	11.0731	3.730
		Ln(Stand Value)	6	15.4197	1.403
		Valid N (listwise)	4		

Regression

Model Summary

Development Level	**Geographic Location**	**Model**	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
Metro/City	**Inland**	**1**	.337(a)	.113	.109	1.18280
	Coastal	**1**	.311(a)	.097	.090	1.11080
Rural	**Inland**	**1**	.572(a)	.328	.314	.63283
	Coastal	**1**	.811(a)	.658	.487	.67947

a Predictors: (Constant), Ln(Stand Area)

ANOVA(b)

Development Level	**Geographic Location**	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Metro/City	**Inland**	**1**	**Regression**	33.779	1	33.779	24.145	.000(a)
			Residual	264.413	189	1.399		
			Total	298.192	190			
	Coastal	**1**	**Regression**	17.192	1	17.192	13.933	.000(a)
			Residual	160.404	130	1.234		
			Total	177.596	131			
Rural	**Inland**	**1**	**Regression**	9.763	1	9.763	24.378	.000(a)
			Residual	20.024	50	.400		
			Total	29.786	51			
	Coastal	**1**	**Regression**	1.777	1	1.777	3.848	.189(a)
			Residual	.923	2	.462		
			Total	2.700	3			

a Predictors: (Constant), Ln(Stand Area)

b Dependent Variable: LNwater

Coefficients(a)

Development Level	Geographic Location	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
				B	Std. Error	Beta			Lower Bound	Upper Bound
Metro/City	Inland	1	(Constant)	-1.325	.522		-2.537	.012	-2.356	-.295
			Ln(Stand Area)	.284	.058	.337	4.914	.000	.170	.397
	Coastal	1	(Constant)	-1.300	.662		-1.963	.052	-2.610	.010
			Ln(Stand Area)	.289	.077	.311	3.733	.000	.136	.442
Rural	Inland	1	(Constant)	-2.335	.553		-4.227	.000	-3.445	-1.226
			Ln(Stand Area)	.328	.066	.572	4.937	.000	.195	.461
	Coastal	1	(Constant)	-2.066	2.275		-.908	.460	-11.853	7.721
			Ln(Stand Area)	.398	.203	.811	1.962	.189	-.476	1.272
a Dependent Variable: LNwater										

Regression

Model Summary

Development Level	Geographic Location	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Metro/City	Inland	1	.237(a)	.056	.052	1.21697
	Coastal	1	.275(a)	.076	.070	1.08877
Rural	Inland	1	.398(a)	.158	.142	.70695
	Coastal	1	.312(a)	.097	-.128	1.60264
a Predictors: (Constant), Ln(Stand Value)						

ANOVA(b)

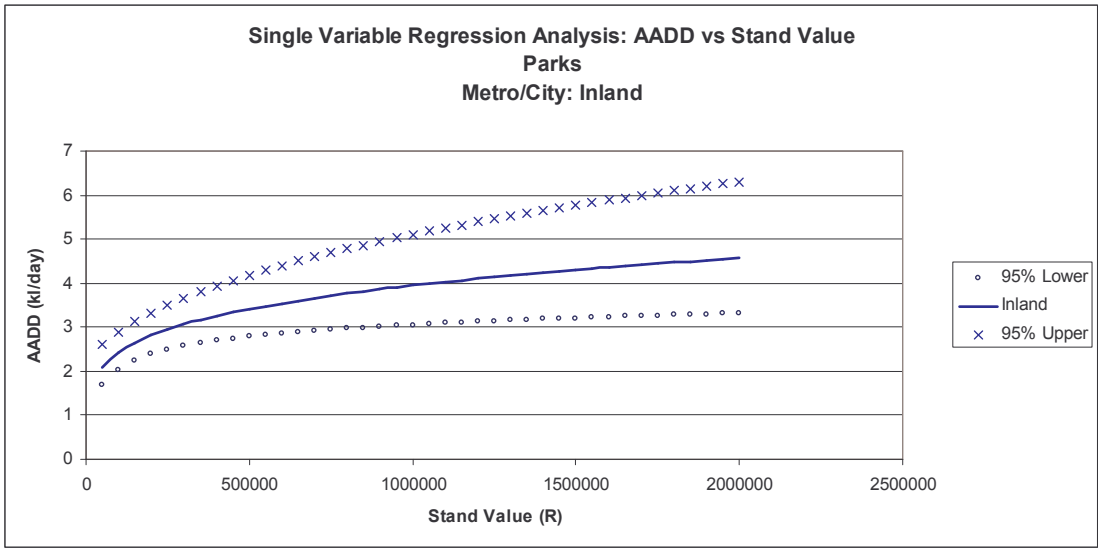
Development Level	Geographic Location	Model		Sum of Squares	df	Mean Square	F	Sig.
Metro/City	Inland	1	Regression	19.614	1	19.614	13.244	.000(a)
			Residual	328.788	222	1.481		
			Total	348.402	223			
	Coastal	1	Regression	16.099	1	16.099	13.581	.000(a)
			Residual	196.780	166	1.185		
			Total	212.879	167			
Rural	Inland	1	Regression	4.884	1	4.884	9.773	.003(a)
			Residual	25.989	52	.500		

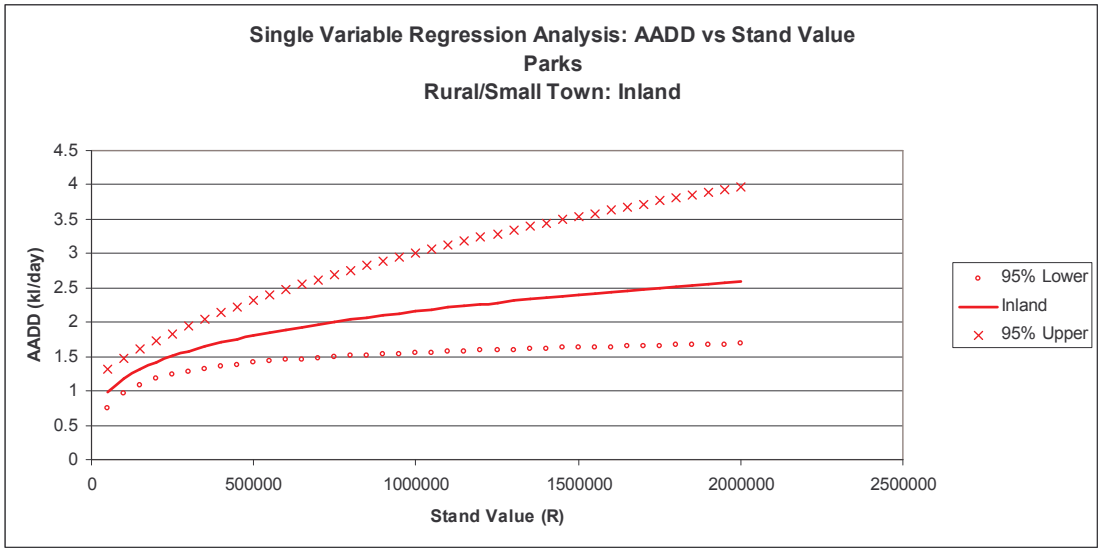
			Total	30.873	53			
	Coastal	**1**	**Regression**	1.109	1	1.109	.432	.547(a)
			Residual	10.274	4	2.568		
			Total	11.383	5			
a Predictors: (Constant), Ln(Stand Value)								
b Dependent Variable: LNwater								

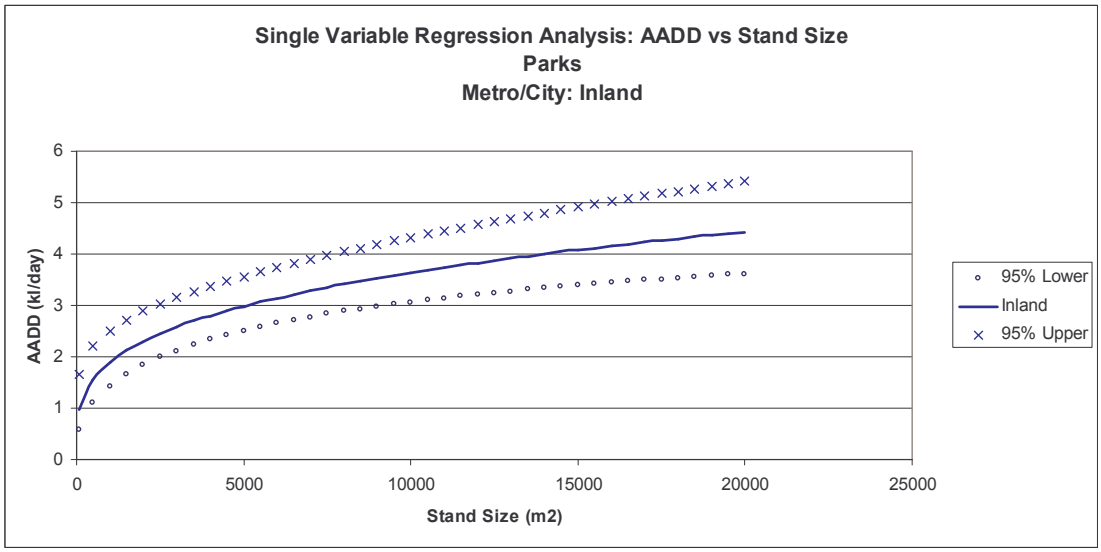
Coefficients(a)

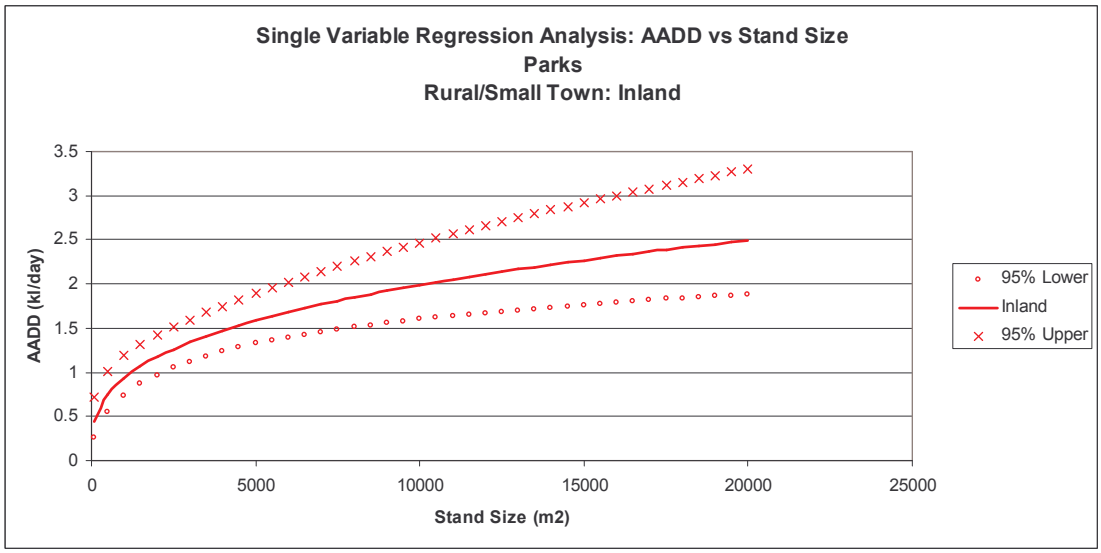
Development Level	**Geographic Location**	**Model**		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
				B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
Metro/City	**Inland**	**1**	**(Constant)**	-1.382	.695		-1.989	.048	-2.750	-.013
			Ln(Stand Value)	.205	.056	.237	3.639	.000	.094	.316
	Coastal	**1**	**(Constant)**	-1.542	.697		-2.212	.028	-2.919	-.166
			Ln(Stand Value)	.211	.057	.275	3.685	.000	.098	.325
Rural	**Inland**	**1**	**(Constant)**	-2.822	1.017		-2.776	.008	-4.862	-.782
			Ln(Stand Value)	.260	.083	.398	3.126	.003	.093	.427
	Coastal	**1**	**(Constant)**	-4.607	9.354		-.493	.648	-30.577	21.363
			Ln(Stand Value)	.398	.605	.312	.657	.547	-1.282	2.078
a Dependent Variable: LNwater										

Graphs




Single Variable Regression Analysis: AADD vs Stand Value
Parks
Rural/Small Town: Inland
AADD (kl/day)
Stand Value (R)
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Parks
Metro/City: Inland
AADD (kl/day)
Stand Size (m2)
95% Lower
Inland
95% Upper


Single Variable Regression Analysis: AADD vs Stand Size
Parks
Rural/Small Town: Inland
AADD (kl/day)
Stand Size (m2)
95% Lower
Inland
95% Upper

User Category: SPORTS

Multi Variable Regression

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	181	0	99999999	628485.44	7430844.886
Stand Value	173	0	20000000	826161.85	2188487.358
Valid N (listwise)	173				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	147	500	99999999	773816.59	8243973.927
Stand Value	89	10000	20000000	1605910.11	2845138.855
Valid N (listwise)	84				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	73	520	100000	19860.96	27959.329
Stand Value	73	10000	6337000	1065301.37	1382026.488
Valid N (listwise)	73				

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stand Area	73	520	100000	19860.96	27959.329
Water Demand	73	.003	92.999	5.24878	13.195462
Stand Value	73	10000	6337000	1065301.37	1382026.488
Precipitation	73	377.7	841.1	646.562	126.1446
Ave Max Temp	69	20.769070735091	23.393575418995	22.65719879334552	.317229390756369
Ave Min Temp	69	7.430255681819	13.643758668516	10.25888922113661	1.075048849835281
Evaporation	73	1551	2566	2181.86	162.277
Development Level	73	1	2	1.07	.254
Geographic Location	73	1	2	1.14	.346
Valid N (listwise)	69				

Regression

Variables Entered/Removed(a)

Model	Variables Entered	Variables Removed	Method
1	Ave Min Temp	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Ln(Stand Area)	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
a Dependent Variable: Ln(Water Demand)			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.310(a)	.096	.083	1.05956
2	.394(b)	.155	.130	1.03207
a Predictors: (Constant), Ave Min Temp				
b Predictors: (Constant), Ave Min Temp, Ln(Stand Area)				

ANOVA(c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.016	1	8.016	7.140	.009(a)
	Residual	75.218	67	1.123		
	Total	83.234	68			
2	Regression	12.933	2	6.466	6.071	.004(b)
	Residual	70.301	66	1.065		
	Total	83.234	68			
a Predictors: (Constant), Ave Min Temp						
b Predictors: (Constant), Ave Min Temp, Ln(Stand Area)						
c Dependent Variable: Ln(Water Demand)						

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.2082647944	1.233		3.414	.001
	Ave Min Temp	-.3193643484	.120	-.310	-2.672	.009
2	(Constant)	3.4697752466	1.249		2.778	.007
	Ave Min Temp	-.3969693531	.122	-.386	-3.257	.002
	Ln(Stand Area)	.1741107116	.081	.254	2.149	.035
a Dependent Variable: Ln(Water Demand)						

Excluded Variables(c)

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Stand Area	.147(a)	1.220	.227	.149	.920
	Stand Value	.087(a)	.710	.480	.087	.909

	Precipitation	.026(a)	.198	.843	.024	.778
	Ave Max Temp	-.296(a)	-1.150	.254	-.140	.203
	Evaporation	.028(a)	.165	.870	.020	.470
	Development Level	.082(a)	.651	.517	.080	.852
	Geographic Location	-.142(a)	-.832	.409	-.102	.463
	Ln(Stand Area)	.254(a)	2.149	.035	.256	.912
	Ln(Stand Value)	.191(a)	1.645	.105	.198	.976
2	**Stand Area**	-.189(b)	-.911	.366	-.112	.298
	Stand Value	-.045(b)	-.329	.744	-.041	.703
	Precipitation	.137(b)	1.006	.318	.124	.686
	Ave Max Temp	-.310(b)	-1.238	.220	-.152	.202
	Evaporation	.048(b)	.288	.774	.036	.468
	Development Level	.080(b)	.647	.520	.080	.852
	Geographic Location	-.167(b)	-1.002	.320	-.123	.461
	Ln(Stand Value)	.045(b)	.285	.776	.035	.528

a Predictors in the Model: (Constant), Ave Min Temp

b Predictors in the Model: (Constant), Ave Min Temp, Ln(Stand Area)

c Dependent Variable: Ln(Water Demand)

Single Variable Regression

Descriptive Statistics

	N	Mean	Variance
Ln(Water Demand)	73	.9404	1.181
Ln(Stand Area)	73	8.8044	2.588
Ln(Stand Value)	73	13.1026	1.896
Valid N (listwise)	73		

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.153(a)	.023	.010	1.08166

a Predictors: (Constant), Ln(Stand Area)

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	1.991	1	1.991	1.702	.196(a)
	Residual	83.068	71	1.170		
	Total	85.059	72			

a Predictors: (Constant), Ln(Stand Area)

b Dependent Variable: Ln(Water Demand)

Coefficients(a)								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
		B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
1	**(Constant)**	.030	.709		.043	.966	-1.384	1.444
	Ln(Stand Area)	.103	.079	.153	1.304	.196	-.055	.261
a Dependent Variable: Ln(Water Demand)								

Regression

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.154(a)	.024	.010	1.08141
a Predictors: (Constant), Ln(Stand Value)				

ANOVA(b)						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	**Regression**	2.029	1	2.029	1.735	.192(a)
	Residual	83.030	71	1.169		
	Total	85.059	72			
a Predictors: (Constant), Ln(Stand Value)						
b Dependent Variable: Ln(Water Demand)						

Coefficients(a)								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
		B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
1	**(Constant)**	-.657	1.219		-.539	.592	-3.089	1.774
	Ln(Stand Value)	.122	.093	.154	1.317	.192	-.063	.306
a Dependent Variable: Ln(Water Demand)								

Descriptive Statistics					
Development Level	**Geographic Location**		**N**	**Mean**	**Variance**
Metro/City	**Inland**	**Ln(Water Demand)**	59	1.0645	1.255
		Ln(Stand Area)	59	8.6419	2.418
		Ln(Stand Value)	59	13.1448	1.219

		Valid N (listwise)	59		
	Coastal	**Ln(Water Demand)**	9	.1123	.398
		Ln(Stand Area)	9	9.7624	3.135
		Ln(Stand Value)	9	13.3985	3.788
		Valid N (listwise)	9		
Rural	**Inland**	**Ln(Water Demand)**	4	1.0872	.578
		Ln(Stand Area)	4	8.6372	2.789
		Ln(Stand Value)	4	11.1750	4.399
		Valid N (listwise)	4		
	Coastal	**Ln(Water Demand)**	1	.4861	.
		Ln(Stand Area)	1	10.4422	.
		Ln(Stand Value)	1	15.6619	.
		Valid N (listwise)	1		

Regression

Warnings
The dependent variable Ln(Water Demand) has been deleted in split file Development Level=Rural,Geographic Location=Coastal. Statistics cannot be computed.
For models with dependent variable Ln(Water Demand), the following variables are constants or have missing correlations in split file Development Level=Rural,Geographic Location=Coastal : Ln(Water Demand), Ln(Stand Area). They will be deleted from the analysis.
For models with dependent variable Ln(Water Demand), fewer than 2 variables remain in split file Development Level=Rural,Geographic Location=Coastal. Statistics cannot be computed.

Model Summary						
Development Level	**Geographic Location**	**Model**	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
Metro/City	**Inland**	**1**	.267(a)	.072	.055	1.08874
	Coastal	**1**	.100(a)	.010	-.131	.67065
Rural	**Inland**	**1**	.606(a)	.367	.050	.74103
a Predictors: (Constant), Ln(Stand Area)						

ANOVA(b)								
Development Level	**Geographic Location**	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Metro/City	**Inland**	**1**	**Regression**	5.205	1	5.205	4.391	.041(a)
			Residual	67.565	57	1.185		
			Total	72.770	58			
	Coastal	**1**	**Regression**	.032	1	.032	.071	.797(a)
			Residual	3.148	7	.450		
			Total	3.180	8			
Rural	**Inland**	**1**	**Regression**	.636	1	.636	1.158	.394(a)

			Residual	1.098	2	.549		
			Total	1.734	3			
a Predictors: (Constant), Ln(Stand Area)								
b Dependent Variable: Ln(Water Demand)								

Coefficients(a)

Development Level	**Geographic Location**	**Model**		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
				B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
Metro/City	**Inland**	**1**	**(Constant)**	-.600	.807		-.744	.460	-2.216	1.016
			Ln(Stand Area)	.193	.092	.267	2.096	.041	.009	.377
	Coastal	**1**	**(Constant)**	.461	1.326		.347	.738	-2.676	3.597
			Ln(Stand Area)	-.036	.134	-.100	-.267	.797	-.352	.281
Rural	**Inland**	**1**	**(Constant)**	-1.294	2.243		-.577	.622	-10.947	8.358
			Ln(Stand Area)	.276	.256	.606	1.076	.394	-.826	1.378
a Dependent Variable: Ln(Water Demand)										

Regression

Warnings

The dependent variable Ln(Water Demand) has been deleted in split file Development Level=Rural,Geographic Location=Coastal. Statistics cannot be computed.
For models with dependent variable Ln(Water Demand), the following variables are constants or have missing correlations in split file Development Level=Rural,Geographic Location=Coastal : Ln(Water Demand), Ln(Stand Value). They will be deleted from the analysis.
For models with dependent variable Ln(Water Demand), fewer than 2 variables remain in split file Development Level=Rural,Geographic Location=Coastal. Statistics cannot be computed.

Model Summary

Development Level	**Geographic Location**	**Model**	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
Metro/City	**Inland**	**1**	.221(a)	.049	.032	1.10209
	Coastal	**1**	.030(a)	.001	-.142	.67374
Rural	**Inland**	**1**	.987(a)	.973	.960	.15231
a Predictors: (Constant), Ln(Stand Value)						

ANOVA(b)

Development Level	**Geographic Location**	**Model**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**

Metro/City	**Inland**	**1**	**Regression**	3.539	1	3.539	2.913	.093(a)
			Residual	69.232	57	1.215		
			Total	72.770	58			
	Coastal	**1**	**Regression**	.003	1	.003	.006	.939(a)
			Residual	3.177	7	.454		
			Total	3.180	8			
Rural	**Inland**	**1**	**Regression**	1.688	1	1.688	72.757	.013(a)
			Residual	.046	2	.023		
			Total	1.734	3			
a Predictors: (Constant), Ln(Stand Value)								
b Dependent Variable: Ln(Water Demand)								

Coefficients(a)

Development Level	**Geographic Location**	**Model**		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95% Confidence Interval for B**	
				B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
Metro/City	**Inland**	**1**	**(Constant)**	-1.877	1.729		-1.085	.282	-5.339	1.586
			Ln(Stand Value)	.224	.131	.221	1.707	.093	-.039	.486
	Coastal	**1**	**(Constant)**	-.019	1.655		-.011	.991	-3.933	3.895
			Ln(Stand Value)	.010	.122	.030	.080	.939	-.280	.299
Rural	**Inland**	**1**	**(Constant)**	-2.909	.475		-6.129	.026	-4.952	-.867
			Ln(Stand Value)	.358	.042	.987	8.530	.013	.177	.538
a Dependent Variable: Ln(Water Demand)										

Graphs

