Appendix Material

Table A1: Illustrative Water Resource Data for Condamine only (‘000 GL) Current Climate)

		State of Nature	
	Drought	Normal	Wet
Discrete Normal		620	
Stochastic Normal Triangular Distribution (a, b, c)		(97, 620, 985)	
Discrete SCA	359	620	802
Stochastic SCA Triangular Distribution (a, b, c)	(97,358,620)	(359,620,803)	(620,803,985)

Table A2: Water Resource Data for Condamine only (‘000 GL) Climate Change (550 Avg, 2050)

		State of Nature	
	Drought	Normal	Wet
Discrete		564	
Stochastic Triangular Distribution (a, b, c)		(88, 564, 896)	
Discrete SCA	326	564	730
Stochastic SCA Triangular Distribution (a, b, c)	(88,326,564)	(326,564,730)	(564,730,896)

There is constant water reduction in each corresponding cell. Full data sets available on request.

Table A1: Analysis Summary

Run	Description	Climate	State of Nature		
			Drought	Normal	Wet
1	EV, Discrete	Current		1.0	
2	EV, Inputs Ex-ante	Current		1.0	
3	EV, Inputs Ex-post	Current		1.0	
4	EV, State Ex-ante	Current		1.0	
5	EV, State Ex-post	Current		1.0	
4	SCA, discrete	Current	0.2	0.5	0.3
5	SCA, Input Ex-ante	Current	0.2	0.5	0.3
6	SCA Input Ex-post	Current	0.2	0.5	0.3
7	SCA, State Ex-ante	Current	0.2	0.5	0.3
8	SCA, State Ex-post	Current	0.2	0.5	0.3
8	EV, Discrete	550 Avg		1.0	
9	EV, Inputs Ex-ante	550 Avg		1.0	
10	EV, Inputs Ex-post	550 Avg		1.0	
11	EV, State Ex-ante	550 Avg		1.0	
12	EV, State Ex-post	550 Avg		1.0	
13	SCA, discrete	550 Avg	0.2	0.5	0.3
14	SCA, Input Ex-ante	550 Avg	0.2	0.5	0.3
15	SCA Input Ex-post	550 Avg	0.2	0.5	0.3
16	SCA, State Ex-ante	550 Avg	0.2	0.5	0.3
17	SCA, State Ex-post	550 Avg	0.2	0.5	0.3
18	SCA, discrete	Current	0.3	0.5	0.2
19	SCA, Input Ex-ante	Current	0.3	0.5	0.2
20	SCA Input Ex-post	Current	0.3	0.5	0.2
21	SCA, State Ex-ante	Current	0.3	0.5	0.2
22	SCA, State Ex-post	Current	0.3	0.5	0.2

EV= expected value
SCA = State contingent analysis
Current climate = historical values
550 Avg = forecasted climate in 2050 under 550 ppm of carbon
State of Nature = examines the implication of how a state of nature is described
Inputs by state = describes the volume of water required to produce a state specific commodity

Table A4 Area Irrigated By State of Nature

		State of Nature		
		Drought	**Normal**	**Wet**
Current climate	**EV, Discrete**		1,435	
	EV, Inputs Ex-ante		1,435	
	EV, Inputs Ex-post		1,156	
	EV, State Ex-ante		1,435	
	EV, State Ex-post		1,053	
	SCA, discrete	853	1,290	1,533
	SCA, Input Ex-ante	853	1,290	1,533
	SCA Input Ex-post	802	1,145	1,385
	SCA, State Ex-ante	853	1,290	1,533
	SCA, State Ex-post	838	1,005	1,818
Climate change 550 Avg.	**EV, Discrete**		1,444	
	EV, Inputs Ex-ante		1,444	
	EV, Inputs Ex-post		1,279	
	EV, State Ex-ante		1,444	
	EV, State Ex-post		805	
	SCA, discrete	673	1,309	1,553
	SCA, Input Ex-ante	673	1,309	1,553
	SCA Input Ex-post	702	1,288	1,417
	SCA, State Ex-ante	673	1,309	1,553
	SCA, State Ex-post	591	708	1,772
Frequency	**SCA, discrete**	607	1,577	1,808
	SCA, Input Ex-ante	607	1,577	1,808
	SCA Input Ex-post	539	1,440	1,645
	SCA, State Ex-ante	607	1,577	1,808
	SCA, State Ex-post	780	965	2,081

Table A5 Compare Discrete v Stochastic & Climate Change (Ex-post)

			State of Nature		
			Drought	**Normal**	**Wet**
Discrete	Current Climate	EV	0	1,435	0
	Current Climate	SCA	853	1,290	1,533
	550 Avg	EV	0	1,444	0
	550 Avg	SCA	673	1,309	1,553
	Frequency	SCA	607	1,577	1,808
Inputs	Current Climate	EV	0	1,156	0
	Current Climate	SCA	802	1,145	1,385
	550 Avg	EV	0	1,279	0
	550 Avg	SCA	702	1,288	1,417
	Frequency	SCA	539	1,440	1,645
State	Current Climate	EV	0	1,053	0
	Current Climate	SCA	838	1,005	1,818
	550 Avg	EV	0	805	0
	550 Avg	SCA	591	708	1,772
	Frequency	SCA	780	965	2,081