

Kennedy II - Rainbow Trout Mortality
part of the raw data

Obs	species	hardness	dose	tub	eggs	dead
1	RB	6	0	1	30	0
2	RB	50	41	1	30	1
3	RB	100	82	1	30	0
4	RB	250	267	1	30	0
5	RB	6	0	1	30	1
6	RB	50	41	1	30	0
7	RB	100	82	1	30	0
8	RB	250	267	1	30	0
9	RB	6	0	1	30	0
10	RB	50	41	1	30	0
11	RB	100	82	1	30	0
12	RB	250	267	1	30	0
13	RB	6	0	1	30	0
14	RB	50	41	1	30	0
15	RB	100	82	1	30	1
16	RB	250	267	1	30	1
17	RB	6	0	1	30	0
18	RB	50	41	1	30	0
19	RB	100	82	1	30	1
20	RB	250	267	1	30	1

Kennedy II - Rainbow Trout Mortality
Summary of number of replicates in the study

species RB

		tub		
		1	2	3
		N	N	N
hardness	dose			
6	1.9	5	5	5
	122.5	5	5	5
	213	5	5	5
	457.5	5	5	5
	987	5	5	5
	1845	5	5	5
50	40.9	5	5	5
	130	5	5	5
	218	5	5	5
	463	5	5	5
	965	5	5	5
	1710	5	5	5
100	87.8	5	5	5
	133	5	5	5
	201	5	5	5
	457	5	5	5
	960	5	5	5
	1710	5	5	5

Kennedy II - Rainbow Trout Mortality
Summary of number of replicates in the study

species RB

		tub		
		1	2	3
		N	N	N
250	229	5	5	5
	449	5	5	5
	702	5	5	5
	950	5	5	5
	1380	5	5	5
	1730	5	5	5
All		120	120	120

Kennedy II - Rainbow Trout Mortality
Summary of number of replicates in the study

species RB

		eggs	dead
		Sum	Sum
hardness	dose		
6	1.9	450	2
	122.5	450	47
	213	450	55
	457.5	450	161
	987	450	382
	1845	450	448
50	40.9	450	4
	130	450	9
	218	450	44
	463	450	60
	965	450	252
	1710	450	444
100	87.8	450	5
	133	450	7
	201	450	19
	457	450	48
	960	450	103
	1710	450	403

Kennedy II - Rainbow Trout Mortality
Summary of number of replicates in the study

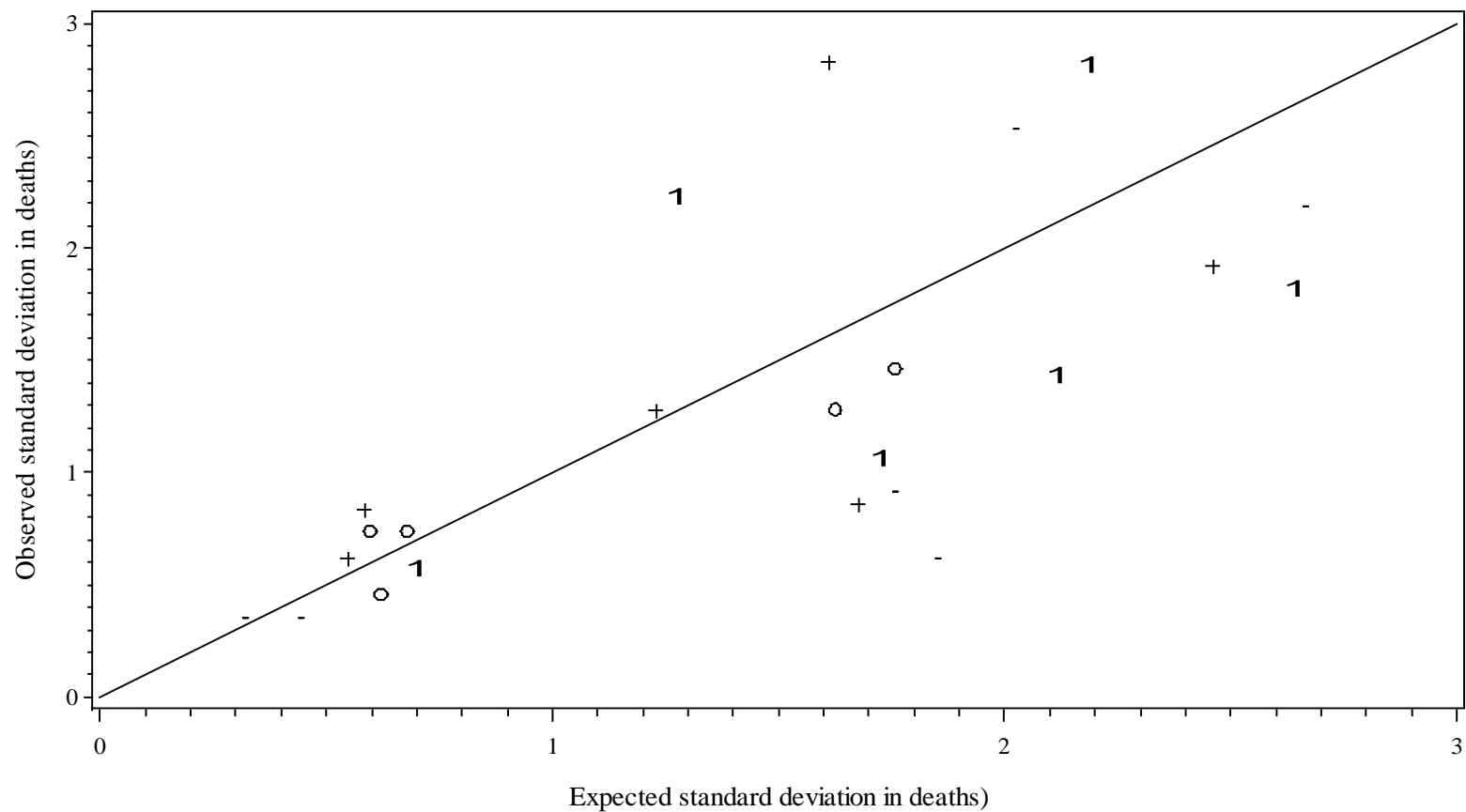
species RB

		eggs	dead
		Sum	Sum
250	229	450	4
	449	450	27
	702	450	63
	950	450	81
	1380	450	190
	1730	450	342

Kennedy II - Rainbow Trout Mortality

Check for overdispersion

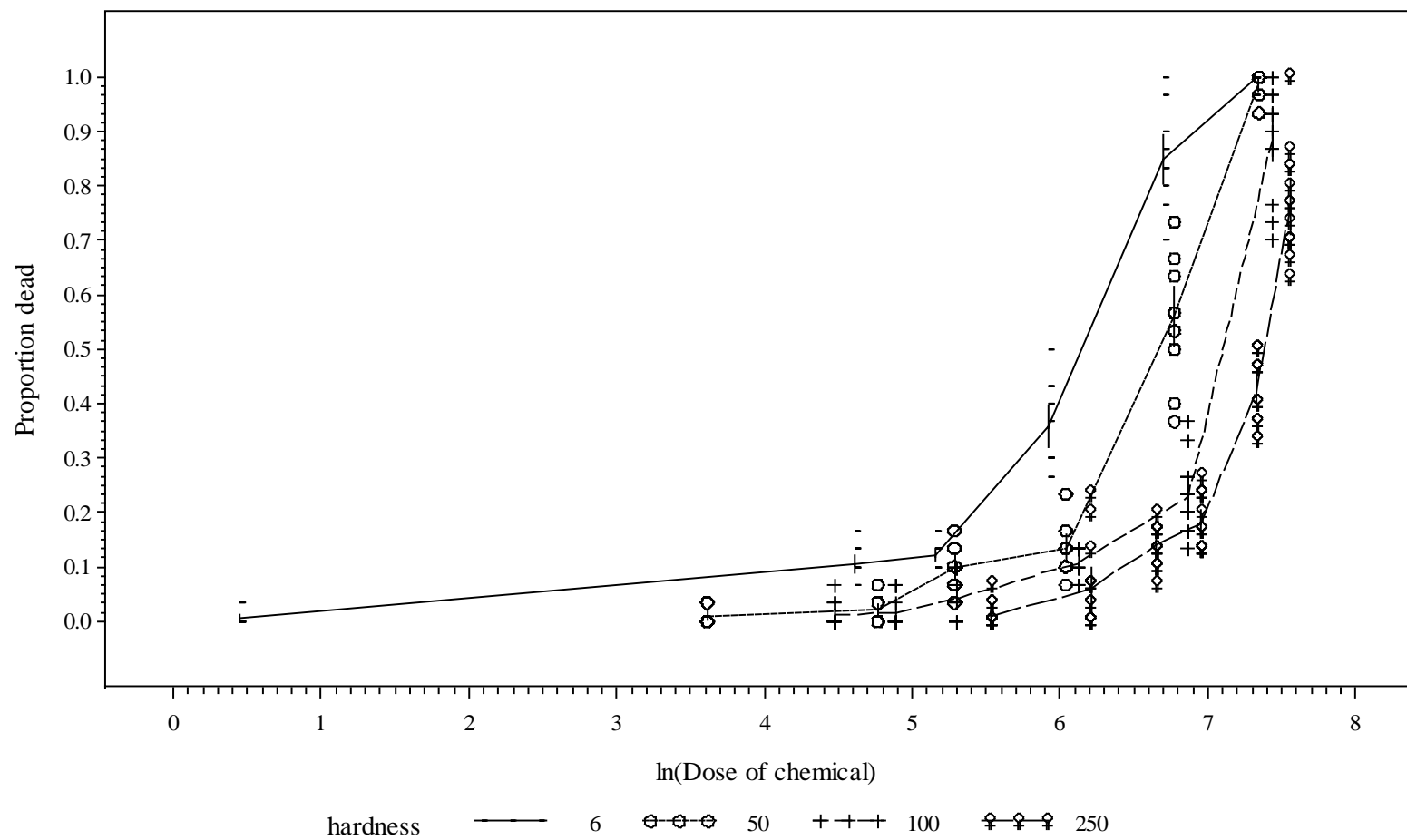
species=RB



hardness - - - 6 ○ ○ ○ 50 + + + 100 **1 1 1** 250

Line $x=y$ reflect obs and actual binomial variation equal

Kennedy II - Rainbow Trout Mortality
Preliminary plot of the mortality curve by dose
species=RB



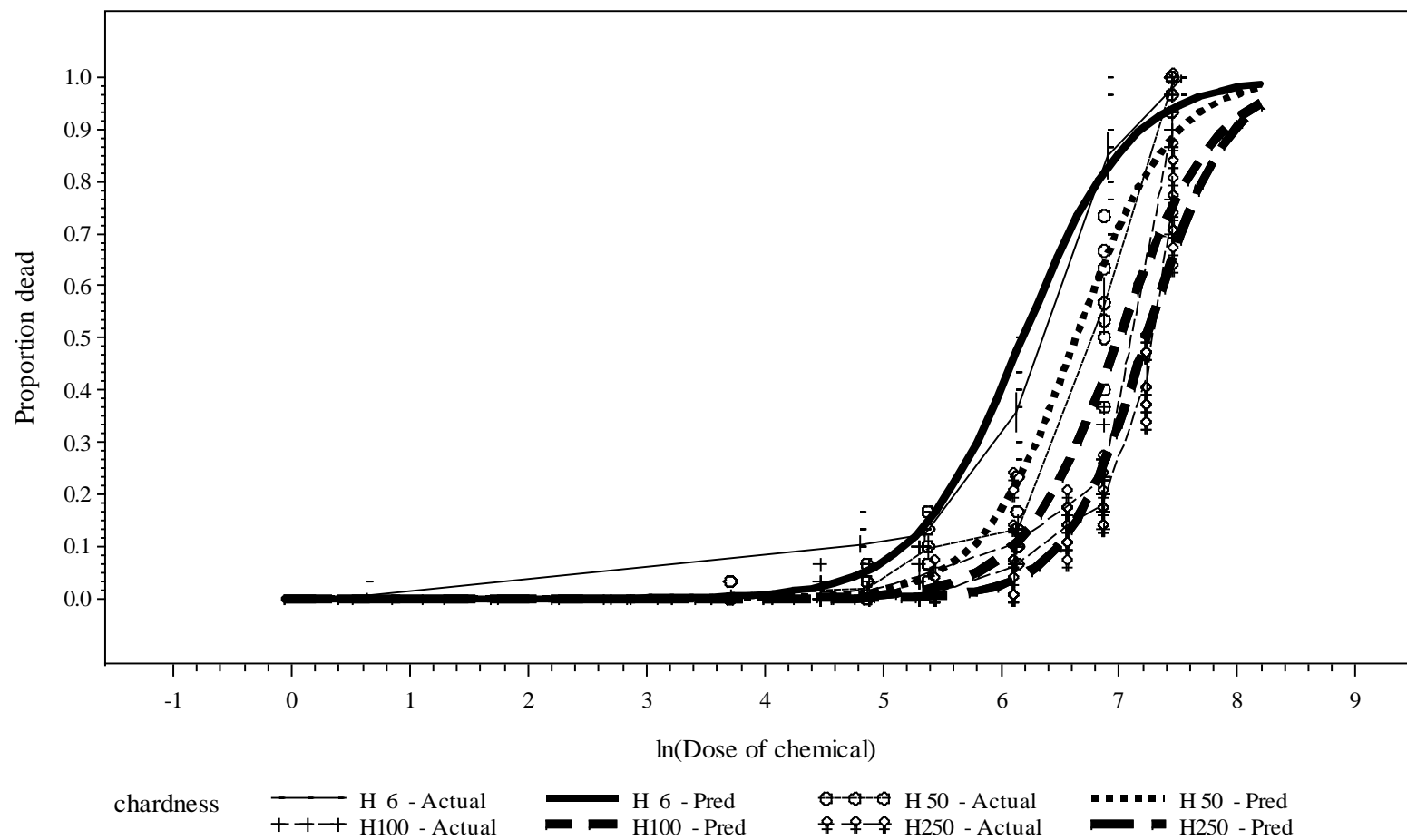
Doses jittered to avoid overplotting

Kennedy II - Rainbow Trout Mortality
Comparison of models using AICc - smaller is better

species=RB

Obs	species	model	nparms	LogL	AICc	delta_aicc	aicc_weight
1	RB	Logit H*D	8	-802.56	1621.11	0.00	1.00
2	RB	Logit H+D	5	-815.12	1640.24	19.13	0.00
3	RB	Probit H*D	8	-890.49	1796.98	175.87	0.00
4	RB	Probit H+D	5	-907.68	1825.36	204.25	0.00
5	RB	Logit D	2	-1368.91	2741.81	1120.70	0.00
6	RB	Probit D	2	-1456.95	2917.91	1296.79	0.00

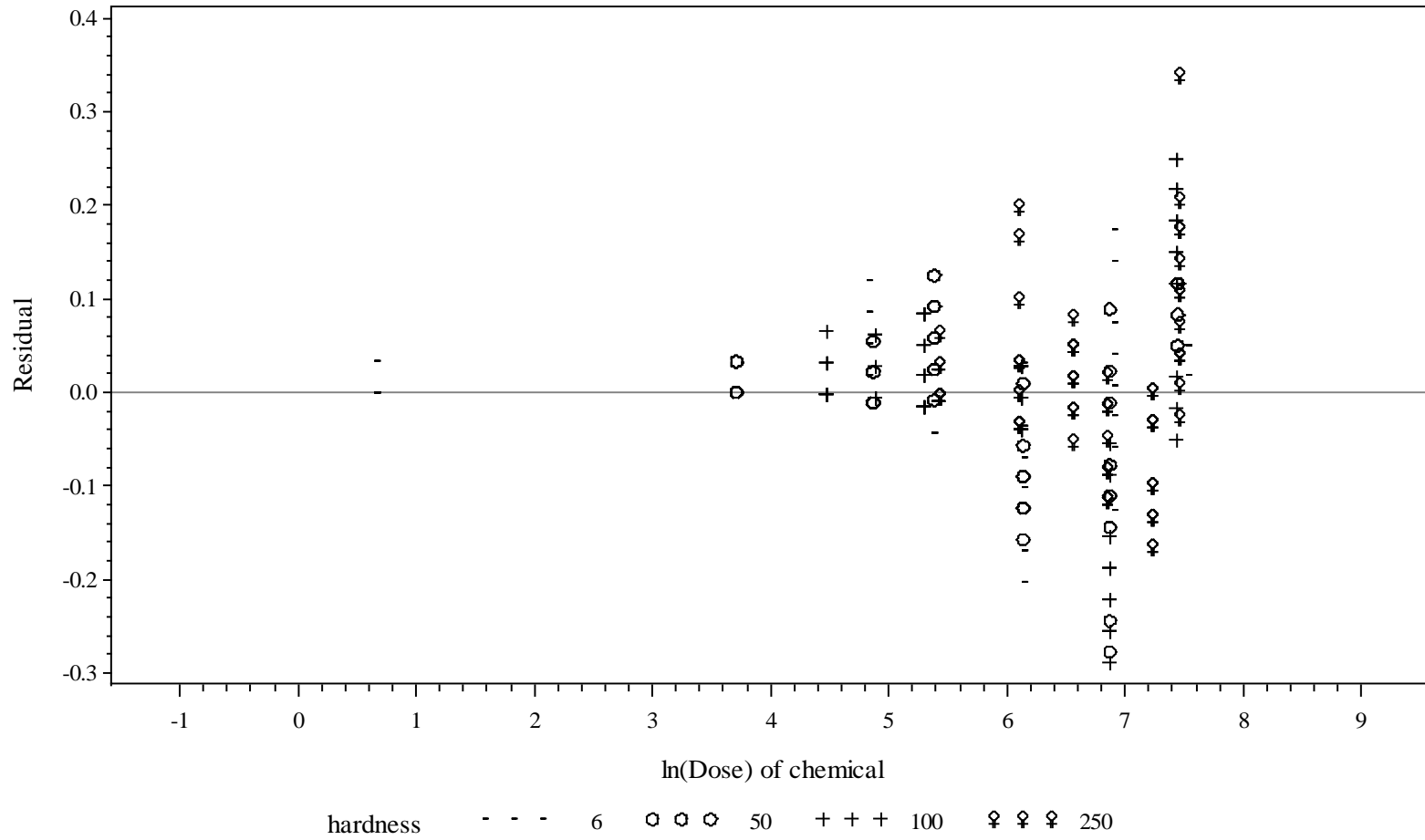
Kennedy II - Rainbow Trout Mortality
 Fitted lines from the Logit H*D model
 species=RB



Kennedy II - Rainbow Trout Mortality
*Fitted lines from the Logit H*D model*

Obs	species	hardness	dose	tub	eggs	dead	p_dead	log_dose	type	fit_prob	lowerci	upperci	model
1	RB	6	1.9	1	30	0	0.000000	0.64185	Actual	.000005652	.000002303	.000013868	Logit H*D
2	RB	6	1.9	1	30	1	0.033333	0.64185	Actual	.000005652	.000002303	.000013868	Logit H*D
3	RB	6	1.9	1	30	0	0.000000	0.64185	Actual	.000005652	.000002303	.000013868	Logit H*D
4	RB	6	1.9	1	30	0	0.000000	0.64185	Actual	.000005652	.000002303	.000013868	Logit H*D
5	RB	6	1.9	1	30	0	0.000000	0.64185	Actual	.000005652	.000002303	.000013868	Logit H*D
6	RB	6	1.9	2	30	0	0.000000	0.64185	Actual	.000005652	.000002303	.000013868	Logit H*D
7	RB	6	1.9	2	30	0	0.000000	0.64185	Actual	.000005652	.000002303	.000013868	Logit H*D
8	RB	6	1.9	2	30	0	0.000000	0.64185	Actual	.000005652	.000002303	.000013868	Logit H*D
9	RB	6	1.9	2	30	0	0.000000	0.64185	Actual	.000005652	.000002303	.000013868	Logit H*D
10	RB	6	1.9	2	30	0	0.000000	0.64185	Actual	.000005652	.000002303	.000013868	Logit H*D

Kennedy II - Rainbow Trout Mortality
 residual plot from the Logit H*D model
 species=RB



Kennedy II - Rainbow Trout Mortality
Estimated endpoints

species RB, endpoint 0.1

	Logit D		Logit H*D		Logit H+D		Probit D		Probit H*D		Probit H+D	
	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose
hardness												
6	5.78	0.02	5.17	0.05	5.28	0.03	5.65	0.02	5.05	0.05	5.14	0.03
50	5.78	0.02	5.75	0.04	5.73	0.03	5.65	0.02	5.62	0.04	5.60	0.03
100	5.78	0.02	6.10	0.04	6.10	0.03	5.65	0.02	5.93	0.04	5.97	0.03
250	5.78	0.02	6.48	0.03	6.37	0.02	5.65	0.02	6.43	0.03	6.30	0.03

Kennedy II - Rainbow Trout Mortality
Estimated endpoints

species RB, endpoint 0.2

	Logit D		Logit H*D		Logit H+D		Probit D		Probit H*D		Probit H+D	
	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose
hardness												
6	6.18	0.02	5.54	0.04	5.62	0.03	6.06	0.02	5.43	0.04	5.48	0.03
50	6.18	0.02	6.08	0.03	6.07	0.03	6.06	0.02	5.96	0.03	5.94	0.03
100	6.18	0.02	6.43	0.03	6.43	0.03	6.06	0.02	6.29	0.03	6.31	0.03
250	6.18	0.02	6.75	0.02	6.70	0.02	6.06	0.02	6.70	0.02	6.65	0.02

Kennedy II - Rainbow Trout Mortality
Estimated endpoints

species RB, endpoint 0.25

	Logit D		Logit H*D		Logit H+D		Probit D		Probit H*D		Probit H+D	
	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose
hardness												
6	6.32	0.02	5.68	0.03	5.73	0.03	6.22	0.02	5.57	0.03	5.62	0.03
50	6.32	0.02	6.19	0.03	6.18	0.03	6.22	0.02	6.08	0.03	6.07	0.03
100	6.32	0.02	6.54	0.03	6.54	0.03	6.22	0.02	6.43	0.03	6.44	0.03
250	6.32	0.02	6.85	0.02	6.82	0.02	6.22	0.02	6.81	0.02	6.77	0.02

Kennedy II - Rainbow Trout Mortality
Estimated endpoints

species RB, endpoint 0.5

	Logit D		Logit H*D		Logit H+D		Probit D		Probit H*D		Probit H+D	
	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose	Est log dose	SE log dose
hardness												
6	6.86	0.01	6.18	0.03	6.18	0.03	6.85	0.01	6.15	0.03	6.14	0.03
50	6.86	0.01	6.63	0.03	6.63	0.03	6.85	0.01	6.59	0.03	6.60	0.03
100	6.86	0.01	7.00	0.03	7.00	0.03	6.85	0.01	6.98	0.03	6.97	0.03
250	6.86	0.01	7.23	0.02	7.27	0.02	6.85	0.01	7.23	0.02	7.30	0.02

Kennedy II - Rainbow Trout Mortality
Estimated endpoints

species RB, endpoint 0.1

	Logit D		Logit H*D		Logit H+D		Probit D		Probit H*D		Probit H+D	
	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose
hardness												
6	323.0	7.7	175.7	8.1	197.2	6.1	283.8	6.3	155.3	7.0	170.5	5.3
50	323.0	7.7	314.8	12.9	309.2	9.8	283.8	6.3	277.1	11.0	269.1	8.4
100	323.0	7.7	444.2	18.7	444.3	13.7	283.8	6.3	377.5	15.7	389.6	12.0
250	323.0	7.7	654.0	20.4	581.5	13.5	283.8	6.3	617.6	19.6	545.5	13.9

Kennedy II - Rainbow Trout Mortality
Estimated endpoints

species RB, endpoint 0.2

	Logit D		Logit H*D		Logit H+D		Probit D		Probit H*D		Probit H+D	
	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose
hardness												
6	480.9	8.0	255.3	9.2	274.9	7.7	427.7	7.6	227.4	8.3	240.9	6.8
50	480.9	8.0	435.1	14.3	430.6	12.1	427.7	7.6	386.7	12.3	379.8	10.8
100	480.9	8.0	618.2	20.2	618.3	17.3	427.7	7.6	541.2	17.8	549.6	15.6
250	480.9	8.0	856.9	19.7	811.0	16.4	427.7	7.6	814.8	17.5	769.4	17.8

Kennedy II - Rainbow Trout Mortality
Estimated endpoints

species RB, endpoint 0.25

	Logit D		Logit H*D		Logit H+D		Probit D		Probit H*D		Probit H+D	
	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose
hardness												
6	555.5	8.5	291.6	9.3	307.8	8.6	500.2	8.0	262.3	8.8	275.2	7.7
50	555.5	8.5	488.5	13.8	484.8	12.3	500.2	8.0	437.6	13.1	432.3	12.0
100	555.5	8.5	695.2	19.8	695.3	17.9	500.2	8.0	619.0	19.1	625.1	17.7
250	555.5	8.5	947.4	17.8	916.0	19.0	500.2	8.0	907.7	18.8	874.7	20.5

Kennedy II - Rainbow Trout Mortality
Estimated endpoints

species RB, endpoint 0.5

	Logit D		Logit H*D		Logit H+D		Probit D		Probit H*D		Probit H+D	
	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose	Est dose	SE dose
hardness												
6	956.4	12.9	484.4	13.2	483.7	12.3	941.1	14.0	469.3	13.0	466.3	12.2
50	956.4	12.9	760.6	19.1	761.2	19.2	941.1	14.0	730.6	18.9	734.4	19.2
100	956.4	12.9	1092.6	28.9	1092.6	28.1	941.1	14.0	1074.6	32.7	1061.2	29.5
250	956.4	12.9	1379.8	26.6	1432.9	29.8	941.1	14.0	1385.5	30.0	1485.4	34.9

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

endpoint=0.1 species=RB hardness=6

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
1	0.1	RB	6	Logit H*D	5.17	0.05	1621.1	0.0	1.00	.	.	.	.
2	0.1	RB	6	Logit H+D	5.28	0.03	1640.2	19.1	0.00	.	.	.	.
3	0.1	RB	6	Probit H*D	5.05	0.05	1797.0	175.9	0.00	.	.	.	.
4	0.1	RB	6	Probit H+D	5.14	0.03	1825.4	204.2	0.00	.	.	.	.
5	0.1	RB	6	Logit D	5.78	0.02	2741.8	1120.7	0.00	.	.	.	.
6	0.1	RB	6	Probit D	5.65	0.02	2917.9	1296.8	0.00	.	.	.	.
7	0.1	RB	6	99-Model Averaged	.	.	.	.	.	5.17	0.05	5.08	5.26
8	0.1	RB	6	99-Model Averaged on antilog	.	.	.	.	.	175.74	8.10	160.56	192.35

endpoint=0.1 species=RB hardness=50

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
9	0.1	RB	50	Logit H*D	5.75	0.04	1621.1	0.0	1.00	.	.	.	.
10	0.1	RB	50	Logit H+D	5.73	0.03	1640.2	19.1	0.00	.	.	.	.
11	0.1	RB	50	Probit H*D	5.62	0.04	1797.0	175.9	0.00	.	.	.	.
12	0.1	RB	50	Probit H+D	5.60	0.03	1825.4	204.2	0.00	.	.	.	.
13	0.1	RB	50	Logit D	5.78	0.02	2741.8	1120.7	0.00	.	.	.	.
14	0.1	RB	50	Probit D	5.65	0.02	2917.9	1296.8	0.00	.	.	.	.
15	0.1	RB	50	99-Model Averaged	.	.	.	.	.	5.75	0.04	5.67	5.83
16	0.1	RB	50	99-Model Averaged on antilog	.	.	.	.	.	314.80	12.92	290.48	341.16

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

endpoint=0.1 species=RB hardness=100

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
17	0.1	RB	100	Logit H*D	6.10	0.04	1621.1	0.0	1.00	.	.	.	.
18	0.1	RB	100	Logit H+D	6.10	0.03	1640.2	19.1	0.00	.	.	.	.
19	0.1	RB	100	Probit H*D	5.93	0.04	1797.0	175.9	0.00	.	.	.	.
20	0.1	RB	100	Probit H+D	5.97	0.03	1825.4	204.2	0.00	.	.	.	.
21	0.1	RB	100	Logit D	5.78	0.02	2741.8	1120.7	0.00	.	.	.	.
22	0.1	RB	100	Probit D	5.65	0.02	2917.9	1296.8	0.00	.	.	.	.
23	0.1	RB	100	99-Model Averaged	.	.	.	.	.	6.10	0.04	6.01	6.18
24	0.1	RB	100	99-Model Averaged on antilog	.	.	.	.	.	444.15	18.72	408.94	482.40

endpoint=0.1 species=RB hardness=250

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
25	0.1	RB	250	Logit H*D	6.48	0.03	1621.1	0.0	1.00	.	.	.	.
26	0.1	RB	250	Logit H+D	6.37	0.02	1640.2	19.1	0.00	.	.	.	.
27	0.1	RB	250	Probit H*D	6.43	0.03	1797.0	175.9	0.00	.	.	.	.
28	0.1	RB	250	Probit H+D	6.30	0.03	1825.4	204.2	0.00	.	.	.	.
29	0.1	RB	250	Logit D	5.78	0.02	2741.8	1120.7	0.00	.	.	.	.
30	0.1	RB	250	Probit D	5.65	0.02	2917.9	1296.8	0.00	.	.	.	.

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
31	0.1	RB	250	99-Model Averaged	.	.	.	.	.	6.48	0.03	6.42	6.54
32	0.1	RB	250	99-Model Averaged on antilog	.	.	.	.	.	654.01	20.41	615.22	695.25

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

endpoint=0.2 species=RB hardness=6

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
33	0.2	RB	6	Logit H*D	5.54	0.04	1621.1	0.0	1.00	.	.	.	.
34	0.2	RB	6	Logit H+D	5.62	0.03	1640.2	19.1	0.00	.	.	.	.
35	0.2	RB	6	Probit H*D	5.43	0.04	1797.0	175.9	0.00	.	.	.	.
36	0.2	RB	6	Probit H+D	5.48	0.03	1825.4	204.2	0.00	.	.	.	.
37	0.2	RB	6	Logit D	6.18	0.02	2741.8	1120.7	0.00	.	.	.	.
38	0.2	RB	6	Probit D	6.06	0.02	2917.9	1296.8	0.00	.	.	.	.
39	0.2	RB	6	99-Model Averaged	.	.	.	.	.	5.54	0.04	5.47	5.61
40	0.2	RB	6	99-Model Averaged on antilog	.	.	.	.	.	255.28	9.24	237.79	274.05

endpoint=0.2 species=RB hardness=50

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
41	0.2	RB	50	Logit H*D	6.08	0.03	1621.1	0.0	1.00	.	.	.	.
42	0.2	RB	50	Logit H+D	6.07	0.03	1640.2	19.1	0.00	.	.	.	.
43	0.2	RB	50	Probit H*D	5.96	0.03	1797.0	175.9	0.00	.	.	.	.
44	0.2	RB	50	Probit H+D	5.94	0.03	1825.4	204.2	0.00	.	.	.	.
45	0.2	RB	50	Logit D	6.18	0.02	2741.8	1120.7	0.00	.	.	.	.
46	0.2	RB	50	Probit D	6.06	0.02	2917.9	1296.8	0.00	.	.	.	.
47	0.2	RB	50	99-Model Averaged	.	.	.	.	.	6.08	0.03	6.01	6.14
48	0.2	RB	50	99-Model Averaged on antilog	.	.	.	.	.	435.14	14.25	408.08	463.99

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

endpoint=0.2 species=RB hardness=100

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
49	0.2	RB	100	Logit H*D	6.43	0.03	1621.1	0.0	1.00	.	.	.	.
50	0.2	RB	100	Logit H+D	6.43	0.03	1640.2	19.1	0.00	.	.	.	.
51	0.2	RB	100	Probit H*D	6.29	0.03	1797.0	175.9	0.00	.	.	.	.
52	0.2	RB	100	Probit H+D	6.31	0.03	1825.4	204.2	0.00	.	.	.	.
53	0.2	RB	100	Logit D	6.18	0.02	2741.8	1120.7	0.00	.	.	.	.
54	0.2	RB	100	Probit D	6.06	0.02	2917.9	1296.8	0.00	.	.	.	.
55	0.2	RB	100	99-Model Averaged	.	.	.	.	.	6.43	0.03	6.36	6.49
56	0.2	RB	100	99-Model Averaged on antilog	.	.	.	.	.	618.22	20.19	579.89	659.08

endpoint=0.2 species=RB hardness=250

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
57	0.2	RB	250	Logit H*D	6.75	0.02	1621.1	0.0	1.00	.	.	.	.
58	0.2	RB	250	Logit H+D	6.70	0.02	1640.2	19.1	0.00	.	.	.	.
59	0.2	RB	250	Probit H*D	6.70	0.02	1797.0	175.9	0.00	.	.	.	.
60	0.2	RB	250	Probit H+D	6.65	0.02	1825.4	204.2	0.00	.	.	.	.
61	0.2	RB	250	Logit D	6.18	0.02	2741.8	1120.7	0.00	.	.	.	.
62	0.2	RB	250	Probit D	6.06	0.02	2917.9	1296.8	0.00	.	.	.	.

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
63	0.2	RB	250	99-Model Averaged	.	.	.	.	.	6.75	0.02	6.71	6.80
64	0.2	RB	250	99-Model Averaged on antilog	.	.	.	.	.	856.88	19.66	819.20	896.30

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

endpoint=0.25 species=RB hardness=6

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
65	0.25	RB	6	Logit H*D	5.68	0.03	1621.1	0.0	1.00	.	.	.	.
66	0.25	RB	6	Logit H+D	5.73	0.03	1640.2	19.1	0.00	.	.	.	.
67	0.25	RB	6	Probit H*D	5.57	0.03	1797.0	175.9	0.00	.	.	.	.
68	0.25	RB	6	Probit H+D	5.62	0.03	1825.4	204.2	0.00	.	.	.	.
69	0.25	RB	6	Logit D	6.32	0.02	2741.8	1120.7	0.00	.	.	.	.
70	0.25	RB	6	Probit D	6.22	0.02	2917.9	1296.8	0.00	.	.	.	.
71	0.25	RB	6	99-Model Averaged	.	.	.	.	.	5.68	0.03	5.61	5.74
72	0.25	RB	6	99-Model Averaged on antilog	.	.	.	.	.	291.61	9.33	273.88	310.49

endpoint=0.25 species=RB hardness=50

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
73	0.25	RB	50	Logit H*D	6.19	0.03	1621.1	0.0	1.00	.	.	.	.
74	0.25	RB	50	Logit H+D	6.18	0.03	1640.2	19.1	0.00	.	.	.	.
75	0.25	RB	50	Probit H*D	6.08	0.03	1797.0	175.9	0.00	.	.	.	.
76	0.25	RB	50	Probit H+D	6.07	0.03	1825.4	204.2	0.00	.	.	.	.
77	0.25	RB	50	Logit D	6.32	0.02	2741.8	1120.7	0.00	.	.	.	.
78	0.25	RB	50	Probit D	6.22	0.02	2917.9	1296.8	0.00	.	.	.	.
79	0.25	RB	50	99-Model Averaged	.	.	.	.	.	6.19	0.03	6.14	6.25
80	0.25	RB	50	99-Model Averaged on antilog	.	.	.	.	.	488.50	13.83	462.13	516.36

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

endpoint=0.25 species=RB hardness=100

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
81	0.25	RB	100	Logit H*D	6.54	0.03	1621.1	0.0	1.00	.	.	.	.
82	0.25	RB	100	Logit H+D	6.54	0.03	1640.2	19.1	0.00	.	.	.	.
83	0.25	RB	100	Probit H*D	6.43	0.03	1797.0	175.9	0.00	.	.	.	.
84	0.25	RB	100	Probit H+D	6.44	0.03	1825.4	204.2	0.00	.	.	.	.
85	0.25	RB	100	Logit D	6.32	0.02	2741.8	1120.7	0.00	.	.	.	.
86	0.25	RB	100	Probit D	6.22	0.02	2917.9	1296.8	0.00	.	.	.	.
87	0.25	RB	100	99-Model Averaged	.	.	.	.	.	6.54	0.03	6.49	6.60
88	0.25	RB	100	99-Model Averaged on antilog	.	.	.	.	.	695.21	19.77	657.51	735.07

endpoint=0.25 species=RB hardness=250

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
89	0.25	RB	250	Logit H*D	6.85	0.02	1621.1	0.0	1.00	.	.	.	.
90	0.25	RB	250	Logit H+D	6.82	0.02	1640.2	19.1	0.00	.	.	.	.
91	0.25	RB	250	Probit H*D	6.81	0.02	1797.0	175.9	0.00	.	.	.	.
92	0.25	RB	250	Probit H+D	6.77	0.02	1825.4	204.2	0.00	.	.	.	.
93	0.25	RB	250	Logit D	6.32	0.02	2741.8	1120.7	0.00	.	.	.	.
94	0.25	RB	250	Probit D	6.22	0.02	2917.9	1296.8	0.00	.	.	.	.

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
95	0.25	RB	250	99-Model Averaged	.	.	.	.	.	6.85	0.02	6.82	6.89
96	0.25	RB	250	99-Model Averaged on antilog	.	.	.	.	.	947.40	17.76	913.23	982.86

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

endpoint=0.5 species=RB hardness=6

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
97	0.5	RB	6	Logit H*D	6.18	0.03	1621.1	0.0	1.00	.	.	.	.
98	0.5	RB	6	Logit H+D	6.18	0.03	1640.2	19.1	0.00	.	.	.	.
99	0.5	RB	6	Probit H*D	6.15	0.03	1797.0	175.9	0.00	.	.	.	.
100	0.5	RB	6	Probit H+D	6.14	0.03	1825.4	204.2	0.00	.	.	.	.
101	0.5	RB	6	Logit D	6.86	0.01	2741.8	1120.7	0.00	.	.	.	.
102	0.5	RB	6	Probit D	6.85	0.01	2917.9	1296.8	0.00	.	.	.	.
103	0.5	RB	6	99-Model Averaged	.	.	.	.	.	6.18	0.03	6.13	6.24
104	0.5	RB	6	99-Model Averaged on antilog	.	.	.	.	.	484.41	13.22	459.18	511.03

endpoint=0.5 species=RB hardness=50

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
105	0.5	RB	50	Logit H*D	6.63	0.03	1621.1	0.0	1.00	.	.	.	.
106	0.5	RB	50	Logit H+D	6.63	0.03	1640.2	19.1	0.00	.	.	.	.
107	0.5	RB	50	Probit H*D	6.59	0.03	1797.0	175.9	0.00	.	.	.	.
108	0.5	RB	50	Probit H+D	6.60	0.03	1825.4	204.2	0.00	.	.	.	.
109	0.5	RB	50	Logit D	6.86	0.01	2741.8	1120.7	0.00	.	.	.	.
110	0.5	RB	50	Probit D	6.85	0.01	2917.9	1296.8	0.00	.	.	.	.
111	0.5	RB	50	99-Model Averaged	.	.	.	.	.	6.63	0.03	6.58	6.68
112	0.5	RB	50	99-Model Averaged on antilog	.	.	.	.	.	760.59	19.09	724.09	798.93

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

endpoint=0.5 species=RB hardness=100

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
113	0.5	RB	100	Logit H*D	7.00	0.03	1621.1	0.0	1.00	.	.	.	.
114	0.5	RB	100	Logit H+D	7.00	0.03	1640.2	19.1	0.00	.	.	.	.
115	0.5	RB	100	Probit H*D	6.98	0.03	1797.0	175.9	0.00	.	.	.	.
116	0.5	RB	100	Probit H+D	6.97	0.03	1825.4	204.2	0.00	.	.	.	.
117	0.5	RB	100	Logit D	6.86	0.01	2741.8	1120.7	0.00	.	.	.	.
118	0.5	RB	100	Probit D	6.85	0.01	2917.9	1296.8	0.00	.	.	.	.
119	0.5	RB	100	99-Model Averaged	.	.	.	.	.	7.00	0.03	6.94	7.05
120	0.5	RB	100	99-Model Averaged on antilog	.	.	.	.	.	1092.63	28.95	1037.34	1150.87

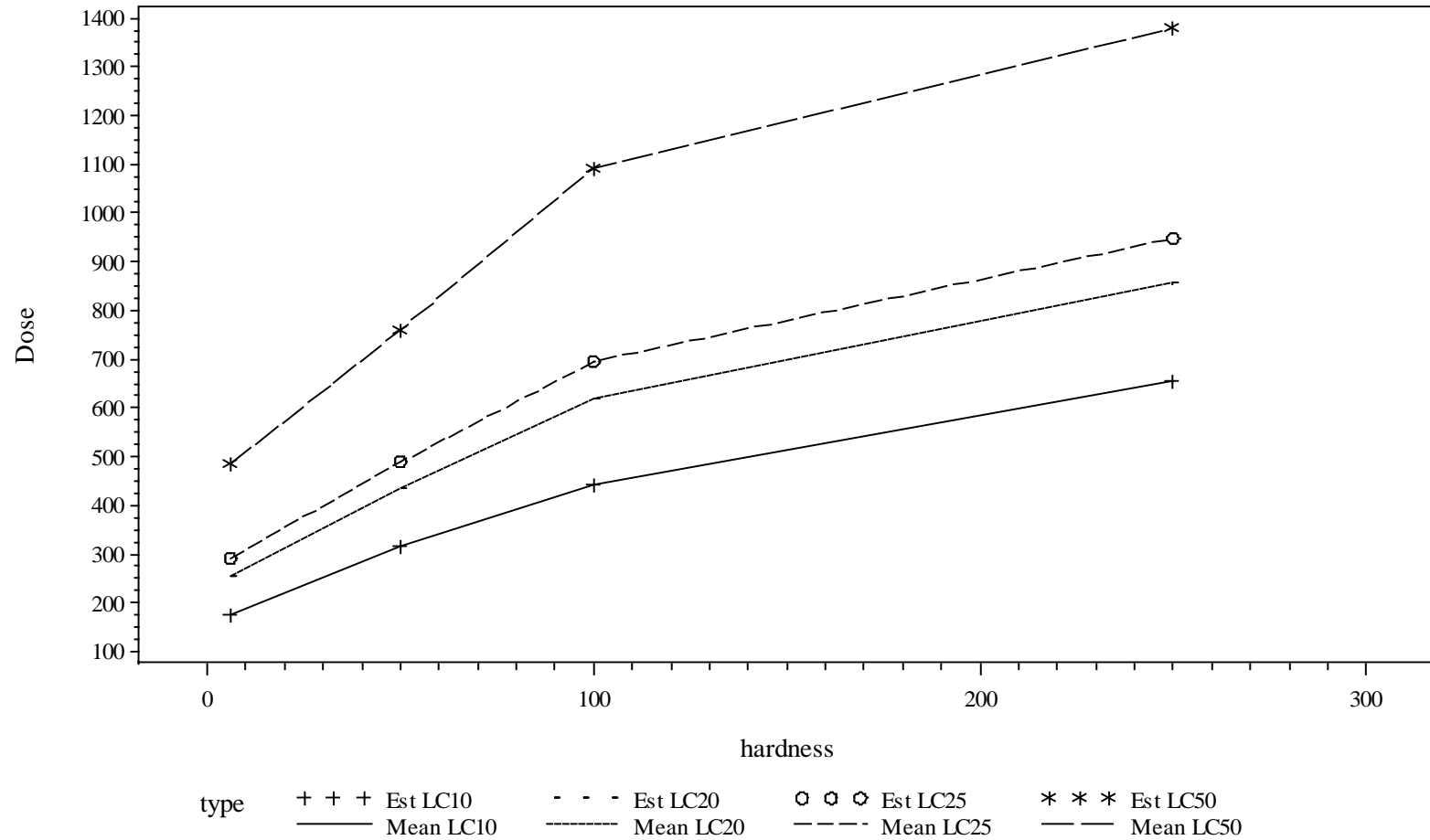
endpoint=0.5 species=RB hardness=250

Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
121	0.5	RB	250	Logit H*D	7.23	0.02	1621.1	0.0	1.00	.	.	.	.
122	0.5	RB	250	Logit H+D	7.27	0.02	1640.2	19.1	0.00	.	.	.	.
123	0.5	RB	250	Probit H*D	7.23	0.02	1797.0	175.9	0.00	.	.	.	.
124	0.5	RB	250	Probit H+D	7.30	0.02	1825.4	204.2	0.00	.	.	.	.
125	0.5	RB	250	Logit D	6.86	0.01	2741.8	1120.7	0.00	.	.	.	.
126	0.5	RB	250	Probit D	6.85	0.01	2917.9	1296.8	0.00	.	.	.	.

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels

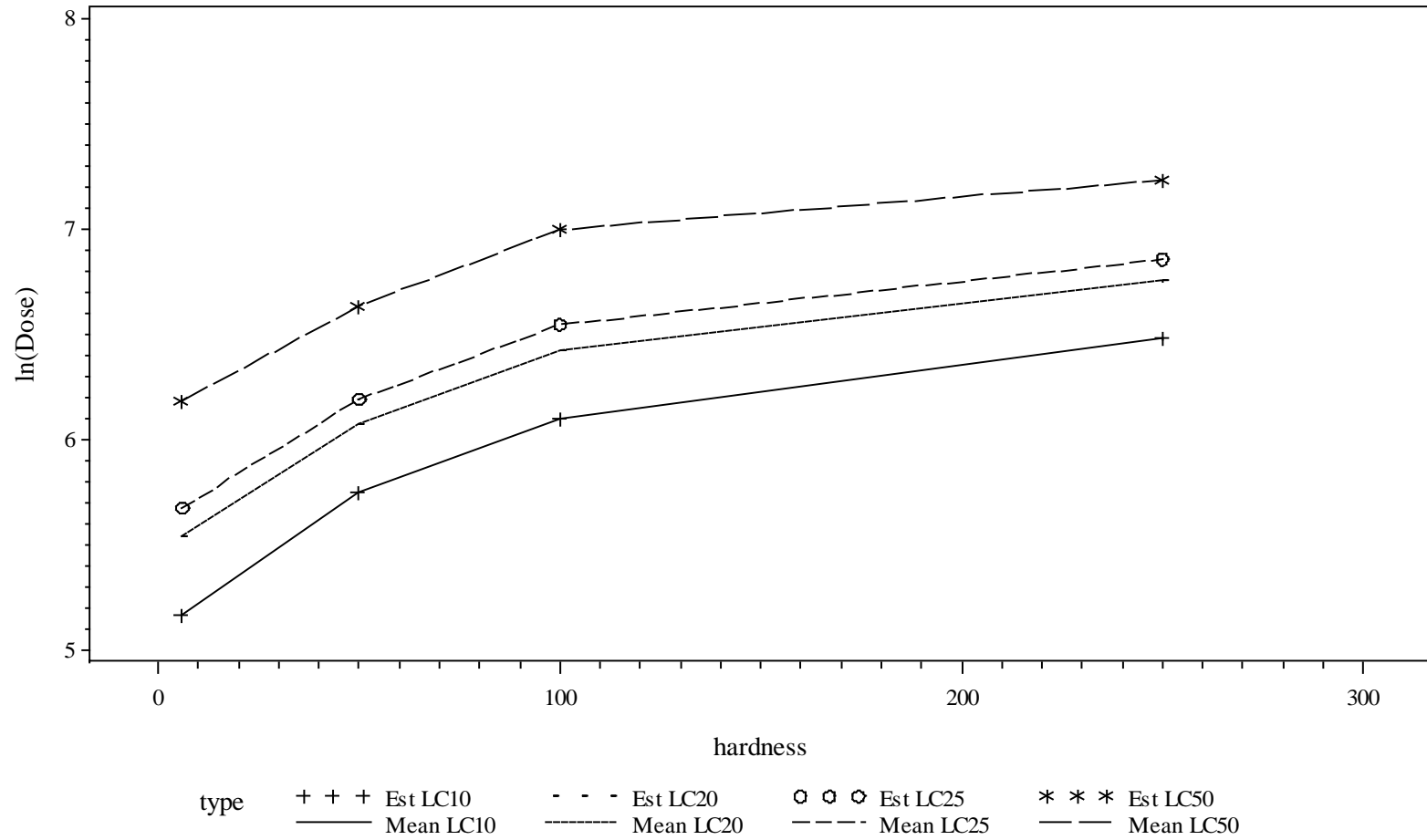
Obs	endpoint	species	hardness	model	estimate	se	AICc	delta aicc	aicc weight	ma estimate	ma standard error	lower ci	upper ci
127	0.5	RB	250	99-Model Averaged	.	.	.	.	.	7.23	0.02	7.19	7.27
128	0.5	RB	250	99-Model Averaged on antilog	.	.	.	.	.	1379.80	26.56	1328.71	1432.86

Kennedy II - Rainbow Trout Mortality
 Estimated model-averaged end-points (anti-log scale)
 species=RB



Plotting positions jittered at the hardness levels

Kennedy II - Rainbow Trout Mortality
 Estimated model-averaged end-points (log-scale)
 species=RB



Plotting positions jittered at the hardness levels

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels - log scale

	endpoint															
	0.1				0.2				0.25				0.5			
	Est	SE	LCL	UCL	Est	SE	LCL	UCL	Est	SE	LCL	UCL	Est	SE	LCL	UCL
hardness																
6	5.17	0.05	5.08	5.26	5.54	0.04	5.47	5.61	5.68	0.03	5.61	5.74	6.18	0.03	6.13	6.24
50	5.75	0.04	5.67	5.83	6.08	0.03	6.01	6.14	6.19	0.03	6.14	6.25	6.63	0.03	6.58	6.68
100	6.10	0.04	6.01	6.18	6.43	0.03	6.36	6.49	6.54	0.03	6.49	6.60	7.00	0.03	6.94	7.05
250	6.48	0.03	6.42	6.54	6.75	0.02	6.71	6.80	6.85	0.02	6.82	6.89	7.23	0.02	7.19	7.27

All estimates are model averaged

Kennedy II - Rainbow Trout Mortality
Summary of model averaged estimates of LCxx at various hardness levels - antilog scale

	endpoint															
	0.1				0.2				0.25				0.5			
	Est	SE	LCL	UCL	Est	SE	LCL	UCL	Est	SE	LCL	UCL	Est	SE	LCL	UCL
hardness																
6	176	8	161	192	255	9	238	274	292	9	274	310	484	13	459	511
50	315	13	290	341	435	14	408	464	488	14	462	516	761	19	724	799
100	444	19	409	482	618	20	580	659	695	20	658	735	1093	29	1037	1151
250	654	20	615	695	857	20	819	896	947	18	913	983	1380	27	1329	1433

All estimates are model averaged