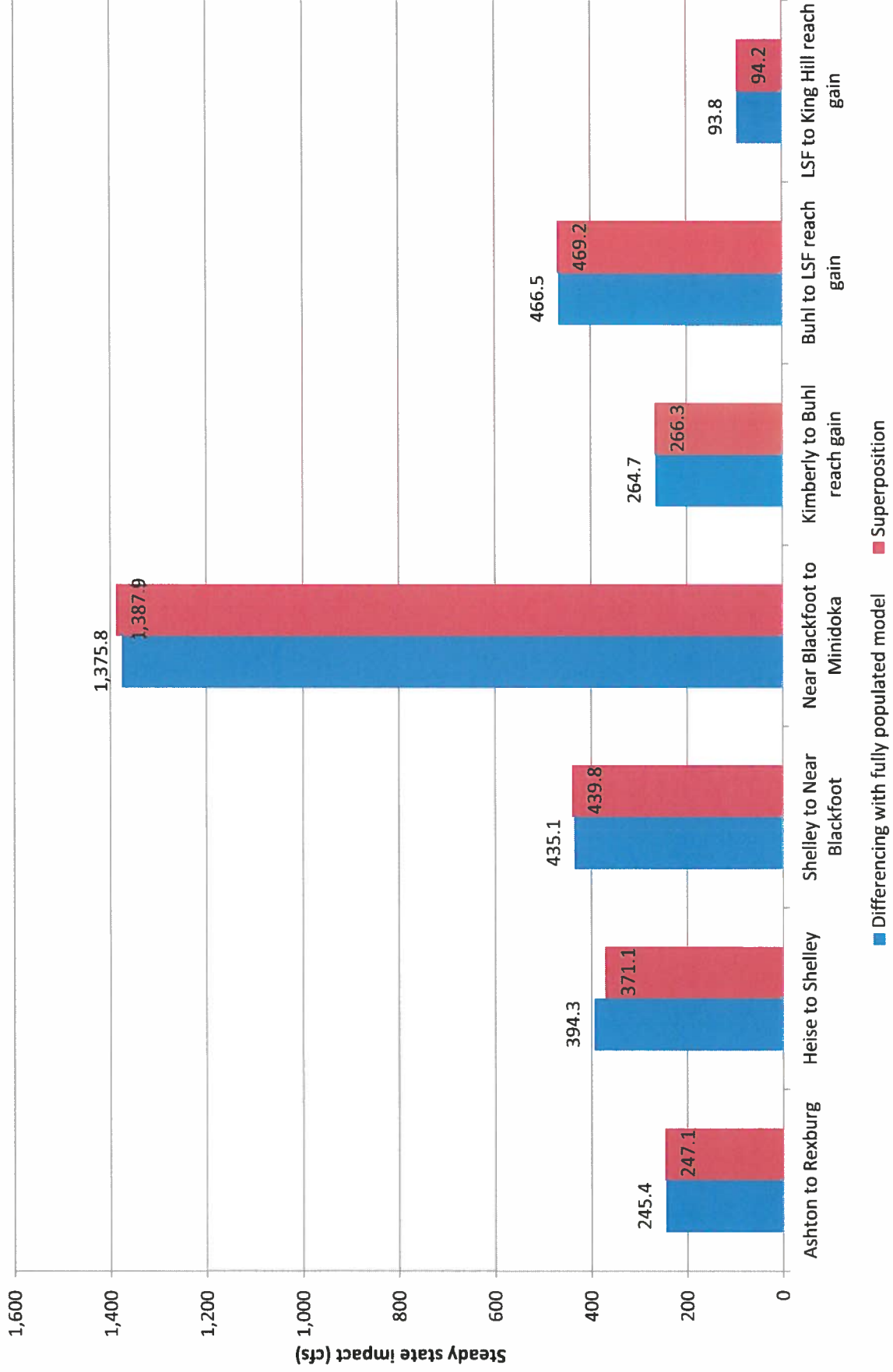
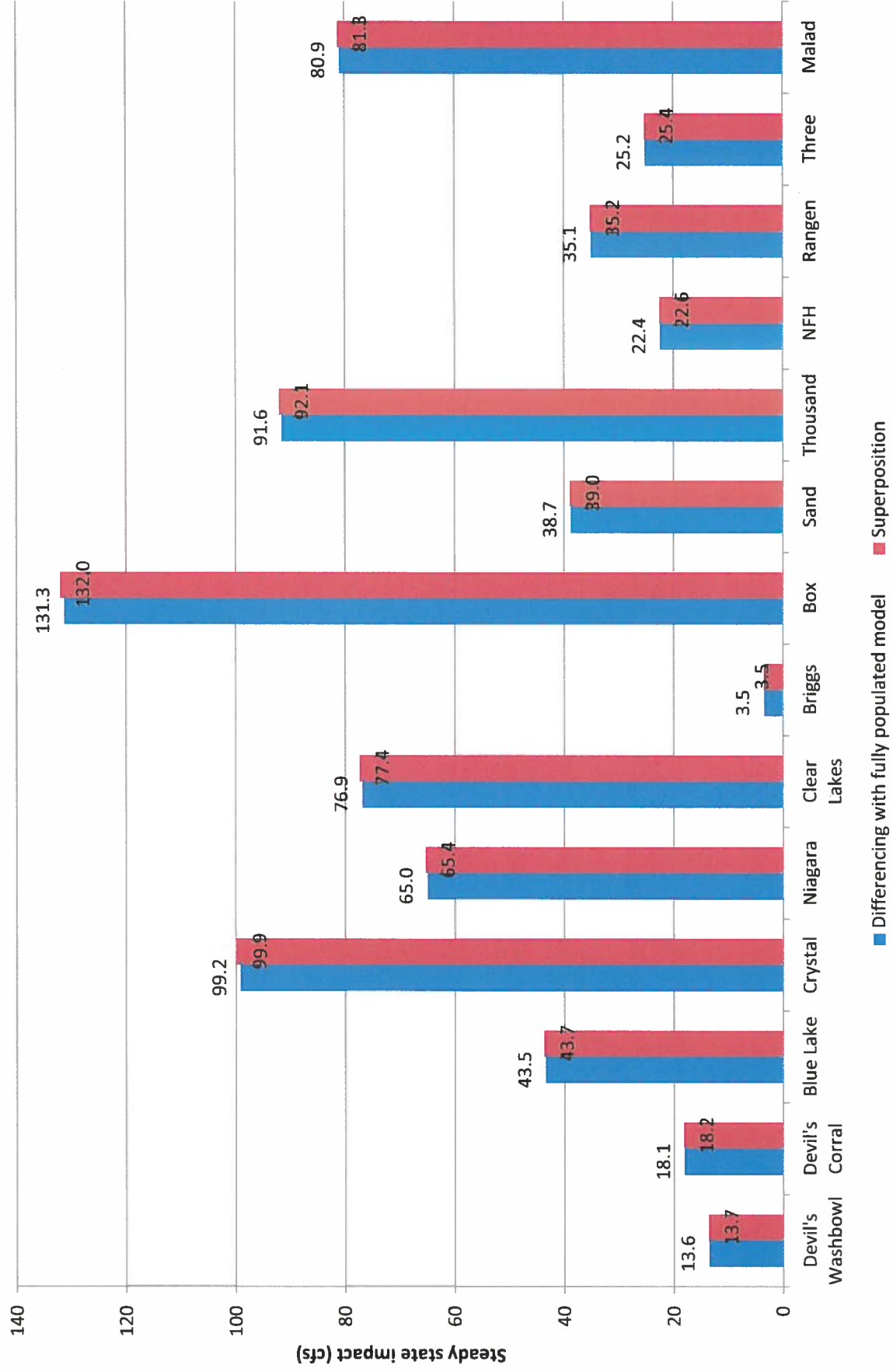


**APPENDIX A.**  
**STEADY STATE SIMULATIONS**

# Comparison of model calculated impacts to reach gains for curtailment of groundwater rights junior to 1/1/1870



# Comparison of model calculated impacts to reach gains for curtailment of groundwater rights junior to 1/1/1870



Response to simulated curtailment junior to 1/1/1870

Note: Reaches representing springs downstream of Milner may contain multiple springs, and may contain springs not included in the reach name.

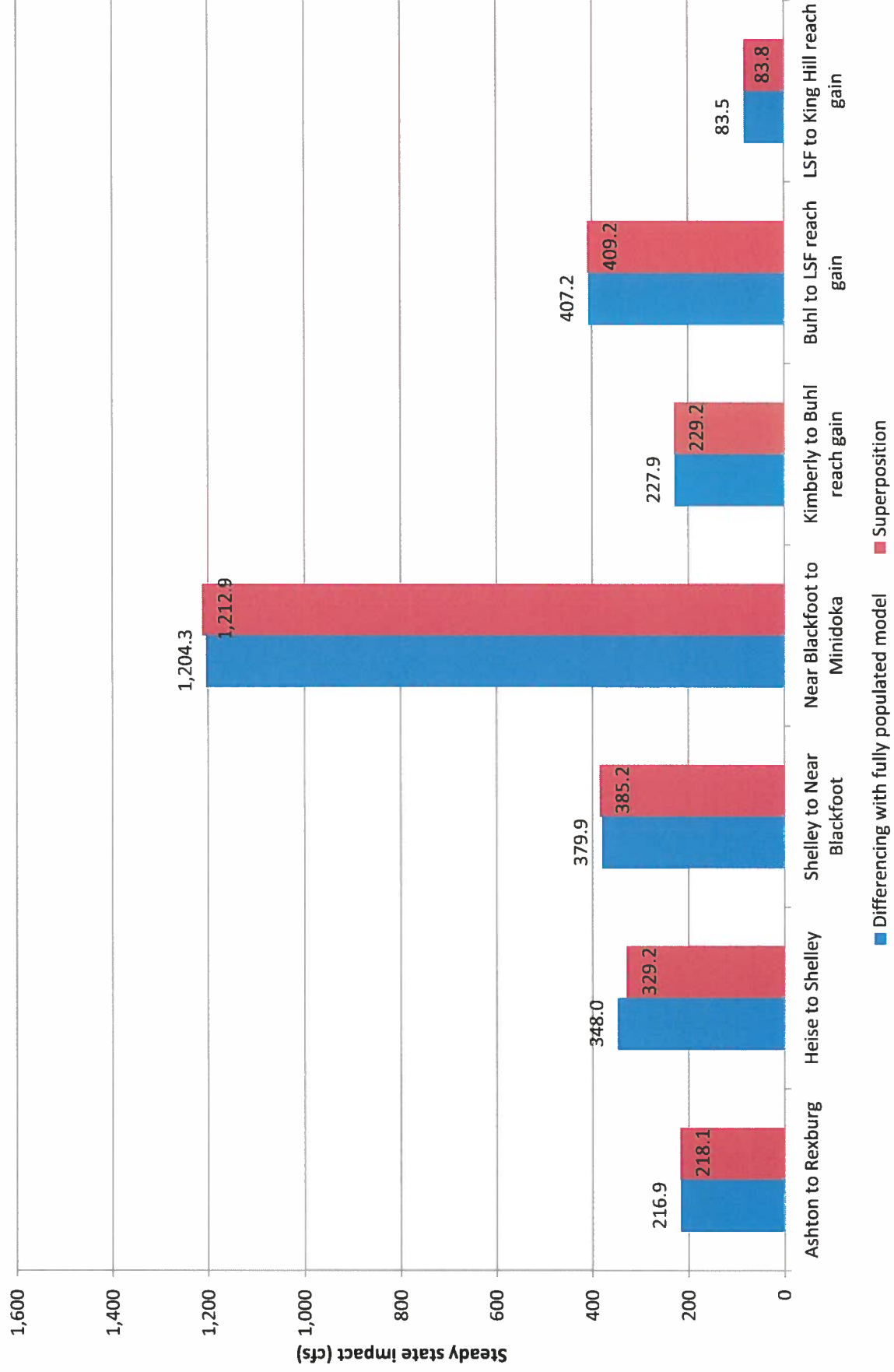
Reach Name	Response to 10-year average conditions without curtailment (cfs)	Response to 10-year average conditions with curtailment (cfs)	Fully Populated Model Response Difference (cfs)	Superposition Model Response (cfs)	Super - Full (cfs)	% difference
Ashton to Rexburg	-160.8	84.7	245.4	247.1	1.6	0.7%
Heise to Shelley	-1,000.3	-606.1	394.3	371.1	-23.2	-5.9%
Shelley to Near Blackfoot	-650.9	-215.8	435.1	439.8	4.7	1.1%
Near Blackfoot to Minidoka	2,083.9	3,459.7	1,375.8	1,387.9	12.1	0.9%
D070030	0.2	0.4	0.1	0.1	0.0	0.5%
D069029	0.3	0.4	0.2	0.2	0.0	0.5%
D068029	0.2	0.3	0.1	0.1	0.0	0.5%
Devil's Washbowl	9.7	23.3	13.6	13.7	0.1	0.5%
Devil's Corral	35.4	53.5	18.1	18.2	0.1	0.5%
D065027	1.7	4.0	2.3	2.3	0.0	0.6%
D064026	3.4	4.7	1.3	1.3	0.0	0.6%
Blue Lake	180.8	224.3	43.5	43.7	0.3	0.6%
D062023	1.9	2.0	0.1	0.1	0.0	0.6%
D061023	10.0	10.4	0.5	0.5	0.0	0.6%
D059022	0.8	0.8	0.1	0.1	0.0	0.6%
D059021	0.0	0.0	0.0	0.0	0.0	0.6%
Ellison	4.1	4.5	0.4	0.4	0.0	0.6%
D058020	0.6	0.6	0.1	0.1	0.0	0.6%
D057020	1.7	1.8	0.2	0.2	0.0	0.6%
Crystal	333.7	432.9	99.2	99.9	0.7	0.7%
Niagara	223.6	288.6	65.0	65.4	0.4	0.6%
D051014	0.0	0.0	0.0	0.0	0.0	0.6%
D050014	0.0	0.0	0.0	0.0	0.0	0.6%
Clear Lakes	432.2	509.1	76.9	77.4	0.5	0.7%
Briggs	101.7	105.2	3.5	3.5	0.0	0.6%
Banbury	97.1	106.5	9.4	9.4	0.1	0.5%
D047011	2.8	3.1	0.3	0.3	0.0	0.6%
Box	663.3	794.6	131.3	132.0	0.7	0.6%
Sand	53.0	91.7	38.7	39.0	0.2	0.6%
D045011	0.1	0.1	0.0	0.0	0.0	0.6%
D045012	4.0	4.1	0.1	0.1	0.0	0.6%
Thousand	543.7	635.2	91.6	92.1	0.5	0.5%
NFH	161.9	184.3	22.4	22.6	0.1	0.5%
Tucker	65.3	67.4	2.0	2.1	0.0	0.5%
Rangen	19.9	55.0	35.1	35.2	0.2	0.5%
Three	48.4	73.7	25.2	25.4	0.1	0.6%
D040013	0.7	0.9	0.2	0.2	0.0	0.6%
D040014	2.4	3.8	1.4	1.4	0.0	0.5%

Response to simulated curtailment junior to 1/1/1870

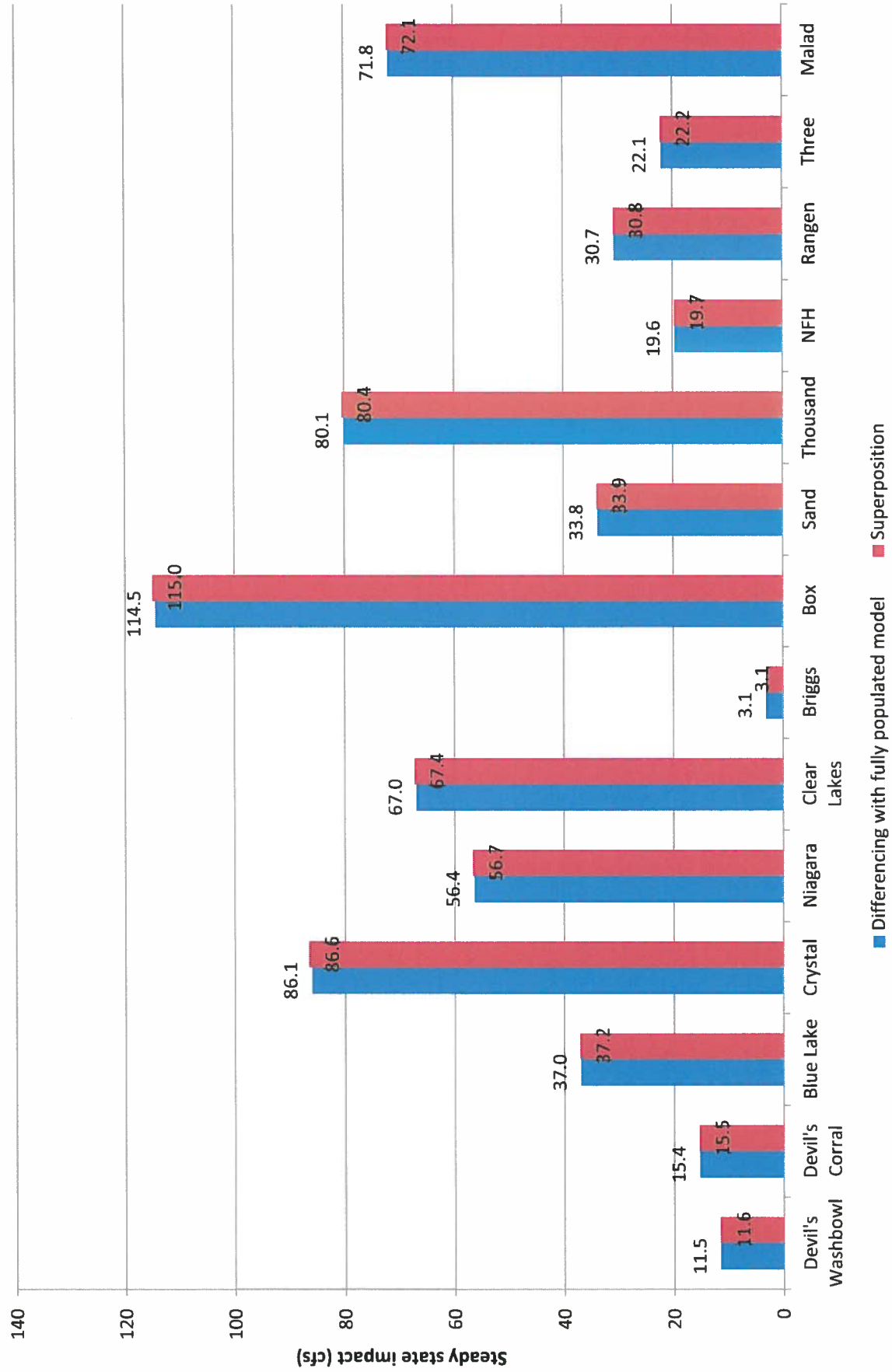
Note: Reaches representing springs downstream of Milner may contain multiple springs, and may contain springs not included in the reach name.

Reach Name	Response to 10-year average conditions without curtailment (cfs)	Response to 10-year average conditions with curtailment (cfs)	Fully Populated Model Response Difference (cfs)	Superposition Model Response (cfs)	Super - Full (cfs)	% difference
Big	81.6	94.9	13.3	13.4	0.1	0.5%
D038014	16.7	18.7	2.0	2.0	0.0	0.5%
D037014	5.3	5.6	0.3	0.3	0.0	0.5%
Birch	1.8	1.9	0.1	0.1	0.0	0.6%
D036014	7.7	8.1	0.4	0.4	0.0	0.5%
Malad	1,060.9	1,141.8	80.9	81.3	0.4	0.5%
D035014	6.2	6.5	0.3	0.3	0.0	0.5%
D034014	51.5	53.7	2.3	2.3	0.0	0.4%
D033013	0.1	0.1	0.0	0.0	0.0	0.4%
D033014	26.9	27.8	0.9	0.9	0.0	0.4%
D032013	1.4	1.4	0.0	0.0	0.0	0.4%
D032014	14.1	14.7	0.6	0.6	0.0	0.4%
D031013	7.2	7.4	0.2	0.2	0.0	0.5%
D031014	4.5	4.6	0.1	0.1	0.0	0.5%
D030013	1.5	1.6	0.1	0.1	0.0	0.4%
Bancroft	23.9	24.8	0.9	0.9	0.0	0.2%
Kimberly to Buhl springs	808.0	1,052.7	244.7	246.2	1.5	0.6%
Buhl to LSF springs	2,302.1	2,755.9	453.8	456.4	2.6	0.6%
LSF to King Hill springs	1,206.0	1,292.7	86.7	87.1	0.4	0.5%
Kimberly to Buhl baseflow	250.0	270.0	20.0	20.1	0.1	0.6%
Buhl to LSF baseflow	904.9	917.6	12.7	12.8	0.1	0.5%
LSF to King Hill baseflow	362.4	369.5	7.1	7.1	0.0	0.4%
Kimberly to Buhl reach gain	1,058.0	1,322.7	264.7	266.3	1.6	0.6%
Buhl to LSF reach gain	3,207.0	3,673.5	466.5	469.2	2.7	0.6%
LSF to King Hill reach gain	1,568.4	1,662.2	93.8	94.2	0.4	0.5%
Kimberly to King Hill reach gain	5,833.3	6,658.3	825.0	829.7	4.7	0.6%
Total response	6,105.2	9,380.8	3,275.6	3,275.6	0.0	0.0%

# Comparison of model calculated impacts to reach gains for curtailment of groundwater rights junior to 1/1/1949



## Comparison of model calculated impacts to reach gains for curtailment of groundwater rights junior to 1/1/1949



Response to simulated curtailment junior to 1/1/1949

Note: Reaches representing springs downstream of Milner may contain multiple springs, and may contain springs not included in the reach name.

Reach Name	Response to 10-year average conditions without curtailment (cfs)	Response to 10-year average conditions with curtailment (cfs)	Fully Populated Model Response Difference (cfs)	Superposition Model Response (cfs)	Super - Full (cfs)	% difference
Ashton to Rexburg	-160.8	56.1	216.9	218.1	1.2	0.5%
Heise to Shelley	-1,000.3	-652.4	348.0	329.2	-18.7	-5.4%
Shelley to Near Blackfoot	-650.9	-271.0	379.9	385.2	5.4	1.4%
Near Blackfoot to Minidoka	2,083.9	3,288.3	1,204.3	1,212.9	8.6	0.7%
D070030	0.2	0.3	0.1	0.1	0.0	0.5%
D069029	0.3	0.4	0.1	0.1	0.0	0.5%
D068029	0.2	0.3	0.1	0.1	0.0	0.5%
Devil's Washbowl	9.7	21.3	11.5	11.6	0.1	0.5%
Devil's Corral	35.4	50.8	15.4	15.5	0.1	0.5%
D065027	1.7	3.7	2.0	2.0	0.0	0.5%
D064026	3.4	4.5	1.1	1.1	0.0	0.5%
Blue Lake	180.8	217.8	37.0	37.2	0.2	0.5%
D062023	1.9	2.0	0.1	0.1	0.0	0.5%
D061023	10.0	10.4	0.4	0.4	0.0	0.5%
D059022	0.8	0.8	0.1	0.1	0.0	0.6%
D059021	0.0	0.0	0.0	0.0	0.0	0.5%
Ellison	4.1	4.4	0.3	0.3	0.0	0.5%
D058020	0.6	0.6	0.0	0.0	0.0	0.5%
D057020	1.7	1.8	0.2	0.2	0.0	0.5%
Crystal	333.7	419.7	86.1	86.6	0.5	0.6%
Niagara	223.6	280.0	56.4	56.7	0.3	0.5%
D051014	0.0	0.0	0.0	0.0	0.0	0.5%
D050014	0.0	0.0	0.0	0.0	0.0	0.5%
Clear Lakes	432.2	499.2	67.0	67.4	0.4	0.6%
Briggs	101.7	104.7	3.1	3.1	0.0	0.5%
Banbury	97.1	105.3	8.2	8.2	0.0	0.5%
D047011	2.8	3.0	0.3	0.3	0.0	0.5%
Box	663.3	777.8	114.5	115.0	0.5	0.5%
Sand	53.0	86.8	33.8	33.9	0.2	0.5%
D045011	0.1	0.1	0.0	0.0	0.0	0.5%
D045012	4.0	4.1	0.1	0.1	0.0	0.5%
Thousand	543.7	623.7	80.1	80.4	0.4	0.5%
NFH	161.9	181.5	19.6	19.7	0.1	0.5%
Tucker	65.3	67.1	1.8	1.8	0.0	0.5%
Rangen	19.9	50.6	30.7	30.8	0.1	0.5%
Three	48.4	70.5	22.1	22.2	0.1	0.5%
D040013	0.7	0.9	0.1	0.1	0.0	0.5%
D040014	2.4	3.7	1.2	1.2	0.0	0.4%

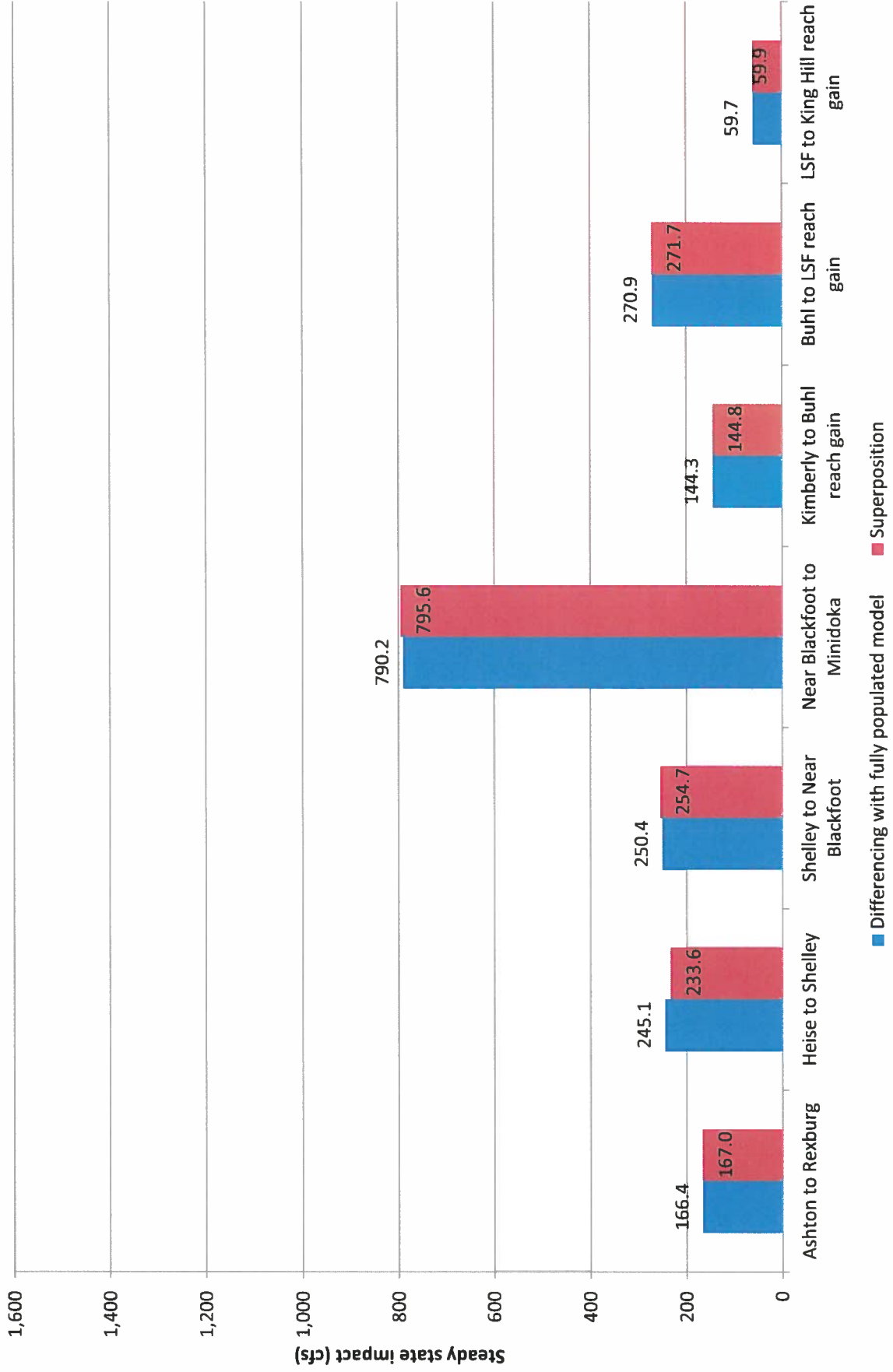


Response to simulated curtailment junior to 1/1/1949

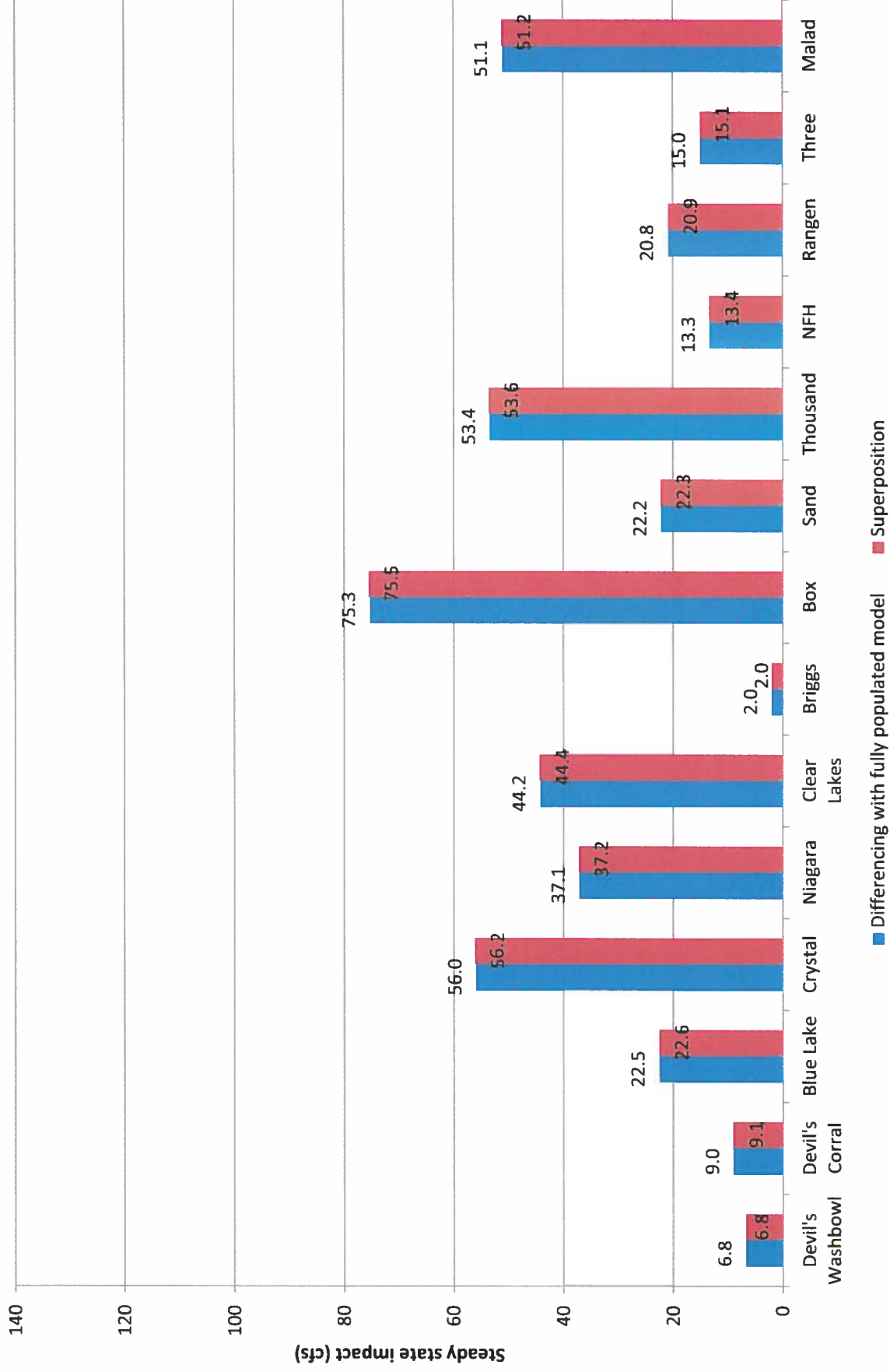
Note: Reaches representing springs downstream of Milner may contain multiple springs, and may contain springs not included in the reach name.

Reach Name	Response to 10-year average conditions without curtailment (cfs)	Response to 10-year average conditions with curtailment (cfs)	Fully Populated Model Response Difference (cfs)	Superposition Model Response (cfs)	Super - Full (cfs)	% difference
Big	81.6	93.2	11.6	11.7	0.1	0.4%
D038014	16.7	18.4	1.8	1.8	0.0	0.4%
D037014	5.3	5.5	0.3	0.3	0.0	0.4%
Birch	1.8	1.9	0.1	0.1	0.0	0.5%
D036014	7.7	8.1	0.4	0.4	0.0	0.4%
Malad	1,060.9	1,132.7	71.8	72.1	0.3	0.4%
D035014	6.2	6.5	0.3	0.3	0.0	0.4%
D034014	51.5	53.5	2.0	2.0	0.0	0.4%
D033013	0.1	0.1	0.0	0.0	0.0	0.4%
D033014	26.9	27.7	0.8	0.8	0.0	0.4%
D032013	1.4	1.4	0.0	0.0	0.0	0.3%
D032014	14.1	14.7	0.5	0.5	0.0	0.4%
D031013	7.2	7.4	0.1	0.1	0.0	0.4%
D031014	4.5	4.6	0.1	0.1	0.0	0.4%
D030013	1.5	1.6	0.1	0.1	0.0	0.4%
Bancroft	23.9	24.8	0.9	0.9	0.0	0.1%
Kimberly to Buhl springs	808.0	1,018.9	210.9	212.1	1.1	0.5%
Buhl to LSF springs	2,302.1	2,698.2	396.2	398.1	1.9	0.5%
LSF to King Hill springs	1,206.0	1,283.1	77.1	77.4	0.3	0.4%
Kimberly to Buhl baseflow	250.0	267.0	17.0	17.1	0.1	0.5%
Buhl to LSF baseflow	904.9	916.0	11.1	11.1	0.1	0.5%
LSF to King Hill baseflow	362.4	368.8	6.4	6.4	0.0	0.3%
Kimberly to Buhl reach gain	1,058.0	1,285.9	227.9	229.2	1.2	0.5%
Buhl to LSF reach gain	3,207.0	3,614.2	407.2	409.2	2.0	0.5%
LSF to King Hill reach gain	1,568.4	1,651.9	83.5	83.8	0.3	0.4%
Kimberly to King Hill reach gain	5,833.3	6,552.0	718.7	722.2	3.5	0.5%
Total response	6,105.2	8,972.9	2,867.7	2,867.6	-0.1	0.0%

# Comparison of model calculated impacts to reach gains for curtailment of groundwater rights junior to 1/1/1961



# Comparison of model calculated impacts to reach gains for curtailment of groundwater rights junior to 1/1/1961



Response to simulated curtailment junior to 1/1/1961

Note: Reaches representing springs downstream of Milner may contain multiple springs, and may contain springs not included in the reach name.

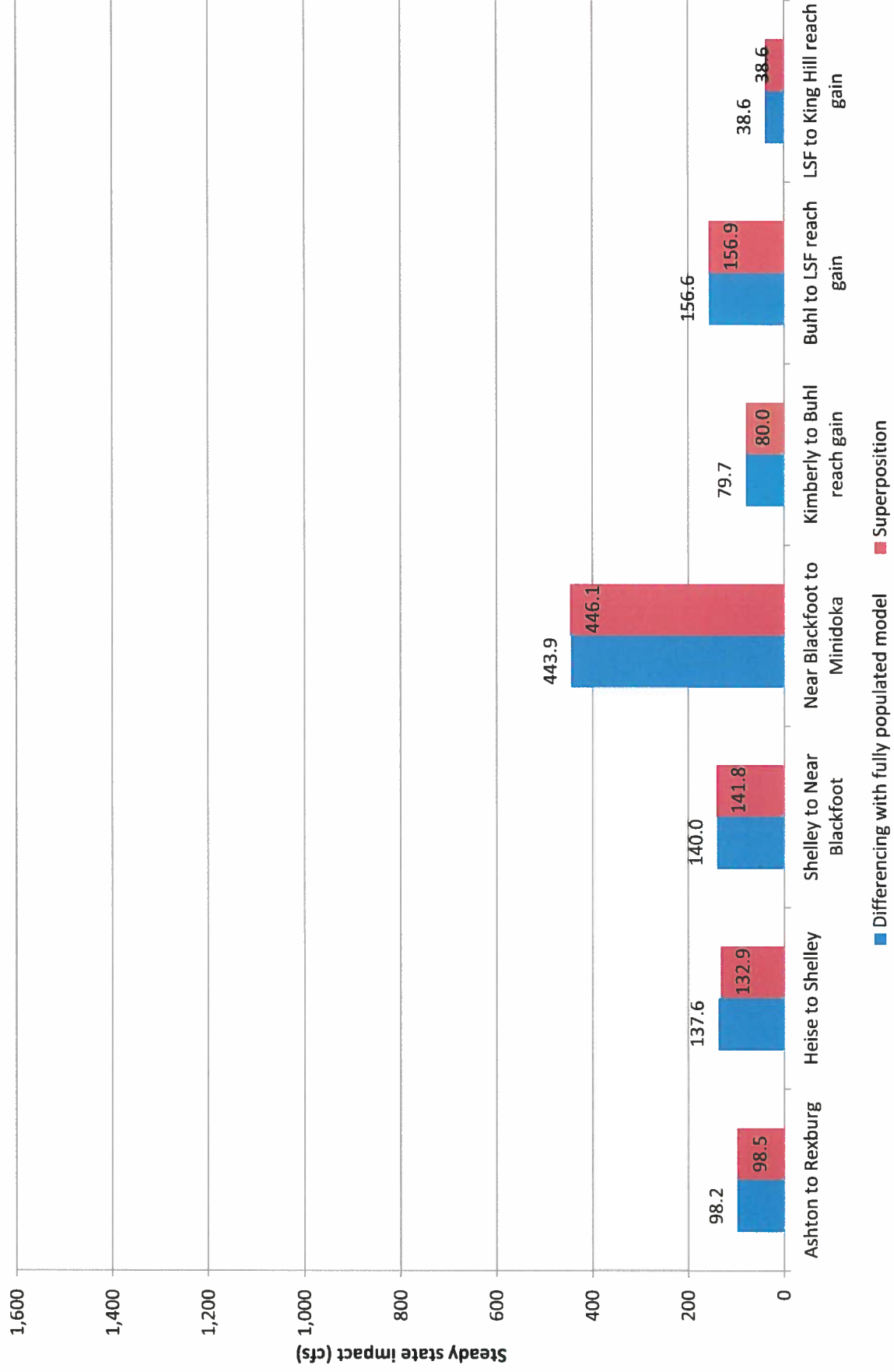
Reach Name	Response to 10-year average conditions without curtailment (cfs)	Response to 10-year average conditions with curtailment (cfs)	Fully Populated Model Response Difference (cfs)	Superposition Model Response (cfs)	Super - Full (cfs)	% difference
Ashton to Rexburg	-160.8	5.6	166.4	167.0	0.6	0.4%
Heise to Shelley	-1,000.3	-755.2	245.1	233.6	-11.5	-4.7%
Shelley to Near Blackfoot	-650.9	-400.5	250.4	254.7	4.3	1.7%
Near Blackfoot to Minidoka	2,083.9	2,874.1	790.2	795.6	5.4	0.7%
D070030	0.2	0.3	0.1	0.1	0.0	0.3%
D069029	0.3	0.3	0.1	0.1	0.0	0.3%
D068029	0.2	0.2	0.1	0.1	0.0	0.3%
Devil's Washbowl	9.7	16.5	6.8	6.8	0.0	0.3%
Devil's Corral	35.4	44.4	9.0	9.1	0.0	0.3%
D065027	1.7	2.9	1.2	1.2	0.0	0.3%
D064026	3.4	4.0	0.7	0.7	0.0	0.4%
Blue Lake	180.8	203.3	22.5	22.6	0.1	0.3%
D062023	1.9	2.0	0.1	0.1	0.0	0.3%
D061023	10.0	10.2	0.3	0.3	0.0	0.4%
D059022	0.8	0.8	0.0	0.0	0.0	0.4%
D059021	0.0	0.0	0.0	0.0	0.0	0.4%
Ellison	4.1	4.3	0.2	0.2	0.0	0.4%
D058020	0.6	0.6	0.0	0.0	0.0	0.4%
D057020	1.7	1.8	0.1	0.1	0.0	0.3%
Crystal	333.7	389.7	56.0	56.2	0.2	0.4%
Niagara	223.6	260.7	37.1	37.2	0.1	0.3%
D051014	0.0	0.0	0.0	0.0	0.0	0.3%
D050014	0.0	0.0	0.0	0.0	0.0	0.3%
Clear Lakes	432.2	476.4	44.2	44.4	0.2	0.4%
Briggs	101.7	103.7	2.0	2.0	0.0	0.3%
Banbury	97.1	102.5	5.4	5.4	0.0	0.3%
D047011	2.8	2.9	0.2	0.2	0.0	0.3%
Box	663.3	738.6	75.3	75.5	0.2	0.3%
Sand	53.0	75.2	22.2	22.3	0.1	0.3%
D045011	0.1	0.1	0.0	0.0	0.0	0.3%
D045012	4.0	4.1	0.0	0.0	0.0	0.3%
Thousand	543.7	597.1	53.4	53.6	0.2	0.3%
NFH	161.9	175.2	13.3	13.4	0.0	0.3%
Tucker	65.3	66.6	1.2	1.2	0.0	0.3%
Rangen	19.9	40.7	20.8	20.9	0.1	0.3%
Three	48.4	63.4	15.0	15.1	0.0	0.3%
D040013	0.7	0.8	0.1	0.1	0.0	0.3%
D040014	2.4	3.3	0.8	0.8	0.0	0.3%

Response to simulated curtailment junior to 1/1/1961

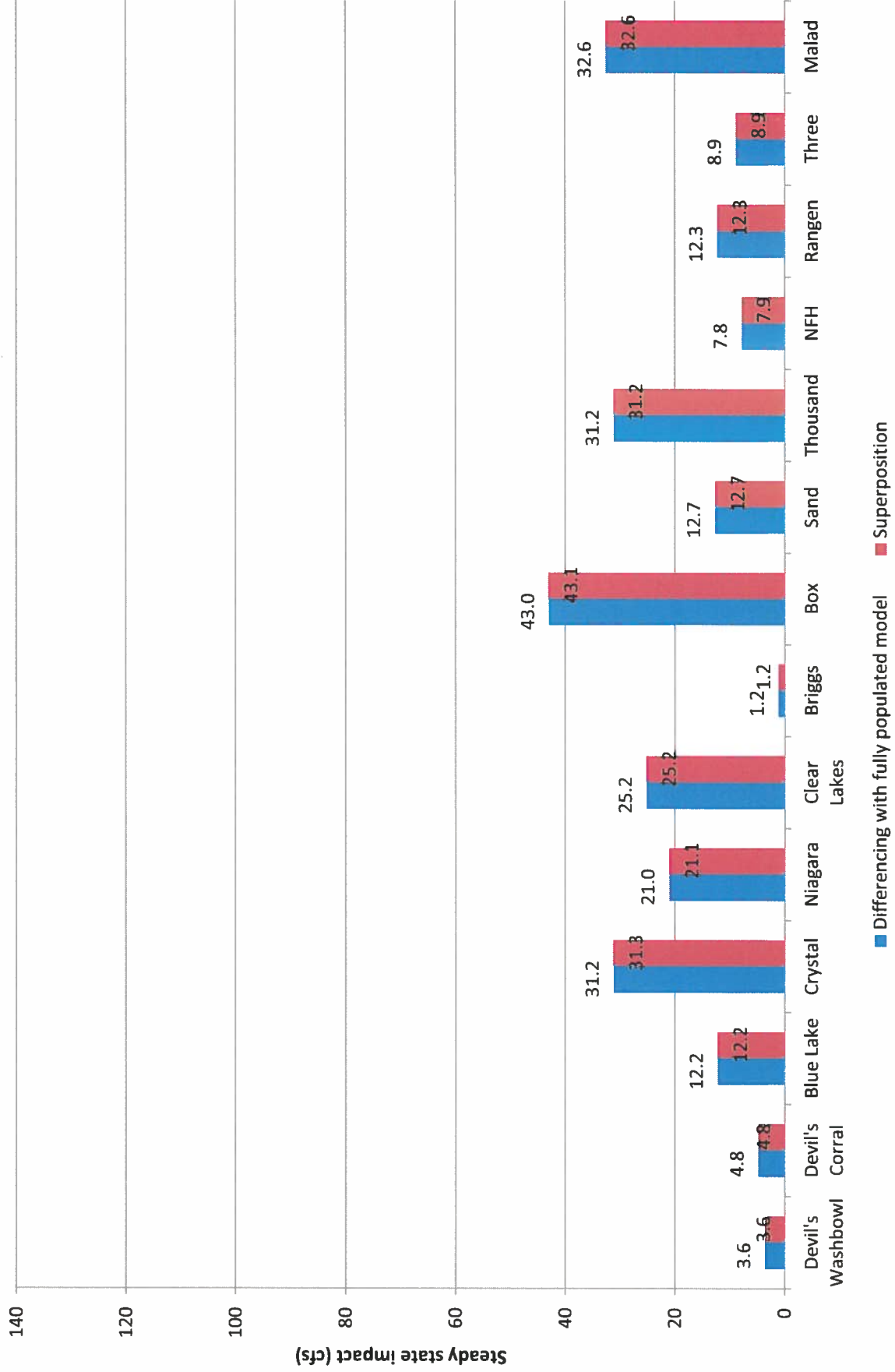
Note: Reaches representing springs downstream of Milner may contain multiple springs, and may contain springs not included in the reach name.

Reach Name	Response to 10-year average conditions without curtailment (cfs)	Response to 10-year average conditions with curtailment (cfs)	Fully Populated Model Response Difference (cfs)	Superposition Model Response (cfs)	Super - Full (cfs)	% difference
Big	81.6	89.5	7.9	7.9	0.0	0.3%
D038014	16.7	17.9	1.2	1.2	0.0	0.3%
D037014	5.3	5.5	0.2	0.2	0.0	0.3%
Birch	1.8	1.8	0.1	0.1	0.0	0.3%
D036014	7.7	8.0	0.3	0.3	0.0	0.3%
Malad	1,060.9	1,111.9	51.1	51.2	0.1	0.2%
D035014	6.2	6.4	0.2	0.2	0.0	0.2%
D034014	51.5	53.0	1.5	1.5	0.0	0.2%
D033013	0.1	0.1	0.0	0.0	0.0	0.2%
D033014	26.9	27.5	0.6	0.6	0.0	0.2%
D032013	1.4	1.4	0.0	0.0	0.0	0.2%
D032014	14.1	14.5	0.4	0.4	0.0	0.2%
D031013	7.2	7.3	0.1	0.1	0.0	0.2%
D031014	4.5	4.6	0.1	0.1	0.0	0.2%
D030013	1.5	1.6	0.0	0.0	0.0	0.2%
Bancroft	23.9	24.6	0.7	0.7	0.0	0.1%
Kimberly to Buhl springs	808.0	942.1	134.1	134.6	0.5	0.3%
Buhl to LSF springs	2,302.1	2,565.5	263.4	264.2	0.8	0.3%
LSF to King Hill springs	1,206.0	1,261.0	55.0	55.1	0.1	0.2%
Kimberly to Buhl baseflow	250.0	260.1	10.2	10.2	0.0	0.3%
Buhl to LSF baseflow	904.9	912.4	7.4	7.5	0.0	0.3%
LSF to King Hill baseflow	362.4	367.1	4.8	4.8	0.0	0.2%
Kimberly to Buhl reach gain	1,058.0	1,202.2	144.3	144.8	0.5	0.3%
Buhl to LSF reach gain	3,207.0	3,477.9	270.9	271.7	0.8	0.3%
LSF to King Hill reach gain	1,568.4	1,628.1	59.7	59.9	0.1	0.2%
Kimberly to King Hill reach gain	5,833.3	6,308.2	474.9	476.3	1.5	0.3%
Total response	6,105.2	8,032.2	1,927.0	1,927.3	0.3	0.0%

# Comparison of model calculated impacts to reach gains for curtailment of groundwater rights junior to 1/1/1973



# Comparison of model calculated impacts to reach gains for curtailment of groundwater rights junior to 1/1/1973



Response to simulated curtailment junior to 1/1/1973

Note: Reaches representing springs downstream of Milner may contain multiple springs, and may contain springs not included in the reach name.

Reach Name	Response to 10-year average conditions without curtailment (cfs)	Response to 10-year average conditions with curtailment (cfs)	Fully Populated Model Response Difference (cfs)	Superposition Model Response (cfs)	Super - Full (cfs)	% difference
Ashton to Rexburg	-160.8	-62.6	98.2	98.5	0.2	0.2%
Heise to Shelley	-1,000.3	-862.8	137.6	132.9	-4.7	-3.4%
Shelley to Near Blackfoot	-650.9	-510.9	140.0	141.8	1.8	1.3%
Near Blackfoot to Minidoka	2,083.9	2,527.9	443.9	446.1	2.2	0.5%
D070030	0.2	0.3	0.0	0.0	0.0	0.3%
D069029	0.3	0.3	0.0	0.0	0.0	0.3%
D068029	0.2	0.2	0.0	0.0	0.0	0.3%
Devil's Washbowl	9.7	13.3	3.6	3.6	0.0	0.2%
Devil's Corral	35.4	40.2	4.8	4.8	0.0	0.3%
D065027	1.7	2.3	0.6	0.6	0.0	0.3%
D064026	3.4	3.7	0.4	0.4	0.0	0.3%
Blue Lake	180.8	193.0	12.2	12.2	0.0	0.3%
D062023	1.9	2.0	0.0	0.0	0.0	0.3%
D061023	10.0	10.1	0.1	0.1	0.0	0.3%
D059022	0.8	0.8	0.0	0.0	0.0	0.3%
D059021	0.0	0.0	0.0	0.0	0.0	0.3%
Ellison	4.1	4.2	0.1	0.1	0.0	0.3%
D058020	0.6	0.6	0.0	0.0	0.0	0.3%
D057020	1.7	1.7	0.0	0.1	0.1	0.3%
Crystal	333.7	364.9	31.2	31.3	0.1	0.3%
Niagara	223.6	244.6	21.0	21.1	0.0	0.2%
D051014	0.0	0.0	0.0	0.0	0.0	0.2%
D050014	0.0	0.0	0.0	0.0	0.0	0.2%
Clear Lakes	432.2	457.4	25.2	25.2	0.1	0.2%
Briggs	101.7	102.8	1.2	1.2	0.0	0.2%
Banbury	97.1	100.2	3.1	3.1	0.0	0.2%
D047011	2.8	2.9	0.1	0.1	0.0	0.2%
Box	663.3	706.4	43.0	43.1	0.1	0.2%
Sand	53.0	65.7	12.7	12.7	0.0	0.2%
D045011	0.1	0.1	0.0	0.0	0.0	0.2%
D045012	4.0	4.1	0.0	0.0	0.0	0.2%
Thousand	543.7	574.8	31.2	31.2	0.1	0.2%
NFH	161.9	169.7	7.8	7.9	0.0	0.2%
Tucker	65.3	66.1	0.7	0.7	0.0	0.2%
Rangen	19.9	32.2	12.3	12.3	0.0	0.2%
Three	48.4	57.3	8.9	8.9	0.0	0.2%
D040013	0.7	0.8	0.1	0.1	0.0	0.2%
D040014	2.4	2.9	0.5	0.5	0.0	0.2%
Big	81.6	86.3	4.7	4.7	0.0	0.2%

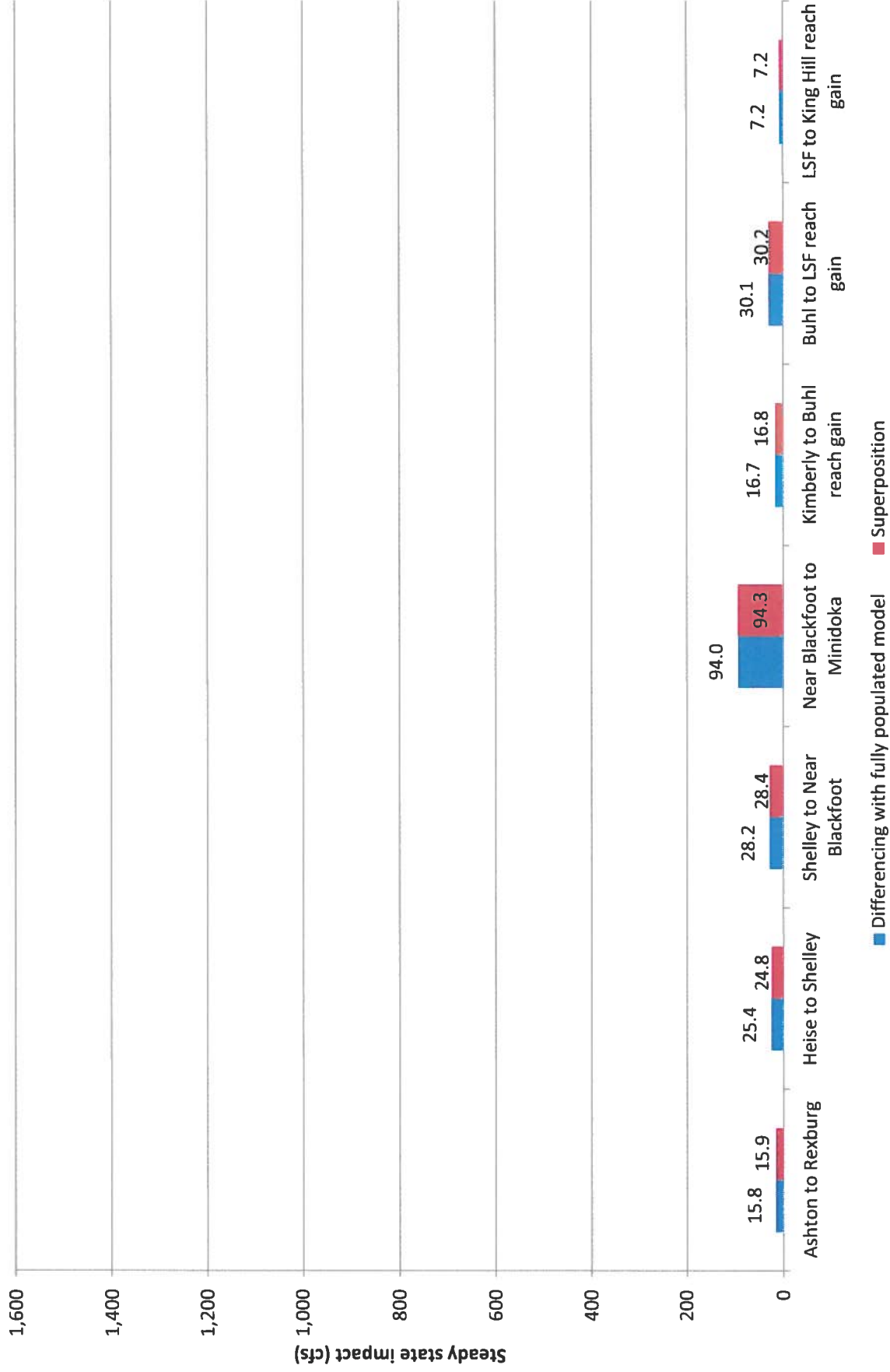


Response to simulated curtailment junior to 1/1/1973

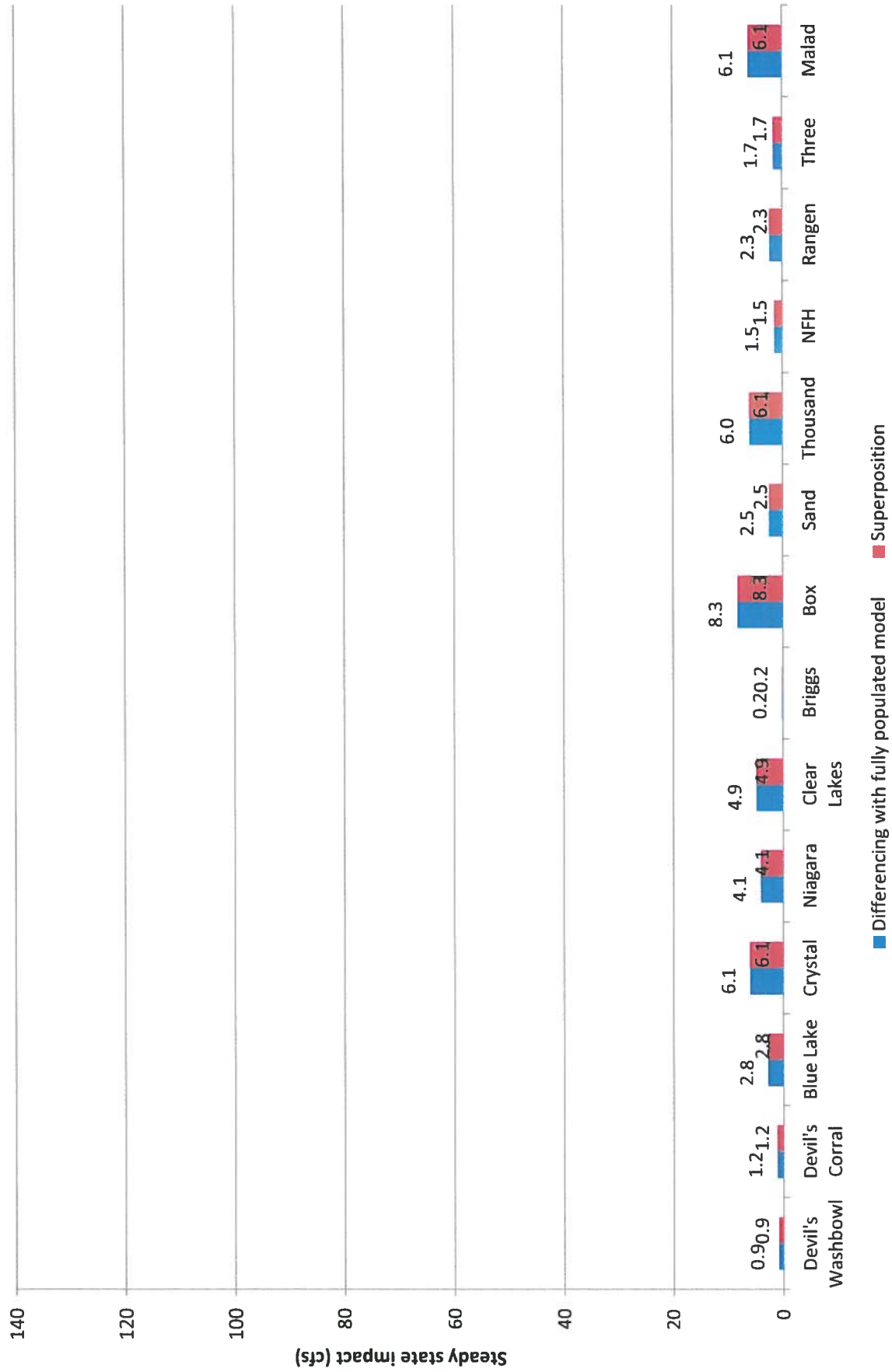
Note: Reaches representing springs downstream of Milner may contain multiple springs, and may contain springs not included in the reach name.

Reach Name	Response to 10-year average conditions without curtailment (cfs)	Response to 10-year average conditions with curtailment (cfs)	Fully Populated Model Response Difference (cfs)	Superposition Model Response (cfs)	Super - Full (cfs)	% difference
D038014	16.7	17.4	0.7	0.7	0.0	0.2%
D037014	5.3	5.4	0.1	0.1	0.0	0.2%
Birch	1.8	1.8	0.0	0.0	0.0	0.2%
D036014	7.7	7.9	0.2	0.2	0.0	0.2%
Malad	1,060.9	1,093.4	32.6	32.6	0.0	0.1%
D035014	6.2	6.3	0.1	0.1	0.0	0.1%
D034014	51.5	52.5	1.0	1.0	0.0	0.1%
D033013	0.1	0.1	0.0	0.0	0.0	0.1%
D033014	26.9	27.3	0.4	0.4	0.0	0.1%
D032013	1.4	1.4	0.0	0.0	0.0	0.1%
D032014	14.1	14.4	0.3	0.3	0.0	0.1%
D031013	7.2	7.3	0.1	0.1	0.0	0.1%
D031014	4.5	4.5	0.1	0.1	0.0	0.1%
D030013	1.5	1.6	0.0	0.0	0.0	0.1%
Bancroft	23.9	24.5	0.6	0.6	0.0	0.0%
Kimberly to Buhl springs	808.0	882.3	74.3	74.5	0.2	0.3%
Buhl to LSF springs	2,302.1	2,454.3	152.2	152.6	0.3	0.2%
LSF to King Hill springs	1,206.0	1,241.3	35.3	35.3	0.0	0.1%
Kimberly to Buhl baseflow	250.0	255.4	5.4	5.4	0.0	0.3%
Buhl to LSF baseflow	904.9	909.3	4.3	4.4	0.0	0.2%
LSF to King Hill baseflow	362.4	365.7	3.3	3.3	0.0	0.1%
Kimberly to Buhl reach gain	1,058.0	1,137.7	79.7	80.0	0.2	0.3%
Buhl to LSF reach gain	3,207.0	3,363.6	156.6	156.9	0.3	0.2%
LSF to King Hill reach gain	1,568.4	1,606.9	38.6	38.6	0.0	0.1%
Kimberly to King Hill reach gain	5,833.3	6,108.2	274.9	275.5	0.6	0.2%
Total response	6,105.2	7,199.8	1,094.6	1,094.7	0.1	0.0%

# Comparison of model calculated impacts to reach gains for curtailment of groundwater rights junior to 1/1/1985



# Comparison of model calculated impacts to reach gains for curtailment of groundwater rights junior to 1/1/1985



Response to simulated curtailment junior to 1/1/1985

Note: Reaches representing springs downstream of Miliner may contain multiple springs, and may contain springs not included in the reach name.

Reach Name	Response to 10-year average conditions without curtailment (cfs)	Response to 10-year average conditions with curtailment (cfs)	Fully Populated Model Response Difference (cfs)	Superposition Model Response (cfs)	Super - Full (cfs)	% difference
Ashton to Rexburg	-160.8	-144.9	15.8	15.9	0.0	0.2%
Heise to Shelley	-1,000.3	-975.0	25.4	24.8	-0.5	-2.1%
Shelley to Near Blackfoot	-650.9	-622.7	28.2	28.4	0.2	0.7%
Near Blackfoot to Minidoka	2,083.9	2,177.9	94.0	94.3	0.3	0.4%
D070030	0.2	0.2	0.0	0.0	0.0	0.1%
D069029	0.3	0.3	0.0	0.0	0.0	0.1%
D068029	0.2	0.2	0.0	0.0	0.0	0.1%
Devil's Washbowl	9.7	10.6	0.9	0.9	0.0	0.1%
Devil's Corral	35.4	36.6	1.2	1.2	0.0	0.1%
D065027	1.7	1.9	0.2	0.2	0.0	0.1%
D064026	3.4	3.4	0.1	0.1	0.0	0.1%
Blue Lake	180.8	183.6	2.8	2.8	0.0	0.1%
D062023	1.9	1.9	0.0	0.0	0.0	0.1%
D061023	10.0	10.0	0.0	0.0	0.0	0.1%
D059022	0.8	0.8	0.0	0.0	0.0	0.1%
D059021	0.0	0.0	0.0	0.0	0.0	0.1%
Ellison	4.1	4.1	0.0	0.0	0.0	0.1%
D058020	0.6	0.6	0.0	0.0	0.0	0.1%
D057020	1.7	1.7	0.0	0.0	0.0	0.1%
Crystal	333.7	339.7	6.1	6.1	0.0	0.6%
Niagara	223.6	227.7	4.1	4.1	0.0	0.1%
D051014	0.0	0.0	0.0	0.0	0.0	0.1%
D050014	0.0	0.0	0.0	0.0	0.0	0.1%
Clear Lakes	432.2	437.1	4.9	4.9	0.0	0.9%
Briggs	101.7	101.9	0.2	0.2	0.0	0.1%
Banbury	97.1	97.7	0.6	0.6	0.0	0.1%
D047011	2.8	2.8	0.0	0.0	0.0	0.1%
Box	663.3	671.6	8.3	8.3	0.0	0.1%
Sand	53.0	55.5	2.5	2.5	0.0	0.1%
D045011	0.1	0.1	0.0	0.0	0.0	0.1%
D045012	4.0	4.0	0.0	0.0	0.0	0.1%
Thousand	543.7	549.7	6.0	6.1	0.0	0.1%
NFH	161.9	163.4	1.5	1.5	0.0	0.1%
Tucker	65.3	65.5	0.1	0.1	0.0	0.1%
Rangen	19.9	22.3	2.3	2.3	0.0	0.1%
Three	48.4	50.1	1.7	1.7	0.0	0.1%
D040013	0.7	0.7	0.0	0.0	0.0	0.1%
D040014	2.4	2.5	0.1	0.1	0.0	0.1%

Response to simulated curtailment junior to 1/1/1985

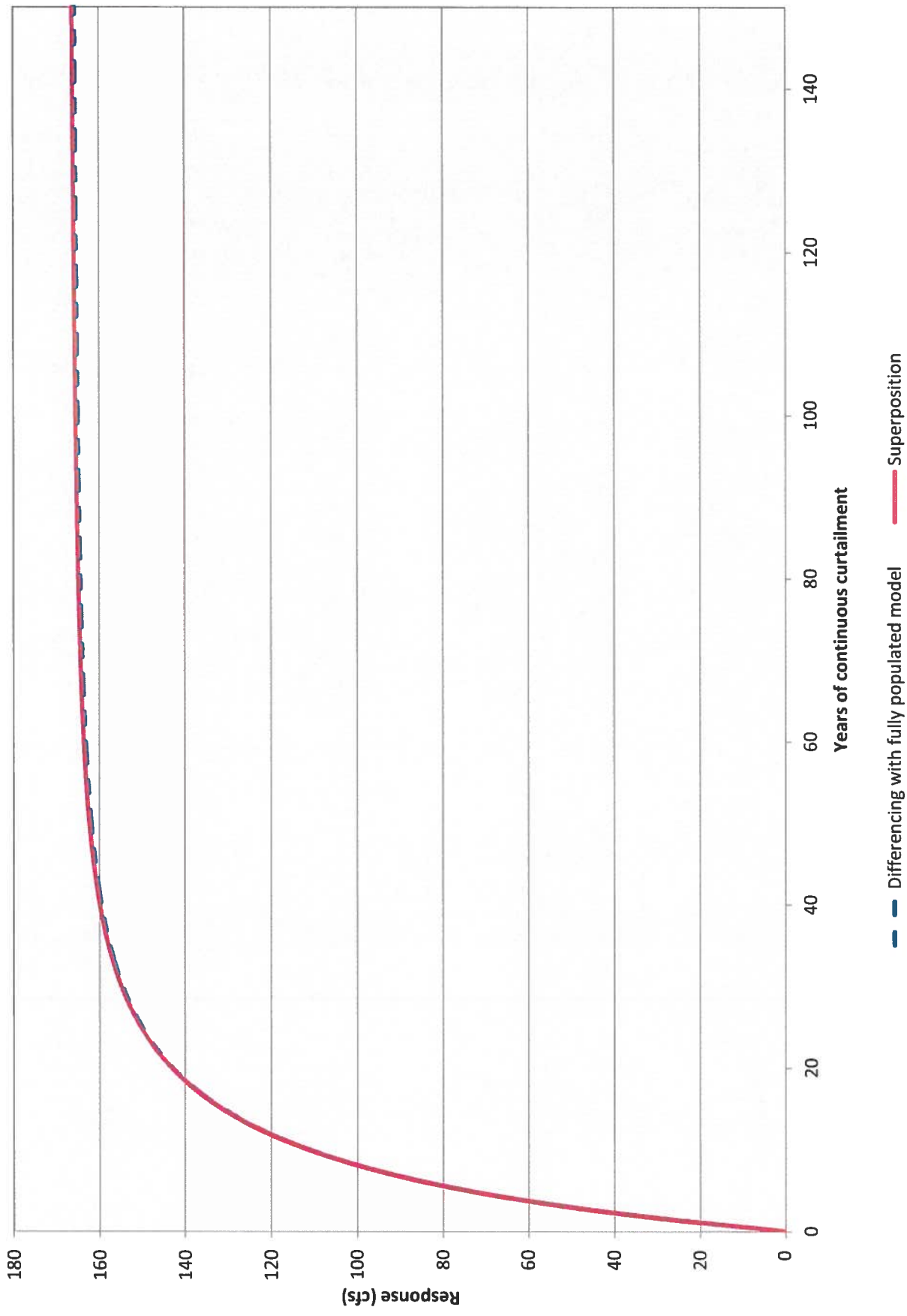
Note: Reaches representing springs downstream of Milner may contain multiple springs, and may contain springs not included in the reach name.

Reach Name	Response to 10-year average conditions without curtailment (cfs)	Response to 10-year average conditions with curtailment (cfs)	Fully Populated Model Response Difference (cfs)	Superposition Model Response (cfs)	Super - Full (cfs)	% difference
Big	81.6	82.5	0.9	0.9	0.0	0.1%
D038014	16.7	16.8	0.1	0.1	0.0	0.1%
D037014	5.3	5.3	0.0	0.0	0.0	0.1%
Birch	1.8	1.8	0.0	0.0	0.0	0.1%
D036014	7.7	7.7	0.0	0.0	0.0	0.1%
Malad	1,060.9	1,067.0	6.1	6.1	0.0	0.1%
D035014	6.2	6.2	0.0	0.0	0.0	0.1%
D034014	51.5	51.7	0.2	0.2	0.0	0.1%
D033013	0.1	0.1	0.0	0.0	0.0	0.1%
D033014	26.9	27.0	0.1	0.1	0.0	0.1%
D032013	1.4	1.4	0.0	0.0	0.0	0.0%
D032014	14.1	14.2	0.1	0.1	0.0	0.1%
D031013	7.2	7.3	0.0	0.0	0.0	0.1%
D031014	4.5	4.5	0.0	0.0	0.0	0.1%
D030013	1.5	1.6	0.0	0.0	0.0	0.1%
Bancroft	23.9	24.0	0.0	0.0	0.0	0.0%
Kimberly to Buhl springs	808.0	823.4	15.4	15.4	0.0	0.3%
Buhl to LSF springs	2,302.1	2,331.4	29.3	29.4	0.1	0.2%
LSF to King Hill springs	1,206.0	1,212.6	6.6	6.6	0.0	0.1%
Kimberly to Buhl baseflow	250.0	251.3	1.3	1.3	0.0	0.1%
Buhl to LSF baseflow	904.9	905.8	0.8	0.8	0.0	0.1%
LSF to King Hill baseflow	362.4	362.9	0.6	0.6	0.0	0.1%
Kimberly to Buhl reach gain	1,058.0	1,074.7	16.7	16.8	0.0	0.3%
Buhl to LSF reach gain	3,199.9	3,230.1	30.1	30.2	0.1	0.3%
LSF to King Hill reach gain	1,575.4	1,582.6	7.2	7.2	0.0	-0.3%
Kimberly to King Hill reach gain	5,833.3	5,887.4	54.1	54.2	0.1	0.2%
Total response	6,105.2	6,322.7	217.5	217.6	0.2	0.1%

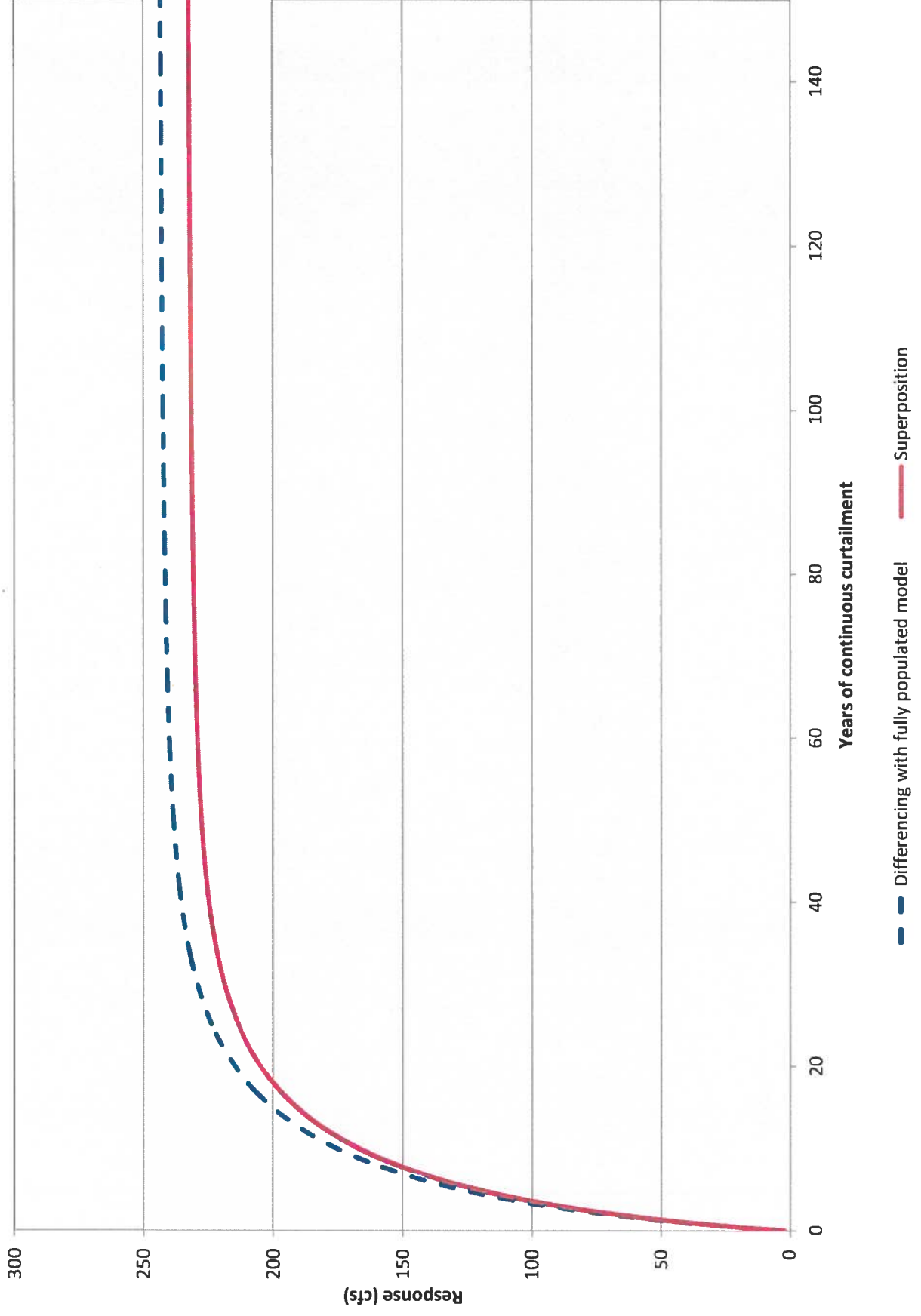
**APPENDIX B.**

**LONG TERM TRANSIENT SIMULATION**

# Predicted response to curtailment junior to 1/1/1961, Ashton to Rexburg reach

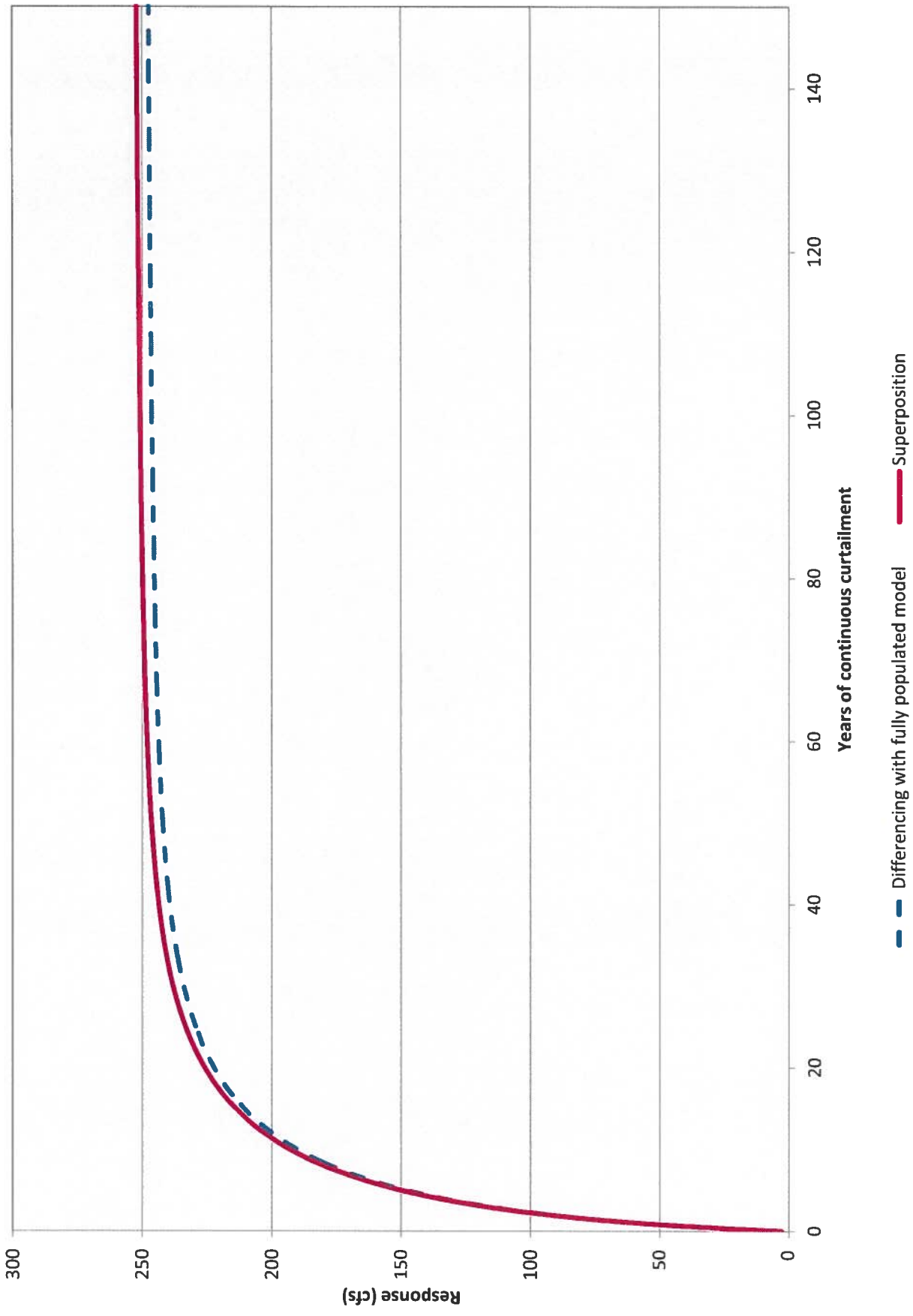


# Predicted response to curtailment junior to 1/1/1961, Heise to Shelley reach

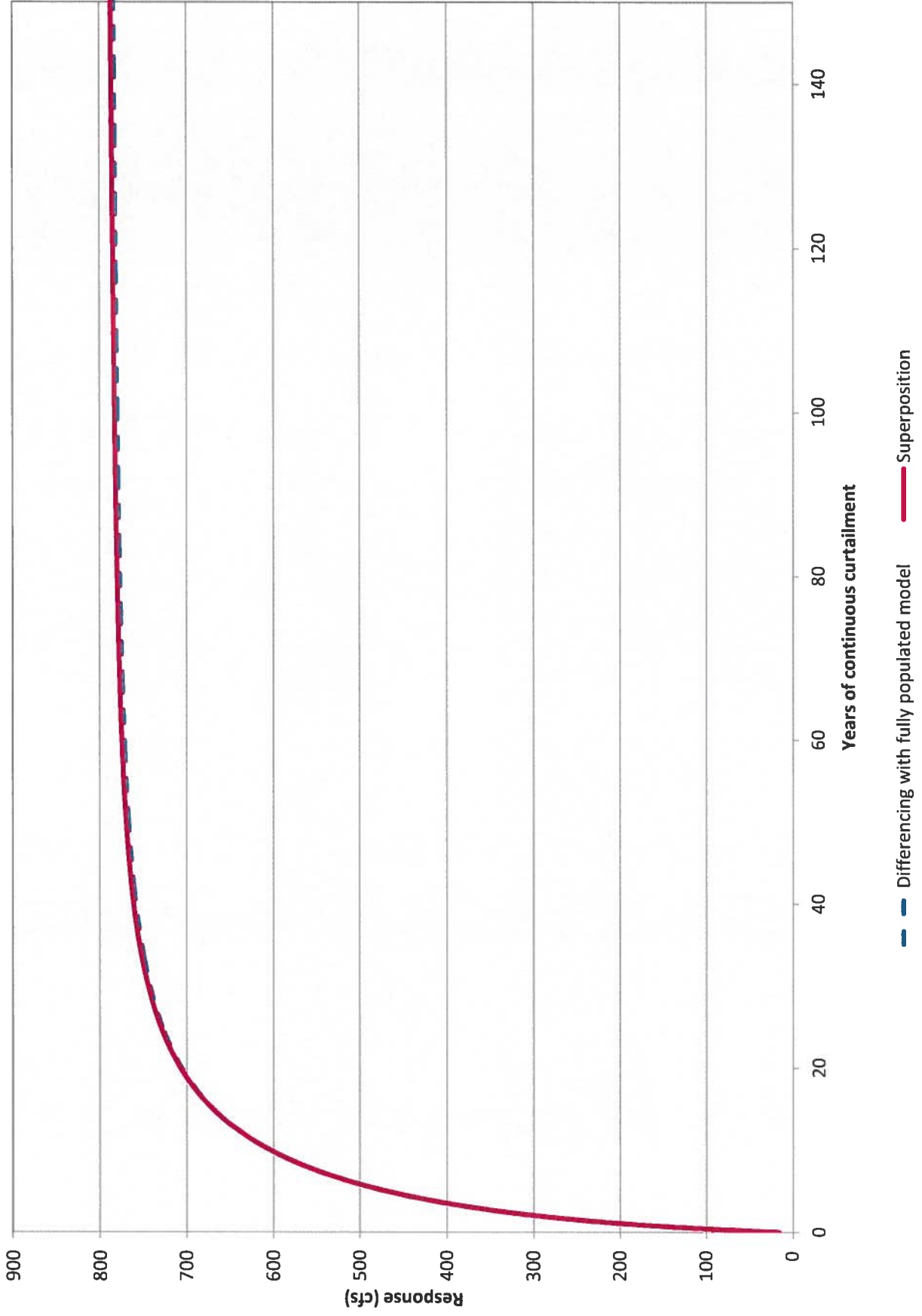




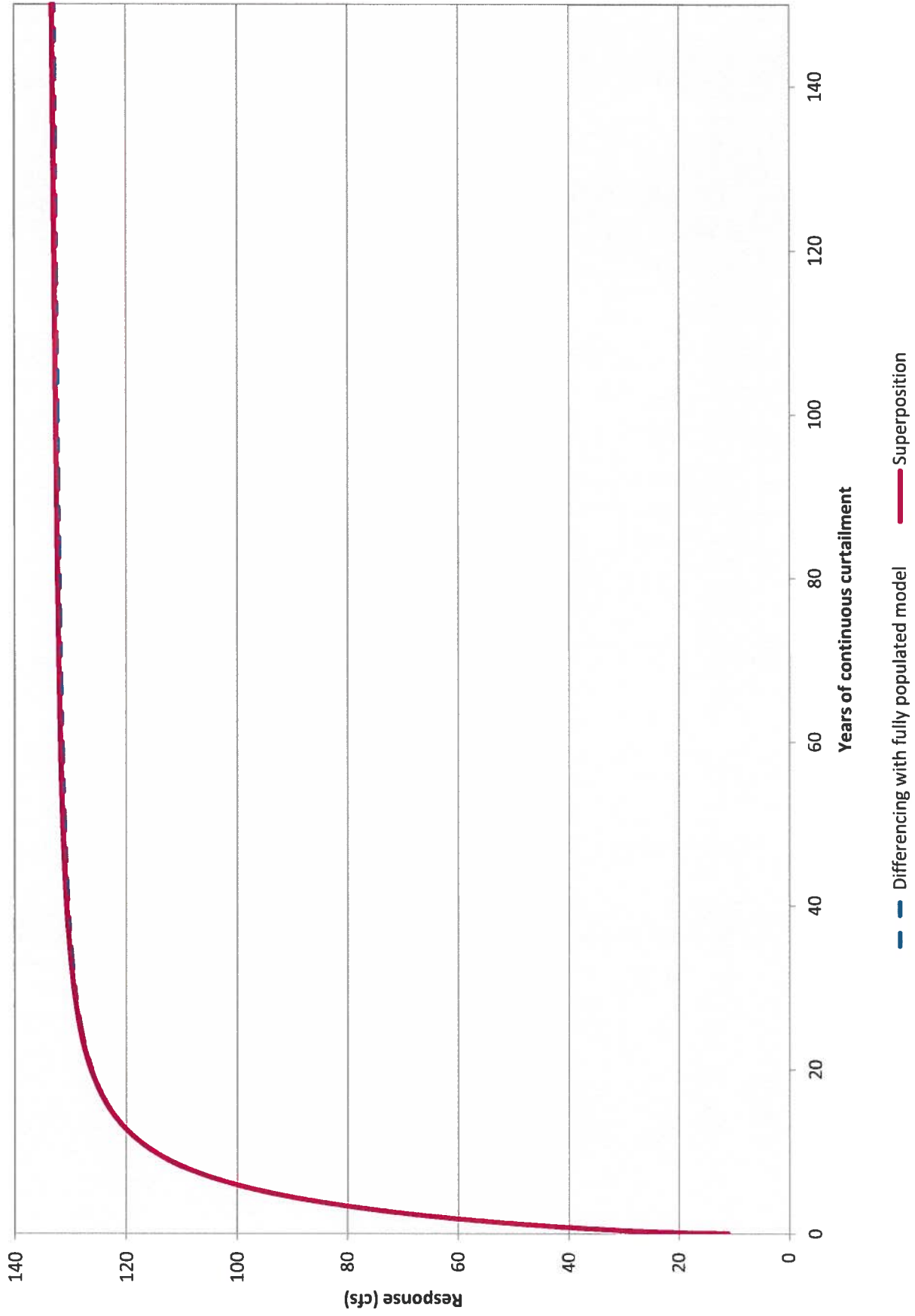
# Predicted response to curtailment junior to 1/1/1961, Shelley to near Blackfoot reach



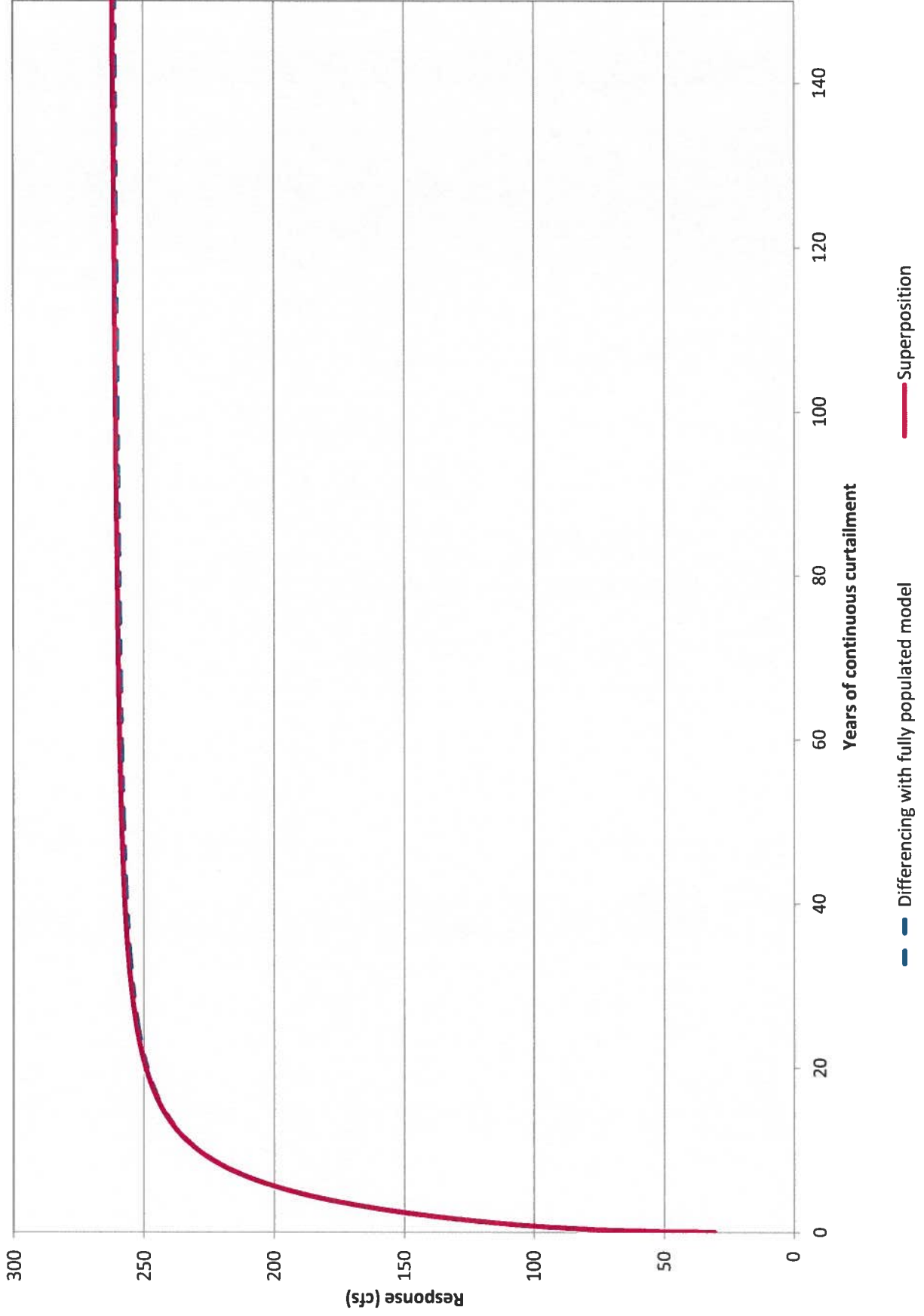
# Predicted response to curtailment junior to 1/1/1961, near Blackfoot to Minidoka reach



# Predicted response to curtailment junior to 1/1/1961, Kimberly to Buhl springs



# Predicted response to curtailment junior to 1/1/1961, Buhl to Lower Salmon Falls springs



# Predicted response to curtailment junior to 1/1/1961, LSF to King Hill springs

