

Appendix C

Table C-1. Power of Blue Sucker-All at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; go, gear-otter trawl; gt, gear-trammel net; gg, gear-gill net; seg, segment; sf, season-fish community; ss, season-sturgeon]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,go	0.0500	0.0504	0.0510
z1,gt	.0501	.0509	.0524
z2,gg	.0501	.0510	.0527
z2,go	.0502	.0516	.0541
z2,seg5,go	.0501	.0507	.0517
z2,seg6,gg	.0501	.0507	.0517
z2,seg6,go	.0501	.0510	.0525
z3,gg	.0510	.0585	.0731
z3,go	.0509	.0577	.0709
z3,gt	.0521	.0685	.1018
z3,seg7,gg	.0502	.0520	.0552
z3,seg7,go	.0509	.0581	.0719
z3,seg7,gt	.0504	.0532	.0584
z3,sf,go	.0503	.0529	.0576
z3,sf,gt	.0512	.0606	.0788
z3,ss,go	.0508	.0569	.0687
z3,ss,gt	.0508	.0569	.0686
z4,gg	.0508	.0568	.0684
z4,go	.0507	.0562	.0666
z4,gt	.0517	.0653	.0926
z4,seg10,go	.0501	.0511	.0529
z4,seg10,gt	.0503	.0527	.0572
z4,seg13,gg	.0502	.0520	.0552
z4,seg13,go	.0503	.0527	.0571
z4,seg13,gt	.0504	.0530	.0580
z4,seg14,gg	.0501	.0508	.0520
z4,seg14,go	.0505	.0545	.0621
z4,seg14,gt	.0506	.0548	.0628
z4,seg8,gg	.0510	.0586	.0734
z4,seg8,go	.0509	.0581	.0720
z4,seg8,gt	.0508	.0571	.0692
z4,seg9,gg	.0503	.0523	.0560
z4,seg9,go	.0501	.0512	.0533
z4,seg9,gt	.0508	.0570	.0690
z4,sf,go	.0503	.0522	.0559
z4,sf,gt	.0510	.0587	.0736
z4,ss,go	.0508	.0569	.0687
z4,ss,gt	.0507	.0557	.0654

Table C-2. Power of Blue Sucker-Adult at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; gt, gear-trammel net; gg, gear-gill net; go, gear-otter trawl; seg, segment; sf, season-fish community; ss, season-sturgeon]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,gt	0.0501	0.0509	0.0524
z2,gg	.0501	.0510	.0527
z2,go	.0502	.0516	.0541
z2,seg5,go	.0501	.0507	.0517
z2,seg6,gg	.0501	.0510	.0525
z2,seg6,go	.0501	.0507	.0517
z2,sf,go	.0502	.0516	.0541
z3,gg	.0509	.0582	.0722
z3,go	.0507	.0556	.0651
z3,gt	.0519	.0670	.0973
z3,seg7,gg	.0502	.0520	.0554
z3,seg7,go	.0507	.0564	.0672
z3,seg7,gt	.0504	.0533	.0589
z3,sf,go	.0503	.0524	.0564
z3,sf,gt	.0512	.0602	.0778
z3,ss,go	.0505	.0547	.0625
z3,ss,gt	.0507	.0558	.0657
z4,gg	.0508	.0565	.0675
z4,go	.0505	.0546	.0622
z4,gt	.0516	.0640	.0887
z4,seg10,go	.0501	.0511	.0529
z4,seg10,gt	.0502	.0521	.0555
z4,seg13,gg	.0502	.0514	.0536
z4,seg13,go	.0502	.0519	.0550
z4,seg13,gt	.0503	.0527	.0571
z4,seg14,gg	.0501	.0507	.0518
z4,seg14,go	.0503	.0528	.0573
z4,seg14,gt	.0505	.0544	.0618
z4,seg8,gg	.0510	.0588	.0739
z4,seg8,go	.0509	.0582	.0722
z4,seg8,gt	.0508	.0571	.0692
z4,seg9,gg	.0503	.0522	.0557
z4,seg9,go	.0501	.0509	.0525
z4,seg9,gt	.0507	.0564	.0672
z4,sf,go	.0502	.0519	.0550
z4,sf,gt	.0510	.0584	.0727
z4,ss,go	.0505	.0547	.0625
z4,ss,gt	.0506	.0547	.0626

Table C–3. Power of Blue Sucker-Juvenile at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; go, gear-otter trawl; gg, gear-gill net; gt, gear-trammel net; seg, segment; sf, season-fish community; ss, season-sturgeon]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,go	0.0500	0.0504	0.0510
z3,gg	.0505	.0544	.0617
z3,go	.0510	.0587	.0736
z3,gt	.0510	.0589	.0743
z3,seg7,gg	.0500	.0503	.0509
z3,seg7,go	.0501	.0510	.0526
z3,seg7,gt	.0501	.0510	.0526
z3,sf,go	.0502	.0519	.0550
z3,sf,gt	.0505	.0546	.0623
z3,ss,go	.0505	.0546	.0623
z3,ss,gt	.0504	.0538	.0600
z4,gg	.0505	.0539	.0605
z4,go	.0508	.0567	.0681
z4,gt	.0509	.0574	.0699
z4,seg10,gt	.0500	.0504	.0510
z4,seg13,gg	.0500	.0503	.0508
z4,seg13,go	.0501	.0508	.0521
z4,seg13,gt	.0501	.0507	.0518
z4,seg14,gg	.0500	.0504	.0509
z4,seg14,go	.0502	.0517	.0544
z4,seg14,gt	.0502	.0514	.0537
z4,seg8,gg	.0502	.0515	.0539
z4,seg8,go	.0501	.0504	.0511
z4,seg8,gt	.0502	.0513	.0534
z4,seg9,gg	.0502	.0520	.0552
z4,seg9,go	.0502	.0515	.0540
z4,seg9,gt	.0503	.0526	.0568
z4,sf,go	.0502	.0513	.0534
z4,sf,gt	.0504	.0538	.0601
z4,ss,go	.0505	.0546	.0623
z4,ss,gt	.0503	.0529	.0578

Table C-4. Power of Pallid Sturgeon-All at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; go, gear-otter trawl; gt, gear-trammel net; sf, season-fish community; ss, season-sturgeon; gg, gear-gill net; seg, segment]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,go	0.0503	0.0524	0.0564
z1,gt	.0506	.0551	.0636
z1,sf,gt	.0505	.0539	.0603
z1,ss,gt	.0501	.0507	.0520
z2,gg	.0503	.0526	.0568
z2,go	.0503	.0527	.0572
z2,gt	.0505	.0544	.0619
z2,seg5,gg	.0503	.0522	.0559
z2,seg5,go	.0504	.0531	.0583
z2,seg5,gt	.0503	.0526	.0568
z2,seg6,gg	.0500	.0503	.0508
z2,seg6,gt	.0502	.0519	.0549
z2,sf,go	.0501	.0508	.0520
z2,sf,gt	.0504	.0533	.0589
z2,ss,go	.0501	.0511	.0530
z2,ss,gt	.0501	.0508	.0521
z3,gg	.0506	.0552	.0639
z3,go	.0503	.0523	.0561
z3,gt	.0504	.0533	.0587
z3,seg7,gt	.0501	.0507	.0518
z3,sf,go	.0502	.0518	.0547
z3,sf,gt	.0502	.0521	.0554
z3,ss,gt	.0501	.0510	.0527
z4,gg	.0506	.0548	.0627
z4,go	.0502	.0520	.0552
z4,gt	.0503	.0527	.0572
z4,seg10,go	.0501	.0507	.0520
z4,seg10,gt	.0501	.0508	.0520
z4,seg13,gg	.0502	.0514	.0538
z4,seg13,go	.0501	.0509	.0523
z4,seg13,gt	.0501	.0511	.0530
z4,seg14,gg	.0500	.0503	.0508
z4,seg14,gt	.0501	.0506	.0515
z4,seg14,go	.0500	.0501	.0504
z4,seg8,gg	.0501	.0509	.0525
z4,seg8,go	.0501	.0509	.0523
z4,seg8,gt	.0501	.0507	.0518
z4,seg9,gg	.0502	.0517	.0545
z4,seg9,go	.0501	.0505	.0512
z4,seg9,gt	.0501	.0507	.0519
z4,sf,go	.0502	.0515	.0540
z4,sf,gt	.0502	.0516	.0543
z4,ss,go	.0500	.0504	.0511
z4,ss,gt	.0501	.0509	.0522

Table C-5. Power of Pallid Sturgeon-Adult at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; gt, gear-trammel net; gg, gear-gill net; seg, segment; go, gear-otter trawl]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,gt	0.0500	0.0502	0.0506
z2,gg	.0501	.0509	.0523
z2,seg6,gg	.0501	.0507	.0519
z3,gg	.0502	.0517	.0544
z3,go	.0501	.0505	.0514
z3,gt	.0500	.0502	.0504
z4,gg	.0502	.0514	.0536
z4,go	.0501	.0505	.0514
z4,gt	.0500	.0501	.0504
z4,seg13,gg	.0501	.0505	.0512
z4,seg13,gt	.0500	.0503	.0508
z4,seg8,gg	.0501	.0506	.0517
z4,seg9,gg	.0500	.0503	.0509
z4,seg9,go	.0501	.0505	.0514
z4,seg9,gt	.0500	.0501	.0502

Table C-6. Power of Pallid Sturgeon-Juvenile at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; go, gear-otter trawl; gt, gear-trammel net; sf, season-fish community; ss, season-sturgeon; gg, gear-gill net; seg, segment]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,go	0.0503	0.0524	0.0564
z1,gt	.0505	.0546	.0622
z1,sf,gt	.0504	.0534	.0589
z1,ss,gt	.0501	.0507	.0520
z2,gg	.0503	.0524	.0563
z2,go	.0503	.0527	.0572
z2,gt	.0505	.0544	.0619
z2,seg5,gg	.0503	.0522	.0559
z2,seg5,go	.0504	.0531	.0583
z2,seg5,gt	.0503	.0526	.0568
z2,seg6,gg	.0500	.0501	.0502
z2,seg6,gt	.0502	.0519	.0549
z2,sf,go	.0501	.0508	.0520
z2,sf,gt	.0504	.0533	.0589
z2,ss,go	.0501	.0511	.0530
z2,ss,gt	.0501	.0508	.0521
z3,gg	.0503	.0525	.0565
z3,go	.0502	.0521	.0555
z3,gt	.0504	.0532	.0586
z3,seg7,gt	.0501	.0507	.0518
z3,sf,go	.0502	.0518	.0547
z3,sf,gt	.0502	.0521	.0554
z3,ss,go	.0500	.0503	.0508
z3,ss,gt	.0501	.0510	.0526
z4,gg	.0503	.0524	.0564
z4,go	.0502	.0518	.0547
z4,gt	.0503	.0527	.0571
z4,seg10,go	.0501	.0507	.0520
z4,seg10,gt	.0501	.0508	.0520
z4,seg13,gg	.0501	.0509	.0523
z4,seg13,go	.0501	.0509	.0523
z4,seg13,gt	.0501	.0510	.0526
z4,seg14,gg	.0500	.0503	.0508
z4,seg14,gt	.0501	.0506	.0515
z4,seg14,go	.0500	.0501	.0504
z4,seg8,gg	.0500	.0503	.0508
z4,seg8,go	.0501	.0509	.0523
z4,seg8,gt	.0501	.0507	.0518
z4,seg9,gg	.0501	.0509	.0524
z4,seg9,go	.0500	.0503	.0509
z4,seg9,gt	.0501	.0507	.0519
z4,sf,go	.0502	.0515	.0540
z4,sf,gt	.0502	.0516	.0543
z4,ss,go	.0500	.0503	.0508
z4,ss,gt	.0501	.0508	.0521

Table C–7. Power of Sand Shiner-All at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; gm, gear-mini fyke net; gb, gear-beach seine; seg, segment]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,gm	0.0500	0.0504	0.0510
z2,gb	.0501	.0509	.0524
z2,gm	.0508	.0567	.0680
z2,seg5,gb	.0501	.0507	.0519
z2,seg5,gm	.0503	.0526	.0569
z2,seg6,gb	.0503	.0524	.0564
z2,seg6,gm	.0507	.0562	.0667
z3,gb	.0521	.0683	.1014
z3,gm	.0506	.0556	.0649
z3,seg7,gb	.0503	.0527	.0572
z3,seg7,gm	.0504	.0534	.0591
z4,gb	.0518	.0654	.0928
z4,gm	.0504	.0531	.0584
z4,seg10,gb	.0501	.0510	.0527
z4,seg10,gm	.0503	.0527	.0572
z4,seg13,gb	.0503	.0530	.0578
z4,seg13,gm	.0500	.0503	.0508
z4,seg14,gb	.0501	.0512	.0533
z4,seg14,gm	.0500	.0503	.0508
z4,seg8,gb	.0506	.0548	.0629
z4,seg8,gm	.0501	.0512	.0532
z4,seg9,gb	.0506	.0552	.0640
z4,seg9,gm	.0502	.0521	.0554

Table C-8. Power of Sauger-All at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; gb, gear-beach seine; gm, gear-mini fyke net; go, gear-otter trawl; gt, gear-trammel net; sf, season-fish community; ss, season-sturgeon; gg, gear-gill net; seg, segment]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,gb	0.0504	0.0531	0.0583
z1,gm	.0506	.0549	.0631
z1,go	.0503	.0523	.0561
z1,gt	.0509	.0582	.0722
z1,sf,gt	.0506	.0555	.0647
z1,ss,gt	.0503	.0525	.0566
z2,gg	.0510	.0583	.0725
z2,go	.0505	.0546	.0623
z2,gt	.0515	.0627	.0850
z2,seg5,gg	.0503	.0523	.0560
z2,seg5,go	.0501	.0512	.0532
z2,seg5,gt	.0504	.0535	.0592
z2,seg6,gg	.0514	.0623	.0837
z2,seg6,go	.0503	.0529	.0576
z2,seg6,gt	.0510	.0585	.0730
z2,sf,go	.0506	.0553	.0641
z2,sf,gt	.0507	.0562	.0666
z2,ss,go	.0502	.0515	.0538
z2,ss,gt	.0509	.0578	.0712
z3,gb	.0552	.0989	.1951
z3,gg	.0515	.0633	.0866
z3,gm	.0504	.0533	.0588
z3,go	.0503	.0523	.0561
z3,gt	.0503	.0528	.0575
z3,seg7,gb	.0502	.0518	.0548
z3,seg7,gg	.0501	.0512	.0531
z3,seg7,gm	.0501	.0509	.0524
z3,seg7,go	.0501	.0506	.0515
z3,seg7,gt	.0502	.0516	.0543
z3,sf,go	.0501	.0512	.0533
z3,sf,gt	.0502	.0515	.0539
z3,ss,go	.0501	.0507	.0517
z3,ss,gt	.0502	.0515	.0540
z4,gg	.0513	.0610	.0800
z4,gm	.0505	.0539	.0605
z4,go	.0502	.0517	.0544
z4,gt	.0503	.0524	.0563
z4,seg10,gm	.0501	.0506	.0517
z4,seg10,go	.0500	.0504	.0510
z4,seg13,gg	.0503	.0527	.0572
z4,seg13,go	.0500	.0503	.0507
z4,seg13,gt	.0502	.0514	.0536

Table C-8. Power of Sauger-All at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.—Continued

[z, zone; gb, gear-beach seine; gm, gear-mini fyke net; go, gear-otter trawl; gt, gear-trammel net; sf, season-fish community; ss, season-sturgeon; gg, gear-gill net; seg, segment]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z4,seg14,gg	0 .0502	0.0518	0 .0549
z4,seg14,gm	.0501	.0508	.0522
z4,seg14,go	.0501	.0507	.0517
z4,seg14,gt	.0502	.0515	.0541
z4,seg8,gg	.0504	.0538	.0600
z4,seg8,gm	.0501	.0510	.0527
z4,seg8,go	.0501	.0512	.0533
z4,seg8,gt	.0501	.0512	.0530
z4,seg9,gg	.0504	.0536	.0596
z4,seg9,gm	.0500	.0501	.0504
z4,seg9,gt	.0500	.0503	.0508
z4,sf,go	.0501	.0509	.0524
z4,sf,gt	.0502	.0513	.0535
z4,ss,go	.0501	.0507	.0517
z4,ss,gt	.0501	.0511	.0528

Table C-9. Power of Sauger-Adult at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; gm, gear-mini fyke net; gt, gear-trammel net; sf, season-fish community; ss, season-sturgeon; gg, gear-gill net; go, gear-otter trawl; seg, segment]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,gm	0.0502	0.0517	0.0544
z1,gt	.0509	.0578	.0711
z1,sf,gt	.0506	.0552	.0638
z1,ss,gt	.0503	.0525	.0566
z2,gg	.0510	.0583	.0725
z2,go	.0504	.0532	.0584
z2,gt	.0515	.0627	.0850
z2,seg5,gg	.0503	.0523	.0560
z2,seg5,go	.0502	.0519	.0550
z2,seg5,gt	.0504	.0535	.0592
z2,seg6,gg	.0514	.0623	.0837
z2,seg6,go	.0502	.0518	.0548
z2,seg6,gt	.0510	.0585	.0730
z2,sf,go	.0504	.0531	.0583
z2,sf,gt	.0507	.0562	.0666
z2,ss,go	.0502	.0515	.0541
z2,ss,gt	.0509	.0578	.0712
z3,gg	.0515	.0631	.0860
z3,go	.0503	.0523	.0562
z3,gt	.0504	.0537	.0600
z3,seg7,gg	.0501	.0512	.0531
z3,seg7,go	.0501	.0505	.0512
z3,seg7,gt	.0502	.0516	.0543
z3,sf,go	.0502	.0516	.0543
z3,sf,gt	.0502	.0518	.0548
z3,ss,go	.0501	.0508	.0522
z3,ss,gt	.0503	.0522	.0559
z4,gg	.0512	.0608	.0796
z4,gt	.0502	.0521	.0556
z4,seg13,gg	.0503	.0527	.0570
z4,seg13,gt	.0501	.0511	.0529
z4,seg14,gg	.0502	.0518	.0549
z4,seg14,gt	.0502	.0513	.0535
z4,seg8,gg	.0504	.0538	.0600
z4,seg8,gt	.0501	.0512	.0530
z4,seg9,gg	.0504	.0536	.0596
z4,seg9,gt	.0500	.0503	.0508
z4,sf,gt	.0501	.0511	.0529
z4,ss,gt	.0501	.0511	.0528

Table C-10. Power of Sauger-Juvenile at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; gb, gear-beach seine; gm, gear-mini fyke net; go, gear-otter trawl; seg, segment; sf, season-fish community; ss, season-sturgeon]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,gb	0.0504	0.0531	0.0583
z1,gm	.0506	.0554	.0644
z1,go	.0502	.0516	.0542
z2,gb	.0501	.0510	.0527
z2,gm	.0501	.0508	.0522
z2,go	.0507	.0556	.0650
z2,seg5,go	.0501	.0506	.0515
z2,seg6,gb	.0501	.0507	.0519
z2,seg6,gm	.0501	.0508	.0521
z2,seg6,go	.0505	.0543	.0614
z2,sf,go	.0505	.0540	.0606
z2,ss,go	.0501	.0512	.0531
z3,gb	.0552	.0989	.1951
z3,gm	.0504	.0533	.0588
z3,go	.0502	.0515	.0539
z3,seg7,gb	.0502	.0518	.0548
z3,seg7,gm	.0501	.0509	.0524
z3,seg7,go	.0500	.0504	.0510
z3,sf,go	.0501	.0511	.0528
z3,ss,go	.0501	.0505	.0513
z4,gb	.0541	.0875	.1595
z4,gm	.0504	.0537	.0599
z4,go	.0501	.0512	.0531
z4,seg10,gm	.0500	.0503	.0508
z4,seg13,gm	.0501	.0507	.0519
z4,seg13,go	.0500	.0502	.0506
z4,seg14,gm	.0500	.0504	.0510
z4,seg14,go	.0500	.0504	.0510
z4,seg8,gb	.0501	.0508	.0521
z4,seg8,gm	.0501	.0508	.0520
z4,seg8,go	.0501	.0509	.0522
z4,seg9,gb	.0504	.0531	.0581
z4,seg9,gm	.0500	.0502	.0506
z4,sf,go	.0501	.0508	.0521
z4,ss,go	.0501	.0505	.0513

Table C-11. Power of Shovelnose Sturgeon-All at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; go, gear-otter trawl; gt, gear-trammel net; sf, season-fish community; ss, season-sturgeon; gg, gear-gill net; seg, segment]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,go	0.0506	0.0554	0.0645
z1,gt	.0512	.0605	.0787
z1,sf,gt	.0509	.0577	.0708
z1,ss,gt	.0504	.0536	.0594
z2,gg	.0514	.0624	.0842
z2,go	.0514	.0621	.0833
z2,gt	.0524	.0713	.1102
z2,seg5,gg	.0512	.0603	.0781
z2,seg5,gt	.0515	.0633	.0866
z2,seg6,gg	.0502	.0520	.0553
z2,seg6,go	.0509	.0575	.0704
z2,seg6,gt	.0500	.0501	.0502
z2,sf,go	.0503	.0523	.0561
z2,sf,gt	.0510	.0585	.0729
z2,ss,go	.0511	.0594	.0757
z2,ss,gt	.0515	.0631	.0860
z3,gg	.0588	.1363	.3108
z3,go	.0607	.1579	.3749
z3,gt	.0565	.1115	.2344
z3,seg7,gg	.0504	.0538	.0601
z3,seg7,go	.0502	.0517	.0545
z3,seg7,gt	.0523	.0701	.1064
z3,sf,go	.0556	.1023	.2058
z3,sf,gt	.0539	.0855	.1532
z3,ss,go	.0533	.0800	.1364
z3,ss,gt	.0521	.0684	.1016
z4,gg	.0570	.1174	.2528
z4,go	.0593	.1424	.3293
z4,gt	.0551	.0971	.1895
z4,seg10,go	.0513	.0612	.0805
z4,seg10,gt	.0515	.0627	.0849
z4,seg13,gg	.0510	.0584	.0729
z4,seg13,go	.0539	.0859	.1546
z4,seg13,gt	.0521	.0682	.1008
z4,seg14,gg	.0524	.0712	.1098
z4,seg14,go	.0513	.0617	.0822
z4,seg14,gt	.0514	.0621	.0832
z4,seg8,gg	.0511	.0591	.0748
z4,seg8,go	.0509	.0579	.0713
z4,seg8,gt	.0503	.0526	.0570
z4,seg9,gg	.0523	.0703	.1072
z4,seg9,go	.0513	.0611	.0803
z4,seg9,gt	.0507	.0558	.0657
z4,sf,go	.0551	.0974	.1905
z4,sf,gt	.0530	.0774	.1285
z4,ss,go	.0533	.0800	.1364
z4,ss,gt	.0516	.0636	.0877

Table C-12. Power of Shovelnose Sturgeon-Adult at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; go, gear-otter trawl; gt, gear-trammel net; sf, season-fish community; ss, season-sturgeon; gg, gear-gill net; seg, segment]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,go	0.0503	0.0522	0.0558
z1,gt	.0508	.0565	.0676
z1,sf,gt	.0506	.0554	.0646
z1,ss,gt	.0501	.0510	.0526
z2,gg	.0513	.0611	.0805
z2,go	.0514	.0621	.0833
z2,gt	.0524	.0713	.1102
z2,seg5,gg	.0511	.0592	.0749
z2,seg5,gt	.0515	.0633	.0866
z2,seg6,gg	.0502	.0519	.0550
z2,seg6,go	.0509	.0575	.0704
z2,seg6,gt	.0508	.0571	.0692
z2,sf,go	.0503	.0523	.0561
z2,sf,gt	.0510	.0585	.0729
z2,ss,go	.0511	.0594	.0757
z2,ss,gt	.0515	.0631	.0860
z3,gg	.0575	.1225	.2688
z3,go	.0560	.1070	.2203
z3,gt	.0554	.1001	.1990
z3,seg7,gg	.0504	.0531	.0582
z3,seg7,go	.0501	.0512	.0532
z3,seg7,gt	.0516	.0640	.0886
z3,sf,go	.0529	.0756	.1232
z3,sf,gt	.0535	.0816	.1415
z3,ss,go	.0521	.0686	.1021
z3,ss,gt	.0516	.0637	.0878
z4,gg	.0560	.1071	.2206
z4,go	.0551	.0980	.1923
z4,gt	.0542	.0889	.1640
z4,seg10,go	.0509	.0575	.0703
z4,seg10,gt	.0509	.0574	.0700
z4,seg13,gg	.0510	.0584	.0729
z4,seg13,go	.0510	.0586	.0732
z4,seg13,gt	.0515	.0634	.0871
z4,seg14,gg	.0524	.0709	.1090
z4,seg14,go	.0510	.0586	.0732
z4,seg14,gt	.0511	.0596	.0761
z4,seg8,gg	.0510	.0589	.0742
z4,seg8,go	.0507	.0561	.0664
z4,seg8,gt	.0502	.0520	.0552
z4,seg9,gg	.0520	.0678	.0999
z4,seg9,go	.0505	.0539	.0603
z4,seg9,gt	.0504	.0537	.0598
z4,sf,go	.0525	.0725	.1138
z4,sf,gt	.0528	.0750	.1214
z4,ss,go	.0521	.0686	.1021
z4,ss,gt	.0512	.0601	.0776

Table C-13. Power of Shovelnose Sturgeon-Juvenile at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; go, gear-otter trawl; gt, gear-trammel net; sf, season-fish community; ss, season-sturgeon; gg, gear-gill net; seg, segment]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,go	0.0505	0.0545	0.0619
z1,gt	.0509	.0578	.0712
z1,sf,gt	.0506	.0550	.0633
z1,ss,gt	.0504	.0530	.0580
z2,gg	.0502	.0517	.0544
z2,seg5,gg	.0502	.0515	.0540
z2,seg6,gg	.0500	.0502	.0505
z3,gg	.0598	.1476	.3448
z3,go	.0626	.1786	.4333
z3,gt	.0558	.1049	.2140
z3,seg7,gg	.0504	.0536	.0596
z3,seg7,go	.0503	.0522	.0558
z3,seg7,gt	.0521	.0690	.1034
z3,sf,go	.0568	.1150	.2455
z3,sf,gt	.0534	.0807	.1387
z3,ss,go	.0536	.0829	.1454
z3,ss,gt	.0521	.0683	.1014
z4,gg	.0578	.1257	.2784
z4,go	.0609	.1601	.3813
z4,gt	.0545	.0918	.1730
z4,seg10,go	.0516	.0636	.0875
z4,seg10,gt	.0514	.0624	.0840
z4,seg13,gg	.0509	.0574	.0699
z4,seg13,go	.0530	.0768	.1266
z4,seg13,gt	.0520	.0678	.0998
z4,seg14,gg	.0516	.0642	.0894
z4,seg14,go	.0515	.0630	.0859
z4,seg14,gt	.0515	.0629	.0855
z4,seg8,gg	.0509	.0581	.0719
z4,seg8,go	.0508	.0567	.0681
z4,seg8,gt	.0504	.0532	.0585
z4,seg9,gg	.0523	.0708	.1087
z4,seg9,go	.0524	.0713	.1101
z4,seg9,gt	.0508	.0566	.0679
z4,sf,go	.0561	.1081	.2239
z4,sf,gt	.0526	.0734	.1165
z4,ss,go	.0536	.0829	.1454
z4,ss,gt	.0516	.0637	.0877

Table C-14. Power of Sicklefin Chub-All at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; go, gear-otter trawl; gm, gear-mini fyke net; seg, segment; sf, season-fish community; ss, season-sturgeon]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,go	0.0517	0.0645	0.0902
z3,gm	.0502	.0513	.0534
z3,go	.0519	.0670	.0975
z3,seg7,go	.0500	.0504	.0510
z3,sf,go	.0512	.0605	.0786
z3,ss,go	.0505	.0547	.0625
z4,gm	.0502	.0513	.0534
z4,go	.0517	.0645	.0903
z4,seg10,go	.0506	.0553	.0642
z4,seg13,gm	.0501	.0506	.0515
z4,seg13,go	.0504	.0533	.0588
z4,seg14,gm	.0502	.0520	.0552
z4,seg14,go	.0513	.0609	.0798
z4,seg8,go	.0502	.0518	.0547
z4,seg9,go	.0501	.0505	.0513
z4,sf,go	.0510	.0589	.0741
z4,ss,go	.0505	.0547	.0625

Table C–15. Power of Speckled Chub-All at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; gb, gear-beach seine; gm, gear-mini fyke net; go, gear-otter trawl; seg, segment; sf, season-fish community; ss, season-sturgeon]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z3,go	0.0528	0.0751	0.1217
z3,gb	.0506	.0553	.0643
z3,gm	.0507	.0561	.0664
z3,sf,go	.0512	.0606	.0790
z3,ss,go	.0510	.0589	.0741
z3,seg7,go	.0500	.0504	.0510
z4,go	.0524	.0710	.1093
z4,gb	.0505	.0545	.0619
z4,gm	.0506	.0552	.0639
z4,sf,go	.0511	.0592	.0749
z4,ss,go	.0510	.0589	.0741
z4,seg8,go	.0506	.0551	.0638
z4,seg9,go	.0503	.0529	.0576
z4,seg9,gm	.0502	.0515	.0539
z4,seg10,go	.0506	.0554	.0644
z4,seg10,gm	.0502	.0521	.0554
z4,seg13,go	.0509	.0574	.0700
z4,seg13,gm	.0501	.0510	.0526
z4,seg13,gb	.0501	.0507	.0519
z4,seg14,go	.0506	.0550	.0635
z4,seg14,gm	.0503	.0525	.0566
z4,seg14,gb	.0501	.0512	.0531

Table C–16. Power of Sturgeon Chub-All at different annual population decreases for a sampling level of 12 bends and 8 subsamples for 5 years.

[z, zone; gm, gear-mini fyke net; go, gear-otter trawl; seg, segment; sf, season-fish community; ss, season-sturgeon]

Model type	Annual population decrease		
	1 percent	3 percent	5 percent
z1,gm	0.0501	0.0509	0.0525
z1,go	.0502	.0513	.0534
z3,go	.2232	.9826	1.0000
z3,seg7,go	.7772	1.0000	1.0000
z3,sf,go	.2098	.9747	1.0000
z3,ss,go	.0761	.3376	.7649
z4,go	.1879	.9539	1.0000
z4,seg10,go	.1607	.9041	.9999
z4,seg13,go	.1194	.7333	.9938
z4,seg14,go	.1162	.7124	.9917
z4,seg8,go	.1991	.9659	1.0000
z4,seg9,go	.0568	.1151	.2457
z4,sf,go	.1751	.9348	1.0000
z4,ss,go	.0761	.3376	.7649

