Table 6.1. Overview of model diagnostics and sensitivity analyses used to evaluate the Dam Impact Analysis Model, including a description of the analysis or input, how the input was varied, and values tested in the Base Case and Recovery scenarios. Model diagnostics and sensitivity analyses are divided into sections based on how model inputs were varied.

Description	Vary By	Base Case					Recovery				
Number of iterations	number	100	500	1000	5000	10000	100	500	1000	5000	10000
Model stability	number	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
Production potential cap	multiplier	0.25	0.5	base	2	4	0.25	0.5	base	2	4
Eggs per female	multiplier	0.25	0.5	base	2	4	0.25	0.5	base	2	4
Egg to smolt survival	multiplier	0.25	0.5	base	2	4	0.25	0.5	base	2	4
In-river mortality	multiplier	0.25	0.5	base	2	4	0.25	0.5	base	2	4
Marine survival	multiplier	0.25	0.5	base	2	4	0.25	0.5	base	2	4
Initial number of adults	multiplier	0.25	0.5	base	2	4	0.25	0.5	base	2	4
Hatchery discount	multiplier	0.25	0.5	base	2	4	0.25	0.5	base	2	4
Number of smolts stocked	multiplier	0.25	0.5	base	2	4	0.25	0.5	base	2	4
Proportion returning to sea	multiplier	0	0.5	base	2	4	0	0.5	base	2	4
Indirect latent mortality	multiplier	0.25	0.5	base	2	4	0.25	0.5	base	2	4
Downstream path choice	multiplier	0.25	0.5	base	2	4	0.25	0.5	base	2	4
Egg to smolt survival (hatchery on)											
Marine survival * 0.25	multiplier	0.25	0.5	1	2	4					
Marine survival * 0.5	multiplier	0.25	0.5	1	2	4					
Marine survival * 1	multiplier	0.25	0.5	1	2	4					
Marine survival * 2	multiplier	0.25	0.5	1	2	4					
Marine survival * 4	multiplier	0.25	0.5	1	2	4					
Egg to smolt survival (hatchery off)											
Marine survival * 0.25	multiplier	0.25	0.5	1	2	4					
Marine survival * 0.5	multiplier	0.25	0.5	1	2	4					
Marine survival * 1	multiplier	0.25	0.5	1	2	4					
Marine survival * 2	multiplier	0.25	0.5	1	2	4					
Marine survival * 4	multiplier	0.25	0.5	1	2	4					
Downstream dam survival	percent	-10%	-5%	base	5%	10%	-10%	-5%	base	5%	10%
Upstream dam survival	percent	-10%	-5%	base	5%	10%	-10%	-5%	base	5%	10%
Hatchery stocking	varying approaches	off	on 1st 25 yrs	on 2nd 25 yrs	base		off	on 1st 25 yrs	on 2nd 25 yrs	base	
Stocking distribution	varying approaches	all in Pisc	all in PU 2	base	equal in all PUs	all below VZ	all in Pisc	all in PU 2	base	equal in all PUs	all below VZ
Straying	varying approaches	RulesX1	RulesX2	base	100% home	=straying	RulesX1	RulesX2	base	100% home	=straying
Proportion dying	proportion	0	0.012	base	0.024	0.048	0	0.012	base	0.024	0.048
Proportion remaining downstream	varying approaches	below impassable dam	evenly dist below	base			below impassable dam	evenly dist below	base		
Marine survival											
Mean based	varying approaches	1971-1990	1991-2010	1971-2010			1971-1990	1991-2010	1971-2010		
Median based	varying approaches	1971-1990	1991-2010	base			1971-1990	1991-2010	base		