Model year	Arev model 2025		MFRI - GIRAF 2017	2020	2025
Model mechanics	Stochastic simulation (1000 years) of escapees entering rivers		Average escapees		Stochastic simulation
Model limits/constraints	a. Max 4% escapees in each river b. Max ave 2% escapees for 4 consecutives years		a. Max 4% escapees in each river b. Max ave 2% escapees for 4 consecutives years		
Model output	Years out of 1000 exceeding set limits in each river for various levels of biomass.		Total maximum allowed biomass		

	Arev model						MFRI - GIRAF		
	Case 1 (conservative)		**Case 2**		**Case 3 (worst case)**		**West- and Eastfjords**		
	Westfjords	*Eastfjords*	*Westfjords*	*Eastfjords*	*Westfjords*	*Eastfjords*			
Model year	2025		2025		2025		*2017*	*2020*	*2025*
Escape parameters									
Reported escapees per ton of production	0.54	0.54	0.54	0.54	0.54	0.54	0.8	0.64	0.5
Multiplier - reported vs. actual escapees	4	4	4	4	4	4	4	4	1
Production licenses (max production) - MT	64,500	42,000	64,500	42,000	64,500	42,000	71,000	106,500	106,500
Estimated annual number of escapees	139,320	90,720	139,320	90,720	139,320	90,720	227,200	272,640	53,250
Skilbrei split estimate									
Ratio of late escapees	20%	20%	20%	20%	20%	20%	50%	50%	33%
Ratio of early escapees	80%	80%	80%	80%	80%	80%	50%	50%	67%
Skilbrei - tag/unreported assumptions									
Lost tag	10%	10%	10%	10%	10%	10%			
Unreported catch of escapees	33%	33%	33%	33%	33%	33%			
=> Ratio early escapees	60%	60%	60%	60%	60%	60%			
Ratio late escapees	67%	67%	67%	67%	67%	67%			
Late Escapees									
Ratio of late escapees that were caught (Skilbrei average)	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%			
Risk period - in-season (months of the year)	4/18	4/18	4/12	4/12	4/12	4/12	4/18	4/18	
Reverse homing ratio (ratio of surviving escapees that leave farm site)*							25%	25%	
Ratio of escapees that survive, leave farm site and migrate rivers**	7.5%	7.5%	15%	15%	100%	100%	15%	5%	
Average % of late escapees that migrate to rivers	0.57%	0.57%	1.70%	1.70%	11.3%	11.3%	0.83%	0.28%	0.17%
Average number of late escapees before catch% adjustment	158	103	474	309	3161	2058	237	95	30
Ratio of escapees that are caught (Arev estimate) ****	75%	75%	75%	75%	75%	75%			
Ratio of late escapees that are caught							0.4	0.4	0.4
Ratio of early escapees that are caught							0.5	0.5	0.5
Average annual numbers of late escapees that enter rivers	211	137	632	412	4214	2,744	592	237	30
Early escapees									
Ratio of returns of escaped smolts to wild smolts (***)							37%	30%	
Natural returns							5%	5%	
Estimated return of smolts to rivers							1.85%	1.50%	0.17%
Ratio of early escapees that were caught (Skilbrei average)	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%			
Risk period - in-season (months of the year)	6/12	6/12	6/12	6/12	6/12	6/12	4/18	4/18	
Reverse homing ratio (ratio of surviving escapees that leave farm site)*	25%	25%	100%	100%	100%	100%	25%	25%	
Average % of early escapees that migrate to rivers	0.093%	0.093%	0.37%	0.37%	0.37%	0.37%	0.103%	0.083%	
Average annual early escapees into rivers	139	90	555	361	555	361	234	227	60
Total average late + early escapees	349	227	1,187	773	4,769	3,105			
Total average escapees in Icelandic rivers (Westfjord + Eastfjord)	**577**		**1,959**		**7,874**		825	464	90

Reverse homing ratio" is a term introduced by MFRI. represent % of surviving late escapees that will leave farming site. 100% means that all surviving escapees will leave farming site. 25% means that 75% of escapees that survive will remain at the farming site and 25% will leave farming site.

** "Ratio of escapees that survive, leave farm site and migrate rivers" is a term introduced by MFRI. It represent the proportion of surviving escapees (that have left farm site) that will migrate to rivers. Supposed to reflect effects of mittigation measures such as light controls to lower maturation prior to escape (assuming such measures were absent in Skilbrei study).

*** "Ratio of return of escaped smolts to wild smolts" is a conscept used by MFRI 2017 and 2018 to estimate the number of returning escaped smolts based on estimates of released wild smolts in Icelandic rivers

**** "Ratio of escapees that are caught" is an Arev estimate that takes into account the extra mitigation effort when there are big reported escapes such s snorkling and organized search for escapees.