

WSDOT's Chehalis Basin Approach

Mark Gaines, PE State Design Engineer March 7, 2024





"WSDOT was tasked with evaluating alternatives that could be used to protect I-5 from flooding"



Alternative	Impacts to Buildings**				Protect	Ability to Most	Cost of	Cost of Future I-5	Total Cost of Alternative Plus
	100 Year Flood Event		2007 Flood Event		Airport & SW	Ability to Meet Future I-5 Capacity	Alternative	Widening After Alternative is	Cost to Meet Future I-5 Capacity Needs (C)
	Positive	Negative	Positive	Negative	Chehalis	Needs	(A)	Constructed (B)	A + B = C
1. I-5 Walls and Levees, Raise Airport Levee, New Chehalis Levee	510	140	1030	140	Y	Future widening required. Allows for widening.	\$80 to 100 Million	\$225 to 330 Million	\$305 to 430 Million
2. I-5 Raise and Widen Only	430	240	840	300	N*	Provides widening of I-5.	\$450 to 550 Million	\$0	\$450 to 550 Million
3. I-5 Express Lanes	390	180	890	170	N*	Provides capacity, future widening unnecessary.	\$120 to 150 Million****	\$0	\$120 to 150 Million
4. I-5 Temporary Bypass	400	150	900	170	N*	Future widening required. Allows for widening.	\$70 to 90 Million****	\$250 to 350 Million	\$320 to 440 Million
5. I-5 Viaduct	***	**	* * *	* * *	N*	Replaces I-5 with new facility with sufficient capacity.	Greater than \$1.5 Billion	\$0	Greater than \$1.5 Billion
6. I-5 Relocation	***	***	***	***	N*	Replaces I-5 with new facility with sufficient capacity.	Greater than \$2 Billion	\$0	Greater than \$2 Billion

Cost of Future I-5

Total Cost of Alternative Plus

Impacts to Buildings**



What has been done so far? 2013 legislative study

"Model results show that a dam would significantly reduce flood levels and shorten the duration of I-5 closures during major flood events."

"If the State moves forward with the process to construct a dam as it is anticipated to, WSDOT will not pursue a separate full-flood-protection project for I-5."

"...any project to widen this stretch of highway will include minor enhancements to promote flood resistance... but would not incorporate the significant investment required to ensure robust and reliable flood proofing."









