

<b>Project Title</b>	BNSF SPJ - Vibratory driving behavioral impact distance
<b>Pile information (size, type, number, pile strikes, etc.)</b>	Vibratory driving of 36-inch steel piles assumed at 175dBrms (WSDOT).

Fill in green cells: estimated sound levels and distances at which they were measured, estimated number of pile strikes per day, and transmission loss constant.

	Acoustic Metric			Effective Quiet
	Peak	SEL	RMS	
Measured single strike level (dB)			<b>175</b>	<b>150</b>
Distance (m)			<b>10</b>	

Estimated number of strikes	
-----------------------------	--

Cumulative SEL at measured distance	<b>#NUM!</b>
-------------------------------------	--------------

	Distance (m) to threshold			
	Onset of Physical Injury			Behavior
	Peak dB	Cumulative SEL dB**		RMS dB
		Fish ≥ 2 g	Fish < 2 g	
Transmission loss constant (15 if unknown)	206	187	183	150
<b>15</b>	<b>0</b>	<b>#NUM!</b>	<b>#NUM!</b>	<b>464</b>

\*\* This calculation assumes that single strike SELs < 150 dB do not accumulate to cause injury (Effective Quiet)

**Notes (source for estimates, etc.)**

(This model was last updated January 26, 2009)

464 meters = 0.29 mile.