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The following material is based principally on Culvert Fishway Planning and Design Guidelines, which provide designers with a basis for planning, design and implementation of fish passage facilities at road crossings and other small waterway structures.

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Fishway component types for small waterway structures

The configuration of fish passage facilities at a waterway structure is established on the basis of fish migration barrier characteristics of the structure and fish passage goals and other multipurpose requirements for the site. A number of fishway configuration options comprising several component types may be considered to overcome migration barriers within various hydraulic zones of the structure.

set Baffle – Box	\checkmark	\checkmark	\checkmark				
hway component e	Zone D: Culvert inlet and upstream channel	Zone C: Culvert barrel	Zone B: Culvert outlet & downstream apron	Zone A: Downstream channel			
Possible application of fishway component types for particular hydraulic zones of culverts / waterway structures							
at	 series of transverse ridge V- localised drops ranging from suited for weirs, grade contra 	-slots with small pools n 50 mm to 100 mm rol, aprons or drops	 provides low velocity zones / shelter areas for flows within and surcharging the block ridges suited for use in fishway system with offset baffle 				
	Block Ramp fishway – Weirs, grade control, aprons and drops						
	 Rock Ramp fishway – series of transverse rock rid, localised drops ranging from suited for free standing or an 	Open channels ges with small pools n 50 mm to 100 mm ttached structures	 provides low velocity zor flows within and surchar multiple interconnected p 	nes / shelter areas for ging the rock ridges pathways for fish passage			
and s	 Corner "Quad" Baffle f series of quad baffles perper suited to relatively deep low more readily constructed that 	fishway – Pipe cu ndicular to wall v velocity flow an offset baffle	 provides flow resistance within baffle field for full good self-cleaning and the 	/ shelter / recirculation ll height of baffles rrough-flow attributes			
Pro-	Offset Baffle fishway - • series of low baffles fixed to • suited to relatively shallow • less suited to deep slow wat	- Pipe culverts o structure base high velocity flow er environments	 provides low velocity / sh for flows within and surce less suited to pipe culvert 	helter / flow circulation charging the baffles ts than to box culverts			
pro l	Corner "EL" Baffle fish • series of "L" shaped baffles • suited to relatively deep low • less suited to shallow high v	way – Box culves perpendicular to wall v velocity flow velocity flow	 provides flow resistance within baffle field for ful good self-cleaning and th 	/ shelter / recirculation ll height of baffles rrough-flow attributes			
	 Offset Baffle fishway series of low baffles fixed to suited to relatively shallow less suited to deep slow wat 	- Box culverts, ap o structure base high velocity flow er environments	 provides low velocity / shelter / flow circulation for flows within and surcharging the baffles good self-cleaning and through-flow attributes 				

Fishway compo type	onent	Zone D: Culvert inlet and upstream channel	Zone C: Cu barre	lvert Zone & de	B: Culvert outlet	Zone A: Downstream channel
<u>Offset Baffle</u> – H	Box	\checkmark	\checkmark		\checkmark	
EL Baffle – Box	κ.	\checkmark	\checkmark		\checkmark	
Offset Baffle – H	Pipe		\checkmark		\checkmark	
Quad Baffle – P	ipe		\checkmark			
Rock Ramp – O	pen ch	\checkmark				\checkmark
<u>Block Ramp</u> – D	Drop	\checkmark			\checkmark	✓
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