

CISA – Assessment of Conservation values, Impact, Sensitivity and Added value of streams

WAMBAF

Developed by WWF Sweden 2011, revised by Lennart Henrikson and Linnéa Jägrud, WAMBAF, May 2017

Date:	Name of conductor:		
Name of stream			
Catchment area	Number:	Name:	
Stretch surveyed (m)			
Coordinates lower	X	Y	
Coordinates upper	X	Y	
Average width (estimated: <1 m, <3 m, <6 m, >6 m)	Dominating bottom substrate:		
Stream order:			

Mark with X if present!

C1. CONSERVATION VALUES – Stream	
Strong habitat variation	Stream mostly meandering <u>or</u> large variation in depth and width <u>and</u> occurrence of sand/gravel <u>or</u> stones/boulders.
Dead wood in water	>7 pieces per 100 m. Length of pieces ≥ 1 m and 10 cm \varnothing
Stretch of rapids or swiftly-flowing water (broken water surface)	Distance >10 times the average width.
Stretch with lots of boulders	Boulders (> the size of a fist) and/or bed with gravel and pebbles, distance >10 times the average width of the water course.
Credits; 0 - 4	<i>One X = 1 credit etc.</i>
C2. CONSERVATION VALUES – Special biotopes and species	
Natural waterfall or braided channel	Water falling in 90°, height of fall >1 m, often forming a natural migration barrier. <u>Braided channel</u> : The stream splitted up in ≥ 3 channels, >10 m length, with water all year round.
Clear and uncoloured water	Not obviously turbid or brown-coloured water.
Inlet or outlet of lake or tributary inlet	Outlet/inlet not regulated, not deepened, not changed by digging. Tributary inlet of natural stream, no ditch.
Valuable species	Red-listed species (should normally be know in advance of survey) or occurrence of big mussels and/or salmonids.
Credits; 0 - 4	<i>One X = 1 credit etc.</i>
C3. CONSERVATION VALUES – Riparian zone	
Riparian zone for >75%	Riparian zone regarding shading of the stream.
Natural composition of tree species	Related to the actual site, without human disturbance/forestry.
Old riparian zone	At the age of normal final felling, producing dead wood etc.
Flooded zone or permanent area of diffuse groundwater outflow or spring.	Periodically flooded riparian zone; to be observed on the vegetation, stones, trees and ground. One large, or several obvious objects along the stretch.
Credits; 0 - 4	<i>One X = 1 credit etc.</i>
TOTAL CONSERVATION VALUES	

I1. IMPACT – Stream	
Not cleaned or straightened	<u>Not cleaned</u> : Stream with natural occurrence of boulders, stones and gravel. <u>Not straightened</u> : Natural meandering of stream – not straightened, not chanellized.
No serious sedimentation	Normal amount of particles of fine material <u>on</u> bottoms of gravel and sand.
No water regulation or extraction of water	<u>No adjustment</u> : No occurrence of one or several dams, often with an arrangement for adjustment of the water level. <u>No removal of water</u> : no hoses, pumps etc. in or along the stream.
No artificial migration barriers	No dams, culverts, or other artificial barriers for fish or benthic fauna. No definite barrier made by beaver that makes it completely impossible for fish to migrate.
Credits; 0 - 4	<i>One X = 1 credit etc.</i>

I2. IMPACT – Riparian zone	
Functional riparian zone	Ecological functional riparian zone (shading, filtering, litter input, dead wood input). No serious damages on the riparian zone at ≤75 % of the distance. (In Latvia only: Riparian zone not heavily dominated by grey alder.)
No inflow from ditches	No ditches entering directly into the stream; without infiltrating through a sediment trap.
No soil damages	No old or new soil damages (by heavy vehicles or scarification) in or along the stream which might have had a negative effect on the stream (eg. siltation).
No roads	No road crosses the stream, and no road within 10 m along the stream.
Credits; 0 - 4	<i>One X = 1 credit etc.</i>

I3. IMPACT – Water quality	
No turbid water	Normal level of turbidity.
No antropogenic litter	No great amount of antropogenic litter affecting water or riparian zone.
No eutrophication	No large amounts of excess vegetation, e.g. green algae and/or reed in the stream.
No point sources	No drainage from industries, farmland or urban areas, no wastewater input straight into the stream.
Credits; 0 - 4	<i>One X = 1 credit etc.</i>
TOTAL IMPACT	.

S. SENSITIVITY	
Soil types tending to erode	Coarse sand, moraine with fine sand or silt, fine soil types, or peat in the area.
Slope towards the stream	>3 m slope (drop) within a distance of 30 m, towards the stream.
Wet-moist riparian zones	Heavy vehicles may cause soil damages along the stream and in the stream.
Spring or outflow of water in the area.	Water overflowing the ground and/or shallow ground water in the neighbouring stands.
TOTAL SENSITIVITY	<i>One X = 1 credit etc..</i>

A ADDED VALUE	
Cultural values and/or ancient remains.	Intact mills, stone foundations, stone bridges etc.
Nature protection or recreational area	Nature reserve etc. Frequently used recreational area, for example foot paths, picnic area, signs, or arrangements for fishing or area often used for fishing.
Actions for restoration	Restoration undertaken of migration routes etc.
Occurrence of Interesting species	Interesting fish, birds and plants. For example <i>Astacus astacus</i> , <i>Lampetra planeri</i> , <i>Misgurnus fossilis</i> , <i>Phoxinus phoxinus</i> , <i>Hildenbrandia regularis</i> or <i>Fontinalis</i> .
TOTAL PLUS VALUE	<i>One X = 1 credit etc..</i>

General description and comments

Write a comprehensive description of the stream and note other conditions which might effect C, I, S or A.

Final assessment

	Conservation values			Impact			Sensitivity	Added value	CISA	Blue target class (WG, WE, WS, WU)
	C1	C2	C3	I1	I2	I3				
RESULT										
TOTAL										
ASSESSMENT										

Conservation value:	Low	0–2	Moderate	3–6	High	7–12
Impact:	High	0–2	Moderate	3–6	Low	7–12
Sensitivity:	Low	0	Moderate	1–2	High	3–4
Added value :	Low	0	Moderate	1–2	High	3–4

Actions according to target class

Propose actions needed to improve C, I, S or A.
