

RHS forms over the years (1994-2022)

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Introduction and scope

The RHS was originally designed as part of R&D project in the 90s. The first stable form produced was in 1994. The form was changed in 1995, 1996, 1997 and 2003. As a result, fields, acronyms and underlying data may be different between survey years. This document summarises the change in format and includes the citizen RHS form produced in 2022.

RHS data formats

The main differences between formats are listed in the table below. The 1994 survey format is very different from subsequent one. The flow-types were different and land uses were not assessed at spot-check level. All this resulted in different calculations for the HQA scores and the derivation of an adjusted HQA score that allowed the comparisons between 1994 and subsequent formats.

For the 1994 survey format, only one entry for bank modification was allowed. It is important to note that, although multiple entries for modifications and features were allowed, until the development of a new database online, only 2 entries were allowed for multiple fields. This resulted in some modifications and features missing from the database. Unfortunately, all paper forms have been destroyed so it is not possible to complete the surveys that had multiple entries.

A variation on the 1997 form was also developed for canals and artificial water bodies. It was not included in the table.

Although cRHS does not record all features and sections, some of the data can be later extracted using videos taken by surveyors at spot-checks, photos and 360 walk-over photos.

The 1997 survey forms and manual were translated in French and German (on the RHS website)

Section	1994	1995	1996	1997	2003	cRHS
Predominant channel form	Describes the level of modification of the channel in 6 category (semi-natural to culverted)	Not recorded				Not recorded
Valley form: terraces	Terraced valley form as a specific valley type	Terraces recorded separately				Terraces not recorded
Valley form: distinct flat valley bottom	Not recorded				Recorded	Not recorded
Valley form	Recorded				Not recorded	
Count of riffles, pools, and point bars	Recorded				Not recorded	
Count of artificial features	Culvert, weirs, bridges and outfalls	Bridges are split into road and foot bridges. 'Other' category added	Sluices, revetments and deflectors added. Weirs, bridges, revetments and 'others' are split into Major/Intermediate/Minor categories. Sluices, culverts, outfalls and fords are all major. Deflectors are minor	Weirs and sluices are combined. Revetments are removed. Fords, outfalls and deflectors can be major/intermediate/minor		
Artificial features: is water impounded by dams?	Not recorded	Recorded				
Artificial features: is channel obviously realigned?	Not recorded				Recorded	
Artificial features: is channel obviously over-deepened?	Not recorded				Recorded	
Presence of functioning navigation	Recorded in the field	Recorded using maps in the office				

Section	1994	1995	1996	1997	2003	cRHS
Predominant flow type	Recorded as one of the spot-check flow-types	Not recorded				
Predominant flow sequence	Not recorded		Recorded in section K (channel features)	Not recorded		
Spot-checks: bank modifications	One entry only	Multiple entries allowed but a maximum of two entries were recorded on the database			Multiple entries recorded	Up to 4 entries recorded
Spot-checks: bank features	Multiple entries allowed but a maximum of two entries were recorded on the database				Multiple entries recorded Up to 3 entries recorded on the RHS Toolbox	
Spot-checks: bank features -Natural Berms	Not recorded				Recorded	Not recorded
Spot-checks: bank features -vegetated bedrock and boulders	Not recorded				Recorded	
Spot-checks: channel substrate - Earth	Not recorded				Recorded	
Spot-checks: Flow-type	Torrential whitewater, step-pool cascade, riffle-pool, approximately laminar, static, impounded	Free-fall, chute, broken standing waves, unbroken standing waves, chaotic flow, rippled flow, smooth flow, no perceptible downstream flow, no flow (dry)				Not included
Spot-checks: channel modifications	Multiple entries allowed but a maximum of two entries were recorded on the database					
Spot-checks: channel features	Multiple entries allowed but a maximum of two entries were recorded on the database				Multiple entries recorded Up to 3 entries recorded on RHS Toolbox	
Spot-checks: number of sub-channel	Not recorded				Recorded	Not recorded
Spot-checks: banktop land use	Not recorded	Recorded 5m from banktop (first break in slope where development or agriculture is possible)				
Spot-checks: banktop vegetation structure	Recorded within a surveyor define 'riparian' zone	Recorded within 1m of the banktop (first break in slope where development or agriculture is possible)				

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Spot-checks: channel vegetation types	Submerged vegetation combined	Submerged broad leaved Submerged fine/linear leaved		Submerged broad leaved Submerged fine Submerged linear leaved		
Land use categories - woodland	Broadleaf woodland Coniferous plantation				Broadleaf woodland Broadleaf plantation Coniferous woodland Coniferous plantation	
Land use categories – open water	Not recorded	Open water			Natural open water Artificial open water	
Land use categories – scrub/rough pasture	scrub/rough pasture	Scrub Rough pasture				
Land use categories – Orchard and Tall herbs	Not recorded		Recorded			
Land use categories – Rock and scree	Not recorded			Recorded		
Land use categories – Irrigated land, Parkland and gardens and 'Not visible'	Not recorded				Recorded	
Bank profiles: embankments	Recorded as % length in a separate section	Recorded in bank profiles				
Bank profiles: set-back embankments	Not recorded	Recorded				
Sweep up channel flow features	Waterfall/cascade, torrential flow, laminar flow, static flow	Waterfalls, cascades, step/pool sequence, rapids,riffle-pool sequence, runs, boils glides, marginal deadwater		Same + ponded reach	Free-fall, chute, broken standing waves, unbroken standing waves, chaotic flow, rippled flow, smooth flow, no perceptible downstream flow, no flow (dry) Ponded reach removed	Not recorded

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Sweep up channel features - artificial	Recorded	Not recorded				
Sweep up channel features – Discrete sand and silt deposits	Not recorded			Recorded		
Sweep up channel features – Discrete gravel deposits	Not recorded				Recorded	
Sweep up channel features – additional features					Eroding cliffs Stable cliffs Vegetated bedrock/boulders Unvegetated point bar Vegetated point bar	Eroding cliffs Stable cliffs Vegetated bedrock/boulders
Dimensions	Bankfull height Bank height if different Bankfull width	Banktop height Trashline height Banktop width	Banktop height Is banktop also bankfull? Trashline height Bankfull width			
Special features	None listed			Fringing reed bank Floating mat	Fringing reed bank Floating mat/Quaking bank Waterfall < 5m Natural cascade Very large boulders Sink holes Backwater Floodplain boulder deposits	
Invasive species	Giant Hogweed Himalayan balsam Japanese knotweed Tick box only	Giant Hogweed Himalayan balsam Japanese knotweed Other Present or extensive			Giant Hogweed Himalayan balsam Japanese knotweed Other	Giant Hogweed Himalayan balsam Japanese knotweed Other

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					Present or extensive on bankface and banktop	P or E on bankface and banktop Other and Pennywort P or E in channel
Alders	Not recorded	Diseased alders	Alders and diseased alders			Not recorded
River typing	Recorded	Not recorded				
Overall characteristics	Descriptive sentence	Descriptive sentence, Plants, Major conservation features, Major impacts, Animals	Descriptive sentence, Major impacts, Land management, Animals			Descriptive sentence