



**Canal &
River Trust**

Making life better by water

Environment as Asset

Tom King

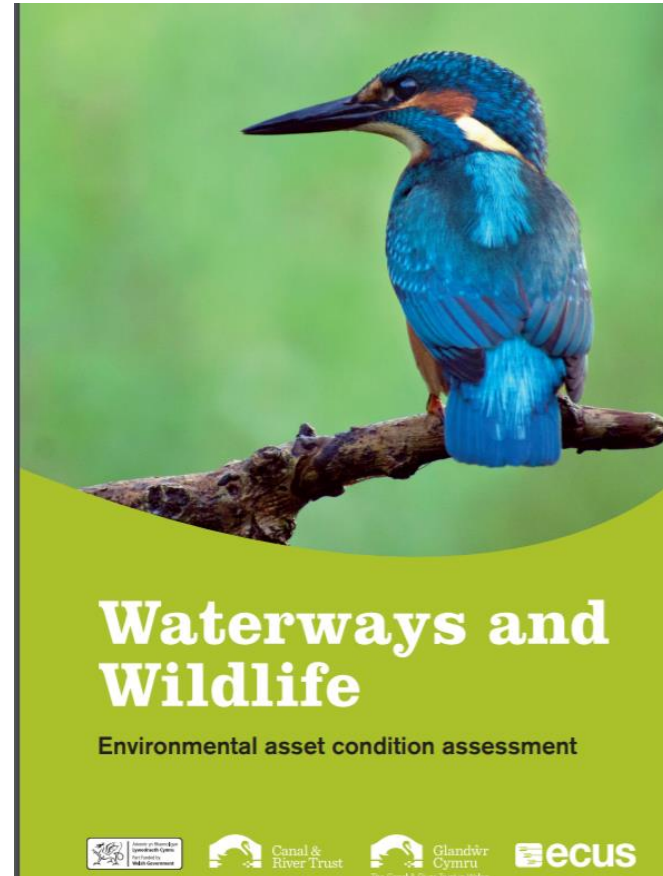
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10 Sept 2018

Environment as Asset - managing our natural environment

- What does Environment as Asset mean?
- Where has this come from
- Why is it important
- Background to the survey
- How the survey works
- Summary

The image is a screenshot of a mobile application titled 'Environment as Asset'. The interface is displayed on a smartphone screen with status bar icons at the top. The app has a green header with a close button (X) and a menu icon (three horizontal lines). The main content area contains several sections with checkboxes and radio buttons. The first section, 'Asset types present', includes checkboxes for 'Open Water', 'Reed Fringe', 'Grassland', 'Boundary Features', and 'Trees and Woodland'. The second section, 'Are moorings present in area', has radio buttons for 'Yes' and 'No'. The third section, 'Is there a hard edge', has radio buttons for 'Towpath', 'Offside', 'Both', and 'Neither'. The fourth section, 'Dominant Adjacent Land Use Offside', has a dropdown menu. A green bar at the bottom of the app interface contains a white checkmark icon.

What does Environment as Asset mean

- The internal name for our drive to record, protect and enhance the important environments on our Waterways;
- Comes from the principle that, along with bridges/locks/weirs, our waterway's environment is also an asset, that many people appreciate and impacts how our waterways are used;
- Based on the models our Engineers use to assess our build assets;
- In line with various scientific and political thinking such as Natural Capital and Ecosystem Services;
- Put simply, the Environment as Asset project is a way of assessing the condition of these key habitats and developing an action plan for improvement.

Where has this come from?

- One of the main reasons people come to visit our canals is for the quiet, green and relaxing environment;
- This nice 'environment' is based on lots of wildlife and people being able to connect with nature;
- We have 2,000 miles of waterways, but don't have a complete picture of their value for the environment, and the benefits the environment provide to our customers and neighbours;



Where has this come from?



- We want to improve the quality of our habitats and have made commitments to do this;

- First step it to know what quality of habitats we have!



- Environment as Asset survey will gives us basic information on key habitats to help us record which stretches of habitat are good and which could be improved;

Where has this come from?

Multiple habitats within a very small area, woodland and scrub; open and flowing water; marginal fringes; grassland and hedgerows all within the space of a few metres:

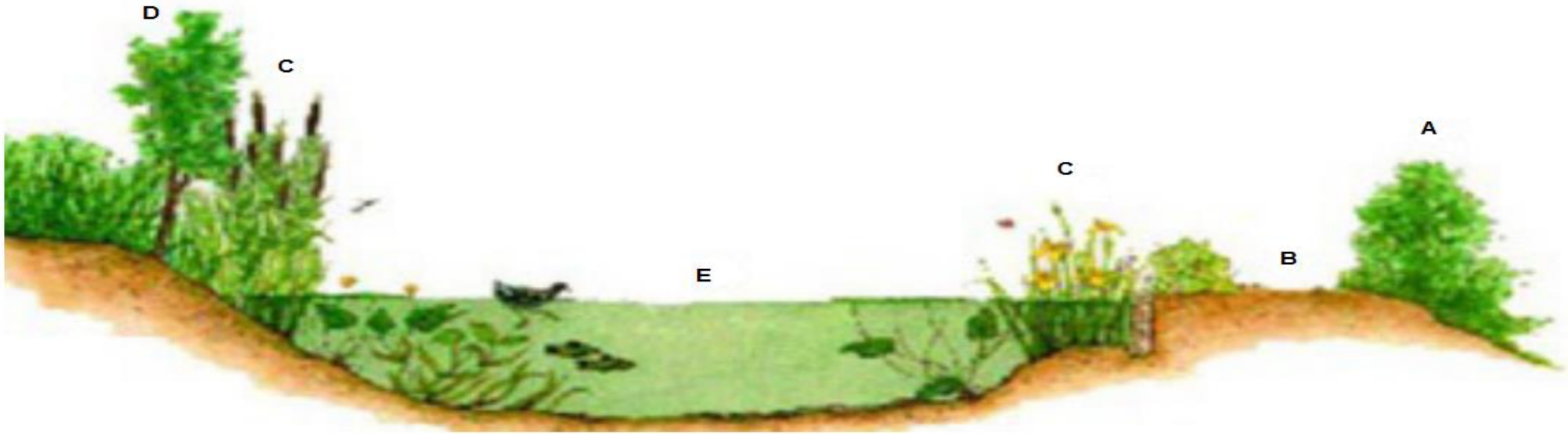


Figure 1: A typical cross-section of a canal. The key habitats are; (A) boundary features, (B) grassland, (C) reed fringe, (D) trees, and (E) open water. You don't need to be able to identify species but there is space to include this information if you would like to.

Why is it important?

- We have a 2,000 mile network that crosses the country;
- Green corridors through urban areas into rural ones, so people and wildlife can move around easily;
- Our network runs through some very deprived areas where access to green spaces are limited, we can prove the welfare benefits green space bring



Why is it important?

- The 'greeness' of our waterways and the ability for people to get away from the urban environment is always a top reason people visit our waterways;

The calm water and singing birds help us to disconnect from our busy lives and create a breathing space where we can take the time to focus on our wellbeing

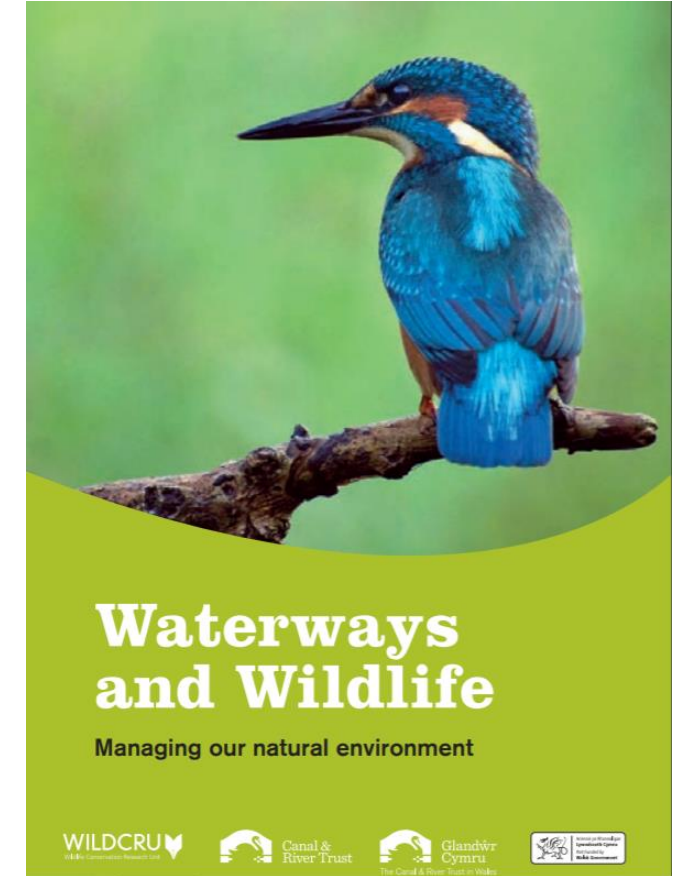
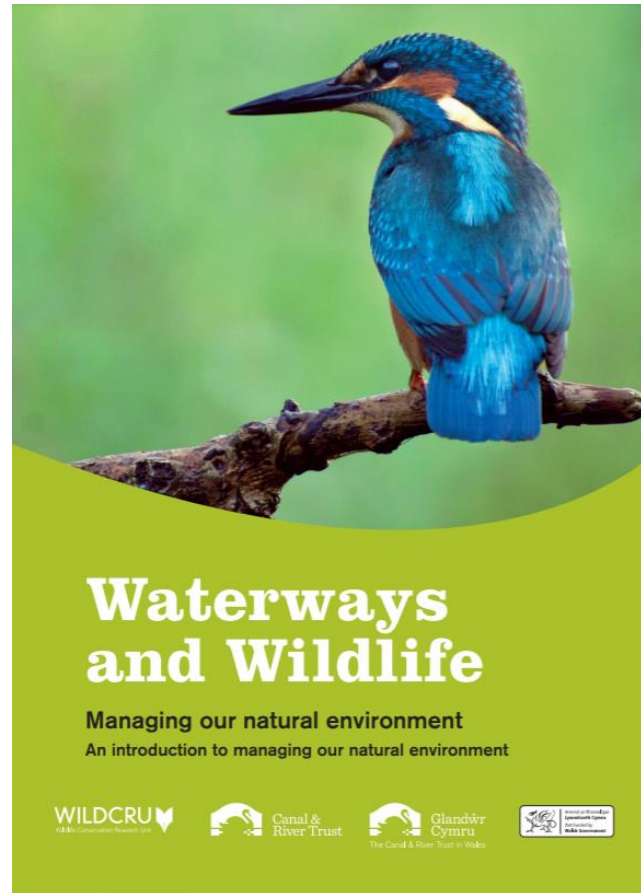
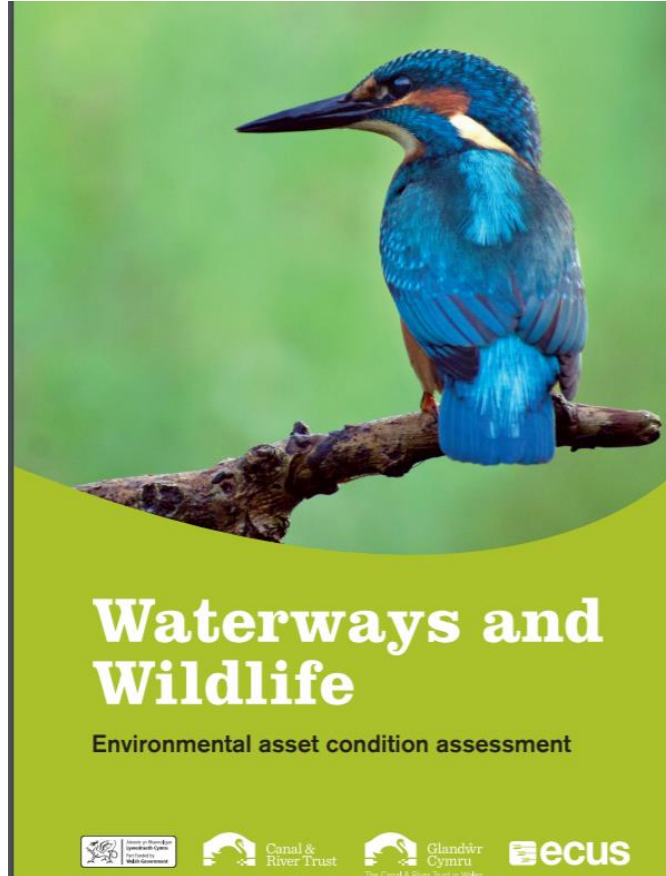
- Understand what benefits and intrinsic value the environmental assets of our waterway network can provide. Better wellbeing for our visitors and neighbours!
- The benefits of our waterways have been found to range between £109k per kilometre per year to over £730k per kilometre per year for the key benefit categories;

Background to the survey

- Pilot on Monmouthshire & Brecon Canal;
- Welsh Government funded the development of the application of this approach to the environmental management on our inland waterways;
- Consultants developed a methodology and undertook the surveys;



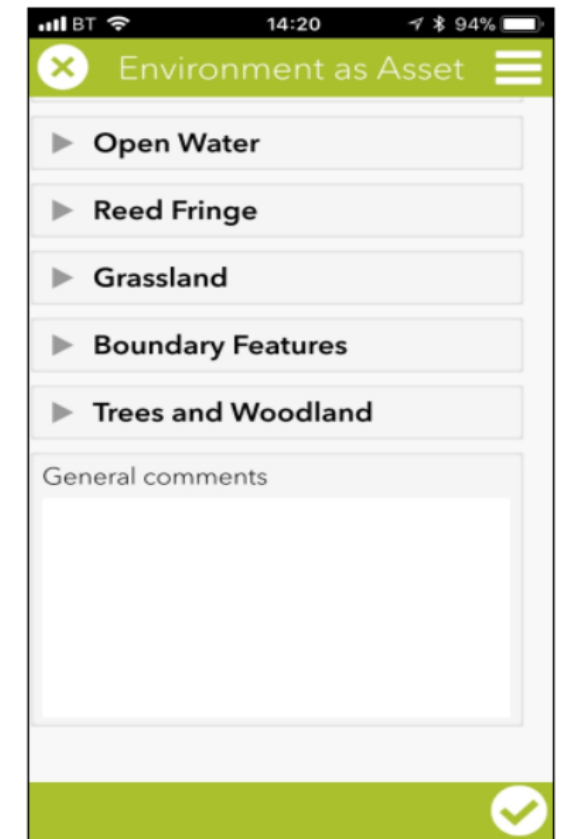
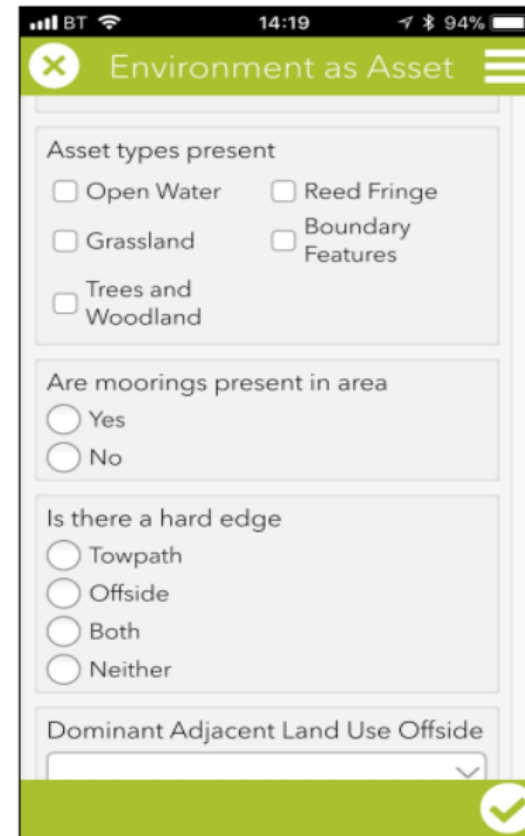
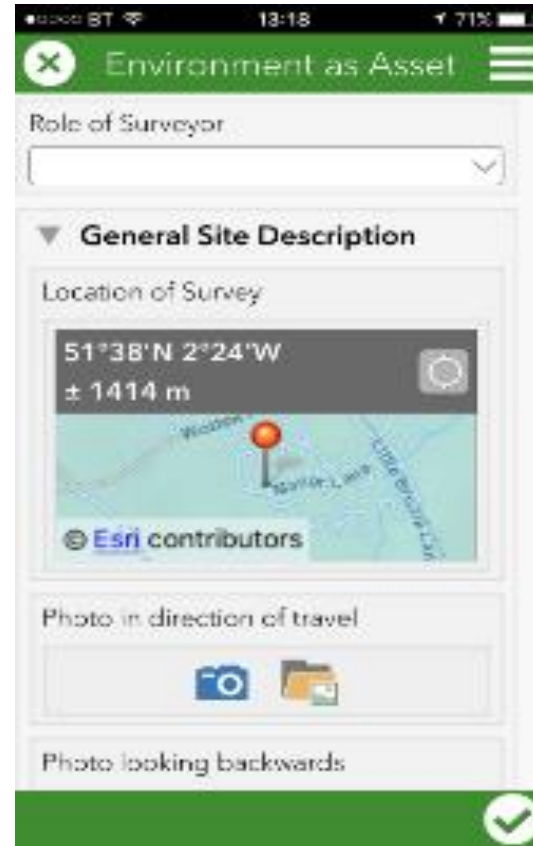
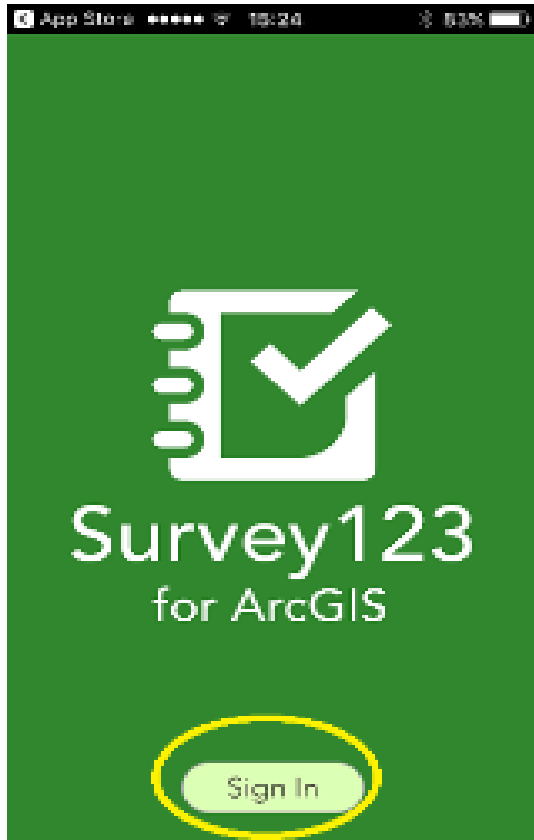
Background to the survey



Background to the survey

- National working group internally;
- Developed consultants survey;
- Pilots nationally – 45km surveyed;
- More development of questions and survey;
- Designing it to be done by volunteers who know little about the environment =, plus guidance!

How the survey works



How the survey works

- Do survey every 100m;
- Series of questions for each habitat;
- Simple tick box or select one answer questions;
- Takes a few minutes to complete each point;
- Can do around 4km a day;

		A	B	C	D	E	
Hedgerow	Continuity	Continuous, no gaps	Occasional gaps, less than 1m		Frequent gaps, more than 1m	Many gaps, or very large gaps (>5m)	
	Structure <i>more of the 'good' ticks = higher score. More of the 'bad' ticks = lower score.</i>	Dense			Thin		
		Wide			Gappy at base		
		Standard trees present			Outgrown		
		Ungraded Tunnelling towpath or growing into towpath Tail					
	Diversity (Having two 'good' scores = A). Please can	Bare earth covers 0-50% under hedge		Abundant bare earth 50-75%	Dominant bare earth >75%		
		Hedge made up of 3 or more 'woody' species		Scrub dominant >75%			
				Grass mown up to hedge			
<i>Use answers from Grassland rear verge question "Diversity" section</i>	<i>Highly diverse grass and plant species (10 or more)</i>	<i>Some mixed grasses and plants (5-9)</i>	<i>Low species diversity (less than 5)</i>				
Connectivity (need surveyor to look left and right)	Good hedgerow connections	Connected to other habitats			No connections to other habitats		

How the survey works

- The answers to the questions go into an excel spreadsheet;
- This then assesses the answers and gives a 'grade';
- Each habitat is graded A-E;
- The answers give us an idea of the 'problem' for each habitat, so a 'fix';
- We will develop an action plan for sections.

		A	B	C	D	E
Hedgerow	Continuity	Continuous, no gaps	Occasional gaps, less than 1m		Frequent gaps, more than 1m	Many gaps, or very large gaps (>5m)
	Structure <i>more of the 'good' ticks = higher score. More of the 'bad' ticks = lower score.</i>	Dense			Thin	
		Wide			Woods Gappy at base	
		Standard trees present			Outgrown	
		<u>Ungraded</u> Tunnelling towpath or growing into towpath Tail				
	Diversity (Having two 'good' scores = A). Please can	Bare earth covers 0-50% under hedge		Abundant bare earth 50-75%	Dominant bare earth >75%	
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	<i>Use answers from Grassland rear verge question "Diversity" section</i>	<i>Highly diverse grass and plant species (10 or more)</i>	<i>Some mixed grasses and plants (5-9)</i>	<i>Low species diversity (less than <u>5.1</u>)</i>		
	Connectivity (need surveyor to look left and right)	Good hedgerow connections	Connected to other habitats		No connections to other habitats	

Summary

- We want to understand the value of our environment more as it is important for our customers;
- We want to make our waterways better for nature and the benefits;
- Easy survey done quickly with the maximum information we can get;
- Done by volunteers and staff;
- Lead to a 10% (at least) improvement in our environment

A screenshot of a mobile application interface titled 'Environment as Asset'. It features a dropdown menu for 'Role of Surveyor', a 'General Site Description' section with a 'Location of Survey' field showing coordinates (51°38'N 2°24'W) and an elevation of ± 1414 m, a map with an orange location pin, and icons for 'Photo in direction of travel' and 'Photo looking backwards'. A green checkmark icon is visible at the bottom right.