

### Appendix 5: Guidance Note on selection of rivers and streams

#### Watercourses

Rivers, their tributaries and the entire catchment are important in maintaining the integrity and continuity of a truly linear habitat system. The smallest stream can have a large impact on the river system and, as such, the whole system could be considered as one integral site. The designation of such linear flowing features is problematic as even the most engineered section of a river can be of importance to its ecological continuity. Some of the criteria for site selection are, therefore, inappropriate in selecting such sites, such as size, and in some cases naturalness.

**Diversity** will be considered an important criterion where one or more of the following applies:

1. The watercourse contains a variety of features typical of its type e.g. riffles, bars, cliffs, braiding with central sand or gravel banks (vegetated or otherwise), islands and glides;
2. The watercourse has a significant amount of surrounding semi-natural habitat e.g. vegetated shallow bays or permanent spill areas, including adjacent willow and/or alder carr;
3. The watercourse contains frequent associated sub-habitats e.g. marginal habitats, damp areas, open springs, flushes, marsh, exposed tree roots, overhanging branches, woody debris;
4. The watercourse has importance for invertebrates, fish mammal and/or bird life.

**Rarity** will be considered an important criterion where one or more of the following applies.

1. The watercourse contains one or more locally important or threatened species or habitat;
2. The watercourse contains one or more nationally important or threatened species or habitat;
3. The watercourse contains one or more internationally important or threatened species or habitat.

**Size** – not applicable

**Naturalness** will be considered an important criterion where the following applies:

1. Resectioning or reinforcement of the bed and banks is localised and not recent. (Very few watercourses have no artificial modification, indeed some water features have been created due to human modification);
2. There are areas of semi-natural habitat associated with the watercourse e.g. marginal swamp, marsh, grassland or woodland;
3. The aquatic communities present have developed or are developing through natural processes post any alterations to the water course.

**Fragility** will be considered an important criterion where one or more or both of the following applies:

1. The survival of the watercourse or its features, or important species it supports, is dependent on continued sensitive management;
2. The watercourse or its features, or important species it supports, is relatively sensitive to human disturbance and/or the adverse effects of neighbouring land-use (e.g. external hydrological change, agricultural pesticides, loss of adjacent semi-natural habitat, eutrophication);
3. Poor management of the watercourse would increase the fragility of other known sites of wildlife importance for which the presence of fresh water is necessary for the life-cycle of key species – e.g. wet grassland with semi-aquatic invertebrates which could not survive on the grassland without the adjacent open water.

**Typicalness** will be considered an important criterion where one or both of the following applies:

1. The watercourse is a good example of its watercourse type. The national, regional or local context should be stated.

**Ecological Position.** Ecological continuity is an intrinsic attribute of a watercourse but will be considered an important criterion where one or more of the following applies:

1. Any artificial modification present does not significantly reduce ecological continuity;
2. The watercourse is linked to other open water or to wetland habitat or is one of a group of watercourses in the area (e.g. stepping stone function);
3. The watercourse is associated with other semi-natural habitat;
4. The watercourse is close to, or part of, or itself forms, a wildlife corridor or other connecting linear habitat.

**Significant Populations** will be considered an important criterion where one or both of the following applies:

1. The watercourse is known to contain a important population, or high proportion, of a particular species occurring in Gloucestershire (or nationally);
2. The watercourse is known to contain a species on the edge of its range;
3. Special habitat criteria for watercourse-dependent species may apply to some rivers – e.g. water vole or white-clawed crayfish habitat – see the relevant section of the main habitat criteria.

**Potential Value** will be considered as an additional criterion where one or more of the following applies:

1. It can be demonstrated that diversity, or any other criterion, can be enhanced so as to improve the watercourse's substantive nature conservation value, and that the improvements can realistically be achieved;
2. If the watercourse was of sufficient value to be selected, but has been damaged, and it is considered to be recoverable;
3. The watercourse is considered to provide ideal habitat for an important species that has been recorded nearby.

**Physical and Visual Access** will be considered a secondary criterion where one or both of the following apply:

1. There is formal access to a series of points long its length by means of a definitive public right of way or visual inspection from a crossing;
2. There is informal access to the watercourse e.g. through unrestricted entranceways and casual footpaths which are obviously well used.

!Note that this could be a disadvantage in some cases

**Educational Value** will be considered an important criterion where one or more of the following applies:

1. The watercourse has existing use as an education resource;
2. The watercourse includes a good range of accessible educational features/types;
3. The watercourse includes transitional habitats.

**Community and Amenity Value** may be considered as a secondary criterion where there is significant evidence of regular use of the watercourse by the public (e.g. signs of informal access, footpaths etc.) and where one or more of the following applies:

1. The watercourse is characteristic of the Gloucestershire Landscape Area within which it is found;
2. The watercourse contributes to local landscape character and appeal;
3. The watercourse has a varied channel with such features as meanders, riffles and pools or islands.

**Geographic Position** will be considered as an important criterion where one or more of the following applies:

1. The watercourse is isolated from other areas of semi-natural habitat or open water;
2. The watercourse is situated within walking distance of residential communities.

**Recorded History** will be considered an important criterion where one or more of the following applies:

1. The recorded history is known for the watercourse;
2. Records for the watercourse extend back to before World War II;
3. Records for the watercourse extend back to before the start of the 20th Century or before the 1st Edition O.S Map.

**Continuity of Land-use** will be considered secondary criterion where one or both of the following applies:

1. The watercourse is known to have been unaltered for a long established period since 1950;
2. The watercourse includes archaeological feature (e.g. mill pond, fish pond, wash pond, mill race and leat).