REF.	ACTIONS	PARTNERS (lead partners in bold)
19.1	**Promote agricultural management that is sustainable and avoids loss of near-natural habitats within the catchment (ongoing).**	**SGRPID** / SNH / SWT / RSPB / FES / FCS / Landowners
19.1.1	Promote the update of environmental measures within the SRDP that encourages positive management of semi natural/riverine habitat.	NERPAC / SGRPID / SAC / NFUS / SRBPA
19.2	**Encourage sustainable forest management that avoids the loss of near-natural habitats and promotes the expansion of riparian woodlands (ongoing).**	**FCS** / **FES** / SNH / SEPA
19.2.1	Promote the update of environmental measures within the SRDP that encourages positive management of semi natural/riverine habitat.	NERPAC / SGRPID / SAC / SRBPA / Forestry Contractors
19.3	**Ensure that there are adequate policies in Local Plans to safeguard river habitats in new developments.**	**ACC** / **AC** / **CNPA** / SNH / SGRPID / SEPA / FES / FCS / Landowners
19.3.1	Ensure proper assessment of development proposals through consultation.	**ACC** / **AC** / **CNPA** / SNH / SEPA
19.3.2	Review plan policies (ongoing).	**AC** / **ACC** / **CNPA**
19.3.3	Ensure these policies are carried through into Council guidelines and strategies	**ACC** / **AC**
19.3.4	Promote and encourage use of Sustainable Drainage Systems (SuDS)	**ACC** / **AC** / SEPA
19.3.5	Ensure proper assessment of development proposals	**ACC** / **AC** / SNH / SEPA
19.3.6	Ensure appropriate Directives are considered in relation to development proposals.	**ACC** / **AC** / SNH
19.4	**Ensure effective conditions are in place where planning permission is given and monitor outcome.**	**ACC** / **AC** / SNH / SEPA
19.4.1	Review protocols to ensure rigorous monitoring and action against infringements (ongoing)	**ACC** / **AC** / SNH / SEPA

Acronyms are listed in the centre of this Action Card

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impacts of changes in landuse

19 DEVELOPMENT & ENGINEERING

OBJECTIVE 19. Prevent adverse impact on riverine habitats and species arising from changes of land use.

BACKGROUND

The catchment of the River Dee has a variety of different land uses. The more significant include agriculture, forestry, moorland managed for game, recreational use and a range of sites managed for conservation. There are however other activities that, although using a smaller percentage of the catchment area, can have significant effects on the aquatic environment. These include housing and industrial development, water abstraction and mineral extraction.

Changes in land use can have wide-ranging implications for water resources, water quality and the conservation of habitats and species dependant on the aquatic environment.

Historically communities have developed along the river corridor as people like to live close to sources of water for a range of reasons particularly as a source of water supply, transportation and to an extent protection. However these days many of our current demands are becoming increasingly incompatible. For example, the demand for new housing within the current settlements often conflicts with the need to protect areas of functioning floodplain. Some of the other areas next to the river may also be important areas for biodiversity.

ISSUES

There are a number of key issues relating to historic or more recent large-scale changes in land use in the Dee Catchment.

- Land management changes in agriculture, forestry or moorland management over the years has had an effect on the water quality of the catchment. The more intensive use of the land particularly next to watercourses has lead to more diffuse pollution and therefore a decline in water quality.
- Infrastructure development, including transport corridors, housing and industrial development particularly on the outskirts of Aberdeen has lead to increased pollution from surface water runoff and where small burns have been culverted has resulted in loss of both bank and instream species and habitat.
- Mineral extraction, although not a significant industry in the Dee catchment can potentially create discharge with a high sediment load either directly or indirectly through dust being washed into watercourses following periods of heavy rain.
- Water abstraction, the boom in housing and industrial development in recent years and the increase in extreme flows particularly low flows levels is a cause for concern. Abstraction at times of low flow can cause damage to fisheries and aquatic habitats by lowering the depth of water available which in turn can affect water temperatures.
- Recreation pressure is affecting the catchment is a number of ways. The increase in both hill walkers and mountain biking is having an effect on the mountain paths in the upper reaches of the catchment, causing erosion that then during periods of wet weather increases scour and therefore sediment pollution into the watercourse. Outdoor toileting is also of increasing concern due to the pollution issues particularly at "honeypots" such as Cambus o May and Linn of Dee.
- Conservation and biodiversity the increase in pressure from many of the above land uses has had an impact on habitats and species within the catchment over many years. The Nature Conservation Act makes it a duty for all agencies to work towards protecting and enhancing our biodiversity and so this is an important consideration when considering any new change in land use particularly for infrastructure developments.

WHO IS INVOLVED?

Aberdeenshire Council

Aberdeen City Council

Cairngorms National Park Authority

Forestry Commission Scotland

Forest Enterprise Scotland

Landowners

Royal Society for the Protection of Birds

Scottish Environment Protection Agency

Scottish Government Rural Payments & Inspections Directorate

Scottish Natural Heritage

Scottish Wildlife Trust

Further copies can be downloaded at www.theriverdee.org. For further information contact the Dee Catchment Officer
c/o The Macaulay Institute, Craigiebuckler, Aberdeen AB15 8QH Telephone: 01224 498200 email: info@theriverdee.org

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EXISTING / RECENT INITIATIVES

- Cairngorms National Park Plan
- Aberdeen City/Aberdeenshire Development Plans
- 3-Dee Vision Project
- North East and Cairngorms Local Biodiversity Action Plans (River and Wetland Plans)
- Rural Development Contracts under Scottish Rural Development Programme (SRDP)
- Scottish Forestry Strategy
- Environmental Impact Asessment regulations for semi-natural habitats
- Prevention of Environmental Pollution from Agricultural Activities (PEPFAA) Code of Good Practice 2005
- PEPFAA DOs and DON'Ts guide
- Foress and Water Guidelines (Forestry Commission)
- Scottish Forestry Grants Scheme conditions

ACTIONS REQUIRED

See Action Pack Annex for information sources

- Promote agricultural management that is sustainable and avoids loss of semi-natural habitats within the catchment from agricultural intensification
- Encourage sustainable forest management that avoids the loss of semi-natural habitats and promotes the expansion of riparian woodlands
- Ensure that there are adequate policies in Local Plans to safeguard river habitats in new developments.
- Ensure effective conditions are in place where planning permission is given and monitor outcome.

LEGISLATION

- Town and Country Planning (Scotland) Act 1997
- Agricultural legislation
- Conservation Regulations
- Nature Conservation Act 2003?
- Water Environment and Water Services Act (2003)
- Forestry Act

GUIDELINES AND INFORMATION

See Action Pack Annex for information sources

- Aberdeen City/Aberdeenshire Development Plans
- Forests and Water Guidelines 4th Edition (Forestry Commission)
- Prevention of Environmental Pollution From Agricultural Activity
- Sewers For Scotland
- National Planning Policy Guidelines (various)
- Scottish Planning Policy guigelines (various)
- 'A Forward Strategy for Scottish Agriculture'

BENEFITS TO PROTECTED SPECIES

The following specially protected species will benefit from the Actions:

- Wych Elm *Ulmus glabra*
- Aspen Hoverfly *Hammerschmidtia ferruginea*
- Otter *Lutra lutra*
- Pipistrelle bat *Pipistrellus pipistrellus*
- Water vole *Arvicola terrestris*
- Snipe *Gallinago gallinago*



RELATED ACTION CARDS

1. Diffuse agricultural pollution
3. Woodland management
4. Road and access track drainage
15. Effects of land management on river flow
20. Lowland wetlands
21. Upland wetlands
22. Flood plains

AC Aberdeenshire Council **ACC** Aberdeen City Council **CNPA** Cairngorms National Park Authority **FCS** Forestry Commission Scotland **FES** Forest Enterprise Scotland **RSPB** Royal Society for the Protection of Birds **SEPA** Scottish Environment Protection Agency **SGRPID** Scottish Government Rural Payments & Inspections Directorate **SNH** Scottish Natural Heritage **SWT** Scottish Wildlife Trust

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