Integrating Cumulative Effects in Water and Spatial Planning

Josh Fothergill Institute of Environmental Management and Assessment (IEMA), and Barbara Carroll (Enfusion) and Jo Murphy (NEAS – Environment Agency)

CEA Origins in the UK
Cumulative Effects Assessment (CEA) in Strategic Environmental Assessment (SEA) in the United Kingdom (UK).
- SEA is required for certain plans in the UK, including spatial (land use) planning and water management planning) as a result of European Directive 2001/42/EC.
- Cumulative effects are specifically identified in the Directive:
  - In Screening = Annex II (2) – when considering the likely effects of a plan consider “The cumulative nature of effects”; and
  - In Assessment = Annex I (f) – information should be included in the Environmental Report on significant environmental effects, including secondary, cumulative, and synergistic effects.

CEA practice in the UK
How well are cumulative effects on the water environment currently considered in SEA?
- Central Government SEA guidance has only 6 pages of advice on CEA as a whole.
- CEA practice is rather basic – tick box approach, often stopping at a plan’s boundaries.
- A lack of integrated water policy has led to other policy areas dominating (e.g. spatial planners have embraced an over-arching consideration of Energy and Climate Change).
- Cumulative effects to the water environment are rarely considered, and when they are flood risk management issues tend to dominate.

The Water Framework Directive
Managing water in an integrated manner and improving the consideration of cumulative effects on water.
- European Directive 2000/60/EC, designed to protect & improve all waters through a set of environmental objectives and by introducing River Basin Management Plans (RBMP).
- River basin planning will lead to 3 important developments for water related CEA:
  - Significant improvement in baseline info, related to the water environment;
  - Water related environmental limits will be established;
  - River basin planning is CEA - it investigates and identifies the cause of complex impacts, in the water environment, and defines actions for improvement.

River Basin Management Plans
A single document for managing water indicating: where we are, current problems, and how to improve it.
- RBMP identify the current status of the water environment, targets to improve it, and actions needed to generate these improvements.
- These actions will be carried out by different sectors (agriculture, transport, spatial planners) and could lead cumulative environmental effects. Therefore SEA was carried out during the production of a RBMP.
• The SEA identified 2 broad types of cumulative effects:
  1. Effects between the actions in the RBMP (Intra-Plan effects); and
  2. Effects between the RBMP and wider plans (Inter-Plan Effects).

• Inter-Plan focussed on four (4) key plans: Spatial, Economic, Flooding, and Water Resources.

**Linking the water environment and spatial planning via CEA**

• The likely cumulative effects of the RBMP (identified by the SEA) were reviewed and discussed with a steering group of key interested parties.

• This has helped to raise the profile of water as a policy issue, particularly:
  o Water resources and growth / housing targets, especially in water scarce areas,
  o Identify areas where partnership working is needed between sectors to reduce impacts on the water environment.

• Opportunities for improvement exist:
  o Consultation on the draft RBMP will raise the profile of the cumulative effects in the water environment with spatial planners,
  o The RBMP will provide significantly more information on the water environment and impacts upon it – improving the baseline for both SEA of spatial plans and EIA of developments.

• However, challenges also need to be overcome:
  o The timing of the RBMP is not synchronised with spatial plans,
  o Spatial planners will need further guidance and training to realise the opportunities presented by the information included in the RBMP.

**Contacts:**

Presenter:
- **Josh Fothergill** ([j.fothergill@iema.net](mailto:j.fothergill@iema.net))
  Senior Environmental Adviser – Institute of Environmental Management and Assessment

Co-authors:
- **Barbara Carroll** ([Barbara.Carroll@enfusion.co.uk](mailto:Barbara.Carroll@enfusion.co.uk))
  Director – Infusion Ltd

- **Jo Murphy** ([Joanne.murphy@environment-agency.gov.uk](mailto:Joanne.murphy@environment-agency.gov.uk))
  National Technical Manager – National Environmental Assessment Service, Environment Agency (England & Wales)