

## SECTION 9: ECOSYSTEM SERVICES

The concept of ecosystem services (ES) emerged in the late 1980s as a structure for defining the direct or indirect benefits provided for people by naturally-functioning ecosystems (Everard, 2012).

The most widely accepted classification system, formulated by the Millennium Ecosystem Assessment (MA) of 2005, groups ES into four primary categories: Supporting, Provisioning, Regulating and Cultural. Their interactions are displayed in Fig 9a below:

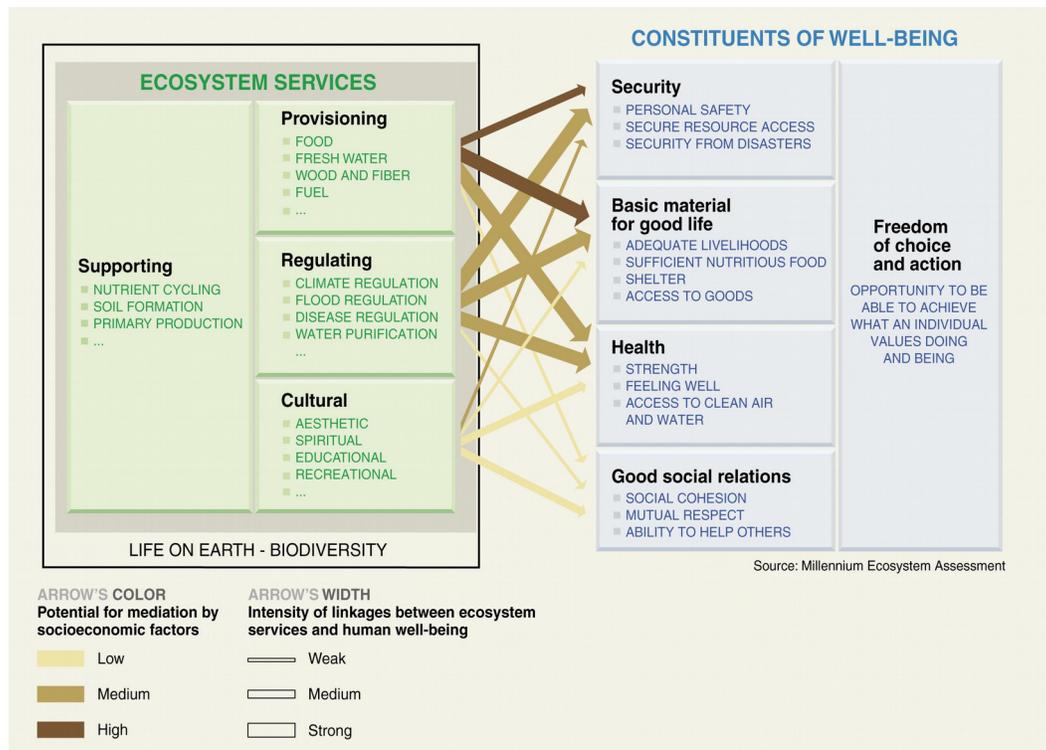


Fig 9a: Ecosystem service benefits as described by the Millennium Ecosystem Assessment (MEA), 2005

Ecosystem service benefits to people can be measured without ascribing a monetary value to them. This is helpful because it is not yet possible to describe all benefits in financial terms, and the methods by which this might be attempted are not yet fully developed (although studies like the UK's National Ecosystem Assessment in 2011 ascribed a wide range of economic values including £1.5bn per year for clean water produced by the UK's inland wetlands, and £300 per person per year in health benefits from living near green space like the Wandle corridor).

As part of the Ecosystem Approach, outlined in Section 1.3, the Wandle Catchment Plan assessed the current ecosystem services provided by the River Wandle and its catchment in order to identify:

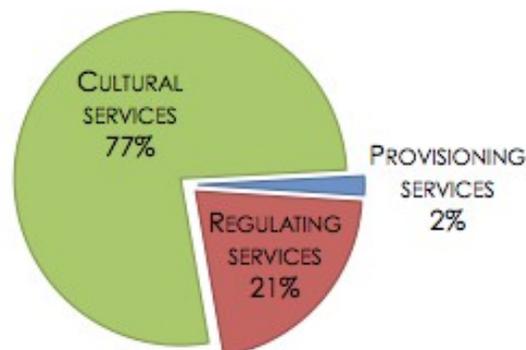
- The values people place on the ecosystem service benefits which they derive from the riverine landscape. This has helped to define GEP for the Wandle: a river that has been heavily modified for societal benefit needs to keep societal interests and priorities integrated with any ecologically driven management approach.

- How ecosystem service benefits may be affected by the achievement of GEP. This will help to guide river restoration activities, in order to achieve the best results with multiple benefits wherever possible.

In order to meet these objectives, an MSc research project (Moore, 2012) was undertaken in summer 2012 at the same time as the Wandle Catchment Plan's community consultations. This research incorporated data from the consultation and a previous unpublished assessment of existing ecosystem services derived from the Wandle, which was undertaken by the EA and the Wandle Trust in 2011 (Everard et al., unpublished data). The MSc research project made several observations and recommendations which have been incorporated into the development of this Catchment Plan. The information will also be shared with other relevant strategies and plans in the Wandle area, and is appended to this Catchment Plan in Appendix G.

The values of ES can be based on qualitative information, such as public opinion: this was the approach used during this Catchment Plan's community consultations. It is important to note that such values may change through time with varying circumstances, eg increased publicity for a particular issue, or demographic changes in a local community.

Comments made during the community consultations were coded according to the 4 ecosystem service themes described in Figure 9a above. Local people currently value the river and its catchment for a variety of reasons. However the majority of values, accounting for more than 75% of all the responses, could be ascribed to cultural services such as recreational, educational, cultural heritage and aesthetic values (Figure 9b below).



*Fig 9b: Relative importance of ecosystem service categories as expressed by stakeholders in the Wandle Catchment Plan community consultations (Moore, 2012)*

The absence of supporting services (such as nutrient cycling and soil formation) being noted by the local community is likely to be due to the fact that these are less noticeable services: thus they are less likely to be cited by people, unless they have a strong ecological background. The unpublished ecosystem services assessment on the Wandle identifies that the current provision of supporting services is severely depleted due to pollution and urbanisation but also that, with the right restoration, there is the potential to restore some of these services. Additionally, participants in the community consultation did recognise that the cultural services they valued so highly are dependent on provisioning and regulating services, and that restoring and maintaining these will also enhance cultural services.

Of the values relating to cultural services, recreation (including angling) and tourism are currently the most highly valued benefits in the catchment, and are expected to increase notably in importance in the future. Likewise, social relations (which help foster social and environmental stewardship and community cohesion) are seen as a great benefit at present. Yet this service is also perceived to be the most degraded and was cited as a priority for improvement. This could be achieved through the creation of high quality, multi-functional landscapes, which can

encourage positive neighbourhood interaction and an interest in and ownership of the local environment.

The Wandle has a strong industrial and cultural heritage, which is reflected in its status as the third most highly valued cultural service benefit. Cultural heritage engenders a strong sense of place. Education about the heritage of the Wandle is valued highly by local people, and this value is expected to increase in the future. However, stakeholders recognise that this will be achievable only if existing knowledge about local history and ecology is nurtured and passed on.

Overall, the greatest values local people place upon the provisioning and regulating services that the river and its landscape provide are for flood risk management, water purification and regulation, landscape and biodiversity features. Stakeholders recognise that ecological processes and environmental health underpin many of the other benefits they enjoy. Concerns centre on the extent of negative human impact on water quality (from pollution, litter and road runoff), the lack of education and awareness about these and other issues, and the lack of cohesive policy concerning management of the catchment. For the future, stakeholders' priorities focused on maintaining ongoing work to enhance biodiversity and landscape, improving access to the river, championing better education and policy, and, crucially, improving water quality.

Notably, the Catchment Plan's community consultation results (social science analysis) complement the ecological evidence (natural science analysis) that the River Wandle currently fails GEP on a number of biological and physico-chemical quality elements. This demonstrates three important points:

- Far wider benefits can be derived from rehabilitation of the natural riverine environment
- The concept of ecosystem services can be an effective communication tool for linking ecosystem health to societal goals
- Achieving GEP for the River Wandle can be made more meaningful for local people by discussing it in terms of the added benefits they will gain, rather than sticking to traditional technical terms

People in the Wandle catchment perceive GEP to be delivered through a multi-strand approach. Provisioning, regulating and cultural services must all be rehabilitated and enhanced and supporting services restored. Likewise, management needs to take into account societal values and interests so that more sustainable policy can be realised now, and for the long term.

These pieces of research align strongly with work carried out by other analysts, most notably in the fields of access to blue green spaces such as those provided by the Wandle (Alcock, 2014) and the social and community benefits of angling (Substance, 2012).

### 9.1: Wider benefits of ecosystem services

Ecosystem services provided by the Wandle are closely interrelated to many themes in this Catchment Plan.

These relationships are summarised in the sequence of tables below, which are intended to demonstrate the multiple benefits of delivering the Catchment Plan's objectives – including how these objectives will contribute to fulfilling many other strategic plans.

### 9.2: Water quantity

<b>Objective</b>	<b>1: Water Quantity</b>
<b>Projects contributing to delivery of this objective</b>	A3, B12, B14, B17, C2
<b>Mitigation Measures being addressed</b>	9, 10, 7
<b>Numbers of volunteers involved</b>	To be calculated, but volunteers are already identified as participating in 1 project delivering this Objective.
<b>Skills: number of people trained and themes</b>	Numbers of people to be calculated but themes include: native species planting and wetland creation.

<b>Catchment Plan objectives overlap with a broad range of other strategies and plans under the following themes</b> (including, but not limited to, the examples given below)	
<b>WFD Statutory Legislation</b> (eg River Basin Management Planning)	✓
<b>Biodiversity</b> (eg Biodiversity 2020, Mayor's London Plan)	✓
<b>Water abstraction and resource management</b> (eg Environment Agency's Catchment Abstraction Management Strategy, Local Authorities' Surface Water Management Plans, Water Companies' Water Resource Management Plans)	✓
<b>Health and Wellbeing</b> (eg Mayor's London Plan, LB Wandsworth's Health & Wellbeing Board)	✓
<b>Planning and Green Infrastructure</b> (eg All London Green Grid, Local Authorities' Local Plans – formerly LDFs)	✓
<b>Economic Growth</b> (eg Mayor's London Plan)	✓

### 9.3: Water quality

<b>Objective</b>	<b>2: Water Quality</b>
<b>Projects contributing to delivery of this objective</b>	A1, A2, A4, B3, B12, C1, C2
<b>Mitigation Measures being addressed</b>	9, 10

<b>Numbers of volunteers involved</b>	To be calculated, but volunteers are already identified as participating in 3 projects delivering this Objective.
<b>Skills: number of people trained and themes</b>	Numbers of people to be calculated but themes include: pollution monitoring and reporting, and riverfly assessments.

<b>Service Category</b>	<b>Ecosystem Service</b>	<b>Examples of the benefits provided for people</b>
Regulating Services	<ul style="list-style-type: none"> <li>• Water purification</li> <li>• Hazard regulation</li>   <li>• Water regulation</li>   <li>• Pest regulation</li>   <li>• Climate regulation</li> <li>• Air quality regulation</li> </ul>	<ul style="list-style-type: none"> <li>• Removal of pollutants, waste treatment</li> <li>• Soil retention helping sediment stabilisation and erosion protection</li> <li>• Reduced surface runoff volume / speed helping flood risk management: increased flood storage capacity, decrease in localised flood events</li> <li>• Control of invasive non-native species, pests and disease,</li> <li>• Reduced urban temperatures</li> <li>• Clean air</li> </ul>
Provisioning Services	<ul style="list-style-type: none"> <li>• Provision of fresh water</li> </ul>	<ul style="list-style-type: none"> <li>• Domestic and industrial use</li> <li>• Energy generation</li> </ul>
Cultural Services	<ul style="list-style-type: none"> <li>• Cultural heritage</li> <li>• Education opportunities</li>   <li>• Social relations</li>   <li>• Recreational activities</li> </ul>	<ul style="list-style-type: none"> <li>• Aesthetic appeal, artistic and spiritual value</li> <li>• Increased awareness of the natural environment and social factors such as industrial heritage and buildings</li> <li>• Neighbourhood cohesion and environmental stewardship</li> <li>• Physical and mental well-being, tourism, sport (fishing, paddling, wildlife watching etc)</li> </ul>

<b>Catchment Plan objectives overlap with a broad range of other strategies and plans under the following themes</b> (including, but not limited to, the examples given below)	
<b>WFD Statutory Legislation</b> (eg River Basin Management Planning)	✓
<b>Biodiversity</b> (eg Biodiversity 2020, Mayor's London Plan)	✓
<b>Water abstraction and resource management</b> (eg Environment Agency's Catchment Abstraction Management Strategy, Local Authorities' Surface Water Management Plans, Water Companies' Water Resource Management Plans)	✓
<b>Health and Wellbeing</b> (eg Mayor's London Plan, LB Wandsworth's Health & Wellbeing Board)	✓
<b>Planning and Green Infrastructure</b> (eg All London Green Grid, Local Authorities' Local Plans – formerly LDFs)	✓
<b>Economic Growth</b> (eg Mayor's London Plan)	✓

**9.4: Dynamics of flow**

<b>Objective</b>	<b>3: Dynamics of flow</b>
<b>Projects contributing to delivery of this objective</b>	A4, B1, B3, B10/C9, B13, B14, B17, B18, B19, B20, B21, B28, B30, B31, B33, C1, C4, C5, C6
<b>Mitigation Measures being addressed</b>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
<b>Numbers of volunteers involved</b>	To be calculated, but volunteers are already identified as participating in 13 projects delivering this Objective.
<b>Skills: number of people trained and themes</b>	Numbers of people to be calculated but themes include: habitat suitability assessments, mink monitoring, riparian habitat management, scrub clearance and tree pruning, native species planting and wetland creation, and installation of flow deflectors.

<b>Service Category</b>	<b>Ecosystem Service</b>	<b>Examples of the benefits provided for people</b>
Regulating Services	<ul style="list-style-type: none"> <li>• Water purification</li> <li>• Hazard regulation</li>   <li>• Water regulation</li>   <li>• Pest regulation</li>   <li>• Climate regulation</li> <li>• Air quality regulation</li> </ul>	<ul style="list-style-type: none"> <li>• Removal of pollutants, waste treatment</li> <li>• Soil retention helping sediment stabilisation and erosion protection</li> <li>• Reduced surface runoff volume / speed helping flood risk management: increased flood storage capacity, decrease in localised flood events</li> <li>• Control of invasive non-native species, pests and disease,</li> <li>• Reduced urban temperatures</li> <li>• Clean air</li> </ul>
Provisioning Services	<ul style="list-style-type: none"> <li>• Provision of fresh water</li> </ul>	<ul style="list-style-type: none"> <li>• Domestic and industrial use</li> <li>• Energy generation</li> </ul>
Cultural Services	<ul style="list-style-type: none"> <li>• Cultural heritage</li> <li>• Education opportunities</li>   <li>• Social relations</li>   <li>• Recreational activities</li> </ul>	<ul style="list-style-type: none"> <li>• Aesthetic appeal, artistic and spiritual value</li> <li>• Increased awareness of the natural environment and social factors such as industrial heritage and buildings</li> <li>• Neighbourhood cohesion and environmental stewardship</li> <li>• Physical and mental well-being, tourism, sport (fishing, paddling, wildlife watching etc)</li> </ul>

<b>Catchment Plan objectives overlap with a broad range of other strategies and plans under the following themes</b> (including, but not limited to, the examples given below)	
<b>WFD Statutory Legislation</b> (eg River Basin Management Planning)	✓
<b>Biodiversity</b> (eg Biodiversity 2020, Mayor's London Plan)	✓
<b>Water abstraction and resource management</b>	✓

(eg Environment Agency's Catchment Abstraction Management Strategy, Local Authorities' Surface Water Management Plans, Water Companies' Water Resource Management Plans)	
<b>Health and Wellbeing</b> (eg Mayor's London Plan, LB Wandsworth's Health & Wellbeing Board)	✓
<b>Planning and Green Infrastructure</b> (eg All London Green Grid, Local Authorities' Local Plans – formerly LDFs)	✓
<b>Economic Growth</b> (eg Mayor's London Plan)	✓

### 9.5: Fish and fisheries

<b>Objective</b>	<b>4: Fish and fisheries</b>
<b>Projects contributing to delivery of this objective</b>	A1, B1, B3, B10/C9, B11/C10, B13, B14, B20, B21, B22, B23, B24, B25, B26, B27, B28, B29, B30, B31, B33, C1, C3, C4, C5, C6
<b>Mitigation Measures being addressed</b>	1, 2, 3, 4, 5, 6, 8
<b>Numbers of volunteers involved</b>	To be calculated, but volunteers are already identified as participating in 19 projects delivering this Objective.
<b>Skills: number of people trained and themes</b>	Numbers of people to be calculated but themes include: invasive non-native species management, riparian habitat management, wetland creation and native species planting, scrub clearance and tree pruning, habitat suitability surveying, mink monitoring, riverfly assessment, basic weir notching and removal, eel pass and easement installation and monitoring, installation of flow deflectors.

<b>Service Category</b>	<b>Ecosystem Service</b>	<b>Examples of the benefits provided for people</b>
Regulating Services	<ul style="list-style-type: none"> <li>Water purification</li> <li>Hazard regulation</li> <li>Water regulation</li> <li>Pest regulation</li> <li>Climate regulation</li> <li>Air quality regulation</li> </ul>	<ul style="list-style-type: none"> <li>Removal of pollutants, waste treatment</li> <li>Soil retention helping sediment stabilisation and erosion protection</li> <li>Reduced surface runoff volume / speed helping flood risk management: increased flood storage capacity, decrease in localised flood events</li> <li>Control of invasive non-native species, pests and disease,</li> <li>Reduced urban temperatures</li> <li>Clean air</li> </ul>
Provisioning Services	<ul style="list-style-type: none"> <li>Provision of fresh water</li> </ul>	<ul style="list-style-type: none"> <li>Domestic and industrial use</li> <li>Energy generation</li> </ul>

Cultural Services	<ul style="list-style-type: none"> <li>• Cultural heritage</li> <li>• Education opportunities</li> <li>• Social relations</li> <li>• Recreational activities</li> </ul>	<ul style="list-style-type: none"> <li>• Aesthetic appeal, artistic and spiritual value</li> <li>• Increased awareness of the natural environment and social factors such as industrial heritage and buildings</li> <li>• Neighbourhood cohesion and environmental stewardship</li> <li>• Physical and mental well-being, tourism, sport (fishing, paddling, wildlife watching etc)</li> </ul>
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<b>Catchment Plan objectives overlap with a broad range of other strategies and plans under the following themes</b> (including, but not limited to, the examples given below)	
<b>WFD Statutory Legislation</b> (eg River Basin Management Planning)	✓
<b>Biodiversity</b> (eg Biodiversity 2020, Mayor's London Plan)	✓
<b>Water abstraction and resource management</b> (eg Environment Agency's Catchment Abstraction Management Strategy, Local Authorities' Surface Water Management Plans, Water Companies' Water Resource Management Plans)	✓
<b>Health and Wellbeing</b> (eg Mayor's London Plan, LB Wandsworth's Health & Wellbeing Board)	✓
<b>Planning and Green Infrastructure</b> (eg All London Green Grid, Local Authorities' Local Plans – formerly LDFs)	✓
<b>Economic Growth</b> (eg Mayor's London Plan)	✓

## 9.6: Macrophytes

<b>Objective</b>	<b>5: Macrophytes, trees and wider river habitat</b>
<b>Projects contributing to delivery of this objective</b>	A1, A2, A4, A6, A7, A8, B1, B2, B4, B5, B6, B10/C9, B11/C10, B12, B14, B15, B16, B19, B20, B21, B28, B30, B31, B32, B33, B34, C1, C2, C4, C5, C6
<b>Mitigation Measures being addressed</b>	1, 2, 3, 4, 6, 8, 9, 10
<b>Numbers of volunteers involved</b>	To be calculated, but volunteers are already identified as participating in 35 projects delivering this Objective.
<b>Skills: number of people trained and themes</b>	Numbers of people to be calculated but themes include: invasive non-native species management, riparian habitat management, wetland creation and native species planting, scrub clearance and tree pruning, eel pass installation and monitoring, habitat suitability surveying, mink monitoring, basic weir notching and removal.

<b>Service Category</b>	<b>Ecosystem Service</b>	<b>Examples of the benefits provided for people</b>
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Regulating Services	<ul style="list-style-type: none"> <li>• Water purification</li> <li>• Hazard regulation</li>   <li>• Water regulation</li>   <li>• Pest regulation</li>   <li>• Climate regulation</li> <li>• Air quality regulation</li> </ul>	<ul style="list-style-type: none"> <li>• Removal of pollutants, waste treatment</li> <li>• Soil retention helping sediment stabilisation and erosion protection</li> <li>• Reduced surface runoff volume / speed helping flood risk management: increased flood storage capacity, decrease in localised flood events</li> <li>• Control of invasive non-native species, pests and disease,</li> <li>• Reduced urban temperatures</li> <li>• Clean air</li> </ul>
Provisioning Services	<ul style="list-style-type: none"> <li>• Provision of fresh water</li> </ul>	<ul style="list-style-type: none"> <li>• Domestic and industrial use</li> <li>• Energy generation</li> </ul>
Cultural Services	<ul style="list-style-type: none"> <li>• Cultural heritage</li> <li>• Education opportunities</li>   <li>• Social relations</li>   <li>• Recreational activities</li> </ul>	<ul style="list-style-type: none"> <li>• Aesthetic appeal, artistic and spiritual value</li> <li>• Increased awareness of the natural environment and social factors such as industrial heritage and buildings</li> <li>• Neighbourhood cohesion and environmental stewardship</li> <li>• Physical and mental well-being, tourism, sport (fishing, paddling, wildlife watching etc)</li> </ul>

<b>Catchment Plan objectives overlap with a broad range of other strategies and plans under the following themes</b> (including, but not limited to, the examples given below)	
<b>WFD Statutory Legislation</b> (eg River Basin Management Planning)	✓
<b>Biodiversity</b> (eg Biodiversity 2020, Mayor's London Plan)	✓
<b>Water abstraction and resource management</b> (eg Environment Agency's Catchment Abstraction Management Strategy, Local Authorities' Surface Water Management Plans, Water Companies' Water Resource Management Plans)	✓
<b>Health and Wellbeing</b> (eg Mayor's London Plan, LB Wandsworth's Health & Wellbeing Board)	✓
<b>Planning and Green Infrastructure</b> (eg All London Green Grid, Local Authorities' Local Plans – formerly LDFs)	✓
<b>Economic Growth</b> (eg Mayor's London Plan)	✓

**9.7: Macroinvertebrates**

<b>Objective</b>	<b>6: Invertebrates</b>
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<b>Projects contributing to delivery of this objective</b>	A1, A2, A4, A6, A7, A8, B1, B2, B4, B5, B6, B10/C9, B11/C10, B12, B14, B15, B16, B19, B20, B21, B28, B30, B31, B33, B34, C1, C2, C4, C5, C6
<b>Mitigation Measures being addressed</b>	1, 2, 3, 6, 8, 9, 10
<b>Numbers of volunteers involved</b>	To be calculated, but volunteers are already identified as participating in 25 projects delivering this Objective.
<b>Skills: number of people trained and themes</b>	Numbers of people to be calculated but themes include: invasive non-native species management, riparian habitat management, wetland creation and native species planting, scrub clearance and tree pruning, habitat suitability surveying, mink monitoring, riverfly assessment, basic weir notching and removal.

<b>Service Category</b>	<b>Ecosystem Service</b>	<b>Examples of the benefits provided for people</b>
Regulating Services	<ul style="list-style-type: none"> <li>• Water purification</li> <li>• Hazard regulation</li>   <li>• Water regulation</li>   <li>• Pest regulation</li>   <li>• Climate regulation</li> <li>• Air quality regulation</li> </ul>	<ul style="list-style-type: none"> <li>• Removal of pollutants, waste treatment</li> <li>• Soil retention helping sediment stabilisation and erosion protection</li> <li>• Reduced surface runoff volume / speed helping flood risk management: increased flood storage capacity, decrease in localised flood events</li> <li>• Control of invasive non-native species, pests and disease,</li> <li>• Reduced urban temperatures</li> <li>• Clean air</li> </ul>
Provisioning Services	<ul style="list-style-type: none"> <li>• Provision of fresh water</li> </ul>	<ul style="list-style-type: none"> <li>• Domestic and industrial use</li> <li>• Energy generation</li> </ul>
Cultural Services	<ul style="list-style-type: none"> <li>• Cultural heritage</li> <li>• Education opportunities</li>   <li>• Social relations</li>   <li>• Recreational activities</li> </ul>	<ul style="list-style-type: none"> <li>• Aesthetic appeal, artistic and spiritual value</li> <li>• Increased awareness of the natural environment and social factors such as industrial heritage and buildings</li> <li>• Neighbourhood cohesion and environmental stewardship</li> <li>• Physical and mental well-being, tourism, sport (fishing, paddling, wildlife watching etc)</li> </ul>

<b>Catchment Plan objectives overlap with a broad range of other strategies and plans under the following themes</b> (including, but not limited to, the examples given below)	
<b>WFD Statutory Legislation</b> (eg River Basin Management Planning)	✓
<b>Biodiversity</b> (eg Biodiversity 2020, Mayor's London Plan)	✓
<b>Water abstraction and resource management</b> (eg Environment Agency's Catchment Abstraction Management Strategy, Local Authorities' Surface Water Management Plans, Water Companies' Water Resource	✓

Management Plans)	
<b>Health and Wellbeing</b> (eg Mayor's London Plan, LB Wandsworth's Health & Wellbeing Board)	✓
<b>Planning and Green Infrastructure</b> (eg All London Green Grid, Local Authorities' Local Plans – formerly LDFs)	✓
<b>Economic Growth</b> (eg Mayor's London Plan)	✓

### 9.8: Phytobenthos

<b>Objective</b>	<b>7: Phytobenthos</b>
<b>Projects contributing to delivery of this objective</b>	A2, A4, B12, B34, C1, C2
<b>Mitigation Measures being addressed</b>	3, 6, 9
<b>Numbers of volunteers involved</b>	To be calculated, but volunteers are already identified as participating in 4 projects delivering this Objective.
<b>Skills: number of people trained and themes</b>	Numbers of people to be calculated but themes include: invasive non-native species management, riparian habitat management and native species planting and pollution monitoring and reporting

<b>Service Category</b>	<b>Ecosystem Service</b>	<b>Examples of the benefits provided for people</b>
Regulating Services	<ul style="list-style-type: none"> <li>• Water purification</li> <li>• Hazard regulation</li> <li>• Water regulation</li> <li>• Pest regulation</li> <li>• Climate regulation</li> <li>• Air quality regulation</li> </ul>	<ul style="list-style-type: none"> <li>• Removal of pollutants, waste treatment</li> <li>• Soil retention helping sediment stabilisation and erosion protection</li> <li>• Reduced surface runoff volume / speed helping flood risk management: increased flood storage capacity, decrease in localised flood events</li> <li>• Control of invasive non-native species, pests and disease,</li> <li>• Reduced urban temperatures</li> <li>• Clean air</li> </ul>
Provisioning Services	<ul style="list-style-type: none"> <li>• Provision of fresh water</li> </ul>	<ul style="list-style-type: none"> <li>• Domestic and industrial use</li> <li>• Energy generation</li> </ul>

Cultural Services	<ul style="list-style-type: none"> <li>• Cultural heritage</li> <li>• Education opportunities</li> <li>• Social relations</li> <li>• Recreational activities</li> </ul>	<ul style="list-style-type: none"> <li>• Aesthetic appeal, artistic and spiritual value</li> <li>• Increased awareness of the natural environment and social factors such as industrial heritage and buildings</li> <li>• Neighbourhood cohesion and environmental stewardship</li> <li>• Physical and mental well-being, tourism, sport (fishing, paddling, wildlife watching etc)</li> </ul>
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<b>Catchment Plan objectives overlap with a broad range of other strategies and plans under the following themes</b> (including, but not limited to, the examples given below)	
<b>WFD Statutory Legislation</b> (eg River Basin Management Planning)	✓
<b>Biodiversity</b> (eg Biodiversity 2020, Mayor's London Plan)	✓
<b>Water abstraction and resource management</b> (eg Environment Agency's Catchment Abstraction Management Strategy, Local Authorities' Surface Water Management Plans, Water Companies' Water Resource Management Plans)	✓
<b>Health and Wellbeing</b> (eg Mayor's London Plan, LB Wandsworth's Health & Wellbeing Board)	✓
<b>Planning and Green Infrastructure</b> (eg All London Green Grid, Local Authorities' Local Plans – formerly LDFs)	✓
<b>Economic Growth</b> (eg Mayor's London Plan)	✓

Further reading:

Appendix G

Alcock (2014) [\*Longitudinal Effects on Mental Health of Moving to Greener and Less Green Urban Areas\*](#)

Substance (2012) *Fishing for Answers: The Final Report of the Social and Community Benefits of Angling Project*

Moore (2012) *What are the ecosystem service benefits of achieving Good Ecological Potential for the River Wandle?*