



# VALUING NATURE

## Lightning Talks

Chair: Ece Ozdemiroglu, eftec

# Lightning Talks

**Valuing landscape condition**

*Lisa Norton, Centre for Ecology & Hydrology*

**SENCE maps to communicate nature's value**

*Katie Medcalf, Environment Systems*

**BESS-EO: Earth Observation for Biodiversity and Ecosystem Services**

*Beth Cole, University of Leicester*

**Framework to target nature based solutions aimed at engaging people with nature**

*Liz O'Brien, Forest Research*

**Demonstrating the multiple benefits of wetlands for nature and society**

*Hannah Robson, Wildfowl & Wetlands Trust*

**Manchester's Great Outdoors: a Green & Blue Infrastructure Strategy**

*David Barlow, Manchester City Council*

**Wellbeing valuation and the University of Manchester Living Campus**

*Kelly Watson, University of Manchester*

## Valuing Landscape Condition

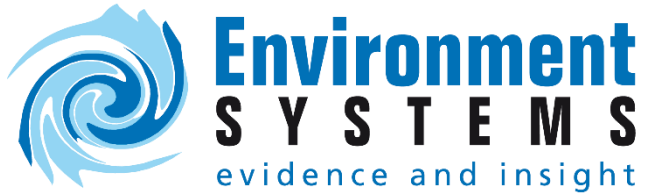
- Who cares about it?
- From what perspective?

- Who is responsible for its governance and management?
- What are appropriate spatial and temporal scales?

- Balancing perspectives
- Taking action

### Decision Support Tools

- Scenario testing
- Engagement
- Management decisions



# SENCE – Spatial Evidence for Natural Evaluation

Dr. Katie Medcalf CEnv

@envsystems



Spatial Evidence for Natural Capital Evaluation

# Framework to target nature based solutions aimed at engaging people with nature

Liz O'Brien

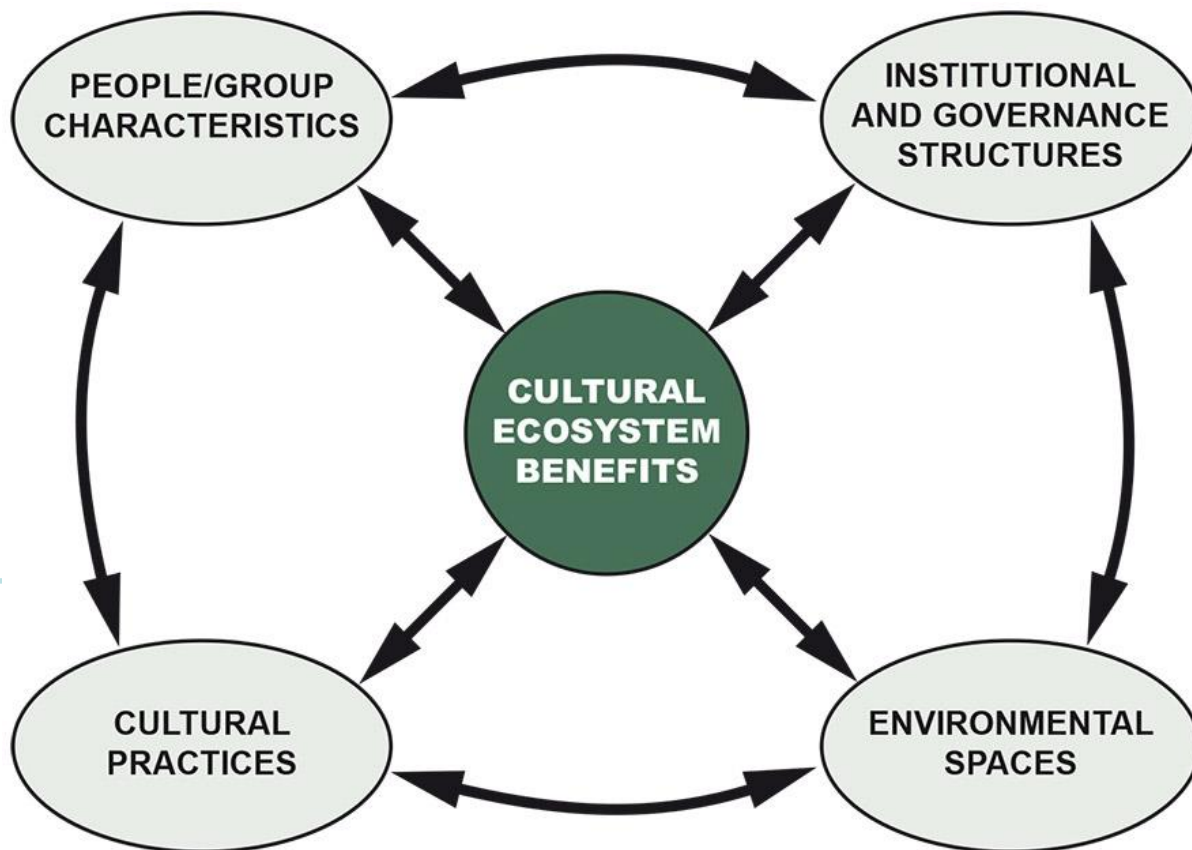
Forest Research – Social and Economic Research Group,  
United Kingdom

Valuing Nature Network Conference, October 2016





•The figure presents a non-linear framework detailing key factors that enable, mediate, or restrict the realisation of cultural benefits from woodlands. This can be applied to research case studies to describe how various factors combine in the 'co-production' of cultural benefits.



# Pakistani Women's Group

**The people:** Ethnic minority group, low income, aged 16-44, 10 women, 2 children. Lack of cultural norm to visit woods, confidence issues

**The space:** National Forest site in England, 154 ha of woodland. Facilities – trails, children's play area, cycle hire, café, toilets

**Governance:** Facilitated access, mini-bus transport to site, guided walk, focus group to understand needs and barriers

**Practices:** Walking, viewing, accessing children's play area

**Benefits:** Familiarisation with site, fun and enjoyment, gaining confidence, socialising, fresh air

*Interviewer- would you get a bus (to site)?  
'I think if I had somebody else with me for support'. (Young Pakistani woman)*

*'I think lacking in confidence is a big thing, people who have come from abroad or Asian ladies haven't got the confidence. It is hard for them to go places if they don't know anybody'.  
(Translator)*



## Conclusions

- Multi-layered and strong governance models are a dominant feature of co-production of benefits for under-represented groups
- Facilitated access (including transport to a site and led activity on site) can be critical in enabling groups to access an environmental space and start to become more familiar with it – important for future use
- Importance of partnerships – environment sector working with other sectors (health, social care, education) to understand audiences and work together to create opportunities
- All the key categories (environmental space, governance, people characteristics, practices) combine in different ways to produce the necessary conditions for co-production of benefits



# GREEN EXERCISE

LINKING NATURE, HEALTH AND WELL-BEING



Edited by Jo Barton, Rachel Bragg, Carly Wood and Jules Pretty

earthscan from Routledge

Please visit our website to find out more about our work

[www.forestresearch.gov.uk/peopleandtrees](http://www.forestresearch.gov.uk/peopleandtrees)

Forestry Commission



Research Report

Trees, people and the built environment

Proceedings of the Urban Trees Research Conference 13–14 April 2011

Institute of Chartered Foresters

Nov 2014 Briefing Note

### We have stopped moving

Tackling physical inactivity - a role for the Public Forest Estate in England?

Forests are very highly valued by the public in England, as the consultation in 2011 that proposed selling off the Public Forest Estate (PFE) highlighted. The widespread outcry to the consultation showed that people value forests and access to them for many diverse reasons (O'Brien and Morris, 2013). Thousands commented on the importance of having a PFE and how the management of this resource by Forest Enterprise England (FEE) afforded everyone with welcoming sites and good facilities that provide opportunities for all ages. This briefing note highlights the importance of the PFE in England and the contribution it can make to tackling the national crisis of physical inactivity. The scale of this problem is enormous and is a national priority that needs to be addressed, in part, by providing many attractive locations and spaces that are suitable for, and can help in, encouraging physical activity. Inactivity is the fourth greatest risk factor for poor health in England. It contributes to almost 1 in 10 premature deaths: equal to smoking (PHE, 2014b). It is a greater cause of death in the United Kingdom (UK) than in comparable countries such as the United States, Netherlands or France.

The evidence outlined in this briefing note draws on research in forests but also greenspace and green infrastructure in which trees are often an important or key component. We conclude that the PFE in England is extremely versatile and has the potential to contribute to cost-effective solutions for the health sector targeted at preventing ill health and also in recovery and treatment programmes. It is uniquely placed to replicate and provide opportunities for 'industrial-scale growth' of successful initiatives.

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### A marvellous opportunity for children to learn

A participatory evaluation of Forest School in England and Wales

Dr O'Brien and Richard Murray

July 2014 Briefing Note

### Innovative NHS Greenspace in Scotland

Green Exercise Partnership

This briefing note is based on interviews with a small number of Directors of Public Health and senior staff with responsibilities for planning and policy, estate and sustainable management in NHS Scotland in 2013. The research was undertaken to better understand the drivers and priorities faced by the interviewees and where NHS greenspace might contribute to meeting current health priorities. The work was commissioned by the Green Exercise Partnership (GEP) which comprises NHS Scotland, Forestry Commission Scotland and Scottish Natural Heritage to support the NHS greenspace demonstration programme being co-ordinated by the GEP. The briefing note also draws on GEP papers and on evaluative evidence from existing demonstration projects that have been running since 2010. While NHS greenspace was not considered core business for the NHS Scotland staff interviewed it was viewed extremely positively, contributing to a range of policies including health, well-being and biodiversity. The interviews illustrated that there is potential for greenspace design to be stipulated as an essential requirement for retrofitting existing healthcare facilities and in the creation of new facilities. This would be in line with the NHS ethos and approach over much of its history and help meet important social, environmental and economic benefits. There are exciting opportunities to use the NHS estate far more effectively to promote better health outcomes for patients, staff, visitors and the wider community.

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Kjell Nilsson, Marcus Sangster, Christos Gallis, Terry Hartig, Sjerp de Vries, Klaus Seeland, Jasper Schipperijn, Editors

### Forests, Trees and Human Health

Springer

# The Wildfowl and Wetlands Trust

*Hannah Robson*

Peter Scott / Nenes



Flight of the swans



Great Crane Project





# The multiple benefits of wetlands

## Innovative solutions

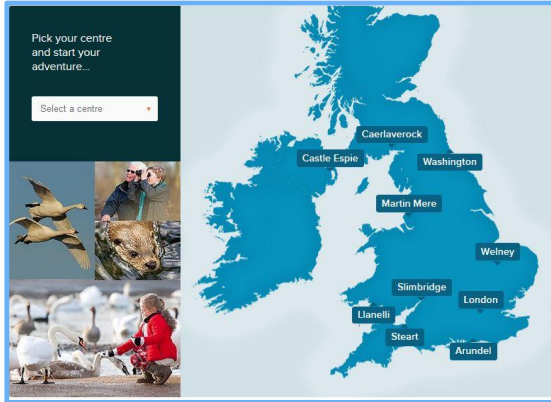
- ✓ Flood attenuation
- ✓ Water quality
- ✓ Livelihoods
- ✓ Habitat
- ✓ 'Sense of place'

### Conserving wetlands

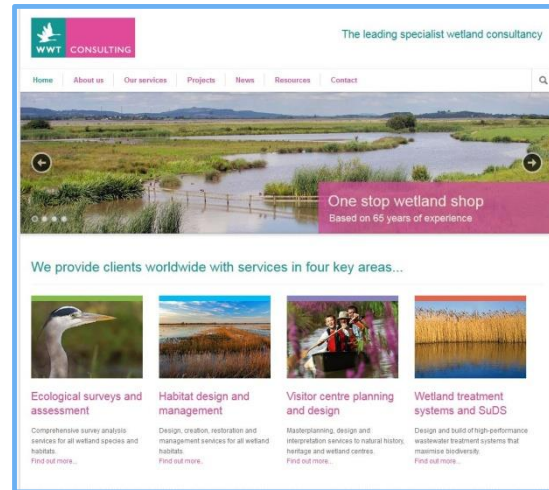


# WWT working wetlands

## WWT centres



## WWT consultancy



## Nature based solutions

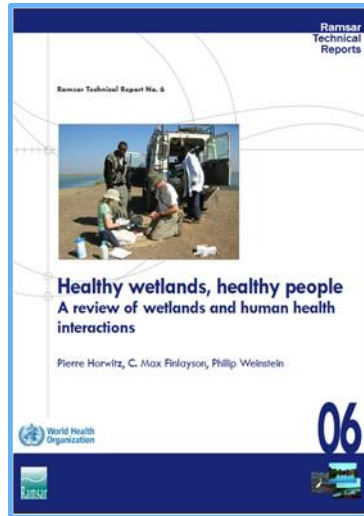


# WWT wetland research

## Wetland monitoring



## Health and wellbeing



## Qualitative research





# WWT current projects

Transforming lives and landscapes:  
community action for the Salt Hill Stream in Slough



MANCHESTER  
1824

The University of Manchester

# Wellbeing valuation and the University of Manchester Living Campus

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Kelly Watson

Research Associate

University of Manchester

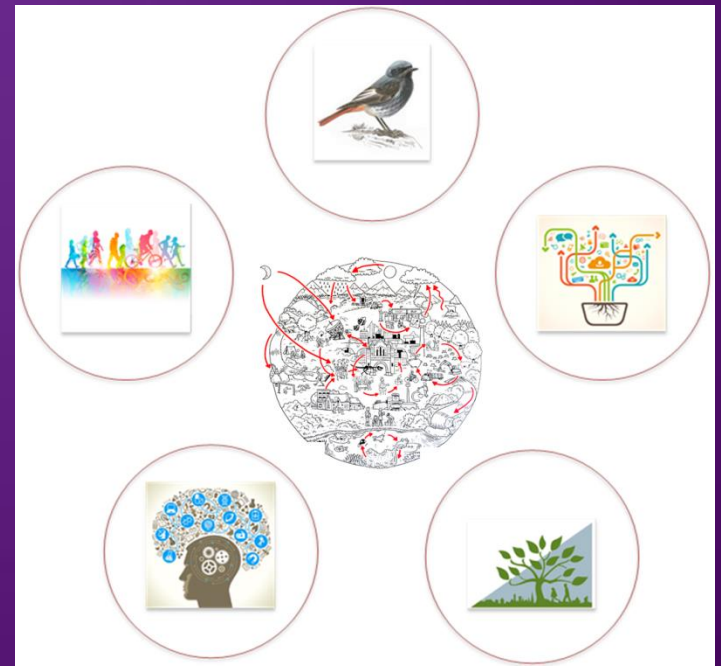
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# Campus Masterplan

- £1 billion 10 year plan 2012-2022
- World-class single campus for students and staff





# Living Campus plan

A living campus...

- which is distinctive, with a strong sense of place
- to learn, work, enjoy, reflect and live in
- where we work alongside nature and nature works alongside us



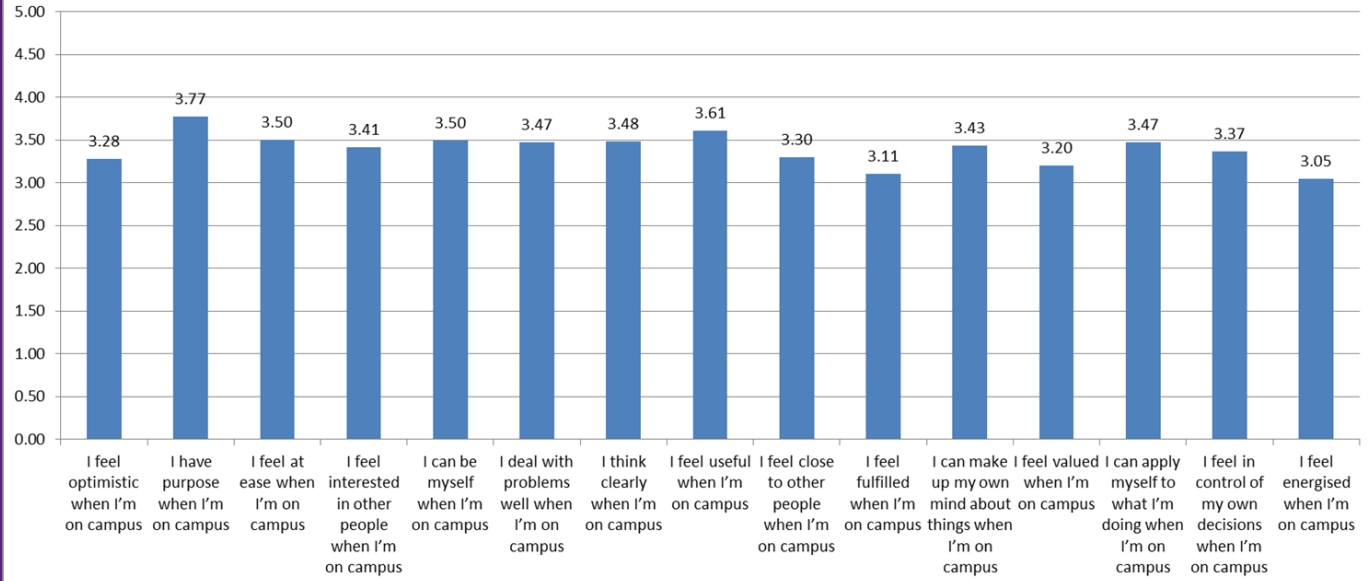
## Outcome measures

- Wellbeing impacts on staff and student groups
- Newly developed scale
- Items based on 5 psychological components
- Baseline data collected summer 2016

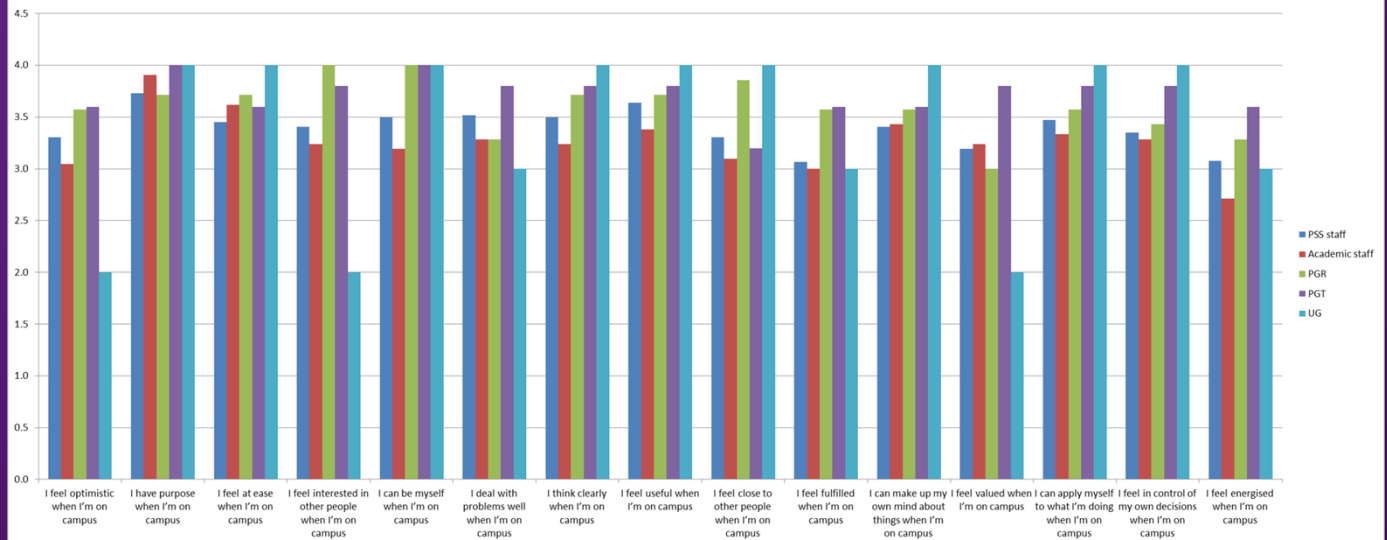
STATEMENTS	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I feel optimistic when I'm on campus	1	2	3	4	5
I have purpose when I'm on campus	1	2	3	4	5
I feel at ease when I'm on campus	1	2	3	4	5
I feel interested in other people when I'm on campus	1	2	3	4	5
I can be myself when I'm on campus	1	2	3	4	5
I deal with problems well when I'm on campus	1	2	3	4	5
I think clearly when I'm on campus	1	2	3	4	5
I feel useful when I'm on campus	1	2	3	4	5
I feel close to other people when I'm on campus	1	2	3	4	5
I feel fulfilled when I'm on campus	1	2	3	4	5
I can make up my own mind about things when I'm on campus	1	2	3	4	5
I feel valued when I'm on campus	1	2	3	4	5
I can apply myself to what I'm doing when I'm on campus	1	2	3	4	5
I feel in control of my own decisions when I'm on campus	1	2	3	4	5
I feel energised when I'm on campus	1	2	3	4	5



Average wellbeing score by item

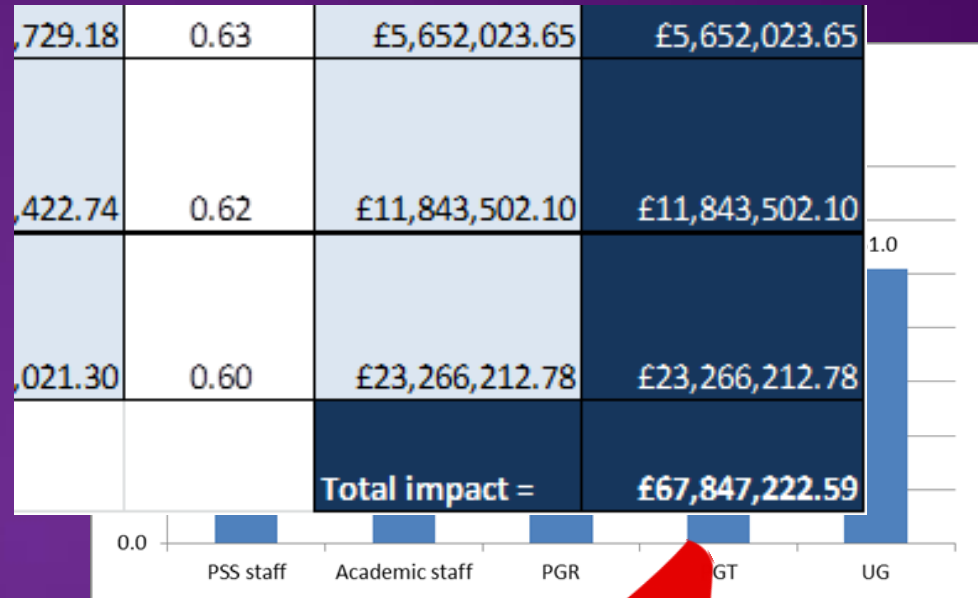


Average wellbeing score by item and group



# Wellbeing valuation

- Using Social Return on Investment (SROI)



Group	Total population at UoM	Average hours spent on campus per week	Working weeks per year	Financial proxy description	Proxy	Annual value produced	Wellbeing score (out of 75)	Wellbeing score (as a %)	Deadweight proportion	Annual value produced minus deadweight	Attribution proportion	Annual value produced minus deadweight and attribution	Impact per year
PSS staff	4855	35.19	48	Value of relief from depression or anxiety is £36,766 p.a. (Source: Measuring the Social Impact of Community Investment: A Guide to Using the Wellbeing Valuation Approach, 2014, HACT), or £4.20 p.h., adjusted for average number of hours spent on campus per year	£7,089.29	£34,418,506.01	50.81	0.68	0.32	£23,317,172.00	0.58	£13,547,276.94	£13,547,276.94
Academic staff	6490	35.03	48		£7,056.05	£45,793,765.39	47.79	0.64	0.36	£29,177,170.52	0.46	£13,538,207.12	£13,538,207.12
PGR	3555	17.43	48		£3,510.60	£12,480,179.42	54.00	0.72	0.28	£8,980,729.18	0.63	£5,652,023.65	£5,652,023.65
PGT	8310	17.12	31		£3,089.69	£25,675,299.39	55.80	0.74	0.26	£19,100,422.74	0.62	£11,843,502.10	£11,843,502.10
UG	26725	16.40	31		£2,133.77	£57,025,031.32	51.00	0.68	0.32	£38,770,021.30	0.60	£23,266,212.78	£23,266,212.78
<b>Total impact =</b>												<b>£67,847,222.59</b>	

# Wellbeing valuation at UoM

- Long term monitoring of LC plan
- Staff and student wellbeing scores
- ROI data to understand the value of green infrastructure on campus

