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SPECIAL ISSUE ARTICLE

Catching the tide: Reversing legal trends to find collective and long-term solutions that value the natural world

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Email: c.t.reid@dundee.ac.uk**Abstract**

The social and economic trends that have contributed to the current climate and biodiversity crises have been created by and reflected in the law in many ways. Looking primarily at experience in the UK, it can be seen that much that is deeply embedded in the law needs to change to enable a more sustainable future. In particular, we have seen a move to greater individualism when we need to adopt more collective solutions, we have seen an emphasis on short-term priorities when we need to take a longer-term view and we have seen a focus on economic and commercial value when we need to value more highly the natural world. The past trends in the evolution of the law must be reversed, requiring consideration across many legal areas. Examples of past evolution are identified to show how the law encourages unsustainable ways of working and obstructs, or fails to enable and incentivise, improvement, before more recent positive developments are discussed to illustrate how legal structures can be recast to support a new way of living based on collective and long-term approaches and a partnership with nature. Ensuring a sustainable future requires a break from many inherited legal structures.

1 | INTRODUCTION

It is widely accepted that the world today is facing both climate (IPCC, 2022) and biodiversity (Almond et al., 2020) crises which together threaten the survival of the world as we know it. These crises are largely the result of human activity over past centuries that has led to an over-exploitation of natural resources and the degradation of the natural environment in many ways. This harmful impact on the world around us has often been not the product of conscious choice, but rather the consequence of long-term social and economic trends, especially in the western, industrialised world, which have led to other priorities taking precedence

over nurturing the biosphere that we depend on for survival. Too often society has operated on an individualised basis, disconnected from nature and ignoring our shared dependence on Earth's natural resources and systems. This has to change if we are to build a better future (UNEP, 2019).

The law has had and will have a crucial part to play here. In the past the law has both shaped and reflected the ultimately self-destructive approach to the world we have followed, fixing patterns of behaviour from which it is hard to escape. Now that we need to reset our approach, again the law has a role, driving and shaping the new direction for society and removing the obstacles to change that our past attitudes and behaviour

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have created. The aim of this paper is to take a broad sweep over various areas of law over a prolonged period to highlight how the law has embodied the unhealthy attitudes of the past but now must (and is starting to) explore ways of building legal frameworks that will enable and encourage a more sustainable future. The changes we need to achieve require not just the introduction of specific new laws but a reworking of much that is unconsciously but deeply embedded in all areas of law. The focus and examples here are from my own experience in the United Kingdom, and although many of the details are jurisdiction-specific, especially in relation to land law, most of the trends apply to the position across the developed western world and wherever its legal systems have been exported.

This paper represents a personal, selective and greatly simplified overview, jumping across time and jurisdictions to present a view of the 'big picture' and ignoring nuance to the extent that some may say that it is at times presenting a false image or caricature. Yet the hope is that this approach is useful in highlighting how much is embedded in the legal rules we have inherited and what must change. Central to its argument is that, although the changes brought many benefits at the time, as the modern law evolved it developed in line with what we now can see as being a destructive tide. This tide must be reversed and new currents developed if the damaging errors of the past (often mis-steps rather than conscious decisions) are to be repaired. The key trends that have to be reversed are:

- The move to greater individualism, when we need to adopt more collective solutions;
- The emphasis on short-term priorities, when we need to take a longer-term view;
- The focus on economic and commercial value (ignoring natural capital and damage to the ecosystem), when we need to value more highly the natural world.

Each of these trends reached their peak in the mid-twentieth century but still cast a long shadow, even as we start to see encouraging signs of new thinking being applied. The challenge today is to make sure that the tide really is turning and to develop a pervasive new model that discovers fresh, or revitalises old, legal structures that can serve our sustainable future.

2 | THE HISTORICAL TIDES

The development of the law to prioritise individualism, short-term goals and economic value over other interests can be illustrated in many ways. This section starts by noting how all of these are apparent in relation to land law before presenting some other examples where these different strands are obvious. In all cases the examples could be qualified in some ways and the clock

Policy Implications

- Securing a sustainable future requires changes in current legal structures that embody an unsustainable way of living.
- Key trends in the past evolution of the law need to be reversed.
 - We have seen a move to greater individualism when we need to adopt more collective solutions.
 - We have seen an emphasis on short-term priorities when we need to take a longer-term view.
 - We have seen a focus on economic and commercial value when we need to value more highly the natural world.
- Recent reforms in various areas in the UK offer some examples of positive development, but more must be done.

has been stopped to show a negative picture, without noting the more positive developments that can be seen in recent years.

2.1 | Land law

The history of land law is a large and complicated subject, where even a 'short simple book' (Simpson, 1986 p. v) reveals a complex picture, and one where evolution has not always run smoothly or consistently. Yet the general trend in the common law world has been towards enabling a piece of land to be treated by its owner as a distinct commercial asset, disposable at the hands of its current holder and free from restrictions imposed for the benefit of others except in clearly defined and limited circumstances, as demonstrated by the limited categories of easements and servitudes that can exist (Law Commission, 2008, Parts 1 & 2; Scottish Law Commission, 1998, Parts 1 & 2). During the debates on the great reforms to English land law in the early 1920s, one MP even lauded the idea of land being 'as marketable as socks and shirts' (Wedgwood, 1922). Historically the position was very different. Landholding was part of a network of wider relationships, with rights and obligations in many directions, a long way from what we understand as ownership today

In the early feudal system land was not owned by an individual but temporarily made available by the Crown to enable services to be provided. Eventually the relationship changed and continued evolving until by the sixteenth century in England one can see 'the transition from the mediaeval conception of land as the basis of political functions and obligations to the

modern view of it as an income-yielding investment. Landholding tends, in short, to become commercialised' (Tawney, 1912, pp. 188–189). A similar tide flowed in Scotland, with particular impact in the Highlands, where the holding of clan territory was transformed from a relationship based on kinship and mutual obligations to one of ownership in the hands of the clan chief with the expectation that 'land should produce a revenue ... like any other capital asset and that it should be allocated, not as a token of kinship, as a reward for allegiance or as a means to maintain a following, but in response to the operation of competitive bidding' (Creegan, 1969, p.118; Hunter, 1976).

The freeing of land from encumbrances to make it a capital asset disposable by the current holder has many aspects. Some, such as the elimination of entails and settlements in land are of relevance here mainly as a sign of priority being placed on short-term and financial considerations over others (long-term arrangements are not necessarily more sustainable). Other aspects are also relevant to the relationship with the natural world. This applies to the gradual erosion of the rights of commoners through enclosures and other changes, since a common feature of commoners' rights is that the scale of them is linked to the capacity of the land (as discussed in a modern consideration of commons and their potential role in environmental governance, Rodgers et al., 2011). The terms on which access is provided to cattlegates, stunted pastures and common grazings limit the amount of grazing to what the land can support and the right to timber by way of estovers was limited to meeting certain immediate needs, preventing unlimited commercial exploitation. The loss of the commons therefore entails the loss of a means for securing long-term sustainable use. As such, commoners' rights might present a picture at odds with Hardin's *Tragedy of the commons*, where it is argued that the lack of individual property rights in common pool resources (such as shared grazings or fish in the sea) leads to harmful over-exploitation which could be avoided if there were property rights that led to owners taking more care of 'their' assets (Hardin, 1968). Instead, they offer a means of supporting the more positive view of the sustainable management of common pool resources put forward by Ostrom (1990) who argues that in contrast to Hardin's thesis there are many successful examples of sustainable management of resources held in common.

2.2 | Lack of a collective approach

Maine's (1861, p. 170) broad statement that 'the movement of the progressive societies has hitherto been a movement from Status to Contract' can be contested, but it is undeniable that modern society operates largely on an individual and atomised basis, with contractual connections playing a key role. Relationships

are largely based on contractual mechanisms that link individuals on a bilateral basis, where in theory individuals have the freedom to negotiate and decide the terms on which they deal with others, rather than through more collective obligations (although not even contract theorists recommend trying to negotiate individual terms when at the front of queue to buy tickets at a busy railway station!). It is contracts which bind people together in many aspects of their lives, contracts which are usually fairly short-term in nature – at most usually no longer than a single human lifetime (the blink of an eye in ecosystem terms) and subject to termination and change. Placing so much reliance of contracts has the effect of limiting our 'toolkit', so that when collective needs are to be met the tendency is either to look at private enterprise operating on a contractual basis, or to rely on public authorities to meet those needs, rather than to see collective solutions emerging. The past communal mechanisms for providing the physical or social infrastructure to meet life's challenges continue to be eroded.

In legal terms, when shared facilities need to be created or cared for, mechanisms for shared responsibility do exist, but these are limited and are not our first port of call when collective needs are identified. Much responsibility is passed on to public bodies in terms of providing infrastructure (or at least arranging for it to be provided by privatised service providers) or left wholly to the private sector. There are no convenient means for a group of local residents to come together to arrange for the provision, supply and maintenance of electric car-charging points in their street. In the distant past mechanisms emerged for sharing the cost of maintaining facilities seen as essential for the community. An example is the historic obligation in some areas on local landowners to contribute to the maintenance of the parish church, an essential element of the community's infrastructure in a truly Christian society; such chancel repair obligations can still survive and cause disputes in modern times (Aston Cantlow case, 2003). No equivalent legal mechanisms are emerging for new responsibilities, with a preference instead for contractual arrangements. Even where collective arrangements constituted through a bundle of individual agreements are given extra weight, this is limited; the scope for enduring covenants that bind all the owners of related land is restricted both in content and in when mutual 'schemes of development' will be recognised, with no indication that this might be expanded to deal with emerging social needs (Law Commission, 2008).

The individualised approach, as well as the blinkered focus on economic values discussed further below, is also strongly shown in the workings of competition law. The choice of the individual consumer is given priority over other factors even where the wider interest may suffer. The damaging effects of this were shown in the 'bus wars' of the 1980s when the deregulation of bus

services in the UK led to competition for the profitable urban routes with high demand resulting in an overprovision of buses trying to use the same stops and hence congestion and pollution in city centres (Farrington & McKenzie, 1987; Nash, 1993). There were even fears that steps towards providing an integrated transport service linking buses, trains and ferries – a long-standing goal of national transport policies – could be held to be anti-competitive if this involved co-ordinating timetables between transport modes when the same companies held stakes in the different service providers (Reid, 2011). The dominance of individual choice over other concerns is also shown by the limited scope allowed for other interests in the key legislation. For example, the exemptions under section 9 of the Competition Act 1998 focus on consumer benefits, not wider benefits in terms of the environment or sustainability (and similarly under article 101(3) of the Treaty on the Functioning of the European Union).

2.3 | Lack of a long-term view

Large-scale environmental degradation is usually a slow progress, involving a cumulation of impacts from many different activities which may not be readily appreciated (Richardson, 2017). It is possible to point to specific mining developments, pollution sources or industrial disasters that have a notable effect (Minnerop & Otto, 2020; Stuart-Smith et al., 2021), but the global climate and biodiversity crises are much more the product of centuries of human activity, accelerating in recent decades, that has polluted air and water, used land in ways that diminish biodiversity and over-exploited natural resources. The solutions similarly take a long time, but it is short-term considerations that have traditionally dominated our actions. Long-term targets and plans are now a feature of environmental law (discussed below) but political thinking has often been shaped by more immediate, fluctuating concerns.

The short-term focus is shown in many ways. As noted above, enduring obligations on land have become increasingly restricted and buildings are often constructed with intended lifespans measured in a couple of decades. It is only exceptional bodies such as Oxbridge colleges that still think on extended timescales, as shown by the disappointment of Gonville and Caius College Cambridge at being able to take 'only' a 350-year lease of the former Squire Law Library next-door to the college's main site (personal recollection). The creation or restoration of habitat takes a long time – obviously so for establishing woodland, but even apparently rapidly regenerating habitats require extended periods to establish an appropriate mix of species. One study of how arable land in England might be returned to floodplain meadows suggests that it will take over 150 years for all the appropriate species to

become established (and even then not fully matching ancient meadows) and over 60 years for the functional traits of the plant community to be replicated (Hodder & Bullock, 1997).

Yet many of the initiatives intended to support such land uses operate on shorter timescales. Management agreements for nature conservation sites are usually only for a few years' duration. For example, NatureScot (the statutory conservation body in Scotland) states that:

A management agreement (MA) involves NatureScot making payments to a land manager in return for an agreed programme of work. We typically offer MAs for European sites and Sites of Special Scientific Interest. MAs usually run for five years. Very rarely, the timescale may be longer or shorter if this is necessary to realise the full natural heritage benefits.

(NatureScot, 2022)

Even the new arrangements for Biodiversity Net Gain in England, requiring development of land to show biodiversity enhancements that more than compensate for any losses occurring, are based on the gains being secured for only 30 years (Environment Act 2021, ss 98–101 and Scheds 14 and 15; DEFRA, 2022b). Even where longer term obligations are in place, such as planning conditions or obligations, monitoring and enforcement are notoriously weak, as shown by research identifying limited enforcement activity in the English town and county planning system, despite the availability of a wide array of powers and mechanisms to this end (Sheppard et al., 2014). Prior to fairly recent changes in the law (see below), responsibility for the continuing effect of harmful land uses could be avoided simply by abandoning a waste site, or by the absence of any mechanisms for up-dating permissions that had become out-of-date with modern conditions and concerns, or for making those who created the problem responsible for remediating contaminated land.

The short-term effect is visible in other ways. Prescription periods after which legal rights crystallise or disappear have become progressively shorter over history (Russell, 2015; Law Commission, 1998, paras 1.6–1.21). With short election cycles, policies based on 'short-term pain for long-term gain' are not politically attractive. The history of road fuel tax in the UK shows a pattern of long-term policy being disrupted by more immediate concerns, undermining the intended structural changes in pricing (House of Commons Library, 2011). On the other hand, notable disasters can direct political attention to issues that have previously been ignored. For example, the key EU legislation on the storage of hazardous materials is known as the 'Seveso Directive' (Dir. 82/501/EEC) after the location of the chemical

plant near of Milan where in 1976 an accident resulted in residents being exposed to hazardous chemicals; the name is still in use after several revisions, often in turn influenced by other disasters.

2.4 | Lack of regard for nature

Until comparatively recently the law paid little regard to any elements of the natural world except to the extent that they were covered by property rights. Wildlife at large does not belong to anyone and so had no legal recognition; therefore (in the absence of any statutory intervention) the owner's extermination of all creatures in their area of land would fall wholly outwith legal consideration unless this interfered with legally recognised fishing or game rights (Reid, 2009). Trees and plants are property belonging to the owner of the land on which they grow, but their value is generally assessed in commercial terms (the value of the timber) not the ecological contribution of woodland nor any intrinsic value (hence the challenge laid down in Stone's seminal paper – Should trees have standing?; Stone, 1972). The blinkered view of property rights is shown in the inquiries into and legislation authorising the construction of hydro-electric dams in Scotland in the mid-twentieth century where the environmental consequences were essentially ignored, apart from passing references to landscape, with the notable exception of detailed consideration of the effects on privately held fishing rights (Reid et al., 2005). Some regard for nature did make an appearance, such as the provisions introduced in the 1940s for nature reserves (National Parks and Access to the Countryside Act 1949, Part III) and tree preservation orders (Town and Country Planning Act 1947, s.28), but these narrow arrangements for special attention to be paid to ecological features serve only to emphasise how little such elements featured in the general law.

The absence of recognition for the non-commercial dimension is apparent in many places. Regardless of the increasing emphasis on environmental aspects within agricultural support schemes (McMahon, 2019), agricultural tenants are obliged to follow 'good husbandry' to maintain their lease and this is defined in terms of 'maintaining a reasonable standard of efficient production', without regard for environmental considerations (Agriculture (Scotland) Act 1948, Sched. 6; Agriculture Act 1947, s. 11). The obligations of companies and trusts to their shareholders and beneficiaries traditionally excluded non-commercial considerations, requiring a focus purely on economic returns (Reid & MacCulloch, 1993). When initially created, the list of factors that the various utility regulators could consider did not include considerations of environmental protection or sustainability and there were early examples of regulators having concerns about whether certain measures to pursue environmental aims fell within their

remit (Owen, 2006), prior to a wider range of considerations being added to their functions (Utilities Act 2000, ss 10,14). Concern for sustainability had to be expressly added to the legitimate concerns of public authorities, not seen as embedded in their basic responsibilities.

This rag-bag selection of examples shows how the law has created and reflected a social and economic system that has proved inimical to long-term sustainability, creating incentives for short-term, individualised economic thinking, and even placing obstacles in the way of alternative approaches. That way of thinking has led us to our current perilous position. New paradigms are required if we are to do better.

3 | CHANGING THE CURRENT

Many of the ways of building a sustainable future require breaking away from the existing social, commercial and legal structures. The new and more sustainable ways of living our lives have often been identified, but challenges remain in getting there. In the same way as the previous section has provided a scattering of examples of where individualised, short-term thinking that ignores the natural world has contributed to our plight, this section identifies a selection of ways in which collective, long-term thinking that values nature can offer hope, and the legal steps being taken, or needed, to enable this.

3.1 | Collective Action

In many ways an atomised approach does not offer the means to achieve a better environment. In looking after the natural world, conservation today is increasingly adopting an ecosystem approach rather than focussing narrowly on specific species or habitats. The Convention on Biological Diversity defines an 'ecosystem' as 'a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional units' (Convention on Biological Diversity, 1992, art.2) and the ecosystem approach calls for 'adaptive management to deal with the complex and dynamic nature of ecosystems', noting that this requires attention to ecosystems at all scales, 'a grain of soil, a pond, a forest, a biome or the entire biosphere.' (CBD-COP 5, 2000, Decision V/6, para. 3). This approach involves 'a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way', with a priority being the 'conservation of ecosystem structure and functioning, in order to maintain ecosystem services' (CBD-COP 5, 2000, Decision V/6, para. 5, Principle 5). Such an approach cannot be delivered by treating each landholding as a discrete unit, to be dealt with wholly separately from its neighbours.

Instead, a landscape-scale approach is needed, looking at the health of an ecosystem across a broad area.

Such collective management requires a move away from the view of each landholding as a separate commercial asset, but the law offers limited possibilities for achieving this. On a voluntary basis, owners can get together and commit themselves to working together, such as the Cairngorms Connect Partnership that links a number of large landholdings in Scotland covering over 600 square kilometres and with a 200-year plan for the restoration of the natural habitat (Cairngorms Connect, 2022). There is, however, little that can be done to guarantee that all the partners continue to be committed to this vision, or even continue in existence to maintain their commitment, although the nature of many as statutory bodies, charities or trusts does remove some of the risks of a radical change of direction as a result of land passing to new owners through succession, buy-out or insolvency. One of the frequently asked questions on the Cairngorms Connect website is: *You say you have a 200-year vision. You can't guarantee all of your organisations will still be around that long, so how can you be sure you'll deliver?* 'In short we, can't. However there is good reason to be optimistic!' (Cairngorms Connect, 2022). Official attempts to link action across large areas covered by diverse landholdings tend to be limited to creating policies or strategies which can guide the action of different bodies and individual. Recent examples include the Local Nature Recovery Strategies designed to help in coordinating biodiversity action across England on at least the scale of local authority areas (Environment Act 2021, ss 104–108; county council areas can be split) and the development of the Landscape Recovery scheme within the wider Environmental Land Management programme, supporting individuals and groups to deliver projects on a scale larger than the vast majority of the designated conservation sites in England (DEFRA, 2022a).

Legal recognition can be given to collective action on occasions. With no natural predators, deer numbers in Scotland need to be controlled in order to allow diverse vegetation to thrive and the legislation enables NatureScot to reach agreements with groups of owners and occupiers of land to take the necessary steps to achieve this (Deer (Scotland) Act 1996, s. 7). Such agreements by their nature require the relevant individuals to accept and implement the obligations, but a fallback position is provided in the power of NatureScot to establish control schemes where an agreement cannot be reached or is not being implemented (Deer (Scotland) Act 1996, s. 8). These schemes require owners and occupiers in the area to take the specified steps, so that collective action across a broad area can thus be achieved by voluntary co-operation or ultimately statutory imposition.

More radical steps towards securing the collective management of parcels of land are provided in

Scotland through the land reforms which have granted communities the right to buy land and hence manage it in their collective best interests, as opposed to being at the mercy of the land-owners' own desires. The legal hurdles are substantial, but community bodies that satisfy the relevant tests, most notably that their purposes are in line with sustainable development, are given the right to buy land in various circumstances. The right can arise when the land is being put up for sale in any case (Land Reform (Scotland) Act 2003, Part 2), or in some circumstances can lead to a compulsory purchase, for example for crofting land (Land Reform (Scotland) Act 2003, Part 3), for land that is abandoned, neglected or causing detriment to amenity (Land Reform (Scotland) Act 2003, Part 3A) or where there are significant benefits to the community in line with achieving sustainable development (Land Reform (Scotland) Act 2016, Part 5). Community groups can also request certain public authorities to transfer land to them where this will further the community's interests in specified ways, including social and environmental well-being (Community Empowerment (Scotland) Act 2015, Part 5).

At a smaller level, legal change is also taking place to break away from the fragmented nature of landholdings. Heating homes and other buildings is one of the largest sources of greenhouse gas emissions (contributing 22 per cent of the emissions in the UK in 2021; Climate Change Committee, 2022), and reductions can be achieved by moving away from each flat, house or building having its own small and inefficient boiler and linking them to a district heating system based on a larger-scale source of heat where substantial efficiencies are possible. This, though, requires a legal framework that enables the infrastructure to be established and maintained and protects the users whose homes and offices are 'locked in' to the shared system without the freedom as consumers to look to other sources of heating. Steps towards this have now been taken in the Heat Networks (Scotland) Act 2021. Other more technical changes can also help to overcome obstacles that the individualistic approach puts in the way of action to tackle climate change. Again looking in Scotland, 'the installation of insulation' has been added to what counts as maintenance of a tenement building and therefore (subject to any specific provisions otherwise in the title) is something that can proceed with no single owner in the building having the right to veto the change or to refuse access or to pay their share of the cost (Tenements (Scotland) Act 2004, Sched. 1, rule 1.5).

3.2 | Long-term Vision

The need for a long-term vision and policies that stretch beyond the normal lifecycle of any government has

become recognised within many specific areas of environmental law, with Wales providing an example of a broader ambition. Taking a longer-term approach is a well-accepted feature of tackling problems such as climate change. There are so many contributing factors and so much change to be achieved, including the provision of infrastructure, that long timescales are essential and anticipatory interventions must be considered (Stokes, 2021). The Climate Change Acts in the UK are themselves the leading example here, setting slightly different targets for radical change: achieving 'net zero' for the UK as a whole by 2050 (Climate Change Act 2008, s. 1) and by 2045 in Scotland (Climate Change (Scotland) Act 2009, s. A1) and in Northern Ireland, a 100 per cent reduction on key baselines (Climate Change Act (Northern Ireland) 2022, s. 1). The fact that these provisions depart from the normal short-term position by trying to specify what must be achieved into the future has led to the argument that these might be called 'constitutional' measures (McHarg, 2011). Uncertainty over the nature of exactly what it means for these to be *legal* targets remains (Reid, 2012), but they clearly represent a new way of directing government. The opposite risk, that looking only at the long-term can provide an excuse for not taking immediate action, is addressed through the legal frameworks also incorporating a number of shorter-term targets and reporting obligations (Climate Change Act 2008, ss 4, 18; Climate Change (Scotland) Act 2009, ss 2,3, 9; Climate Change Act (Northern Ireland) 2022, ss 3, 4, 38–41).

Similar medium- or long-term targets feature in other areas of environmental policy, although still usually reaching only into the middle of the current century (Richardson, 2017). They have been a mainstay of EU legislation on air quality (Dir. 2008/50/EC), water quality (Dir. 2000/60/EC), packaging (Dir. 94/62/EC) and landfill (Dir. 99/31/EC), and for England the Environment Act 2021 imposes obligations to create not only a long-term Environmental Improvement Plan (sections 8–15), but also specific targets in various environmental priority area (sections 1–7). The idea is that by setting objectives well in advance, all those concerned have the opportunity to adjust their behaviour in an appropriate and non-disruptive way and if necessary invest in the design and infrastructure construction projects needed to meet the target. This can be successful, as with the massive investment and construction effort over several years that largely met the obligations under the Urban Waste Water Directive, made in 1991 but requiring relevant waste water treatment facilities to be in place by 2000 and 2005 (Dir. 91/271/EEC). This is not always the case, though, as shown by the Scottish Government's aim to introduce a ban on biodegradable domestic waste going to landfill in 2021, with this date being set in legislation in 2012 (Waste (Scotland) Regulations 2012, SSI 2021/148). However, the ban has had to be delayed until 2025 (Waste (Miscellaneous Amendments)

(Scotland) Regulations 2020, SSI 2020/314, reg 4(3)) since it became clear that despite the long run-in period not all the necessary arrangements and infrastructure provision had progressed in order to enable landfill in Scotland to be avoided by the original target date (other than by simply resorting to the export of waste which is not an environmentally desirable solution; Cunningham, 2019).

Setting such targets is one thing, but monitoring and enforcing compliance another. Within the European Union the powers of the Commission and Court to ensure that national governments comply with the obligation to meet targets makes them a powerful tool, whereas within a single national system any enforcement is inevitably weaker. Heavy reliance is placed on specialist bodies reviewing and reporting publicly on progress, for example, the role of the Climate Change Committee under the Climate Change Acts. New environmental 'watchdogs' have been created in the UK – the Office for Environmental Protection and Environmental Standards Scotland (Environment Act 2021, ss 22–43; UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021, ss 19–46) – and they have a part to play here, with the former explicitly given a role in monitoring action under the Environmental Improvement Plan (Environment Act 2021, s. 28). Such bodies, though, do not have the legal power over government that the EU institutions enjoyed. Moreover, the security of long-term targets can never be guaranteed since there is always the possibility of the targets being changed in future, even if embedded in an Act of Parliament – parliamentary supremacy means that the Climate Change Acts could simply be amended or repealed at any point.

Long-term thinking also means taking responsibility for one's actions even though the consequences are not immediately apparent. Liability for the remediation of contaminated land, reaching back to the person responsible for the contamination where possible, is one manifestation of this (Environmental Protection Act 1990, Part IIA), as is the inability now of the permit-holder to walk away from a licensed waste or industrial site unless the regulator is willing to accept the surrender of the permit on the basis that there is no risk to the environment or human health (Environmental Protection Act 1990, s. 39). The aftercare provisions for mineral sites similarly ensure that the operator needs to be thinking about the position when the active exploitation has ended rather than leaving the consequences for others to deal with (Town and Country Planning Act 1990, Sched. 5; Town and Country Planning (Scotland) Act 1997, Sched. 3). Producer responsibility measures affecting a range of products mean that manufacturers, importers and sellers have to make arrangements and bear the costs for dealing with at least some of the consequences of their goods during and at the end of their working life (Environment Agency, 2021b). One

difficulty, however, is effectively attributing responsibility where over an extended period a key party's identity or status changes. This has been shown in the litigation over the continuing responsibility for contaminated land following the privatisation of nationalised industries (*R (National Grid Gas plc) v Environment Agency* [2007] UKHL 30) and the consequences of insolvency for liability for former coal workings (*South Lanarkshire Council v Coface SA* [2016] CSIH 15). As with long-term targets, lots can get in the way to interrupt the effective implementation of responsibility.

The most dramatic recognition of long-term thinking, though, comes in Wales, with the Well-being of Future Generations (Wales) Act 2015 (Davies, 2017). This obliges the Welsh Government and other public bodies to carry out sustainable development and pursue the well-being goals set, with an explicit obligation to 'take account of ... the importance of balancing short term needs with the need to safeguard the ability to meet long term needs, especially where things done to meet short term needs may have detrimental long term effect.' (Well-being of Future Generations (Wales) Act 2015, s. 5(2)(a)). Moreover, the Act establishes the post of Future Generations Commissioner for Wales, whose duty of promoting sustainable development expressly requires her to '(i) act as a guardian of the ability of future generations to meet their needs, and (ii) encourage public bodies to take greater account of the long-term impact of the things that they do' (Well-being of Future Generations (Wales) Act 2015, s.18). It is notable, however, that the Act does not set timescales and much of the reporting and planning structure is based on annual or election cycles, not inter-generational thinking (Davies, 2017).

3.3 | Valuing the environment

Environmental considerations are now embedded in the law in lots of ways. Environmental Impact Assessment (e.g. Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017, SSI 2017/102) and Strategic Environmental Assessment (e.g. Environmental Assessment (Scotland) Act 2005) ensure that such considerations are at least part of (if not decisive in) the decision-making process in many contexts and environmental principles are now being added as a relevant consideration to policy-making for UK Ministers (Environment Act 2021, ss 17–19) and a wider range of bodies in Scotland (UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021, ss 13–18). Development of the notion of 'ecosystem services' (UNEP, 2005; TEEB, 2010) is opening up new ways of recognising the benefits, and hence value, provided by natural processes which have not previously attracted commercial or legal attention. Conventional approaches to economic and commercial valuation

have ignored such elements. Land left in an undeveloped state is not actually unproductive, but is providing a range of services of great practical, economic and spiritual value to society, ranging from the regulation of water resources (quality and quantity) to pollinating services and aesthetic and amenity benefits to residents and visitors. The provision of such services can attract direct financial support under section 1 of the Agriculture Act 2020, and the 'cross-compliance' rules mean that many rural payments are conditional on meeting various conditions designed for the benefit of biodiversity and the environment (DEFRA, 2021). 'Natural solutions' are now part of the way in which problems such as flooding are being tackled (Environment Agency, 2021a).

Many other changes in the law are requiring, or removing obstacles to, the recognition of the natural world. In England there will be a requirement for new developments to show that they are leading to a Biodiversity Net Gain (Environment Act 2021, ss 98–101 and Schedules 14–15). Partly to enable this, a departure is being made from the general hostility noted earlier to long-term restrictions on land through enabling the creation of conservation covenants that run with the land, binding successive owners, and secure its management in a way intended to deliver conservation benefits (Environment Act 2021, Part 7). Equivalent enduring obligations have also recently been enabled in Scotland in the form of conservation burdens and climate change burdens, but have been little used (Title Conditions (Scotland) Act 2003, ss 38–42, 46A–48). This legal approach is well-developed in other jurisdictions such as the USA (Ristino & Jay, 2016) and New Zealand, with possible lessons for developments in the UK (Rodgers & Grinlinton, 2020). As well as accepting that managing land for nature is a legitimate land use that merits recognition, such covenants and equivalents support the further aims of providing a long-term, potentially permanent constraint on how land is used, way beyond the terms of the statutory land-management schemes, and providing a means for various parties to come together to act collectively, whether a groups of neighbouring land-owners agreeing similar covenants or linking land-owners with those willing to offer financial or practical assistance to enable land to be maintained for biodiversity purposes.

More, though, could be done to recognise the natural world. Over 100 years ago, psychological harm was recognised as a form of injury alongside physical injury when a victim suffers as a result of an incident for which someone is liable. Without disrupting existing legal structures the same could be done so that harm to ecosystem services is recognised as a form of damage entitling those suffering to recover for their loss, whereas at present if no commercially valued property is harmed, environmental harm does not attract legal attention (except under specific statutory

provisions) (Reid, 2014). Determining the remedy for such harm may be problematic, but a model is perhaps provided by the EU Environmental Liability Directive (Dir. 2004/35/EC) which places the emphasis on avoiding harm, then physical remediation and if necessary compensatory action to make up for the loss when restoration is not possible or is delayed. More radically, the rights of nature could be given explicit recognition, such as the legal personality conferred on rivers in various jurisdictions (Agnew & Jahan, 2021) and the constitutional rights conferred on Pacha Mama in the 2008 Ecuadorian Constitution (art. 71). The environment can thus become an actor in the legal networks rather than a passive bystander (if not victim).

Many of these strands come together when we look at Sustainable Urban Drainage. This seeks to manage run-off from roads, car-parks and buildings in a way that uses natural processes to reduce flood risk and helps biodiversity and the environment, while often providing an amenity benefit for local residents. Such schemes involve managing a shared asset for the collective benefit of many properties, doing so over a long time and in way that makes use of nature. The traditional individualised, short-term structures that look only at commercial values are not well-suited to ensuring that such schemes can be created and run smoothly. Guidance produced for developers contains over 10 pages covering the different legal structures that can be used to establish, finance and maintain such a scheme, but none is a particularly good fit (Susdrain, 2015). This shows that the existing legal frameworks can be used to deliver the relationships that sustainability requires, but not always to the optimum.

4 | CONCLUSION

This paper is designed to provoke reflection on the features deeply embedded in our laws that reflect the attitudes and structures which have supported the way of living that we now realise is unsustainable. It does not purport to present a comprehensive diagnosis of our current plight nor a detailed prescription for the future, but to prompt us all to think about the ways in which the legal architecture and culture serves, in often unappreciated ways, to maintain our damaging behaviour. The social and economic climate is both created by and reflected in the law and if we are to find a more sustainable way of living, the law has a part to play. This requires more than the passing a few 'headline' measures such as Climate Change Acts, but demands a thorough examination of all the ways in which the law encourages unsustainable ways of working and obstructs, or fails to enable and incentivise, improvement. Long-term trends in the law need to be reversed to support the changes needed.

To build a more sustainable future, a new set of priorities must be developed in the law, one that looks to our shared, long-term future living in partnership with nature. This requires a different mind-set from what has been shaping legal evolution over past centuries, manifestations of which have been provided above. The legal structures that we have inherited must be redirected or recast to take account of the urgent needs of today which cannot be served by a framework based on short-term, individualised thinking based on financial interests alone. Recent developments show that the seeds are there which can be nurtured to support a new approach to how we live, both removing obstacles to achieving what we want and providing the legal vehicles that enable and encourage new ways of living and working. There is also, though, a need for innovation to break away from the conventional structures which no longer serve us well and to realise the paradigm shift towards a more sustainable future, finding the legal mechanisms that can support a new way of living. The tide has been flowing in an unsustainable direction for too long, but is starting to turn and we must catch the turning tide to reach a better future.

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DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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REFERENCES

- Agnew, C. & Jahan, I. (2021) A critical analysis of the development of the concept of giving rivers a personality: does it in fact help to protect the rivers? *Journal of Water Law*, 27(3), 77–88.
- Almond, R.E.A., Grooten, M. & Petersen, T. (Eds.). (2020) *Living planet report 2020 - bending the curve of biodiversity loss gland*. Switzerland: WWF.
- Aston Cantlow case (2003) *Parochial Church Council of the Parish of Aston Cantlow and Wilmcote with Billesley, Warwickshire v Wallbank* [2003] UKHL 37.
- Cairngorms Connect (2022) Available from <http://cairngormsconnect.org.uk/> [Accessed 2 September 2022].
- CBD-COP (2000) Fifth ordinary meeting of the conference of the parties to the convention on biological diversity, 15–26 May 2000 - Nairobi, Kenya.
- Climate Change Committee. (2022) *Progress in reducing emissions: 2021 report to parliament*. London: Climate Change Committee.
- Convention on Biological Diversity (1992) 1760 UNTS 79.
- Creegan, E.R. (1969) The tacksmen and their successors. *Scottish Studies*, XIII, 93–144.

- Cunningham, R. (2019) Answer to written question ref. S5W-25409 in the Scottish Parliament, 19 September, 2019.
- Davies, H. (2017) The well-being of future generations (Wales) act 2015—a step change in the legal protection of the interests of future generations? *Journal of Environmental Law*, 29(1), 165–175.
- DEFRA (Department for Environment, Food and Rural Affairs). (2021) Guide to cross compliance in England 2022. Available from: <https://www.gov.uk/guidance/guide-to-cross-compliance-in-england-2022> [Accessed 2 September 2022]
- DEFRA (Department for Environment, Food and Rural Affairs) (2022a) Landscape Recovery: more information on how the scheme will work. Available from: <https://www.gov.uk/government/publications/landscape-recovery-more-information-on-how-the-scheme-will-work/landscape-recovery-more-information-on-how-the-scheme-will-work> [Accessed 2 September 2022]
- DEFRA (Department for Environment, Food and Rural Affairs). (2022b) *Consultation on biodiversity net gain – regulations and implementation*. London: DEFRA.
- Environment Agency (2021a) *Use nature-based solutions to reduce flooding in your area*. Available from: <https://www.gov.uk/guidance/use-nature-based-solutions-to-reduce-flooding-in-your-area>. [Accessed 2 September 2022].
- Environment Agency (2021b) *Producer responsibility regulations*. Available from: <https://www.gov.uk/government/collections/producer-responsibility-regulations> [Accessed 2 September 2022]
- Farrington, J.H. & McKenzie, R.P. (1987) Bus deregulation in Scotland – a preliminary view. *Scottish Geographical Magazine*, 103(1), 50–53.
- Hardin, G. (1968) The Tragedy of the Commons. *Science*, 162(3859), 1243–1248.
- Hodder, K.H. & Bullock, J.M. (1997) Translocations of native species in the UK: implications for biodiversity. *Journal of Applied Ecology*, 34(3), 547–565.
- House of Commons Library (2011) Taxation of road fuels: the road fuel escalator (1993–2000) (SN3015) and Taxation of road fuels: policy following the ‘fuel crisis’ (2000–2008) (SN3016).
- Hunter, J. (1976) *The making of the crofting community*. Edinburgh: John Donald.
- IPCC (2022) *Climate change 2022: impacts, adaptation and vulnerability*, the working group II contribution to the sixth assessment report of the intergovernmental panel on climate change. Available from: <https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/> [accessed 2 September 2022].
- Law Commission (1998) *Limitation of Actions Consultation Paper* (Consultation Paper No. 161).
- Law Commission (2008) *Easements, Covenants and Profits à Prendre: A Consultation Paper* (Consultation Paper No. 186).
- Maine, H.S. (1861) *Ancient Law (1861 – reprinted 2012)*. Cambridge: Cambridge University Press.
- McHarg, A. (2011) Climate change constitutionalism? Lessons from the United Kingdom. *Climate Law*, 2(special issue), 469–484.
- McMahon, J.A. (2019) *EU agricultural law and policy*. Cheltenham: Edward Elgar Publishing.
- Minnerop, P. & Otto, F.E.L. (2020) Climate change and causation: joining law and climate science on the basis of formal logic. *Buffalo Environmental Law Journal*, 27, 1–22.
- Nash, C.A. (1993) British bus deregulation. *The Economic Journal*, 103(419), 1042–1049.
- NatureScot (2022) Management agreements. Available from: <https://www.nature.scot/professional-advice/protected-areas-and-species/protected-areas/management-agreements> [Accessed 2 September 2022].
- Ostrom, E. (1990) *Governing the commons: the evolution of institutions for collective action*. Cambridge: Cambridge University Press.
- Owen, G. (2006) Sustainable development duties: new roles for UK economic regulators. *Utilities Policy*, 14(3), 208–217.
- Reid, C.T. (2009) *Nature conservation law*, 3rd edition. Edinburgh: W. Green.
- Reid, C.T. (2011) Author's personal experience while a member of the Public Transport Users' Committee for Scotland (2007–2013).
- Reid, C.T. (2012) A new sort of duty? The significance of ‘outcome’ duties in the climate change and child poverty acts. *Public Law*, (4), 749–767.
- Reid, C.T. (2014) Taking account of environmental damage – a brief overview. *Environmental Law and Management*, 26(5), 164–168.
- Reid, C.T. & MacCulloch, A. (1993) Obstacles to environmentally sensitive land management. *Environmental Law And Management*, 5(6), 202–204.
- Reid, C.T., Pillai, A. & Black, A.R. (2005) The emergence of environmental concerns: Hydro-electric schemes in Scotland. *Journal of Environmental Law*, 17(3), 361–382.
- Richardson, B. (2017) *Time and environmental law: telling Nature's time*. Cambridge: Cambridge University Press.
- Ristino, L.A. & Jay, J.E. (Eds.). (2016) *A changing landscape: the conservation easement reader*. Washington DC: Environmental Law Institute.
- Rodgers, C. & Grinlinton, D. (2020) Covenancing for nature: a comparative study of the utility and potential of conservation covenants. *Modern Law Review*, 83(2), 373–405.
- Rodgers, C.P., Straughton, E., Winchester, A.J.L. & Pieraccini, M. (2011) *Contested common land: environmental governance past and present*. Abingdon: Routledge.
- Russell, E.J. (2015) *Prescription and limitation of actions*, 7th edition. Edinburgh: W. Green.
- Scottish Law Commission (1998) *Discussion Paper on Real Burdens* (Discussion Paper No. 106).
- Sheppard, A. et al. (2014) *Planning enforcement England: At the crossroads*. Project Report Bristol: University of the West of England. Available from: <http://eprints.uwe.ac.uk/24531/> [Accessed 2 September 2022].
- Simpson, A.W.B. (1986) *A history of the land law*, 2nd edition. Oxford: Clarendon Press.
- Stokes, E. (2021) Beyond evidence: anticipatory regimes in law. *Law and Policy*, 43(1), 73–91.
- Stone, C.D. (1972) Should trees have standing? Toward legal rights for natural objects. *Southern California Law Review*, 45(2), 450–501.
- Stuart-Smith, R.F., Otto, F.E.L., Saad, A.I., Lisi, G., Minnerop, P., Lauta, K.C. et al. (2021) Filling the evidentiary gap in climate litigation. *Nature Climate Change*, 11, 651–655. <https://doi.org/10.1038/s41558-021-01086-7>
- Susdrain (2015) Sustainable drainage systems (SuDS) maintenance and adoption options (England). Available from: https://www.susdrain.org/files/resources/fact_sheets/09_15_fact_sheet_suds_maintenance_and_adoption_options_england_.pdf [Accessed 2 September 2022].
- Tawney, R.H. (1912) *The agrarian problem in the sixteenth Century*. London: Longman.
- TEEB (The Economics of Ecosystems and Biodiversity). (2010) *Mainstreaming the economics of nature: a synthesis of the approach, conclusions and recommendations of TEEB* (UNEP). <https://www.teebweb.org/wp-content/uploads/Study%20and%20Reports/Reports/Synthesis%20report/TEEB%20Synthesis%20Report%202010.pdf> [Accessed 11 October 2022].
- UNEP. (2005) *Millennium ecosystem assessment: ecosystems and human well-being synthesis*. Washington DC: Island Press.
- UNEP. (2019) *Global environment outlook – GEO-6: Healthy planet, healthy people*. Cambridge: Cambridge University Press.
- Wedgwood, J. (1922) Col Wedgwood MP speaking in debate on the Law of Property Bill, Commons Hansard of 15 May 1922 (vol 154 col 119).

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