

Imagining Regenerative Futures for Lough Neagh

Lough Neagh is not just polluted. It is a living system trapped in an extractive structure. Fragmented governance, private control, and regulatory failure have turned it into a sacrifice zone. But by mapping the system, we reveal the cracks – and the pathways toward regeneration.

Background

Lough Neagh, the largest freshwater lake in both Ireland and Britain, is viewed as a vital natural resource – supplying over 40% of Northern Ireland’s drinking water, supporting biodiversity, and sustaining local industries.

Yet in 2023, a severe bloom of toxic blue-green algae brought decades of ecological mismanagement into sharp focus. This was not an isolated event, but a symptom of systemic failure driven by absentee ownership, fragmented governance, and an extractive mindset that treats nature as a resource to be used, not a system to be cared for.

This investigation emerges from ongoing research and design work led by DTNI, in collaboration with community stakeholders, environmental advocates, and legal researchers. Grounded in systems mapping, transition design, and the emerging framework of the Rights of Nature, this project explores new ways of imagining governance, stewardship, and regeneration.

Methodology & Approach

This work draws upon a multidisciplinary and participatory methodology:

- Primary Interviews: Conversations with Lough Neagh Development Trust members, environmental advocates, and community stakeholders.
- Systems Mapping: Capturing current extractive dynamics.
- Transition Design: Framing interventions across temporal horizons.
- Literature Review & Case Studies: Insights from Rights of Nature movements, ecological governance, and regenerative design.
- Stakeholder events: Including local communities of place, government departments, councils, commercial interests, environmental interest, land owners, users & residents.

A Reverse Island

The lough’s catchment spans 43% of Northern Ireland’s surface area and has shores on 5 of the 6 counties. This makes it a “reverse island,” shaped by everything that flows toward it: the region’s farming practices, sewage systems, industry, and politics. This raises difficult but essential questions:

- Where does responsibility begin and end?
- Who counts as part of the Lough’s community?
- Can we design governance that reflects this entangled geography?

Current systems treat the Lough as a bounded resource. But what if we understood it as a relational commons – influenced by many, and so held in care by many?

“We must move from managing nature to being in relationship with it.”

Leverage Points

Narrative & Legal Framing	Shift from Lough as property → Lough as a living entity with rights
Governance Structures	Create integrated, community-led body (e.g. Development Trust & Citizens’ Assembly)
Economic Redesign	Link restoration to carbon credit schemes, sustainable tourism, green energy jobs
Civic Infrastructure	Use participatory design & local dialogue to rebuild public trust

Results

Initial consultations revealed disillusionment and fatigue stemming from fragmented efforts, stalled reforms, and ecological decline. Yet as stakeholders engaged with the concept of community ownership, a sense of renewed optimism emerged, with a willingness to co-develop new models of governance rooted in shared responsibility.

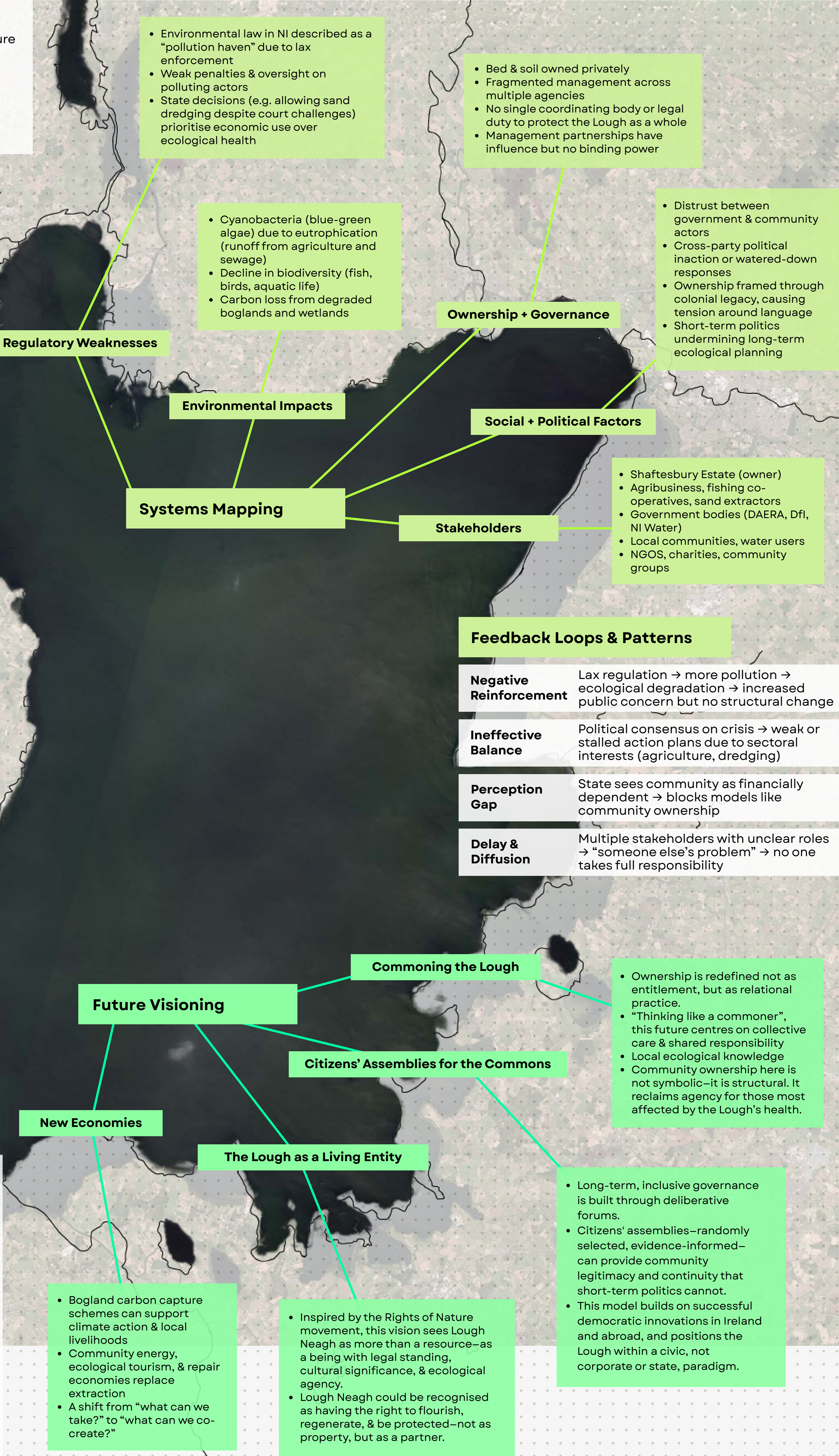
Across interviews and workshops, community ownership was recognised as a pragmatic structure for transformation. Stakeholders viewed it as a means to:

- Unite diverse interests under a single, accountable body
- Access new funding and legal frameworks unavailable through current arrangements
- Foster long-term incentives for sustainable land and water governance

Insights from interviews, legal literature and case studies reinforce the potential of Rights of Nature frameworks to reframe the Lough not as property, but as a living entity with intrinsic value. However, interviewees emphasised that any legal shift must be locally grounded.

Design Thinking and Transition Design enabled:

- Mapping entangled systems of influence and harm
- Imagining futures rooted in care, not extraction
- Facilitating community imagination and dialogue through workshops and assemblies
- Rather than prescribing solutions, design surfaced principles for regenerative transition, including: recognising relational interdependence, restoring trust and civic agency & embedding democracy in ecological governance



Case Studies in Regenerative Governance

Whanganui River, Aotearoa, New Zealand

In 2017, the Whanganui River became the first river in the world to be granted legal personhood under the Te Awa Tupua (Whanganui River Claims Settlement) Act. This landmark decision followed over 140 years of advocacy by the Māori iwi of Whanganui, who maintain a deep ancestral and spiritual connection to the river. The river is recognised as a living, indivisible whole with its own rights and interests.

- Moves away from Western property law toward relational governance.
- Creates a precedent for embedding Indigenous worldviews in legal systems.
- Demonstrates how rights of nature can coexist with human rights through co-governance and cultural recognition.

Machángara River, Ecuador

In 2021, Ecuador’s Constitutional Court ruled that the Machángara River holds legal rights under the country’s 2008 Constitution—the first in the world to enshrine the Rights of Nature. The case was brought by local residents and environmental groups after years of pollution from untreated wastewater. The river is recognised as a rights-bearing entity entitled to exist, flow, and be restored.

- Affirms the power of citizen guardianship to enforce ecological rights.
- Demands state accountability and ecological restoration through legal mechanisms.
- Demonstrates how Rights of Nature can function within constitutional law to protect urban waterways.

Stòras Uibhist, Scotland

In 2006, the community of South Uist, Benbecula, and Eriskay in the Outer Hebrides purchased 93,000 acres of land through a historic buyout – the largest community-owned estate in Scotland. The land includes crofts, beaches, lochs, and renewable energy assets. The estate is managed by a locally elected board, with profits reinvested in housing, infrastructure, biodiversity, and cultural projects.

- Shows how community ownership can govern large, ecologically and socially complex areas.
- Demonstrates long-term decision-making rooted in local knowledge and collective responsibility.
- Offers a scalable model for place-based governance and sustainable land use beyond state or market control.