

Write-up Documentation

Echoes of Lough Neagh: for fixed media and live piano

1. Intentions and Site

Echoes of Lough Neagh is a work for fixed media and live piano that responds to the ecological crisis of Lough Neagh and to Henry McPherson's practice as an improvising pianist.¹ The work began from the composer's visit to Lough Neagh after learning about the serious pollution affecting it. As Figure 1 shows, the site appeared, on the surface, to be a peaceful living environment.



Figure 1. Lough Neagh landscape photograph taken by the composer.

However, many areas have been severely affected by pollution.² This contrast between visible calmness and ecological damage was transformed into a fixed-media sound environment, within which the pianist acts as a responsive and embodied listener.

¹ Henry McPherson, "Research & Writing", *Henry McPherson*, <https://www.henrymcpherson.org.uk/research> (accessed 3 May 2026).

² Department of Agriculture, Environment and Rural Affairs, "Action Being Taken to Address the Issues of Lough Neagh", *Department of Agriculture, Environment and Rural Affairs*, <https://www.daera-ni.gov.uk/articles/action-being-taken-address-issues-lough-neagh> (accessed 4 May 2026).

McPherson's research practice connects improvisation with environmental relationships.³ Therefore, the piano score adopts non-traditional improvisatory notation, guiding his performative response to the fixed media. Through the musical approach, the work aims to raise awareness of protecting Lough Neagh's environment.

2. Research Context

As Figure 2 shows, the green surface of the polluted water in Lough Neagh produces an immediate visual shock. Northern Ireland Assembly research also notes public attention around the 2023 and 2024 blooms, including questions about water supply, ecology, fishing, recreation, and sand extraction.⁴



Figure 2. Pollution at Lough Neagh in 2024. Photograph by Jonathan Porter, Press Eye.⁵

3. Sound and Video Material

Based on this context, the fixed-media material was created from the composer's field recordings and studio transformations. As Figure 3 shows, a Zoom H4essential recorder was used at Lough Neagh to record water movement, wind, shoreline ambience, and nocturnal frogs and insects.

³ McPherson, "Research & Writing".

⁴ Olivia Davies, "Algal Blooms and Lough Neagh", *Research Matters*, Northern Ireland Assembly, 27 June 2024, <https://www.assemblyresearchmatters.org/2024/06/27/algal-blooms-and-lough-neagh/> (accessed 3 May 2026).

⁵ Tommy Greene, "Who Decides the Future of Lough Neagh?", *The Detail*, 13 March 2026, <https://www.thedetail.tv/articles/comment-who-decides-the-future-of-lough-neagh> (accessed 4 May 2026).



Figure 3. Field recording at Lough Neagh using a Zoom H4essential recorder.

These sounds form the recognisable wetland layer of the piece. They were composed in Logic Pro through studio transformations. In line with Truax’s argument that soundscape composition can preserve environmental associations while creating musical meaning through transformation,⁶ some sounds remain recognisable, while others become mechanical, compressed, noisy, and unstable. In addition to the fixed-media music, a time-counter video made from Lough Neagh imagery was created to help the pianist follow the fixed-media progression.

Figure 4 shows the complete performance schematic, including the audio/video path and playback system.

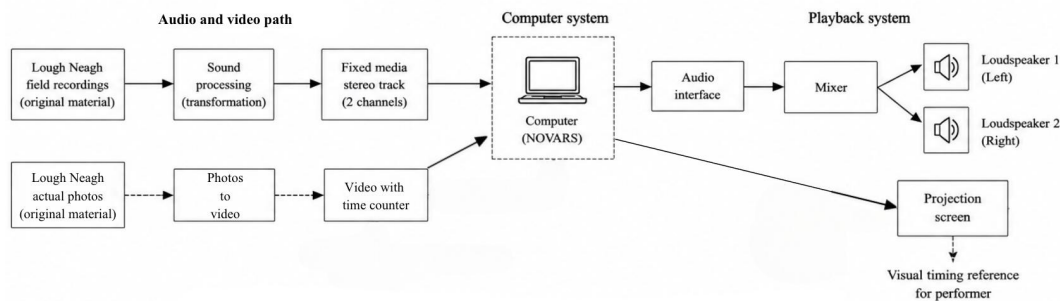


Figure 4. Performance system schematic.

4. Form and Collaborative Response

The four-state design of this work is summarised in Figure 5. Balance creates a humid and overcast wetland atmosphere. Intrusion introduces construction-like sounds and

⁶ Barry Truax, “Soundscape Composition as Global Music: Electroacoustic Music as Soundscape”, *Organised Sound*, 13 (2008), 2: 103–109.

rising tension, while Pollution becomes the most violent stage. Fragile Recovery reduces some mechanical pressure, but the ending remains damaged rather than fully restored.

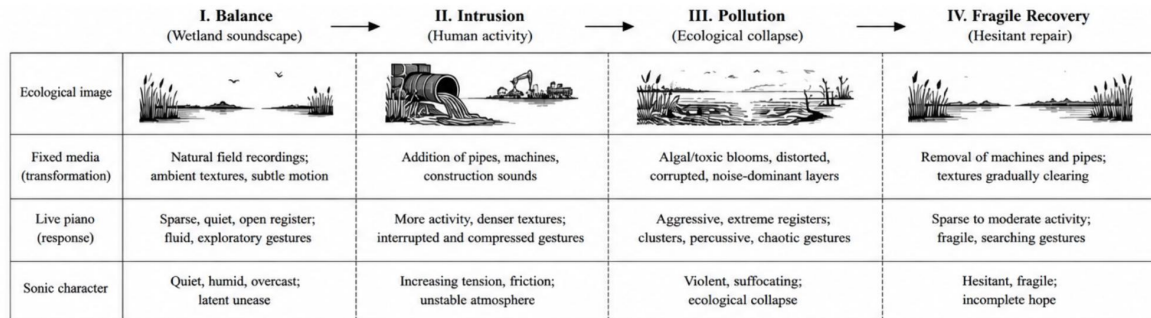


Figure 5. Ecological narrative and sonic transformation model.

The live piano responds to this structure through improvisation. The performer may use conventional and extended techniques, turning the piano into an ecological body within the fixed-media environment.

5. Conclusion

Overall, *Echoes of Lough Neagh* connects soundscape composition, acoustic ecology, and piano improvisation. It aligns with recent interests in using sound to understand environments and human relationships.⁷ Through the fixed media and live piano, the work transforms the ecological crisis of Lough Neagh into an electroacoustic performance, encouraging audiences to reflect on the importance of its protection.

⁷ Sound + Environment Research Group, “Sound + Environment Symposium 2025”, *Newcastle University*, <https://blogs.ncl.ac.uk/sound-environment/sample-page/> (accessed 3 May 2026).

Reference

Davies, Olivia, “Algal Blooms and Lough Neagh”, *Research Matters*, Northern Ireland Assembly, 27 June 2024, <https://www.assemblyresearchmatters.org/2024/06/27/algal-blooms-and-lough-neagh/> (accessed 3 May 2026).

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