

Summary of Publications (Jan 2007 – Sep 2022)

- H index: 34
- 17 papers > 100 citations
- Books and special issues of journals edited: 4
- Peer reviewed journal publications: 83
- Peer reviewed book chapters: 8
- Technical and commissioned reports: 53
- Data outputs, R scripts and Genbank submissions: 7
- Total citations since 2007: 4389
- > 60 outputs including students and early career researchers (underlined)

Books

- B1. Steinman, A., **Spears, B.M.**, 2020. Internal phosphorus loading in lakes: causes, case studies and management. J. Ross Publishing, Florida, USA. 464 p.

Special Issues of Journals Edited

- SI1. **Spears, B.M.**, Lurling, M., Hamilton, D., 2022. Towards preventative management in lakes, Inland Waters.
- SI2. Lüring, M., Mackay, E., Reitzel, K., **Spears, B.M.**, 2016. Special Issue on geo-engineering to manage eutrophication in lakes. Water Research, 97.
- SI3. May, L., **Spears, B.M.**, 2012. Loch Leven: 40 years of scientific research. Understanding the links between pollution, climate change and ecological response. Developments in Hydrobiology, Springer, 218, 130 p.

Peer Reviewed Journal Publications { % contribution } (Citations @ 01/09/2022)

- P1. Metson, G., Brownlie, W., and **Spears B.M.** Accepted. Towards Net-Zero Phosphorus Cities. Nature Urban Sustainability. {33%; snr author}
- P2. Cowan, N., Ferrier, L., **Spears, B.M.**, Drewer, J., Reay, D. and Skiba, U. 2022. CEA Systems: the Means to Achieve Future Food Security and Environmental Sustainability? Frontiers in Sustainable Food Systems, 6:891256. {10%}
- P3. **Spears, B.M.**, Brownlie, B., Cordell, D.S., Hermann, L., Mogollon, J. 2022. Concerns about global phosphorus demand for lithium-iron-phosphate batteries in the light electric vehicle sector. Nature Communications Materials, 3, 14. {90%} (2)
- P4. Olsson, F., Mackay, E.B., Barker, P., Davies, S., Hall, R., **Spears, B.M.**, Exley, G., Thackeray, S.J., Jones, I.D., 2022. Annual water residence time effects on thermal structure: a potential lake restoration measure? Journal of Environmental Management. 314:115082. {10%}
- P5. Olsson, F., Mackay, E.B., Barker, P., Davies, S., Hall, R., **Spears, B.M.**, Exley, G., Thackeray, S.J., Jones, I.D., 2022. Can reductions in water residence time be used to disrupt seasonal stratification and control internal loading in a eutrophic monomictic lake? Journal of Environmental Management. 304, 114169. {15%} (3)
- P6. **Spears, B.M.**, Lüring, M., Hamilton, D.M., 2022. Mustering the troops towards preventative management in lakes. Inland Waters, 12, 1-7. {90%}
- P7. **Spears, B.M.**, Chapman, D., Carvalho, L., Rankinen, K., Stefanidis, K., Ives, S., Vuorio, K., Birk, S., 2021. Assessing multiple stressor effects to inform climate change management responses in three European catchments. Inland Waters, 12, 94-106. {80%} (9)
- P8. **Spears, B.M.**, Hamilton, D., Pan, Y., Zhaosheng, C., May, L., 2021. Lake management: is prevention better than cure? Inland Waters, 12, 173-186. {80%} (11)
- P9. **Spears, B.M.**, Chapman, D., Carvalho, L., Feld, K.,...Birk, S., 2021. Bridging theory and practice towards multiple stressor management in freshwater ecosystems. Water Research, 196, 116981. {80%} (12)

- P10. Williamson, J., Tye, A., Lapworth, D., Monteith, D., Pickard, A., ...**Spears, B.M.**, et al., 2021. Landscape controls on riverine export of dissolved organic carbon from Great Britain. *Biogeochemistry*, doi.org/10.1007/s10533-021-00762-2(0123456789. {15%} (11)
- P11. Garcia-Martin, E., Sanders, R., Evans, C., Kitidis, V., Lapworth, D., Rees, A.P., **Spears, B.M.**,...,Mayor, D.J., 2021. Contrasting Estuarine Processing of Dissolved Organic Matter Derived From Natural and Human-Impacted Landscapes. *Global Biogeochemical Cycles*. DOI:10.1029/2021GB007023. {15%} (3)
- P12. Brownlie, W., Sutton, M., Raey, D.,...**Spears, B.M.**, 2021. Global actions for a sustainable phosphorus future. *Nature Food*, 2(2), 71-74. {50%; snr author} (21)
- P13. Birk, S., Chapman, D., Carvalho, L., **Spears, B.M.**, et al. 2020. Impacts of multiple stressors on freshwater biota across spatial scales and ecosystems. *Nature Ecology and Evolution*, 4, 1060-1068. {30%} (191)
- P14. May, L., Olszewska, J., Gunn, I.D.M., Meis, S., **Spears, B.M.**, 2020. Eutrophication and restoration in temperate lakes. *IOP Conference Series: Earth and Environmental Science*, 535:012001. {5%} (7)
- P15. Dobel, A.J., Willby, N.J., Ives, S.C., May, L., Carvalho, L., Olszewska, J., Pickard, A., **Spears, B.M.**, 2020. Rewilding Revisited – don't forget about freshwater ecology. *Science*. eLetter., <https://science.sciencemag.org/content/364/6438/eaav5570/tab-e-letters> {60%; snr author}
- P16. Anderson, T.R., Rowe, E.C., Polimene, L., Tipping, E., Evans, C.D., Barry, C.D.G., Hansell, D. A., Kaiser, K., Kitidis, V., Lapworth, D.J., Mayor, D.J., Monteith, D.T., Pickard, A.E., Sanders, R.J., **Spears, B.M.**, Torres, R., Tye, A.M., Wade, A.J., Waska, H., 2019. Unified concepts for understanding and modelling turnover of dissolved organic matter from freshwaters to the ocean: the UniDOM model. *Biogeochemistry*, 146, 105-123. {5%} (23)
- P17. D'Haese, P.C., Douglas, G., Verhulst, A., Neven, E., Behets, G.J., Vervaet, B. A., Finsterle, K., Lüring, M., **Spears, B.M.**, 2019. Human health risk associated with the management of phosphorus in freshwaters using lanthanum and aluminium. *Chemosphere*. 220. 286-299. {30%; snr author} (57)
- P18. May, L., Taylor, P., **Spears, B.M.**, Pitt, J.-A., Collins, A.L., Corkley, I., Anthony, S., Skirvin, S., Lee, D., Naden, P., 2019. Decision support framework to identify lakes that are likely to meet water quality targets if external inputs of phosphorus from agriculture are reduced. *Limnetica* 38:489-501. {25%} (1)
- P19. Carvalho, L., Mackay, E.B., Cardoso, A.C., Baattrup-Pedersen, A., Birk, S., **Spears, B.M.**, et al., 2019. Protecting and restoring Europe's waters: An analysis of the future development needs of the Water Framework Directive. *The Science of the Total Environment*, 658:1228-1238. {15%} (256)
- P20. Olszewska, J.P., Heal, K.V., Edwards, R., McDonald, C., Foster, T., Winfield, I.J., **Spears, B.M.**, 2019. Assessing the legacy of red mud pollution in a shallow freshwater lake: long-term chemical recovery in the water column. *Inland Waters*, 9, 453-463. {40%; snr author} (3)
- P21. Reitzel, K., Bennett, W.B.,...**Spears, B.M.**, et al., 2019 New training to meet the global phosphorus challenge. *Environmental Science & Technology*, 53: 8479-8481. {5%} (24)
- P22. Watt, J.A.J., Burke, I.T., Edwards, R.A., Malcolm, H.M., Mayes, W., Olszewska, J.P., Pan, G., Graham, M.C., Heal, K.V., Rose, N.L., Turner, S.D., **Spears, B.M.**, 2018. Vanadium: A Re-Emerging Environmental Hazard. *Environmental Science & Technology*, 52, 11973-11974. {60%; snr author} (64)
- P23. Waters, K.E., Maberly, S.C., Clarke, S.J., **Spears, B.M.**, Winfield, I.J. 2018. Is the vendace Britain's rarest fish, on the brink of extinction? *British Wildlife*, 29(3). {20%}
- P24. Friberg, N., Buijse, T., Carter, C., Hering, D., **Spears, B.M.**, Verdonschot, P., Moe, T.F., 2017. Effective restoration of aquatic ecosystems: scaling the barriers. *Wiley Interdisciplinary Reviews: Water* 4(1). {10%} (20)

- P25. Olszewska, J.P., Heal, K.V., Winfield, I.J., Eades, L.J., **Spears, B.M.**, 2017. Assessing the role of bed sediments in the persistence of red mud pollution in a shallow lake (Kingham Loch, UK). *Water Research*, 123:569-577. {40%; snr author} (22)
- P26. **Spears, B.M.**, Futter, M.N., Jeppesen, E., Huser, B.J., Ives, S., Davidson, T.A., et al., 2017. Ecological resilience in lakes and the conjunction fallacy. *Nature Ecology & Evolution*, 1(11):1616-1624. {70%} (47)
- P27. **Spears, B.M.**, Vieno, M., Van Outen, M. Sutton, M., 2017. Eutrophication and Climate Change Revisited. *Science*, eLetter, <http://science.sciencemag.org/content/357/6349/405/tab-e-letters>. {80%}
- P28. Bryce, C.C., Le Bihan, T., Martin, S.F., Harrison, J.P., Bush, T., **Spears, B.M.**, Moore, A., Leys, N., Byloos, B., Cockell, C.S., 2016. Rock geochemistry induces stress and starvation responses in the bacterial proteome. *Environmental Microbiology*, 18(4):1110-1121. {5%} (19)
- P29. Burthe, S.J., Henrys, P.A., Mackay, E.B., **Spears, B.M.**, Campbell, R., et al., 2016. Do early warning indicators consistently predict nonlinear change in long-term ecological data? *Journal of Applied Ecology*, 53(3):666-676. {15%} (103)
- P30. Copetti, D., Finsterle, K., Marziali, L., Stefani, S., Tartari, G., Douglas, G., Reitzel, K., **Spears, B.M.**, et al., 2016. Eutrophication management in surface waters using lanthanum modified bentonite: a review. *Water Research*, 97:162-174. {10%} (242)
- P31. Dithmer, L., Nielsen, U.G., Lurling, M., **Spears, B.M.**, Yasserli, S., Lundberg, D., Moore, A., et al., 2016. Responses in sediment phosphorus and lanthanum concentrations and composition across 10 lakes following applications of lanthanum modified bentonite. *Water Research*, 97:101-110. {10%} (72)
- P32. Douglas, G.B., Lurling, M., **Spears, B.M.**, 2016. Assessment of changes in potential nutrient limitation in an impounded river after application of lanthanum-modified bentonite. *Water Research*, 97:47-54. {30%} (26)
- P33. Douglas, G.B., Hamilton, D.P., Robb, M.S., Pan, G., **Spears, B.M.**, Lurling, M., 2016. Guiding principles for the development and application of solid-phase phosphorus adsorbents for freshwater ecosystems. *Aquatic Ecology*, 50(3):385-405. {15%} (97)
- P34. Lang, P., Meis, S., Procházková, L., Carvalho, L., Mackay, E.B., Woods, H.J., Pottier, J., Milne, I., Taylor, C., Maberly, S.C., **Spears, B.M.**, 2016. Phytoplankton community responses in a shallow lake following lanthanum-bentonite application. *Water Research*, 97:55-68. {30%; snr author} (19)
- P35. Lurling, M., Mackay, E., Reitzel, K., **Spears, B.M.**, 2016. A critical perspective on geo-engineering for eutrophication management in lakes. *Water Research*, 97:1-10. {25%} (180)
- P36. Olszewska, J.P., Meharg, A.A., Heal, K.V., Carey, M., Gunn, I.D.M., Searle, K.R., Winfield, I.J., **Spears, B.M.**, 2016. Assessing the legacy of red mud pollution in a shallow freshwater lake: arsenic accumulation and speciation in macrophytes. *Environmental Science & Technology*, 50(17):9044-9052. {40%; snr author} (34)
- P37. **Spears, B.M.**, Carvalho, L., Futter, M.N., May, L.,...Ives, S.C., et al., 2016. Ecological Instability in Lakes: A Predictable Condition? *Environmental Science & Technology*, 50(7), 3285-3286. {70%} (12)
- P38. **Spears, B.M.**, Mackay, E.B., Yasserli, S., Gunn, I.D.M., Waters, K., Andrews, C., Cole, S., de Ville, M., Kelly, A., Meis, S., Moore, A.L., et al., 2016. A meta-analysis of water quality and aquatic macrophyte responses in 18 lakes treated with lanthanum modified bentonite (PHOSLOCK®). *Water Research*, 97, 111-121. {80%} (105)
- P39. Tipping, E., Boyle, J.F., Schillereff, D.N., **Spears, B.M.**, Phillips, G., 2016. Macronutrient processing by temperate lakes: a dynamic model for long-term, large-scale application. *Science of the Total Environment*, 572, 1573-1585. {5%} (12)
- P40. Brownlie, W.J., **Spears, B.M.**, Patidar, S., May, L., Roaf, S., 2015. Assessing Pro-environmental Behaviour in Relation to the Management of Pollution from Private Sewage Systems. *Human Ecology*, 43(1), 131-140. {30%} (6)

- P41. Lang, P., Meis, S., **Spears, B.M.**, Krokowski, J., Milne, I., Pottie, J., 2015. *Dinobryon stokesii* var. *neustonicum* in Loch Flemington, Scotland: a rarely observed variety of golden alga new to UK freshwaters. *Glasgow Naturalist*, 26(2). {5%} (3)
- P42. **Spears, B.M.**, Ives, S.C., Angeler, D.G., Allen, C.R., Birk, S., Carvalho, L., et al., 2015. Effective management of ecological resilience – are we there yet? *Journal of Applied Ecology*, 52(5), 1311-1315. {80%} (54)
- P43. **Spears, B.M.**, May, L., 2015. Long-term homeostasis of filterable un-reactive phosphorus in a shallow eutrophic lake following a significant reduction in catchment load. *Geoderma*, 257, 78-85. {90%} (7)
- P44. Brownlie, W., May, L., McDonald, C., Roaf, S., **Spears, B.M.**, 2014. Assessment of a novel development policy for the control of phosphorus losses from private sewage systems to the Loch Leven catchment, Scotland, UK. *Environmental Science & Policy*, 38, 207-216. {30%; snr author} (11)
- P45. Brownlie, W., **Spears, B.M.**, Sutton, M., 2014. Putting a phosphorus bounty on society's bad behaviour. *ESPP SCOPE*, 16. {40%}
- P46. Gunn, I.D.M., Meis, S., Maberly, S.C., **Spears, B.M.**, 2014. Assessing the responses of aquatic macrophytes to the application of a lanthanum modified bentonite clay, at Loch Flemington, Scotland, UK. *Hydrobiologia*, 737(1), 309-320. {30%; snr author} (25)
- P47. Lang, P., Procházková, L., Krokowski, J., Meis, S., **Spears, B.M.**, Milne, I., Pottie, J., 2014. The bizarre Eustigmatacean alga, *Pseudostaurastrum limneticum* (Borge) Chodat, in a shallow, nutrient-enriched Scottish loch: new to the British Isles. *The Glasgow Naturalist*, 26(1), 107-109. {5%} (12)
- P48. Mackay, E.B., Maberly, S.C., Pan, G., Reitzel, K., ...Meis, S., Moss, B., Lüring, M., Phillips, G., Yasserli, S., **Spears, B.M.**, 2014. Geoengineering in lakes: welcome attraction or fatal distraction? *Inland Waters*, 4(4), 349-356. {40%; snr author} (89)
- P49. May, L., **Spears, B.M.**, Dudley, B.J., Gunn, I.D.M., 2014. The response of the rotifer community in Loch Leven, UK, to changes associated with a 60% reduction in phosphorus inputs from the catchment. *International Review of Hydrobiology*, 99(1-2), 65-71. {15%} (23)
- P50. Pagaling, E., Strathdee, F., **Spears, B.M.**, Cates, M.E., Allen, J., Free, A., 2014. Community history affects the predictability of microbial ecosystem development. *ISME Journal*, 8(1), 19-30. {20%} (82)
- P51. **Spears, B.M.**, Maberly, S.C., 2014. Lessons learned from geoengineering freshwater systems. *Nature Climate Change*, 4, 935-936. {55%} (4)
- P52. **Spears, B.M.**, Maberly, S.C., Pan, G., Mackay, E., Bruere, A., ...Meis, S., et al., 2014. Geo-Engineering in Lakes: A Crisis of Confidence? *Environmental Science & Technology*, 48(17), 9977-9979. {70%} (88)
- P53. Condron, L.M., **Spears, B.M.**, Haygarth, P.M., Turner, B.L., Richardson, A.E., 2013. Role of legacy phosphorus in improving global phosphorus-use efficiency. *Environmental Development*, 8, 147-148. {15%} (43)
- P54. Jarvie, H.P., Sharpley, A.N., **Spears, B.M.**, Buda, A.R., May, L., Kleinman, P.J.A., 2013. Water quality remediation faces unprecedented challenges from "legacy phosphorus". *Environmental Science & Technology*, 47(16), 8997-8998. {20%} (255)
- P55. Meis, S., **Spears, B.M.**, Maberly, S.C., Perkins, R.G., 2013. Assessing the mode of action of Phoslock® in the control of phosphorus release from the bed sediments in a shallow lake (Loch Flemington, UK). *Water Research*, 47(13), 4460-4473. {35%} (136)
- P56. Sharpley, A., Jarvie, H.P., Buda, A., **Spears, B.M.**, et al., 2013. Phosphorus Legacy: Overcoming the Effects of Past Management Practices to Mitigate Future Water Quality Impairment. *Journal of Environmental Quality*, 42(5), 1308-1326. {15%} (802)
- P57. **Spears, B.M.**, Carvalho, L., Dudley, B., May, L., 2013. Variation in chlorophyll a to total phosphorus ratio across 94 UK and Irish lakes: implications for lake management. *Journal of Environmental Management*, 115, 287-294. {70%} (42)

- P58. **Spears, B.M.**, Meis, S., Anderson, A., Kellou, M., 2013. Comparison of phosphorus (P) removal properties of materials proposed for the control of sediment phosphorus release in UK lakes. *Science of the Total Environment*, 442, 103-110. {70%} (112)
- P59. **Spears, B.M.**, Dudley, B., Reitzel, K., Rydin, E., 2013. Geo-engineering in lakes - a call for consensus. *Environmental Science and Technology*, 47(9), 3953-3954. {80%} (56)
- P60. **Spears, B.M.**, Lurling, M., Yasserli, S., Castro-Castellon, A.T., Gibbs, M., Meis, S., et al., 2013. Lake responses following lanthanum-modified bentonite clay (Phoslock®) application: an analysis of water column lanthanum data from 16 case study lakes. *Water Research*, 47(15), 5930-5942. {70%} (137)
- P61. Verdonschot, P.F.M., **Spears, B.M.**, Feld, C.K., Brucet, S., Keizer-Vlek, H., Borja, A., Elliott, M., Kernan, M., Johnson, R.K., 2013. A comparative review of recovery processes in rivers, lakes, estuarine and coastal waters. *Hydrobiologia*, 704(1), 453-474. {30%} (170)
- P62. Carss, D., **Spears, B.M.**, Quinn, L., Cooper, R., 2012. Long-term variations in waterfowl populations in Loch Leven: identifying discontinuities between local and national trends. *Hydrobiologia*, 681(1), 85-104. {60%} (14)
- P63. Carvalho, L., Miller, C., **Spears, B.M.**, Gunn, I.D.M., Bennion, H., Kirika, A., May, L., 2012. Water quality of Loch Leven: responses to enrichment, restoration and climate change. *Hydrobiologia*, 681(1), 35-47. {20%} (82)
- P64. Letovsky, E., Heal, K.V., Carvalho, L., **Spears, B.M.**, 2012. Intracellular versus extracellular iron accumulation in freshwater periphytic mats across a mine water treatment lagoon. *Water, Air and Soil Pollution*, 223(4), 1519-1530. {20%; snr author} (11)
- P65. May, L., **Spears, B.M.**, 2012. A history of scientific research at Loch Leven, Kinross, Scotland. *Hydrobiologia*, 681(1), 3-9. {50%} (13)
- P66. May, L., **Spears, B.M.**, 2012. Managing ecosystem services at Loch Leven, Scotland, UK: actions, impacts and unintended consequences. *Hydrobiologia*, 681(1), 117-130. {40%} (36)
- P67. Meis, S., **Spears, B.M.**, Maberly, S.C., O'Malley, M.B., Perkins, R.G., 2012. Sediment amendment with Phoslock in Clatto Reservoir (Dundee, UK): investigating changes in sediment elemental composition and phosphorus fractionation. *Journal of Environmental Management*, 93(1), 185-193. {30%} (186)
- P68. **Spears, B.M.**, Carvalho, L., Perkins, R., Kirika, A., Paterson, D.M., 2012. Long-term variation and regulation of internal phosphorus loading in Loch Leven. *Hydrobiologia*, 681(1), 23-33. {80%} (104)
- P69. **Spears, B.M.**, May, L., 2012. In memoriam: Antony Edward Bailey-Watts PhD, D.Sc. (23 August 1942 – 15 July 2007). *Hydrobiologia*, 681:1-2. {90%}
- P70. Winfield, I. J., Adams, C.E., Armstrong, J.D., Gardiner, R., Kirika, A., Montgomery, J., **Spears, B.M.**, Stewart, D.C., Thorpe, J.E., Wilson, W., 2012. Changes in the fish community of Loch Leven: untangling anthropogenic pressures. *Hydrobiologia*, 681(1), 73-84. {10%} (22)
- P71. May, L., **Spears, B.M.**, Dudley, B.J., Hatton-Ellis, T.W., 2010. The importance of nitrogen limitation in the restoration of Llangorse Lake, Wales, UK. *Journal of Environmental Monitoring*, 12(1), 338-346. {30%} (27)
- P72. **Spears, B.M.**, Carvalho, L., Perkins, R., O'Malley, M., Paterson, D.M., 2010. The contribution of epipelton to total sediment microalgae in a shallow temperate eutrophic loch (Loch Leven, Scotland). *Hydrobiologia*, 646(1), 281-293. {70%} (9)
- P73. **Spears, B.M.** Jones, I.D., 2010. The long-term (1979-2005) effects of the North Atlantic Oscillation on wind-induced wave mixing in Loch Leven (Scotland). *Hydrobiologia*, 646(1), 49-59 doi:10.1007/s10750-010-0188-9. {70%} (35)
- P74. Duethmann, D., Anthony, S., Carvalho, L., **Spears, B.M.**, 2009. A model-based assessment of non-compliance of phosphorus standards for England and Wales. *International Journal of River Basin Management*, 7(3), 197-207. {20%} (10)

- P75. Evans, K., Chepurinov, V., Sluiman, H.J., Thomas, S.J., **Spears, B.M.**, Mann, D.M., 2009. Highly Differentiated Populations of the Freshwater Diatom *Sellaphora capitata* Suggest Limited Dispersal and Opportunities for Allopatric Speciation. *Protist*, 160, 386-396. {5%} (93)
- P76. **Spears, B.M.**, Gunn, I.D.M., Carvalho, L., Winfield, I.J., Dudley, B., Murphy, K., May, L., 2009. An evaluation of methods for sampling macrophyte maximum colonisation depth in Loch Leven, Scotland. *Aquatic Botany*, 91(2), 75-81. {60%} (35)
- P77. Poulickova, A., Hasler, P., Lysakova, M., **Spears, B.M.**, 2008. The ecology of freshwater epipelagic algae: an update. *Phycologia*, 47(5), 437-450. {50%; snr author} (114)
- P78. **Spears, B.M.**, Carvalho, L., Perkins, R., Paterson, D.M., 2008. The effects of light on sediment nutrient flux and water column nutrient stoichiometry in a shallow lake. *Water Research*, 42(4-5), 977-986. {80%} (118)
- P79. **Spears, B.M.**, Saunders, J.E., Davidson, I., Paterson, D.M., 2008. Microalgal sediment biostabilisation along a salinity gradient in the Eden Estuary (Scotland): unravelling a paradox. *Marine and Freshwater Research*, 59(4), 313-321. {60%} (62)
- P80. **Spears, B.M.**, Carvalho, L., Paterson, D.M., 2007. Phosphorus partitioning in a shallow lake: implications for water quality management. *Water and Environment Journal*, 21, 47-53. {70%} (75)
- P81. **Spears, B.M.**, Carvalho, L., Perkins, R., Kirika A., Paterson, D.M., 2007. Sediment phosphorus cycling in a large shallow lake: spatio-temporal variation in phosphorus pools and release. *Hydrobiologia*, 584(1), 37-48. {70%} (148)
- P82. **Spears, B.M.**, Carvalho, L., Perkins, R., Kirika, A., Paterson, D.M., 2006. Spatial and historical variation in sediment phosphorus fractions and mobility in a large shallow lake. *Water Research*, 40, 383-391. {70%} (69)
- P83. **Spears, B.M.**, Lesack, L.F.W., 2006. Bacterioplankton production, abundance, and nutrient limitation among lakes of the Mackenzie Delta (Western Canadian arctic). *Canadian Journal of Fisheries and Aquatic Sciences*, 63(4), 845-857. {60%} (35)

Peer Reviewed Book Chapters

- BC1. Carvalho, L., Gunn, I., **Spears, B.** Dobel, A.J., 2021 Ecological Restoration, In Ferrier, R., Jenkins, A. (eds) *Handbook of Catchment Management*, 2nd Edition. John Wiley & Sons.
- BC2. Phillips, G, Kelly, A., Pitt, J. -A. and **Spears, B. M.**, 2020 Barton Broad, UK: over 40 years of phosphorus dynamics in a shallow lake subject to catchment load reduction and sediment removal. In Steinman, A. & Spears, B. M. (eds) *Internal phosphorus loading in lakes causes, case studies, and management*. J. Ross Publishing, 2020. 466 pp.
- BC3. **Spears, B.M.**, Ives, S., May, L., 2020. Loch Leven, UK: Long-term (1985 to 2016) phosphorus dynamics in a shallow lake and its implications for water quality management. In Steinman, A. & Spears, B. M. (eds) *Internal phosphorus loading in lakes causes, case studies, and management*. J. Ross Publishing, 2020. 466 pp.
- BC4. **Spears, B. M.** and Steinman, A. D., 2020. Synthesis, Implications, and Recommendations. In Steinman, A. & Spears, B. M. (eds) *Internal phosphorus loading in lakes causes, case studies, and management*. J. Ross Publishing, 2020. 466 pp.
- BC5. Steinman A. and **Spears, B. M.**, 2020. What is internal phosphorus loading and why does it occur? In Steinman, A. & Spears, B. M. (eds) *Internal phosphorus loading in lakes causes, case studies, and management*. J. Ross Publishing, 2020. 466 pp.
- BC6. Acreman, M. C., Blake, J.R., Carvalho, L., ... **Spears, B.M.**, et al., 2015. Ecohydrology. In Rodda, J. C., Robinson, M. (eds) *Progress in modern hydrology: past, present and future*. Wiley Blackwell, Chichester, 267-301.
- BC7. Anderson, A. M., **Spears, B.M.**, Lubarsky, H.V., Davidson, I., Gerbersdorf, S.U., Paterson, D.M., 2011. Magnetic particle induction and its importance in biofilm research. In Fazel-Rezai, R. (eds) *Biomedical Engineering – Frontiers and Challenges*. InTech Scientific Publishers, 189-216.

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