REPLY TO MACLEAN:

The flexibility of existing laws is an essential element of environmental governance

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MacLean (1) suggests that we place too much emphasis on "formal legal instruments" instead of politics. However, our article (2) does not pose an "either/or" choice; instead, while all aspects of governance remain critical, accelerating environmental change warrants renewed attention to formal legal instruments. Efforts to craft new international and national climate change regimes remain absolutely necessary as climate change needs to be attacked at all levels and pathways. Emphasizing action at some levels does not undermine the need for continued work at others (3).

We agree with MacLean that countering political opposition to transformative policies is necessary. However, changing political majorities at international and national scales takes time. Mining untapped capacities in existing laws gives humankind a chance now to make progress at lower levels of government and through processes that are less political or where politics already align in favor of change.

Thus, subsidiary governments and communities who want to move forward—in places where politics do favor transformative policies—can do so (2). It is for these bodies politic that the untapped capacities for resilience in existing legal texts and processes are most important, particularly in nations such as the United States, where the national environmental statutes reserve considerable authority to the states to act, and many states leave discretion to local governments to develop local law and policy. Moreover, it is far easier in the United States to petition an agency and go to court than to petition Congress and get a response. Furthermore, in the United States, it is much harder politically to change a statute than it is to change its interpretation through a regulation, agency guidance, court decision, or executive order. In other words, our approach requires much less change in political will to make a difference.

MacLean also downplays the extent to which statutory law exists as an independent force capable of resisting politics. For instance, citizen actions are critical components of US environmental law that largely circumvent politics. As two examples, past citizen suits activated the Clean Water Act's total maximum daily load provisions, while it was a citizen petition to the US Environmental Protection Agency that ultimately led to the Supreme Court deciding that the Clean Air Act applies to greenhouse gases (4). In addition, citizens can use the Administrative Procedure Act to challenge regulations and interpretations that violate statutes. Thus, when political will generates efforts to push a statute's interpretation too far in an antienvironmental direction, citizens have been right there to push back—in court—preserving statutory protections (5, 6).

In insisting on the primacy of politics over law, MacLean figures politics as both too monolithic and scale-free while ignoring the status of law as an independent force on the political stage. Given the deeply divisive politics in many nations, mining untapped capacities within existing statutes and regulations provides a pathway out of the stagnation that political attempts at legal reforms have been producing across the global stage.

1 J. MacLean, Learning to overcome political opposition to transformative environmental law. *Proc. Natl. Acad. Sci. U.S.A.*, 10.1073/pnas.1921436117 (2020).
2 A. Garmestani *et al.*, Untapped capacity for resilience in environmental law. *Proc. Natl. Acad. Sci. U.S.A.* **116**, 19899–19904 (2019).
3 A. S. Garmestani, M. H. Benson, A framework for resilience-based governance of social-ecological systems. *Ecol. Soc.* **18**, 9 (2013).
4 R. L. Glicksman, The value of agency-forcing citizen suits to enforce nondiscretionary duties. *Widener Law Rev.* **10**, 353–394 (2004).

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5 J. Ellperin, The Trump Administration keeps losing environmental cases. *The Washington Post*, 18 August 2018. https://www.washingtonpost.com/energy-environment/2018/08/18/trump-administration-keeps-losing-environmental-court-cases/. Accessed 27 February 2020.
6 T. Carper, Rule of law? Not so much. Scott Pruitt's losing litigation record at EPA 1-3 (U.S. Senate Committee on Environment and Public Works, 2018). https://www.epw.senate.gov/public/_cache/files/5/c/5c690fc8-1800-4963-896b-4e76995158aa/B0DF8DBE8E1D27EA12643E177A7EA644.05212018-pruitt-litigation-report.pdf. Accessed 27 February 2020.