

Response to MAH reviewers

December 1, 2025

We are grateful to both reviewers for their careful reading of our essay and for their constructive—and, at times, challenging—feedback. Their critiques have prompted us to undertake a substantial revision that has sharpened the argument, clarified our method, and strengthened the essay’s engagement with the literature. Below, we first outline the major changes we have made, then provide point-by-point responses to each reviewer’s specific comments.

I. Overview of major revisions

A. Clarified structure and strengthened rationale

We have restructured the essay to improve organization and flow. The revised version opens with a new abstract that previews our central argument. The introduction now articulates a clear threefold rationale for a water-centered history of the United States:

1. Complementing existing narratives: We show how a water-focused perspective extends and problematizes environmental historiography by bringing it into conversation with the blue humanities.
2. Integrating regional perspectives: We explain how attending to regionally distinct water regimes reveals the coherence of an exploitative national pattern that both relied on and justified the expansion of federal authority.
3. Assessing planetary impact: We position the United States as a central driver and emblematic case of the “blue acceleration,” linking national history to global environmental consequences.

The body of the essay is now organized into clearly demarcated sections with descriptive headings (*Aquatic Scales and Sources*; *Watershed Moments and Flows*; *Water Activism and Solidarity*; *Conclusion*), each addressing a distinct analytical dimension. We have added signposting throughout to guide readers through the argument.

B. Redefined scope and purpose

We have reframed the essay as an “open invitation” and a “conceptual map” rather than a comprehensive historical or historiographical survey. We now state explicitly that our goal is to offer a methodological toolkit—identifying the analytical vantage points (scales, sources, temporal frameworks, actors) that a water-centered perspective enables—while noting that a full synthesis remains a challenge for the field, requiring sustained collaboration across disciplines. This framing better calibrates expectations about the essay’s scope.

C. Refined positioning relative to existing scholarship

Both reviewers noted that our original framing risked understating or dismissing existing work, which was not the essay’s intent. We have moderated our claims and rebalanced the emphasis:

- We now explicitly state that our proposal values and draws on existing environmental historiography, aiming to further expand and problematize rather than to supplant it.

- We have removed the term “land-centric” as a polemical descriptor and rebalanced our characterization of prior scholarship.
- We cite the U.S. Department of the Interior’s award-winning 2017 exhibition *People, Land, and Water* as evidence that intertwined land-water narratives have entered public consciousness.
- We situate U.S. water history within a broader comparative and transnational frame, citing scholarship on the Middle East (Ward et al., *The History of Water in the Land Once Called Palestine*), the Netherlands (Mostert), Qing China (Po, *The Blue Frontier*), colonial water regimes (Ross, *Liquid Empire*), and Germany (Blackbourn, *The Conquest of Nature*). See footnote 20.

D. Methodology: Latour and “actants”

Reviewer 2 observed that our invocation of Latour needed to be more substantial and developed. We have refined our approach:

1. Clearer framing: We now state explicitly that “we borrow this term conceptually rather than adopting Actor–Network Theory’s full ethnographic methodology.” This clarifies the nature of our theoretical debt.
2. More consistent application: Throughout the essay, we describe water as actively shaping possibilities, constraining choices, and reconfiguring power relations—language that aligns with the relational sensibility of ANT. We also engage with adjacent scholarship on water’s agency (Linton, Swyngedouw, Boelens et al.) and cite Timothy Mitchell’s work, as suggested.

E. Indigenous peoples and water governance

Reviewer 1 identified the limited treatment of Indigenous peoples as a significant gap. We have expanded this dimension considerably. The revised essay now includes a substantial section (within *Watershed Moments and Flows*) on Indigenous water governance prior to and during Euro-American expansion:

- Hohokam irrigation networks in the Sonoran Desert (citing Haury and Gregonis/Evans)
- Pueblo water retention and storage systems (citing Glowacki et al., 2025)
- Pacific Northwest salmon stewardship by Indigenous nations (citing Carothers et al., Atlas et al., and Richard White)
- Ojibwe/Anishinaabe wild rice (manoomin) management in the Great Lakes region (citing Stack Whitney and Kozich et al.)

We frame these as governance systems—ways of organizing social relations, territorial claims, and intergenerational responsibility around water—and note that European colonization displaced and undermined these orders. Indigenous perspectives also appear in our discussion of Columbia River dams (footnote 62), Standing Rock (footnote 82), and traditional environmental knowledge (footnote 89).

F. Animals, fisheries, and marine life

Reviewer 2 noted the limited treatment of animals and food production. We have added substantial new material:

- Tuna and shrimp: A detailed case study showing how U.S. fisheries policy in the 1970s prioritized the high-seas tuna fleet (with documentation from National Security Council memoranda and the 1976 U.S.–Mexico Agreement) while leaving shrimp-dependent Gulf communities to face decline. We trace consequences for both coastal communities and marine species, including the collapse of Pacific bluefin tuna spawning stock. See footnotes 37–41.
- Atlantic menhaden: We discuss how intensive reduction fisheries disrupted coastal food webs, citing H. Bruce Franklin’s *The Most Important Fish in the Sea* and recent scientific literature (Anstead et al.). See footnote 42.
- Gulf of Mexico dead zone: We explain how agricultural runoff from the Mississippi basin feeds hypoxic conditions that devastate fisheries and marine ecosystems (citing Rabalais et al. and NOAA data). See footnotes 72 and 74.
- Aquatic biodiversity: The conclusion notes that U.S. water resources “are home to a remarkable variety of aquatic and amphibious species” and describes them as “dynamic systems that respond to human intervention in ways that have repeatedly constrained and redirected American development.”

We also now cite Rob Verchick’s *The Octopus in the Parking Garage* (2023), which uses the story of an octopus stranded in a Miami Beach parking garage by rising seas to rethink urban vulnerability and ecological disruption—an example of the climate resilience thinking that Reviewer 2 recommended. See footnote 6.

G. Water forms: liquid, ice, vapor, steam

Reviewer 1 asked why ice occasionally appeared while vapor and steam did not. We now address this directly. A new paragraph explains:

- Scholars have shown that vapor (rainfall patterns), steam (industrialization), and ice (snowpack, Arctic sovereignty) have each been historically significant.
- We cite relevant scholarship: Worster on Dust Bowl rainfall, Malm on steam power, Trujillo/Molotch on snowpack, and legal scholarship on Arctic sovereignty claims.
- We then explain that, given space constraints, we focus primarily on liquid water and ice—“the forms that have most directly shaped institutions, law, territorial control, and the human–water relations at the core of our analysis.”

H. Water-powered industrialization and riparian rights

Reviewer 1 noted that we had not addressed how water-powered industrialization reshaped riparian rights. The revised essay now includes a detailed discussion:

- New England textile mills (1810s–1820s) on the Merrimack and Charles rivers fundamentally altered stream flows.
- Mill Acts permitted dam builders to flood neighboring lands, privileging industrial use over agrarian claims.
- We cite Morton Horwitz’s legal history (*The Transformation of American Law*) on how courts shifted from protecting prior users to weighing the relative efficiency of competing uses.

- We connect this to the parallel development of prior appropriation doctrine in the arid West.

See footnotes 48–52.

I. Federal Expansion: Evidence and Limits

Reviewer 1 asked for evidence supporting our claim that water regimes “necessitated and justified” federal expansion. The revised essay now provides:

- The 1902 Reclamation Act: We explain how repeated failures of private and state-sponsored irrigation projects led western boosters to press for federal aid, resulting in the creation of the Reclamation Service (footnote 56).
- Interstate compacts: We cite the Arkansas River Compact of 1948 as an example of federal involvement when states could not resolve disputes on their own, and note that at least twenty major interstate river compacts now require congressional approval (footnote 57).
- New Deal water institutions: We discuss how the Great Depression accelerated federal authority over flood control, navigation, irrigation, and hydropower (footnotes 58–59).
- Columbia River dams: We cite the 2024 U.S. Department of the Interior report on the cumulative impacts of federal dams on tribal communities (footnote 62).

We also note that water governance in the United States has always been fragmented across multiple jurisdictions—federal, state, local, and tribal. Our argument is not that the federal government monopolized water governance, but that water management became a key vector through which federal authority expanded.

J. Removed or revised material

- Lucio Fontana reference: Removed, as Reviewer 1 found it unhelpful.
- Immerwahr: Revised. We no longer frame his work in a way that could suggest he argues land is the basis of empire. He is now cited only for the “logo map” concept (footnote 24), which accurately reflects his argument.
- “Richest globally”: Changed to “most ecologically diverse” to be more precise.

II. Point-by-Point Response to Reviewer 1

Point 1 (“The essay argues that water has been central to U.S. history... I don’t find the essay especially helpful or convincing.”): We have substantially restructured the essay to make the argument clearer and more compelling. The introduction now presents a threefold rationale; the body is organized into thematic sections with explicit signposting; and the conclusion draws out the implications more sharply. We hope the revision demonstrates the value of our approach.

Point 2 (“Engagement with the literature leans heavily toward the casual and superficial... Indigenous peoples receive no mention whatsoever, which I find highly problematic.”): We have deepened our engagement with the literature throughout and expanded our treatment of Indigenous water governance (Hohokam, Pueblo, Pacific Northwest salmon, Ojibwe wild rice). See Section I.E above and footnotes 43–46, 62, 82, 89.

Point 3 (“The essay is trying to accomplish too much too quickly, without the strength of organization needed... Why does ice occasionally count as water—but water vapor and steam never do?”): We have reframed the essay as a “conceptual map” rather than a comprehensive survey, which better calibrates expectations about scope. We now address water’s various forms explicitly and justify our focus on liquid water and ice. See Section I.G above.

Point 4 (“The structure needs considerable work... the author(s) move very, very quickly; make too many vague and blanket statements; and afford the reader very little by way of signposting.”): We have added clear section headings, a guiding abstract, and explicit transitions throughout. We have also grounded key claims with evidence and examples (e.g., the tuna/shrimp case study, the Mill Acts discussion, specific interstate compacts).

Point 5 (“Can actants ‘determine’? I think not.”): We appreciate the opportunity to clarify. In Latour’s usage, “actant” designates precisely an entity with causal efficacy—one that makes a difference in a given situation. We do not claim that water determines outcomes in isolation; historical outcomes emerge from networks of human and nonhuman actors. But to say that water has helped determine where Americans settled, which communities prospered, and how institutions evolved is, we believe, consistent with the concept’s intended meaning. We have refined our language to emphasize that water “actively shaped possibilities, constrained choices, and reconfigured power relations, driving institutional development and helping to determine political outcomes”—phrasing that captures relational causation rather than monocausal determination.

Point 6 (“Given the inclusion of aquifers, is there sufficient reason to treat water only as a liquid?”): See Section I.G. We now discuss how vapor, steam, and ice have each been historically significant and explain why we focus primarily on liquid water and ice.

Point 7 (“I don’t find the order of operations here very legible.”): We have restructured the introduction to present our rationale clearly (three numbered points) before turning to method and scope.

Point 8 (“Aren’t there older aquatic literatures that this essay mostly ignores?”): We now engage more fully with the existing aquatic and oceanic literature, including Rozwadowski’s 2013 call for ocean history, Pisani’s 2000 essay on nationalizing water history, and the broader corpus of Western water historiography (Worster, Hundley, Reisner, etc.). See footnotes 4, 7, and 11.

Point 9 (“Lucio Fontana is hardly a household name; I did not find this comparison useful.”): Removed.

Point 10 (“National claims to EEZs are all well and good, but is this actually a strong claim?”): We maintain that the EEZ framing is analytically significant. As Roberts and others have shown, viewing the United States as an oceanic nation—with sovereign rights over 3.4 million square nautical miles—challenges the “logo map” representation that dominates popular and scholarly imagination. We have clarified that our claim concerns *how we conceptualize* U.S. territory, not the strength of EEZ claims under international law.

Point 11 (“Here ice figures, but it feels inconsistent.”): Addressed in Section I.G. We now explain our focus and cite relevant scholarship on ice and Arctic sovereignty.

Point 12 (“The claims offered on this page feel especially unmoored and vague.”): We have revised throughout to ground claims in specific evidence, scholarship, and examples.

Point 13 (“This essay seems to write Indigenous peoples... entirely out of US history. This is a BIG problem!”): Addressed. See Section I.E above.

Point 14 (“‘Richest globally’—by what metric?”): Changed to “most ecologically diverse,” with reference to the EPA’s *Report on the Environment* and scholarship on aquatic biodiversity (footnotes 87–88).

Point 15 (“This discussion ignores the extent to which water-powered industrialization undermined riparian rights systems.”): Addressed. See Section I.H above and footnotes 48–52.

Point 16 (“By here, I’m getting very frustrated with this essay’s lack of organization.”): We hope the restructured essay, with its clear sections and signposting, addresses this concern.

Point 17 (“I’m not sure why this never mentions Mart Stewart’s excellent work.”): Stewart’s work is now cited (footnote 19).

Point 18 (“‘These regionally distinct but equally exploitative water regimes would ultimately necessitate and justify the expansion of federal power to manage them.’ How so? What evidence do you bring to bear?”): See Section I.I above. We now cite the 1902 Reclamation Act, the Arkansas River Compact, and the 2024 Interior Department report on Columbia River dams, among other sources.

Point 19 (“The flow of this article... seems to single out the federal government for intensive blame by the end. Water, though, falls under a host of jurisdictions.”): We have given greater attention to the fragmentation of U.S. water governance. Our argument is not that the federal government is solely responsible, but that water management became a key vector through which federal authority expanded—often in ways that reinforced existing inequalities. State, local, and tribal jurisdictions also figure in our analysis (e.g., Mill Acts were state legislation; tribal water rights are discussed extensively).

III. Point-by-Point Response to Reviewer 2

Point 1 (“The term ‘land-centric’ seems a bit silly to me... Why not position this new work as an extension and addition, as being built upon the environmental histories so far, rather than as overcoming their terrible failures?”): We found this comment helpful and have revised accordingly. We have removed the term “land-centric” as a polemical descriptor and rebalanced our framing. We now explicitly state that our proposal values and draws on existing environmental historiography and aims to further expand and problematize it. See Section I.C above.

Point 2 (“Other than throwing out the term, this essay doesn’t engage very deeply with Latour’s theory... Mitchell’s Rule of Experts is more than 20 years old, but his discussion of the mosquito makes wonderful use of Latour.”): We have refined our approach to Latour. We now clarify that we borrow the term “actant” conceptually rather than adopting ANT’s full methodology while engaging more consistently with the relational sensibility of ANT throughout the essay and cite Mitchell’s work. See Section I.D above.

Point 3 (“I think there is a bit of a misreading of Immerwahr on p. 3. Much of his argument is about the fact that empire is NOT just a matter of territorial control.”): We have revised our use of Immerwahr. He is now cited only for the “logo map” concept, which accurately reflects his argument. See footnote 24.

Point 4 (“It would still be much better if the authors showed some familiarity with the excellent work done on other parts of the world.”): We have added a paragraph explicitly situating U.S. water history alongside scholarship on the Middle East, the Netherlands, Qing China, colonial water regimes, and Germany. See Section I.C above and footnote 20.

Point 5 (“I’d like a more careful historiography that says what is new about the current work, OR one that doesn’t try to make an argument for newness so much as to clarify what approaches to the watery world are speaking to each other.”). The revised essay addresses this concern. We position our contribution as an attempt to bring U.S. environmental history into conversation with the rising field of the blue humanities, clarifying how these approaches speak to each other. At the same time, we explain what distinguishes our approach from the environmental historiography we build on: blue humanities scholarship extends environmental history “not merely a shift in subject matter... but a reorientation of method” that attends to water’s cultural meanings, embodied dimensions, and entanglement with nonhuman life. This framing allows us to articulate what is distinctive about a water’s history without overstating novelty or dismissing prior work.

Point 6 (“I was very surprised not to see any discussion of animals and water... fish, seafood, etc. but also irrigation for agriculture.”): We have added substantial new material on fisheries and marine life (tuna, shrimp, menhaden, Pacific bluefin, Gulf dead zone) and on the ecological consequences of agricultural water use (fertilizer runoff, hypoxia). See Section I.F above and footnotes 37–42, 72.

Point 7 (“We need a recognition of water as a home for animal and plant life... At least one might consider how historians might make use of the kind of thinking that climate activists are promoting (e.g., Ron Verchick’s *The Octopus in the Parking Garage*).”): We have followed this suggestion. The revised essay now attends to water as habitat for nonhuman life and to the ecological dynamics that constrain and shape human possibilities. We have also added a citation to Rob Verchick’s *The Octopus in the Parking Garage* (2023).

Point 8 (“Right now it reads as a bit too much of a discovery story when what they are chronicling is the development of a field that is well underway.”): We have revised the framing throughout to position our essay as contributing to an ongoing scholarly conversation rather than announcing a completely new discovery. We engage with the decades of work already done and describe our essay as an “open invitation” to further research.

IV. Conclusion

We are grateful to both reviewers for pushing us to sharpen the argument, refine our engagement with the literature, and expand the essay’s treatment of Indigenous peoples and nonhuman actors. The revised essay is, we believe, stronger and more precisely calibrated as a result. We hope that the changes outlined above demonstrate our commitment to taking the reviewers’ concerns seriously and to producing an insightful and thought-provoking contribution for *Modern American History*.