

AN AMERICAN RESET — SAFE WATER & A WORKABLE MODEL OF FEDERALISM

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ABSTRACT

In 2015, at least 3.9 million Americans were exposed to lead in their drinking water at legally unacceptable levels.¹ An additional 18 million Americans were at risk because their water systems were not in compliance with federal rules designed to detect the presence of lead contamination and to ameliorate its impact.² What’s more, in 82 percent of the cases where the violation related to a health standard, no formal state or federal enforcement action was taken.³

These startling statistics indicate that the Flint Water Crisis (“Flint Water”) is not an isolated event. In fact, it is a case study that might explain these statistics. Flint Water reveals a fault line within our cooperative federalism model: We are relying on an increasingly ineffective power structure to guarantee the safety of our water supply, one that places the heaviest burden on the least powerful actor—the

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1. ERIC OLSEN & KRISTI PULLEN, NAT. RES. DEF. COUNCIL, WHAT’S IN YOUR WATER? FLINT AND BEYOND—ANALYSIS OF EPA DATA REVEALS WIDESPREAD LEAD CRISIS POTENTIALLY AFFECTING MILLIONS OF AMERICANS 5 (2016), <https://www.nrdc.org/sites/default/files/whats-in-your-water-flint-beyond-report.pdf> [hereinafter WIDESPREAD LEAD CRISIS]. Federal law distinguishes between maximum contaminant *levels* or action levels and maximum contaminant *goals*. The goals are just that, while the maximum contaminant levels set enforceable standards based on what is economically and technically achievable. DENISE SCHEBERLE, FEDERALISM AND ENVIRONMENTAL POLICY: TRUST AND THE POLITICS OF IMPLEMENTATION 128–29 (2d ed. 2004). For example, the maximum contaminant goal for lead is zero because of its significant health effects. CITY OF FLINT, EPA DOC. NO. SDWA 05-2015-000, EMERGENCY ADMIN. REP. ¶ 27 (Jan. 21, 2016), https://www.epa.gov/sites/production/files/2016-01/documents/1_21_sdwa_1431_emergency_admin_order_012116.pdf [hereinafter FLINT ADMINISTRATIVE ORDER]. Whereas the action level for lead is fifteen parts per billion. 40 C.F.R. § 141.80(b)(1). It is a violation of this latter standard that affects the 3.9 million Americans.

2. WIDESPREAD LEAD CRISIS, *supra* note 1, at 5.

3. *Id.* at 6.

water supplier. This article proposes a ‘reset’ of the model in order to achieve safe water and government accountability.

I. INTRODUCTION

Imagine this headline flashing across your screen: *City of 100,000 Poisoned by Local Water. State and Federal Officials Pointing Fingers as Proof of Cover-ups and Gross Misconduct Comes to Light.* Now consider your first impression. Did you doubt the story or assume it happened in a third-world country? Or did you feel a sense of relief that at least your community was not affected?

Here is the problem: The story is true. Beginning in 2014, Flint residents were poisoned by lead in their drinking water. At the same time, state and local officials repeatedly assured residents the water was safe, in spite of mounting evidence it was not.⁴

The Flint water crisis is a story of government failure, intransigence, unpreparedness, delay, inaction, and environmental injustice.⁵ The Michigan Department of Environmental Quality (MDEQ) failed in its fundamental responsibility to effectively enforce drinking water regulations . . . [T]he MDEQ[] stubbornly worked to discredit and dismiss others’ attempts to bring the issues of unsafe water, lead contamination, and increased cases of Legionellosis (Legionnaires’ disease) to light. With the City of Flint under emergency management, the Flint Water Department rushed unprepared into fulltime operation of the Flint Water Treatment Plant, drawing water from a highly corrosive source without the use of corrosion control. Though MDEQ was delegated primacy (authority to enforce federal law), the United States Environmental Protection Agency (EPA) delayed enforcement of the Safe Drinking Water Act (SDWA) and Lead and Copper Rule (LCR), thereby prolonging the calamity. Neither the Governor nor the Governor’s office took steps to reverse poor decisions by MDEQ and state-appointed emergency managers [from at least April 2014] until October 2015, in spite of

4. See Jeremy C.F. Lin, Jean Rutter, & Haeyoun Park, *Events That Led to Flint’s Water Crisis*, N.Y. TIMES, Jan. 21, 2016, <http://www.nytimes.com/interactive/2016/01/21/us/flint-lead-water-timeline.html> (recounting the timeline of events that occurred in Flint leading up to and during the water crisis).

5. There is no question that Flint Water is a case of environmental injustice. FLINT WATER ADVISORY TASK FORCE, FINAL REPORT 1, 54 (2016), www.michigan.gov/documents/snyder/FWATF_FINAL_REPORT_21March2016_517805_7.pdf [hereinafter FLINT FINAL REPORT]. The crisis reflects a callous disregard for the lives and dignity of Flint residents, who are among the most economically disadvantaged in the country and who are majority African American. It also reflects the lack of representation or participation they had in their community and its water supply system. The author applauds the Taskforce for making this finding and raising awareness of this deplorable state of affairs. This paper will not explore this perspective in great detail, however, because it is urging that Flint Water will repeat itself in cities across the United States, regardless of whether environmental injustice is present.

mounting problems and suggestions to do so by senior staff members in the Governor's office, in part because of continued reassurances from MDEQ that the water was safe. The significant consequences of these failures for Flint will be long-lasting. They have deeply affected Flint's public health, its economic future, and residents' trust in government.⁶

Flint Water also did not occur in a third-world country. Flint is in the State of Michigan, a state ranked fourth in the United States for its water quality⁷ and surrounded by the Great Lakes, the source of one-fifth of the Earth's fresh surface water supply.⁸

Finally, it is doubtful that Flint Water is an isolated incident.⁹ According to the Natural Resources Defense Council ("NRDC"),¹⁰ the EPA's official data reveal that millions of Americans are either already being poisoned by lead in their drinking water or are at risk of being poisoned.¹¹

Flint Water is shocking from a human and moral perspective, but it also reveals a pernicious problem with our current federalism model that might explain the startling statistics above: we are relying on an increasingly inappropriate power structure to guarantee the safety of our water supply, one that places the heaviest burden on the least powerful actor—the water supplier.

6. *Id.* at 1. The Taskforce members were appointed by Michigan governor, Rick Snyder. The list of members and their qualifications are found in Appendix I of their report.

7. John Kiernan, *2016's Greenest States*, WALLETHUB, Sept. 30, 2016, <https://wallethub.com/edu/greenest-states/11987/#red-vs-blue>.

8. *Facts and Figures*, GREAT LAKES INFO. NETWORK, <http://www.great-lakes.net/lakes/ref/lakefact.html> (last visited Sept. 30, 2016) [hereinafter GREAT LAKES INFO NETWORK].

9. This is troubling particularly since the average family in the U.S. consumes more than 120 gallons of water per day. (The total amount is more than 300 gallons of water per day, but the 120-gallon figure excludes water uses that would not affect human health (i.e., water used for toilets or lost because of leaks)). See *Water Use Today*, U.S. EPA & WATER SENSE, https://www3.epa.gov/watersense/our_water/water_use_today.html (last visited Sept. 30, 2016).

10. The Natural Resources Defense Council ("NRDC") is a not-for-profit organization founded in 1970 by law students and attorneys. It now has more than two million members. Its mission is to "safeguard the earth—its people, its plants and animals, and the natural systems on which all life depends." *About Us*, NAT. RES. DEF. COUNCIL, <https://www.nrdc.org/about> (last visited Sept. 30, 2016). It should be noted that, "NRDC and the American Civil Liberties Union of Michigan served upon EPA a petition on behalf of Flint residents on October 1, 2015, requesting an intervention many months before the agency issued an administrative order on January 21, 2016, directed at city and state officials. Ultimately, NRDC and ACLU-MI also filed litigation on behalf of local citizens in an effort to address Flint's water woes." WIDESPREAD LEAD CRISIS, *supra* note 1, at 4.

11. See WIDESPREAD LEAD CRISIS, *supra* note 1, at 5 (finding that "over 18 million people were served by 5,363 community water systems that violated the Lead and Copper Rule" in 2015, including failures to test, report, and treat water contaminated by lead or were found to have "conditions that could result in lead contamination").

This paper begins by exploring America's federalism roots and the creation of our current cooperative federalism model, which is reflected in the Safe Drinking Water Act of 1974¹² and the 1991 Lead and Copper Rule.¹³ Section Three identifies the structural challenges of the cooperative federalism model. Section Four explores the base facts of Flint Water as well as the historical and political context in which this behavior occurred. In this way, Flint Water can be seen as a case study for the flaws of cooperative federalism. The final section suggests exploring a collaborative or polyphonic¹⁴ federalism model to provide safe water.

II. FEDERALISM & ENVIRONMENTAL LAW

A. *The Beginning*

1. American Roots

Our founding fathers are credited with creating modern federalism,¹⁵ a form of government that allocates power between multiple sovereigns within a single territory.¹⁶ Their action marked a radical departure from the governing philosophy of the time that sovereignty, by definition, was indivisible.¹⁷ Indeed, it was the “eighteenth century’s conviction that there must be in every state, if it were to be a state, an indissoluble supreme power.”¹⁸ Wood vividly describes the strength of this sentiment:

A state with more than one independent sovereign power within its boundaries was a violation of the unity of nature; it would be like a monster with more than one head, continually at war with itself, an

12. 42 U.S.C. § 300f (2012).

13. 40 C.F.R. § 141.80 (2015).

14. Polyphony is a style of musical composition that employs two or more simultaneous but relatively independent melodic lines.

15. See ALISON L. LACROIX, *THE IDEOLOGICAL ORIGINS OF AMERICAN FEDERALISM* 1–2 (2010); FORREST McDONALD, *STATES’ RIGHTS AND THE UNION: IMPERIUM IN IMPERIO 1776–1876*, viii (2000).

16. McDONALD, *supra* note 15, at viii.

17. *Id.* at 1.

18. GORDON S. WOOD, *THE CREATION OF THE AMERICAN REPUBLIC, 1776–1787* 345 (1998). Sir William Blackstone expresses the same sentiment: “There is and must be in every state a supreme, irresistible, absolute, uncontrolled authority in which the *jura summi imperii*, in the rights of sovereignty, reside.” WILLIAM BLACKSTONE, *COMMENTARIES OF THE LAWS OF ENGLAND* 48–49 (1765). This is not to say that the sovereign could not delegate authority to a sub-unit within the territory, but the unit’s authority, even if it is self-governing, emanates from and is subordinate to the sovereign. McDONALD, *supra* note 15, at 1–2.

absurd chaotic condition that could result only in the dissolution of the state.¹⁹

And yet, by the second half of the eighteenth century²⁰ and certainly by the 1787 Constitutional Convention, our founding fathers moved away from this indivisible conception of sovereignty to the idea of dual sovereignty (i.e., *imperium in imperio* or supreme power within supreme power).²¹ Justice Kennedy has spoken proudly about this American contribution.

Federalism was our Nation's own discovery. The Framers split the atom of sovereignty. It was the genius of their idea that our citizens would have two political capacities, one state and one federal, each protected from incursion by the other. The resulting Constitution created a legal system unprecedented in form and design, establishing two orders of government, each with its own direct relationship, its own privity, its own set of mutual rights and obligations to the people who sustain it and are governed by it.²²

LaCroix suggests the action was a mix of necessity and theory.²³ This new philosophy that splits power between two sovereigns was necessary (and realistic) in the sense that only a centralized government could address the challenges facing the new nation,²⁴ yet

19. WOOD, *supra* note 18, at 345–46, citing ISSAC KING, THE POLITICAL FAMILY 6–7 (James Humphreys, Jr. 1775).

20. See LACROIX, *supra* note 15, at 7–8. LaCroix challenges the position that federalism originated at the Constitutional Convention of 1787, arguing that the concept of federalism was created in time between 1764 and 1802, and some of the ideas that provided a conceptual framework for our Founders date back to the late 16th and early 17th centuries. *Id.* at 11. McDonald evaluates colonial acceptance of dual sovereigns from an institutional perspective, noting a certain level of imperial-federal continuity in the second half of the 18th century. While the British viewed Parliament as the supreme authority or sovereign over all matters, colonists were living in a *de facto* state of divided sovereignty. They recognized the power of Parliament in things pertaining to the empire as a whole, like trade and foreign relations, but the colonies exercised sovereignty with respect to internal concerns. MCDONALD, *supra* note 15, at 2. McDonald does acknowledge that the colonies were not completely independent with respect to internal matters in the sense that colonial legislation was reviewable and could be disallowed by Britain; however, the power was erratically exercised, and disallowance rates were very low (approximately 5 percent (i.e., 469 disallowances out of 8563 reviews)). *Id.*

21. MCDONALD, *supra* note 15, at viii.

22. U.S. Term Limits, Inc. v. Thornton, 514 U.S. 779, 838 (1995) (Kennedy, J., concurring); See also EUGENE HICKOK, WHY STATES? THE CHALLENGE OF FEDERALISM 15 (2007) (“[The Constitution] held out the proposition that the nation would benefit from an energetic but limited national government while simultaneously nurturing and being nurtured by sovereign, politically vital states and communities. . . . A nation where states matter.”).

23. LACROIX, *supra* note 15, at 2.

24. See HICKOK, *supra* note 22, at 8 (noting James Madison's strategy to convince delegates that the existing Articles of Confederation, regardless of the strength of the confederation itself, were inadequate to the task and that a new, truly national government was needed).

strong and fiercely independent state governments already existed.²⁵ The action also was rooted in the theory that “a republic could not easily be maintained across a large territory.”²⁶

2. Dual Federalism

Originally “the states and the national government each enjoyed exclusive authority over defined and non-overlapping realms.”²⁷ This approach is known as “dual federalism,”²⁸ which, by virtue of affording mutually exclusive powers to the state and national governments, made “conflicts between the two appear[] unlikely.”²⁹ The authority granted to the new national government was also intended to be limited.

The powers delegated by the proposed Constitution to the federal government are few and defined. Those which are to remain in the State governments are numerous and indefinite. The former will express principally on external objects, as war, peace, negotiation, and foreign commerce; with which last the power of taxation will, for the most part, be connected. The powers reserved to the several States will extend to all the objects which, in the ordinary course of affairs, concern the lives, liberties, and properties of the people, and the internal order, improvement, and prosperity of the States.³⁰

In this dual-federalism era, environmental matters generally fell to the states as an issue of land use.³¹ With respect to water specifically,

25. LACROIX, *supra* note 15, at 2. “Given the long separate political identity of the states, only a political organization that gave a strong role to states was politically viable. Virginia had existed for over 150 years before the Declaration of Independence; Massachusetts was only slightly younger. The Constitution had to recognize that organizational reality.” ROBERT A. SCHAPIRO, POLYPHONIC FEDERALISM: TOWARD THE PROTECTION OF FUNDAMENTAL RIGHTS 33 (2009).

26. LACROIX, *supra* note 15, at 2; *see* HICKOK, *supra* note 22, at 9–10. Contrast this with Madison’s position that “a large, extended republic would embrace a ‘multiplicity of interests’ making it less likely that an interest ‘adverse to the rights of other citizens, or to the permanent and aggregate interest of the community’ could prevail.” *Id.* at 10 referring to, but not citing to THE FEDERALIST, Nos. 10, 51 (James Madison).

27. SCHAPIRO, *supra* note 25, at 33.

28. *Id.* Chief Justice Roger Taney would later describe it: “The powers of the General Government, and of the State, although both exist and are exercised within the same territorial limits, are yet separate and distinct sovereignties, acting separately and independently of each other within their respective spheres.” *Id.* at 35, citing *Ableman v. Booth*, 62 U.S. 506, 516 (1859).

29. SCHAPIRO, *supra* note 25, at 33. One leader in Virginia noted how the general and state governments acted within different spheres and “[b]eing for two different purposes, as long as they are limited to the different objects, they can no more clash than two parallel lines can meet.” *Id.*, citing 3 DEBATES ON THE ADOPTION OF THE FEDERAL CONSTITUTION 301 (Jonathan Elliot ed., 2d ed., 1888).

30. THE FEDERALIST No. 45. (Alexander Hamilton).

31. Kirsten H. Engel, *Harnessing the Benefits of Dynamic Federalism in Environmental Law*, 56 EMORY L.J. 159, n.10 (2006).

in the late 1700's and early 1800's, cities and towns began creating public water supply systems or purchasing those that had been previously owned by private companies.³² By 1860, there were over 400 water systems, and the number grew to over 3,000 by 1900.³³ Today, there are approximately 155,000 public water systems in the United States that service almost ninety percent of the population.³⁴ Of those that are community water systems, 83.8 percent are locally owned,³⁵ and that number is increasing.³⁶ Before 1970, these systems were not generally regulated at the federal level.³⁷

B. *The Shift—Cooperative Federalism*

The Supreme Court continues to iterate the power of sovereign states and has recently interpreted the Constitution to require “that Congress treat the States in a manner consistent with their status as residuary sovereigns and joint participants in the governance of the Nation.”³⁸ Since our founding, however, questions of federalism have focused on states' rights,³⁹ as federal power has become more expansive than was proposed and ratified originally.⁴⁰

32. William E. Cox, *Evolution of the Safe Drinking Water Act: A Search for Effective Quality Assurance Strategies and Workable Concepts of Federalism*, 21 WM. & MARY ENVTL. L. & POL'Y. REV. 69, 72–73 (1997); FOOD & WATER WATCH, THE STATE OF PUBLIC WATER IN THE UNITED STATES, 3–4 (2016), http://www.foodandwaterwatch.org/sites/default/files/report_state_of_public_water.pdf [hereinafter FOOD & WATER WATCH].

33. Cox, *supra* note 32, at 72–73.

34. U.S. Env'tl. Prot. Agency, *Drinking Water Requirements for States and Public Water Systems, Information About Public Water Systems*, <https://www.epa.gov/dwreginfo/information-about-public-water-systems> (last updated Dec. 3, 2015) [hereinafter *Drinking Water Requirements*].

35. FOOD & WATER WATCH, *supra* note 32, at 3.

36. *Id.* at 2, 4.

37. Cox, *supra* note 32. Federal jurisdiction in the early 20th century focused on inter-state carriers, leaving water supply generally to the localities. *Id.*

38. Robert L. Glicksman, *From Cooperative to Inoperative Federalism: The Perverse Mutation of Environmental Law and Policy*, 41 WAKE FOREST L. REV. 719, 722 (2006), citing *Alden v. Maine*, 527 U.S. 706, 748 (1999) (dismissing federal Fair Labor Standards Act claim against the state of Maine, with the Supreme Court finding that Congress could not use its Article I powers to abrogate the states' sovereign immunity in private suits filed in state courts).

39. Ernest A. Young, *Protecting Member States' Autonomy in the European Union: Some Cautionary Tales from American Federalism*, 77 N.Y.U. L. REV. 1612, n.147, citing Edward T. Swaine, *Subsidiarity and Self-Interest: Federalism at the European Court of Justice*, 47 HARV. INT'L L.J. 1, 2–3 (2000). For a more particular look into the States' rights debate, see ERIN RYAN, FEDERALISM AND THE TUG OF WAR WITHIN (2011) and SOTIRIOS A. BARBER, THE FALLACIES OF STATES' RIGHTS (2013).

40. Martha A. Field, *The Differing Federalisms of Canada and the United States*, 55 LAW & CONTEMP. PROBS. 107, 107 (1992); HICKOK, *supra* note 22, at 3–4. Field suggests that the shift in power occurred because of the structure of the Constitution itself. Field proffers that the lack of

The Supreme Court's use of the term "joint participants" is also instructive. It notes the shift away from dual federalism, which, over time, failed to reflect the reality of state and federal relationships as they began to overlap and intersect.⁴¹ This brought us to cooperative federalism, which is the prevalent model used today.⁴² For example, there are certain environmental issues that implicate both national and local concerns, such that they can only be resolved when inter-jurisdictional authority exists.⁴³ Safe water is a prime example.

As previously noted, water supply was treated historically as a local matter for hundreds of years, but these early localities were not exactly effective.

Many of these systems did not supply safe water and often were the source of major disease outbreaks resulting from biological contamination of the water. The ability to collect and deliver water had outpaced understanding of the health implications of water supply and the knowledge to remedy the problem.⁴⁴

Nevertheless, the issue of systemic water contamination and pollution went unchecked for generations. A 1969 Community Water Supply Survey finally seemed to turn the tide. It revealed that only sixty percent of the public water supply systems surveyed were in compliance with applicable standards.⁴⁵ Nearly forty percent of tap water samples exceeded bacteriological or chemical contaminant standards.⁴⁶ "Physical facilities were often inadequate [and] water treatment plant operators were inadequately trained. State programs

enumeration of state powers, coupled with the power of the federal government to interpret its enumerated rights, has expanded the rights of the national government to the detriment of the several states. *See id.* at 108–12 (considering the structural and ideological differences between the United States' and Canada's constitutions and the impacts of their respective disbursements of power).

41. SCHAPIRO, *supra* note 25, at 55–56.

The term [cooperative federalism] arose out of the recognition that the separation of state and national authority assumed in dual federalism did not accurately describe the actual interaction of state and national governments. The perceived need for such cooperation and the longstanding judicial acquiescence in these cooperative arrangements gave the concept strong normative force. Cooperative federalism seeks to legitimate in theory the state-federal partnerships that in fact pervade governmental operations. *Id.* at 90.

42. *Id.* at 35–36. See also *id.* at 55 (discussing the Supreme Court's 1990's jurisprudence, which, even though it shifted back to a pre-New Deal philosophy that sought to draw lines between state and federal authority, "[g]iven the pervasive concurrence of state and federal functions, that notion of dual federalism ha[d] passed irretrievably into history.")

43. Bridget A. Fahey, *Consent Procedures and American Federalism*, 128 HARV. L. REV. 1561, 1629 n.19 (2015) (citing RYAN, *supra* note 39, at 146).

44. Cox, *supra* note 32, at 73.

45. SCHEBERLE, *supra* note 1, at 125.

46. Cox, *supra* note 32, at 75.

were found commonly to be deficient in inspections and sampling for bacteriological analysis.”⁴⁷

Despite ideological divides, general agreement began to emerge that the environmental challenges had reached a breaking point and necessitated the creation of a federal environment policy.⁴⁸ The 1970’s heralded an era that scholars describe as the “Decade of the Environment,”⁴⁹ an age of federal activism,⁵⁰ and “a new experiment in cooperative federalism in the field of environmental law.”⁵¹

The first step involved enacting the National Environmental Policy Act of 1969,⁵² which President Nixon signed into law on January 1, as his first official act of 1970.⁵³ Then, during the 1970 State of the Union address, President Nixon announced his plans to further strengthen federal water and air pollution laws. “It was in this atmosphere of intense concern for environmental issues that President Nixon . . . proposed making ‘the 1970s a historic period when, by conscious choice, [we] transform our land into what we want it to become.’”⁵⁴ The president “continued this activist theme”⁵⁵ by announcing a 37-point action plan to strengthen federal programs addressing water and air pollution.⁵⁶

The remainder of 1970 heralded the first Earth Day, the enactment of the Clean Air Act,⁵⁷ and the creation of the EPA.⁵⁸ Congress then enacted the Clean Water Act⁵⁹ in 1972 and the Safe Drinking Water Act⁶⁰ in 1974.⁶¹

47. *Id.*

48. Jack Lewis, *The Birth of EPA*, 11 EPA J. 6, 7 (1985).

49. SCHEBERLE, *supra* note 1, at 5.

50. Cox, *supra* note 32, at 76.

51. Glicksman, *supra* note 38, at 719.

52. Pub. L. No. 91-190, 83 Stat. 852 (codified as amended at 42 U.S.C. §§ 4321–4347 (1994)).

53. Lewis, *supra* note 48, at 7.

54. *Id.*

55. *Id.*

56. *Id.*

57. 42 U.S.C. § 7401 (2012).

58. Lewis, *supra* note 48, at 8.

59. Federal Water Pollution Control Act, Pub. L. No. 92-240, 86 Stat. 47 (1972) (codified as amended at 33 U.S.C. §§ 1251–1387 (1994)).

60. 42 U.S.C. § 300f (2012).

61. Cox, *supra* note 32, at 76 n.44. This behavior would have been protected in the 1980’s by what Schapiro suggests was “the most nationalistic period in the rulings of the United States Supreme Court. In a series of decisions the Supreme Court disavowed judicial review of congressional encroachment on state prerogatives[.]” SCHAPIRO, *supra* note 25, at 1.

C. Statutory Schemes Generally

In these statutory schemes and others, the federal government has pursued three levels of federal-state interactions to implement federal environmental programs. At the far ends of the spectrum are total pre-emption or direct statutory orders⁶² and voluntary programs.⁶³ The middle ground is one of partial pre-emption, which is rooted in cooperative federalism.⁶⁴

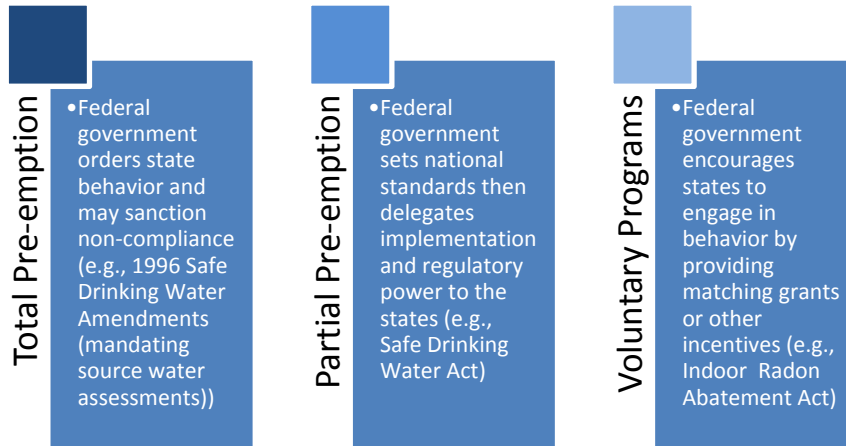


Figure 1 Federal-State Interaction Spectrum⁶⁵

In a partial pre-emption case, cooperation occurs as follows: The federal government typically bears primary responsibility for setting strong health or technology-based environmental standards.⁶⁶ The pattern “was to write strong statutory language that relied on command-and-control regulatory schemes and an initial preemption of

62. “In this case, congressional architects of environmental laws oblige the states to perform certain tasks.” SCHEBERLE, *supra* note 1, at 9. An example is the 1996 Safe Drinking Water Act amendments that required states to conduct source water assessments. If states fail to comply, they may face sanctions or be compelled by court order to perform their duties. The only limitation to federal power is that its behavior cannot constitute a constitutional encroachment on state sovereignty. *Id.* at 10

63. These are primarily voluntary programs that encourage state participation with the “carrot” of federal grant monies. An example of this type of relationship is the Indoor Radon Abatement Act, which provided matching funds for states to promote residential radon testing. *Id.*

64. *Id.* at 8.

65. *Id.* at 9–10.

66. *Id.* at 4.

state laws, then permit devolution of responsibility back to state and local governments.”⁶⁷ States are encouraged “to become regulatory partners in federal programs,”⁶⁸ with states and local governments serving as “front-line delivery agents.”⁶⁹ Encouragement can involve Congress “threatening to preempt the existing regulations of non-participating states [or] rewarding participating states with substantial monetary subsidies.”⁷⁰

Partial pre-emption has become “[t]he prevailing national pattern for environmental policy.”⁷¹ Unlike total pre-emption,⁷² it “allows states certain flexibility in program design.”⁷³ In this way, partial pre-emption reflects a cooperative federalism model of layered state and federal responsibility.⁷⁴ Within this framework, “each level of government ha[s] a particular role to play . . . contribut[ing] to the common goal of minimizing the degree to which human activities threaten harm to health and to valuable natural resources.”⁷⁵

D. Safe Drinking Water

The philosophical shift of the 1970’s prompted the enactment of the environmental statutes noted above.⁷⁶ The most relevant to our discussion of Flint Water are the Safe Drinking Water Act and the Lead and Copper Rule, with which all public water systems are

67. *Id.* at 8.

68. Ronald J. Krotoszynski, Jr., *Cooperative Federalism, the New Formalism, and the Separation of Powers Revisited: Free Enterprise Fund and the Problem of Presidential Oversight of State-Government Officers Enforcing Federal Law*, 61 DUKE L.J. 1599, 1602 (2012), citing Evan Caminker, *The Unitary Executive and State Administration of Federal Law*, 45 U. KAN. L. REV. 1075, 1075 (1997).

69. SCHEBERLE, *supra* note 1, at 5.

70. Krotoszynski, *supra* note 68, at 1602 (citing Caminker, *supra* note 68, at 1075).

71. SCHEBERLE, *supra* note 1, at 8.

72. In the case of complete pre-emption, federal law mandates state performance according to federal prescription. *Id.* at 9. “During the 1970s and 1980s federal assertion into previous state policy territory reached its zenith with preemptions more than doubling after 1969. More than half of the federal mandates enacted since 1789 were passed in the 1970s and 1980s, and many of those preemptions dealt with environmental protection.” *Id.* at 5.

73. *Id.* at 9.

74. *See id.* at 1 (“[p]ulling together suggests that state and federal personnel involved in the implementation of a program work cooperatively, regarding each other with mutual trust, respect, and a shared sense of program goals”).

75. Glicksman, *supra* note 38, at 719–20.

76. *See* SCHEBERLE, *supra* note 1, at 124 (“taking a hard look at the wide range of public water suppliers, the intensely emotional and complicated process of setting standards” has “promoted not only environmental groups but also government agencies at all levels to foresee a ‘crisis’ on the drinking water horizon”).

required to comply.⁷⁷ Flint Water and the EPA's own data, however, reveal that there may be a stark divide between the statutory theory and the actual reality of our drinking water scheme.

1. The Safe Drinking Water Act

The Safe Drinking Water Act sets Maximum Contaminant Levels ("MCLs") for microorganisms, disinfectants, disinfection byproducts, chemicals, and radionuclides.⁷⁸ MCLs should be distinguished from Maximum Contaminant Level Goals ("MCLGs"). The goals focus on the protection of human health.⁷⁹ However, these goals are not enforceable, and they may not even be the same as the MCLs or action levels, which are based on the best achievable treatment technology and cost.⁸⁰ For example, the MCLG for lead is zero because of its serious health effects.⁸¹ On the other hand, the action level for lead is .015 mg/L (fifteen parts per billion).⁸²

Within this cooperative-federalism framework, states may be granted primacy with respect to the implementation and enforcement of the Safe Drinking Water Act standards so long as certain requirements are met, including that the state standards are at least as stringent as the federal standards.⁸³ If states elect not to seek primacy, the enforcement authority remains with the federal government, but,

77. *Id.* at 124, 130.

78. 42 U.S.C. § 300g-1.

79. Memorandum from Committee on Energy and Commerce Majority Staff to Subcommittee on Environment and the Economy and the Subcommittee on Health (Apr. 11, 2016) (explaining "EPA's primary goals in this effort are to: (1) improve the effectiveness of the corrosion control treatment in reducing exposure to lead and copper and (2) require additional actions that reduce the public's exposure to lead and copper when corrosion control treatment alone is not effective") [hereinafter *Flint Lessons Memo*].

80. *See* SCHEBERLE, *supra* note 1, at 129 ("These guidelines are not enforceable by EPA" [and] MCL is set as close to the MCLG as 'feasible.' The concept of feasibility allows EPA to consider technological limitations and cost of treatment.").

81. *See* FLINT ADMINISTRATIVE ORDER, *supra* note 1, at 27 ("EPA has set the Maximum Containment Level Goal ('MCLG') at zero for lead because (1) there is no clear threshold for some non-carcinogenic lead health effects, (2) a substantial portion of the sensitive population already exceeds acceptable blood lead levels, and (3) lead is a probable carcinogen.").

82. 40 C.F.R. § 141.80(b)(1); *See* *Flint Lessons Memo*, *supra* note 79, at 4 ("The LCR also establishes a lead "action level" of 15 parts per billion (ppb) based on the 90th percentile level of water samples for water drawn from the tap. This means that for a water system to be in compliance with the LCR not more than 10 percent of sampled homes located in high risk areas for lead contamination (primarily homes with lead pipes and/or lead service lines) may have lead levels in their drinking water exceeding 15 ppb.").

83. *See* 42 U.S.C. § 300g-2 (explaining when a "[s]tate has primary enforcement responsibility for public water systems").

as of 2016, all states, except Wyoming, have been granted primacy.⁸⁴ This makes them responsible for safe drinking water within their territory unless the federal government re-assumes authority, which is what is supposed to occur if the state program proves inadequate.⁸⁵

2. Lead and Copper Rule

Lead and copper are monitored somewhat differently than other contaminants because the contamination usually comes from corrosion of the water distribution system itself rather than the water source.⁸⁶ Instead of setting numeric MCLs for lead and copper, the Lead and Copper Rule uses a system of action levels and mandated treatment techniques.⁸⁷ Treatment techniques include “requirements for corrosion control treatment, source water treatment, lead service line replacement, and public education. These requirements are triggered, in some cases, by lead and copper action levels measured in samples collected at consumers’ taps.”⁸⁸

The Lead and Copper Rule specifically details how action-level samples shall be taken. Samples shall be “first draw” samples taken from the cold water tap in the homes with the highest risk for contamination and drawn from water that has been stagnant for at least six hours.⁸⁹ The number of samples required to be taken depends on the size of the water system.⁹⁰ If ten percent of the samples exceed the action level, the water supplier is required to take action to limit exposure (i.e., the treatment techniques described above, such as public education, corrosion control, etc.).⁹¹ It is not a violation to exceed the action level; it is a violation to fail to take corrective action.⁹²

84. *Safe Drinking Water Act Primacy Agencies*, SUSTAINABLE INFRASTRUCTURE MGMT. PROGRAM LEARNING ENVT., <http://simple.werf.org/Books/Contents/Asset-Management-for-Small-Utilities/Appendices/Safe-Drinking-Water-Act-Primacy-Agencies> (last visited June 13, 2016) [hereinafter *Safe Drinking Water Act Primacy Agencies*].

85. See SCHEBERLE, *supra* note 1, at 9 (“If approved state programs prove inadequate in enforcing national standards, the federal government reserves the right to ‘preempt’ state authority and reassume primacy.”).

86. ENVTL. PROT. AGENCY, OPTIMAL CORROSION CONTROL TREATMENT EVALUATION TECHNICAL RECOMMENDATIONS FOR PRIMACY AGENCIES AND PUBLIC WATER SYSTEMS 8 (2016), <https://www.epa.gov/dwreginfo/optimal-corrosion-control-treatment-evaluation-technical-recommendations> [hereinafter EPA 2016 TECHNICAL RECOMMENDATIONS].

87. *Id.* at 3.

88. 40 C.F.R. § 141.80(b) (2014).

89. 40 C.F.R. § 141.86(a)(1) (2014); EPA 2016 TECHNICAL RECOMMENDATIONS, *supra* note 86, at 4.

90. EPA 2016 TECHNICAL RECOMMENDATIONS, *supra* note 86, at 4.

91. See 40 C.F.R. §§ 141.80(b)–(c).

92. Flint Lessons Memo, *supra* note 79, at 3.

3. Safe Water Scheme—Theory vs. Reality

Critics claim “weak regulatory language and poor implementation and enforcement of the Lead and Copper Rule at the federal and state levels are at the heart of the [Flint] problem.”⁹³ This could be due, in part, “[b]ecause cooperative federalism accepts the general notion of a federal-state partnership, but does not provide for rules of engagement, the theory provides no resources for monitoring federal-state relations.”⁹⁴ In theory, though, the SDWA/LCR model of cooperative federalism could provide a doubly redundant public protection system—a belt, suspender, and brace – if each actor was capable of fulfilling its responsibilities.

a. In Theory

Local or regional suppliers, who are required to provide water in compliance with federal and state standards, are at the forefront. If they fail, they must notify users and relevant regulatory entities of their non-compliance. As part of its push for SDWA enactment, EPA claimed that this notification requirement, in addition to the truly American notion of litigation deterrence, creates market incentives that protect public health.⁹⁵

This [notification] provision, coupled with a citizen suit provision will, we believe, make enforcement actions by regulatory agencies largely unnecessary. We believe that suppliers of drinking water, who in almost all cases charge for their product, could not withstand the public pressure if their customers have noticed that they are receiving water not in compliance with mandatory health standards. The possibility of a citizen suit provides an additional incentive to suppliers to maintain compliance with the standards.⁹⁶

A 2016 study confirms the EPA’s projections with respect to the overall impact of local control, finding that water supply systems that are publicly owned by localities tend to be more accountable to the

93. Widespread Lead Crisis, *supra* note 1, at 4.

94. Robert A. Schapiro, *Toward a Theory of Interactive Federalism*, 91 IOWA L. REV. 243, 285 (2005).

95. Press Release, Evtl. Prot. Agency, EPA Voices Support for Safe Drinking Water Act (Mar. 8, 1973) (quoting then EPA Deputy Administrator Robert W. Fri), <https://www.epa.gov/aboutepa/epa-voices-support-safe-drinking-water-act> [hereinafter March 1973 EPA Press Release].

96. *Id.*

residents,⁹⁷ more affordable,⁹⁸ more equitable,⁹⁹ and more environmentally sound.¹⁰⁰

Beyond the locality and consumers, the Safe Drinking Water Act and Lead and Copper Rule are designed to provide layered oversight and accountability: The state is empowered to monitor and regulate the supplier, and the federal government retains authority to intervene if the state fails in its responsibilities.

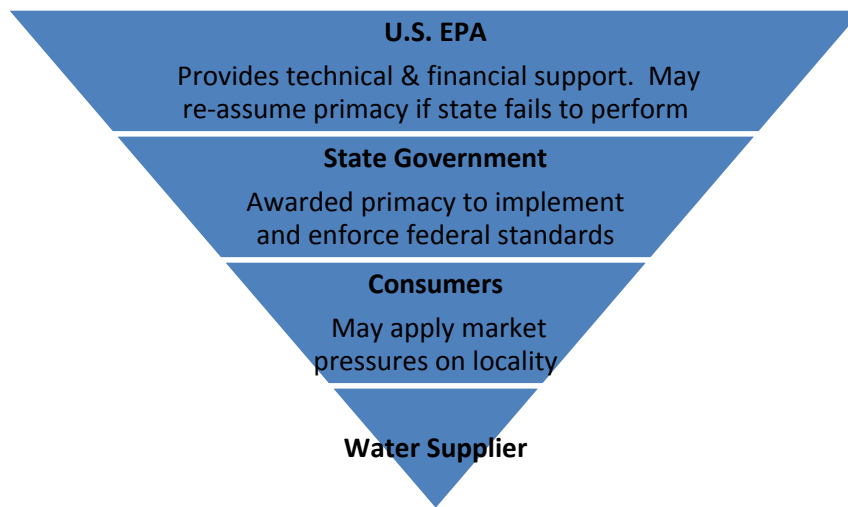


Figure 2 Cooperative Federalism—Safe Drinking Water Model

Graphically, one can picture the scheme as an inverted pyramid, with the locality at the bottom, and the consumers, the state, and the EPA representing increasingly powerful layers moving upward. When the system works, the more powerful layers above are in place to prevent the escalation of a problem below, and it would take a failure at all four levels for significant, long-term harm to occur.¹⁰¹

97. FOOD & WATER WATCH, *supra* note 32, at 6.

98. *Id.* at 11.

99. *Id.*

100. *Id.*

101. As federalism itself is an American invention, an analogy to our favorite pastime—baseball—might further the explanation of cooperative federalism and the Safe Drinking Water Act. One can imagine a line drive being hit directly toward the pitcher. In the case of the SDWA, the line drive would be a water contamination issue. The pitcher (a.k.a. the local water supplier) would be the first to respond and try to stop the ball. If the supplier fails, one would expect the in-field players (a.k.a. state government) to back up the pitcher and stop the ball. If both the pitcher and the in-field players fail, the outfielders (a.k.a. the EPA) serves as a final line of defense. Like cooperative federalism, each player plays his or her position and relies on the others to perform their jobs. The roles are clearly defined, and each player would be careful not to

b. The Reality

Failure at that rate sounds like a statistical longshot, but it is not. Flint Water represents a complete breakdown of this model, with failures at each level bringing the weight of the entire structure down upon the locality.

Moreover, the NRDC's report, which is based on EPA's official violations and enforcement data,¹⁰² indicates Flint Water is not an isolated case. It reveals that in 2015, at least 3.9 million Americans were exposed to lead in their drinking water at levels that exceeded fifteen parts per billion.¹⁰³ (The words "at least" are chosen purposely as EPA acknowledges its data is substantially incomplete.¹⁰⁴ For example, they do not include Flint.¹⁰⁵)

An additional 18 million Americans were at risk for lead poisoning in 2015 because their water systems were not in compliance with the Lead and Copper Rule.¹⁰⁶ These "violations included failures to properly test the water for lead or conditions that could result in lead contamination, failures to report contamination to state officials or the public, and failures to treat the water appropriately to reduce corrosion."¹⁰⁷ In eighty-eight percent of these cases overall, and in the eighty-two percent that involved health-related violations, there was no formal state or federal enforcement response.¹⁰⁸ Sadly, these statistics are not new.¹⁰⁹ Scheberle also noted systemic compliance

invade another player's space (e.g., one would not see an outfielder charge the pitcher's mound to stop a line drive). And, as in baseball, there is no need for the outfielder to step in if the first-line defenders are doing their jobs. However, when the pitcher or the in-field players commit an error and miss a ball, it takes a long time for that line drive to make it to the outfield, and, by that time, the runner has made it to home. In the case of a water contamination issue, that can be a game-ending run.

102. The NRDC used official EPA violation and enforcement records and completed data analysis using geographic information system mapping software. WIDESPREAD LEAD CRISIS, *supra* note 1, at 5.

103. *Id.*

104. ENVTL. PROT. AGENCY, PROVIDING SAFE DRINKING WATER IN AMERICA: 2013 NATIONAL PUBLIC WATER SYSTEMS COMPLIANCE REPORT 3 (June 2013), <https://www.epa.gov/sites/production/files/2015-06/documents/sdwacom2013.pdf> [hereinafter EPA COMPLIANCE REPORT].

105. WIDESPREAD LEAD CRISIS, *supra* note 1, at 14.

106. *Id.* at 5.

107. *Id.*

108. *Id.* at 6. Scheberle also noted in 2004 the high number of violations, which she attributed to the lack of capacity of small providers. SCHEBERLE, *supra* note 1, at 128. Given the size of the suppliers, she further suggested that informal action, rather than formal action or fines, would be pursued as the most effective mode of obtaining compliance. *Id.*

109. This is not the first time where there has been a disconnect between the theory and the reality of the assertion of federal authority. One previous example is the American Civil War and

failures in her 2004 work.¹¹⁰ So what do these facts say about the capacity of our cooperative federalism model and the level of confidence it inspires?

III. COOPERATIVE FEDERALISM AT A CROSSROADS

The premise of this paper is that the cooperative federalism model we rely upon for safe water is becoming increasingly inadequate for the reality of twenty-first century water delivery. It places the already heavy and ever-increasing burden on the least powerful and capable actor—the water supplier.¹¹¹ This is problematic because when “the scope of an environmental harm does not match the regulator’s jurisdiction, the cost-benefit calculus will be skewed and either too little or too much environmental protection will be provided.”¹¹² In this case, it is the former.

A. *The Heavy Burden of Providing Safe Water in the Twenty-First Century*

The burden of providing safe water is great. In addition to meeting all of the technical requirements of the federal safe water scheme, which have been characterized as “overwhelming,”¹¹³

Reconstruction. The Thirteenth, Fourteenth, and Fifteenth Amendments changed drastically the states’ power over civil rights, election laws, and some aspects of criminal law, making them an area of shared state and federal responsibility, SCHAPIRO, *supra* note 25, at 36. And yet,

The federal government retreated from its obligations to supervise the areas of joint authority. After the Compromise of 1877, national troops withdrew from the former Confederate states, and national attention largely turned elsewhere. In the ironically named Civil Rights Cases in 1883, the Supreme Court restricted the authority of Congress to guarantee equal rights. In the infamous case of *Plessy v. Ferguson* in 1896, the Court held that the system of pervasive, legally enforced racial segregation in the South did not violate the constitutional command of equal protection of law. *Id.*

110. See SCHEBERLE, *supra* note 1, at 139–40 (“State officials are reluctant to adopt strong compliance postures toward systems that lack the ability to add new treatment technologies or monitoring staff. Thus, not only were PWS systems failing to comply but states also were failing to report these violations to EPA or to take action to address the problem.”).

111. This power “mismatch” has been noted before, as has its consequences. Even those advocating local water rights in the 1970’s recognized the mismatch might occur and necessitate more powerful entity involvement “where there is undue political influence at local levels, where there is sufficient interjurisdictional pollution, and where technological considerations give substantially greater efficiency to larger jurisdictions in either providing technical information or in carrying out control responsibilities.” See Richard Zerbe, *Optimal Environmental Jurisdictions*, 4 *ECOLOGY L.Q.* 193, 245 (1974); See also Jonathan H. Adler, *Jurisdictional Mismatch in Environmental Federalism*, 14 *N.Y.U. ENVTL. L.J.* 130 (2005); Engel, *supra* note 31, at 161.

112. Daniel C. Esty, *Revitalizing Environmental Federalism*, 95 *MICH. L. REV.* 570, 587 (1996).

113. SCHEBERLE, *supra* note 1, at 136.

particularly in the face of inadequate federal funding,¹¹⁴ other challenges loom large.

1. Infrastructure

The federal government's position is that "localities are primarily responsible for providing water infrastructure services."¹¹⁵ Yet, localities are ill-equipped to address the challenge. Infrastructure in the United States is "at the end of its useful life."¹¹⁶ (In fact, it may already be beyond it, but the underreporting of lead contamination levels¹¹⁷ and lack of complete EPA violations data¹¹⁸ may be masking the depth of the problem.) Nevertheless, in 2013, the American Society of Civil Engineers¹¹⁹ graded our nation's drinking water infrastructure a "D," noting that it is frequently more than 100 years old.¹²⁰ Michigan's governor noted much the same when delivering his Fiscal Year 2017 Budget Presentation.¹²¹ And the Council of State Governments ("Council")¹²² reports that 6.5 million lead service lines

114. *Id.* at 140, 143.

115. CLAUDIA COPELAND, ET AL., CONG. RESEARCH SERV., R42467, LEGISLATIVE OPTIONS FOR FINANCING WATER INFRASTRUCTURE 1 (2016) [hereinafter LEGISLATIVE FINANCING OPTIONS].

116. *The Major Changes of a Deteriorating Infrastructure in the United States*, GROWING BLUE Apr. 4, 2011, <http://growingblue.com/case-studies/the-major-challenge-of-a-deteriorating-infrastructure-in-the-united-states/>; WIDESPREAD LEAD CRISIS, *supra* note 1, at 6.

117. See generally WIDESPREAD LEAD CRISIS, *supra* note 1, at 5; Sara Gannim, *5,300 U.S. Water Systems Are in Violation of Lead Rules*, CNN Jun. 29, 2016, <http://www.cnn.com/2016/06/28/us/epa-lead-in-u-s-water-systems/>; Oliver Milman & Jessica Glenza, *At Least 33 Cities Used Water Testing 'Cheats' over Lead Concerns*, THE GUARDIAN (Jun. 2, 2016), https://www.theguardian.com/environment/2016/jun/02/lead-water-testing-cheats-chicago-boston-philadelphia?utm_source=esp&utm_medium=Email&utm_campaign=GU+Today+USA+-+morning+briefing+2016&utm_term=175331&subid=11404366&CMP=ema_a-morning-briefing_b-morning-briefing_c-US_d-1.

118. EPA COMPLIANCE REPORT, *supra* note 104.

119. The ASCE is the oldest engineering society in the United States. Founded in 1852, it now has more than 150,000 members from 177 countries. *About Us*, AM. SOC'Y OF CIVIL ENG'RS, http://www.asce.org/about_asce/ (last visited Sept. 30, 2016).

120. AM. SOC'Y OF CIVIL ENG'RS, *2013 REPORT CARD FOR AMERICA'S INFRASTRUCTURE—DRINKING WATER 17* (2013), <http://www.infrastructurereportcard.org/water-infrastructure/>.

121. RICK SNYDER & JOHN ROBERTS, WE ARE ONE MICHIGAN, GOVERNOR RICK SNYDER'S FY 2017 BUDGET PRESENTATION (slide at 15) (2016), http://www.michigan.gov/documents/budget/FY17_Exec_Budget_Presentation_514108_7.pdf [hereinafter FY 2017 BUDGET PRESENTATION].

122. The CSG was founded in 1933 and is a not-for-profit organization. It has created regional fora for American states and territories and Canadian provinces to share information and develop state policy. COUNCIL OF ST. GOV'TS, <http://www.csg.org/about/> (last visited Sept. 30, 2016). It also publishes annually *The Book of the States*, which provides data, shares policy initiatives, and reports on current affairs for state leaders of all three branches of government. *Book of the States*, COUNCIL OF ST. GOV'TS, <http://knowledgecenter.csg.org/kc/category/content-type/content->

are in use.¹²³

Both the Council and American Water Works Association¹²⁴ estimate it will cost 1 trillion dollars to replace these lines and maintain new growth over the next twenty-five years.¹²⁵ The EPA's estimate is \$655 billion over a twenty-year period.¹²⁶ (This figure is lower because EPA only considers projects that currently are eligible for federal funding.¹²⁷) "Whether the estimates made by states and EPA understate or overstate capital needs, communities face formidable challenges in providing adequate and reliable water infrastructure services."¹²⁸ The estimated spending needs for Michigan's drinking water infrastructure alone are \$13.8 billion over the next twenty years, with California's projection topping the list at \$44.5 billion.¹²⁹

To put these numbers in perspective, in 2014, all fifty U.S. states *combined* spent a total of \$4.7 billion on capital expenditures for the environment generally, which includes new construction, infrastructure, major repairs, land purchases, and other items.¹³⁰ Moreover, these figures represent a reduction in spending¹³¹ that is likely to continue.

In fiscal 2016, for the first time, general fund spending and revenue levels in the aggregate are estimated to have finally surpassed their pre-recession peaks, after adjusting for inflation. However, many individual states still report general fund expenditures and revenues below their fiscal 2008 levels in real terms. Looking ahead, states

type/book-states_(last visited Nov. 13, 2016). From 2012-2016, its presidents, all state governors, have been Republicans and Democrats. For the past five years, its chairs have all been Republicans. *Id.*

123. Liz Edmondson, *The State of America's Aging Drinking Water Infrastructure*, COUNCIL OF ST. GOV'TS: LIZ EDMONDSON'S BLOG (Feb. 5, 2016, 3:41 PM), <http://knowledgecenter.csg.org/kc/content/state-americas-aging-drinking-water-infrastructure>.

124. The AAWA was established in 1881 and is the "largest nonprofit, scientific and educational association dedicated to managing and treating water." *About Us*, AM. WATER WORKS ASS'N, <http://www.awwa.org/about-us.aspx> (last visited Sept. 30, 2016).

125. Edmondson, *supra* note 123.

126. LEGISLATIVE FINANCING OPTIONS, *supra* note 115, at 1.

127. *Id.*

128. *Id.*

129. Edmondson, *supra* note 123.

130. NAT'L ASS'N OF STATE BUDGET OFFICERS, STATE EXPENDITURE REPORT; EXAMINING FISCAL 2013-2015 STATE SPENDING 81, 86 (2015) [hereinafter STATE EXPENDITURE REPORT].

131. *See id.* ("State capital funding for environmental purposes in fiscal 2014 totaled \$4.7 billion, 5.0 percent of total capital spending and a 0.5 percent decrease from fiscal 2013. Environmental capital expenditures are estimated to decrease by 4.9 percent in fiscal 2015."). The areas that make up the remaining 95 percent are Higher Education, Corrections, Transportation, Housing, and an "Other" category. *Id.* at 80.

across the country continue to face budgetary challenges, including:
... a pent-up need for infrastructure investment[.]¹³²

2. Lack of Political Will

A recent Congressional Research Service report reiterates this “pent-up” need, indicating that “interest in other financing options continues, in part due to long-standing concerns with the costs to repair aging and deteriorated U.S. infrastructure generally, and also in response to events in individual regions and cities, such as Flint, MI.”¹³³ The report goes on to note:

Consensus exists among many stakeholders . . . on the need for more investment in water infrastructure. There is no consensus supporting a preferred option or policy. . . . Some of the options discussed in this report may be helpful, but there is no single method that will address needs fully or close the financing gap completely.¹³⁴

With these staggering cost estimates and difficult policy choices, it is perhaps not surprising that America is not moving ahead full steam with much-needed projects. In these economic times, it is unclear who has the financial capacity to undertake the challenge, although it is clear it is not the locality. In addition, in this very long and contentious election cycle, the candidates’ positions are divided.¹³⁵ While this gives voters a choice, it indicates nothing is likely to happen in the near future.

3. Inaccurate or Incomplete Reporting Suggests Systemic Disrespect for the Statutory Scheme

This inaction, while perhaps politically understandable, does leave all cities at risk, even those serviced by the most forthright and earnest water suppliers. And here is where an already grim picture gets worse, as there is reason to believe that not all suppliers meet this description. As noted above, even with incomplete data, the NRDC study reveals a startling number of violations.¹³⁶

The Guardian recently published a report with similar findings,

132. NAT’L ASS’N OF STATE BUDGET OFFICERS, SUMMARY: SPRING 2016 FISCAL SURVEY OF STATES 5 (2016).

133. LEGISLATIVE FINANCING OPTIONS, *supra* note 115, at Summary.

134. *Id.*

135. Gabrielle Marangell, *Presidential Politics: Water Supply and Contamination*, EARTH INST., COLUM. UNIV. (June 29, 2016), <http://blogs.ei.columbia.edu/2016/06/29/presidential-politics-water-supply-and-contamination/>.

136. *See* WIDESPREAD LEAD CRISIS, *supra* note 1, at 3 (introducing the underreporting problems but noting that “the widespread violations evidenced by the EPA’s data and the maps contained in this report reflect only a subset of a serious and likely much bigger lead problem”).

reporting that major U.S. cities have used in the past decade water sampling “cheats” that are likely to distort lead contamination results.¹³⁷ This report sought to study lead sample collection techniques in eighty-one of the largest cities east of the Mississippi.¹³⁸ It found that thirty-three of the forty-three cities that reported their techniques, including Boston, Chicago, and Philadelphia, had violated EPA sampling protocols by flushing stagnant water from pipes before collecting samples, removing aerators from the tips of the faucets, or collecting the samples slowly to reduce the flow of the water through the pipes.¹³⁹ Another statewide practice employed in Michigan and New Hampshire was to take samples early so there would be sufficient time to collect additional samples if the originals exceeded federal lead limits.¹⁴⁰ *The Guardian* echoes the Flint Taskforce’s characterization of EPA, reporting that the EPA has been slow to respond to the sampling issue and has left these “cheats” at the local and state levels largely unchecked for years.¹⁴¹

4. Security of Resources

a. Using Challenged Water Sources

Beyond infrastructure, localities in the future also may need to turn to more challenged water sources.¹⁴² Flint’s shift to the corrosive Flint River was related, at least in part, to its inability to pay the increased cost of Detroit water.¹⁴³ In addition to financial considerations, localities may need to shift to new water sources when an existing source lacks capacity, which might occur in cases of drought, expanding populations, and shifts from private water sources. For example, from 2007-2014, localities saw a ten percent increase in the number of people they serviced, with the addition of 24 million new people in just that short period of time.¹⁴⁴ At the same time, “many of

137. Milman & Glenza, *supra* note 117.

138. *Id.*

139. *Id.*

140. *Id.*

141. *Id.*

142. “As worldwide populations grow and become more affluent, the demand for food and water rises. At the same time, climate variability and change are making it difficult to provide water where and when it is needed. Floods destroy communities in one part of the world, while in another people trek miles every day just to get enough water to survive. Water scarcity is a pervasive problem and is one of the most difficult challenges we face in the 21st century.” *Water*, THE EARTH INST., <http://www.earth.columbia.edu/articles/view/2125> (last visited Sept. 30, 2016).

143. *See infra* Section IV.A.2 c–d.

144. FOOD & WATER WATCH, *supra* note 32, at 3, 5.

the states that have projected population growth increases also have higher per capita water use and can expect increased competition for water resources.”¹⁴⁵ Contamination of existing sources is another reason localities may seek alternative water sources.¹⁴⁶

In any of these circumstances, however, a basic truth may be that the locality was already using the best water source available, which means that if localities are required to identify alternative sources, their options may be limited. They may be forced to shift to sources that represent more of a financial or technical challenge or more of a danger. This, in turn, places an increased burden on the locality.

b. Terrorism

It goes without saying that the security of our water supply is a vital national security interest. Before September 11, 2001, there were “few political discussions about protecting America’s public water supplies from terrorist attacks. But since September 11, the discussions have moved front and center in many debates about environmental laws, including the Safe Drinking Water Act.”¹⁴⁷ Despite that critical turning point in 2001, as of 2002, no federal funds were available to help systems that served fewer than 100,000 people.¹⁴⁸ As of 2004, only twenty-eight percent of those surveyed felt that their state system was secure from attack.¹⁴⁹ Undoubtedly these discussions have become even more intense in recent years. The question remains whether localities are capable of defending against such threats. Those that are struggling to meet daily needs are unlikely to have longer-term strategies.

B. The Least Powerful Actor—The Water Supplier

These increasingly heavy burdens are placed on the least powerful actor—the water supplier. Of all the actors in the cooperative federalism scheme, the supplier is the least funded and the least

145. *Our Water, Tomorrow & Beyond, Communities Face Challenges*, U.S. ENVTL. PROT. AGENCY & WATERSENSE, https://www3.epa.gov/watersense/our_water/tomorrow_beyond.html (last visited Sept. 30, 2016).

146. See generally Marangell, *supra* note 135 (discussing contamination of water in America); See also Rochelle Riley, *A Long Friendship Put Spotlight on Flint Water Crisis*, DET. FREE PRESS (Apr. 29, 2016, 7:13PM), <http://www.freep.com/story/news/columnists/rochelle-riley/2016/02/06/long-friendship-put-spotlight-flint-water-crisis/79774098/>. (“Usually the reason you change your source water is because your original source is contaminated or it’s running out . . .”).

147. SCHEBERLE, *supra* note 1, at xvi.

148. *Id.* at 139.

149. *Id.* at 143.

imbued with official status. As a consequence, it cannot “go it alone,” but it also cannot compel financial, technical, and political support from state and federal actors, even when such assistance may be desperately needed.

Moreover, localities suffer when the perceived spheres of state and federal responsibility become more distinct and uncooperative, as reflected by the March 2016 Congressional testimony of Governor Snyder and EPA Administrator Gena McCarthy.¹⁵⁰ Although cooperative federalism works in the context of voluntary interaction, “it does little to sort out the conflicts that may arise in that relationship,”¹⁵¹ when it becomes competitive or confrontational. This makes it even more difficult for the locality to obtain needed assistance.

1. Water Supplier May Lack Capacity

First, most water supply systems are small and local. As noted above, today there are approximately 155,000 public water systems¹⁵² in the United States that service almost ninety percent of the population.¹⁵³ Of those that are community water systems, roughly eighty-four percent are locally owned,¹⁵⁴ and that number is increasing as part of a nationwide trend of localities purchasing small, privately-owned systems.¹⁵⁵

150. See generally *Transcript of March 17, 2016 Meeting of the House Oversight & Governmental Reform Committee*, FLINT WATER COMMITTEE, <http://www.flintwatercommittee.com/wp-content/uploads/2016/05/FLINT-HEARING-OF-MARCH-17-FINAL-with-cover-sheet.pdf>. Watching this testimony was the inspiration for this article. Both the state and federal governments were blaming each other for the crisis, and there was a kernel of truth to what they both were saying. The idea struck like a flash—the problem, at its core, is an issue of federalism.

151. SCHAPIRO, *supra* note 25, at 90.

152. A public water system, as defined, provides water for human consumption to at least twenty-five people or fifteen service connections. *Building the Capacity of Drinking Water Systems, Learn About Small Drinking Water Systems*, U.S. ENVTL. PROT. AGENCY, <https://www.epa.gov/dwcapacity/learn-about-small-drinking-water-systems> (last visited Sept. 29, 2016) [hereinafter *EPA – Building Capacity*].

153. *Drinking Water Requirements*, *supra* note 34. The EPA separates these public systems into three categories: (1) a community water system, which is a public water system that supplies water to the same population year-round; (2) a non-transient non-community water system, which is a public water system that regularly supplies water to at least 25 of the same people at least six months per year (e.g., schools, factories, office buildings, and hospitals that have their own water systems); and (3) a transient non-community water system, which is a public water system that provides water to people who do not remain for long periods of time (e.g., gas stations and campgrounds). *Id.* As demonstrated by these definitions, the term “public water system” refers to the people who are serviced by the system rather than the entity that owns the system.

154. FOOD & WATER WATCH, *supra* note 32, at 4.

155. *Id.* at 2, 4. It should be noted that about half of the systems in the United States are

There are many benefits to locally owned public water supply systems.¹⁵⁶ They tend to be more accountable to the residents,¹⁵⁷ more affordable,¹⁵⁸ more equitable,¹⁵⁹ and more environmentally sound.¹⁶⁰

There also are drawbacks, especially for small systems, in terms of capacity. Water systems range in size, serving anywhere from a few dozen to a few million taps,¹⁶¹ although the clear majority are considered small because of the number of people they serve.¹⁶² The diversity of the systems has “staggering implications for implementing the law. Small systems lack technical capacity and resources to comply.”¹⁶³ They operate on miniscule budgets. The smallest providers, who also tend to be the systems out of compliance, report zero total water revenues or very low revenues.¹⁶⁴ They also lack a tax base to repay loans.¹⁶⁵ Along these lines, EPA notes that “small water systems can face unique financial and operational challenges in consistently providing drinking water that meets EPA standards and requirements.”¹⁶⁶

Although other water suppliers may have more capacity, they are subject to a lack of federal and state funding. Although the Safe Drinking Water Act authorizes the federal government to provide states with up to seventy-five percent of the funds needed to administer their programs, funding has never reached that level.¹⁶⁷ In the 1980's and 1990's, federal funding covered only about thirty-five percent of the states' program costs¹⁶⁸ and the numbers have gone downhill from

privately owned. Although public systems service a clear majority of the population, “only about half of U.S. water systems are publicly owned. The reason is that there are many small private systems serving subdivisions and other small communities, while nearly every large city owns its own water system and serves a much larger population.” *Id.* at 5.

156. In terms of this report, the authors are comparing public and private, for-profit systems. *See generally id.* (finding public ownership of water systems a more affordable option for water service). Again, the EPA's characterization of “public water systems” refers to serving the public, and these systems can be both publicly and privately owned.

157. *Id.* at 6, 11.

158. *Id.*

159. *Id.* at 7.

160. *Id.*

161. SCHEBERLE, *supra* note 1, at 124.

162. *See EPA – Building Capacity, supra* note 152. More than 97 percent of these systems service less than 10,000 people. *Id.*

163. SCHEBERLE, *supra* note 1, at 127.

164. *Id.* at 128.

165. *See* LEGISLATIVE FINANCING OPTIONS, *supra* note 115, at 1.

166. *EPA – Building Capacity, supra* note 152.

167. *See* SCHEBERLE, *supra* note 1, at 126.

168. *See id.*

there. (And it should be noted that these are federal funds to the states, who then distribute funds to localities.)

Federal capitalization grants [or State Revolving Funds, which are the most prominent source of federal funding to the states] are entirely *subject to appropriations*, which generally have been *flat or declining for more than a decade*[.] The FY2009 exception to this trend reflects temporary funding under the American Recovery and Reinvestment Act of 2009)]. The President's *FY2016 budget request* for capitalization grants for the [Clean Water Act and Safe Drinking Water Act] SRF (State Revolving Funds) programs *was 2.3 percent below* the \$2.36 billion total appropriated in *FY2015*. Similarly, the *FY2017 request* for the two programs totals \$2.0 billion and is *nearly 13 percent below the FY2016-appropriated amount*.¹⁶⁹

Along these lines, it has been argued that “[t]he current congressional funding of \$2.37 billion per year for drinking water and clean water infrastructure funds is paltry at best and should at least be restored to the approximately \$8 billion per year stipulated under the 2009 American Recovery and Reinvestment Act.”¹⁷⁰

With respect to state funding, as noted above, states generally have been reducing capital expenditures related to the environment, with a 5.4 percent decrease from 2013-2015.¹⁷¹

2. Localities Cannot Compel Needed Assistance

Localities are the least powerful in terms of generating state and federal assistance. For example, there is no coordinated action being taken to address our infrastructure problem.¹⁷² Localities on the front line have the most incentive to facilitate coordinated action but are powerless to compel the action. They also lack the capacity to change the lack of federal and state funding noted above. A supplier is at the mercy of state and federal officials when it comes to technical guidance

169. LEGISLATIVE FINANCING OPTIONS, *supra* note 115, at 5 (emphasis added). In addition to the reduction in federal funds, smaller communities also criticize the SRF programs, which treat the funds as loans rather than grants. Smaller or beleaguered communities tend not to have the tax base to support loan repayment. *Id.* at 4.

170. WIDESPREAD LEAD CRISIS, *supra* note 1, at 6. This is not to say that the federal government does not fund the states, as federal funding makes up more than thirty percent of states' annual revenue, but the vast majority of federal funding is allocated to health care. STATE EXPENDITURE REPORT, *supra* note 147, at 1; See PEW CHARITABLE TRUSTS, *Fiscal 50: State Trends and Analysis, Federal Share of State Revenue*, PEWTRUSTS.ORG <http://www.pewtrusts.org/en/multimedia/data-visualizations/2014/fiscal-50#ind1> (last updated Jul. 28, 2016). The next highest pool of federal funds is devoted to education. As one can see, there are no easy options.

171. STATE EXPENDITURE REPORT, *supra* note 130, at 81, 86.

172. See Edmondson, *supra* note 123.

and support. The locality can request guidance but lacks a mechanism to require others to provide it.

C. *State as a Supplier & Enforcer*

Although uncommon, one final point to consider in terms of a structural flaw in the cooperative federalism model is that the state may become too heavily involved in local decisions, which impairs its ability to regulate and enforce the law. This could happen if the locality lacks appropriate funds. For example, state-appointed emergency managers in Flint made the critical decisions that led to the water crisis.¹⁷³ In a sense, the state appointees became the local supplier, so the state was essentially monitoring itself. With respect to the nineteen states and the District of Columbia who have emergency manager laws¹⁷⁴ or states that may become heavily embroiled in local water supply issues for other reasons, one must recognize that this altered position undercuts a key component of the cooperative federalism model. This can become a case of the fox guarding his own hen house.

IV. FLINT WATER—A CASE STUDY OF COOPERATIVE FEDERALISM

This section will describe the base facts of Flint Water and place them into a historical and political context. In this way, the ongoing challenges of our cooperative federalism model are revealed, as Flint Water is not just an isolated event. It is an outward manifestation of the ongoing challenges facing local, state, and federal government generally.

A. *The City of Flint*

As noted above, our nation relies increasingly on local public water supply systems, and there are many benefits to this model in terms of accountability, etc. However, Flint's significant economic and social challenges demonstrate an underlying problem with cooperative federalism, which places the greatest responsibility on what is sometimes the least capable actor—the locality.

Since Flint's conditions are extreme, it might be tempting to conclude that they cannot speak for a more systemic problem that localities face in our cooperative federalism model. However, rather

173. See FLINT FINAL REPORT, *supra* note 5, at 1; Jeremy C.F. Lin, Jean Rutter, & Haeyoun Park, *Events That Led to Flint's Water Crisis*, N.Y. TIMES, Jan. 21, 2016.

174. Liz Edmondson, *Emergency Manager Laws in the States*, COUNCIL OF ST. GOV'TS: LIZ EDMONDSON'S BLOG (Jan. 29, 2016, 9:32 AM), <http://knowledgecenter.csg.org/kc/content/emergency-manager-laws-states-0>.

than saying Flint is an isolated case, one might wonder why, when it so obvious that a locality is struggling, would any model look to that locality as a viable supplier or not at least verify its reports, which were contradicted by the facts on the ground. This is the dilemma.

1. The Mechanics of the Water Crisis

Flint residents, among some of the most economically disadvantaged people in the United States,¹⁷⁵ pay the highest water rates in the United States.¹⁷⁶ Here is the unbelievable story of what they receive in exchange.

In April 2014, Flint discontinued its 49-year-old practice of purchasing safe water from the Detroit Water and Sewerage Department (“DWSD” or “Detroit”).¹⁷⁷ As an alternative, it began to supply water to its citizens using the highly corrosive Flint River as its water source, which had been rejected repeatedly in the past as an unacceptable source.¹⁷⁸ Flint also began to use its own Water Treatment Plant, which had stopped being used on an on-going basis in 1965,¹⁷⁹ when Flint converted to Detroit water.¹⁸⁰

As noted above, Flint did not use corrosion-control measures to prevent contaminants from leaching from its aging lead pipes into the water,¹⁸¹ even though Flint River water was nineteen times more

175. FOOD & WATER WATCH, *supra* note 32, at 10.

176. *Id.*

177. There was a small ceremony at the treatment plant when the Detroit pipeline was officially powered down. In what now seems to be a gruesome act of foreshadowing, the officials on hand raised glasses of water in celebration, and the now-indicted MDEQ district supervisor, Steve Busch, declared: “Individuals shouldn’t notice any difference.” The mayor is quoted to have said, “There have been a lot of questions from our customers because this is such a major change. When the treated river water starts being pumped into the system, we move from plan to reality. The water quality speaks for itself.” Dominic Adams, *Closing the Valve on History: Flint Cuts Water Flow from Detroit After Nearly 50 Years*, MLIVE, http://www.mlive.com/news/flint/index.ssf/2014/04/closing_the_valve_on_history_f.html (last updated Jan. 17, 2015, 10:13 AM).

178. See FLINT FINAL REPORT, *supra* note 5, app. at 1 (summarizing 2004 study noting Flint River potential for contamination and 2006 study suggesting Flint River’s lack of capacity for long-term use).

179. During this period, the treatment plant was tested four times a year and updated, as necessary, but only so that it could be maintained as an emergency back-up system. *Id.* at app. 15.

180. *Id.* It should be noted that the Taskforce states that Flint and Detroit entered into the water contract in 1967. Other sources note the date as 1965. See Letter from Sue McCormick, Director, City of Detroit Water and Sewerage Department, to Inez Brown, Clerk, City of Flint, re: Termination of Contract for the Provision of Water Services by the City of Detroit, Water and Sewerage Department (Apr. 17, 2013) [hereinafter Termination Letter].

181. FLINT FINAL REPORT, *supra* note 5, at app. 1.

corrosive than Detroit water.¹⁸² The Michigan Department of Environmental Quality treated the Flint treatment plant, which was built in 1952,¹⁸³ as a “new” system.¹⁸⁴ This (mis)categorization exempted Flint from immediately implementing corrosion control techniques. Instead, Flint began two six-month monitoring periods, at the end of which it could implement corrosion control if needed.¹⁸⁵

For most, the shift to the Flint River was obviously ill advised before it occurred in April 2014.¹⁸⁶ For those few who lacked foresight, however, the problems became glaringly apparent almost immediately afterward. Flint was struggling to comply with its legal obligations to provide safe drinking water.

a. Summary Timeline

The facts are detailed in the Flint Taskforce’s Final Report,¹⁸⁷ but here are some key findings:

- Residents first began to complain about the water’s odor, taste, and appearance.¹⁸⁸
- In August 2014, Flint issued a boil-water advisory because of E-coli contamination in the water.¹⁸⁹
- October 2014 was a critical time for several reasons.
 - General Motors discontinued use of Flint water at its Flint manufacturing facility because the water was damaging GM’s automotive parts.¹⁹⁰
 - The Genesee County Health Department reported to Flint Public Works that there had been an increase in cases of Legionellosis since April 2014, with a possible connection to the switch to the Flint River.¹⁹¹
 - Top aides and advisors to Governor Snyder contacted the Flint emergency manager to discuss

182. Siddharthe Roy, *Test Update: Flint River Water 19x More Corrosive than Detroit Water for Lead Solder; Now What?*, FLINT WATER STUDIES (Sep. 11, 2015), <http://flintwaterstudy.org/2015/09/test-update-flint-river-water-19x-more-corrosive-than-detroit-water-for-lead-solder-now-what/>.

183. *Water Treatment Plant*, CITY OF FLINT <https://www.cityofflint.com/public-works/utilities/water/water-treatment-plant/> (last visited Sept. 30, 2016).

184. Flint Lessons Memo, *supra* note 79, at 2.

185. FLINT FINAL REPORT, *supra* note 5, at app. 16; Flint Lessons Memo, *supra* note 79, at 2.

186. FLINT FINAL REPORT, *supra* note 5, at app. 16.

187. *See generally id.* at app. (summarizing event timeline).

188. *Id.* at app. 16.

189. *Id.* at app. 17.

190. *Id.*

191. *Id.*

switching back to Detroit water. The emergency manager indicated that Flint's water problems could be resolved and converting back to Detroit water was cost prohibitive.¹⁹²

- In December 2014, the first six-month period of Lead and Copper Rule monitoring ended. Flint water samples exceeded the lead action level, which triggered the need to implement corrosion control measures.¹⁹³ The state did not inform Flint of this requirement.¹⁹⁴
- By January 2015, state offices in Flint were equipped with water coolers, and employees were given the option of using bottled water in their offices and providing bottled water to visitors.¹⁹⁵
- In March 2015, the Flint City Council voted seven to one to return to the Detroit water system. This vote was non-binding since the city was under emergency management.¹⁹⁶
- At the same time, non-state sourced testing revealed lead in the water. As noted, the State of Michigan and Flint water officials were purposefully skewing water sampling practices and results to conceal the presence of lead. Their March 2015 report indicated a lead level of six parts per billion.¹⁹⁷ However, testing completed by a private citizen, LeeAnne Walters, and the EPA revealed something different. A sample drawn from Walters' home in February 2015 was 104 parts per billion;¹⁹⁸ subsequent samples revealed 397 parts per billion in March 2015¹⁹⁹ and 2,429 parts per billion in May 2015.²⁰⁰
- In June 2015, EPA official Del Toral published a report noting concerns with lead levels in Flint.²⁰¹ In fact, it was Del Toral who put Walters in contact with Professor Mark Edwards.²⁰²
- In August 2015, Professor Mark Edwards and his team revealed that Flint's water was well beyond the federal action level of fifteen parts per billion.²⁰³ Random samples

192. *Id.* at app. 17–18.

193. *Id.* at app. 18.

194. *Id.*

195. *Id.*

196. *Id.* at app. 11.

197. *Id.*

198. *Id.* at app. 18.

199. *Id.* at app. 10.

200. *Id.* at app. 12.

201. *Id.* at app. 13.

202. *Id.* at app. 12.

203. The team stresses that it is using volunteer participants for the study. The study is not an official Lead and Copper Rule study, which requires a certain number of homes to have lead pipes

of 162 homes revealed the ninetieth percentile of samples to be 28.7 parts per billion.²⁰⁴ This finding prompted the team to conclude that Flint was experiencing a system-wide contamination event.²⁰⁵ Another metric used to evaluate lead levels in Flint was to test the percentage of samples that had no detectable lead levels. In July 2015, only nine percent of the samples had no detectible lead levels.²⁰⁶

b. Health Implications

The ramifications of this toxic water are devastating.

i. Lead Exposure

Lead is a possible carcinogen²⁰⁷ that “can affect almost every organ and system in your body. Children six years old and younger are most susceptible to the effects of lead.”²⁰⁸ “Even at very low levels once considered safe, lead can cause serious, irreversible damage to the developing brains and nervous systems of babies and young children.”²⁰⁹ Lead poisoning in these children can have long-term health and behavioral consequences, including lower IQ, hyperactivity, slowed growth, hearing problems, and anemia. It can even cause seizures, coma, and death in rare cases.²¹⁰

Sadly, the EPA acknowledges that nation-wide “a substantial portion of the sensitive population already exceeds acceptable blood lead levels.”²¹¹ With respect to Flint, Governor Snyder said that we “must assume all children were exposed” to lead.²¹²

and to focus on high risk homes. FLINT WATER STUDY, August 11, 2016 Press Conference, Flint Residents Sampling Aug. 2015-July 2016 and Presentation Slides, <http://flintwaterstudy.org/> [hereinafter WATER STUDY].

204. *Id.*

205. *Id.* at slide 9. Thankfully the numbers are coming down. In March 2016, the 90th percentile was 22.5 parts per billion. *Id.* at slide 11. In July 2016, the 90th percentile was 13.9—finally under the action level. *Id.* at slide 14.

206. *Id.* at slide 15.

207. FLINT ADMINISTRATIVE ORDER, *supra* note 1, at ¶ 27.

208. *Learn About Lead*, U.S. ENVTL. PROT. AGENCY, <https://www.epa.gov/lead/learn-about-lead#effects> (last visited Sept. 30, 2016) [hereinafter *Learn About Lead*].

209. WIDESPREAD LEAD CRISIS, *supra* note 1, at 3 (citing Advisory Committee on Childhood Lead Poisoning Prevention, *Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention*, CTNS. FOR DISEASE CONTROL AND PREVENTION (2012), http://www.cdc.gov/nceh/lead/acclpp/final_document_030712.pdf).

210. *Learn About Lead*, *supra* note 208.

211. FLINT ADMINISTRATIVE ORDER, *supra* note 1, at ¶ 27.

212. FY 2017 BUDGET PRESENTATION, *supra* note 121, at slide 4.

With respect to adults, pregnant women should take care, as fetuses are especially vulnerable to lead poisoning.²¹³ Lead exposure in adults also can cause cardiovascular effects, increased blood pressure and incidence of hypertension, decreased kidney function, and reproductive problems (in both men and women).²¹⁴

ii. Cases of Legionnaire’s Disease (Including Deaths)

Medical data²¹⁵ collected also reveals a sharp increase in the number of cases of Legionnaire’s Disease after Flint converted to the Flint River in April 2014, particularly in the summer of 2014 and 2015.²¹⁶ “Infections caused by *Legionella* bacteria can cause relatively mild illness in generally healthy adults but can cause life-threatening illness and even death in elderly and immune-compromised patients.”²¹⁷ From 2010 to 2013, the number of reported cases of Legionnaire’s Disease in the county averaged nine point five. The number of reported cases jumped to forty-two in 2014 and forty-five in 2015, with a total of nine deaths.²¹⁸ “This was described by an expert from the Centers for Disease Control in 2015 as ‘one of the largest [outbreaks of Legionellosis] in the past decade.’”²¹⁹

Although it was not possible for the state epidemiologists to draw definitive conclusions that the change in water supply was related to the outbreak of disease, there were strong indications that Flint’s water contributed to this outbreak. The summer water temperatures and increased sediments in the water reduced residual chlorine levels, which increases the surface area for microbial growth.²²⁰ The sharp increase in cases also mirrors the time frame of Flint Water.²²¹

213. “During pregnancy, lead is released from bones as maternal calcium and is used to help form the bones of the fetus. . . . Lead can also cross the placental barrier exposing the fetus to lead.” *Learn About Lead*, *supra* note 208.

214. *Id.*

215. “Legionellosis is a reportable disease, meaning that infections with *Legionella* must be reported to local and state public health authorities. Public health specialists known as epidemiologists conduct analyses of cases, especially when the pattern of cases exceeds historical levels in a given jurisdiction.” FLINT FINAL REPORT, *supra* note 5, at 24.

216. Samples can identify the presence of bacteria, but they cannot identify the source. Nevertheless, there is a strong indication that these increased cases were caused, at least in part, because of the reduced chlorine residual levels in Flint water. *Id.* at 24–25.

217. *Id.* at 24.

218. WATER STUDY, *supra* note 203, at Flint Water Heater Study Jun. 20–July 1, 2016, Press Conference and Presentation Slides, slide 2; FLINT FINAL REPORT, *supra* note 5, at 24.

219. FLINT FINAL REPORT, *supra* note 5, at 24–25.

220. WATER STUDY, *supra* note 203, at slide 22.

221. *Id.*; FLINT FINAL REPORT, *supra* note 5, at 24–25.

c. Official Misconduct

During this time of toxic water exposure, Flint residents were told repeatedly that the water was safe, and reports suggesting contamination and elevated lead blood levels were roundly dismissed and criticized.²²² Because of the efforts of private citizens and one federal EPA official, it was finally revealed that Flint's drinking water was not safe. On September 29, 2015, the Genesee County Health Department warned citizens about Flint's water quality.²²³ On October 16, 2015, Flint returned to Detroit water.²²⁴

Based on these facts, the Flint Task Force issued the following findings with respect to the City of Flint:²²⁵

F-23. Flint Public Works personnel were ill-prepared to assume responsibility for full-time operation of the Flint WTP and distribution system.

F-24. The Flint Water Treatment Plant (WTP) and installed treatment technologies were not adequate to produce safe, clean drinking water at startup of full-time operations. Flint's lack of reinvestment in its water distribution system contributed to the drinking water crisis and ability to respond to water quality problems.

F-25. Flint Public Works personnel failed to comply with LCR requirements, including the use of optimized corrosion control treatment and monitoring for lead. Flint personnel did not identify residences with LSLs, secure an adequate number of tap water samples from high-risk homes, or use prescribed sampling practices (for example, line and tap flushing methods and sample bottle sizes).

F-26. Flint Public Works acted on inaccurate and improper guidance from MDEQ.

F-27. Many communities similarly rely on MDEQ to provide technical assistance and guidance on how to meet regulatory requirements. **In the case of Flint, MDEQ assistance was deeply flawed and lax, which led to myopic enforcement of regulations designed to protect public health.**

F-28. The emergency manager structure made it extremely difficult for Flint citizens to alter or check decision-making on preparations for use of Flint River water, or to receive responses to concerns about subsequent water quality issues.²²⁶

222. FLINT FINAL REPORT, *supra* note 5, at 18–21.

223. *Id.* at 21.

224. *Id.*

225. *Id.* at 8.

226. *Id.* at 8 (emphasis added).

2. The Crisis in Context

These instances of official misconduct certainly did not occur in a vacuum. Understanding this context is what sheds light on the deficits of cooperative federalism, here with respect to the locality. Conditions in Flint have been grim for some time,²²⁷ and what follows below flies in the face of the EPA's statement in 1973 that there would be little need for state or federal involvement in local water supply, and market demands would incentivize safe water.²²⁸

a. Flint's Population Decline & Its Impact on Water Quality

Flint has lost fifty percent of its population since 1960, with a twenty percent decline in just the past fifteen years.²²⁹ Flint also has one of the smallest population growth rates in the country, with ninety-nine percent of American cities of the same size growing at faster rates.²³⁰

Population decline plays a role in Flint Water in a variety of ways. There are obvious implications with respect to the tax base and generating the revenue needed to pay the ever-increasing rates Detroit had been charging Flint.²³¹ There also may be a link between the population decline and the increased Detroit rates. The long-term contract between Flint and Detroit expired in 2000, which allowed Detroit to increase the rates as the entities shifted to year-to-year contracts.²³² When the situation reached its breaking point in April 2014, both Flint and Detroit had lost local government autonomy and were being led by state-appointed emergency managers.²³³ It is possible that the decline in the overall amount of water Flint needed made the transactions less cost-effective for Detroit, with increased prices as a consequence.

227. The Flint Water Task Force recommends Eric Scorsone and Nicolette Bateson, *Long-Term Crisis and Systemic Failure: Taking the Fiscal Stress of America's Older Cities Seriously: Case Study, Flint Michigan* (Michigan State University Extension, Sept. 2011) as a useful source to learn more about Flint. See FLINT FINAL REPORT, *supra* note 5, at 15 n.11.

228. March 1973 EPA Press Release, *supra* note 95.

229. Flint's population numbered more than 200,000 in 1960. By 2014, its population was below 100,000. FLINT FINAL REPORT, *supra* note 5, at 15 (citing BiggestUSCities.com, *Flint Michigan Population History 1920-2015*, www.biggestuscities.com/city/flint-michigan [hereinafter *Population History*]).

230. *Population History*, *supra* note 229.

231. FLINT FINAL REPORT, *supra* note 5, at 16 (stating that during the last 10-year period of its contractual service, DWSD raised Flint's water rates on average 6.2 percent per year).

232. *Id.*

233. *Id.*

The population reduction also implicates Flint's water quality. The city system was designed decades ago to service more than twice the current population of Flint.²³⁴ As we know, the lead contamination is caused by the corrosive Flint River water traveling through lead pipes without appropriate corrosion control.²³⁵ A reduction in population decreases the demand for water, which, in turn, increases the amount of time the corrosive water is stagnant in the lead pipes, which in turn can increase the level of lead contamination.²³⁶

b. Poverty & Its Impact on Water Quality and Public Health

Poverty is pervasive and also plays a role in the crisis in terms of risk and lack of market pressure. According to the Flint Water Task Force, in 2014, the number of people in Flint living below the federal poverty threshold was almost three times the rate of poverty nationwide, and median property values were roughly eighty percent less than the national average.²³⁷ This implicates the city's and the residents' ability to improve aging infrastructure and replace lead pipes.²³⁸

When Flint's emergency manager announced in April 2015 that the financial emergency in Flint had been resolved, he noted that there was still a structural deficit in Flint's five-year revenue projections.²³⁹ He also noted ongoing concerns for the city's ability to provide quality services to residents (describing them as already low in quality) and the ongoing issues with aging infrastructure and high water rates.²⁴⁰ These characterizations help tell the story about why people left Flint in

234. Letter from Gerald Ambrose, Flint Emergency Manager, to Honorable Rick Snyder, Governor of the State of Michigan, 3 (Apr. 28, 2015), <https://www.cityofflint.com/wp-content/uploads/Emergency-Manager-Exit-Letter.pdf> [hereinafter Ambrose Letter].

235. FLINT FINAL REPORT, *supra* note 5, at 16.

236. Remarks by Ms. Elin Betanzo, PE (Senior Policy Analyst, Northeast Midwest Institute) at University of Detroit Mercy, Detroit, MI (Apr. 14, 2016) (notes on file with author) [hereinafter Betanzo Remarks]. Reduced demand also increases the water's age, which degrades the chlorine used to protect against pathogens. Ron Fonger, *EPA Letter Questions Flint's Ability to Provide Clean Water in the Long Term*, MLIVE (Jun. 17, 2016) http://www.mlive.com/news/index.ssf/2016/06/epa_questions_flints_ability_t.html. With respect to Ms. Betanzo, she questioned Flint's conversion to the Flint River and asked her long-time friend and Flint pediatrician, Dr. Mona Hanna-Attisha, to analyze blood lead level samples of Flint children. It is Dr. Hanna-Attisha's analysis and public pronouncements that revealed the elevated blood lead levels and prompted action. Riley, *supra* note 146.

237. FLINT FINAL REPORT, *supra* note 5, at 15 (citing *Quick Facts for Flint, Michigan and the United States*, U.S. CENSUS, www.census.gov/quickfacts/table/PST045215/00 (Sept. 30, 2016)).

238. Betanzo Remarks, *supra* note 236.

239. Ambrose Letter, *supra* note 234, at 3.

240. *Id.*

droves. The emergency manager's predictions though were geared more toward Flint's ability to attract new residents and increase tax revenue.

Health statistics, recorded *before* the crisis was fully known, are even more dire. Flint is the largest population center in Genesee County, and 2015 statistics rank that county, out of eighty-two Michigan counties:

- 81st in health outcomes
- 81st in quality of life
- 78th in length of life
- 78th in social and economic factors
- 77th in health behaviors, and
- 75th in physical environment measures.²⁴¹

“Only the quality of clinical care, for which the county ranked twenty-second, is not a cause of acute community concern.”²⁴² These statistics reveal the dire conditions in which local residents live and the general failure or inability of government to help.

These factors cut against the argument raised by the EPA in 1973 with respect to market demands incentivizing safe water.²⁴³ It is fair to assume that these people had little market power. It is not the case that they could readily move (or vote with their feet). They also would have few to no options for alternative water supplies.

c. The Economy & Its Impact on Accountability

This economic situation also created a lack of local control and government accountability, as both the City of Detroit and the City of Flint were being operated by emergency managers, meaning that the authority vested in elected mayors and city council members was overruled by the state.²⁴⁴ This article does not delve into the debate over these laws; however, where they are in place one must recognize that there is the potential absence of the typical checks and balances we rely on to ensure government accountability.

This is the case in Flint, where the decision to switch to the Flint River was made by the Flint emergency manager, as was the delayed

241. FLINT FINAL REPORT, *supra* note 5, at 15 (citing *Genesee (GE)*, County Health Rankings, www.countyhealthrankings.org/app/michigan/2015/rankings/genesee/county/outcome/s/overall/snapshot (Sept. 30, 2016)).

242. *Id.*

243. March 1973 EPA Press Release, *supra* note 95.

244. FLINT FINAL REPORT, *supra* note 5, at 39–40.

decision to revert to Detroit water.²⁴⁵ There also is evidence that the residents' repeated concerns over drinking water quality went unheeded by the emergency manager, who was accountable to the State of Michigan, not the people of Flint.²⁴⁶ As noted by the Flint Taskforce:

The Flint water crisis occurred when state-appointed emergency managers replaced local representative decision-making in Flint, removing the checks and balances and public accountability that come with public decision-making. Emergency managers made key decisions that contributed to the crisis[.] Given the demographics of Flint, the implications for environmental injustice cannot be ignored or dismissed.²⁴⁷

d. The Crux of the Case—Conversion and Continued Use of a Challenged Water Source

In this context, one can see that Flint was vulnerable to pollution and mismanagement; however, it still begs the question why Flint would convert to the highly corrosive and contaminated Flint River and its mothballed treatment plant and then delay a return to safe water from Detroit. Sadly, the potential answers come down to money and perhaps to the development of an alternative water source—the Karegnondi Water Authority (“KWA”).

i. The Karegnondi Water Authority

The KWA is a new \$285 million²⁴⁸ pipeline that will bring raw water from Lake Huron to Flint and other localities.²⁴⁹ Flint and the Genesee County Drain Commission began to explore alternatives to Detroit water as early as 2004.²⁵⁰ There was a 2004 technical assessment of the Flint River, which raised concerns about using it as a drinking water source because it was susceptible to contamination.²⁵¹ In 2006, a drain commission feasibility study indicated that the Flint River could be treated, but it was not a feasible permanent water

245. *Id.* at 1.

246. *Id.* at 1, 7.

247. *Id.* at 1.

248. Paul Egan, ‘Sweetheart’ Bond Deal Aided Flint Water Split from Detroit, DET. FREE PRESS (May 12, 2016), <http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/05/11/did-state-give-flint-break-its-water/84238120/>.

249. The pipeline will service Genesee County, Lapeer County, Sanilac County, the City of Flint, and the City of Lapeer. Karegnondi Water Authority Bylaws, § 2.2 (adopted Oct. 26, 2010, amended Sept. 23, 2013), http://media.wix.com/ugd/60e74e_c4608d16cd2c4bb8afdc8bf105960860.pdf.

250. *See* FLINT FINAL REPORT, *supra* note 5, at app. V.

251. *Id.*

source because of its capacity.²⁵² (Recall Betanzo’s position that lack of capacity or contamination typically would cause a supplier to look for an alternative source.²⁵³ Here, Flint chose a source that lacked capacity and was prone to contamination.) The search was still ongoing in 2008, when the Drain Commission, also negotiating on behalf of Flint, asked Detroit for a short-term contract, as it was still assessing its “long-term needs.”²⁵⁴

The KWA began to take shape in 2009, when the Drain Commission sought and received a permit to withdraw water from Lake Huron, and Genesee County approved KWA Articles of Incorporation.²⁵⁵

Although there were ongoing questions about its feasibility and cost,²⁵⁶ KWA was seen as the future of Flint’s economy.²⁵⁷ On March 25, 2013, Flint’s city council approved, by a vote of seven to one, the decision of Flint’s emergency manager to join the KWA.²⁵⁸ Indicative of the city’s loss of autonomy, this vote was not binding, and the ultimate decision rested with the State Treasurer, who noted his approval of the action on March 28, 2013, and authorized Flint’s emergency manager to take action in April 2013.²⁵⁹ On April 16, 2013, Flint’s emergency manager executed the KWA agreement separating Flint from Detroit water and binding it to participate in KWA.²⁶⁰

On April 17, 2013, the day after Flint’s emergency manager executed the KWA agreement, Detroit terminated its year-to-year contract with Flint and announced it would suspend services effective April 2014.²⁶¹ The KWA was expected to become operational in 2016, which left Flint with a two-year gap in coverage. Flint then announced its decision to fill this gap by supplying its own water, using the Flint River and its old treatment plant as of April 2014.²⁶² This action was taken in spite of the fact that Genesee County continued to use Detroit

252. *Id.*

253. *See* Riley, *supra* note 146.

254. FLINT FINAL REPORT, *supra* note 5, at app. V.

255. *Id.*

256. *Id.*

257. *Id.*

258. *Id.* There appears to be some inconsistencies in the Flint Final Report, which also indicates that this approval took place on April 16, 2013. *See id.* at 16.

259. *Id.* at app. V.

260. *Id.*

261. Termination Letter, *supra* note 180.

262. FLINT FINAL REPORT, *supra* note 5, at app. V.

water,²⁶³ the Flint River had been judged previously as an unacceptable source,²⁶⁴ the treatment plant had not been fully operational since the 1960's,²⁶⁵ and WTP personnel warned against such action, noting the WTP was not staffed or equipped to take on the charge.²⁶⁶

ii. Decision to Convert to the Flint River

So why did Flint convert to the Flint River? One could argue that Flint discontinued using Detroit water because it could not afford it; however, there is a factual dispute in this regard.²⁶⁷ KWA claims that Detroit rates increased 11.18 percent from 2002-15, including a massive 23.61 percent increase from 2013-15, although KWA admits it used a different timeframe to calculate 2014 and 15 rates.²⁶⁸ On the other hand, the Flint Taskforce reports that the annual average increase in Detroit rates for the last ten years of the DWSD/Flint contract was 6.2 percent.²⁶⁹ Regardless of the rate increase, however, only Flint began to use the Flint River. KWA itself reports that Genesee County continued using Detroit water,²⁷⁰ which suggests that the rates may not have been prohibitive.

Another possibility has come to light more recently, indicating that Flint's conversion to the Flint River was a condition precedent to

263. Of all of the cities within Genesee County, only Flint converted to the Flint River during the two-year gap period between Detroit water and the new Karegnondi Water Authority pipeline described below. The Genesee County Drain Commission continued to provide Detroit water to all of its customers (19 different cities and townships) pending the KWA shift. Genesee County Press Release, Clarification Reminder for Genesee County Water Customers (Jan. 9, 2015), <http://ftpcontent2.worldnow.com/wjrt/PDF/Presspercent20Release.Geneseepercent20Countypercent20WWSpercent20Customerpercent20Notice.pdf>.

264. FLINT FINAL REPORT, *supra* note 5, at app. V.

265. *Id.* at 15.

266. *Id.* at app. V.

267. Allie Gross, *New E-mails Reveal the Switch to the Flint River Was Not About Saving Money*, METRO TIMES (Jan. 25, 2016), <http://www.metrotimes.com/Blogs/archives/2016/01/25/new-emails-reveal-the-switch-to-the-flint-river-was-not-about-saving-money> (challenging the continued and often-repeated claim that Flint switched to the Flint River because of Detroit rates and reporting that Detroit's offer to Flint would have cut Flint's rates by 48 percent, with a 30-year projection that Detroit's rates would be 20 percent less than KWA); email from Sue McCormick to Jim Fausone, William Wolfson, and Bill Johnson (Apr. 15, 2013) (on file with author).

268. Karegnondi Water Authority, Sloan PowerPoint Presentation, Dawn of a New Era in Water Supply, slide 14, http://media.wix.com/ugd/60e74e_e0588f95f1eb481db5d33f7d8b28a0b3.pdf (last visited July 10, 2016) [hereinafter Sloan Slides].

269. The original long-term DWSD/Flint contract expired in 2000 and, by its terms, continued on a year-to-year basis until either one of the parties terminated it. During this year-to-year phase, the DWSD increased its rates an average of 6.2 percent per year. FLINT FINAL REPORT, *supra* note 5, at 16.

270. Genesee County Press Release, *supra* note 263.

the KWA obtaining funding. *The Detroit Free Press* and reporter Paul Egan, who is an award-winning investigative journalist,²⁷¹ is now reporting that recently released e-mails raise new questions about why Flint began to draw its water from the Flint River in April 2014.²⁷²

The Free Press reports that “Flint’s financial condition was so dire in 2014 that it threatened the ability of the Karegnondi Water Authority to issue bonds and start construction[.]”²⁷³ The article goes on to suggest that the project was rescued when KWA bond attorneys and a state employee prompted the Michigan Department of Environmental Quality to issue a state environmental order.²⁷⁴

E-mails suggest bond attorneys insisted on wording that linked the relatively inexpensive work the DEQ ordered [Flint to complete regarding WTP sludge] to the entire KWA project, thus lifting Flint’s entire share of the project debt from its municipal debt limit, despite the fact the DEQ was not ordering Flint to participate in the KWA. Both the administrative consent order and the wording similar to what the attorneys specified were referenced in the 2014 prospectus the KWA issued to prospective bond buyers.²⁷⁵

The wording said, in part, that Flint “plans to use the Flint River as its temporary source of untreated water supply until KWA water is available,” and “must undertake the KWA public improvement project or undertake other public improvement projects to continue to use the Flint River.”²⁷⁶

KWA denies that it had any involvement with Flint’s decision to switch to the Flint River. In support of its denial, KWA cites the contract termination letter the DWSD director sent to Flint the day after Flint’s emergency manager executed the KWA contract.²⁷⁷ A troubling question is why Detroit terminated its contract with Flint. It is clear that Detroit opposed the KWA in 2009. It spoke out against KWA during the permit process and offered Flint a long-term contract

271. *Free Press Wins Michigan AP Newspaper of the Year*, 14 1st-Place Awards, DET. FREE PRESS (May 23, 2016), <http://www.freep.com/story/news/local/michigan/detroit/2016/05/22/free-press-wins-top-ap-editors-awards/84746988/>.

272. Egan, *supra* note 248. Readers also should note the important role played by local investigative journalists in bringing the facts of Flint Water to light. The Taskforce praised local journalists and engaged residents for bringing the facts of Flint Water to light. FLINT FINAL REPORT, *supra* note 5, at 15 n.10. The report even goes so far as to state that the facts may have never been known without the work of these citizens. “Without their courage and persistence, this crisis likely never would have been brought to light and mitigation efforts never begun.” *Id.*

273. Egan, *supra* note 248.

274. *Id.*

275. *Id.*

276. *Id.*

277. Sloan Slides, *supra* note 268, at slides 31–32.

that it claimed was more cost effective than KWA.²⁷⁸ It is not unreasonable to suggest Detroit did not want a competitor in the market, but what was the benefit to either party to terminate the Detroit contract and leave Flint with the two-year gap? Moreover, one should remember that, as of 2014, the State of Michigan oversaw both localities through its emergency managers--Flint as of November 2011²⁷⁹ and Detroit as of March 2013.²⁸⁰ Why then was it that “efforts to arrive at an agreement between the parties during the final year of service to the City of Flint ultimately failed”?²⁸¹

3. The Aftermath

The situation in Flint remains complicated and largely unresolved. The original failures of cooperative federalism now appear to be impeding a meaningful resolution.

On December 14, 2015, the City of Flint declared an emergency.²⁸² On January 14, 2016, Governor Snyder requested that a federal emergency be declared and federal funds be made available.²⁸³ On January 16, 2016, the President of the United States declared Flint was in a state of emergency and authorized federal relief funds.²⁸⁴

On January 21, 2016, almost one year after EPA first learned of the Flint issue, the EPA issued an eighteen-page administrative order directing Flint, MDEQ, and the State of Michigan to address the crisis.²⁸⁵ The EPA found that the water “poses imminent and substantial endangerment to the health of Flint residents [and that the] endangerment will continue unless preventative actions are taken.”²⁸⁶ The EPA also noted that although there has been some progress, “there continues to be delays in responding to critical EPA recommendations and in implementing the actions necessary to reduce and minimize the presence of the lead and other contaminants in the water supply.”²⁸⁷

278. FLINT FINAL REPORT, *supra* note 5, at app. V.

279. *Id.*

280. Ashley Woods, *Detroit Emergency Manager: Gov. Rick Snyder Announces State Financial Takeover*, HUFFINGTON POST (Mar. 14, 2013), http://www.huffingtonpost.com/2013/03/14/detroit-emergency-manager_n_2871371.html.

281. FLINT FINAL REPORT, *supra* note 5, at 16.

282. FLINT ADMINISTRATIVE ORDER, *supra* note 1, at ¶ 22.

283. *Id.* at ¶ 23.

284. *Id.* at ¶ 24.

285. *See generally id.*

286. *Id.* at ¶ 33.

287. *Id.* at ¶ 34.

With respect to the City, the EPA stated that it “remains concerned that the City lacks the professional expertise and resources needed to carry out the recommended actions and to safely manage the City’s public water system.”²⁸⁸ The EPA reiterated these concerns in June 2016, noting that the water treatment plant remained inadequately staffed, operated, or administered.²⁸⁹

It remains an open question whether the lead service lines in Flint will be replaced. In January 2016, the NRDC and others filed suit seeking the removal of Flint’s lead service lines.²⁹⁰ Flint’s mayor also has called for the replacement of lead service lines in the city. The process has been stalled because of cost. While the State of Michigan has announced a seventy-five point plan that does not call for the replacement of all lead service lines,²⁹¹ it has given Flint a \$2.5 million grant and the promise of additional funding to remove some lead pipes.²⁹² Unfortunately, the cost per home appears to be more than double the city’s original estimate and more than the cost permitted by restrictive language in the state’s grant. As of summer 2016, Flint’s mayor had proposed moving forward with a “pilot” program to replace 250 lead service lines to get a better sense of the cost.²⁹³

In addition to delays, there is much finger-pointing between state and federal officials, as demonstrated by the testimony Governor Rick Snyder and EPA Administrator Gina McCarthy gave to the House Committee on Oversight & Governmental Reform on March 17, 2016.²⁹⁴

As for the actual water supply, Flint reverted to Detroit water in October 2015. Lead levels are now coming down. As of July 2016, the last round of random testing performed by residents and Professor Edwards’ team revealed the ninetieth percentile was 13.9 parts per billion, which is just below the fifteen parts per billion action level.²⁹⁵

288. *Id.*

289. Ron Fonger, *EPA Letter Questions Flint’s Ability to Provide Clean Water in the Long Term*, MLIVE (June 17, 2016), http://www.mlive.com/news/index.ssf/2016/06/epa_questions_flints_ability_t.html.

290. WIDESPREAD LEAD CRISIS, *supra* note 1, at 10–12.

291. *Goals to Strengthen Flint*, MICHIGAN.GOV (Mar. 21, 2016), http://www.michigan.gov/documents/snyder/GoalsToStrengthenFlint_FinalMarch_20_2016_517484_7.pdf.

292. *Extended Water Testing in Flint Continues Showing Positive Signs*, MICHIGAN.GOV (July 8, 2016), <http://www.michigan.gov/snyder/0,4668,7-277-388196-,00.html>.

293. Matthew Dolan, *Flint to Replace up to 250 Lead Lines in Water Crisis*, DET. FREE PRESS (Jul. 13, 2016), <http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/07/13/flint-replace-up-250-lead-lines-water-crisis/87027512>.

294. *Transcript of March 17, 2016*, *supra* note 150.

295. WATER STUDY, *supra* note 203, at slide 14.

Forty-five percent of the samples also had no detectable level of lead, which is a real improvement from the 2015 study that showed only nine percent had no detectable levels.²⁹⁶

Flint will continue to use Detroit water until the KWA pipeline becomes operational,²⁹⁷ which still has not occurred. The EPA has ordered certain measures to be taken before Flint converts to a new water source, including the submission of a written plan, offered in advance and with an opportunity for public comment, which demonstrates Flint has the technical, managerial, and financial capacity to operate its public water system.²⁹⁸

With respect to the KWA, there appears to be an ongoing dispute whether it will be as cost effective as promised. The mayor is questioning the veracity of KWA's original claims of water-rate savings. KWA itself now claims that it never promised to reduce the customer rates of Flint residents; it allegedly only claimed to reduce the price Flint would pay for its raw water.²⁹⁹

The conclusion with respect to localities, as evidenced by Flint Water, is that tremendous pressures can be placed on them, including the "choice" to convert to challenged water sources, and they may be powerless to galvanize action on the part of state and federal officials. We next turn to the second actor in the scheme—the State of Michigan.

B. The State of Michigan

The premise with respect to state actors is that they may be too lax in their reporting and enforcement of safe drinking water standards. They also may become too involved in local decisions, especially in instances of financially troubled localities, which makes the state both the supplier and the regulator of the supplier.

1. State Behavior

The State of Michigan is the primary enforcer in Michigan of the Safe Drinking Water Act.³⁰⁰ The Flint Taskforce, appointed by

296. *Id.* at slide 15.

297. *License to Transmit Water executed by the City of Flint and Genesee County Drain Commissioner* (Oct. 14, 2015), http://media.wix.com/ugd/60e74e_0e77bc4182c248d4ad728860f47f5f00.pdf.

298. FLINT ADMINISTRATIVE ORDER, *supra* note 1, at ¶ 60.

299. See Paul Egan & Matthew Dolan, *Official: Flint will lose everything if it leaves KWA*, DET. FREE PRESS, June 13, 2016, <http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/06/11/official-flint-lose-everything-if-leaves-kwa/85662110/>.

300. FLINT FINAL REPORT, *supra* note 5, at 22.

Governor Snyder, delivered a strong indictment of the state's behavior in this case:³⁰¹

F-1. The Michigan Department of Environmental Quality bears primary responsibility for the water contamination in Flint.

F-2. MDEQ, specifically its Office of Drinking Water and Municipal Assistance (ODWMA), suffers from cultural shortcomings that prevent it from adequately serving and protecting the public health of Michigan residents.

F-3. MDEQ misinterpreted the LCR and misapplied its requirements. Thus, lead-in-water levels were under-reported and many residents' exposure to high lead levels was prolonged for months.

F-4. MDEQ waited months before accepting EPA's offer to engage its lead (Pb) experts to help address the Flint water situation and, at times, MDEQ staff were dismissive and unresponsive.

F-13. The Governor's knowledge, and that of Governor's office staff, of various aspects of the Flint water crisis was compromised by the information—much of it wrong—provided by MDEQ and MDHHS.

F-14. The Governor's office continued to rely on incorrect information provided by these departments despite mounting evidence from outside experts and months of citizens' complaints throughout the Flint water crisis, only changing course in early October 2015 when MDEQ and MDHHS finally acknowledged the extent of the problem of lead in the public water supply.

F-15. The suggestion made by members of the Governor's executive staff in October 2014 to switch back to DWSD should have resulted, at a minimum, in a full and comprehensive review of the water situation in Flint, similar to that which accompanied the earlier decision to switch to KWA. It was disregarded, however, because of cost considerations and repeated assurances that the water was safe. The need to switch back to DWSD became even more apparent as water quality and safety issues continued and lead issues began to surface in 2015, notwithstanding reassurances by MDEQ.

F-16. The Flint water crisis highlights the risks of over-reliance—in fact, almost *exclusive* reliance—on a few staff in one or two departments for information on which key decisions are based.

F-17. Official state public statements and communications about the Flint water situation have at times been inappropriate and unacceptable.

F-18. Emergency managers, not locally elected officials, made the decision to switch to the Flint River as Flint's primary water supply source.

F-19. Treasury officials, through the terms of the local emergency

301. *Id.* at 6–8.

financial assistance loan executed by the Flint emergency manager on April 29, 2015, effectively precluded a return to DWSD water, as Flint citizens and local officials were demanding, without prior state approval.

F-20. The role of the emergency managers in Flint (in combination with MDEQ's failures) places primary accountability for what happened with state government.

F-21. Emergency managers charged with financial reform often do not have, nor are they supported by, the necessary expertise to manage non-financial aspects of municipal government.³⁰²

The Flint Taskforce suggests Michigan was not acting as a regulator or as an enforcer. Public announcements by private citizens drove action rather than the State of Michigan. The state was involved in making local decisions, and perhaps got too closely involved in those local decisions, and then sought to protect its decisions from scrutiny. And the "bad behavior" does not focus exclusively on those charged criminally. The Taskforce notes that multiple state actors failed in their respective duties, including MDEQ, MDHHS, the Health Department, and the Governor.³⁰³

As of August 2016, Michigan's attorney general had pursued a total of thirty-six criminal charges, including misconduct in office and willful neglect of duty.³⁰⁴ The first set is against one local and two state officials.³⁰⁵ The second set is against six state officials related to falsifying and covering up reports that would have brought the crisis to light.³⁰⁶ When these charges were announced, the attorney general said:

302. *Id.*

303. *Id.* at 1.

304. See Press Release, Bill Schuette, Attorney Gen., State of Mich. Schuette Charges Three with Multiple Felonies in First Stage of Crisis Investigation (Apr. 20, 2016), http://www.michigan.gov/ag/0,4534,7-164-46849_47203-382827--,00.html (listing 18 different charges filed against state officials); Press Release, Bill Schuette, Attorney Gen., State of Mich. Schuette Charges Six More in Flint Water Crisis (July 2016), http://www.michigan.gov/ag/0,4534,7-164-46849_47203-390055--,00.html (listing an additional 18 charges filed against current and former state officials) [hereinafter AG July Press Release].

305. Complaint, Michigan v. Busch, Prysby, Glasgow, (Genesee County Circuit Court, Apr. 2016), http://www.michigan.gov/documents/ag/Complaint-Flint_Water_First_Charges_522704_7.pdf [hereinafter Criminal Complaint 1].

306. AG July Press Release, *supra* note 304. The second criminal complaint relates to (1) misleading federal and county officials as to the quality of Flint drinking water; (2) authorizing a permit to the Flint Water Treatment Plant knowing the Flint WTP was deficient in its ability to provide clean and safe drinking water; (3) tampering with monitoring reports that are mandated by law; (4) tampering with Lead and Copper Reports and Consumer Notices of Lead Results; (5) ceasing optimal corrosion control treatment at the Flint WTP and/or refusing to mandate optimized corrosion control treatment; (6) improperly manipulating the collection of water samples and/or removing test results from samples; and (7) negligent operation of the Flint WTP.

The victims are real people, families who have been lied to by government officials and been treated as expendable. But when our investigation is completed and our prosecutions are successful—and we believe they will be—then accountability and justice will be delivered to families of Flint and families of Michigan.³⁰⁷

2. State Behavior in Context

As noted above, one purpose of this paper is to put the bare facts into context to help us better understand the story of Flint Water and how it may be considered a case study on the challenges of cooperative federalism. Despite the outrageous findings above, Michigan is not generally a rogue state. It is much like others in the country.

a. The State of Michigan Generally and Its Relationship with Flint

The State of Michigan is led by Governor Rick Snyder (R) and a Republican-led House and Senate.³⁰⁸ Michigan has been ranked the sixteenth most “eco-friendly” state in the United States. As noted above, it scores fourth overall in water quality.³⁰⁹ It is surrounded by the five Great Lakes, which account for one-fifth of the world’s fresh surface water, a staggering six quadrillion gallons of fresh water.³¹⁰ With respect to infrastructure, it received a “D” rating by the American Society of Civil Engineers.³¹¹

i. Economy & Solvency

As of 2015, *Business Insider* ranked Michigan the seventeenth strongest economy of the fifty states and the District of Columbia, when considering the state’s unemployment rates, gross domestic product per capita, average weekly wages, and recent growth rates for nonfarm payroll jobs, GDP, house prices, and wages.³¹² In 2016, Michigan’s fiscal health was ranked thirty-fifth of the fifty states and Puerto Rico by the Marcatus Center of George Mason University.

307. *Id.*

308. *Senator Information*, MICH. SEN., <http://www.senate.michigan.gov/senatorinfo.html> (last visited Oct. 3, 2016) (Republicans holding a 27 to 10 seat majority in the Senate, with one vacancy); *Michigan Representative*, MICH HOUSE, <http://house.michigan.gov/mhrpublic/frmRepList.aspx> (last visited Oct. 3, 2016) (Republicans holding 63 to 47 seat majority in the House of Representatives).

309. Kiernan, *supra* note 7.

310. GREAT LAKES INFO. NETWORK, *supra* note 8.

311. FY 2017 BUDGET PRESENTATION, *supra* note 121, at Slide 15.

312. Andy Kiersz, *Ranked: The Economies of All 50 States and D.C. from the Worst to Best*, BUS. INSIDER (Aug. 5, 2015), <http://www.businessinsider.com/state-economy-ranking-july-2015-2015-7>.

Specifically, the study found Michigan to be below average in terms of cash solvency (i.e., its ability to pay short-term bills), budget solvency (i.e., whether state has ability to generate revenue to cover expenditures), and trust fund solvency (i.e., how much debt the state has).³¹³

ii. Budget & Infrastructure Spending

Consistent with a nation-wide trend of conservative spending, as states are finally reaching pre-recession revenue and spending levels,³¹⁴ Michigan's proposed 2017 budget calls for a 0.8 percent increase in total spending, and 1.5 percent increase in general fund spending.³¹⁵

Its lack of focus on the environment also is consistent with other states.³¹⁶ The budget breaks down into the following categories of spending.³¹⁷

- 45 percent Health and human services
- 30 percent Education
- 10 percent Jobs
- 7 percent Government services
- 6 percent Public safety
- 2 percent Environment
- -1 percent Reserves

There are state-wide infrastructure expenditures related to the inner-city passenger project, recreational lands, game and hunting, forests, and boating.³¹⁸ There also is a call for \$165 million for a state-wide infrastructure³¹⁹ fund and the creation of a Commission on twenty-first century Infrastructure.³²⁰

313. Mercatus Ctr., *Ranking the States by Fiscal Condition: Michigan*, GEO. MASON U. (2016) <http://mercatus.org/statefiscalrankings/michigan>. This is down from 34th in 2015, but up compared to 2014 when Michigan was ranked 37th, see Mercatus Ctr., *Ranking the States by Fiscal Condition*, Geo. Mason U. (2015) <http://mercatus.org/statefiscalrankings-2015-edition>; see Mercatus Ctr., *State Fiscal Condition: Ranking the 50 States*, Geo. Mason U. (2014) <http://mercatus.org/publication/state-fiscal-condition-ranking-50-states-2014>.

314. NATIONAL ASSOCIATION OF STATE BUDGET OFFICERS, SUMMARY: SPRING 2016 FISCAL SURVEY OF STATES, 5 (June 21, 2016), <http://www.nasbo.org/sites/default/files/Summary%20of%20Spring%202016%20Fiscal%20Survey.pdf> [hereinafter NASBO—Summary Spring 2016].

315. H.R. 5294, 98th Leg., Reg. Sess. (Mich. 2017) [hereinafter FY 2017 ENACTED BUDGET].

316. NASBO—*Summary Spring 2016*, *supra* note 314.

317. *Id.*

318. FY 2017 ENACTED BUDGET, *supra* note 315, at 4, 61, 223, 261, 266.

319. FY 2017 BUDGET PRESENTATION, *supra* note 121, at slide 16. Unlike the Flint plans, the state-wide plan calls expressly for the replacement of lead and copper service lines. The Flint references are more vague.

320. *Id.* at 15.

With respect to Flint, there is a specific allocation for an additional investment of \$195 million to continue support and address various needs for Flint.³²¹ The governor has called for a system-wide assessment of pipes, a plan to prioritize replacement, the replacement of fixtures in schools and day care centers, and a vague reference to “abatement in homes.”³²² With this said, however, the Flint plan appears much more focused on screening, sampling, and medical and community support and less about addressing the infrastructure. The former is obviously meeting important immediate needs, but the latter should be equally so.

iii. Transparency

In 2012, one year into Governor Snyder’s administration, Michigan was named one of the least transparent states in the country, as one of only eight states to receive an “F” overall on the accountability study’s grid.³²³ This included an “F” in ten of fourteen individual categories.³²⁴ More recent data on this topic was not located.

iv. Michigan’s Relationship with Flint—State Emergency Management

The relationship between Flint and the State of Michigan was strained before Flint Water because of the state’s appointment of Flint’s emergency manager in 2011.³²⁵ As noted above, nineteen states and the District of Columbia have emergency manager laws, and their use may impair the supplier-regulator boundary that we rely on for safe water.³²⁶

Flint’s process began in August 2011, when the Michigan Department of Treasury recommended a Financial Review Team be appointed for the City of Flint, which had a \$25.7 million deficit.³²⁷ In

321. *Id.*

322. *Id.* at slides 9-13.

323. Caitlin Ginley, *Grading the Nation: How Accountable is Your State?*, CTR. FOR PUB. INTEGRITY (Mar. 19, 2012, 12:01 AM), <https://www.publicintegrity.org/2012/03/19/8423/grading-nation-how-accountable-your-state>.

324. Chris Andrews, *Michigan Gets F Grade in 2012 State Integrity Investigation*, CTR. FOR PUB. INTEGRITY (Mar. 19, 2012, 12:01 AM), <https://www.publicintegrity.org/2012/03/19/18188/michigan-gets-f-grade-2012-state-integrity-investigation>. The categories were: Executive Accountability, Judicial Accountability, Legislative Accountability, State Civil Service Management, State Insurance Commissions, State Pension Fund Management, Political Fundraising, Lobbyist Disclosures, Ethics Enforcement Agencies, and Redistricting.

325. FLINT FINAL REPORT, *supra* note 5, at app. V.

326. Edmondson, *supra* note 174.

327. FLINT FINAL REPORT, *supra* note 5, at app. V.

September 2011, the governor appointed the team, and in November 2011, the governor proceeded to appoint an emergency manager for the city.³²⁸ The emergency manager laid off City Hall appointees and terminated the mayor's and the city council's salaries.³²⁹

Multiple disputes arose as a result. The governor announced new lockup policies and increased police patrols. Residents challenged the appointment of the emergency manager and the constitutionality of Michigan's Emergency Manager laws. Residents also began filing suit over water and sewage rates.³³⁰ In short, there was a breakdown in the relationship between Flint and the State of Michigan—one that predates Flint Water by more than three years.

This breakdown would make it difficult for the state and locality to work together on any future challenge. This obvious conclusion becomes even more fixed when the challenge—in this case, Flint Water—is connected to the source of the original breakdown: the emergency manager's appointment and loss of local autonomy. The author is a life-long Michigan resident and has followed public reports about Flint. She recalls that the residents' initial water complaints appeared to be a continuation of the ongoing challenges to the emergency manager's appointment. The State of Michigan, already entrenched in its support and use of the emergency management framework, might have been unwilling or unable to see or appreciate the legitimacy of the new or evolving water concerns.

Flint Water clearly would not improve the relationship, but even after the Flint Taskforce issued its damning report, finding the MDEQ bore primary responsibility for the contamination in Flint,³³¹ the state still felt empowered to implicitly threaten the residents of Flint. In response to the city announcing its intention to sue the state to recoup money for declining property values and tax revenues, emergency manager costs, and medical claims, the governor's communication director warned that the state was in the process of identifying its funding package for Flint, and any law suits against the state might affect those decisions.³³² Specifically, he said any lawsuit would “get in

328. *Id.*

329. *Id.*

330. *Id.*

331. *Id.* at 6.

332. Rick Pluta, *Flint Getting Ready to Sue State*, MICH. RADIO (Apr. 2016), <http://michiganradio.org/post/flint-getting-ready-sue-state-deq#stream/0>.

the way of efforts to convince Republicans in the Legislature to send more money and resources to Flint.”³³³

v. Michigan’s Connection to the KWA

As noted above, *The Free Press* reported that the state and KWA asserted a very heavy hand in the decision to convert to the Flint River. The MDEQ has a policy of seeking compliance and enforcement of environmental statutes through three forms of enforcement actions: administrative, civil, and criminal.³³⁴ With an administrative enforcement action, either a unilateral order is issued (administrative consent order), or the MDEQ and an entity agree that the entity shall bring its actions into compliance (administrative consent agreement).³³⁵

The Free Press reports that the usual practice of a municipality selling bonds to pay for the ordered correction, without consideration for the municipality’s debt limits, was “turned on its head” with respect to Flint and its decision to switch to the Flint River.³³⁶ In other words, the process allegedly was completely reversed, with the bond attorneys seeking an order first, then working backward through the chain. *The Free Press* reports that it was the KWA bond attorneys and the now-indicted state employee Stephen Busch, then Lansing district coordinator for the Michigan Office of Drinking Water and Municipal Assistance, who approached three different Michigan DEQ departments seeking an administrative consent order, even though the state was not pursuing any enforcement action related to the KWA or the use of the Flint River; the only action related to the use of a lagoon system for treatment plant sludge.³³⁷

333. *Id.*

334. MICH. DEP’T OF ENVTL QUALITY, *Compliance and Enforcement*, MICHIGAN.GOV http://www.michigan.gov/deq/0,4561,7-135-3311_4231_36974--,00.html (last visited July 10, 2016) [hereinafter *MDEQ Compliance*].

335. *Id.*

336. Egan, *supra* note 248.

337. *Id.* The article quotes:

“That’s part of my conundrum,” [Liane Shakter] Smith replied. “We don’t have an enforcement action with them. If they want an order regarding the lagoon then shouldn’t they be working with WRD?” She added: “I need to speak to Steve Busch to understand what the ‘ask’ is.”

Ultimately, the order was officially handled by a third DEQ section, the Office of Waste Management and Radiological Protection, though records show Busch played an active role in finalizing wording that would be agreeable to KWA bond attorneys.

Smith was fired by the state in February for her role in the drinking water crisis. Busch already was suspended when Attorney General Bill Schuette, on April 20, charged him with misconduct in office, conspiracy and other crimes, for his alleged role. The charges, which are pending in Genesee County, do not relate to the administrative consent order.

If, as reported, the state saw conversion to the Flint River as a “condition precedent” to the KWA, which could be an important project for Flint and a massive infrastructure project for the state, etc., it probably would have been difficult to remain an objective and neutral regulator. It had a vested interest in the conversion to the Flint River.

b. Tension between States and the Federal Government Regarding Safe Water

As noted above, all U.S. states, except Wyoming, have gained primacy with respect to the Safe Drinking Water Act. In 2004, Scheberle described the federal-state working relationship as “coming apart and contentious,” although that was a slight improvement from her 1998 study.³³⁸ She noted that “state officials do not perceive EPA as fully understanding public water suppliers, despite the agency’s concerted effort to reach out to stakeholders.”³³⁹

Moreover, some states have gone so far as to assert their resistance to federal environmental directives “by adopting laws that prohibit state regulations from exceeding minimum federal standards, thus converting federal floors into ceilings.”³⁴⁰ As of 2004, this was true for no fewer than twenty-four states.³⁴¹ This could be the case because “[b]y EPA’s own estimate, ‘no state, even after receiving a fee increase, has sufficient funding to meet all of the technical requirements of the Safe Drinking Water Act.’”³⁴²

[One KWA bond attorney] e-mailed Flint finance director Gerald Ambrose and emergency manager Darnell Earley on March 18, 2014, telling them KWA was ready to proceed with a \$220-million bond issue so it could continue pipeline construction. “However, we cannot take that step until the DEQ Administrative Consent Order is effective,” [the attorney wrote], and “the city needs the ACO in place by the end of this week.”

“In order to ensure that the entire project can be financed . . . and that the city will have some debt capacity in the future, the ACO is a condition precedent to proceeding,” he wrote. “If there is much more of a delay, the KWA will have expanded its initial resources and be forced to stop construction and the project will be delayed for at least one more construction cycle.”

338. SCHEBERLE, *supra* note 1, at 149.

339. *Id.*

340. Robert V. Percival, *Environmental Federalism: Historical Roots and Contemporary Models*, 54 MD. L. REV. 1141, 1145 (1995) (citing Jerome M. Organ, *Limitations on State Agency Authority to Adopt Environmental Standards More Stringent Than Federal Standards: Policy Considerations and Interpretive Problems*, 54 MD. L. REV. 1373 (1995)).

341. SCHEBERLE, *supra* note 1, at 1.

342. *Id.* at 138.

The NRDC and other reports detailing states' non-compliance with the Lead and Copper Rule protocols also can be considered as part of the context.

c. States' Aggressively Challenging Federal Agency Authority in Court

“[S]tate suits against the federal government are on the rise,”³⁴³ not only challenging the constitutionality of federal statutes but also the way in which federal agencies are administering federal law.³⁴⁴ These state challenges are occurring in a wide variety of fields.³⁴⁵ Texas, for example, has filed at least forty-three suits against the federal government since President Obama took office.³⁴⁶ These are many suits related to climate change and air and water quality, as well as voter identification laws, immigration, redistricting, women's health, gender equality, and business regulations.³⁴⁷

It is not the goal of this article to explore these cases but rather to note their existence in general and the spirit they reflect. Some states are taking an adversarial approach against federal authority and the assertion of federal agency authority. At the same time, Grove suggests that the Supreme Court has “signaled its endorsement of such lawsuits”³⁴⁸ when in *Massachusetts v. EPA*,

The Court upheld the State's standing to challenge the EPA's failure to regulate greenhouse gas emissions, declaring that Massachusetts was entitled to special solicitude in our standing analysis. As scholars have observed, the decision in *Massachusetts* suggests that states should be accorded special access to federal court in order to challenge federal agency action. That is, states have a special role in monitoring and improving federal agencies' implementation of federal law. Many scholars have welcomed these state-led lawsuits as a crucial new check on the administrative state.³⁴⁹

This behavior would be a significant backdrop to any EPA decision to intervene in Michigan.

343. Tara Leigh Grove, *When Can a State Sue the United States?*, 101 CORNELL L. REV. 851, 852 (2016).

344. *Id.* at 853.

345. *Id.* at 852.

346. Neena Satija, *Texas v. the Feds – A Look at the Lawsuits*, TEX. TRIB. (July 27, 2016, 12:01 AM), <https://www.texastribune.org/2016/07/27/texas-federal-government-lawsuits/>.

347. *Id.*

348. Grove, *supra* note 343, at 853.

349. *Id.* (internal citations omitted).

d. Increased State Financial Autonomy

As noted above, federal funding has been a key ingredient to encourage state cooperation in national programs. This situation is changing as federal funding wanes and new sources of state revenue are appearing. States and localities may rely on a newly developing, world-wide trend to issue so called “green bonds.”³⁵⁰ They “are structured in the same way as other bonds, but the insurer self declares that the proceeds will be used to fund environmentally beneficial projects.”³⁵¹ They can range from “general obligation bonds (backed by the issuer’s ‘entire balance sheet’), revenue bonds (backed by specific revenue streams such as water fees) and securitized bonds (backed by a pool of projects).”³⁵² The use of green bonds has skyrocketed from “\$500 million in 2010 to \$3.8 billion in 2015.”³⁵³ States such as California, New York, Massachusetts, Iowa, and Hawaii have used green bonds to fund a whole host of projects, including loans to municipalities for drinking and waste water infrastructure upgrades.

³⁵⁴

The conclusion with respect to states is that they may not be the regulator the cooperative federalism model assumes. The potential for lax enforcement may stem from a state’s involvement in local water, its disrespect for the federal scheme and federal authority, or the fact that states are becoming increasingly more self-reliant in terms of experience and funding.

C. The U.S. EPA

This section explores the EPA’s delayed involvement in Flint and some root causes that might explain it.

1. EPA Action in Flint

The Flint Taskforce characterizes the EPA as the reluctant enforcer. The Taskforce found:

F-32. EPA failed to properly exercise its authority prior to January 2016. EPA’s conduct casts doubt on its willingness to aggressively pursue enforcement (in the absence of widespread public outrage). EPA could have exercised its powers under Section 1414 and Section

350. Linda Breggin, *States and Localities Are Finding a Huge Potential in Green Bonds*, ENVTL F. 13, 13 (July/Aug. 2016).

351. *Id.*

352. *Id.*

353. *Id.*

354. *Id.*

1431 of the SDWA or under the LCR, 40 CFR 141.82(i).

F-33. Despite the clear intent of the LCR, EPA has accepted differing compliance strategies that have served to mute its effectiveness in detection and mitigation of lead contamination risks. These strategies have been adopted at water systems and primacy agencies across the country. Though there may be some ambiguity in LCR rule, none of it relates to what MDEQ should have done in Flint. There was and remains no justification for MDEQ not requiring corrosion control treatment for the switch of water source to the Flint River.

F-34. EPA was hesitant and slow to insist on proper corrosion control measures in Flint. MDEQ misinformation notwithstanding, EPA's deference to MDEQ, the state primacy agency, delayed appropriate intervention and remedial measures.

F-35. EPA tolerated MDEQ's intransigence and issued, on November 3, 2015, a clarification memo on the LCR when no such clarification was needed.³⁵⁵

Recently released e-mails support the Taskforce's characterization. Rather than taking on the strong tone of an entity in authority, the EPA appears to be worried about the state's response to the EPA's involvement.

Ultimately, [Michigan Department of Environmental Quality] bore the brunt of the blame for a mistake that . . . EPA seemed to recognize as early as last April [2015]. . . . But in more than 5,000 pages of internal e-mails and documents . . . the EPA clearly appears anxious over how to respond to the initial reports of high lead levels in Flint.³⁵⁶

Specifically, EPA officials discussed how to address the issue with the Michigan Department of Environmental Quality without "rubbing their noses in the fact that we're right and they're wrong."³⁵⁷ This might just be a polite reminder not to inflame a situation, but the discussion goes on: "(It) seems more apparent that Flint may have violated the (Lead and Copper Rule) by not maintaining corrosion control. . . . I'll bet that the state will take this personally since they are responsible . . . which isn't a bad thing, but they may get VERY defensive."³⁵⁸

The tone of the discussion certainly flies in the face of what some say is an over-intrusive federal hand in state affairs. It is hard to fathom why any regulatory body would feel impotent in the face of a violation

355. FLINT FINAL REPORT, *supra* note 5, at 8–9.

356. Todd Spangler & Paul Egan, *Emails: EPA Indecision Led to Inaction in Flint Crisis*, DET. FREE PRESS (May 13, 2016, 12:07 PM), <http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/05/12/epa-concerns-contradictions-flint/84299484/>.

357. *Id.*

358. *Id.*

of federal law with such devastating and clear health consequences. Perhaps, though, this gives insight into how the EPA perceives itself and its power.

The tone of the e-mail discussions is reflected in the overall management of Flint Water. As noted above, the 1952 Flint water treatment plant was not a “new” facility that was exempt from corrosion control requirements.³⁵⁹ Yet the EPA did not challenge this state assertion. And it was, at best, completely unclear whether Flint was using corrosion control, yet the EPA accepted the state’s word on the point rather than trusting and confirming. Again and again, this final protection measure was weak in the face of mounting evidence that Flint was poisoning its citizens.

The citizens’ impression of the EPA is summed up in the remarks of one attorney who has sued for the replacement of lead service lines:

The EPA waited far too long to step in to do anything about Flint. The citizens of Flint are right not to trust the EPA in this situation and it’s necessary for the citizens to bring their own lawsuit. . . . We’ll continue to work as hard as we can to get safe drinking water supply to Flint.³⁶⁰

2. EPA’s Behavior in Context

There are a variety of factors that might have contributed to the EPA’s delayed response and hesitant attitude.

a. The Federal Government Has Delegated Authority to the States, and States Have Asserted It.

As we know, state-delegated programs became the norm in the 1970’s and 1980’s.³⁶¹ Initially, “states relied on EPA as a source of information and guidance on how to implement the federal laws.”³⁶² Nevertheless, this appreciation shifted to resentment over time and became a source of tension. As states became more experienced with the implantation and regulation of federal environmental laws, they began to see the EPA as overbearing.

States perceived that while EPA fulfilled its obligation . . . to seek input from the states, it used rules, implementation guidance documents, and grant purse strings to enforce a vision of how things

359. Flint Lessons Memo, *supra* note 79, at 2; FLINT FINAL REPORT, *supra* note 5, at 16.

360. Catherine Shaffer, *Federal Court Allows Flint Lead Lawsuit to Proceed*, MICH. RADIO (July 8, 2016) <https://perma.cc/TMW5-RSL9>.

361. Thomas Burack & A. Stanley Meiurg, *Collaborative Federalism*, 33 ENTVL. FORUM 23, 23 (May/June 2016) [hereinafter Burack & Meiurg].

362. *Id.*

should work, even if that vision differed from states' ideas of how to run delegated programs equally or more effectively.³⁶³

This led to a “movement for greater state engagement and ‘cooperative federalism,’ in which EPA began to be more open to states’ view in establishing and implementing environmental programs.”³⁶⁴ As of 2016, all states, except Wyoming, have primacy with respect to the Safe Drinking Water Act.³⁶⁵ Recall also that almost half of the states have enacted state legislation that makes the federal standards, which were intended to be a floor, a ceiling.³⁶⁶

Moreover, state assumption of power is not novel to the SDWA. “Today state governments taken as a whole are implementing some 96 percent of the major federal programs for which they could be delegated or authorized, and they also conduct a vast majority of the data collection and the enforcement of those federal laws.”³⁶⁷

b. Water is Traditionally a Local Matter

This assumption of state power and potential resentment of federal authority is supported by the nature of the item being regulated—water supply and public safety. Again, this is seen primarily as a state and local responsibility.³⁶⁸ With the exception of the 1970's, the federal government has either stayed out of the matter for the most part (1700's-1970), or it has been reducing its footprint (1980's and beyond).

c. The Federal Government Has a History of Delayed Involvement in Safe Water

Recall the conversation above about what prompted the decade of the environment in the 1970's. Notably, the issue of systemic water contamination and pollution went unchecked for decades. The assertion of federal power finally came in 1970, but it bears repeating that the federal government only acted after a prolonged failure of the states to take adequate measures.³⁶⁹

363. *Id.*

364. *Id.* at 24. Schapiro notes a general trend in this regard: “All branches of the federal government have professed increased deference to state prerogatives. At the same time, the states have taken more active roles in formulating and implementing policy in a variety of areas.” SCHAPIRO, *supra* note 25, at 2.

365. *See Safe Drinking Water Act Primacy Agencies, supra* note 84.

366. Percival, *supra* note 340, at 1145.

367. Burack & Meurg, *supra* note 361, at 23.

368. Cox, *supra* note 32, at 72–73.

369. “Like civil rights law, environmental law became federalized only after a long history of

And even then, the assertion had a softer side to it. Then EPA Deputy Administrator, Robert Fri, optimistically predicted that, “We believe the enforcement provisions of the bill will be highly effective, almost self-executing and require little direct Federal involvement.”³⁷⁰

Moreover, even though the EPA sets minimum national standards, “the federal environmental laws generally have been designed to avoid preemption of state law.”³⁷¹ Scheberle, who has carefully studied working (and unworkable) relationships with respect to the implementation of environmental programs and policies, suggests that this “softer” approach is not altogether wrong. Many scholars have noted “the error of federal overseers leaning too vigorously on their state counterparts to secure compliance with federal goals.”³⁷² She goes on to note that, “high involvement among participants may not necessarily lead to positive working relationships. Federal staff involvement that is perceived by state officials to be nitpicking state programs or micromanaging state activities . . . may be counterproductive.”³⁷³

d. Clean Power Plan

In August 2015, EPA and President Obama announced the Clean Power Plan, which EPA describes as “a historic and important step in reducing carbon pollution from power plants that takes real action on climate change. . . . It also shows the world that the United States is committed to leading global efforts to address climate change.”³⁷⁴ There has been significant resistance to the plan, with twenty-seven states, including Michigan, filing suit against the EPA,³⁷⁵ and the Supreme Court staying implementation of the plan pending judicial review.³⁷⁶ In terms of priorities, EPA may have been focused on the political challenge of implementing this plan rather than addressing the long-standing challenge of Lead and Copper Rule violations.

state failure to protect what had come to be viewed as nationally important interests.” Percival, *supra* note 340, at 1144.

370. March 1973 EPA Press Release, *supra* note 95.

371. Percival, *supra* note 340, at 1142.

372. SCHEBERLE, *supra* note 1, at 20. This observation puts the Flint EPA e-mails in a slightly different light.

373. *Id.* at 21.

374. *Clean Power Plan for Existing Power Plants*, ENVTL PROT. AGENCY, <https://perma.cc/3TZM-RP7Q> (last visited Oct. 16, 2016) [hereinafter *Clean Power Plan*].

375. *States Suing EPA*, CTR. FOR EARTH, ENERGY & DEMOCRACY, <https://perma.cc/KH3C-GBWE> (last visited Oct. 16, 2016).

376. *Clean Power Plan*, *supra* note 374.

e. Reduction in Federal Funding Reduces Federal Moral Authority

With respect to the SDWA, Congress enacted “unfunded mandate rules” in 1996, which, as the name suggests, protect states from federal requirements that are not supported by commensurate federal financial support.³⁷⁷ As noted above, however, federal funding has never kept pace with the amount of funding authorized by the Safe Drinking Water Act, and appropriations have been flat or in decline for a decade.³⁷⁸

In addition, at a time when there are increased concerns over lead in drinking water, federal support for the Center for Disease Control’s Childhood Lead Poisoning Prevention Program has decreased by fifty percent over the past four years, from 30 million in FY 2011 to 15 million in FY 2015.³⁷⁹ Notably, it was the blood samples taken as part of this program that provided concrete evidence of the elevated blood lead levels in Flint’s children in the summer of 2014.³⁸⁰

These statistics suggest that one of the cornerstones of our cooperative federalism model (i.e., delegated authority to the states to implement programs with federal funds) is being undercut, which has two different implications. With respect to the EPA, there might be concern that the reduction in federal funding signals waning support for the agency’s mission. As for the states, which are given primacy and federal funding, they arguably may seek even more autonomy since they retain primacy and are taking on more of the economic burden.

The conclusion here is that the EPA was overly trusting of state behavior and hesitant to assert its authority in Flint, yet this behavior did not occur in a vacuum. There are centuries of context to consider that might explain the approach. The takeaway, however, is that the federal government, which sits at the top of the cooperative federalism pyramid, is not the empowered actor in safe drinking water enforcement.

377. Percival, *supra* note 340, at 1141–42.

378. LEGISLATIVE FINANCING OPTIONS, *supra* note 115, at 5.

379. Flint Lessons Memo, *supra* note 79, at 6.

380. *Id.* at 9 n.44.

V. A COLLABORATIVE OR POLYPHONIC FEDERALISM CONVERSATION

The first step to resolving any problem is to recognize that there is one. Flint Water itself could be the wake-up call needed to prompt a reset of our cooperative federalism model, but the combination of Flint Water and the emerging data reported by NRDC and others should lead inexorably to the conclusion that the existing scheme's overreliance on localities to address our nation's twenty-first century challenges alone is misplaced.

A. *Working Relationships—Summing Up the Current Problem*

Scheberle suggests that the best working federal-state relationships are ones rooted in mutual trust and appropriate levels of involvement. Trust refers to the extent that actors believe that other participants are dedicated to implementing the policy.³⁸¹ “High levels of trust are evident within a relationship when actors share goals, respect the actions of others, allow flexibility, and support individuals within the program.”³⁸²

Considering the discussions above, one can see the lack of trust between the actors in our cooperative federalism model. There is no shared goal with respect to infrastructure and other twenty-first century challenges. The EPA violations data reveal a lack of respect for the safe water program. Flexibility has gone too far and has become lax enforcement. And there are persistent issues with respect to support—particularly funding.

The second critical element to a working relationship is involvement, which includes formal and informal communication, oversight activities, providing funding, sharing resources, giving advice, and personal contact.³⁸³ The “nature of involvement, then, becomes one of assistance, with ample doses of technical assistance, consultation, and even logistical support.”³⁸⁴

Considering the discussions above, one also can see the lack of involvement between the actors in our cooperative federalism model. First, although the localities are given primary responsibility for delivering safe water, they are not even at the table. Ironically, Scheberle, who sets out to describe working relationships for the

381. SCHEBERLE, *supra* note 1, at 21.

382. *Id.*

383. *Id.*

384. *Id.*

implementation of environmental policies, discusses the state-federal relationship, not the local-state-federal relationship. This could be the case because a locality is not considered a sovereign; however, the locality plays such a critical role in the scheme that it should be part of the conversation.

Flint Water is a prime example of lack of local involvement. The locality warned it was concerned about the use of the Flint River and the water treatment plant, yet the locality was not involved in the key decisions. Those were made by the state. Residents of Flint tried for more than a year to bring attention to their water safety concerns. They were also not heard.

The lack of state and EPA involvement is reflected in the lack of enforcement of Lead and Copper Rule violations as reported by the NRDC. One also must remember the reduction in state and federal funding with respect to the environment and infrastructure.

A final point to consider is that EPA represents the federal government but the involvement of Congressional leaders also could be a missing element. EPA promulgates rules and allocates resources, but first Congress appropriates the funds.

B. Initial Observations

Americans created modern federalism when the situation demanded it. Americans also created the decade of the environment when circumstances called for bold action. The current state of affairs with respect to safe water is another one of these times that demands a strong and innovative American response—an American reset of our safe drinking water model.³⁸⁵

In terms of options, total pre-emption does not appear to be a likely or appropriate response given the local nature of water and our history and culture. Reverting to a local, pre-1970 system seems equally inappropriate and unlikely. So, as we were in the second half of the eighteenth century, we are at a time when we need to re-think

385. This shift to a “shared” role in response to national concerns also occurred with respect to the building of the nation’s transport infrastructure, which “was basically different from what has come to be known as the grant-in-aid and other joint or cooperative programs of the modern era, with their extensive auditing and oversight functions, conditional terms, and (above all) agenda-setting and basic policy formulation by Congress and federal administrators rather than at the state or local level.” Harry N. Scheiber, *Redesigning the Architecture of Federalism-an American Tradition: Modern Devolution Policies in Perspective*, 14 *YALE L. & POL’Y REV.* 227, 234 (1996). See also SCHAPIRO, *supra* note 25, at 35 (citing DANIEL J. ELAZAR, *Theory of Federalism*, in 3 *ENCYCLOPEDIA OF THE AMERICAN CONSTITUTION*. 1006 (Leonard W. Levy & Kenneth L. Karst eds., 2000)).

how multiple entities operate within a given territory. The one difference today is that the question is not so much one of dividing power as it is of how to share power.

Scheberle suggests that an ideal relationship would be one of high trust and high involvement of all actors.³⁸⁶ Recognizing some fundamental points could be a first step in the process of creating this relationship with respect to safe water.

1. Trust

Again, trust is rooted in shared goals, respect, flexibility, and support.³⁸⁷

a. Shared Goal

First, all actors involved with safe water should agree there is an urgent need for a twenty-first century water supply system. We do have a history of coming together on national infrastructure projects.³⁸⁸

b. There is a Basis for Mutual Respect

All actors in the current scheme deserve respect. Localities have an extremely difficult job and should not be required to “go it alone.” They are providing a service that is fundamental to human life and dignity. They also are the most informed entity with respect to local needs. They deserve a voice and to be heard.

States also deserve respect for the position they have taken (or could take) with respect to the implementation of national water standards. They have accepted primacy and have carried the load despite reduced federal funding. They also are a vital link between the federal government and localities. Neither entity could fulfill their roles effectively without the involvement of the state.

Finally, the federal government does have a necessary and important role to play in safe water.

Like civil rights law, environmental law became federalized only after a long history of state failure to protect what had come to be viewed as nationally important interests. . . . Despite [recent political events], most Americans continue to believe that the federal government should have more responsibility for environmental protection than the states. This belief may reflect an understanding

386. SCHEBERLE, *supra* note 1, at 21.

387. *Id.*

388. *Id.*; see generally Scheiber, *supra* note 385; SCHAPIRO, *supra* note 25.

that effective environmental protection policy did not evolve until . . . the federal government began to play an active regulatory role.³⁸⁹

It is appropriate to question the premise that water is purely a local matter.³⁹⁰ Perhaps our reality has changed in ways that make this premise less valid. First, there are national interests at stake. All people are entitled to safe drinking water, regardless of the demographics of a city's population. In his 2017 budget presentation, Michigan's Governor Snyder declared that "clean drinking water is a human necessity."³⁹¹ Economic disparity or race should not be the cause of some people being safe and others being poisoned. As with human and civil rights, there is sometimes a need for a federal approach to ensure these rights.

Beyond basic human rights looms the threat that terrorism poses to the security of our water supply system, which is a threat that knows no borders and must be monitored at a national and international level.

There also is universal acceptance that the costs of addressing our water-supply infrastructure are astronomical, something that necessitates federal involvement.³⁹²

c. Support

There are mechanisms in place and other legitimate options to consider with respect to funding a twenty-first century water supply system.³⁹³ The 1970's and 1980's also demonstrate the actors' capacity to provide expertise and support.³⁹⁴ In other words, these actors know how to support environmental goals, they just may be out of practice.

2. Involvement—Collaborative or Polyphonic Federalism

Addressing the "high involvement" prong of Scheberle's recommendation is critical. We should look for a new level of

389. Percival, *supra* note 340, at 1144 (internal citations omitted).

390. As Schapiro notes, we are historically predisposed to separate or compartmentalize topics as "local" or "national," but these labels do not reflect the reality of our current day. "The key to understanding contemporary federalism is to embrace the overlap of state and federal authority. That concurrence is not an aberration to be shunned, but a core reality to be accepted and theorized." SCHAPIRO, *supra* note 25, at 92.

391. FY 2017 BUDGET PRESENTATION, *supra* note 121, at slide 3.

392. "Not only are some problems better dealt with on a national (or international) basis, but each environmental issue also presents a set of sub problems and diverse regulatory activities, some of which are best undertaken centrally." Esty, *supra* note 112, at 571. It should be noted that the author is not urging a federal-only approach. This point is merely that the federal government should have an increased role in resolving safe-drinking water issues and financing.

393. See LEGISLATIVE FINANCING OPTIONS, *supra* note 115.

394. See Burack & Meirg, *supra* note 361.

interaction and involvement between safe-drinking water actors: the federal government (both Congress as the funding source and EPA as the regulatory body) and the states. Flint Water and the current state of affairs warrant that these actors reconsider their relationship with one another and the power structure that will be needed to bring safe water to all Americans. It also is time to consider extending more official positions to other safe water actors. Given their involvement and interests, should localities and consumers also be considered actors within this framework and be given formal roles?

It will be the task of experts in many fields to “reset” our existing system, but this article is meant to encourage the conversation. One model to discuss involves actors working as co-regulators in a collaborative or polyphonic federalism scheme. These approaches differ in some ways, but both reflect the idea of shared power and shared responsibility.

a. Collaborative Federalism

One form of the interaction “reset” could be drawn from the recent development of the E-Enterprise for the Environment program. It has been labeled a “collaborative federalism” approach that involves the creation of joint state-EPA governance bodies to streamline reporting for regulated facilities, akin to using one software system to file multiple tax returns.³⁹⁵

“E-Enterprise embodies a cultural shift in how environmental co-regulators work together and deliver environmental protection services.”³⁹⁶ The goal of the program is to modernize the “business of environmental protection . . . [by] improving environmental protection through better program performance, enhancing services to regulated entities, the public, and agency partners; and operating *as a transformative model of joint governance*.”³⁹⁷

The project involves officials “leveraging their collective resources, expertise, and experience” to create “new, deeper partnerships.”³⁹⁸ A key aspect of the program’s success is that the partners “had to accept each other as co-regulators and to

395. *Id.* at 23. It should be noted at the outset that this joint governance system had a strong foundation, as the parties had a positive working relationship and a shared goal by virtue of previous interactions. *Id.* at 24. To some extent, this is not an existing condition for safe drinking water, so the base points would have to be addressed as noted below.

396. *Id.* at 23.

397. *Id.* at 24.

398. *Id.*

acknowledge that their individual success depended upon their collective success.”³⁹⁹

The project was launched in September 2013, when the Environmental Council of the States and EPA executed the Charter for the State and EPA E-Enterprise Leadership Council.⁴⁰⁰ This joint governance body is co-chaired by a state environmental commissioner and the EPA deputy administrator.⁴⁰¹ There is an Executive Committee, which focuses on policy and strategic issues, while a Management Board and an Interoperability and Operations Team focus on day-to-day tasks and implementation of individual projects.⁴⁰² A benefit to this model is that “co-regulators are fully engaged in and committed to this work at both the political and career levels, and that a solid governance foundation exists to support transformative cultural change in the future.”⁴⁰³

b. Polyphonic Federalism

Schapiro’s work on “polyphonic federalism” strikes a similar chord and may inform the conversation of how to create a system of co-regulators or joint safe-water actors. One way to understand the concept is in comparison to other forms of federalism. Unlike dual federalism or even cooperative federalism, to a certain extent, which ask “whether some activity belongs on the state or federal side of a line, polyphonic federalism asks how the overlapping power of the state and federal governments can best address a particular issue.”⁴⁰⁴ Unlike the collaborative E-Enterprise model described above, which involves the creation of a distinct joint-governance body, in a polyphonic regime “the state and federal governments occupy the same place at the same time, yet they maintain their institutional identities.”⁴⁰⁵

Polyphonic federalism also might be understood by way of metaphor. Polyphony refers to “the simultaneous and harmonious combination of several individual melodic lines.”⁴⁰⁶ Historically, scholars have depicted federalism in graphic terms (e.g., layered-cake

399. *Id.*

400. *Id.*

401. *Id.*

402. *Id.*

403. *Id.*

404. SCHAPIRO, *supra* note 25, at 96.

405. *Id.*

406. *Id.* at 94 (internal citation omitted). “The fugues of Johann Sebastian Bach and the canon of Johann Pachelbel are prominent examples of polyphonic compositions.” *Id.*

federalism or marble-cake federalism).⁴⁰⁷ According to Schapiro, using sound as a metaphor is a more apt approach. Visually “it is difficult to imagine two items occupying the same space, without displacing each other or combining into a single new, unified whole. The choice is a marble cake or a stew. Sound, on the other hand, can combine into new melodies, without losing its individual character.”⁴⁰⁸

In the polyphonic conception, federalism is characterized by the existence of multiple, independent sources of political authority. The scope of this political authority is not defined by subject matter. No kind of conduct is categorically beyond the boundaries of state or federal jurisdiction; the federal and state governments function as alternative centers of power. In the first instance, any matter is presumptively within the authority of the federal government and of a state government. Full concurrent power is the norm. A polyphonic conception of federalism thus resists the idea of defining enclaves of state power protected from federal intrusion. . . . [P]olyphonic federalism focuses on facilitating and structuring the interaction of state and federal governments.⁴⁰⁹

Schapiro argues that polyphonic federalism systems are more innovative and resilient.⁴¹⁰ He also notes that “the interaction of state and federal power better advances the substantive goals generally associated with federalism, including efficiency, democratic participation, and liberty.”⁴¹¹

c. Discussion Items for an American Reset Toward Collaborative or Polyphonic Federalism

One benefit to the collaborative or polyphonic models is that they encourage dialogue.⁴¹² They also create the opportunity for the partners to solve problems in ways that exceed what one could have accomplished on its own.⁴¹³

407. Morton Grodzins, *The Federal System*, in AMERICAN INTERGOVERNMENTAL RELATIONS: FOUNDATIONS, PERSPECTIVES, AND ISSUES 55 (Laurence J. O’Toole Jr. ed., 2000).

408. SCHAPIRO, *supra* note 25, at 94.

409. *Id.* at 95.

410. *Id.* at 92.

411. *Id.*

412. *Id.* at 98.

413. See Burack & Meiuerg, *supra* note 361; Engel, *supra* note 31, at 168–69 (discussing the development of low emission vehicle standards by capitalizing on both state and federal mechanisms); DAVID E. ADELMAN & KIRSTEN H. ENGEL, *Adaptive Environmental Federalism*, in PREEMPTIVE CHOICE: THE THEORY, LAW, AND REALITY OF FEDERALISM’S CORE QUESTION (William W. Buzbee ed., 2009) (comparing dynamic federalism to complex adaptive systems in terms of the benefits and strengths they produce).

What follows are several discussion items that could be used to start the conversation of how to “reset” toward a collaborative or polyphonic federalism framework.

1. Who are the actors? Is safe water a governance issue between state and EPA only? Or should consumers, localities, and Congressional leaders also have an active role or voice?
2. How does one shift from the existing power structure to one of shared power between the identified actors? What changes in philosophy and in law are required?⁴¹⁴
3. How does one encourage innovation in water-supply system development? Is it time to re-think water supply systems rather than simply improve upon our century-old framework?⁴¹⁵ Should we also take the opportunity to discuss integration of safe water, land use, energy, and national security policies?⁴¹⁶

414. One initial point may to be expand on the “rules of engagement” noted by Bridget Fahey in her recent article, *Consent Procedures and American Federalism*, 128 HARV. L. REV. 1561, 1567 (2015) (noting that “these rules would dictate how the states and federal government are obliged to treat one another when they join together their respective power, resources, and democratic legitimacy to achieve a common goal”). Fahey credits Robert Schapiro for coining the term “rules of engagement.” *Id.* at 1629 n.16. This concept would be expanded to include other safe drinking water actors if they are identified. *See also* Engel, *supra* note 31; ADELMAN & ENGEL, *supra* note 413. Another idea in terms of how these parties could share power is to consider a variation of the “matching principle” suggested by Butler and Macey in 2006. *See* Henry N. Butler & Jonathan R. Macey, *Externalities and the Matching Principle: The Case for Reallocating Environmental Regulatory Authority*, 14 YALE L. & POL’Y REV. 23, 25 (1996). Butler and Macy suggest that one could identify which governmental actor is best suited to address an issue by evaluating the size of the geographic area affected by the environmental concern. This same principle could be applied when evaluating the role of a particular actor in a shared power structure—that is, focus on the issue at hand and who is best suited to address it or take the lead. Although ultimate responsibility would be shared amongst all actors, the “point” may be taken by different actors or different governing bodies at different times depending on the nature of the particular challenge. Again, this structure would involve shared responsibility and accountability, not simply the delegation of responsibility in a dualist or cooperative federalism framework.

415. While technical realities made water supply a purely local matter in the 1800’s when major water supply systems were first created in cities like Philadelphia and Boston, one has to wonder what a newly conceptualized system would look like today. If we were to create a system today, for the first time, would we rely on this local model? Or does it make more sense to develop regional or multi-locality systems, which would be taking the same approach as our electric power grid? This approach might help achieve the recommendations of the Science Advisory Board and EPA with respect to the consolidation of small systems in order to achieve economies of scale and improve compliance, etc. *See* SCHEBERLE, *supra* note 1, at 138. A regionalized system also might provide better protection from terrorism. Finally, this approach could lend itself to water transfers and the equalization of water level disparities. Perhaps treated flood water from one region could be purchased by drought-stricken areas, and water-use disputes could be resolved collaboratively.

416. *See* Comments of Peter Gleick, Pacific Institute, Columbia Water Center Earth Initiative Panel Discussion (Mar. 2016) (notes on file with the author).

4. What mechanisms will be used to reach necessary and appropriate funding levels?⁴¹⁷
5. What can be done to improve accurate reporting and information gathering and sharing?⁴¹⁸
6. How should at-risk water systems and communities be identified and work prioritized?⁴¹⁹

Again, the idea is to recognize the inherent inability of cooperative federalism to address our twenty-first century challenges. The scheme is flawed because it places the heaviest burden on the least powerful and capable actor. If we continue to persist in this model, despite direct evidence that some localities are not capable of providing safe water, Flint Water will be repeated elsewhere across this country. An alternative is to agree that we need a new model and to begin a conversation about whether collaborative or polyphonic federalism is best suited to address the challenges ahead.

IV. CONCLUSION

There is a well-known warning that those who cannot remember the past are bound to repeat it. The quote is sometimes attributed erroneously to Winston Churchill.⁴²⁰ It actually comes from philosopher George Santayana, who wrote in 1905: “Progress, far from consisting in change, depends on retentiveness. . . . Those who cannot remember the past are condemned to repeat it.”⁴²¹

The sentiment, regardless of attribution, rings true today. Flint Water is now part of our history. Will we evaluate and reflect honestly on its causes? And will we act as the answers come to us to make sure that another Flint Water is not part of our future?

417. See LEGISLATIVE FINANCING OPTIONS, *supra* note 115 for initial starting points.

418. The E-Enterprise model might be particularly instructive here.

419. This question, in and of itself, reflects the benefits of a collaborative or polyphonic system where all actors are involved and share power to achieve a common goal. Localities, consumers, and states can help identify local or regional needs, and the federal voice can serve to collate the ideas into a broader framework. Because all actors are working toward a unified goal of safe water, a goal that is no longer purely local or purely federal, decisions can be made, at least theoretically, in support of that unified goal. The ability to achieve this result in reality will depend on how well the actors can answer discussion item number 1 (i.e., which actors will have a role); item 2 (i.e., how will power be shared); and item 4 (i.e., how will the actors obtain necessary funding).

420. *Those Who Fail to Learn from History*, NAT'L CHURCHILL MUSEUM BLOG (Nov. 16, 2012), <https://perma.cc/8DC9-4RMU>.

421. GEORGE SANTAYANA, *THE LIFE OF REASON OR THE PHASES OF HUMAN PROGRESS*, INTRODUCTION AND REASON IN COMMON SENSE 284 (1905).

Churchill does have something to say to us about our options. In 1935, when Great Britain lost air parity with Hitler, Churchill said this in the House of Commons:

When the situation was manageable it was neglected, and now that it is thoroughly out of hand we apply too late the remedies which then might have effected a cure. There is nothing new in the story. . . . It falls into that long, dismal catalogue of the fruitlessness of experience and the confirmed unteachability of mankind. Want of foresight, unwillingness to act when action would be simple and effective, lack of clear thinking, confusion of counsel until the emergency comes, until self-preservation strikes its jarring gong—these are the features which constitute the endless repetition of history.⁴²²

These sentiments describe Flint Water itself; the hope is that they will not describe our response—both in terms of helping those who have been affected by lead and addressing our federalism challenges. There are fundamental flaws in our existing model of cooperative federalism. We must come to terms with them and face the hard truths about our history and current political climate. Do let us take that path and avoid being twenty-first century incarnations of Churchill's "unteachables." It's time for a reset.

422. Remarks by Winston Churchill to the House of Commons (May 2, 1935), <https://perma.cc/QH9Y-HFRW>; See Winston S. Churchill, *THE GATHERING STORM* 99–113 (1948) (describing the political action (or lack of action) that led to the loss of air parity).