



From pragmatic to politicized? The future of water remunicipalization in the United States

Thomas M. Hanna^a, David A. McDonald^{b,*}

^a National Center for Economic and Security Alternatives, USA

^b Global Development Studies at Queen's University, Director of the Municipal Services Project, Canada

ARTICLE INFO

Keywords:

Remunicipalization
Public water
Water privatization
Pro-public movements

ABSTRACT

The United States has experienced swings of public and private operation of its water services for more than 150 years. This paper examines the most recent swing, that of remunicipalization. We argue that much of this remunicipalization is taking place for 'pragmatic' reasons related to cost savings and service quality, but there are also signs of more 'politicized' forms of water remunicipalization taking place, similar to efforts elsewhere in the world where the process has often involved heated ideological debates and mass mobilizations. Combined with a growing politicization of other social, economic, and environmental issues in the US, water remunicipalization could become more politicized in the future, but a fragmented 'pro-public' movement, combined with ongoing efforts to outsource water services and growing resistance to remunicipalization from private water companies, may constrain this potential.

1. Introduction

As with many countries, the United States has experienced swings of public and private operation of its water services for more than 150 years. Most water services in the country began as private enterprises in the 1800s but were municipalized from the late 19th century into the 1930s. The tide turned once again in the 1980s with efforts to reintroduce privatization in various forms, albeit with limited success. More recently, there have been numerous high-profile remunicipalizations where privately-run services have been brought back into public control, affecting dozens of municipalities across the country. This includes services that have returned directly to municipal control and those which have been brought back into public hands in a different form (i.e. through operation by a separate or new public jurisdiction, public agency, or public company).

The majority of these remunicipalizations appear to have occurred for 'pragmatic' reasons, defined in this article as decision making related primarily to cost savings and service quality (rather than a philosophical objection to private sector participation in the water sector), with decision making driven by bureaucrats and elected officials (for an early review of this dynamic see Hefetz and Warner (2004)). This experience is different from that of water remunicipalizations in many other parts of the world, where the process has often involved high profile political

debate and mass mobilizations of workers and residents seeking not just a return to public control but a fundamental transformation of what is expected from a 'public' water operator (such as demands for better accountability, equity-oriented financing, participatory decision making, and the decommodification of water services). These more politicized remunicipalization voices are part of a growing 'pro-public' water movement, most visible in Europe and Latin America but with an expanding presence around the world (McDonald, 2018; Kishimoto et al., 2020).

The central question in this paper is as follows: Will debates about remunicipalization in the US become more coordinated and ideological in the future (akin to those of pro-public remunicipalization efforts elsewhere), or will they remain largely insulated and pragmatic? Evidence suggests that the trend could go either way. The potential for greater politicization can be witnessed in the growing number of pro-public water organizations and an increase in demands for better social and economic justice in water services. However, it will be difficult for pro-public advocates to coordinate an ideologically and institutionally diverse set of water-related organizations in the US, and pro-private forces remain powerful.

A dearth of research on the topic compounds the analytical challenge, with little in the way of qualitative data. Most academic studies have been quantitative in nature, with limited insights into the political

* Corresponding author.

E-mail addresses: tmhanna@democracycollaborative.org (T.M. Hanna), dm23@queensu.ca (D.A. McDonald).

<https://doi.org/10.1016/j.jup.2021.101276>

Received 17 December 2020; Received in revised form 21 July 2021; Accepted 23 July 2021

Available online 4 August 2021

0957-1787/© 2021 Elsevier Ltd. All rights reserved.

orientation of remunicipalization efforts in the country. There is a growing body of literature by NGOs and special interest groups (including industry associations and their consultants), but these do not always provide the objectivity demanded by policy makers and seldom find their way into scholarly venues. As a result, water remunicipalization has 'escaped widespread attention' in American academia (Ulmer and Gerlak, 2019, p. 19).

Our paper attempts to help fill this analytical gap by critically examining the existing literature on remunicipalization in the US and assessing its relevance for understanding the potential for more politicized forms of remunicipalization in the future. We begin with a review of earlier swings between public and private water delivery (the *municipalization era* and the *re-privatization era*) to put contemporary actions and debates in historical perspective. We then assess the current *remunicipalization era*, asking what is similar and what is different about the US experience to other parts of the world. We review the available academic research alongside reputable NGO and media reports, as well as providing an assessment of 72 US water remunicipalization cases from a new 'crowdsourced' database housed at the University of Glasgow (Transnational Institute, 2020).

Our analysis reinforces the general consensus that water remunicipalization in the US has indeed been largely pragmatic to date, but there is evidence of more politicized forms of remunicipalization taking place. We highlight, in particular, a growing sense of frustration in the country with *both public and private* water operators (particularly as it relates to service cutoffs) as well as a burgeoning of organizations demanding more substantial public sector reforms. Covid-19 has served to further reveal inequities in water and other basic services in the country, potentially intensifying demands for more politicized change (Laster Pirtle, 2020; Warner et al., 2020a).

However, these pro-public movements lack consistent messaging, organizing, and strategizing on water remunicipalization, with opinions on what constitutes a 'good' public water service varying dramatically amongst policy makers, activists, and water operators. There is also growing pushback on remunicipalization from private water companies and pro-private lobbyists in the country, while ongoing fiscal pressures are forcing some municipalities to (re)consider private sector involvement in their water services. As a result, the future of water remunicipalization in the country remains uncertain.

2. The municipalization era

The rapid industrialization of US cities in the 1800s witnessed a dramatic growth in large and small firms providing services for the productive and consumptive needs of a growing working and middle class. Water, gas, transportation, waste management, health care, and electricity services were among the networked amenities developed at that time, provided almost universally by private companies (Emmons, 1991; Melosi, 2000; NRC, 2002; Warner, 1987).

Where economies of scale and capital intensity mattered (e.g. water and electricity) there tended to be oligopolistic players, with some of the largest private water companies still in operation today owing their existence to this period (e.g. Suez, United Water, and General Electric) (Granovetter and McGuire 1998; Lorrain, 2005). More localized services such as waste removal were typically managed by small, sometimes informal, private providers, although consolidations quickly became the norm (Melosi, 2005).

This laissez-faire approach to service development began to change in the mid-to late-1800s with a push to *municipalize* facilities – i.e. local state authorities taking ownership and control of services (Booth, 1985; Crofts, 1895; Kellett, 1978). The overarching rationale for municipalization was that service provision by multiple providers was illogical and wasteful, particularly with natural monopolies such as water, gas, and electricity where it made little economic or regulatory sense to have duplicated personnel and infrastructure. Abusive and fraudulent business practices by increasingly consolidated and large-scale private

providers also often played a role in turning public opinion in favor of municipalization.

The US saw a wave of municipalizations in the water sector, with hundreds of cities – including Baltimore, Boston, Chicago, Los Angeles, New York City, Philadelphia, and San Francisco – making their services public between 1880 and 1920 in an effort to improve water quality and extend service to low-income areas neglected by private providers (Spar and Krysztof, 2009; Melosi, 2000). New York City, for example, took over drinking water services from the Manhattan Company, the predecessor of JPMorgan Chase, after an outbreak of cholera killed more than 3000 people (Soll, 2013).

The political rationales for municipalization during this time were highly polarized, however. On the left, elements of the Socialist Party advocated municipal socialism, a combination of strong anti-capitalist sentiment, municipal reformism, and bottom-up political movement building. At the peak of the Socialist Party in the early 1900s, 'about 1200 party members held public office in 340 cities, including 79 mayors in cities such as Milwaukee, Buffalo, Minneapolis, Reading, and Schenectady' (Dreier, 2013). This brand of municipalization ridiculed the 'robber barons' of the day, with explicit commitments to 'fairness' and 'universal access' based on 'widespread anti-monopoly sentiment' that 'flowed easily into calls for public production and distribution of basic goods and service' (Radford, 2003, p. 870).

To the right were pro-market liberals who argued for municipalization on pragmatic efficiency grounds, including Republicans who ran on a municipalization ticket (Radford, 2003). These pro-market municipalizers were exemplified by the 'goo goos' (short for good government) of Chicago in the early 1900s, whose 'chief interest was to introduce honesty and business-like efficiency into city government. Believers in individualism, the Protestant work ethic, and private enterprise, they strove for a municipal authority that, once cleansed of corruption, would be smaller in size and function and would guarantee lower taxes and enforcement of public order and private morality' (Morten, 2002, p. 28). Their goal was to (re)invigorate capital accumulation, not challenge it. As MacKillop (2005, p. 26) notes in the case of early water infrastructure in Los Angeles, 'public investments furthered private interests on a grand scale,' as land developers pushed for public service extension to open new frontiers of accumulation. Capitalists allowed municipal socialism to develop and thrive, but only insofar as it suited their needs: 'Nobody wanted this [municipalization] venture to be too ideological or harmful to private enterprise The idea was to make the municipal water service [in Los Angeles] work efficiently, to ensure the city's "greatness", and without harm to the city's financial situation. As long as this didn't prevent the oligarchy from making money, they didn't object.'

Many municipalized services were then scaled up to the regional and national level starting in the 1930s (Millward, 1997); part of a larger paradigm shift in Western market economies at the time, with expanded public services seen as an essential part of a nationally coordinated stimulus package to recover from economic downturns and to build national competitive advantage (Harvey, 1982; Jessop, 1982). Water provision largely stayed local – in part because Congress had exempted interest payments on municipal bonds from federal income tax which allowed municipalities to issue bonds at lower interest rates to fund the improvement and expansion of water and other services (Ulmer and Gerlak, 2019) – but many important regulatory and fiscal policies were scaled up to the state and national level during the New Deal and World War II periods, meaning that municipalities were not entirely autonomous in their decision making around water facilities. Nevertheless, states and local governments retained significant authority over water services, with large scale infrastructure projects often routed through or implemented in cooperation with local institutions (Kinkaid, 2013).

In short, water services in the US went from being predominantly private to overwhelmingly public in a matter of decades, with the overarching goal of the municipalization era being one of meeting the demands of an expanding market economy by ensuring that policy

making and investment ‘was subject to government directions’ (Aharoni, 2013, p. 165).

3. The Re-Privatization era

In line with similar trends around the world, a simmering backlash against public ownership erupted in the 1970s in the US, including in the water sector. Pro-privatization advocates argued that public ownership of water services had outlived its usefulness, becoming a drag on, rather than a stimulant for, broader economic growth. Public bureaucrats were deemed to have become sclerotic and unaccountable, providing cumbersome and unimaginative services that failed to meet the needs of a dynamic private sector in a rapidly changing and highly competitive global market economy (Arnold, 2009; Robinson, 2013).

Private sector service delivery, by contrast, was seen to benefit from market-based operating incentives, forcing water operators to respond quickly and efficiently to private sector demands while offering improved accountability via contracts that revealed the ‘true’ costs of service delivery and allowed for the dismissal of poorly-performing operators. Here we see a return to neoclassical economic theory with a neoliberal twist, advancing a more robust role for the state than the *laissez faire* governments of the 19th century – not necessarily in terms of the size of the state, but in its capacity to support the private sector with contracts and targeted intervention and regulation. As such, renewed interest in water privatization from the 1980s should not be seen as an abandonment of faith in government, but rather a revised understanding of the command and control benefits of state engagement with the entrepreneurial spirit of private capital (Bakker, 2003).

A pivotal moment in the rise of neoliberalism in the US was the 1971 ‘Powell Memorandum’ which jolted the business sector to action and stimulated corporate funding to new and existing free market think tanks which grew in power and influence (Noah, 2012). But while it is true that during Ronald Reagan’s first term in office these think tanks provided more than half of his presidential appointments (Wallison, 2004), the notion that Reagan alone introduced a ‘privatization revolution’ in the country is ‘largely a misconception’ (Poole, 2004). As Poole (2004), a pro-privatization advisor from the Reason Foundation, notes of Reagan: ‘While he was generally positive about privatization, he viewed it mostly as a remedy for fixing what was wrong with socialist countries, not as a key pillar of economic reform in the USA’ (see also Henig, 1989).

Nevertheless, free market think tanks in the US were ultimately largely successful in shifting the terrain of political discourse and policy in the direction of privatization, and by the early 1990s both the Democratic and Republican parties were, at least rhetorically, neoliberal – especially at the national level (Connell, 2010; Cerny, 2008). Poole (2004), for instance, argues that privatization was more enthusiastically advanced by President Clinton than by President Reagan.

Privatization also shifted from a federal issue to a state and local government one (Goodman and Loveman, 1991). This was due in part to budgetary pressures that forced state and local administrators to seek cost-savings via privatization out of necessity. But there was also a growing ideological commitment to privatization, with free market think tanks actively extolling the entrepreneurial benefits of private sector participation to state and local officials (Robinson, 2013).

Unlike the United Kingdom, however, privatization in the US most often took the form of a contractual model, with outright asset sales to the private sector being relatively rare (Gauche, 1998). A 1997 report by the Government Accountability Office (GAO, 1997) found that across all sectors, contracting made up 78% of state-level privatizations while asset sales made up less than 1%.

Water services in the US are reflective of these broader trends, with the 1990s and early 2000s witnessing increased involvement by private companies, largely in the form of contracting or leasing. A National Research Council committee on water privatization explained that ‘the contracting of management and operations to a private provider

(outsourcing) has been more common than the sale of utility assets to private companies. No major U.S. city has sold its utility assets in recent decades, although some smaller water utilities have done so’ (NRC, 2002, p. 1).

The 1990s also saw multinational private water companies spending considerable sums of money promoting privatization to cash strapped municipalities and petitioning elected officials (Arnold, 2009). A 2006 exposé by the *Los Angeles Times* found that ‘in pursuit of contracts, water companies have lobbied hardest at the local level, treating office holders to dinners, sports tickets, free trips and campaign contributions’ (Hudson, 2006). It has also been noted that private water companies have helped alter water sector policy, most notably a 1997 IRS rule changing the length of private operating contracts with tax-exempt bonds from five to 20 years, thus incentivizing more private investment (Ballati, 2004). At the state level, the National Association of Water Companies – the trade group representing private water firms – has pushed for legislation that would require local governments to consider water privatization (Luoma, 2008). Some organizations have argued that the combined effects of these changes have resulted in reduced public input on privatization proposals (FWW, 2018).

Despite these privatization pressures, the overwhelming majority of Americans still receive their water from a publicly owned utility. As of the first quarter of 2021, approximately 87.3% of Americans who get their water from a ‘community water system’ (i.e. reticulated water services that do not include private well water, piped water to campgrounds, or individual buildings that have their own system) receive it from a publicly owned entity (EPA, 2021). Moreover, nearly 85% are served by a local-level public utility. Just 12.7% are served by a privately owned utility (including ‘public private partnerships’), with most of these located in small rural communities and small private facilities such as trailer parks (with the latter two categories not considered ‘privatization’ insofar as most of these locations have never had public systems and many are not incorporated) (Melosi, 2011). Only two communities with more than one million people are served by privately owned water utilities in the US – St. Charles and St. Louis counties in Missouri and Santa Clara county in California (which includes the city of San Jose) (EPA, 2021) (see Table 1).

It may also be that private sector contracts in the US water sector have plateaued. In 2009, Global Water Intelligence published a water market analysis stating that when water PPPs ‘came of age [in the US] during the 1990s, it appeared promising. But, after a short period of growth, contract operators struggled to fulfil contracts, and the stream of sizeable new deals tailed off’ (Gasson, 2009). A 2016 report found that little had changed seven years later, with only ‘five [new] major PPPs in the municipal water sector’ (Hays, 2017; see also Bluefield Research, 2016). A 2019 survey of water operators by the American Water Works Association (AWWA, 2019) found that just 7% were involved in a PPP, 2% were planning to use a PPP, and 6% were considering a PPP. More than half (51%) had no plans to use a PPP while 27% of participants were unsure what their utility was doing regarding PPPs. A further 7% said that their utility is partnering with other utilities to share resources (a form of public-public partnership - PUP).

There appear to be two primary reasons why public ownership

Table 1
Ownership type and population served, 1st quarter of 2021.

	Population served	Percent of population served
Public		87.3%
Local government	264,870,648	84.5%
State government	5,275,718	1.7%
Federal government	2,496,331	0.8%
Native American	1,046,909	0.3%
Private		12.7%
Private ownership	35,356,233	11.3%
Public-private partnership	4,504,673	1.4%

Source: EPA, 2021.

remains dominant in the US water sector. The first is that there is little public demand to privatize water utilities. While national polling on the subject is scarce, one 2014 study found that just 13.6% of respondents favored private corporations as the source of funding for water and wastewater infrastructure projects while the remainder favored public sources, with local government being the favorite at 40% (Vedachalam et al., 2014). This support for public water is also often demonstrated at the ballot box when privatization proposals are put to a referendum (Snitow and Kaufman, 2007). In 2010, voters in Trenton, New Jersey rejected water privatization 79%–21% after the city and private water companies battled all the way to the State Supreme Court (FWW, 2010b). In 2018, 77% of voters in Baltimore backed a ballot measure that pre-empted efforts by city officials to privatize the water utility by declaring the ‘inalienability of water and sewer systems and exempt [ing] them from any city charter provisions related to franchising or operational rights’ (Hanna, 2018b). And in 2019, voters in Edison, New Jersey voted to permanently forestall water privatization by 84%–16% (FWW, 2019). What makes these referenda particularly noteworthy is that they were conducted in the face of concerted corporate advertising campaigns. In Trenton, for example, New Jersey American Water spent over \$1 million in promotional campaigns – more than 32 times what was spent by anti-privatization groups (FWW, 2010b).

A second reason for the continued primacy of publicly owned water utilities would appear to be growing opposition to water privatization, driven by three factors: a fear of higher rates, poor performance by private water operators, and a loss of local control over decision making. Expensive water bills from private companies is one concern, with privately owned water utilities in the US often having higher prices for water than public ones (Wait and Petrie, 2017), although widespread evidence for this remains inconclusive (Bel et al., 2010; Bel, 2020). A perceived decline in services and water quality with privatization is also a factor, with growing evidence of poor customer engagement, failure to deliver on contractual obligations (such as investment in new infrastructure), fraud and bribery of public officials, and maintenance issues (such as spills, leaks, and pipe breaks) (Arnold, 2009; Ulmer and Gerlak, 2019). In terms of local control, citizens and water managers alike appear uneasy with a lack of direct accountability and the inflexibility of private contracts making it difficult to allow citizen participation in decision making or respond to emergency situations (such as Covid-19). As Gordon Certain, head of a neighborhood association in Atlanta, noted of community fears around water privatization in that city, ‘If you have a political problem you can vote in a new administration. If you have a private company with a long-term contract, and they’re the source of your problems, then it gets a lot more difficult’ (Jehl, 2003).

These concerns have given rise to a growing number of anti-privatization organizations in the US, with groups such as Friends of Locally Owned Water, Our Water Campaign, and Public Water Now growing across the country (Snitow et al., 2007; Hanna, 2018a). Many of these local anti-privatization groups are bolstered by national organizations, including labour unions, NGOs, and environmental groups. In the Edison case, the ‘Vote Yes’ campaign was supported by Food and Water Action, the lobbying affiliate of the national NGO Food and Water Watch. In a 2017 anti-privatization campaign in Atlantic City, New Jersey, a strong alliance of local organizations was backed by more than 40 state and national organizations, including the NAACP, the ACLU of New Jersey, the New Jersey Educators Association, the Communication Workers of America, the New Jersey Working Families Alliance, and the New Jersey AFL-CIO (FWW, 2017). Some of these coalitions work in collaboration with municipalities, as was the case in Wisconsin when a proposed bill in the state senate that would have restricted the ability of local communities to hold a referendum on water privatization was defeated by a partnership of citizen groups, unions, municipal governments (through the League of Wisconsin Municipalities), and publicly owned water and electricity utilities (Verburg, 2016).

4. The remunicipalization era

Growing dissatisfaction with water privatization has slowed its growth in the US and resulted in some reversals. One crowdsourced study by the Transnational Institute and researchers at the University of Glasgow has identified 72 cases of US municipalities that have returned their water services to public ownership and management over the past 20 years (Transnational Institute, 2020). Some of these cases have attracted considerable media attention, most notably that of Atlanta, Georgia, where, in 1999, United Water took control of Atlanta’s water system under a 20-year, \$428 million contract, the largest private agreement in the US to that point (Solomon, 2011). The next four years saw United Water fail to deliver on many of its contractual promises while the city experienced deteriorating service, including several ‘boil water’ advisories (Ohemeng and Grant, 2011). In 2003, the City Council opted to terminate the contract (Luoma, 2008). Another prominent case is that of Stockton, California, where citizen groups opposed what they saw as an undemocratic process in awarding a PPP, as well as ‘cutbacks in preventive maintenance, noxious odors drifting from the sewage treatment plant, increased leakage from underground pipes [and] sewage spills and fish kills’ (Snitow and Kaufman, 2007). The City Council voted unanimously in 2007 to terminate the contract early and return the system to public ownership. In 2015, the city of Pittsburgh, Pennsylvania cancelled its contract with Veolia amidst issues of rising lead levels in drinking water, anger over rising water rates, and a class action lawsuit from customers alleging erroneous and manipulative billing and water shut off practices (Vicens and Caruso, 2017; Rivas and Schroering 2021).

This growth in the number of water remunicipalizations in the US does not mean that outsourcing has ended, however. The back-and-forth pendulum of public-private service delivery remains highly dynamic. National surveys of US municipalities (across a range of services) by the International City/County Management Association show a comparative increase in contracting out in the early 1990s, followed by a swing back to public provision in the late 1990s. But since that time the shifts have become ‘less pronounced,’ with the numbers of insourcing and outsourcing being ‘about equal’ (Warner and Aldag, 2019, p. 2). Disaggregated data shows this to be the case for water services as well (Warner and Hefetz, 2012). In other words, the number of water remunicipalizations in the US appear to be offset by similar levels of outsourcing.

Equally important is that the *qualitative* nature of water remunicipalizations in the US do not appear to have changed significantly during this time. There are more organizations advocating for remunicipalization in the country (more on this below) but public debate and activism on water services in the US has largely revolved around resisting privatization, not advocating for a return to public control once privatization has occurred. Moreover, most decisions on remunicipalization appear to be made by elected officials and bureaucrats – often with perfunctory public participation processes – with the primary motivation being that of saving money or improving service quality. As Grant (2015, p. 36) notes in her assessment of these dynamics, “decisions to remunicipalise [in the US] are pragmatic” (see also Lobina and Hall, 2013; Warner and Aldag, 2019; Warner et al., 2020b).

Nor do political affiliations of policy makers appear to influence whether a municipality will in source or outsource their water services, perhaps due to the fact that ‘local elections in the US are generally nonpartisan’ (Warner and Aldag, 2019, p. 3). Many bureaucrats and politicians who remunicipalize water may not be opposed to privatization at all, merely seeing their decision to remunicipalize as fiscally or environmentally responsible under present circumstances, leaving open the possibility of outsourcing again in the future if conditions should change (Warner and Hefetz, 2012). Even the existence of unions appears to have a (counter-intuitive) pragmatic effect on insourcing and outsourcing, with collective bargaining processes in unionized local authorities allowing governments to balance ‘political interests with

contract and market management concerns' when making decisions on whether or not to contract out (Warner and Hefetz, 2020, p. 235).

Actions taken to implement remunicipalization also tend to be pragmatic, with policy makers waiting for contracts to expire or terminating contracts early when costs permit (Ulmer and Gerlak, 2019). In cases where municipalities have been forced to buy back physical assets from a private water company, the remunicipalization process is more complicated and can become more politicized, but is still largely bureaucratic, involving legal negotiations around the cost of purchasing the utility (if the seller is willing) or the use of eminent domain (if the seller is not) – a process by which a government entity can take ownership of private property for public use with payment of 'just compensation' (Mann and Warner, 2019). The latter can be an expensive, lengthy and risky process, requiring considerable political will on the part of the municipality. It also tends to be dominated by lawyers and technical experts making it difficult for the average citizen to engage (dampening the potential for politicization). In some cases, it is the private company itself that ends the contract, either because they could not make a profit (such as in Laredo, Texas with United Water, and East Cleveland, Ohio with OMI/CH2M Hill) (Arnold, 2009) or to avoid bad publicity for poor performance (Grant, 2015, p. 31).

Further quantitative evidence of this pragmatic approach can be gleaned from an analysis of the aforementioned International Database of De-privatised Public Services compiled by the Transnational Institute and researchers at the University of Glasgow (Transnational Institute, 2020). As of February 2021, the database contained 72 unique entries for water remunicipalizations in the US over the past 20 years.¹ These cases spanned 26 states, with the most occurring in Texas (10), California (8), New York (7), Indiana (5), and Alabama (5). Significantly, the cases were evenly split between Republican-leaning states (37) and Democratic-leaning states (35).

Of the 72 cases, the vast majority involved the expiration of a contract (21) or the early termination of a contract (39). Six cases involved direct purchasing or eminent domain proceedings and one case was due to a private company withdrawing from the contract. The five remaining cases do not provide information as to the process of return to public provision.

There is sufficient data to draw some preliminary assessments of 49 of these cases, many of which we were able to triangulate with available secondary literature (all of which is from media and NGO reports).² Of these, the 'key actors' involved in decision making were overwhelmingly elected officials or bureaucrats from the relevant public authorities, with the vast majority of stated rationales for remunicipalization being 'high costs' and/or 'poor performance.' Only three cases cited 'local control' or 'transparency' as a rationale, and only six cases indicated active participation by 'residents,' 'activists,' or 'unions.' Based on this assessment, 42 of the cases appear to be pragmatic in orientation while only seven appear to be clearly politicized (i.e. driven by an explicitly anti-privatization or pro-public ideology and involving a

¹ Only a small minority of the entries in the database included detailed information. Where there was no information, each case was cross-referenced against other publications, including Lobina (2014) and FWW (2011) as well as news reports, municipal documents, and other resources in an attempt to develop a more complete profile. In each case, the authors made a judgement as to whether or not the case should be deemed "pragmatic" or "political" based on how the remunicipalization occurred, what issues drove municipalization, and, primarily, whether or not any sources referenced community activism as being a driving force (including protests, petitions, new organizations formed, lawsuits, etc.). In general, there was a paucity of data and significant more research is needed on this topic.

² While we did not include the 23 remaining cases where not enough information was available, it is not unreasonable to assume that many, if not most, were also pragmatic given that a more contentious and politicized process likely would have generated readily available information in the form of news reports, case studies, lawsuits, etc.

broad arc of participants meaningfully engaged in the remunicipalization debate).

Despite its limitations this database serves to reinforce the evidence that the average US experience with water remunicipalization can be defined as one of pragmatism, with the aim of improving efficiencies. This type of 'market managerialism' also tends to be accompanied by efforts to introduce new public management and corporatization, with public sector managers employing the same performance indicators as their private sector predecessors, focusing on unit-based cost recovery and the reduction of non-revenue water (McDonald, 2018, 2016a,b). As the American Water Works Association (AWWA, 2019, p.14) notes in a recent *State of the Water Industry Report*, the 'best' public water operators are those that are 'self-sustaining enterprises that are adequately financed with rates and charges based on sound accounting, engineering, financial, and economic principles. Revenues from service charges, user rates, and capital charges ... should be sufficient to enable utilities to provide for the full cost of service.'

This is not to suggest that the remunicipalization process in the US has been devoid of broader demands for public control. In some cases, legal requirements or local convention require that policymakers put remunicipalization decisions in the hands of voters via a public referendum. An example of this was in Nashua, New Hampshire where, in 2003, the city asked for, and overwhelmingly received, voter approval for its plan to use eminent domain to municipalize its water system, taking over the assets of Pennichuck Water Works after the company revealed plans to be acquired by an out-of-state corporation (NH Business Review, 2008). A more recent case of remunicipalization in Missoula, Montana, highlights the potential for the eminent domain process to heighten public awareness and build broad pro-public alliances (Mann and Warner, 2019).

However, compared to experiences with water remunicipalization in other parts of the world, the US experience has thus far been less politicized and less engaged with civil society. Not all international cases of water remunicipalization involve intense politicking – some are also driven by very pragmatic decisions around cost savings (Gradus and Budding, 2020; Albalade and Bel, 2020; Clifton et al., 2019; Voorn et al., 2020) – but many are motivated by a deep philosophical commitment to water as a 'public good,' with broad coalitions of activists, policy makers and front-line water managers and workers demanding far reaching changes to the ways that a remunicipalized water operator is organized and what its mandates are (McDonald, 2018; Kishimoto et al., 2015).

Efforts to remunicipalize water in Colombia, Germany, and Italy, for example, have involved the mobilization of hundreds of thousands of citizens signing petitions and voting in referenda for change. In Bolivia, Uruguay, and Bulgaria there have been large street protests by residents demanding that water be returned to public management, including constitutional reforms. Spain has seen the creation of new political parties with remunicipalization at the heart of their electoral platforms, several of which have been voted to power. These movements also tend to involve broad coalitions of NGOs, community associations, labour unions and environmental groups working within and outside of official government systems. In some cases, public water operators themselves have banded together to support and promote remunicipalization, such as with Aqua Publica Europea, an association of more than 60 water service providers serving over 70 million people in Europe (Becker et al., 2015; McDonald, 2016; McDonald and Swyngedouw, 2019; Kishimoto et al., 2020).

Many of these water remunicipalizations can be considered 'social democratic,' characterized by robust state intervention with the explicit aim of promoting social and economic justice, deepening democratic accountability, and challenging the commodification of water services (McDonald, 2018). These goals are exemplified by the following excerpt from the 'Declaration for the Public Management of Water' signed by the Mayors of Madrid, Barcelona, and eight other Spanish cities in November 2016 (Cities for Public Water, 2016): 'We believe that water and its associated ecosystems are a common good that cannot be

appropriated for the benefit of private interest. All of nature's good and resources form part of the natural patrimony of the planet and are indispensable for the sustenance of life, which obligates us to preserve and protect them. We therefore defend that they be managed with criteria of solidarity, environmental sustainability, mutual cooperation, collective access, equity and democratic control, without contemplating profit.'

There are more radical remunicipalization movements as well, some of which are explicitly anti-capitalist in their sentiment. Here we see echoes of the municipal socialist movements of the past, with water activists calling for deep structural changes to the ways in which public resources are integrated into market economies, rejecting the possibility of water justice within capitalism. So too are there advocates of autonomous forms of water remunicipalization, with communities controlling their own water services using local socio-ecological practices with little or no direct state involvement. These are not remunicipalization initiatives *per se* – insofar as they are opposed to all forms of centralized and bureaucratized forms of state water delivery regardless of its ideological orientation – but they do constitute an influential voice in the global pro-public water movement. Indigenous groups in Latin America have been most vocal in their efforts to reclaim autonomous artisanal forms of water governance, but similar objectives can be found amongst public water advocates elsewhere (Driessen, 2008; Laurie and Crespo, 2007; Gorostiza et al., 2013; Mazzoni and Cicognani, 2013).

5. The future of remunicipalization in the US

Will water remunicipalization in the US remain largely grounded in pragmatic bureaucratic decision making around costs and quality, or will it move in more politicized directions? A case can be made for both possibilities. Perhaps the greatest factor in the potential for further politicization is a growing frustration with *inequality* in water services in the country – not just with private water operators but with public ones as well. Service disconnections are a particularly explosive touch point. In 2016 alone, 15 million Americans experienced water service interruptions due to an inability to pay (Swain et al., 2020), and the crisis appears to be worsening, with one survey noting that 'water bills could soon be unaffordable for more than one-third of Americans' (Teodoro, 2019, p. 2).

Publicly owned water operators in the US are less likely to cut services than private ones (Homsy and Warner 2020), but because the majority of water operators are in public hands they are responsible for the bulk of cutoffs. Moreover, many of these public water operators seem inured to the impact of service interruptions, with accusations of racism and other forms of discrimination being raised. Similar concerns can be found with uneven water quality. Flint, Michigan is a prominent and tragic example, but more than 21 million Americans were exposed to unsafe drinking water in 2015, with a disproportionate number of these being from communities of color and other marginalized groups (Allaire et al., 2018; Pauli, 2019).

Such experiences are unlikely to inspire residents to defend traditional forms of 'public' water. Instead, they have contributed to growing demands for fundamental changes to public water services, with the language of human rights, environmental justice, anti-racism, and 'new municipalism' central to these campaigns (Sutton, 2019; Thompson, 2020). Rather than returning water to a public status quo, efforts to reverse privatization in the US appear to be increasingly informed by demands for better transparency, equity, and inclusive decision making (often referred to as 'democratic public ownership'). One concrete example is the non-profit charitable trust known as Citizens Energy Group which took over Indianapolis' water supply in 2011 (Citizens Energy Group, 2011).

There are also signs that activists and organizers are beginning to incorporate 'public good' concepts into referendums on water services, such as in Baltimore, Maryland in 2018, and Edison, New Jersey in 2019, where residents opposed a privatization plan promoted by the Mayor

and returned water provision to public control (Wildstein, 2019). These pro-public initiatives draw on a rich history of civil rights and environmental organizing in the country, involving community associations, faith-based organizations, indigenous communities, environmental NGOs, and labor unions. As with the anti-privatization coalitions describe earlier, these local pro-public groups are increasingly supported by national organizations such as Food and Water Watch, Corporate Accountability, In the Public Interest, and The Democracy Collaborative, as well as tapping into a larger international remunicipalization movement with organizations such as the Transnational Institute and Public Services International.

As a result, there is a growing sense of accomplishment amongst remunicipalization advocates in the US, with supporters arguing that remunicipalization is expanding and growing in popularity as well as offering lower prices, better quality, enhanced local control, and renewed investments (FWW, 2010a). These claims are largely anecdotal, and have yet to be tested by statistically representative research, but for many involved in these initiatives in the US 'remunicipalisation has been a resounding success' (Grant, 2015, p. 26; see also Levinson, 2010).

There are, however, several counter-pressures that may serve to stall, limit, or even reverse an expansion of a more politicized water remunicipalization movement in the country. Some of these pressures are external, including push-back from private water operators and pro-private lobbyists, think tanks, and media (see, for example, www.truthfromthetap.com). In some locations, 'aggressive communication organizing and lobbying strategies,' including mass mailings and robocalls, have been used to weaken remunicipalization efforts (FWW, 2012, p. 10). In other cases the strategy appears to be one of silence, with private water companies 'obstinately refusing to negotiate with the public ... forcing communities to pursue eminent domain,' which can prove too expensive for local groups to engage in, effectively shutting down a remunicipalization campaign (FWW, 2012, p. 10). The US is not alone in this regard. Private water companies and other powerful pro-privatization agencies (including multilateral financial institutions, mainstream NGOs and some UN agencies) have actively or passively attempted to suppress water remunicipalization efforts elsewhere in the world (McDonald, 2019).

A second external obstacle to more politicized forms of remunicipalization in the US is the fiscal pressure on municipalities, with budget shortfalls making it difficult for water operators to maintain the public status quo let alone expanding and democratizing their water governance practices. These fiscal constraints may even contribute to an increase in privatization in the future. The American Water Works Association (AWWA, 2010) estimates that \$1 trillion will be required to maintain and expand water services in the country over the next 25 years, but with stagnant municipal budgets, balanced budget requirements, and growing demands for service expansions in other critical sectors where will these funds come from if not increased commercialization or outright privatization? The budgetary impacts of Covid-19 may only add to these privatization pressures (despite promises of post-Covid public infrastructure spending), with one suburb in Philadelphia considering selling its drinking water system to a private firm because, according to the Mayor, 'the city's fiscal issues have been greatly exacerbated by the COVID-19 crisis' and privatization offers a 'path to financial stability' (Mohler, 2020, np).

There are internal challenges to an expansion of a more politicized remunicipalization movement as well. The first of these is the inherent difficulty of building an explicitly pro-public movement with no consensus as to what constitutes an 'exemplary' public water operator. The heterogeneous experience with remunicipalization elsewhere in the world will likely be the experience of the US as well, with no singular definition of what public water means, requiring very different discourses and forms of organizing than the largely homogenous tactics of the anti-privatization movement. Transitioning from a singular anti-privatization message to a diverse and potentially divisive pro-public one will be difficult. Pro-public water organizations will need to learn

how to operate in a more diverse and tension laden context, where coalitions and compromises amongst disparate groups will be necessary but difficult. This challenge is exacerbated by the realities of political organizing in a country as large and politically decentralized as the United States, with many different statutory regimes and political traditions. Countries such as France and Uruguay have managed to create relatively unified remunicipalization campaigns in part because of their comparatively homogenous and centralized water services. Coordination and agreement in the highly fractured US context (politically and jurisdictionally) will make national-level collaboration difficult.

There may also be a reluctance on the part of pro-public advocates to be critical of existing public services given how fragile many public water operators are, and after decades of defending them against privatization. Pro-public messaging could also send the (incorrect) signal that privatization is no longer a factor in the US water sector, potentially drawing resources and attention away from anti-privatization efforts. With public sector unions and other anti-privatization organizations already over-stretched fighting privatization to protect jobs and ensure access to basic services for their members and communities, many of these groups may not have the time, energy, or resources to develop and mobilize complex and potentially divisive pro-public positions.

Finally, a paucity of academic research on remunicipalization may act as a barrier to advancing rigorous pro-public policy positions and actions in the US. International literature on the topic has grown significantly over the past decade, but there are still no clearly established methodological or theoretical frameworks, and the number of comparative qualitative case studies remains limited.

6. Conclusion

History has shown how quickly policy on water management can change, but it remains to be seen how and if remunicipalization will grow in the US. The experience to date has been largely one of pragmatism, but there are signs of more politically charged pro-public remunicipalization discourse and action.

Ironically, it may be a growing frustration with *public* water systems that will inspire a more politicized remunicipalization movement in the US in the future. Defending public water simply because it is state-owned is no longer tenable. Public water operators in the US have often been exclusionary, opaque, and blindly productivist in their orientation. As a result, some water activists are demanding water services that are not only publicly managed, but also focused on equity, participation, democracy, and environmental sustainability. There are indications that this movement is growing in size and diversity in the country, along with new political strategies and an expanding international network.

Building and managing this shift to a new pro-public water movement will not be easy, however. Organizations in favor of public water will need to engage in difficult and uneasy conversations about the past and future of water services, moving away from the stale binaries of 'public' versus 'private,' with new and innovative ways of reimagining public water provision and governance. US remunicipalization efforts are unlikely to stray far from conventional public models in the near future, but a more dynamic and politicized international remunicipalization movement may influence these trends in the medium term. Covid-19 may serve to accelerate the politicization of water policy in the US, similar to the health epidemics of the late 19th and early 20th century which contributed to the original waves of municipalization.

Academic research could play an important role in this debate, but it will need to expand its geographic and methodological scope and focus more on the qualitative nature of the remunicipalization phenomenon. Closer engagement with policy makers and activists on the ground will help to shed light on nuanced decision-making dynamics, while existing theoretical paradigms will need careful reassessment in light of increasingly contested notions of what constitutes 'public.' In this regard, the study of water services in the US will necessarily become more

complex in the future.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Aharoni, Y., 2013. 'Charting the Iceberg: visible and invisible aspects of government' in Spiro. In: E. S., Yuchtman-Yaar, E. (Eds.), *Evaluating the Welfare State: Social and Political Perspectives*. Elsevier, Oxford.
- AWWA, 2010. *Buried No Longer: Confronting America's Water Infrastructure Challenge*. Boulder: American Water Works Association.
- AWWA, 2019. 2019 State of the Water Industry Report [online]. Available at: American Water Works Association. https://www.awwa.org/Portals/0/AWWA/ETS/Resources/2019_STATE%20OF%20THE%20WATER%20INDUSTRY_post.pdf.
- Albalade, D., Bel, G., 2020. 'Politicians, bureaucrats and the public-private choice in public service delivery: anybody there pushing for remunicipalization?'. *J. Econ. Pol. Reform*. <https://doi.org/10.1080/17487870.2019.1685385>.
- Allaire, M., Wu, H., Lall, U., 2018. 'National trends in drinking water quality violations'. *Proc. Natl. Acad. Sci. Unit. States Am.* 115 (9), 2078–2083.
- Arnold, C.A., 2009. *Water Privatization Trends in the United States: Human Rights, National Security, and Public Stewardship*. Wm. & Mary Envtl. L. & Pol'y Rev. 33, 785–849.
- Bakker, K.J., 2003. 'A political ecology of water privatization'. *Stud. Polit. Econ.* 70 (1), 35–58.
- Ballati, D., 2004. *Privatizing Governmental Functions*. Law Journal Press, New York.
- Becker, S., Beveridge, R., Naumann, M., 2015. 'Remunicipalization in German cities: contesting neo-liberalism and reimagining urban governance?'. *Space Polity* 19 (1), 76–90.
- Bel, G., Fageda, X., Warner, M.E., 2010. 'Is private production of public services cheaper than public production? A meta-regression analysis of solid waste and water services'. *J. Pol. Anal. Manag.* 29 (3), 553–577.
- Bel, G., 2020. 'Public versus private water delivery, remunicipalization and water tariffs'. *Util. Pol.* 62, 100982.
- Bluefield Research, 2016. *U.S. Private water utilities: market trends, strategies, and opportunities, 2016* [online]. Available at: <https://www.bluefieldresearch.com/research/us-private-water-utilities-2016/>.
- Booth, D.E., 1985. 'Municipal socialism and city government reform: the Milwaukee experience, 1910–1940'. *J. Urban Hist.* 12 (1), 51–74.
- Cities for Public Water, 2016. *Declaration for the public management of water*. conference convened by La Red Agua Pública/the Public Water network in collaboration with the Municipal Council of Madrid. November 3–4 [online]. Available at: <https://www.tni.org/en/article/consolidation-of-the-public-water-movement-in-spain>.
- Cerny, P.G., 2008. 'Embedding neoliberalism: the evolution of a hegemonic paradigm'. *J. Int. Trade Dipl.* 2 (1), 1–46.
- Citizens Energy Group, 2011. 2011 annual report. <https://www.citizensenergygroup.com/Our-Company/News-Financials/Reports/Annual-Reports/2011-Annual-Report>.
- Clifton, J., Warner, M.E., Gradus, R., Bel, G., 2019. 'Re-municipalization of public services: trend or hype?'. *J. Econ. Pol. Reform*. <https://doi.org/10.1080/17487870.2019.1691344>.
- Connell, R., 2010. 'Understanding neoliberalism'. In: Braedley, S., Luxton, M. (Eds.), *Neoliberalism and Everyday Life*. Montreal & Kingston. McGill-Queens University Press.
- Crofts, W.C., 1895. *Municipal Socialism*. London: Liberty and Property Defence League.
- Dreier, P., 2013. 'Radicals in city Hall: an American tradition'. *Dissent*, 19 December [online]. Available at: http://www.dissentmagazine.org/online_articles/radicals-in-city-hall-an-american-tradition.
- Driessen, T., 2008. 'Collective management strategies and elite resistance in Cochabamba, Bolivia'. *Development* 51 (1), 89–95.
- Emmons, W.M., 1991. 'Private and public responses to market failure in the US electric power industry, 1882–1942'. *J. Econ. Hist.* 51 (22), 452–454.
- EPA, 2021. *Safe drinking water information system (SDWIS) federal reporting services: water system summary* [online]. Available at: <https://ofmpub.epa.gov/apex/sfdw/f?p=108:200>.
- FWW, 2010a. *The public works: how remunicipalization of water services saves money* [online]. Available at: <https://www.foodandwaterwatch.org/sites/default/files/The%20Public%20Works%20FS%20Dec%202010.pdf>.
- FWW, 2010b. *Trenton, NJ rejects water privatization Deal with American water* [online]. Available at: <https://www.foodandwaterwatch.org/impact/trenton-nj-rejects-water-privatization-deal-american-water>.
- FWW, 2011. *Veolia environment: a Profile of the World's largest water service corporation* [online]. Available at: https://www.foodandwaterwatch.org/sites/default/files/veolia_environment_report_apr_2011.pdf.
- FWW, 2012. *Municipalization guide: how U.S. Communities Can Secure Local Public Control of Privately Owned Water and Sewer Systems* [online]. Available at: <https://www.foodandwaterwatch.org/insight/water-municipalization-guide>.

- FWW, 2017. Standing up for atlantic city: 'water rights are civil rights' [online]. Available at. <https://www.foodandwaterwatch.org/news/standing-atlantic-city-%E2%80%9Cwater-rights-are-civil-rights%E2%80%9D>.
- FWW, 2018. Are your state officials in cahoots with big water corporations? [online]. Available at. <https://www.foodandwaterwatch.org/insight/are-your-state-officials-c-ahoots-big-water-corporations>.
- FWW, 2019. How a grassroots coalition stopped a corporate water grab in New Jersey [online]. Available at. <https://www.foodandwaterwatch.org/news/how-grassroots-coalition-stopped-corporate-water-grab-new-jersey>.
- GAO, 1997. Privatization: Lessons Learned by State and Local Governments. United States General Accounting Office, Washington, D.C.
- Gasson, C., 2009. 'Water market USA', global water intelligence [online]. Available at. https://www.globalwaterintel.com/client_media/uploaded/files/sample_water_market_USA.pdf.
- Gauche, J.N., 1998. 'Binary economic modes for the privatization of public assets'. *J. Soc. Econ.* 27 (3), 445–459.
- Goodman, J.B., Loveman, G.W., 1991. 'Does privatization serve the public interest?'. *Harv. Bus. Rev.* November–December [online]. Available at <https://hbr.org/1991/11/does-privatization-serve-the-public-interest>.
- Gorostiza, S., March, H., Sauri, D., 2013. 'Servicing customers in revolutionary times: the experience of the collectivized Barcelona water company during the Spanish civil war'. *Antipode* 45 (4), 908–925.
- Gradus, R., Budding, T., 2020. 'Political and institutional explanations for increasing remunicipalization'. *Urban Aff. Rev.* 56 (2), 538–564.
- Granovetter, M., McGuire, P., 1998. 'The making of an industry: electricity in the United States'. In: Callon, M. (Ed.), *Laws of the Markets*. Wiley, Hoboken.
- Grant, M., 2015. 'Water in public hands: remunicipalisation in the United States'. In: Kishimoto, S., Lobina, E., Petitjean, O. (Eds.), *Here to Stay: Water Remunicipalisation*. PSIRU, TNI, and Multinational Observatory, London, Amsterdam, and Paris.
- Hanna, T.M., 2018a. *Our Common Wealth: the Return of Public Ownership in the United States*. Manchester University Press, Manchester.
- Hanna, T.M., 2018b. 'Baltimore joins global movement, becoming the first major U.S. City to ban water privatization'. *The Times*, 12 November [online]. Available at. <http://inthesetimes.com/article/21574/baltimore-global-movement-water-privatization-2018>.
- Harvey, D., 1982. *The Limits to Capital*. Verso, London.
- Hays, K., 2017. 'What is holding up public-private partnerships in US municipal water?'. *Bluefield Res.* 3 March [online]. Available at <https://www.bluefieldresearch.com/whats-holding-public-private-partnerships-us-municipal-water/>.
- Hefetz, A., Warner, M.E., 2004. 'Privatization and its reverse: explaining the dynamics of the government contracting process', *Journal of public administration. Res. Theor.* 14 (2), 171–190.
- Henig, J.R., 1989. 'Privatization in the United States: theory and practice'. *Polit. Sci. Q.* 104 (4), 649–670.
- Homsy, G.C., Warner, M.E., 2020. 'Does public ownership of utilities matter for local government water policies?'. *Util. Pol.* 64 <https://doi.org/10.1016/j.jup.2020.101057>.
- Hudson, M., 2006. 'Misconduct taints the water in some privatized systems'. *Los Angeles Times*, 29 May [online]. Available at. <https://www.latimes.com/archives/la-xpm-2006-may-29-me-privatewater29-story.html>.
- Jehl, D., 2003. 'As cities move to privatize water, Atlanta steps back'. *N. Y. Times*, 10 February [online]. Available at. <https://www.nytimes.com/2003/02/10/us/as-cities-move-to-privatize-water-atlanta-steps-back.html>.
- Jessop, B., 1982. *The Capitalist State: Marxist Theories and Methods*. Martin Robertson, Oxford.
- Kellett, J.R., 1978. 'Municipal socialism, enterprise and trading in the Victorian city'. *Urban Hist.* 5, 36–45.
- Kinkaid, J., 2013. 'The United States of America: from dualistic simplicity to centralized complexity'. In: Loughlin, J., Kincaid, J., Swenden, W. (Eds.), *Routledge Handbook of Regionalism and Federalism*. Routledge, Abingdon.
- Kishimoto, S., Lobina, E., Petitjean, O., 2015. *Our Public Water Future: the Global Experience with Remunicipalisation*. Transnational Institute, Amsterdam.
- Kishimoto, S., Lobina, E., Petitjean, O., 2020. *The Future Is Public: towards Democratic Ownership of Public Services*. Transnational Institute, Amsterdam.
- Laurie, N., Crespo, C., 2007. 'Deconstructing the best case scenario: lessons from water politics in La Paz–El Alto, Bolivia'. *Geoforum* 38 (5), 841–854.
- Laster Pirtle, W.N., 2020. 'Racial capitalism: a fundamental cause of novel coronavirus (COVID-19) pandemic inequities in the United States'. *Health Educ. Behav.* 47 (4), 504–508.
- Levinson, N., 2010. *The Public Works*. Food & Water Watch, Washington, DC.
- Lobina, E., 2014. *Troubled Waters: Misleading Industry PR and the Case for Public Water*. Public Services International Research Unit, Greenwich.
- Lobina, E., Hall, D., 2013. *Water privatisation and remunicipalisation: international lessons for jakarta* [online]. Available at. <https://pop-umbrella.s3.amazonaws.com/uploads/9966f971-e248-4d49-ae4f-23eadeab1bc5-2014-W-03-JAKARTA-NOVEMBER2013FINAL.pdf>.
- Lorrain, D., 2005. 'La firme locale–globale: lyonnaise des Eaux (1980–2004)'. *Sociol. Travail* 47 (3), 340–361.
- Luoma, J., 2008. 'Water'. In: Kroll, G.M., Robbins, R.H. (Eds.), *World in Motion: the Globalization and the Environment Reader*. Altamira Press, Lanham.
- Mann, C.L., Warner, M.E., 2019. 'Power asymmetries and limits to eminent domain: the case of Missoula water's municipalization'. *Water Altern. (WaA)* 12 (2), 394–413.
- MacKillop, F., 2005. 'The Los Angeles "oligarchy" and the governance of water and power networks: the making of a municipal utility based on market principles (1902–1930)'. *Flux* 60/61 23–34.
- Mazzoni, D., Cicognani, E., 2013. 'Water as a commons: an exploratory study on the motives for collective action among Italian water movement activists'. *J. Community Appl. Soc. Psychol.* 23 (4), 314–330.
- McDonald, D.A., 2016a. 'To corporatize or not to corporatize (and if so how)?'. *Util. Pol.* 40, 107–114.
- McDonald, D.A., 2016b. 'The weight of water: benchmarking for public water services'. *Environ. Plann.* 48 (11), 2181–2200.
- McDonald, D.A. (Ed.), 2016c. *Making Public in a Privatized World: the Struggle for Essential Services*. Zed Books, London.
- McDonald, D.A., 2018. 'Remunicipalization: the future of water services?'. *Geoforum* 91, 47–56.
- McDonald, D.A., 2019. 'Will the empire strike back?: powerbrokers and remunicipalisation in the water sector'. *Water Altern. (WaA)* 12 (2), 348–359.
- McDonald, D.A., Swyngedouw, E., 2019. 'The new water wars: struggles for remunicipalisation'. *Water Altern. (WaA)* 12 (2), 322–333.
- Melosi, M.V., 2000. 'Pure and plentiful: the development of modern waterworks in the United States, 1801–2000'. *Water Pol.* 2 (4–5), 243–265.
- Melosi, M.V., 2005. *Garbage and the Cities: Refuse, Reform, and the Environment*. University of Pittsburgh Press, Pittsburgh.
- Melosi, M.V., 2011. *Precious Commodity: Providing Water for America's Cities*. University of Pittsburgh Press, Pittsburgh.
- Millward, R., 1997. 'The 1940s nationalizations in Britain: means to an end or the means of production?'. *Econ. Hist. Rev.* 50 (2), 209–234.
- Mohler, J., 2020. 'A Philly suburb wants to sell its water, offering a glimpse of post-COVID America'. *Publ. Interest*, 28 May [online]. Available at. <https://www.inthe-public-interest.org/a-philly-suburb-wants-to-sell-its-water-offering-a-glimpse-of-post-covid-america/>.
- Morten, R.A., 2002. 'Public transportation and the failure of municipal socialism in Chicago, 1905–07'. *Illinois History Teacher* 9 (1).
- NH Business Review, 2008. *Pennichuck Q&A* [online]. Available at. <https://www.nhbr.com/pennichuck-q-a/>.
- Noah, T., 2012. *The Great Divergence: America's Growing Inequality Crisis and what We Can Do about it*. Bloomsbury, New York.
- NRC, 2002. *Privatization of Water Services in the United States: an Assessment of Issues and Experience*. The National Academies Press, Washington, DC.
- Ohemeng, F., Grant, J.K., 2011. 'Has the bubble finally burst? A comparative examination of the failure of privatization of water services delivery in Atlanta (USA) and Hamilton (Canada)'. *J. Comp. Pol. Anal.* 13 (3), 287–306.
- Pauli, B.J., 2019. *Flint Fights Back: Environmental Justice and Democracy in the Flint Water Crisis*. MIT Press, Cambridge.
- Poole, R., 2004. 'Ronald Reagan and the Privatization Revolution'. Reason Foundation, 8 June [online]. Available at. <https://reason.org/commentary/ronald-reagan-and-the-privatiz/>.
- Radford, G., 2003. 'From municipal socialism to public authorities: institutional factors in the shaping of American public enterprise'. *J. Am. Hist.* 90 (3), 863–890.
- Rivas, M.G., Schroering, C., 2021. 'Pittsburgh's translocal social movement: a case of the new public water'. *Util. Pol.* 71 <https://doi.org/10.1016/j.jup.2021.101230>.
- Robinson, J.L., 2013. *Contested Water: the Struggle against Water Privatization in the United States and Canada*. MIT Press, Cambridge.
- Snitow, A., Kaufman, D., 2007. 'Lessons of stockton's water war'. SFGATE, 5 August [online]. Available at. <https://www.sfgate.com/opinion/openforum/article/Lessons-of-Stockton-s-water-war-2549287.php>.
- Snitow, A., Kaufman, D., Fox, M., 2007. *Thirst: Fighting the Corporate Theft of Our Water*. Jossey-Bass, San Francisco.
- Solomon, L.D., 2011. *America's Water and Wastewater Crisis: the Role of Private Enterprise*. Transaction Publishers, Abingdon.
- Soll, D., 2013. *Empire of Water: an Environmental and Political History of the New York City Water Supply*. Cornell University Press, Ithaca.
- Spar, D., Krzysztow, B., 2009. 'To the tap: public versus private water provision at the turn of the Twentieth Century'. *Bus. Hist. Rev.* 83 (4), 675–702.
- Sutton, S.A., 2019. 'Cooperative cities: municipal support for worker cooperatives in the United States'. *J. Urban Aff.* 41 (8), 1081–1102.
- Swain, M., McKinney, E., Susskind, L., 2020. 'Water shutoffs in older American cities: causes, extent, and remedies'. *J. Plann. Educ. Res.* 1–8, 0739456X20904431.
- Teodoro, M.P., 2019. 'Water and sewer affordability in the United States'. *AWWA Water Sci.* 1 (2).
- Thompson, M., 2020. 'What's so new about New Municipalism?'. *Prog. Hum. Geogr.* 45 (2), 317–342.
- Transnational Institute, 2020. *Public futures*. Global database of de-privatised public services [online]. Available at: publicfutures.org.
- Ulmer, R., Gerlak, A.K., 2019. 'The remunicipalization of water services in the United States'. *Environment* 61 (4), 18–27.
- Vedachalam, S., Kay, D.L., Riha, S.J., 2014. 'Capital investment and privatization: public opinion on issues related to water and wastewater infrastructure'. *Publ. Works Manag. Pol.* 19 (2), 118–147.
- Verburg, S., 2016. 'Senate vote on drinking water privatization bill scrapped'. *Wisconsin State J.* 17 February [online]. Available at https://madison.com/wsj/news/local/govt-and-politics/senate-vote-on-drinking-water-privatization-bill-scrapped/article_de28dbb4-0a09-5da7-a268-1d815c9f74bc.html.
- Vicens, N., Caruso, S., 2017. *Timeline: the evolution of lead contamination in pittsburgh's water*. *Publ. Sour.* 20 March [online]. Available at <https://www.publsource.org/timeline-the-evolution-of-lead-contamination-in-pittsburghs-water/>.
- Voorn, B., Van Genugten, M.L., Van Thiel, S., 2020. 'Re-interpreting remunicipalization: finding equilibrium'. *J. Econ. Pol. Reform.* <https://doi.org/10.1080/17487870.2019.1701455>.

- Wait, I.W., Petrie, W.A., 2017. 'Comparison of water pricing for publicly and privately owned water utilities in the United States'. *Water Int.* 42 (8), 967–980.
- Wallison, P., 2004. *Ronald Reagan: the Power of Conviction and the Success of His Presidency*. Westview Press, Boulder.
- Warner, M.E., Hefetz, A., 2012. 'Insourcing and outsourcing: the dynamics of privatization among US municipalities 2002–2007'. *J. Am. Plann. Assoc.* 78 (3), 313–327.
- Warner, M.E., Aldag, A.M., 2019. 'Re-municipalization in the US: a pragmatic response to contracting'. *J. Econ. Pol. Reform.* <https://doi.org/10.1080/17487870.2019.1646133>.
- Warner, M.E., Zhang, X., Rivas, M.G., 2020a. 'Which states and cities protect residents from water shutoffs in the COVID-19 pandemic?'. *Util. Pol.* 67, 101118.
- Warner, M.E., Aldag, A.M., Kim, Y., 2020b. 'Pragmatic municipalism: US local government responses to fiscal stress'. *Publ. Adm. Rev.* 81 (3), 389–398.
- Warner, M.E., Hefetz, A., 2020. 'Contracting dynamics and unionisation: managing labour, contracts and markets'. *Local Govern. Stud.* 46 (2), 228–252.
- Warner, S.B., 1987. *The Private City: Philadelphia in Three Periods of its Growth*. University of Pennsylvania Press, Philadelphia.
- Wildstein, D., 2019. 'Edison referendum keeps local control of water system'. *New Jersey Globe*, 10 September [online]. Available at: <https://newjerseyglobe.com/local/edison-referendum-keeps-local-control-of-water-system/>.