

‘All good rule of the Citee’: Sanitation and civic government in England, 1400-1600

Dolly Jørgensen

Revised accepted version as published in *Journal of Urban History* 36, no 3 (2010), 300-315.

DOI: 10.1177/0096144209359141

Online: <http://juh.sagepub.com/cgi/content/abstract/36/3/300>

Abstract:

This article examines how providing one basic city service – sanitation – influenced civic governmental structures from 1400 to 1600 in two of England’s largest provincial cities, Norwich and Coventry, and how those changes meshed with concepts of good rule. Although sanitation services were neither the most costly nor highest profile activity of city councils, they can be a window into the evolution of governmental structures during the early phase of city rule. The period witnessed an increasing reliance on a myriad of officials to provide services, but this transition was not straightforward. City councils grappled with how to allocate responsibility for sanitation duties among civic officials and the assignment of responsibility shifted often over the period. In general, the trend was to allocate responsibility closer and closer to the physical problem, i.e. movement from the mayor as overseer to local inspectors.

Keywords: medieval, sanitation, environment, government, specialization

Author’s Note:

The author wishes to thank Manon van der Heijden, Griet Vermeesch, and the participants in the conference Civil Society and Public Services in Early Modern Europe in November 2007 for their comments on the version of this article presented there. She is also grateful to Anne Throckmorton for her helpful suggestions. A Leiv Eiriksson Mobility Program stipend from the Research Council of Norway provided support for writing this article.

In 1517, the civic council of Coventry enumerated the duties of aldermen, the backbone of sixteenth-century city government. The contents of the list are instructive about day-to-day urban problems of the time period:

“the punyshment of myghty beggers, of vacaboundes, as well wemen as men, suspect allowses & blynde ynnes, clensyng of the stretes & swepyng of the stretes in-to the giter, but see it be boron a-vey. Also that ther be no swynstyes occupied within the walles of the Citee, nor draughtes upon the comen dykes of the Citee that longeth to the conveyance of the water of the Citee; also to see the pawmentes well pavid; also to suffre no onlawfull games to be vsid; also to se the excersysyng of shotyng in long bowes; also to se ther be no wodyn chymneyes nor howses thakkyd with brome or strawe; and to see the Comen ryuer be well kept accordyng to the auncientes ordynaunces therupon made; and also that they execute all oder good ordynaunces made for the welth of the Citee within ther warde.”¹

Along with monitoring for moral offences such as illegal gaming and operating illicit alehouses, city sanitation stands out prominently as an alderman’s responsibility. His duties included checking the sanitary condition of the streets, ensuring no swine were kept within the city walls, stopping illegal tapping of the city water supply, ensuring adequate street paving, and cleaning the city’s river. The council clearly considered these urban sanitation services necessary for the commonwealth.

The fifteenth and sixteenth centuries were a nascent period of urban government formation in England as standing city councils established themselves as the local ruling authority. As they established their right to rule, they also committed themselves to providing services to the citizens. The alderman’s duties above show that sanitation in the form of waste removal and river maintenance was one of the city government’s services, alongside more well-known services such as poor relief, and that the provision of sanitation services was directly tied to visions of good city government. Taking this as a starting point, this article examines how providing sanitation services influenced civic government from 1400 to 1600 in two of England’s largest provincial cities, Norwich and Coventry, and how those changes meshed with concepts of good rule.

City governments have received a fair amount of attention in early modern English historiography, but the inquiries have tended to focus on city politics and patronage.² While significant work has been written about the English poor laws and city poor relief, other service areas of early modern English cities are rarely discussed even though cities provided a plethora of services including libraries, fire brigades, and health services.³ An exception is scholarship on city drinking water supplies, particularly by Roberta Magnusson and Mark Jenner, yet even in these discussions, we get little insight into how city government structures had to adapt in order to supply new service provisions in the period.⁴ Caroline Barron’s discussion of medieval London’s civic bureaucracy comes closer to an examination of

governmental growth, but instead of focusing on the services provided and how the city managed to provide them, she lists named officers in London's government and briefly discusses each office's history.⁵ Two works which briefly mention an increase in the number of people involved in city services deserve mention. First, Slack notes in *From Reformation to Improvement* that more local manpower was needed to enforce poor laws at the very end of the period under investigation here; the 1598 poor relief statutes, for example, prescribed the employment of four overseers in each parish for enforcing poor relief rules. Second, Walter King found that even the small town of Prescot (with only 600 inhabitants) created two well supervisor positions and later a combined supervisors of wells and streetlookers in the early 1600s, which mirrors the increased number of sanitation jobs in the bigger cities we see in this article. Yet neither author discusses the ramifications of these additional oversight jobs.⁶ The urban sanitary condition in the medieval period has also been studied by both Barron and others, but the interaction between sanitation and civic government has been largely unexplored.⁷

Without an analysis of city services and how those affected the structure of urban governments in late medieval and early modern England, we cannot understand the genesis of city bureaucracies that became so prominent in the modern era.⁸ This article, therefore, attempts to uncover how one basic city service – sanitation – had a direct effect on governmental structures because city councilors considered the service necessary for good rule. Although sanitation services were neither the most costly nor highest profile activity of city councils, they can be a window into the evolution of governmental structures during the early phase of city rule.

In this analysis of city government development from 1400 to 1600, I have chosen to cross the boundary of the “late medieval” and “early modern” eras, dated to sometime between 1500 and 1550, adhered to in the works of many scholars. The changes in city governance approaches were gradual and reflect a much longer struggle than using traditional dividing lines would allow. In this way, I am following the example of Marjorie McIntosh's excellent study of controlling social misbehavior from 1370 to 1600 to draw a broader picture of historical changes.⁹ The typical division between medieval and early modern is based on religious changes related to the Reformation in the second quarter of the 1500s and/or political shifts such as the beginning of Queen Elizabeth's reign in 1558. These movements, although they certainly had an impact on the justifications for sanitation, did not radically alter the way cities dealt with the physical problems of urban life, which is the primary concern of this paper.

This article begins with a short discussion of how sanitation services fit into broader ideas of civic rule and good government then delves into case studies exposing how the councils struggled to find workable solutions to sanitation problems. As we will see, the period witnessed an increasing reliance on a myriad of officials to provide services, but this transition was not straightforward. City councils grappled with how to allocate responsibility

for sanitation duties among civic officials. The assignment of responsibility shifted often over the period, indicating that the government struggled with finding workable arrangements. In general, the trend was to allocate responsibility closer and closer to the physical problem, i.e. movement from the mayor as overseer to local inspectors. Early on, councils designated waste removal and inspection duties to existing officeholders, including the mayor, aldermen, and sergeants, but later created many new jobs, such as “scavenger” and “Surveyours of the Ryver and Streates,” delegating responsibilities down the chain of command. I have labeled this process of creating designated jobs with a limited number of responsibilities as “specialization.” One might see shades of “professionalization” in these jobs as well, but because these duties tended to be only part-time and not career-oriented, I believe specialization is a better term in this context.¹⁰ The city governments thus created new specialized service providers to meet the physical demands of urban life. In addition, the councils had to fund increasingly complicated sanitary services including water supply networks and river dredging operations. Acquiring such funds also created a need for increased job specialization. These two demands – staffing and financial backing – worked to greatly complicate the structure of civic government from 1400 to 1600.

Serving the common good

The cities¹¹ under consideration here – Coventry and Norwich – were leading provincial centers of their regions of England. They were both market centers; their populations ranged from around 8,000 to 12,000 for most of the period under study; and the city governments were dominated by a mayor and council.

The governments of English cities developed into powerful civic authorities from 1400 to 1600. City governments diligently worked to define their jurisdictions – legally, socially, and physically. The city government actively monitored trade activities, hosted religious festivals highlighting civic authority and pride, and collected taxes from residents. Government officials even acquired the rights to buy land to get rid of blighted property to improve the civic image and bolster their own positions in the local oligarchy.¹² The civic records from the two cities under investigation here have, in large part, been published as transcriptions, giving us detailed insight into their workings.¹³ The detailed organization of civic government differed from city to city but both had a ruling council with a presiding mayor that heard misdemeanor presentments, levied fines, received capital pledges for minor offenses and issued ordinances. The cities were physically divided into wards with an alderman who represented and was responsible for that section of the city.

In *From Reformation to Improvement*, Paul Slack argues that city governors instituted services for two main overlapping, competing, and/or intersecting reasons. First, they worked for the “common weal,” the general well-being of the citizens. The common weal was opposed by decay – decayed rents, decaying waste in the streets, decaying bodies. Therefore, these sites of decay become targets of reform. Second, city ordinances often framed services

within the concept of civic godliness – a stress on the glory of God and the need for a reformation of manners to show a fear of God. In the language of religious reformers, ordinances controlling rubbish in the streets along with drunkenness, idleness, playing cards, and similar misbehavior were enacted “to the glory of God and well ordering of this commonwealth.”¹⁴ Slack concentrates on poor laws and poor relief, but these ideas held sway in sanitation service areas as well.

We see both concerns clearly in a statement by the Norwich council that their sanitation laws were both “goode and godly;” their efforts to provide clean, well-paved streets and a clean, scoured river were “good actes.” They called those who failed to help keep the streets and river clean “sturдые and disobedyent persons.” Sanitation efforts were not free and the council believed that “great gredynes and obstinacy” led to failure to uphold previous sanitation laws. Disobedient persons existed, and in fact, could be identified because they stood out from the crowd – the “yll-disposed persons” contrasted with good men of the city who kept the ordinances. This language tells us that sanitation was seen as one of the components of good and godly rule in the late medieval/early modern English city.¹⁵

As Lorraine Attreed has argued in her study of English late medieval urban government, we should not see city officers as merely self-interested oligarchs. They were, in fact, constrained by social norms to act in the best interest of the community: “The principles that underlay those constraints placed a high value on civic harmony in the face of inevitable inequality. As Norwich’s Composition of 1415 stated, the object of civic government was the establishment of peace, unity and accord.”¹⁶ The civic officials took actions as part of their duty to create a harmonious community. Stephen Rigby observes, “Harmony in town life was not, however, only thought to arise from the just rule of the better sort and from obedience by the commonalty. It was also seen as the result of town government which was both constitutional and representative.”¹⁷

The councilmen provided good governance in the form of sanitation to maintain social harmony. For example, a 1451 petition presented to the Coventry leet (the presenter is not named in the record) calling for the renewal of city defenses and cleansing of ditches linked the responsibility for maintaining urban infrastructure with the city council who acted for “goode gouernaunse & rule.”¹⁸ The authorities felt obliged to respond to this petition because of their social role as governors. Similar petitions likely prompted councils to appoint the inspectors, workers, and waste removal carts for sanitation services. Officials then acted as the representatives of the community and performed actions to improve living conditions.

As the opening quotation from the alderman’s duties in Coventry pointed out, maintaining clean and paved streets and rivers was considered part of proper moral behavior. The list from 1517 included street cleaning regulations, pavement requirements, limitations on locations of swine sties, river cleansing mandates and prohibitions against sewage drains into the ditches along side of the aldermen’s duties to punish vagabonds, illegal alehouse

mistresses, and those who participated in illegal sports. The aldermen were instructed to “execute all oder good ordynaunces made for the welth of the Citee within ther warde.” The councils harbored the notion that polluting activities ran contrary to the public good. People who threw muck and filth into city gutters were acting “contrarie to all good rule of the Citee.”¹⁹ Sanitation was thus part of a larger program of civic order and the common weal. It is no wonder then that sanitation services became part of the city service repertoire in early modern England.

Because sanitation was seen as a clear part of good government, the city councilors attempted to find workable solutions to basic sanitation issues. Urban sanitation services, broadly defined, included three basic items: supplying the inhabitants with drinking water, removing waste from the populated areas, and scouring ditches and urban rivers to remove waste and dirt accumulation. First, public water supplies included the provision of water wells and conduits, which were pipes leading from wells to feed a watering trough. Conduit systems were installed in several English provincial cities, including Coventry’s system begun in 1333 and Gibson’s conduit attached to Norwich well installed about 1577.²⁰ Second, waste removal from the urban center was the common practice in the 1400 and 1500s. Norwich archeological investigations show that waste disposal patterns changed in the thirteenth century from in-place disposal to temporary storage onsite followed by offsite disposal. Lined cesspits datable to the late fourteenth to mid fifteenth century reflect “the growing practice of using temporary storage ‘bins’ on site for rubbish which was later removed as night soil.”²¹ Third, urban rivers and ditches required maintenance to maintain the depth of the channel. Coventry and Norwich each had a river flowing through them, although in Coventry’s case, the river was not suitable for long-distance travel. Waste accumulated in the city ditches and river from street run-off, so this material needed to be removed.²² We now turn to how the civic government pragmatically addressed these sanitary issues, and how their involvement in turn shaped governmental structure.

Supplying water to Coventry

The delegation of responsibility for maintenance of Coventry’s water supply highlights the complexity of city service provisions at this time. Coventry inhabitants had to obtain drinking water from underground sources because the aboveground river did not have a sufficient flow of clean water. Because of the limited availability of well locations, the Coventry citizens decided early on to build conduits to distribute well water, and in 1333, the inhabitants gained permission from King Edward III to erect a conduit for water distribution.²³ This first conduit was connected to Broad Well and others soon followed as shown in Figure 1.

Although well conduits were constructed to provide residential drinking water, some commercial users, particularly brewers, butchers and dyers, attempted to take advantage of the ready water supply. Brewers and malters needed large supplies of water for brewing and dressing their beer; butchers used water for the washing of entrails after slaughter; and dyers

washed cloths there. The council issued legal restrictions against industrial use of the conduit water numerous times to limit the use of the water by businesses. In addition to illegal water drawing at the conduit head, some individuals tapped the conduit, creating personal water supplies. As early as 1404, the prior of the cathedral church complained to the royal authorities that people had been inserting pipes (called suspirals), without their permission, to draw water from the underground water-conduit that brought water to their priory. One of the earliest recorded decrees of the council was to stop up openings in the conduit. In 1426, for example, John Stafford was accused of having constructed a private well out of the West Orchard conduit water using a suspiral constructed out of lime and stone. In order to control the city water supply, the government found it necessary to create new administrative positions for conduit use and maintenance.²⁴

The Coventry council involved more and more individual government positions in conduit oversight and maintenance. In 1426, the council responded to illegal water usage by creating two conduit keepers in each urban ward who would guard against illicit tapping. Along with the 1444 prohibitions against brewers and butchers, the council instituted a new system of locking the conduits from 9 o'clock at night until 4 in the morning. In each of the four wards, "an honest man" was chosen to lock and unlock the conduit in his ward. In the proceedings of a council meeting in 1483, the council named two keepers of the conduit in each ward. Unlike the pronouncement of 1444 which specified only that the conduit keeper was responsible for conduit access, this time, the council gave the conduit keepers duties to collect the conduit taxes, oversee plumbing work, and look for violators of the conduit laws. In 1497, fifty years after the conduit locking was introduced, the council brought up the issue again and mandated the placement of grates and locks on the conduits so that they could be locked at night. In addition, redundant conduit monitoring duties were added to the chamberlain, warden and sergeant positions.²⁵ Thus by the mid-fifteenth century, Coventry had established a dedicated conduit workforce to maintain and monitor the water supply through ward-based conduit keepers. In order to control individual use of the conduits, the council created new roles and responsibilities within the government.

Providing water on a city-wide basis did not come cheaply, even in the 1400s. Coventry's government found that it needed significant funds to support the conduit system. In 1426, a request for better management of the conduits submitted by residents of the Crosscheaping ward noted that the conduit had been constructed "with gret coste" by leading men of the city "to come into the Croschepyng to ease of all people." From this statement, we can infer that the Crosscheaping conduit was originally a privately funded gift to the city. In order to maintain the conduit on a long-term basis, however, city residents would have to chip in their share. So later that same year, the council demanded each ward to pay for repairs to the conduit or it would be stopped from supplying the ward with water. The council, however, soon turned to coordinating the conduit repair efforts and funding them from the city coffers. The mayor's account of 1498 indicated that conduit repairs cost 10 pounds that

year. In order to pay for this, the council turned to three varieties of funds at various times: fines collected for civil offences, taxes, and voluntary contributions. These sources appear to have been sufficient, since in the 1498 summary, the collections exceeded the expenditures by almost 2 pounds.²⁶

First, the city often specified that a portion of fines received for various offences would go toward conduit upkeep. For example, in 1480 the city chamberlains were convicted of not properly handling the city's money; they were fined 10 pounds, of which 4 pounds was specifically earmarked "to the vse of reparacion of the Cundites of the seid Cite" on the recommendation of the mayor and council. A few years later, the council specified that fines collected from those who failed to clean the street would be split between the officer who reported the crime and the conduit repair fund. The fine levied on brewers for illegal use of conduit water was split between the sheriffs, the presenter of the default, and the common conduit repair fund. In the 1498 mayor account, fines accounted for almost 40 percent of the conduit expenses.²⁷

Second, the city collected taxes from each residence and shop to pay maintenance of the water supply system. In 1483, the overseers collected one pence each quarter from each door (residential or business) in the four wards served by conduits to pay for a plumber. This tax was reissued in 1497 extending it to several additional wards. Brewers and dyers who had special permission to withdraw conduit water each paid an additional 6 shillings 8 pence (80 pence) yearly toward "Reparacion of the said Condytes." The council listed seven business persons with permission for pipes extracting water from the conduits in 1493. Several of them paid 13 shillings 4 pence, indicating that the charge of 6 shillings 8 pence was per pipe and they owned two water withdrawal pipes, and one paid the unusual amount of 10 shillings; the total collected was 70 shillings (3½ pounds). It would be expected, therefore, that these taxes paid for the majority of the conduit expenditures.²⁸

Third, the city turned to voluntary contributions. In 1507, the aldermen of the city along with six of the "most discrete" and "most honest" men of each ward went door to door to ask for contributions toward the making of a new conduit. This tactic may have been undertaken only because of the extraordinary expense associated with constructing a brand new conduit. However, the 1498 mayor's account is ambiguous as to whether money collected from the residents was typically in the form of taxes or in the form of voluntary contributions. That year, 8 pounds was "gadered of dyuers persons in the wardes of this Cite" toward conduit repairs. This sum paid for the majority of the conduit upkeep costs.²⁹

The combination of these funds paid for the annual maintenance of the city's water supplies. The collection of this money as well as oversight of the conduit itself required the establishment of permanent conduit keepers. The difficulties in raising money to fund the conduit, a key civic service, encouraged the city to experiment with various fund raising schemes and resulted in more governmental complexity.

Cleaning up waste in Coventry

Just as Coventry had to establish conduit keepers to regulate the drinking water supply system, the government also found it necessary to establish jobs for managing urban wastes. The physical need to remove waste from the city's inhabited area pushed the Coventry council in this direction. Coventry lies within a shallow basin at a bend in the river, creating many low-lying areas and marshes. Coventry's river, the Sherbourne, was a non-navigable river meandering through the city which served primarily as a drainage way. Because of its flat, winding course, the river was prone to flooding and required regular scouring of accumulated materials. For example, in 1421, the council ordered homeowner adjacent to the river to clean it and clear the river of blockage so that "the waturis in flod tyme may the lyghtlyer pass." Coventry's old castle had a fortification ditch around it, known as the Red Ditch, located within the center of city. The ditch was not connected directly to the River Sherbourne which was located significantly further north within town; therefore, the Red Ditch had no outflow.³⁰ That had been good for castle defenses, but by the fifteenth century, the ditch in the middle of town had become a dumping ground. The Red Ditch appeared often in Coventry's struggles to assign sanitation duties to various officers. Over time, the sanitation responsibility became a more and more well-defined, specific job.

In Coventry, the sergeant served as the primary officer enforcing waste laws through the 1400s. The council told the sergeant to search for people throwing waste into the river, to stop people from putting their muck in a heap at one of the city's market crosses, and to inspect the Red Ditch for illegal latrines weekly. The sergeant organized the removal of waste piles with city funds, found laborers to clean the Red Ditch, and went through the city streets every Sunday afternoon and Monday to verify that the residents had performed their weekly street sweeping on Saturday and levied fines on lax persons.³¹ The mayor always had oversight responsibility and was required to inspect the river for deficiencies in person annually.

By the 1500s, this arrangement had changed. The duty to inspect the Red Ditch for illegal sewage pipes and enforce removal of them was passed from the sheriff (1507) to the Mayor and council (1509) to a list of named overseers (1538). On top of these assignments, the Chamberlains enforced the requirement that landholders adjacent to the Red Ditch cleaned it and they also paid for a laborer to clean the ditch quarterly.³² This trend both indicates a downward movement of responsibility from high officials to specifically named persons and a struggle to find the right governmental structure.

The same readjustment of duty allocation happened for street cleaning. In 1517 when the council specified the duties of aldermen, the list included punishing those who swept waste into the gutters, overseeing street cleaning, and maintaining the street pavement. But only 18 years later, the council ordered aldermen to appoint two "honest men" in each ward to oversee that noone cast filth in rivers or sweep streets during rain.³³ The aldermen, who

were responsible for enforcing morality laws such as bans on illegal gaming and illicit brewhouses, must have had too many other duties to devote enough time to street cleaning issues. Thus, the city government needed to create street cleaning overseers at a lower level.

The great number of officeholders involved in cleaning activities in the early 1500s indicates that the city government was experimenting with different organizational structures to both enforce sanitation legislation and effectively carry out discrete physical tasks such as ditch scouring. Norwich also created a “water bailiff” in 1543 and even earlier on two occasions gave contracts for carrying muck out of the city by boat.³⁴ The trend was to assign the sanitation tasks further and further down the chain of command, making the responsibility localized.

Collection of taxes to provide for waste removal services was a common practice. In Coventry, the council appointed William Oteley as the weekly street cleaner and waste remover in 1420 and authorized him to collect 1 pence from every door and shop to pay for his services. The council reissued the tax in 1452 and 1493. The council also ordered a cart to clear away muck accumulated on Much Park Street in 1470 and designated the same door-tax for it.³⁵ In Norwich, the council provided two weekly muck carts to serve nine parishes. The council listed the amount each ward was required to contribute toward the common carts, which ranged from 6 shillings 8 pence to 40 shillings.³⁶ The councils required the commoners to pay for waste services and thus had to organize the collection of the money. The need to obtain and manage this money prompted the city governments to name tax collectors and track monetary expenditures.

Maintaining Norwich’s river

Finally, we look at the scouring of Norwich’s river as a sanitary service. Through this case, which runs from 1367 to 1570, we can see in detail how the physical requirements of river maintenance continuously encouraged the city government to delegate the responsibility for the task to specific individuals and prompted the government to experiment with various schemes for financing the labor involved. The council considered the maintenance of a clean river to be a common good for the welfare of the entire city; thus, they invested time and money in organizing river cleaning services.

The River Wensum snaked through the city of Norwich (Figure 2) and was a primary commercial route. The Norwich council recognized that the river served “the common utility” and needed oversight. The river was “a thing very useful to the city” so when it was filled with dirt such that the flow of water was prevented, the council was obliged to step in. Weed overgrowth in the river was an ongoing problem in Norwich and filth deposited in the river was seen as a leading cause.³⁷ The response was simple: clean-up the overgrown river and dig out the accumulated waste and silt using city funds. But organizing such a service was not a simple matter. Over the course of 200 years, various city officers were involved in

the operations and the council created new, dedicated positions to deal with the river problems.

At the beginning, Norwich coordinated river cleanup operations through the appointment of work supervisors and relied on day laborers. As early as 1367, Norwich paid for expenditures for workmen and equipment cleaning the river: two men were elected in 1367 to supervise river cleaning and each received half a mark per week; a supervisor of workmen was paid for 35 weeks in 1401-2; and the purchase of scythes and sickles occur among the river expenses in 1405-6.³⁸ Norwich required that individuals dwelling in particular wards clean up the sections of the river in those areas. In 1422, the city assembly issued an ordinance requiring a one-day river cleaning. They gave individuals the ability to choose whether they wanted to personally labor in the cleaning operation or to pay the cost of 4 pence a day to hire a laborer to work on their behalf. No one, regardless of their status or position, was exempted. The ward constables were responsible for ensuring that individuals reported for work or paid for their replacement. The city paid for all of the tools and boats. The mayor was permitted to appoint overseers for the project.³⁹

Such community-involved projects appear to have been regular features of Norwich's approach to the river problem. The council, which included the Mayor, Sheriffs, Aldermen, and 60 citizens, voted unanimously to require that all city dwellers, except the very poor, help clean and regrade the streets in order to prevent waste from clogging the river. The council decided that two supervisors in each ward would certify that everyone participated in the work and verify that no waste was thrown in the street in the future. In addition, the Mayor was held personally responsible for ensuring that the road work on behalf of the river was carried out. Community involvement is seen as well in 1478 when two aldermen were named the river overseers to contract laborers to clear weeds and in 1479 when citizens were required to clean the river if they owned abutting property. In all of these cases, the council required citizens (or paid laborers working on their behalf) to participate in river scouring and placed supervisors in a coordination role as governmental agents. The mayor was directly responsible for ensuring that the supervisors carried out their work.⁴⁰

By the early 1500s, it appears that the city council had grown weary of relying on individual inhabitants to clean the river directly and tried several new schemes. In 1517, the council implemented a new one-time tax to collect a total of £40 to be used for river cleaning, presumably for supplies and workmen. They charged the constables with going door-to-door to collect the tax. In the same act, the council hired a "channel raker," who collected muck from the streets weekly, and the council decided to raise an additional £10 to buy a dung cart for him to carry away the muck.⁴¹ Here we see the first attempts by the Norwich council to create specialization in the sanitation work, giving an official title to a funded position.

But this experiment in specialization did not keep the council from continuing the older model of the community supplying laborers. In 1532, the council placed the responsibility for supplying river workmen on the town elite: the Justices of the Peace had to

supply workmen for 4 days each year; aldermen 3 days; brothers of St George 2 days; and others, particularly nuisance industries such as tanners, dyers, and parchment makers, could be required to supply laborers at Mayor's discretion. The Mayor himself had to approve laborers as able-bodied and the Mayor and Justices of the Peace had to assign surveyors and overseers for the work. The order also required every owner whose property directly abutted the river to cut the weeds from the property to the middle of the river every year.⁴²

In spite of all of these attempts, by 1552, the situation had reached a crisis point. In the council minutes, the councilors lamented that although ordinances had been made for the maintenance of clean streets and river, “notwithstanding those goode actes and ordynaunces the seid streetes remayne fowle and fylthye; and also the seide ryver decayethe and fyllethe moore and moore, what for want of dewe executyon of the seide former actes, and for wante of money and other provysion wherewt to doo the yerely and contynewall charges in and abought the same.” They identified the problem both as a lack of commitment to the cleaning programs and failure to properly fund it. So, the council developed an extended plan.⁴³

Under this plan, the council set up the “Surveyours of the Ryver and Streates,” a body made up of two aldermen and ten citizens. The surveyors had three charges: plan the work; enforce the laws; and fund the cleaning efforts. First, they were to survey the condition of the river and streets and develop a plan for the monetary expenditures for scouring and cleansing them for the next year.

Second, the group was to enforce all previous city laws concerning the maintenance, preservation, scouring, cleansing, and cleanliness of the river and streets. They were to collect all fines related to ordinance violations and put the money to use in the ongoing cleaning efforts. They had the right to arrest any person, both citizens and foreign inhabitants, who disobeyed the sanitation laws, failed to pay cleaning taxes, or failed to labor in reparation and cleansing projects for the river and streets. The arrested individual was to be presented to one of the aldermen of the group who would commit the person to prison. The alderman was then responsible for informing the Mayor or his deputy. The Mayor had the responsibility to establish the fine or prison sentence.

Third, the surveyors were to manage funds for the cleansing efforts. They were ordered to establish a tax on all citizens and foreign inhabitants for the annual repair and cleansing of the river and streets payable the first of March. The amount of this tax on commoners was not set in the ordinance. However, the council did establish a fee schedule for the more upstanding citizens: the Justice of Peace, 2 shillings; Aldermen, 18 pence; and Livery Company members, 12 pence. These were the same governmental positions that had been required in 1532 to provide laborers for the cleansing projects. The surveyors also had the right to levy a special tax on businessmen considered particularly noisome to the river, such as dyers, tanners, parchment makers, and brewers, and to charge the miller a negotiated sum for cutting weeds. In addition to these taxes, an additional 14 pounds would be given out of the general city revenues to the surveyors for use in their projects. The group was charged

with handling all bequeaths toward river and street cleaning. The council mentioned that two former Aldermen had recently given money in their wills and this money, as well as future gifts, would be handed over to the surveyors.⁴⁴ The Surveyors kept account books separate from the general Chamberlain's city accounts beginning four years later in 1556.⁴⁵

The level of authority given to the "Surveyours of the Ryver and Streates" is quite clear. The group would have administrative, judicial, and financial responsibility for the ongoing efforts to clean Norwich's river and streets. The commitment to the sanitation effort on the part of the city is also evident, both in terms of setting up an organizational structure to manage the duties and funding them out of the city coffers. The seriousness of the surveyors' position is evinced by their ability (and obligation) to arrest sanitation law offenders and develop plans for the cleaning efforts.

Norwich continued the trend to establish dedicated positions for city sanitation. In 1570, the council commanded the aldermen and "best commoners" of each ward choose one man called a "Skavenger." The scavenger was given full responsibility for daily street cleaning, just as the surveyors had been set over the larger river and street upkeep projects. The scavenger's duties targeted keeping waste out of the streets, maintaining pavement, and guarding against fire. First, the scavenger was to see that every owner and inhabitant of houses and churches swept all waste from the middle of the street channel every week on the appointed day. If someone was remiss in these duties, the scavenger had to collect a fine that would go toward the cost of street cleaning. If a particular house or ground was unoccupied, the owner would be charged for the scavenger's labor to clean the street. Scavengers not presenting defaulters within 4 days were charged double the fine, so they had a financial incentive to enforce the laws. The council asked the aldermen and six best commoners of every ward to levy a tax on every inhabitant or owner to pay for the scavenger's wages. Every scavenger was to collect this quarterly tax and refer those who do not pay to the alderman. Second, the scavengers were responsible for general pavement upkeep. They were ordered to command anyone with decayed pavement to amend it, and if the owner refused, the scavenger could assign a workman to the task and then charge the owner. Third, the scavengers were to ensure that every chimney was properly swept to guard against fire. The scavengers served as official representatives of the city, just like the surveyors. The mayor was required to administer an oath of office to each scavenger, solidifying the official place of the job. The scavenger, thus, served a vital role in monitoring and providing for city cleaning efforts.⁴⁶

Through this extended case of river and street cleanup in Norwich, we can see how the desire to provide cleansing services provided incentives for changes in the Norwich government. First, Norwich's creation of the specific titled jobs of "Surveyours of the Ryver and Streates" and "Skavenger" in the mid-1500s shows how much governmental structures for sanitation had changed since the early 1400s. The duties of river and street cleaning required complex and continuous planning, enforcement, and funding. The city could no

longer rely on adhoc management of the problem through work supervisors and the Mayor's oversight. More people at the ground-level were needed to make the sanitation project reality. Second, Norwich had to fund their ongoing sanitation services and experimented with several tax plans to provide the necessary revenue. Both developments reveal how the physical demands of urban life directly affected governmental forms.

Conclusion

In this study we have seen how the city governments of Coventry and Norwich were actively involved in providing sanitation services from 1400 to 1600. But doing so was not a straightforward task. Both councils struggled to find long-term solutions to staffing and financing the projects. Their efforts can be characterized as a trial-and-error approach with the councils continually adjusting their staffing and fund raising to find solutions that would work.

In both cities, we see a transition from a top-heavy medieval structure that put sanitation in the hands of the highest civic authorities to a dispersed model of responsibility with involvement at site-specific, local levels. There is a clear trend toward specialization, as evidenced in the establishment of permanent positions for conduit keepers, street cleaners, waste carters, and river overseers. This was necessary because the physical infrastructure required regular oversight – conduits needed to be locked daily, waste carted away weekly, and the river dredged in a large scale annual operation. In addition, these services required financing, so the civic governments gathered taxes, allocated fines, and even asked for donations to support these long-term projects.

Scholars have often located the rise of urban sanitation services in the nineteenth century as a response to urban pollution, both industrial and domestic. In these accounts, such as the work by Martin Melosi, stress is placed on the creation of permanent sanitation departments and technological improvements.⁴⁷ Medieval cities also faced threats from urban pollution, as evidenced by concerns about the condition of the streets and rivers, and they too responded to these pressures. Although the two cities considered here did not establish standing sanitation departments in the early modern period, they did establish regular services manned by designed individuals, a forerunner of later permanent departments. The city councils of Coventry and Norwich did not take their sanitation duties lightly, but rather actively developed strategies to provide these services because such services fit into their larger understanding of the public good. In doing so, they experimented with organizational structures that would later become characteristic of modern city management.

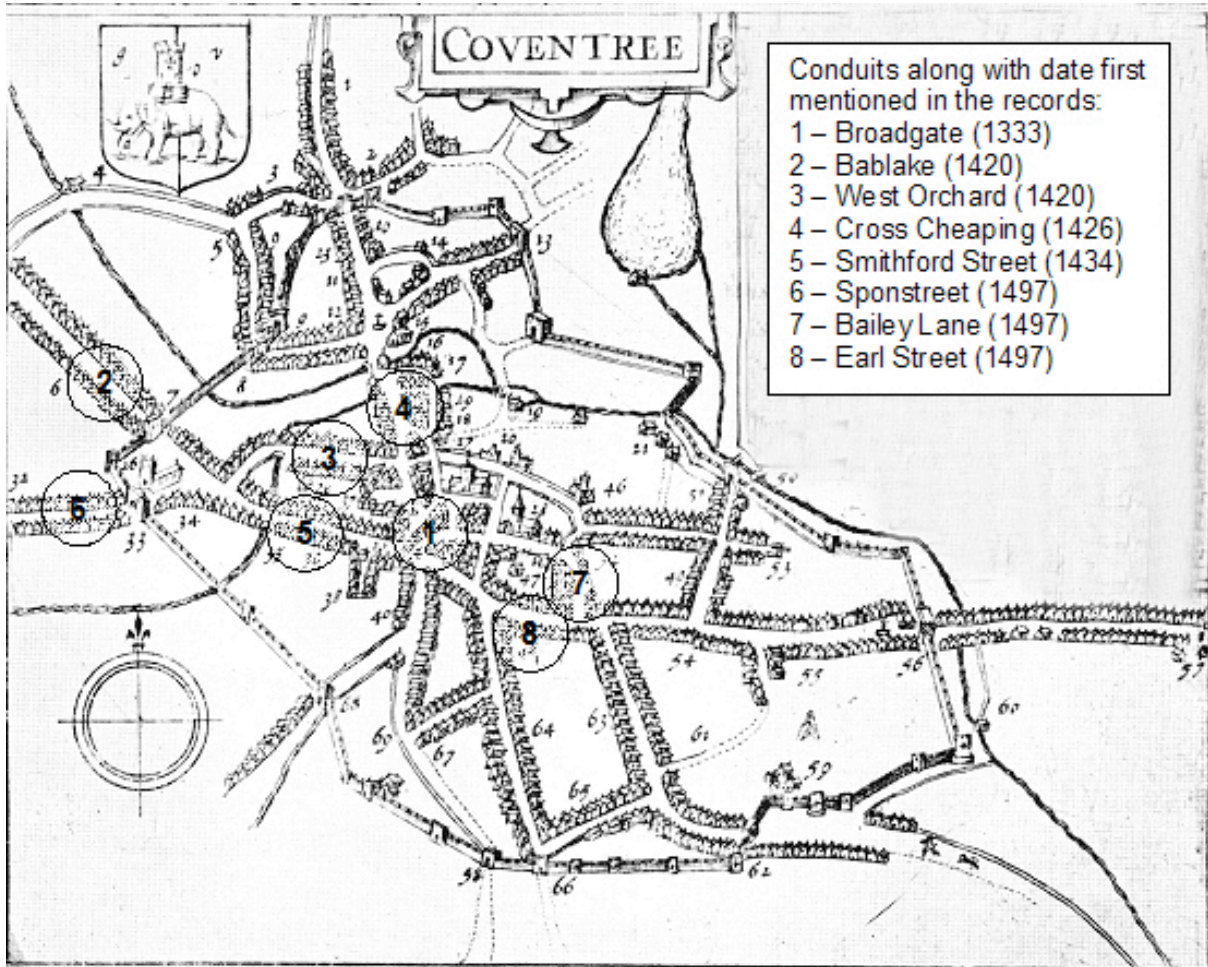


Figure 1. Coventry's conduit system by 1500 superimposed on John Speed, *The Theatre of the Empire of Great Britaine*, Map of Coventry, 1611.



Figure 2. Norwich's town plan with the River Wensum labeled. John Speed, *The Theatre of the Empire of Great Britaine*, Map of Norwich, 1611.

NOTES

¹ *The Coventry Leet Book: or Mayor's Register, Containing the records of the City Court Leet or View of Frankpledge, A.D. 1420-1555, with Divers other matters*, ed. Mary Dormer Harris, four parts (London: Kegan Paul, Trench, Trübner & Co., 1907-1913), 3: 652-653.

² See, for example, several excellent studies of civic identity and patronage: Catherine Patterson, *Urban Patronage in Early Modern England: Corporate Boroughs, the Landed Elite, and the Crown, 1580-1640* (Stanford: Stanford University Press, 1999); Robert Tittler, *Townsperson and Nation: English Urban Experiences, 1540-1640* (Stanford: Stanford University Press, 2001); and Robert Tittler, *The Face of the City: Civic Portraits and Civic Identity in Early Modern England* (Manchester: Manchester University Press, 2007). Paul Halliday discusses partisan politics at the city level in *Dismembering the Body Politic: Partisan Politics in England's Towns, 1650-1730* (Cambridge: Cambridge University Press, 1998).

³ For the involvement of English urban governments in poor relief, see Paul Slack, *From Reformation to Improvement: Public Welfare in Early Modern England* (Oxford: Clarendon Press, 1999); *The English Poor Law, 1531-1782* (Cambridge: Cambridge University Press, 1995); and "Poverty and Politics in Salisbury 1597-1666," in Peter Clark and Paul Slack ed., *Crisis and Order in English Towns 1500-1700* (London: Routledge & Kegan Paul, 1972), 164-203. In *The Impact of Plague in Tudor and Stuart England* (Oxford: Clarendon Press, 1985), Slack discusses the social responses to disease, particularly the institution of quarantine measures and poor relief measures. For a brief overview of English city services at the time see Paul Slack, "Great and Good Towns 1540-1700," in Peter Clark ed., *The Cambridge Urban History of Britain*, vol. 2 (Cambridge: Cambridge University Press, 2000), 347-376.

⁴ Roberta Magnusson, *Water Technology in Medieval Europe* (Baltimore: Johns Hopkins University Press, 2001); Mark Jenner, "From Conduit Community to Commercial Network? Water in London 1500-1725", in Paul Griffiths and Mark Jenner ed., *Londinopolis: Essays in the Social and Cultural History of Early Modern London* (Manchester: Manchester University Press, 2000), 250-272. In Jenner's study, we do get a sense of the financial commitment of the London city government to fresh water conduits and we also see how the city turned to an educated specialized class, engineers, in their quest for water services.

⁵ Caroline Barron, *London in the Later Middle Ages* (Oxford: Oxford University Press, 2004), Chapter 8, "The Government of London: A Civic Bureaucracy." Jennifer Kermode also discusses the development of major city council roles (mayor, chamberlain, aldermen) in the late Middle Ages, but only hints at the lesser job-specific positions central to this article: "Obvious Observations on the Formation of Oligarchies in Late Medieval English Towns," in John A. F. Thomson ed., *Towns and Townspeople in the Fifteenth Century* (Gloucester: Alan Sutton, 1998), 87-106.

⁶ Slack, *From Reformation to Improvement*, 48; Walter King, "How High is too High? Disposing of Dung in Seventeenth-Century Prescot," *Sixteenth Century Journal* 23, no. 3 (1992): 443-457.

⁷ An exception is Dolly Jørgensen, "Cooperative Sanitation: Managing Streets and Gutters in Late Medieval England and Scandinavia," *Technology & Culture* 49, no. 3 (2008): 547-567, which deals with how city governments involved inhabitants in the maintenance of sanitation technologies. Several authors have investigated sanitation through legal records for London, but they do not directly address the roles and changes to city government through the provision of sanitary services: Ernest Sabine, "Butchering in Mediaeval London," *Speculum* 8, no. 3 (1933): 335-353; Ernest Sabine, "Latrines and Cesspools of Medieval London," *Speculum* 9, no. 3 (1934), 303-321; Ernest Sabine, "City Cleaning in Medieval London," *Speculum* 12, no. 1 (1937), 19-43; and Barron, *London in the Later Middle Ages*, Chapter 10, "The Urban Environment." I have not found any works dedicated to early modern sanitation other than King's "How High is too High?" Slack treats the topic tangentially as it relates to public health concerns, specifically the plague, in *Impact of Plague in Tudor and Stuart England*. In Slack's broader *From Reformation to Improvement*, however, the topic of sanitation is not covered in any detail.

⁸ Max Weber, of course, wrote the classic work on bureaucracy and its characteristics: *The Theory of Social and Economic Organization*, trans. A. M. Henderson & Talcott Parsons (New York: Oxford University Press, 1947). Although his ideas have been much debated and refined by others, few would argue with the statement that modern European governments are bureaucratic in the general sense of the word.

⁹ Marjorie McIntosh, *Controlling Misbehavior in England, 1370-1600* (Cambridge: Cambridge University Press, 1998).

¹⁰ Professionalization was used by Weber as the creation of occupations with full-time duties, formal education, codes of conduct, and organizations. See George Ritzer, "Professionalization, Bureaucratization and Rationalization: The Views of Max Weber," *Social Forces* 53, no. 4 (1975): 627-634.

¹¹ I call the urban centers in this study "cities." There is some debate in the history literature as to what should be called a city versus a town versus a small town or village. The debate has been particularly active for the historical period from 1500 to 1700. See for example Alan Dyer, "The early modern town: toward a clearer

definition?” *Journal of Urban History* 26, no. 1 (1999): 74-82; Peter Clark and Paul Slack, *English Towns in Transition 1500-1700* (Oxford: Oxford University Press, 1976); and Peter Clark, ed., *The Early Modern Town* (London: Longman, 1976). Most definitions of “towns” include population concentration, economic functions, social structures, political order, and expanded influence as factors. The locations included in this study would clearly be classified as “towns” under such definitions, but should they be called “cities”? Although they not as populous as many continental cities such as Paris, Cologne, Florence, and Rome, nor London, I have opted to call Coventry and Norwich “cities” because they were the largest urban centers in their respective regions and the governmental representatives consistently refer to their own urban area as a “city” (often as “Citee” or “Cite” in the English texts and “civitas” in Latin passages) in the written records. Therefore, they considered themselves cities.

¹² Lorraine Attreed discusses city government involvement in continual legal struggles to define their jurisdictions in “Urban Identity in Medieval English Towns,” *Journal of Interdisciplinary History* 32, no. 4 (2002): 571-592. See also Martha C. Howell, “The Spaces of Late Medieval Urbanity,” in Marc Boone and Peter Stabel ed., *Shaping Urban Identity in Late Medieval Europe* (Leuven-Apeldoorn: Garant, 2000), 3-19 for how physical spaces defined and legitimated activities that defined the citizen and public. According to Howell, when cities regulated activities like markets and prosecuted crimes against property and persons, they were delineating the spaces that belonged to them. For a good discussion of English civic oligarchies, see Robert Tittler, *The Reformation and the Towns in England: Politics and Political Culture, c. 1540-1640* (Oxford: Oxford University Press, 1998).

¹³ For Coventry, *The Coventry Leet Book* contains the semi-annual council proceedings. For Norwich, extracts from various city registers have been printed in *The Records of the City of Norwich*, 2 vols, ed. W. Hudson and J.C. Tingey (Norwich: Jarrold & Sons, 1906 and 1910).

¹⁴ Slack, *From Reformation to Improvement*, Chapters 1 and 2.

¹⁵ *Records of the City of Norwich*, 2: 128 and 133; *Coventry Leet Book*, 3: 631. For a fuller discussion of why sanitation would have been considered part of “good and godly” rule and a needed city service, see Dolores Jørgensen, “Private Need, Public Order: Urban Sanitation in Late Medieval England and Scandinavia” (PhD dissertation, University of Virginia, 2008), Chapter 2.

¹⁶ Lorraine Attreed, *The King’s Towns: Identity and Survival in Late Medieval English Boroughs* (New York: Peter Lang, 2001), 44–45.

¹⁷ Stephen Rigby, “Urban ‘Oligarchy’ in Late Medieval England,” in John A. F. Thomson ed., *Towns and Townspeople in the Fifteenth Century* (Gloucester: Alan Sutton, 1988), 65.

¹⁸ *Coventry Leet Book*, 2: 257.

¹⁹ *Coventry Leet Book*, 3: 652-653 and 631-632.

²⁰ PRO 703, Chancery Patent Roll (666), no. 180, m.8 reproduced, transcribed, and translated in “City of Coventry Water Undertaking. Centenary 1847-1947 Souvenir Brochure,” Coventry Waterworks Committee, 1947, Archives of the City of Coventry; M. Knights, “St. Lawrence’s Well, Norwich, and Gibson’s Conduit,” *Norfolk Archaeology* 10 (1888), 3.

²¹ Malcolm Atkin and D.H. Evans, “Excavations in Northern Conesford, in and around the Cathedral Close,” in Malcolm Atkin and D.H. Evans ed., *Excavations in Norwich 1971-1978 Part III* (Norwich: Norwich Survey / Norfolk Museums and Archaeology Service, 2002), East Anglian Archaeology Report No. 100, 12 and 31. Evidence from another leading provincial city, York, indicates a similar shift by the beginning of the fourteenth century from unlined pits that remained filled to stone-lined cesspits that could be cleaned out: P.V. Addyman, “The Archaeology of Public Health,” *World Archaeology* 21, no. 2 (1989), 257-258.

²² The Coventry council stated explicitly that sweeping the street gutters to clear filth away while it was raining would “pester the Ryver with fylthe & muck” (*Coventry Leet Book*, iii, 804). The Norwich council also recognized the interconnectedness of the streets and river as an environmental system, noting that filth entered the river by way of “cockeys, gutters and other meanes” (*Records of the City of Norwich*, 2: 115-116).

²³ Herbert Lapworth, “City of Coventry, Report on Water Supply,” November 12, 1925, presented to the Chairman and Members of the Waterworks Committee of the Council of the City of Coventry, Archives of the City of Coventry; PRO 703, Chancery Patent Roll (666), no. 180, m.8.

²⁴ *Coventry Leet Book*, 1: 21, 104-105, 208 and 225; 2: 338, 517, and 572; 3: 788 and 812; UK National Archives SC 8/23/1104.

²⁵ *Coventry Leet Book*, 1: 104-105 and 208; 2: 517; 3: 584.

²⁶ *Coventry Leet Book*, 1: 104-105 and 108; 3: 587-588.

²⁷ *Coventry Leet Book*, 2: 431; 3: 585-588 and 808-809.

²⁸ *Coventry Leet Book*, 2: 517, 548-549 and 586.

²⁹ *Coventry Leet Book*, 3: 587-588.

³⁰ W.B. Stephens, ed., *A History of the County of Warwick, vol 8: The City of Coventry and Borough of Warwick* (London: Victoria County History, 1969), 1; *Coventry Leet Book*, 1: 31.

- ³¹ *Coventry Leet Book*, 1: 91, 113, 118-119, and 170; 2: 361 and 586-587.
- ³² *Coventry Leet Book*, 3: 628, 702, and 728-729.
- ³³ *Coventry Leet Book*, 3: 652-653 and 723.
- ³⁴ *Records of the City of Norwich*, 2: 124-125; 91; and 85.
- ³⁵ *Coventry Leet Book*, 1: 21; 2: 273, 361 and 552-553.
- ³⁶ *Records of the City of Norwich*, 2: 110.
- ³⁷ *Records of the City of Norwich*, 2: 85 and 96-98. The King of England ordered the bailiffs of Norwich in 1378 to inspect the river because on one side of the city it was choked with grass and on the other side, the dry ditches were obstructed with mud and filth thrown in them. *Calendar of the Patent Rolls preserved in the Public Record Office, Richard II, vol. 1, 1377-1381* (London: Public Record Office, 1895), 121. The Norwich city council made a similar observation that weeds were growing in the river and that filth was entering the river through the ditches and gutters (*Records of the City of Norwich*, 2: 115).
- ³⁸ *Records of the City of Norwich*, 1: 267 and 2: 54.
- ³⁹ *Records of the City of Norwich*, 1: 277-278.
- ⁴⁰ *Records of the City of Norwich*, 2: 96-98 and 102.
- ⁴¹ *Records of the City of Norwich*, 2: 109-110. Interestingly, Slack picks up this Norwich order as an example of the influence of Cardinal Wolsey on city social reforms, which he claims was widespread (Slack, *From Reformation to Improvement*, 15-16). However, as is obvious from the discussion in this paper, the 1517 orders were simply one development in a long line of ongoing attempts by the Norwich city council to maintain the city's river and ditches. Wolsey's visit may have been the impetus for the council's actions at that particular moment in time, but it should not be given undue significance in the overall sanitation developments.
- ⁴² *Records of the City of Norwich*, 2: 115-116.
- ⁴³ *Records of the City of Norwich*, 2: 127-130.
- ⁴⁴ The giving of money toward river cleaning was not a new practice. Ralph Segry had bequeathed £10 for cleansing the common river of the city nearly one hundred years earlier. According to the city council meeting notes from 1456, the council was seeking recommendations on how to spend the money. *Records of the City of Norwich*, 2: 92.
- ⁴⁵ The books survive in the Norwich archives, Case 19 b according to John Tingley, "Introduction," in *Records of the City of Norwich*, 2: cxxxii.
- ⁴⁶ The council also discussed fire as a major urban problem in the assembly on the same day that they established the scavenger position. *Records of the City of Norwich*, 2: 137-40.
- ⁴⁷ See for example Martin Melosi, *Sanitary City: Urban Infrastructure in America from Colonial Times* (Baltimore: Johns Hopkins University Press, 2000); Donald Reid, *Paris Sewers and Sewermen: Realities and Representations* (Cambridge, MA: Harvard University Press, 1991); Joel Tarr, *The Search for the Ultimate Sink* (Akron: Akron University Press, 1996); David Stradling, *Smokestacks and Progressives: Environmentalists, Engineers and Air Quality in America, 1881-1951* (Baltimore: Johns Hopkins University Press, 1999); Maureen Ogle, "Water Supply, Waste Disposal, and the Culture of Privatism in the Mid-Nineteenth-Century American City," *Journal of Urban History* 25, vol. 3 (1999): 321-347; and Simone Neri Seneri, "The Construction of the Modern City and the Management of Water Resources in Italy, 1880-1920," *Journal of Urban History* 33, vol. 5 (2007): 813-827.